

# **Nintex Workflow 2010 Help**

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# 1 Workflow Actions

## 1.1 Action Set

This workflow action bundles a collection of actions in a container that can be collapsed and expanded to make workflow designing more convenient.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

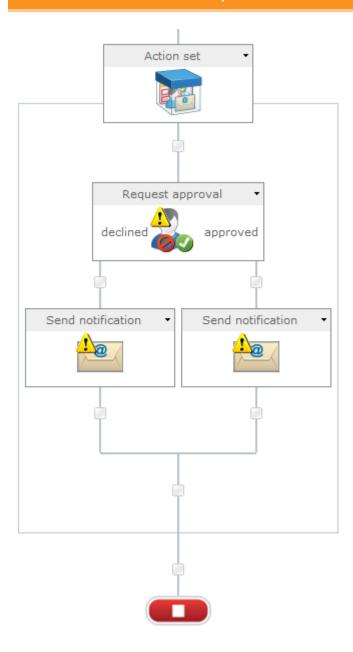
# **Options for this action**

This action does not require any configuration. It has a border that contains a pearl, when actions are added to the pearl inside the border, they become part of the Action set.



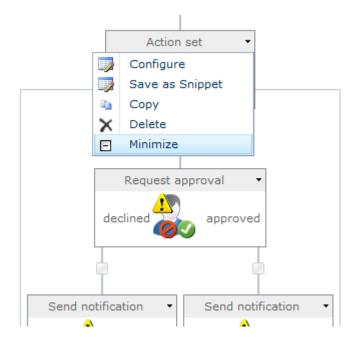






The action set can be minimized by activating the title bar's drop down menu and clicking **Minimize**.





#### Saving as a snippet

To save an action set as a snippet, activate the drop down menu on the action title bar and click **Save as Snippet**. For more information, please refer to the <u>Workflow Snippets</u>.

## 1.2 Add User To AD Group

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will add a user to an Active Directory security group.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR



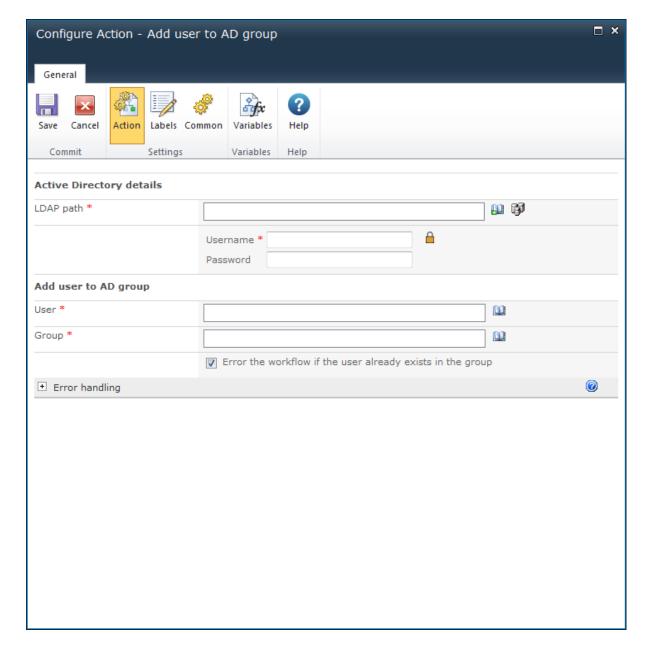
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Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



# Options within this action

### **Active Directory Details**

**LDAP Path** 



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To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

### Add User to AD Group

#### User

The username (sAMAccountName) of the Active Directory entry.

#### Group

The name of an existing Group to which the user will be added. E.g. "Backup Operators". Multiple groups can be separated with semi-colons (;).

#### Error the workflow if the user already exists in the group

Selecting this option will cause the workflow to error if the user already exists in the group. By default this option is checked.

## 1.3 Assign Flexi Task

This workflow action will allow the assignment of a task to one or more users and request a specific outcome. The list of possible outcomes is determined by the person designing the workflow.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

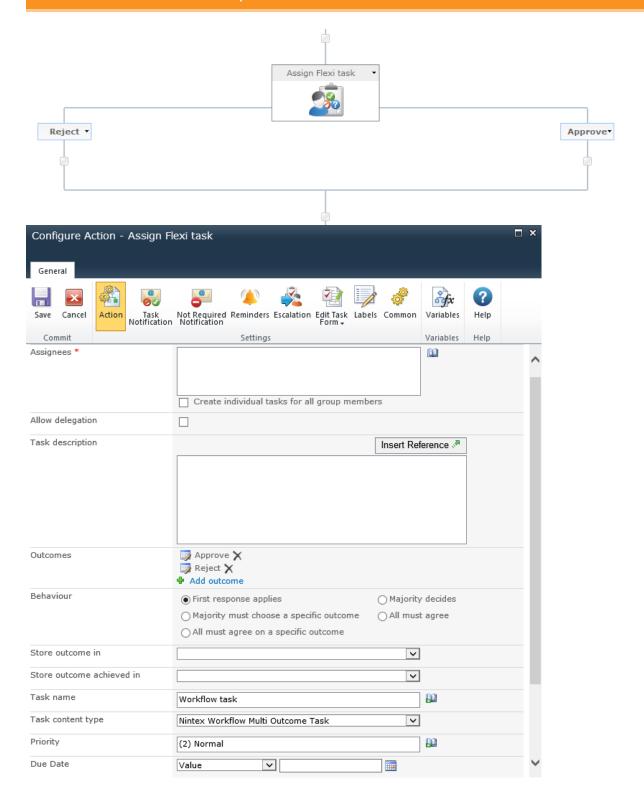
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.











# **Options within this action**

### **Ribbon Option: Action**

### **Assignees**

The assignees list contains all users or groups that will be assigned the task when the workflow is run.

Users can be:

- Entered directly using their username, email address or full name and will be resolved where possible against the SharePoint user list or Active Directory.
- Searched for: click on the address book icon on the right.

Please note that users that are external to the SharePoint environment can be added as **Assignees** by specifying their email address. However, the only way that they can respond to the Task is through <u>LazyApproval</u>, as they will have no access to the SharePoint site.

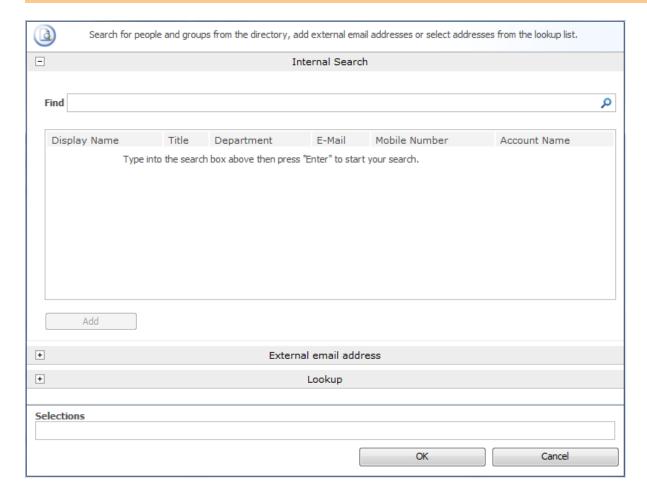
## **Select People and Groups**

To search for users, click on the address book icon on the right.









The configuration dialog allows the workflow designer to search for and/or add users to the **Assignees** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email address or user account name and clicking on the magnifying glass will provide a list of matching users and groups from SharePoint as well as Active Directory.
- **External email address:** Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.
- **Lookup:** Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

### Create individual tasks for all group members

In the case where a group is assigned the task and **Create individual tasks for all group members** checkbox is:





- Not selected all users in that group will receive the task notification. However, the first respondent will represent the entire group.
- Selected an individual task will be assigned to every member of the group.

Groups will only be expanded to one level. Groups within groups will not be expanded.

#### Allow delegation

When this option is selected, the assignee at runtime can delegate the task to another user. For more information, please refer to <u>Delegating Approval Tasks</u>. Changing the 'Allow delegation' option on the 'Action' screen is the same as changing the 'Allow delegation' option for all assignees on the 'Task Notification' ribbon option. See the 'Task Notification' ribbon option section below for more information.

### Allow LazyApproval

If LazyApproval has been enabled, the workflow can permit the assignees to use <u>LazyApproval</u>. Lazy Approval means that a task response can be registered when the assignee replies to a notification email or an automated OCS / Lync conversation with a recognized word or phrase. An administrator can edit or add to the list of acceptable terms. For more information, please refer to the <u>Managing LazyApproval</u> <u>settings</u>. Changing the allow LazyApproval option on the 'Action' ribbon option is the same as changing the 'Allow LazyApproval' option for all assignees on the 'Task Notification' ribbon option. See the 'Task Notification' ribbon option section below for more information.

### Task description

Allows entry of dynamic text that will display on the task response form. This can be used to communicate additional information about the task to the responding user. References can also be inserted using the <u>Inserting reference fields</u> feature.

#### **Outcomes**

The **Outcomes** define all the possible responses to the task. When completing the task, assignees must choose from one of the listed outcomes.

New **Outcomes** can be added by clicking **Add outcome** or removing/editing existing outcomes using the icons.

Each outcome is configured with a name and an optional description, which is displayed on the task response form and can be used to provide instructions and more detail. Whether or not the assignee must provide comments for the outcome can be configured as optional, required or none.

### **Behaviour**

There are five behavioural alternatives to instruct Nintex Workflow how to handle tasks with multiple assignees. These are:

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- First response applies: The first response received will be used for the overall outcome. All other
  pending tasks will be set to 'not required'.
- Majority must choose a specific outcome: The majority of assignees must agree on the same outcome. If a majority is not reached, the 'outcome achieved' variable will be set to 'no' and the overall task outcome will be blank. As soon as Nintex Workflow determines that a majority cannot be reached, the action will complete and all pending tasks will be set to 'not required'.
- All must agree on a specific outcome: All assignees must select the outcome specified in the
  'Outcome' drop down list. If any assignee chooses an alternative outcome, all pending tasks will be
  set to 'not required', the 'outcome achieved' variable will be set to 'no' and the overall task outcome
  will be blank.
- Majority decides: The outcome variable will be set to the most popular outcome. If Nintex Workflow
  can determine the most popular outcome before all assignees have completed the task, all pending
  tasks will be set to 'not required'. If two or more outcomes have the same number of responses after
  all tasks are completed, the 'outcome achieved' variable will be set to 'no' and the overall outcome
  will be blank.
- All must agree: All assignees must agree on the same outcome. If an assignee responds with an
  outcome which differs to a previous respondent, all pending tasks will be set to 'not required', the
  outcome achieved variable will be set to 'no' and the overall task outcome will be blank.

#### Store outcome in

After an outcome is reached, this workflow variable will be populated with the chosen outcome. See the 'Behaviour' section above for more detail on how outcomes are determined.

#### Store outcome achieved in

In some circumstances, it is possible that an outcome is not reached. After this action is completed, this workflow variable will be populated to indicate whether or not an outcome has been reached. See the Behaviour section for more detail on how outcomes are determined.

#### Task name

Allows the title of the task to be defined. This is the title that appears in a SharePoint task list. If left blank, the action's title will be used by default.

References can also be inserted using the <u>Inserting reference fields</u> feature.

#### Task content type

Allows a task content type other than the default to be used. This option will only display if an alternative content type is available on the site. Alternative content types are primarily used to enable custom task response forms.

#### **Priority**





Specifies the value that should be assigned to the priority flag for the task. References can also be inserted using the <u>Inserting reference fields</u>feature.

#### **Due Date**

Set a date for the task to be completed by.

### Form type

Choose which form type is presented to **Assignees**.

#### Store task IDs in

When the workflow runs, the ID given to each task that is created will be stored into an Integer, List Item ID or Collection workflow variable.

#### **Item Permissions**

**Set user permissions to**: Sets the user permission on the item.

When task is complete, set user permissions to: Sets the user permission on the item after the task has been completed.

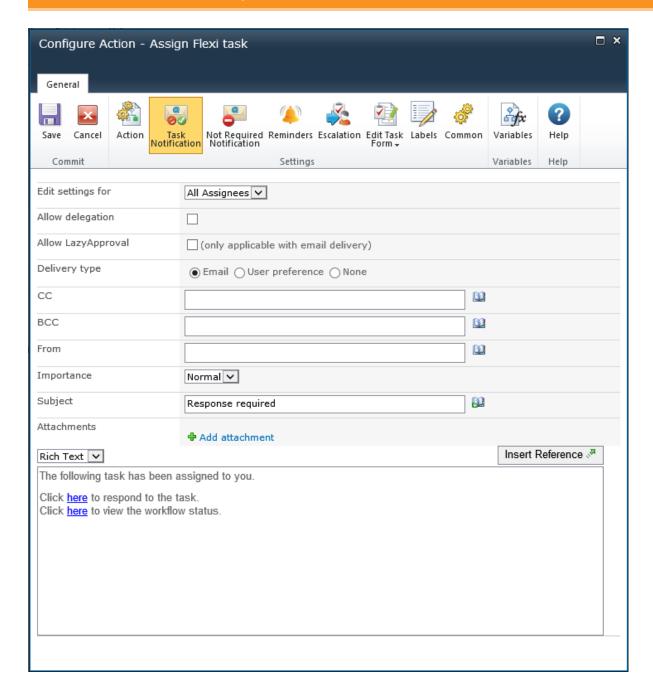
Note: Setting the item permissions could be useful when the task is delegated, this will give the delegated user the necessary permissions to view the item.

#### **Ribbon Option: Task Notification**

Sent when the task is assigned to a user, also used when the task is delegated by one user to another.







### **Edit settings for**

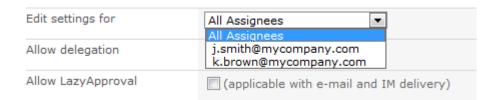
Changing this setting from the default **All Assignees** allows the configuration of unique notification options for a particular **Assignee** in the list.

Unless specifically configured, assignees will use the **All Assignees** settings. To override settings for a specific **Assignee**, select their name from the drop down list.





Changes to All Assignees will not affect users who are given custom settings.



### Allow delegation

When this option is selected, the assignee at runtime can delegate the task to another user. For more information, please refer to <u>Delegating Approval Tasks</u>.

### Allow LazyApproval

If LazyApproval has been enabled on the server, the workflow can permit the assignees to use <u>About LazyApproval</u>. Lazy Approval means that an approval or rejection task response can be registered when the assignee replies to a notification email or an automated OCS / Lync conversation with a recognized word or phrase. An administrator can edit or add to the list of acceptable terms. For more information, please refer to <u>Managing LazyApproval settings</u>.

#### **Delivery type**

**Delivery type** is the method of delivering the notification to the recipients.

Available delivery options; None, Email, User preference or Instant Message (if enabled on the server). For information on User preference, please refer to <u>Configuring user preferences</u>.

Please note: Nintex does not provide support for troubleshooting email, SMS or OCS / Lync systems.

If Allow LazyApproval is checked and Delivery type selected is IM. The option Send a conversation request to confirm if the user is available to respond will be available. Checking this option will ask the assignee if they are available to respond, if the assignee responds with "No", the Delivery type will be switched to Email and the assignee will receive a notification email instead.

If at anytime the assignee does not respond within 5 minutes to the automated OCS / Lync conversation, the conversation will end and a notification email to complete the tasks will be sent instead.

#### CC

The CC field sets read-only users who will receive the notification. CC recipients are not able to respond to the tasks.





To set the CC field click on 11 to open the Select People and Groups configuration dialog.

#### **BCC**

The BCC field sets read only users who will receive the email. BCC recipitants are not able to respond to the tasks. Other users addressed in the email via the To, CC and BCC fields will not be able to see any addresses in the BCC field. To set the BCC field, enter the account name, or alternatively, select the address book icon for additional options.

#### From

The **From** field sets the user or domain group that will appear as the sender of the message. This setting applies to emails only. If no From user or domain group is specified, the From address configured in Global Settings will be used.

### **Importance**

The priority of the notification. This is only applicable when using email notifications.

### Subject

The Subject is the title of the notification being sent. If an Instant Message is being sent it will be prepended to the body of the notification.

It can be added manually or by clicking on [4], to use Insert reference fields from within the runtime instance of the workflow.

#### **Attachments**

Allows file attachments to be added to the notification.

Files will not be received by a user when SMS or IM is selected as the delivery method. For information on User preference, please refer to Configuring user preferences.

#### **Format**

This sets the format of the email.

Selecting:





- **Rich Text** enables italicize, bold, underline and indent information within the email using simple HTML styles provided by the SharePoint rich text tool bar.
- **Plain Text** is simply the text without any stylized formatting.

### **Notification body**

The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided, enter the content for the notification as straight text. Also available are <a href="Insert reference fields">Insert</a> reference fields from within the workflow.

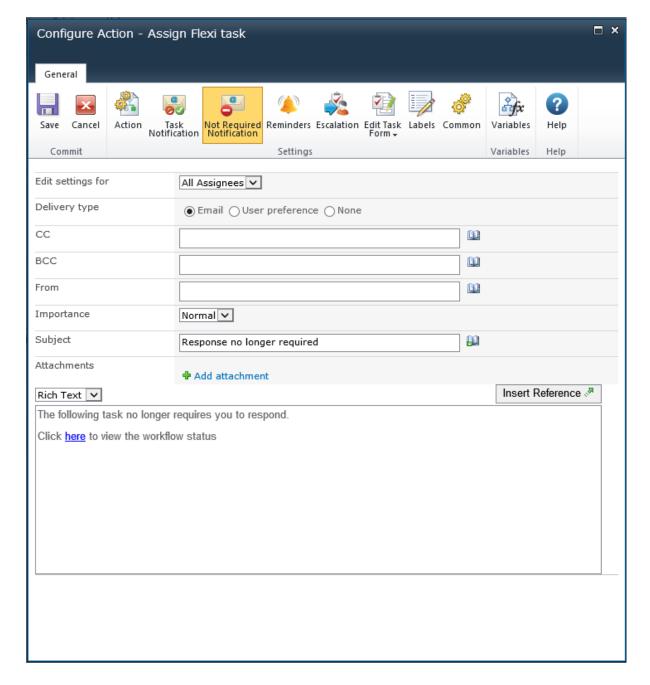
### **Ribbon Option: Not Required Notification**

Sent when the user no longer needs to respond to the task. This can occur when:

- A task is assigned to multiple users but only one is required to respond.
- The workflow is terminated prior to the task being processed.
- An error occurs in the workflow at runtime.







See **Ribbon Option: Task Notification** above for field descriptions.

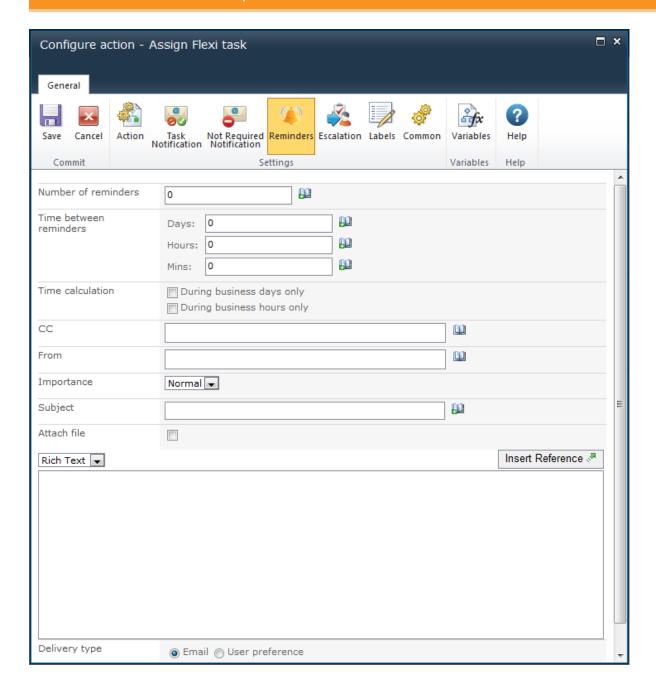
### **Ribbon Option: Reminders**

Optional notification **Reminders** can be configured to be sent to each assignee who has not yet completed the task.



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### **Number of reminders**

The number of reminders to be sent.

#### Time between reminders

The delay before sending each reminder in days, hours and minutes.





The total time is calculated by summing all fields, regardless of the **Time calculation** option selected. For example, 4 days and 4 minutes will be calculated as 96 (24x4) hours and 4 minutes.

#### Time calculation

Specifies whether or not hours outside the work week should be included when counting down to send a reminder.

#### **During business days only**

The **During business days only** option will specify that weekends or holidays are not included in the countdown, but after hours on a business day are.

#### Example:

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder (the work week is defined as Monday to Friday).
  - o A reminder will be sent Monday morning: weekends are not included in the countdown.

#### **During business hours only**

The **During business hours only** option specifies that only business hours are used in the count down.

### Example:

- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder (the work day is defined as Monday to Friday, 8am to 5pm).
  - A reminder will be sent at 11am on Thursday: after-business hours are not included in the countdown.

## **Neither option**

If neither option is selected, all hours will be included in the count down.

### **Examples:**

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder.
  - o A reminder will be sent Saturday morning: weekends **are** included in the countdown.
- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder.
  - A reminder will be sent at 8pm on Wednesday: after-business hours are included in the countdown.

Public holidays and any other special occasions are set using the "Site Settings > Nintex Workflow > Manage Holidays" page.

See **Ribbon Option: Task Notification** above for additional field descriptions.





### **Ribbon Option: Escalation**

Escalation is optional, there are two possible escalation paths:

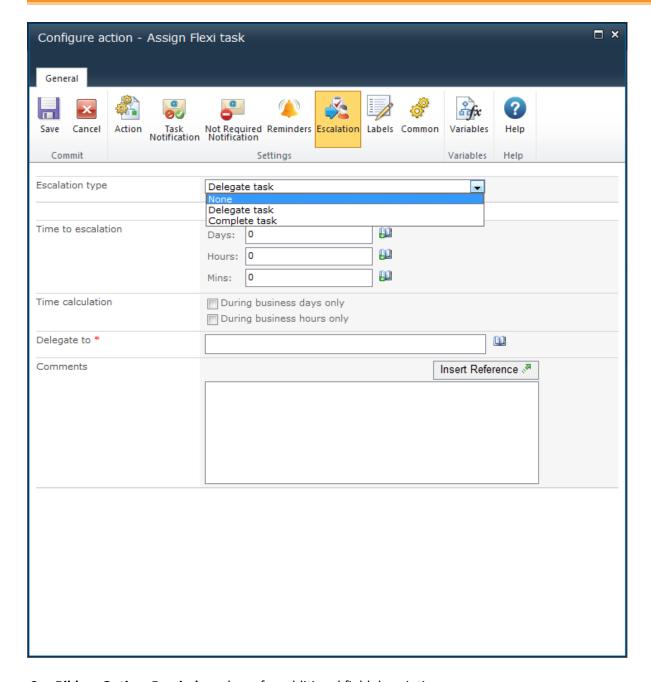
- **Delegate task** will re-assign all pending tasks to the nominated user after the specified time.
- **Complete task** will auto-respond to all pending tasks and set the overall outcome of the action to the indicated outcome after the specified time.
- The specified outcome does not have to be one of the configured possible Outcomes set in the Action.

Note: The user-entered outcome must match the case of the specified outcome. For example, if you specify "Information needed" as an outcome for your workflow to follow the referenced branch, the user-entered outcome must use the same case. If a user entered the outcome "information needed" (lower-case), then the user-entered outcome would not be considered a match to the example outcome, "Information needed". When a user-entered outcome does not match any of the specified outcomes, all branches from those outcomes are skipped and the workflow proceeds to the next action.

Escalation occurs after all reminders have been sent and the specified "Time to escalation" has elapsed.







See **Ribbon Option: Reminders** above for additional field descriptions.

# 1.4 Assign To-Do Task

This workflow action will assign a SharePoint task to one or more users.

To use the workflow action:





- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

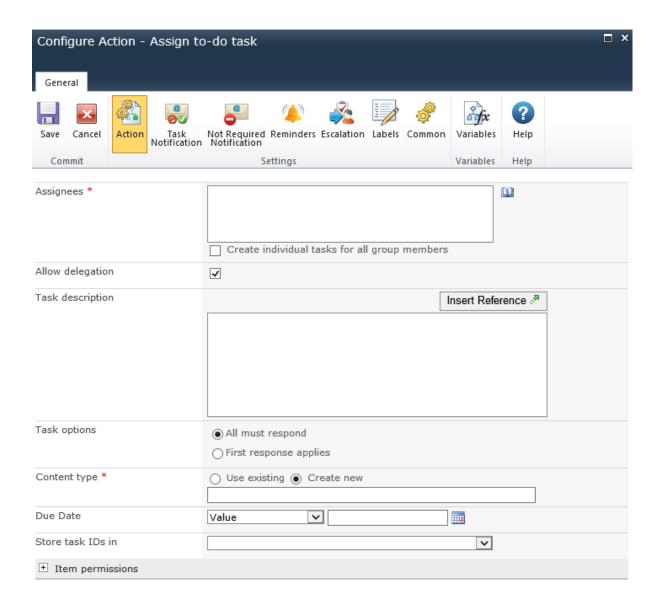
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# Options within this action

## **Ribbon Option: Action**

### **Assignees**

The **Assignees** list contains all users or groups that will be assigned the task when the workflow is runs.

Users can be:



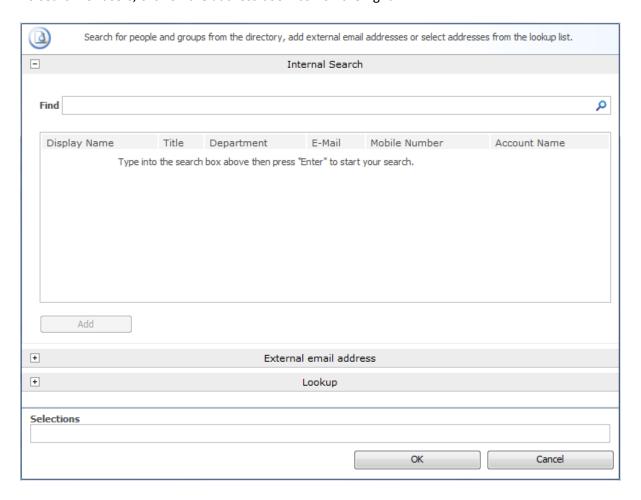




- Entered directly using their username, email address or full name and will be resolved where possible against the SharePoint user list or Active Directory.
- Search for users, click on the address book icon on the right.

#### **Select People and Groups**

To search for users, click on the address book icon on the right.



The configuration dialog allows the workflow designer to search for and/or add users to the **Assignees** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the
  magnifying glass will provide a list of matching users and groups from SharePoint as well as Active
  Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.





 Lookup: Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

#### Create individual tasks for all group members

In the case when a group is assigned the task and Create individual tasks for all group members checkbox is:

- not selected, all users in that group will receive the task notification. The first respondent will represent the entire group.
- selected, an individual task will be assigned to every member of the group.

Groups will only be expanded to one level. Groups within groups will not be expanded.

Users can be entered directly using their username, email address or full name and will be resolved where possible against the SharePoint user list or Active Directory.

#### Allow delegation

When this option is selected, if the assignee field of the task is changed, Nintex Workflow will record the change as a task delegation and the new assignee will receive the Response Required Notification. If this option is not selected, Nintex Workflow will not track the change to the assignee and Nintex Workflow reports and web parts will not reflect the new assignee.

#### Task description

Allows entry of dynamic text that will display on the task response form. This can be used to communicate additional information about the task to the responding user. References can also be inserted using the <u>Inserting reference fields</u> feature.

### **Task options**

There are two behavioural alternatives in this action to instruct Nintex Workflow how to handle tasks with multiple assignees. These are:

- All must respond: All assignees must complete the task before the workflow will continue.
- **First response applies:** After the first response is received, all other tasks will be set to 'not required'.

#### Content type

Choose to use an existing, or instruct Nintex Workflow to create a new content type.





If using an existing content type, select any content type that inherits from 'Workflow Task' but does not inherit from 'Nintex Workflow Task'. The 'Nintex Workflow Task' content type is reserved for request approval and request review actions. Also if selecting an existing content type, specify the value to assign to each field when the task is created.

### **Due Date**

Set a date for the task to be completed by.

#### Store task Ids in

When the workflow runs, the ID given to each task that is created will be stored into the selected collection variable.

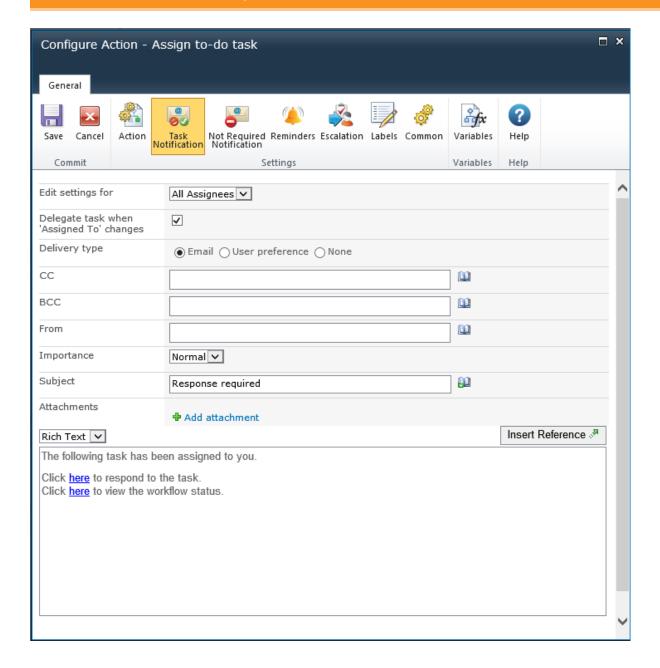
### **Ribbon Option: Task Notification**

Sent when the task is assigned to a user, also used when the task is delegated by one user to another.









#### **Edit settings for**

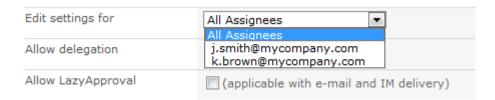
Changing this setting from the default **All Assignees**, allows the configuration of unique notification options for each **Assignee** in the list.

Unless specifically configured, assignees will use the **All Assignees** settings. To override settings for a specific **Assignee**, select their name from the drop down list.

Changes to **All Assignees** will not affect users who are given custom settings.







### Delegate task when 'Assigned To' changes

When this option is selected, if the assignee field of the task is changed, Nintex Workflow will record the change as a task delegation and the new assignee will receive the Response Required Notification. If this option is not selected, Nintex Workflow will not track the change to the assignee and Nintex Workflow reports and web parts will not reflect the new assignee.

### **Delivery type**

**Delivery type** is the method of delivering the notification to the recipients.

Available delivery options; None, Email, User preference or Instant Message (if enable on the server). For information on User preference, please refer to the <u>Configuring user preferences</u>.

Please note: Nintex does not provide support for troubleshooting email, SMS or LCS systems.

#### CC

The CC field sets read only users who will receive the notification. CC recipients are not able to respond to the tasks.

To set the CC field click on 11 to open the Select People and Groups configuration dialog.

#### **BCC**

The **BCC** field sets read only users who will receive the email. **BCC** recipitants are not able to respond to the tasks. Other users addressed in the email via the **To**, **CC** and **BCC** fields will not be able to see any addresses in the **BCC** field. To set the **BCC** field, enter the account name, or alternatively, select the address book icon for additional options.

### From



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The **From** field sets the user or domain group that will appear as the sender of the message. This setting applies to emails only. If no **From** user or domain group is specified, the From address configured in <u>Global Settings</u> will be used.

### **Importance**

The priority of the notification. This is only applicable when using email notifications.

#### Subject

The Subject is the title of the notification being sent. If an OCS/LCS message is being sent it will be prepended to the body of the notification.

Added manually or by clicking on , to use <u>Insert reference fields</u> from within the runtime instance of the workflow.

#### **Attachments**

Allows file attachments to be added to the notification.

Files will not be received by a user when SMS or IM is selected as the delivery method. For information on User preference, please refer to the Configuring user preferences.

### **Format**

This sets the format of the email.

## Selecting:

- Rich Text enables italicize, bold, underline and indent information within the email using simple HTML styles provided by the SharePoint rich text tool bar
- Plain Text is simply the text without any stylized formatting.

#### **Notification body**

The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided enter the content for the notification as straight text, also available are <a href="Insert reference fields">Insert</a> reference fields from within the workflow.

Ribbon Option: Not Required Notification

Sent when the user no longer needs to respond to the task. This can occur when:

A task is assigned to multiple users but only one is required to respond.

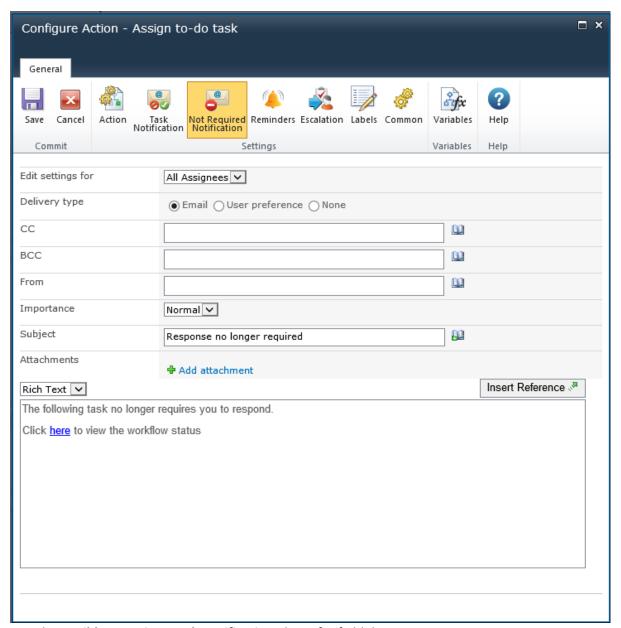
www.nintex.com

• The workflow is terminated prior to the task being processed.





• An error occurs in the workflow at runtime.



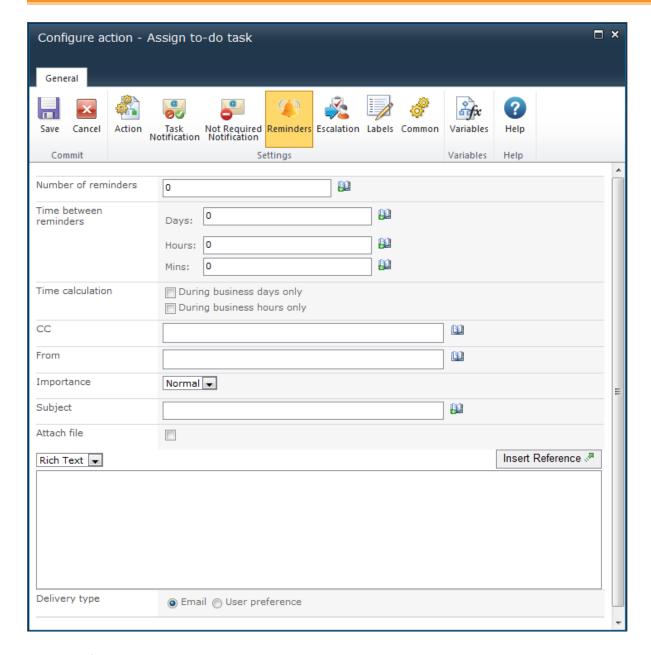
See above Ribbon Option: Task Notification above for field descriptions.

### **Ribbon Option: Reminders**

Optional notification **Reminders** can be configured to be sent to each assignee who has not yet completed the task.







## **Number of reminders**

The number of reminders to be sent.

#### Time between reminders

The delay before sending each reminder in days, hours and minutes.

The total time is calculated by summing all fields, regardless of the **Time calculation** option selected. For example, 4 days and 4 minutes will be calculated as 96 (24x4) hours and 4 minutes.





#### Time calculation

Specifies whether or not hours outside the work week should be included when counting down to send a reminder.

#### **During business days only**

The **During business days only** option will specify that weekends or holidays are not included in the count down, but after hours on a business day are.

#### Example:

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder (the work week is defined as Monday to Friday)
  - o A reminder will be sent Monday morning, weekends are not included in the count down.

#### **During business hours only**

The **During business hours only** option specifies that only business hours are used in the count down.

#### Example:

- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder (the work day is defined as Monday to Friday, 8am to 5pm).
  - o A reminder will be sent at 11am on Thursday, after business hours **are not** included in the count down.

#### **Neither option**

If neither option is selected, all hours will be included in the count down.

#### **Examples:**

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder.
  - o A reminder will be sent Saturday morning, weekends are included in the count down.
- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder.
  - A reminder will be sent at 8pm on Wednesday, after business hours are included in the count down.





Public holidays and any other special occasions are set using the "Site Settings > Nintex Workflow > Manage Holidays" page.

See **Ribbon Option: Task Notification** above for additional field descriptions.

#### **Ribbon Option: Escalation**

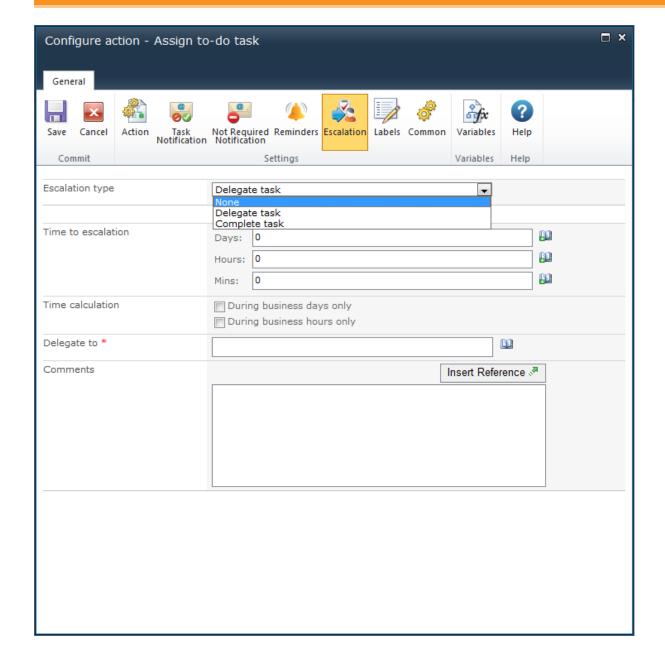
Escalation is optional, there are two possible escalation paths:

- **Delegate task** will re-assign all pending tasks to the nominated user after the specified time.
- **Complete task** will auto-respond to all pending tasks and set the overall outcome of the action to the indicated outcome after the specified time.
- The specified outcome does not have to be one of the configured possible Outcomes set in the Action.

Escalation occurs after all reminders have been sent and the specified "Time to escalation" has elapsed.







See **Ribbon Option: Reminders** above for additional field descriptions.

### 1.5 Build String

This action allows the workflow to perform basic string concatenations for use within other actions at runtime.

To use the workflow action:





- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

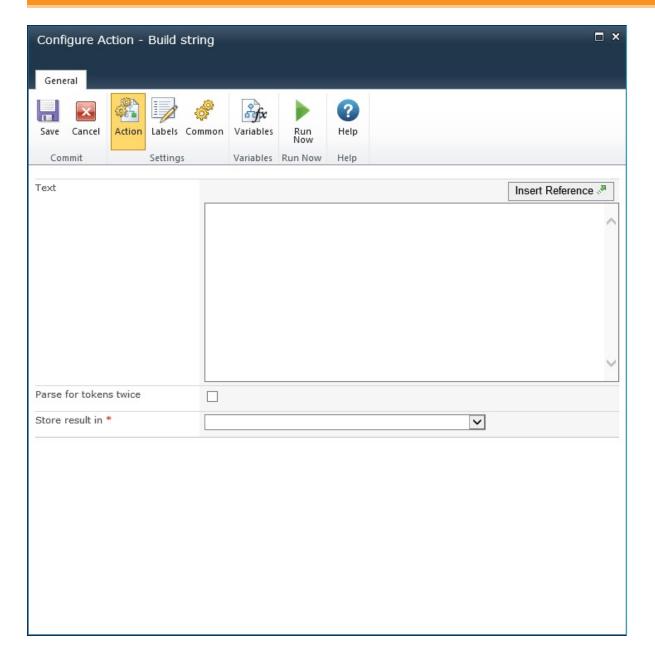
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









## Options within the action

#### **Build string**

Allows the combination of straight text with <u>Insert reference fields</u> from within the workflow and site at runtime.

#### Parse for tokens twice





When this option is selected, tokens will be searched for twice. For example, if a token called {WorkflowVariable:EmailTemplate} is inserted into the text area, and the resulting value contains the text {ItemProperty:Title}, the title token will also be replaced when this option is selected.

#### Store result in

The result of the string that is built at runtime will be stored in a text <u>Workflow variable</u> that is selected from this list.

#### 1.6 Calculate Date

This workflow action allows a time period to be added or subtracted from a date to create a new date.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

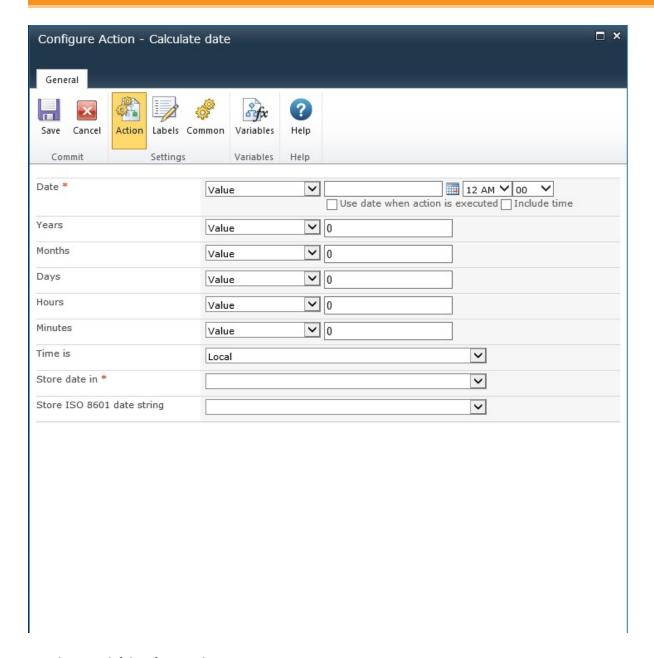
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## Options within the action

#### Date

The date to use as a base for the calculation can be:

- A specific date
- A lookup from a variable or list
- The current date.

The time period change will be applied to this date.







#### **Timeframe**

The number of:

- years
- months
- days
- hours
- minutes

to add to the date.

The value can be:

- Manually entered
- A lookup from a variable or list

Note: a negative value can be used for a subtraction operation.

For more information on lookups, see **Using Lookups**.

#### Time is

Specify whether the date is being specified according to the server's locale settings time zone or UTC time.

#### Store Date in

A date/time workflow variable in which to store the result of the calculation.

#### Store ISO 8601 Date string

A text variable that contains the date in the XML friendly ISO 8601 format.

#### 1.7 Call web service

The Call web service workflow action allows the workflow to make a call to a SOAP web service method.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

Alternatively





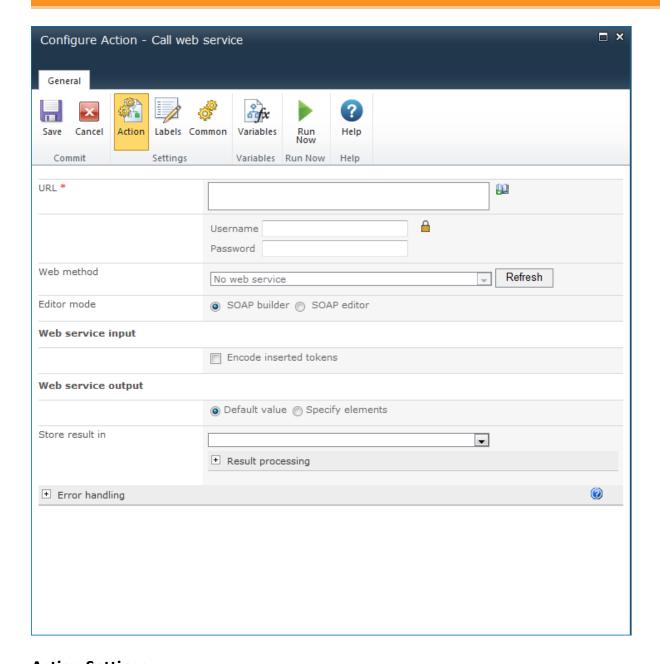
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## **Action Settings**

#### URL

A mandatory field that represents the full 'URL to the WSDL definition of the SOAP web service to call'. Once a URL has been entered, click the **Refresh**button on the Web method to select from the available Web methods. References can also be inserted using the <u>Inserting reference fields</u> feature.

#### Username







The username (including domain) used when authenticating against the web service. This is an optional setting, however if left blank the web service must be open to anonymous access.

#### **Password**

The password for the username above when authenticating against the web service. If left blank, the web service must be open to anonymous access.

#### Web Method

The web methods that are available for the web service.

#### **Editor mode**

The Editor mode defines the values to be sent to the web service. The message configuration depends on the parameters required by the selected web service method.

- SOAP Builder: Use the SOAP Builder if the web service method only required parameters of 'simple'
  data types. An input form is displayed to allow these values to be provided. Note: If the web service
  method requires complex parameters, the SOAP Builder form cannot be displayed and a single text
  box to edit the XML of the SOAP message directly is provided.
- SOAP Editor: Use the SOAP Editor to directly edit the XML message when the selected web service method requires only simple data types.

Note: Editing the SOAP message manually requires some advanced knowledge of web services.

To pass the byte array of the document under workflow, type [FileData] into any input field. At runtime Nintex Workflow will base64 encode the file and pass that as the value.

For more information on the SOAP standard please refer to http://www.w3.org/TR/soap12-part0.

#### Web service input

### **Encode inserted tokens**

Specifies whether inserted tokens (workflow variables, list item properties, etc) should be encoded to ensure they are valid for sending to the web service.

#### Web service output

#### **Default value**

The default value can be used for a single return value from a web service method.

• Store result in

This list contains the workflow variables that can be used to store the simple type result of the call.





#### Result processing

**Force top level XML node:** Determines whether the result should be wrapped in a top level XML element called <xml>. This is useful if the result from the web service is not XML or is an XML fragment with no root node.

**XML Transform:** Allows an XSL transform to be defined. This transform will be applied to the web service results before they are stored in the workflow variable.

#### **Specify elements**

Allow the workflow to store specific values from a web service response.

To specify an element:

- 1. Click on Select element to browse the response format and select a value. Click Apply.
- 2. Specify a workflow variable to store the value of the element selected.

### 1.8 Capture document set version

#### \* This action requires Microsoft SharePoint Server

This workflow action saves a version of the current properties and documents in a document set.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

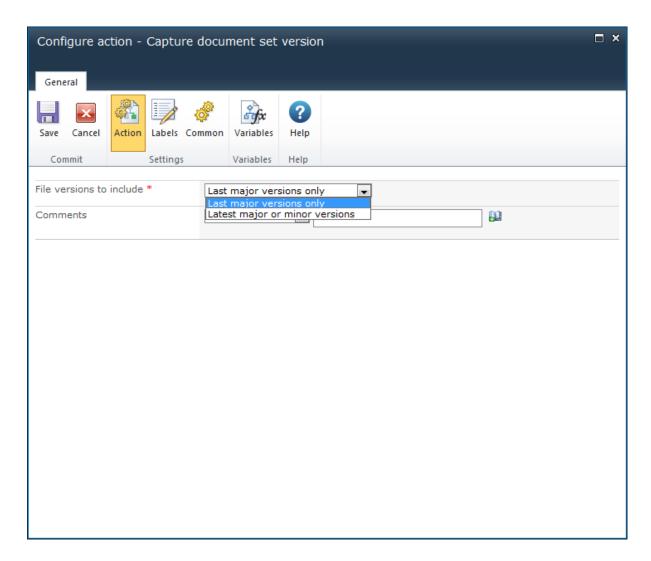
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







### **Options for this action**

#### File versions to include

Specify whether the Document Set should include only major versions of the items in the set or the minor versions. Select the versions of the items in the set to include in the document set:

- Latest major versions only: Includes the latest major versions of items within the document set.
- Latest major or minor versions: Includes the latest major or minor versions of items depending on the version of the item within the document set.

#### Comments







The comments describing what has changed in this version. Either specify a value or use the <u>lookups</u> feature to build the comments dynamically at run time.

For details on using Insert Reference, please refer to Inserting reference fields.

### 1.9 Change State

This action instructs a parent State Machine action which state it should run when the current state has finished. **Change state** actions can only be dragged on to the designer when used in a State Machine action.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

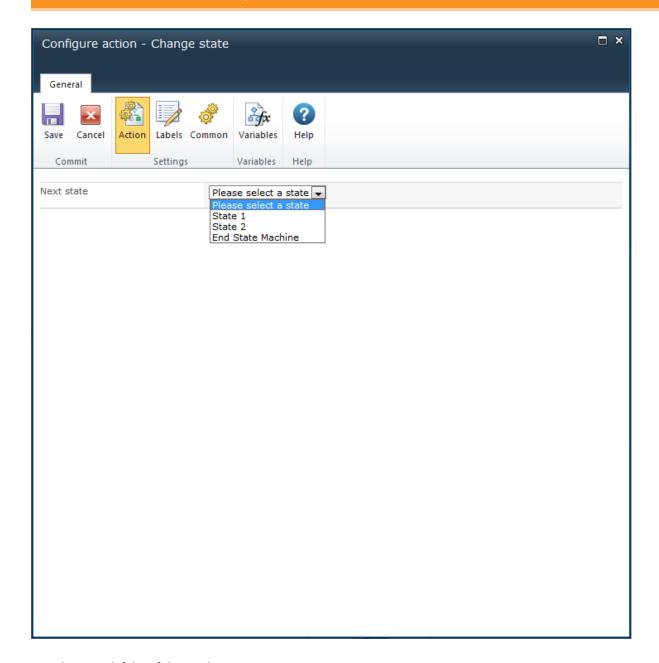
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









## Options within this action

#### **Next state**

Choose a state from the drop-down to determine which state will be used after the one currently running has completed.

Please note that the **Change state** action does not instantly change execution to the new state, it only sets which state should be run next.





Selecting **End State Machine** option from the drop down list will exit the State Machine construct when the current state has completed.

#### 1.10 Check in item

This action allows the workflow to check-in an item that was checked out with the **Check out** item action.

The workflow will error if checking in an item that was checked out by a different user.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

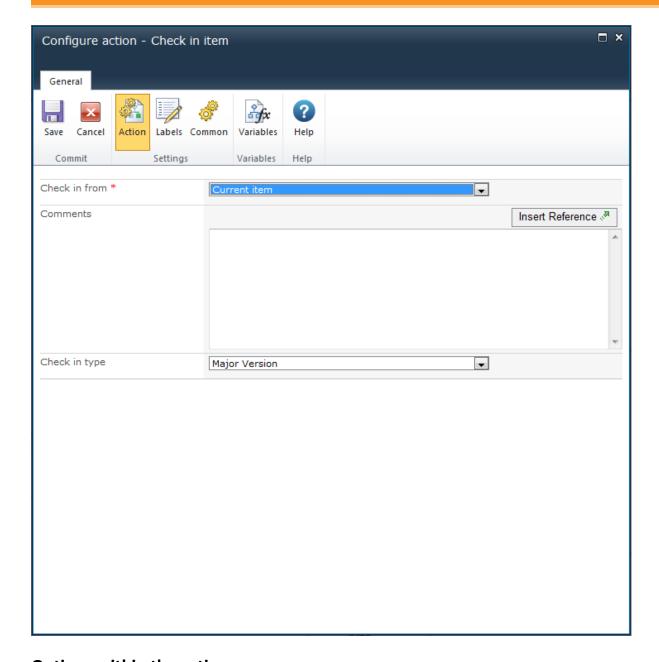
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## Options within the action

#### **Check in from**

**List and Site Workflows**: Check in an item from somewhere else in the current site.

**Document Library:** There are two options when checking in a document:

- Check in for the item currently in the workflow.
- Check in an item from somewhere else in the current site.





From the drop-down list select the current item or the required location. If it is the current item, no filters need to be selected.

In the case of checking in an item from elsewhere in the site, a filter will need to be selected in order for Nintex Workflow to establish which item to check in.

- Select the column that needs to be matched; and then.
- Compare the selected column with a value, workflow variable or list lookups to identify the specific item.

For more details on using List lookups, please refer to the Using lookups.

#### **Comments**

The comments entered will be stored with that items meta data as the check in comments.

Allows the combination of straight text with <u>Inserting reference fields</u> from within the workflow and site at runtime.

The comments are not stored in the **Workflow History**.

#### Check in type

The type of check in to be performed. Options are:

- Major Version
- Minor Version
- No Version Change

The target document library version settings must match what is chosen in the configuration dialog.

### **Troubleshooting**

#### **Action not executing**

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

Connect: <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

#### 1.11 Check Out Item





This action allows the workflow to check out an item in a selected location to the initiator of the workflow. If a library is configured to require check outs, this action must be used to check out the item before an **Update item** action is used.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

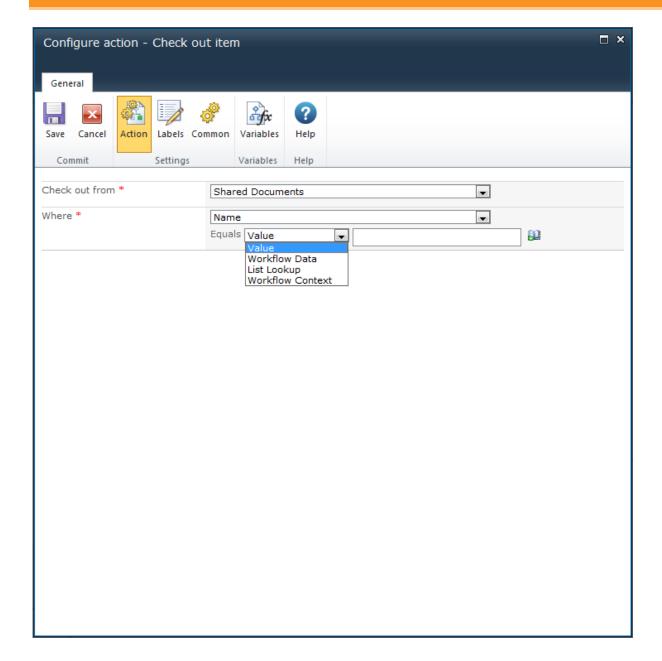
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







# Options within the action

### **Check out from**

Select either the **Current item** that the workflow is running on, or one of the available libraries.

If selecting a library location, the **Where** selector will appear.

#### Where





If not selecting the **Current item**, use this section to specify the filter criteria to identify which document should be checked out. Manually enter the value, or select a workflow variable to evaluate at run time. For more information on lookups, see <u>Using Lookups</u>.

Note: If the filter criteria returns more than one item, only the first item in the collection will be applied.

### **Troubleshooting**

#### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

### 1.12 Collection Operation

This action provides direct access to the values in a collection variable.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

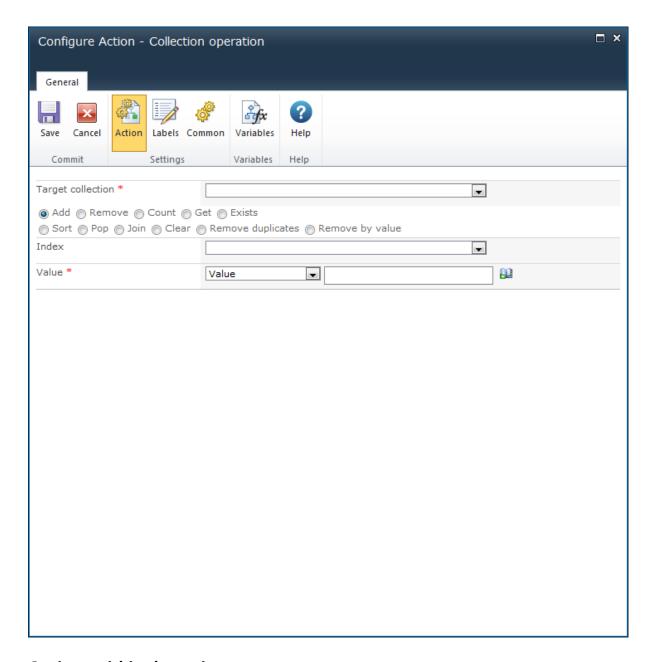
## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





## **Options within the action**

### **Target collection**

The Target Collection parameter is required for each operation. This specifies the collection variable that the operation applies to.

#### Add







Adds a new item to the collection with the value specified in the 'value' parameter. Optionally, a variable storing the index of what position to insert the item into the collection at can be used. If no index variable is selected, the item will be added to the end of the collection. If the index value is larger than the size of the collection, the workflow will error.

#### Remove

Removes the item stored in the collection at the specified index. This will cause the collection size to decrease by one.

#### Count

Outputs a number indicating how many items are currently stored in the collection. The result is stored in a number variable specified at **Store result in**.

#### Get

Retrieves a value at a specified index and stores the value in the variable specified at **Store result in**. The output variable must be compatible with the value being retrieved from the collection.

#### **Exists**

Outputs a Yes / No value into the variable specified at **Store result in** to indicate whether or not an item matching the specified value is currently stored in the collection. The comparison is done by comparing the text representation of the 'value' parameter with the text representation of each item in the collection.

#### Sort

Sorts the values in the collection and stores the sorted collection in another collection variable specified in **Store result in**. **Store result in** can specify the same variable as the **Target collection**.

#### Pop

Retrieves the value at the end position of the collection and stores it in the **Store result in** variable. After this operation, the retrieved item will no longer exist in the collection variable therefore the collection will be one item shorter.

#### Join

Concatenates every value in the collection into a string which is stored in the **Store result in** variable. Each value is separated by the specified **Delimiter**value.

#### Clear

Removes all the items from the collection.





#### **Remove duplicates**

Searches for and removes any values that exist more than once in the collection, leaving only one instance of each value. For text values, duplicate matching is case sensitive.

#### Remove by value

Removes all items from the collection that equal the specified value.

For details on using **Insert Reference**, please refer to <u>Inserting reference fields</u>.

### 1.13 Commit pending changes

This workflow action forces all existing batched operations to be committed. Batched operations are operations performed by workflow actions that do not commit immediately. For example, the "Update list item" action doesn't actually update an item immediately, it waits until the workflow commits. The workflow commits at a delay action, a task action or the end of the workflow. So when the update list item action runs, it just registers that it needs to update the item, the item actually updates on commit.

The SharePoint workflow engine doesn't necessarily commit batched operations in the order they are displayed on the designer. For example, if the following actions are in this order:

Set item permissions action (Nintex)Update list item action (Microsoft SharePoint)Set permissions action (Nintex)

These would actually execute in this order:

- Set item permissions action (Nintex)
- Set item permissions action (Nintex)
- Update list item action (Microsoft SharePoint)





It executes it in this order, because there are actually two batches, the Microsoft batch and the Nintex batch (any other third party has their own batch). This is because third parties cannot add operations to the Microsoft batch. In addition, all items in a single batch are executed before actions in another batch. The batch that is executed first depends on the first activity: If the Microsoft SharePoint action was encountered first, then all the Microsoft actions would run before the Nintex actions.

The "Commit pending changes" workflow action: The "Commit pending changes" action is another point where a workflow will execute all its batch operations.

So, modifying the above example:

- Set item permissions action (Nintex)
- Update list item action (Microsoft SharePoint)
- Commit pending changes
- Set item permissions action (Nintex)





In this case everything will run in order. The Nintex batch will run first because the Nintex action is first encountered, but in this scenario there is only one action in this batch. The "Update item" action will run. Then the workflow will commit, and the final "Set item permissions" action is in a new batch.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





### **Options within the action**

This action has no settings to configure.

### 1.14 Compile Audience

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft Office SharePoint Server

This workflow action will compile an existing audience in the environment.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

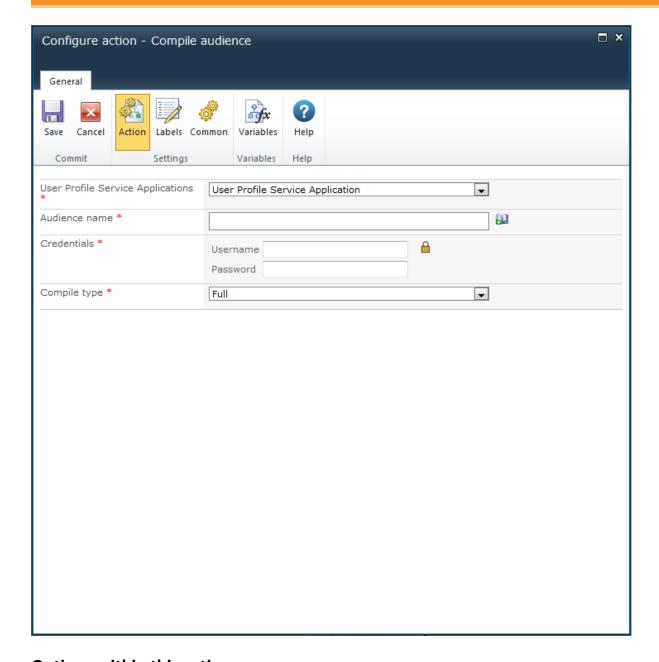
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









## Options within this action

#### Audience name

The name of the audience to compile.

For details on using **Insert Reference**, please refer to <u>Inserting reference fields</u>.

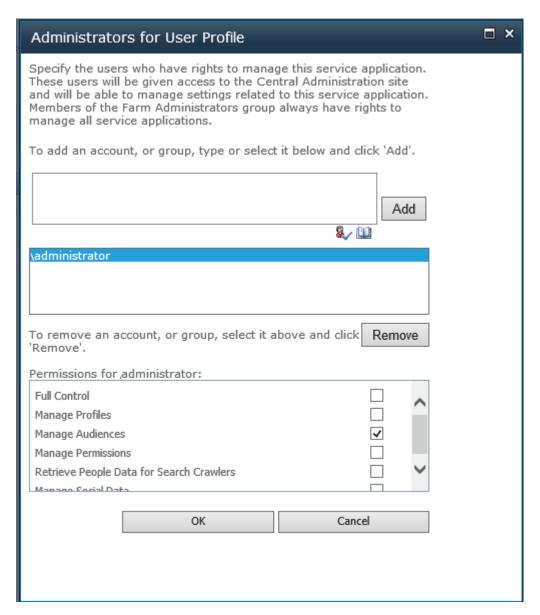
#### Credentials







An account with permissions to compile an audience. This account will need to be explicitly added as the administrator of the User Profile Service with the permission to Manage Audiences.



#### **Compile type**

Specifies whether to perform a complete or incremental compilation.

### 1.15 Complete Workflow Task

This workflow action will complete any outstanding workflow tasks. It will process enough individual tasks to achieve the selected outcome, the workflow engine will then process the remaining individual tasks in accordance with the task settings.





To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

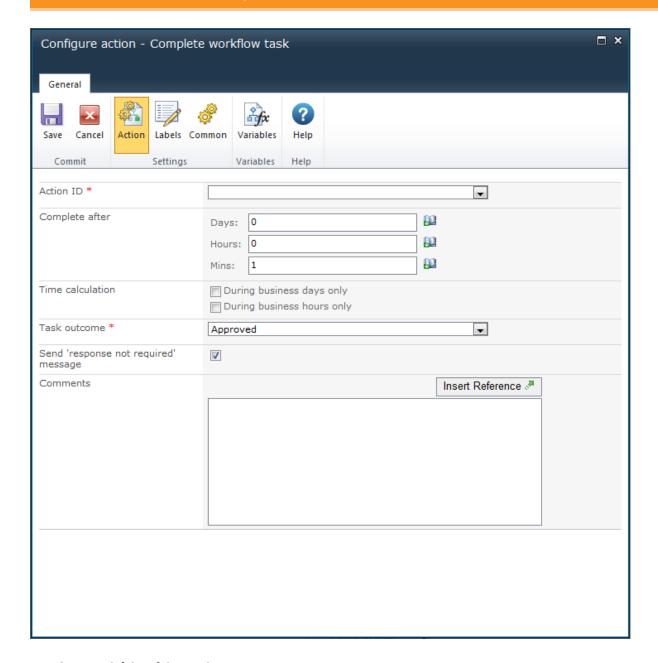
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









## Options within this action

#### **Action ID**

Specify this workflow variable to nominate which task action to complete.

When configuring other task actions, nominate a workflow variable of type **Action ID** to store the assigned workflow action ID.

#### **Complete after**







Specifies how long to wait before the task is completed. If the task is completed manually in this period, the complete action will finish without performing any change to the task.

If the task is set to complete immediately, the action will always wait at least a minute before processing.

The total time is calculated by summing all fields, regardless of the **Time Calculation** option selected. For example, 4 days and 4 minutes will be calculated as 96(24x4) hours and 4 minutes.

For details on using **Insert Reference**, please refer to <u>Inserting reference fields</u>.

#### Time calculation

Specifies whether or not hours outside the work week should be included when counting down to send a reminder.

#### **During business days only**

The **During business days only** option will specify that weekends or holidays are not included in the count down, but after hours on a business day are.

#### **Example:**

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder (the work week is defined as Monday to Friday).
- A reminder will be sent Monday morning, weekends are not included in the count down.

#### **During business hours only**

The **During business hours only** option specifies that only business hours are used in the count down.

#### Example:

- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder (the work day is defined as Monday to Friday, 8am to 5pm).
- A reminder will be sent at 11am on Thursday, after business hours are not included in the count down.

#### **Neither option**

If neither option is selected, all hours will be included in the count down.

#### **Examples:**

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder.
  - o A reminder will be sent Saturday morning, weekends **are** included in the count down.
- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder.





 A reminder will be sent at 8pm on Wednesday, after business hours are included in the count down.

#### Task outcome

The value too set outstanding tasks to. Use 'Approved' or 'Rejected' for approval tasks, and 'Continue' for other task types.

#### Send 'response not required' message

When selected, pending approvers for the completed task will receive an email informing them that their input is no longer required.

#### **Comments**

Comments to be recorded when the task is automatically completed. The comments will be added against each individual task that the **Complete task**action must process to achieve the desired outcome.

Allows the combination of straight text with <u>Inserting reference fields</u> from within the workflow and site at runtime.

Please note that there can be a delay between when the task is processed and when the workflow continues.

#### 1.16 Convert Document

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

This workflow action converts a specified document from its current file type to a specified file type and sends a copy of the document in a specified URL location.

Note: We only support the conversions supported by Word services.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

Alternatively





• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

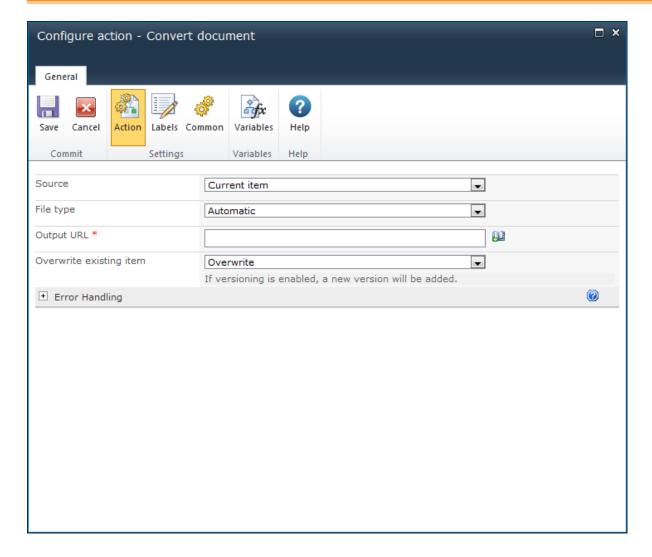
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









### **Options for this action**

#### Source

The document which is to be converted. Select either:

- The Current item; OR
- **Source URL**. In the **Source URL** field, the full URL including the filename and type will need to be provided. E.g. 'http://mycompany.com/sales/Shared%20Documents/WordDocument.docx'

#### File type

The list of available file types that the source can be converted to.

Automatic: Selecting Automatic will convert the source to the extension specified in the Output URL. E.g. If the File type is set to Automatic and the Output URL is







'http://mycompany.com/sales/Shared%20Documents/PDFDocument.pdf', the item will be converted to a PDF.

- Document: Specifies that the output file is an Open XML (docx) file.
- Document MacroEnabled: Specifies that the output file is a macro-enabled Open XML (docm) file.
- **Document97:** Specifies that the output file is a Word97 (doc) file.
- **Template:** Specifies that the output file is an Open XML template (dotx) file.
- **Template MacroEnabled:** Specifies that the output file is a macro-enabled Open XML template (dotm) file.
- Template97: Specifies that the output file is a Word97 template (dot) file.
- MHTML: Specifies that the output file is an MHTML file.
- **PDF:** Specifies that the output file is a PDF file.
- RTF: Specifies that the output file is an RTF file.
- XML: Specifies that the output file is a Word XML file.
- XPS: Specifies that the output file is an XPS file.

#### **Output URL**

The URL to place the converted document. Either specify a valid URL or use the <u>Insert Reference</u> <u>fields</u> feature to build a valid URL. E.g.

'http://mycompany.com/sales/Shared%20Documents/PDFDocument.PDF'

Note: The following settings will result in an unknown file type and the 'Windows can't open this file:' dialog will appear when a user clicks on a converted document:

- If the **File type** is **Automatic** and the extension is not specified in the **Output URL**, the document will have no file type set.
- If the **File type** is **Automatic** and the extension specified in the **Output URL** is not in the available list of file types, the document will not be converted but named to correctly with the file type.
- If the **File type** is set and the extension specified in the **Output URL** is different, the document will have both file type and extension set, the document will however be converted to the **File type** set and renaming the document's extension with the **File type** set will allow the user to open it.

#### Overwrite existing item

If the Converted document should overwrite an existing item if it already exist in the **Output URL** specified. Select either:

- Overwrite: Overwrites the current document, if versioning is enabled, a new version will be created.
- Create new version: Document will be overwritten if versioning is not enabled.
- **Do not overwrite**: Document will not be overwritten. However, the workflow will error if the item already exists.

#### 1.17 Convert Value





This workflow action will interpret a provided text value, and store it into a workflow variable of a different type. For example, if a text variable contains a number, this action will store the value as a numeric value in a number variable.

A common scenario for using this action is using it with an **Inline function** or the result of a query that returns a text string that contains a number, and that number needs to be stored into a number field of a SharePoint list. The value cannot be stored into a number field while the value is stored in a text variable. The example in the screenshot demonstrates processing a text variable by using an **Inline function** to extract the first 4 characters (maybe the variable contains 1234-XXAB). These first 4 characters will then be interpreted and stored into a number variable.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## Options within the action

### Input

The value that is to be interpreted.

#### Store result in

This option specifies the variable in which the resulting value will be stored. If the input text cannot be converted into a value that is compatible with the selected variable, the workflow will error.

#### **Date format**

This option only appears when the 'Store result in' variable is a date time variable. This option allows the exact formatting of the input date to be specified. When a date format is specified, the input date will only be recognized if it is an exact match to the format. This URL lists the recognized date formatting values: <a href="http://msdn.microsoft.com/en-us/library/8kb3ddd4.aspx">http://msdn.microsoft.com/en-us/library/8kb3ddd4.aspx</a>.

#### **Culture (Advanced)**

Specify the language information (LocaleID or LCID) to use when attempting to convert the input value into another variable type. For example, if the provided input text contained a number in a European format, specifying a European culture identified (for example, de-DE for German) will ensure the value is interpreted correctly. When this parameter is blank, the current language settings of the SharePoint site will be used. This URL lists the recognized language codes: <a href="http://msdn.microsoft.com/en-us/library/ms912047">http://msdn.microsoft.com/en-us/library/ms912047</a> (WinEmbedded.10).aspx. The 'Short string' value should be used when specifying the 'Culture' parameter. Enter the text 'Invariant' to specify an invariant culture.

For details on using **Insert Reference**, please refer to **Inserting reference** fields.







## 1.18 Copy item

This workflow action copies an item from one list or library to another within the current site (not parent sites and not sub-sites). It only allows copying from the root level of a location (e.g; a folder within a document library is not valid) to the root level of another location in the same site. The content type of the source must match the content type of the destination - the workflow will error if the source and destination are incompatible. To copy the library item in the workflow to another location in SharePoint (including folders and sub-folders of the same site), please use the "Copy to SharePoint" action.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

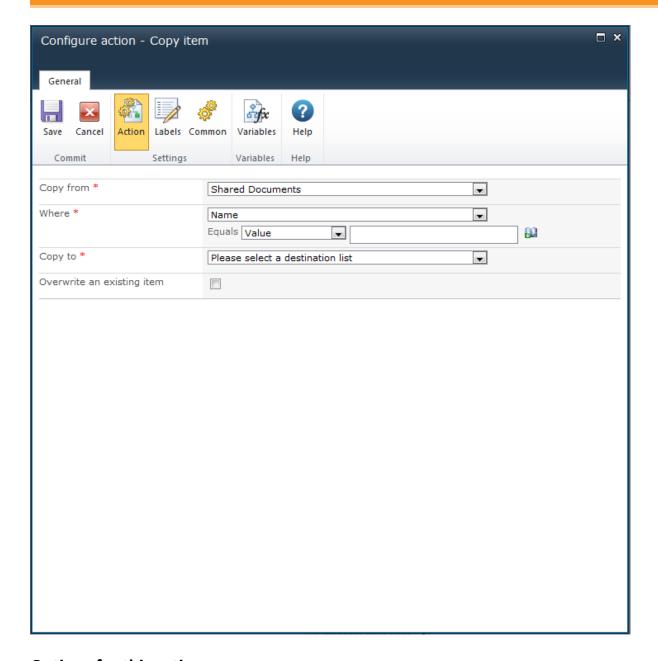
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









# **Options for this action**

## **Copy from**

This mandatory field is used to select the list or library where the item that is to be copied is located.

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### Where





This mandatory field is used to select the filter criteria to return one or more items to be copied (e.g; Created By, Title, Content Type etc.). The information types available in the drop-down are dependent on what is selected in **Copy from**.

For more details on using **List lookups**, please refer to the **Using lookups**.

For details on using **Insert Reference**, please refer to <u>Inserting reference fields</u>.

#### Copy to

This mandatory field is used to select the destination in the current site for the item when it is copied. The destinations available in the drop-down are dependent on the content of the site.

Only root level locations are valid (folders and sub-folders are not supported).

### Overwrite an existing item

If the item to copy is a file in a library, and a file with the same name already exists in the target library, this option will determine if the file will be overwritten. If this option is not selected, a time stamp will be added to the end of the filename.

Overwriting a file does not increase its file version.

## **Troubleshooting**

### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

Connect: <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

## 1.19 Copy to file share

This workflow action downloads a copy of the current item to a specified location. This action is only available when designing the workflow on a library.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

Alternatively





• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

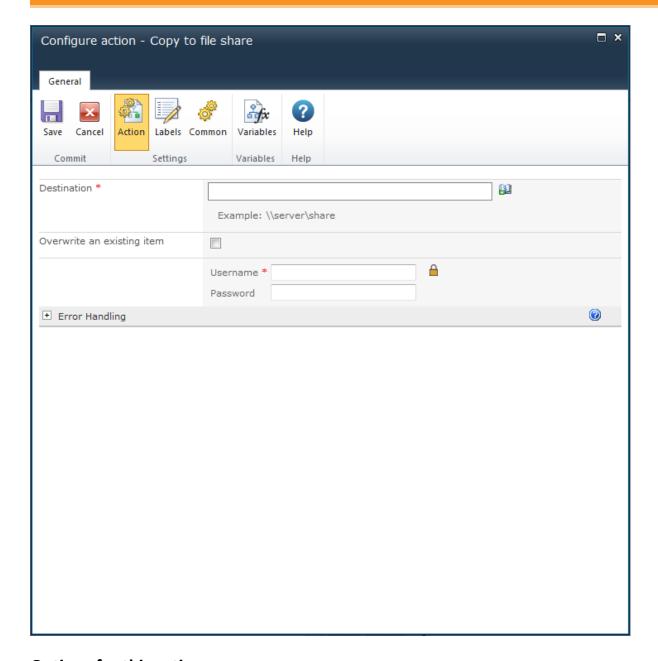
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









# **Options for this action**

### **Destination**

This required field must be a valid UNC path accessible from the SharePoint server where Nintex Workflow is installed e.g. \myfileserver\reports. If a file name is specified in the destination path, the file will be copied using this file name.

For details on using Insert Reference, please refer to Inserting reference fields.







#### Username

The user to authenticate against when the document is copied to the specified location.

#### **Password**

The password to authenticate with when the document is copied to the specified location.

## 1.20 Copy to SharePoint

This action allows the workflow to copy items from the current list to another list within SharePoint.

When the workflow is running on document libraries, the item that the workflow is running on will be copied. In a list, any attachments on the list item that the workflow is running on will be copied.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

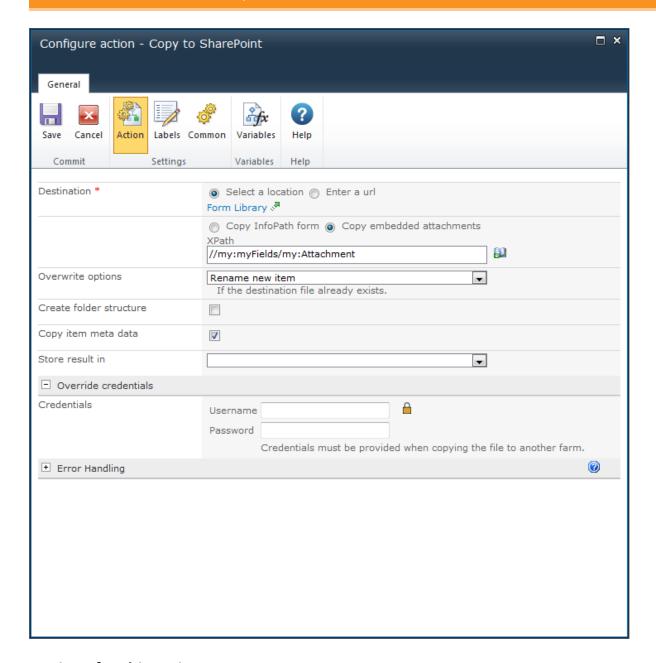
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## **Options for this action**

#### Destination

**Select a location** enables a site picker (Select a document library or folder) to navigate through the portal structure of the current SharePoint environment and select the library to which the document will be copied. Folders and sub-folders can be selected.

**Enter a URL** allows manual entry of the URL or selection using **Insert Reference**. To copy a file to a remote environment, **Enter a URL** must be used.





For more details on using Insert Reference, please refer to Inserting reference fields.

### Copy InfoPath form / Copy embedded attachments

This option is available when designing a workflow on a form library. It allows for InfoPath attachments embedded in the form to be extracted and copied. The XPath query is used to indicate where in the form XML structure the attachments exist. If the XPath query evaluates to more than one attachment node, each attachment will be copied. To copy the actual form item in the form library, choose the **Copy InfoPath form** option.

### **Overwrite options**

Use this setting to determine the behavior when a file with the same name already exists in the destination.

- Remove existing item the file that already exists will be removed. If versioning is enabled in the
  destination the copy that is created will be an initial version
- **Rename new item** the file that already exists will be not be modified. The copied item will have a time stamp appended to its name
- **Update existing item** the file that already exists will be overwritten. If versioning is enabled in the destination, the version of the file will be incremented.

#### Create folder structure

Check this box to replicate a folder structure in the target library if the item being copied is in a sub folder. This option is not applicable when the destination is a remote SharePoint environment.

#### Copy item meta data

Check this box to set the item properties on the target item to the same values as the source item. Only matching fields will have their values copied.

### Store result in

Stores the new URLs of the copied files into a text or collection variable.

#### Override credentials

If the destination library is on a remote SharePoint environment, credentials with access to upload files are required. For copying files to a SharePoint site in the same environment as the workflow, the workflow automatically uses permissions with global SharePoint access if no other credentials are specified. To copy the item as a specific account in the local farm, enter the user credentials.

When a file is copied to the local farm with the global system account (i.e. no alternative credentials are specified), workflows in the destination location will not start automatically.

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## 1.21 Create AD Group

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will create an Active Directory group in the specified LDAP location.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

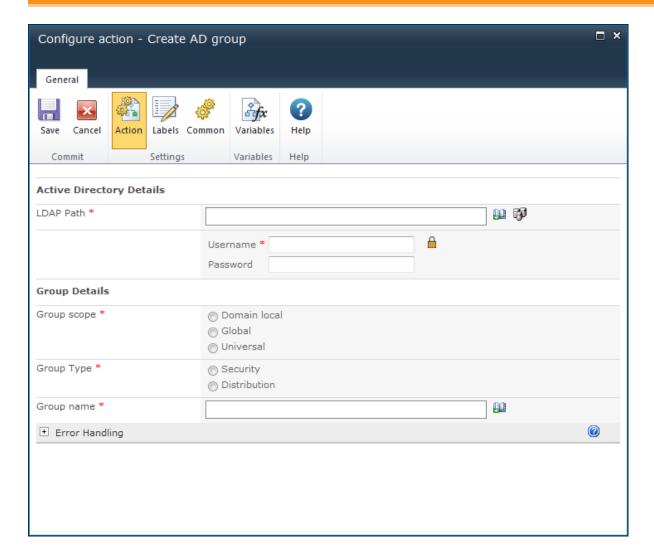
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# **Options within this action**

### **Active Directory Details**

#### **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

### **Group Details**

## **Group scope**

Specify the scope for the group. Available options are: Domain local, Global or Universal.

### **Group type**







Specify the type of group to be created. Available options are: Security or Distribution.

### **Group name**

The name of the group to be created. E.g. Testers.

### 1.22 Create AD User

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will create an Active Directory user account in the specified LDAP location.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

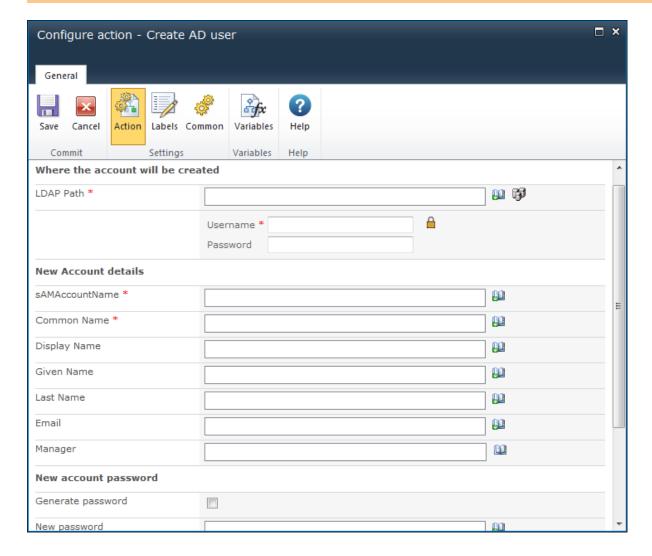
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## **Options within this action**

## Where the account will be created

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

### **New Account Details**

### sAMAccountName

A unique username to specify for the Active Directory entry. This must be a unique username not used within the Domain yet.

#### **Common Name**





The Active Directory Common Name value. This must be unique within the Container in which it will be created.

### **User Principal Name**

The display name of the principal user. If this field is left blank, it will default to the value of sAMAAccountName@domain.com

### **Display Name**

The display name of the new account.

#### **Given Name**

The given name of the new account.

#### **Last Name**

The surname or last name of the new account.

#### **Email**

The email address of the new account.

### Manager

The manager of the new account. The value entered must be the sAMAccountName of the manager in the Active Directory

#### **New Account Password**

The password of the new account. Use this drop down option to set password information correctly. The **New Account Password** option provides the following additional settings:

- Generate password: If checked, a random password will be automatically generated by the action. If unchecked, specify the password for the account in the New password textbox.
- **Store generated password**: The automatically generated password can be stored in a text type workflow variable. This can then be used in other actions.

### Other Fields

Select other fields to set for the user. Select the field name, then click the Add button.

AD Fields to take note of:





- Account Options: Use this property to set the following account options:
  - o User must change password at next logon.
  - User cannot change password.
  - o Password never expires.
  - User cannot change password AND Password never expires.

Note: Leaving all 3 checkboxes unchecked will remove all options. The only valid multiple selection is **User cannot change password** AND**Password never expires**.

For details on using **Insert Reference**, please refer to <u>Inserting reference fields</u>.

## 1.23 Create appointment

\* This topic applies to Nintex Workflow Enterprise Edition only.

This workflow action creates a calendar appointment or meeting request in Microsoft Exchange.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

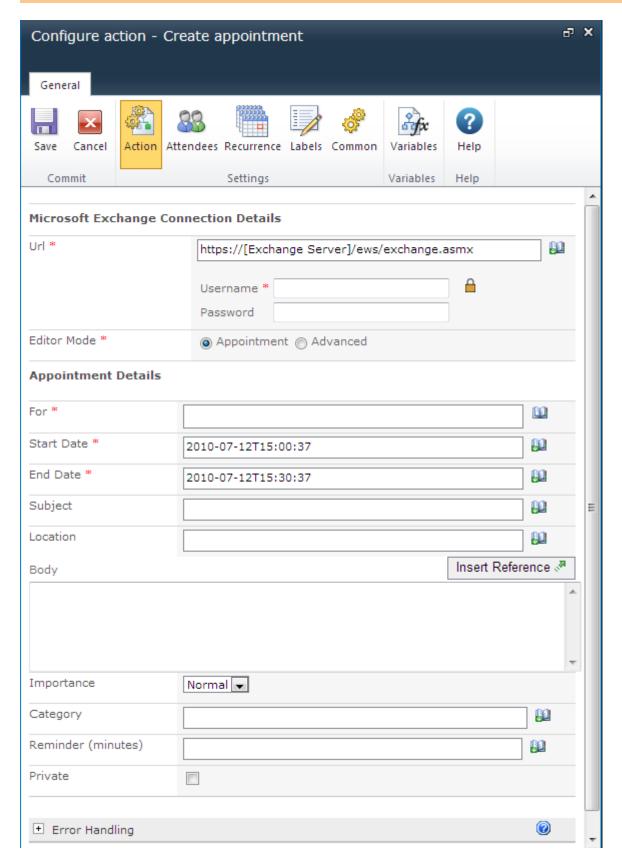
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.











## **Options for this action**

### **Ribbon Option: Action**

### Microsoft Exchange connection details

This action connects to Microsoft Exchange Server using the Exchange web services.

- Enter the URL to the Exchange web service.
- Enter the username and password of an account that has rights to create appointments in the mailbox of the user specified in the **For** field.

#### **Editor mode**

- Appointment: use the Nintex Workflow UI to build the appointment.
- Advanced: edit the appointment XML manually. Use the Advanced mode to set appointment
  options not listed in the Appointment mode (UI). See the Microsoft Exchange Web Services SDK for
  more details.

### **Appointment details**

This section defines the appointment to be created. When the action runs, the calendar appointment will be created in the calendar of the user specified in the **For** field.

No meeting request will be sent to this user. The account credentials specified above must have write access to this user's mailbox.

For more details on using Insert Reference please refer to Inserting reference fields.

Note: Dates specified in the Start Date and End Date fields will be treated as local time according to the time zone specified in the team site regional settings.

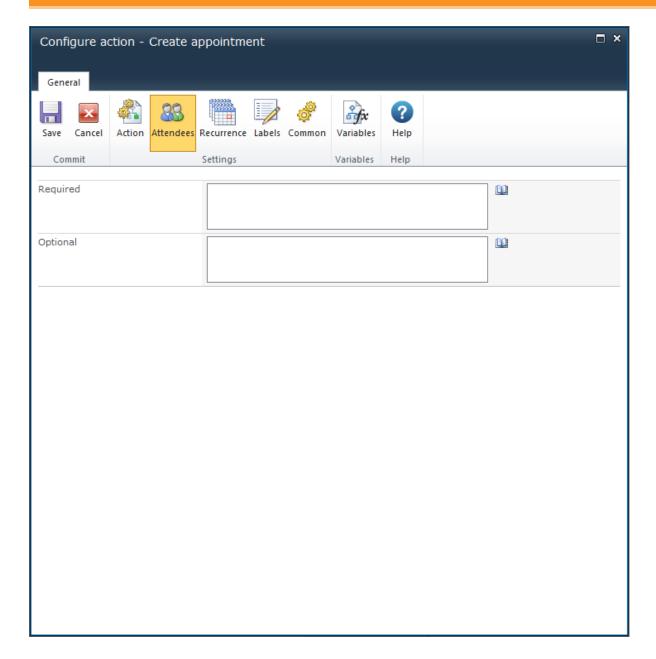
### **Ribbon Option: Attendees**

This section allows the addition of additional meeting attendees. These users will receive meeting requests.







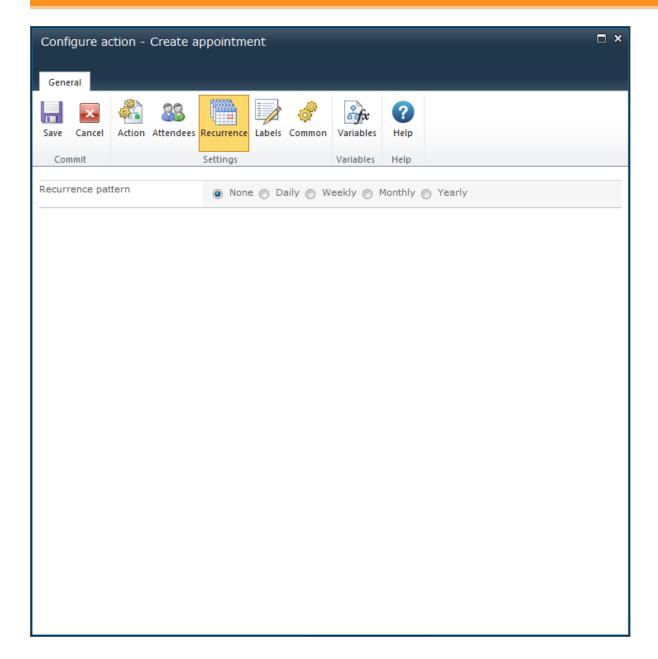


## **Ribbon Option: Recurrence**

This section specifies the recurrence pattern (None, Daily, Weekly, Monthly or Yearly).







## 1.24 Create Audience

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft Office SharePoint Server

This workflow action will create a new audience in the environment.

To use the workflow action:





- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

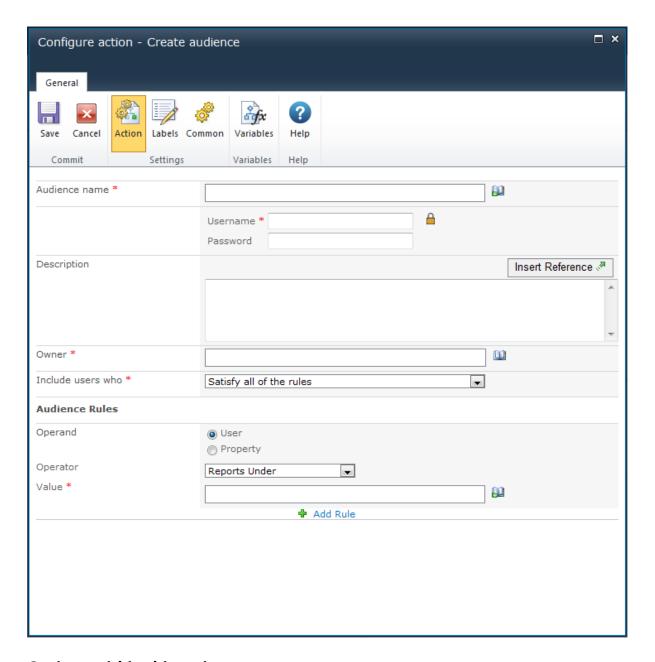
### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





# **Options within this action**

## **Audience name**

The name of the new audience. The value can be added either manually or built up dynamically at run time using **Insert Reference** 

### **Credentials**







An account with permissions to create an audience. In Central Administration, this account will need to be explicitly added as the administrator of the User Profile Service with the permission to Manage Audiences.

#### Description

Additional information to describe the audience. The value can be added either manually or built up dynamically at run time using **Insert Reference** 

#### Owner

The user who will be listed as the owner of the audience.

To set the site owner, click on 11 to search for and/or add users to the **Owner** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the
  magnifying glass will provide a list of matching users and groups from SharePoint as well as Active
  Directory.
- **External email address:** Enter an external email address manually. Where possible, Nintex Workflow will resolve this to an actual user account.
- **Lookup:** Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

### Include users who

Specify whether audience membership requires users to match any of the audience rules or all of the audience rules.

### **Audience Rules**

Audience rules specify the requirements that a user must meet to be considered a member of this group. Multiple rules can be added by clicking the 'Add Rule' link.

## 1.25 Create CRM Record

### \* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will create a single record in Microsoft Dynamics CRM v4.0 and Microsoft Dynamics CRM 2011 or later. This action does not support connections with Microsoft Dynamics CRM Online. A record can be created for any entity, including custom entities.





To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.





## Options for this action

### **Dynamics CRM Version**

The endpoint version of the Microsoft Dynamics CRM server to connect to.

### **Server URL**

The URL of the CRM server to connect to.

### **Organization name**

The Organization located within CRM.

#### Credentials

The credentials used to connect to the CRM server and organization.

#### **Entity**

The type of CRM record to be created.

### Store record ID in

Specify a <u>workflow variable</u> in which to store the newly created CRM record ID. This could be used as a reference to the CRM record ID in other steps of the current workflow.

#### **Attributes**

Selecting an Entity will load any Required and Business Required attributes. This will then allow the entry of data for the attributes that relate to the entity selected.

### 1.26 Create item

This workflow action creates a new list item in a list within the current site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

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Alternatively





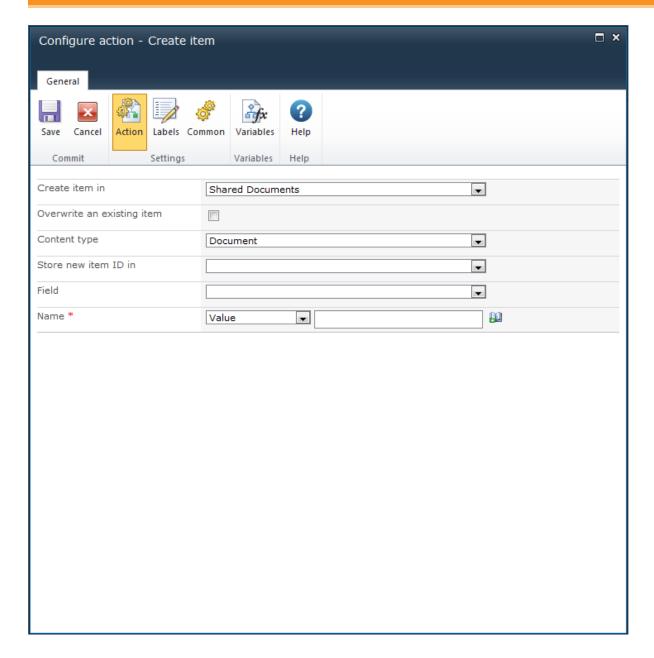
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# **Options for this action**

#### Create item in

Used to select a list in which to create an item.

## **Content Type**

Used when creating the item. If a folder content type is selected, a folder is created. Likewise, if a document content type is selected, the appropriate blank template will be used.







### Overwrite an existing item

To overwrite an existing item in the destination library tick this check box. If this option is not selected, an identifier will be appended to the filename. This applies to libraries only.

#### Store new item ID in

The created item will be assigned an ID. This new item ID can be stored in a List Item ID Workflow Variable. For more on using variables, please refer to information on Workflow Variables, please refer to <a href="Workflow">Workflow</a> <a href="Workflow

#### Field

Available fields that can be added to the created item will be dependent on what fields have been created in the destination list. For each field in the drop down list, a value can be added either manually or based on a dynamic element provided by **Insert Reference**.

### **Troubleshooting**

### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

### 1.27 Create item in another site

This workflow action creates a new item in a list within another site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

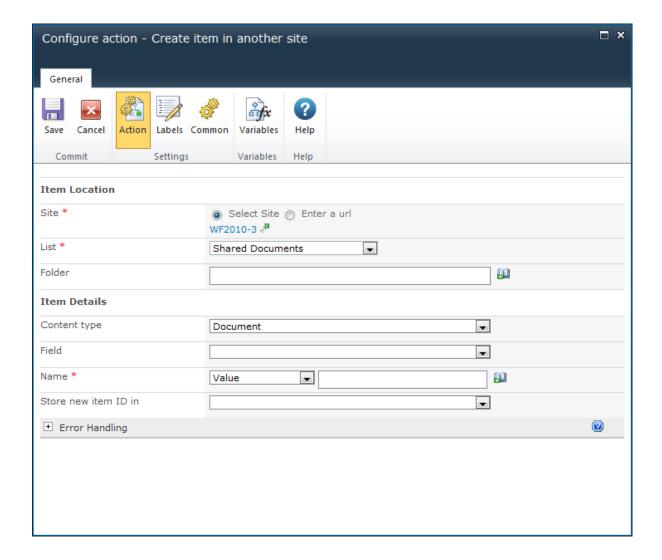




To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





# **Options for this action**

### **Item Location**

### Site

The target site for the new item.

- **Select site:** Enables a site picker (Select a team site) to navigate through the portal structure and select the target location.
- Enter a URL: Allows manual entry of the URL or selection using <u>Inserting reference fields</u>.







#### List

Drop down list containing available **Lists** at the target location. Additional **Fields** are displayed depending on the option **List** selected.

#### Folder

Either specify a value or use the <u>lookups</u> feature to specify a new folder to create the item in. If no folder is specified, the item will be created at the root level of the library or list.

#### **Item Details**

#### **Content Type**

Used when creating the item. If a folder content type is selected, a folder is created. Likewise, if a document content type is selected, the appropriate blank template will be used.

#### Field

Available fields that can be added to the created item will be dependent on what fields have been created in the destination list. More than one field can be selected. By default, the **Name** of the item must be specified. When a Field is selected, an input field is added to the dialog to allow a value to be specified. To remove a field click on X.

#### Store new item ID in

The created item will be assigned an ID. This new item ID can be stored in a List Item ID Workflow Variable. For more information on using variables, please refer to <u>Workflow variables</u>.

### 1.28 Create list

This workflow action permits the creation of a new list anywhere in the web application.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.





## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

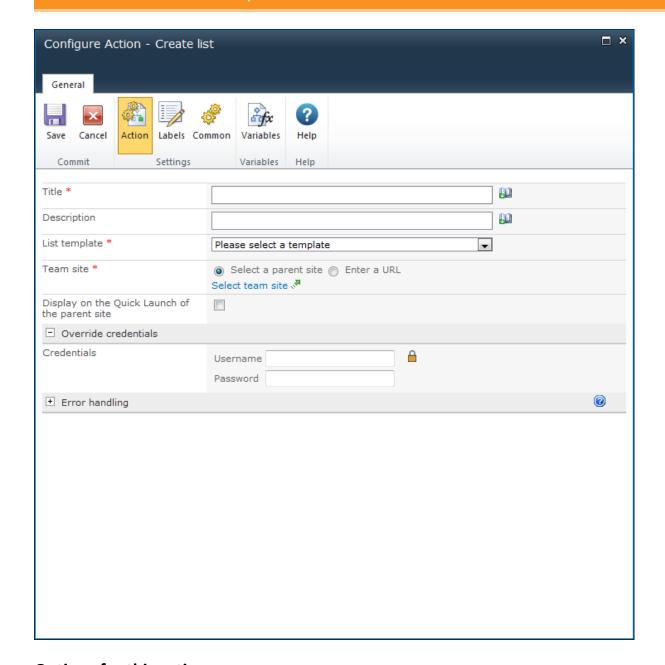
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.

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# **Options for this action**

### **Title**

The Title is the name to be assigned to the new list. Added either manually or based on a dynamic element provided by **Insert Reference**. For more details on using Insert Reference please refer to <u>Inserting reference fields</u>.

### Description





The Description is a brief statement about the new list. Added either manually or based on a dynamic element provided by Insert Reference 🖳 For more details on using Insert Reference please refer to Inserting reference fields.

### List template

The template is the SharePoint list template to be applied to the new list.

Click on the drop down box and select the desired template. For more information on SharePoint list templates, please refer to the SharePoint Help Files.

#### Team site

The **Team site** is the site or sub-site in which the new list will be created.

Select a parent site enables a site picker (Select a team site) to navigate through the portal structure and select the location to create the new list.

Enter a URL allows manual entry of the URL or selection using Insert Reference.

### Display on the Quick Launch of the parent site

This option displays a link to the created list on the left hand navigation (Quick Launch) of the parent site.

### Override credentials

The list will be created using the current security context of the workflow by default. This can be the rights of the initiator or the rights of the workflow owner. If an override username and password is provided, the workflow action will use the permissions of the provided account to create the list instead.

## 1.29 Create Site

This action allows the creation of a site anywhere within the SharePoint environment using the workflow.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

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### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

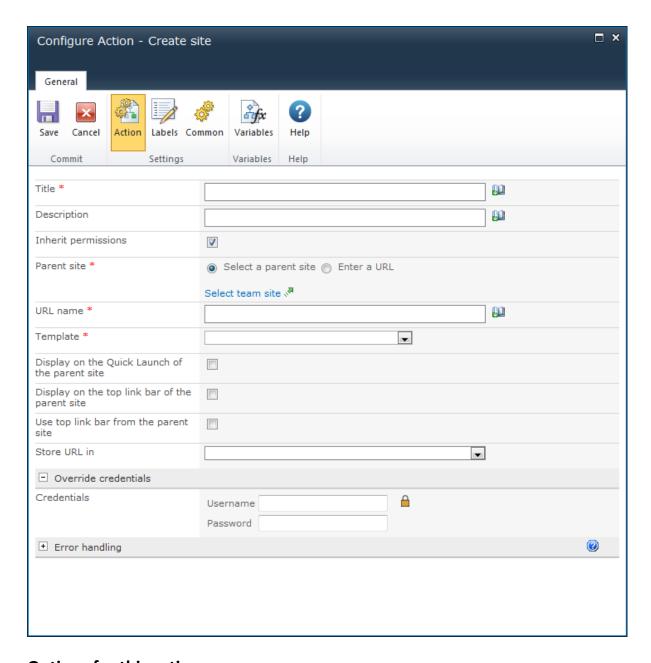




To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





# **Options for this action**

#### Title

The Title is the name to be assigned to the site. Added either manually or based on a dynamic element provided by **Insert Reference**. For more details please refer to <u>Inserting reference fields</u>.

### Description



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The Description is a brief statement about the site. Added either manually or based on a dynamic element provided by **Insert Reference**. For more details please refer to <u>Inserting reference fields</u>.

## Inherit permissions / Site owner

Specifies whether or not to use the same permissions as the parent site.

If permissions are not inherited, a site owner must be specified. The site owner is the person who will manage the site being created and will be given Administrator privileges for the created site. For more information on privileges and permissions, please refer to the SharePoint Help Files.

To set the site owner, click on 11 to search for and/or add users to the **Site owner** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the magnifying glass will provide a list of matching users and groups from SharePoint as well as Active Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.
- Lookup: Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

## Parent site

The Parent site is the site that will contain the created site.

- **Select a parent site** enables a site picker (Select a team site) to navigate through the portal structure and select the location to create the new site.
- Enter a URL allows manual entry of the URL or selection using Insert Reference.

### **URL** name

The URL name is the web address relative to the specified parent site (do not include the full site URL). For example: http://myportal/sites/<URL name>

## **Template**

The SharePoint site template to be applied to the site being created. If multiple languages are installed in the environment, an option to choose the language for the site is available.

Click on the drop down box and select the desired template.

For more information on SharePoint site templates, please refer to the SharePoint Help Files.





## Display on the Quick Launch of the parent site

This option displays a link to the created site on the left hand navigation (Quick Launch) of the parent site.

### Display on the top link bar of the parent site

This option displays a link to the created site on the top navigation of the parent site.

### Use top link bar from the parent site

This option ensures that the created site uses the same top navigation as the parent site.

#### Store URL in

Stores the URL for the created site in a text workflow variable.

#### Override credentials

The site will be created using the current security context of the workflow by default. This can be the rights of the initiator or the rights of the workflow owner.

If an override username and password is provided, the workflow action will use the permissions of the provided account to create the site instead.

## 1.30 Create Site Collection

This workflow action will provision a new site collection in the farm. All of the options available in the SharePoint Central Administration page 'Create site collection' are available.

For more information on any option, see the SharePoint documentation.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:



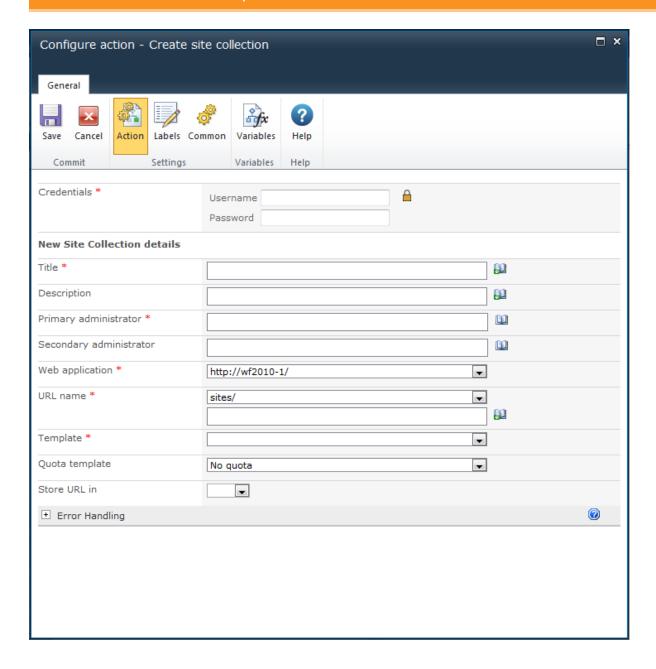


- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.













## **Options within the action**

## **Credentials**

The username and password to use when creating the site collection.

## **New Site Collection details**

#### **Title**

The name of the new site collection.

## Description

The description of the new site collection.

## **Primary administrator**

The administrator of the new site collection.

### Secondary administrator

The secondary administrator of the new site collection.

## Web application

The SharePoint web application that will contain the new site collection.

#### **URL** name

The URL name for the new site collection. The managed path and top level site URL are specified.

## **Template**

The site template to use to create the site collection.

## **Quota template**

The quota template to limit the resources used by the new site collection.

#### Store URL in

The variable in which to store the complete URL of the new site collection.





### 1.31 Create task

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action creates a task in Microsoft Exchange.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

To change the settings used by the action:

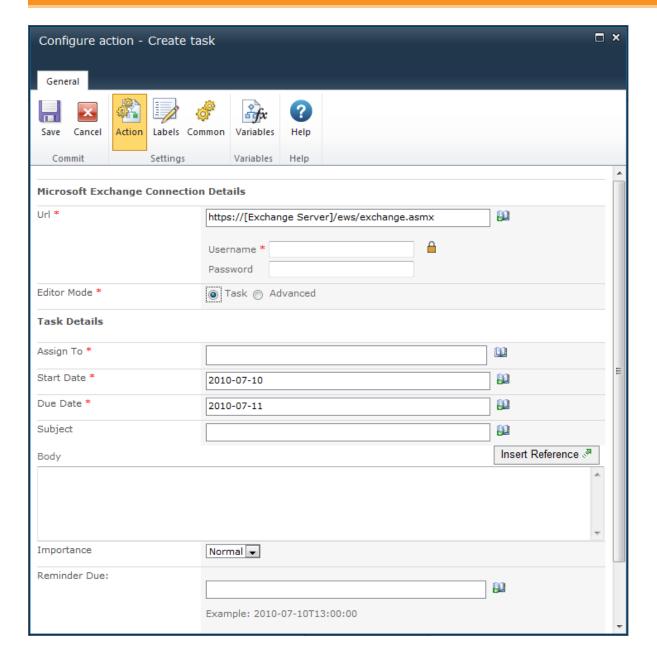
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.



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## **Options for this action**

### Microsoft Exchange connection details

This action connects to Microsoft Exchange Server using the Exchange web services.

- Enter the URL to the Exchange web service.
- Enter the username and password of an account that has rights to create tasks in the mailbox of the user specified in the **Assign To** field.





#### **Editor mode**

- Task use the Nintex Workflow UI to build the task.
- Advanced edit the appointment XML manually. Use the Advanced mode to set task options not listed in the Task mode (UI). See the MicrosoftExchange Web Services SDK for more details.

#### **Task Details**

This section defines the task to be created. When the action runs, the task will be created in the Exchange task list of the user specified in the **Assign To**field.

The user will not receive any notification. The account credentials specified above must have write access to this user's mailbox. A task can only be assigned to a single user.

For more details on using Insert Reference please refer to <u>Inserting reference fields</u>.

Note: Dates specified in the Start Date and Due Date fields will be treated as local time according to the time zone specified in the team site regional settings.

### 1.32 Declare as record

## \* This action requires Microsoft SharePoint Server

This workflow action can be used to declare the current item as a record.

The record restriction settings can be applied once the current item is declared as a record. Record restriction settings can be defined in the Record Declaration Settings page on your SharePoint site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:





- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





Note: There are no Options to configure within this workflow action.

### 1.33 Decommission AD User

### \* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will disable or remove a user from an Active Directory store.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

 Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

To change the settings used by the action:

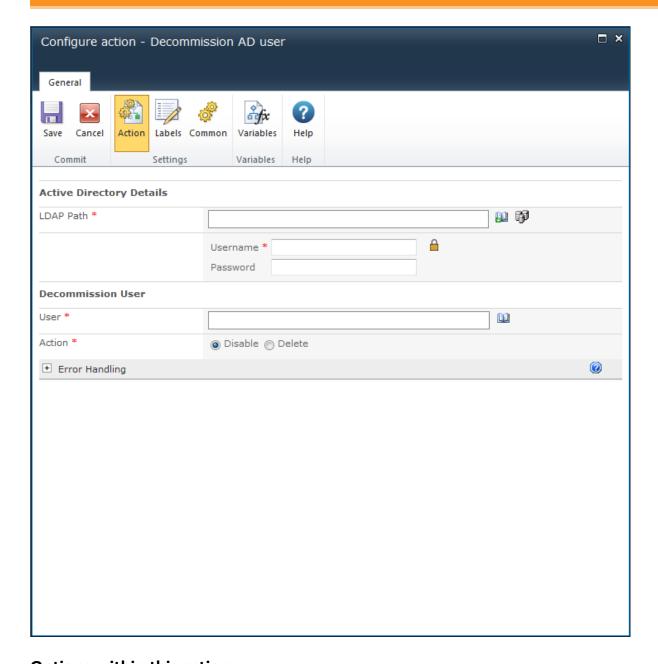
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options within this action**

## **Active Directory details**

## **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

## **Decommission user**







#### User

The username (sAMAccountName) of the Active Directory entry.

#### **Action**

Whether to disable or delete a user.

- **Disable** ticks the 'Disabled' option against the Active Directory user.
- **Delete** will permanently remove the user from Active Directory.

#### 1.34 Decommission Site Collection

This workflow action will delete or restrict access to an existing site collection.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

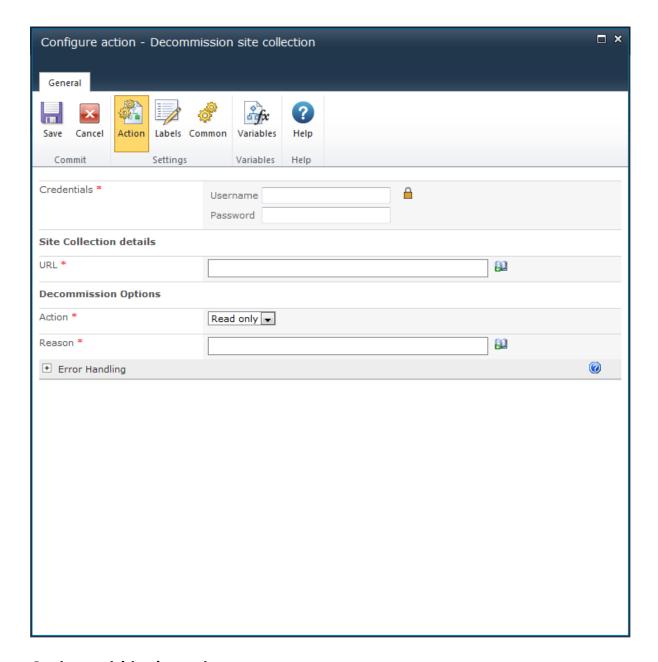
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





# Options within the action

#### **Credentials**

The username and password to use when decommissioning the site collection.

URL







The URL to the site collection being decommissioned.

#### **Action**

The decommission action to apply.

- **Read only** users can access the site but cannot make changes. This option provides an input to specify the reason this action was taken.
- **No access** users cannot access the site, the site collection is not deleted. This option provides an input to specify the reason this action was taken.
- **Delete** the site collection is removed.

## 1.35 Delegate Workflow Task

This action will delegate outstanding workflow tasks to a specific user.

This allows for escalation scenarios as seen below. In this example, an approval task is assigned to a user and after a specified delay, if the user has not responded, the task is delegated to another user.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

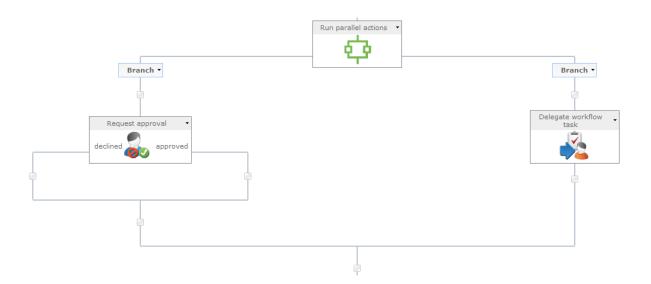
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.

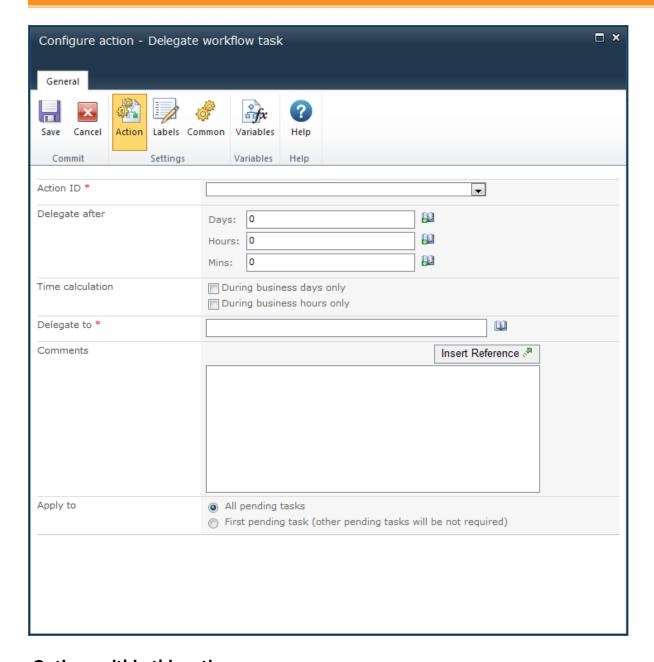












# **Options within this action**

### **Action ID**

Select a workflow variable that contains the ID of the Request action that is to be delegated. Only variables of type "Action ID" are listed.

To store the Action ID in the variable, configure the **Store action ID in** field in one of the following actions:

Request Approval





- Request Data
- Request Review

## **Delegate after**

Specifies how long to wait before the task is delegated.

If the task is completed in this period, the delegate action will not take effect.

The total time is calculated by summing all fields, regardless of the **Time calculation** option selected. For example, 4 days and 4 minutes will be calculated as 96 (24x4) hours and 4 minutes.

#### Time calculation

Specifies whether or not hours outside the work week should be included when counting down the **Delegate** after value.

#### **During business days only**

The **During business days only** option will specify that weekends or holidays are not included in the count down, but after hours on a business day are.

#### Example:

- The delegate task action starts counting down Friday morning and is configured to wait 1 day. (the work week is defined as Monday to Friday)
- The task will delegate on Monday morning, weekends are not included in the count down.

### **During business hours only**

The **During business hours only** option specifies that only business hours are used in the count down.

## Example:

- The delegate task action starts counting down Wednesday at 4pm and is configured to wait 4 hours (the work day is defined as Monday to Friday, 8am to 5pm)
- The task will delegate at 11am on Thursday, after business hours are not included in the count down.

#### **Neither option**

If neither option is selected, all hours will be included in the count down.

#### **Examples:**

- The delegate task action starts counting down Friday morning and is configured to wait 1 day.
  - o A task delegation will be sent Saturday morning, weekends are included in the count down.



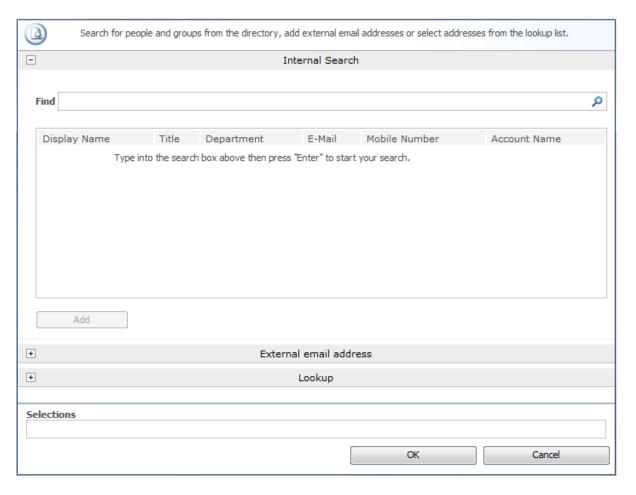


- The delegate task action starts counting down Wednesday at 4pm and is configured to wait 4 hours.
  - o A task delegation will be sent at 8pm on Wednesday, after business hours **are** included in the count down.

### **Delegate to**

The user or group to delegate to. Manually enter the user name, or use the people picker to search.

To search for users, click on the address book icon to the right of the input box. The **Select People and Groups** dialog will appear:



The dialog allows the workflow designer to search for and/or add users to the **Delegate to** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the magnifying glass will provide a list of matching users and groups from SharePoint as well as Active Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.





• **Lookup:** Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

#### **Comments**

Comments to be recorded when performing the delegation. These comments will appear on the workflow history page.

Enter the comments manually, or use Insert Reference to build the string dynamically at run time.

## Apply to

- All pending tasks: reassign all tasks that have not already been actioned to the delegate
- **First pending task:** only reassign the first non-actioned task to the delegate, and all other pending tasks will be set to not required.

## 1.36 Delete / Disable CRM Record

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will delete or disable a record of an entity in Microsoft Dynamics CRM v4.0 and Microsoft Dynamics CRM 2011 or later. This action does not support connections with Microsoft Dynamics CRM Online. A record can be deleted or disabled for any entity, including custom entities.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





## Options for this action

## **Dynamics CRM Version**

The endpoint version of the Microsoft Dynamics CRM server to connect to.

#### Server URL

The URL of the CRM server to connect to.

### **Organization name**

The Organization located within CRM.

#### Credentials

The credentials used to connect to the CRM server and organization.

#### **Action**

- Delete: Permanently remove the selected record.
- **Disable:** Maintains the record but sets the status to hide it from the active views.

## **Entity**

The type of CRM record to be deleted/disabled.

#### Record to delete

Specify the GUID of the CRM record to be deleted/disabled. Note: It is recommended that the <u>Query CRM</u> action be used to obtain the GUID of the record and stored in a workflow variable which can then be specified in the **Record to delete** field

## 1.37 Delete AD Group

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will delete an Active Directory security group.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR





- o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

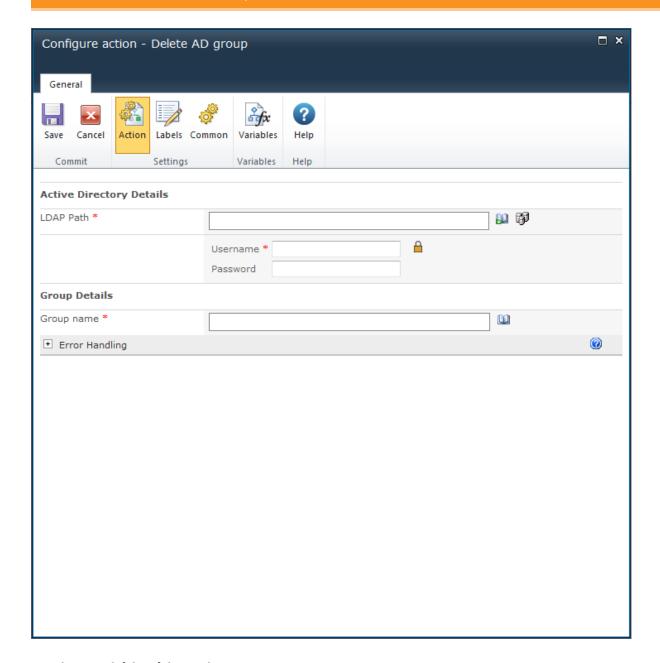
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options within this action**

## **Active Directory details**

#### **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

## **Group details**







### **Group name**

The name of the group to be deleted.

## 1.38 Delete Audience

- \* This topic applies to Nintex Workflow Enterprise Edition only.
- \* This action requires Microsoft SharePoint Server 2010.

This workflow action will delete an existing audience in the environment.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

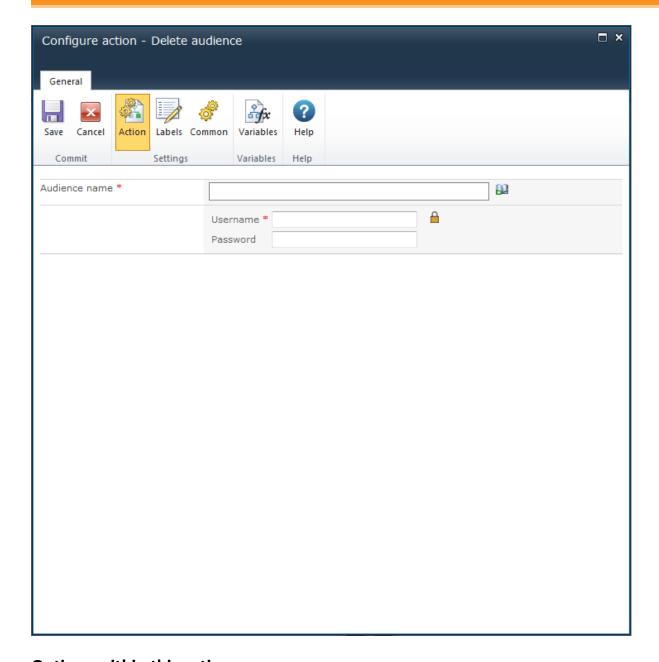
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options within this action**

### **Audience name**

The name of the audience to delete.

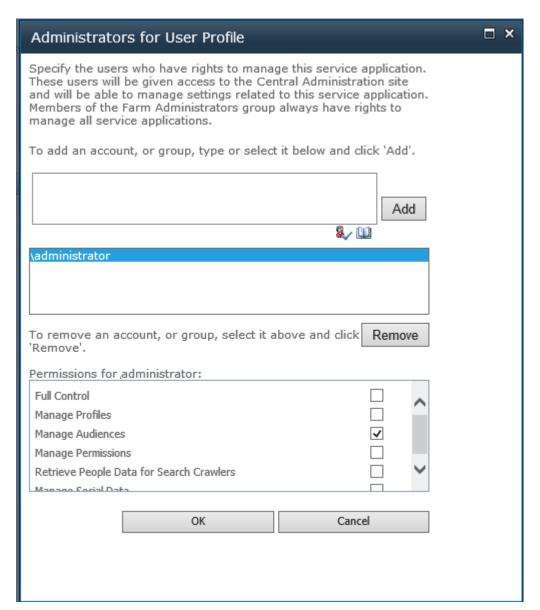
Added either manually or based on a dynamic element provided by **Insert Reference** .

## Credentials





An account with permissions to delete an audience. This account will need to be explicitly added as the administrator of the User Profile Service with the permission to Manage Audiences.



## 1.39 Delete drafts

This workflow action can be used delete all drafts on the current item.

It deletes the draft or minor versions of the current item.

To use the workflow action:





- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.

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Note: There are no Options to configure within this workflow action.

### 1.40 Delete Item

This workflow action deletes a list item in a list within the current site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

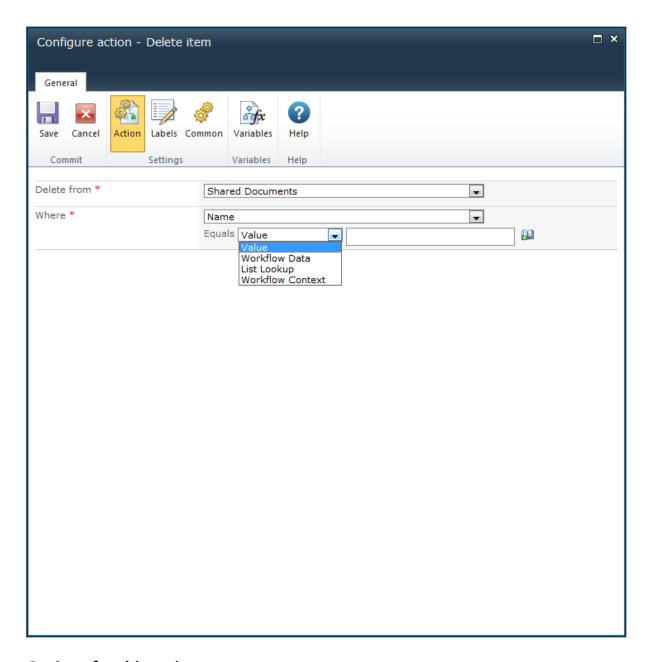
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# **Options for this action**

## **List and Library Workflows**

Delete from

Select the list to delete an item from.





#### Where

Once the **Delete from** field is set, the **Where** field will appear.

Use the **Where** field to select which item to delete. The field choices will depend on what was selected in the **Delete from** drop-down.

#### Site Workflows

#### **Delete from**

Select the site to delete an item from.

#### Where

Use the **Where** field to select which item to delete. The field choices will depend on what was selected in the **Delete from** drop-down.

For more details on using Insert Reference please refer to Inserting reference fields.

For more details on using List lookups, please refer to the Using lookups.

## **Troubleshooting**

## **Action not executing**

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

Connect: http://connect.nintex.com/forums/thread/7827.aspx.

## 1.41 Delete multiple items

This workflow action can be used to delete multiple items within a library or list in a specified site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.





## Alternatively

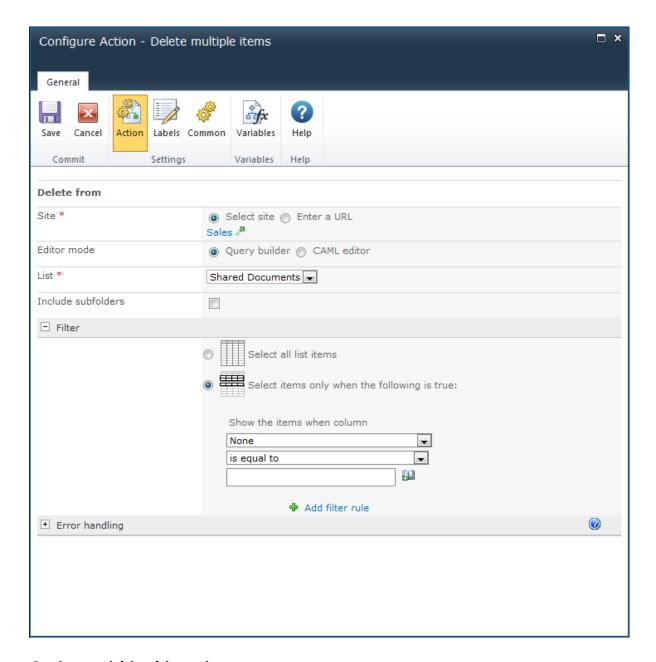
Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the **Getting started with the** Nintex Workflow designer.

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## **Options within this action**

#### Site

The target site where items are to be deleted.

• **Select site:** Enables a site picker (Select a team site) to navigate through the portal structure and select the target location.





Enter a URL: Allows manual entry of the URL or selection using <u>Inserting reference fields</u>.

#### **Editor Mode**

Choose whether to use the UI to build the query, or edit the CAML manually.

- **CAML editor**: Use the **CAML Editor** mode to create more advanced cross list queries. View the CAML at any time by switching to the **CAML Editor** mode.
- Query builder: Build queries for a single list for the site specified.

The following elements will build the query:

#### List

Drop down list containing available **Lists** at the selected site.

#### **Include subfolders**

Specify whether to delete items within subfolders by checking this option.

#### **Filter**

The criteria that items in the list must match in order to be deleted. Use the Filter to specify the delete rules:

- Select all list items: Deletes all items in the list.
- Select items only when the following is true
  - Show the items when column: Selects an item based on the values set in the column. Either specify a value or use the <u>lookups</u> feature.
  - Add filter rule: Specify another rule. Use the And / Or options to specify if the item to be deleted needs to meet conditions of a single rule or all rules.

### Alternative site

When **CAML editor** is selected, there is an option to specify that the query should be run on a site other than the site the workflow is running in.

To query an alternative site, select the **Alternative site** option and enter the **Site URL** to a SharePoint site. The site must exist in the same farm as the workflow, but can be in a different site collection or web application.

When the **Alternative site** is selected, the **Query builder** mode is disabled.

#### **CAML Query**





The CAML query editor appears when **CAML Editor** is selected in the **Editor Mode**. Displays the CAML query being constructed.

## 1.42 Delete previous versions

This workflow action can be used to delete all previous versions (major and minor) of the current item that the workflow is running on.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





Note: There are no Options to configure within this workflow action.

### 1.43 Delete site

This workflow action allows the deletion of a site anywhere within the SharePoint environment.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

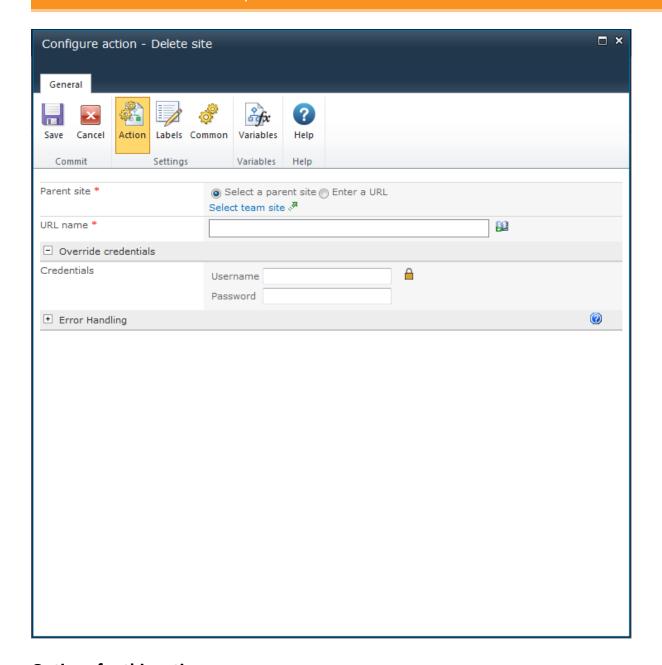
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options for this action**

### Parent site

The **Parent site** is the site that will contain the site to be deleted.

- **Select a parent site** enables a site picker (Select a team site) to navigate through the portal structure and select the location to be deleted.
- Enter a URL manually or use <u>Insert Reference</u> to dynamically build the URL at run time.

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## **URL** name

The URL name is the web address relative to the specified parent site (do not include the full site URL). For example: http://myportal/sites/<URL name>

#### Override credentials

The site will be created using the current security context of the workflow by default. This can be the rights of the initiator or the rights of the workflow owner. If an override username and password is provided, the workflow action will use the permissions of the provided account to delete the site instead.

## 1.44 Discard check out

This action discards the 'checked out' status of a previously checked out document within the current site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

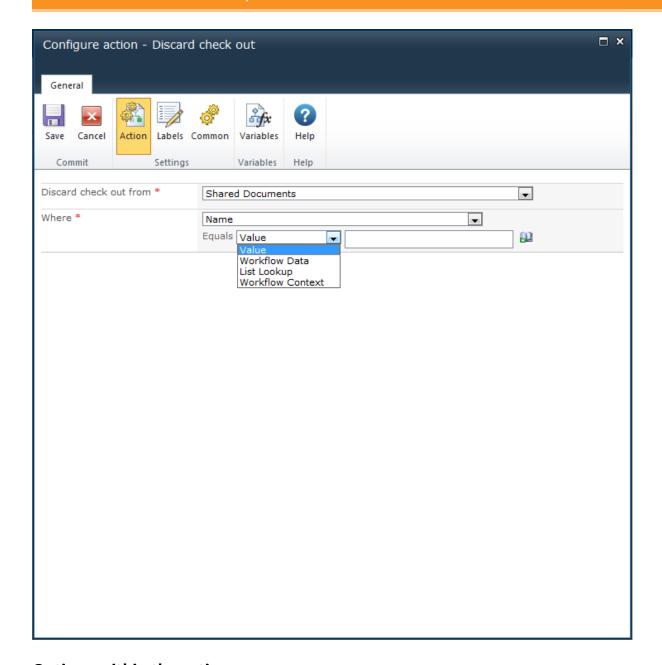
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







# Options within the action

### Discard check out from

Select either the **Current item** that the workflow is running on, or one of the available libraries.

If selecting a library location, the **Where** selector will appear.

#### Where





If not selecting the **Current item**, use this section to specify the filter criteria to identify which document should have a check out cancelled. Manually enter the value, or configure the criteria based on <u>Inserting reference fields</u>. For more information on lookups, see <u>Using Lookups</u>.

Note: if the filter criteria returns more than one document, only the first document in the collection will be applied.

## **Troubleshooting**

### **Action not executing**

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

# 1.45 Enable Lync / OCS

\* This topic applies to Nintex Workflow Enterprise Edition only.

The Enable Lync/ OCS action will enable OCS/LCS or Lync 2010 for an existing Active Directory user account.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

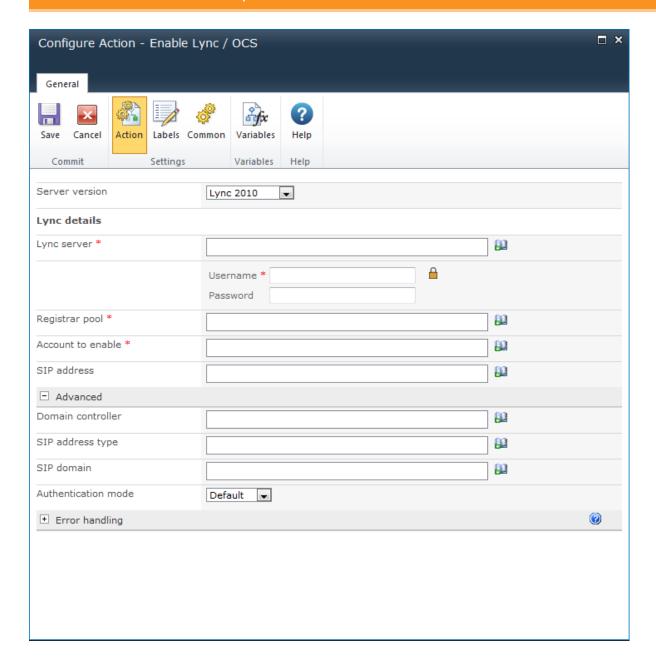
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# **Action Settings**

Server version

Select from Lync 2010, OCS 2007 or LCS 2005.

Server Version: OCS 2007/ LCS 2005

**Active Directory Details** 







## **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

- **Username:** Enter a username with the required permissions to provision a user on OCS/ Lync and access the LDAP Path entered.
- **Password:** Enter a password for the above username.

#### Primary home server

Primary home server for the organization. E.g. CN=LC Services, CN=Microsoft, CN=WS03R2EEEXCHLCS, CN=Pools, CN=RTC Service, CN=Microsoft, CN=System, DC=contoso, DC=com Click on the LDAP Picker button to browse an LDAP Path.

#### Account to enable

The username (sAMAccountName) of the Active Directory entry.

#### SIP address

The SIP address for the Active Directory Account. E.g. sip:john.smith@mycompany.com

### **Enable user**

Check to enable LCS/OCS for the nominated Active Directory account. If left un-checked, the other properties will still be set.

## Server Version: Lync 2010

Note: The Lync mode remotely invokes the PowerShell command 'Enable-CsUser'.

### Lync server

The name of the Lync server.

- Username: Enter a username with the required permissions to access the Lync server.
- **Password:** Enter a password for the above username.

## **Registrar pool**

The FQDN of the Registrar pool where the users' Lync Server account will be honed.





### Account to enable

The username (sAMAccountName) of the Active Directory entry.

#### SIP address

The SIP address for the Active Directory Account. E.g. sip:john.smith@mycompany.com

### **Telephony**

Select the desired communication type. Chose from Audio/video disabled, PC-to-PC only, enterprise voice, remote call control, remote call control only.

#### **Policies**

- **Conferencing policy:** The conferencing policy specifies the conferencing experience for participants.
- Client version policy: The client version policy checks the SIP User Agent header to determine the client version.
- **PIN policy:** The PIN policy provides a personal identification number (PIN) authentication to users who are connecting to Microsoft Lync 2010 with IP phones.
- External access policy: The external access policy determines whether or not your users can 1) communicate with users who have SIP accounts with a federated organization; 2) communicate with users who have SIP accounts with a public instant messaging and; 3) access Microsoft Lync Server 2010 over the internet, without having to log on to your internal network.
- Archiving policy: The archiving policy controls whether archiving for specific users is enabled or disabled for internal and external communications.
- Location policy: The location policy automatically locates clients within a network. The Lync Server uses a Location Policy to enable Lync 2010 clients for E9-1-1 during client registration. A location Policy contains the settings that define how E9-1-1 will be implemented. You can edit the global location policy and create new tagged location policies. A client obtains a global policy when not locations within a subnet with an associated location policy or when the client has not been directly assigned a location policy.
- **Client policy:** The client policy determines the features of Microsoft Lync 2010 which are made available to users.

### **Advanced**

### **Domain controller**

Connect to the specified domain controller in order to enable a user account

### SIP address type

Instructs Lync Server to auto-generate a SIP address for the new user.





#### SIP domain

The SIP domain for the user account being enabled.

#### **Authentication mode**

Select from with default, basic, digest or negotiate.

For more information on the above parameters refer to http://technet.microsoft.com/en-us/library/gg398711.aspx

## 1.46 End workflow

This action will terminate the workflow and, if specified, will log a user defined message in the history list.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





# Options within the action

There are no mandatory fields to complete in this workflow action.

A message can be added to be logged into the history list.

For details on the SharePoint History List, please refer to SharePoint Help Pages.

## 1.47 Execute SQL

This action is for advanced users and allows the workflow to run a SQL command.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

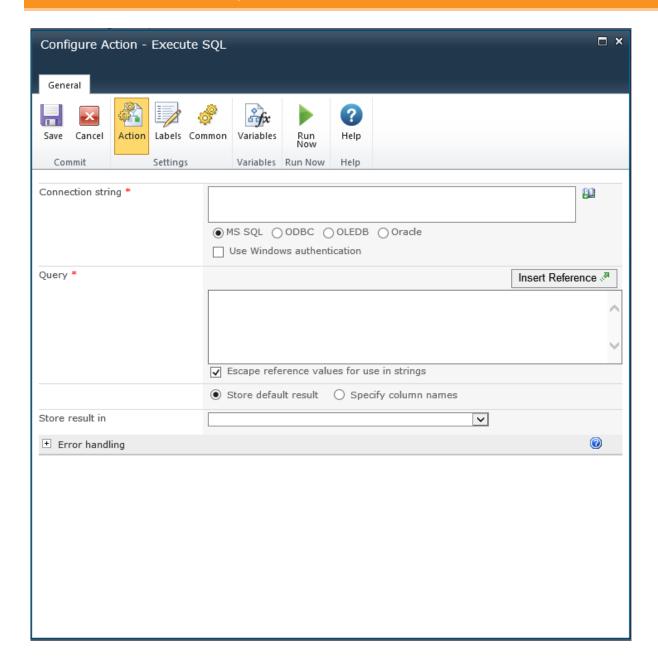
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









# **Options for this action**

## **Connection String**

A SQL connection string to use when connecting to the remote database.

Provider options are:

- MS SQL
- ODBC







- OLEDB
- Oracle

For example: Data Source=myServerAddress;Initial Catalog=myDataBase;Integrated Security=SSPI;.

#### Use windows authentication

Determines that the connection to the database will be made using integrated authentication (trusted connection). When using integrated authentication, username and password fields are presented to allow the credentials of an account with sufficient database access to be provided.

#### Query

Enter the SQL statement directly and/or use <u>Insert reference fields</u> to build the string dynamically at run time.

### Escape reference values for use in strings

Use this option to ensure that any value chosen from the **Insert Reference** button is escaped for use in a SQL string. If the entire SQL statement is contained in a single variable, then this option must be unchecked.

#### Store default result

Returns the result of a SQL 'select' query.

#### Store result in

This list contains all the workflow variables that can be used to store the result of a SQL 'select' query. A collection variable can be used to store multiple records. If a variable that is not a collection is selected, only the first record will be stored. If multiple columns are returned, only the value of the first column will be stored.

## **Specify column names**

Use this option to store the result of specific column name that is returned from a SQL 'select' query.

To specify the column:

- 1. In the **Column to retrieve**, enter the name of the column.
- 2. Click the **Add** button and the property will appear below the **Column to retrieve** box.
- 3. Specify a workflow variable to store the values of the column to be retrieved.

Note: If a variable that is not a collection is selected, only the first result will be stored.





### 1.48 Filter

This workflow action ends the workflow if a configured condition is not met.

Configuring this action is similar to the **Set a condition** action.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

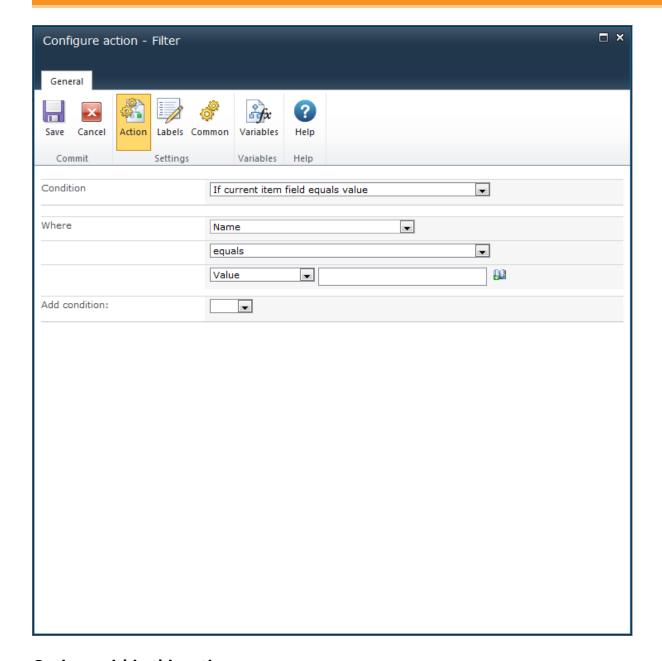
## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





# **Options within this action**

For more details on using this action, please refer to **Set a condition**.

# 1.49 Find users by status

\*This topic applies to Nintex Workflow Enterprise only.

This workflow action will find and return user(s) with a specified OCS/Lync presence status.





Note: Requires Office Communications Server 2007 or Lync Server 2010 and the Instant messaging settings option in Global Settings must be set and configured.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

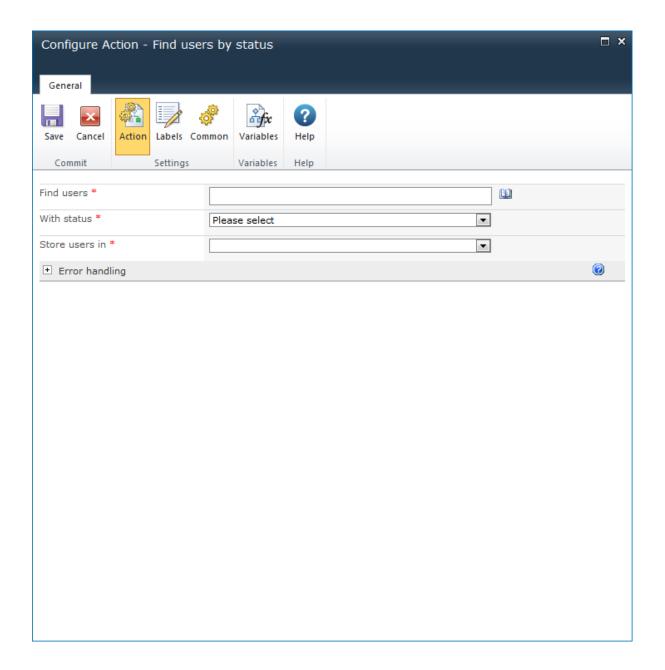
Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.

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# **Options with this action**

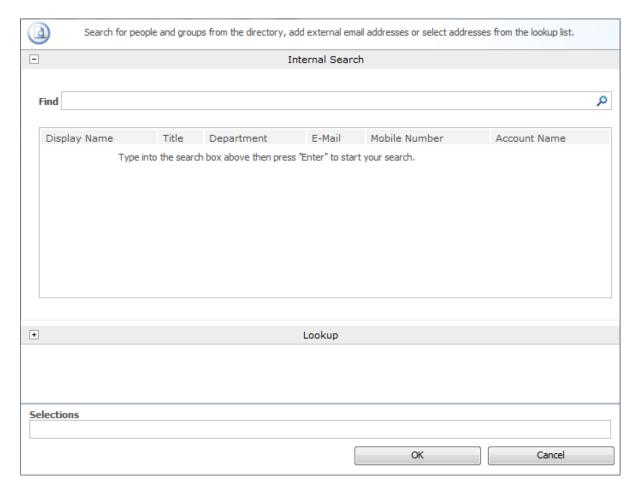
### **Find users**

The user, SharePoint or Active Directory group to search for users with the specified status from. Multiple users and groups can be separated with semi-colons (;).





To search for groups, click on the address book icon to the right of the input box. The Select People and Groups dialog will appear.



#### With status

The OCS/Lync presence status to retrieve users by. To specify a dynamic value using the <u>insert reference</u> <u>function</u>, select **'Other value...'**.

## Store users in

Select the workflow variable to store users from the group whom have the specified presence status.

The results can be stored in a text variable (only the first user of the total returned users will be stored) or a collection.

## 1.50 For Each





This workflow action is used to loop through each value in a collection variable.

Other actions can be dragged on to the designer as child actions of the **For each** action, and these actions will be executed for each value in the collection. The current value of the collection is accessible to each of the child actions via a workflow variable.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

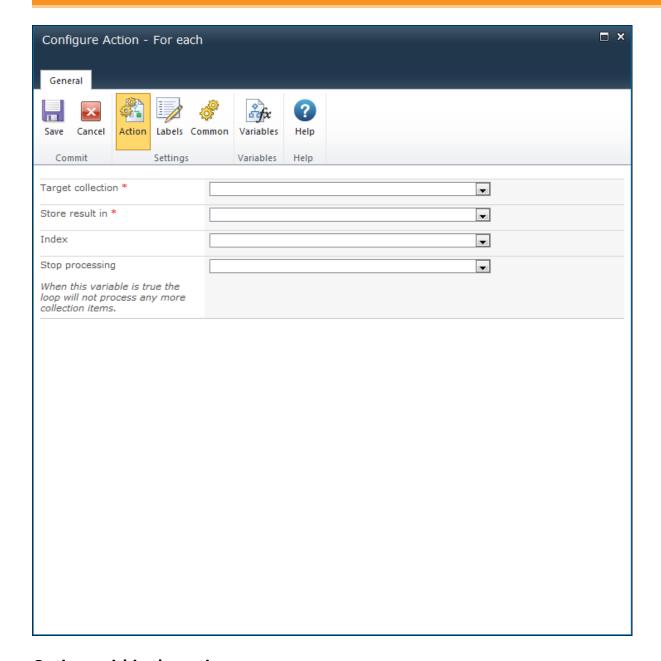
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# Options within the action

## **Target Collection**

The collection variable to loop through.

Store result in





As the action loops through each value in the **Target Collection**, the value will be assigned to this variable. Actions that are children of the **For Each**action can use this variable to access the current value of the collection.

Any variable type can be selected, the workflow designer must ensure that it is compatible with the values stored in the collection.

#### Index

A number variable can be selected to store the position of each item in the collection as it is accessed. The first item will be at position 0.

#### Stop processing

A Yes/No variable type can be selected to break the loop. When the variable is true the loop will not process any more collection items and the workflow will continue to the next action after the For each loop.

## 1.51 Get meeting suggestions

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will retrieve a series of meeting time suggestions based on a specified criteria.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

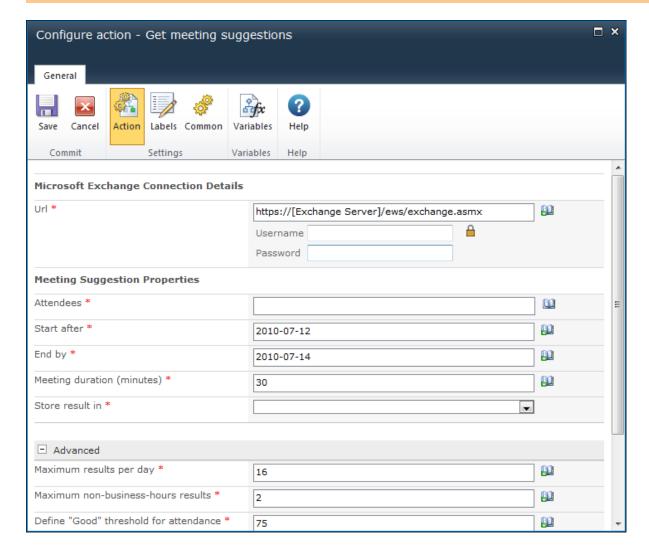
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





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# Nintex Workflow 2010: Help Files



# **Options for this action**

## **Microsoft Exchange connection details**

#### **URL**

This action connects to Microsoft Exchange using the Exchange web services.

- The URL of the Exchange web service.
- The credentials of an Exchange account that has the rights to create appointments in the mailbox of the users specified in the **Attendees** field.

## **Meeting Suggestion Properties**

## **Attendees**

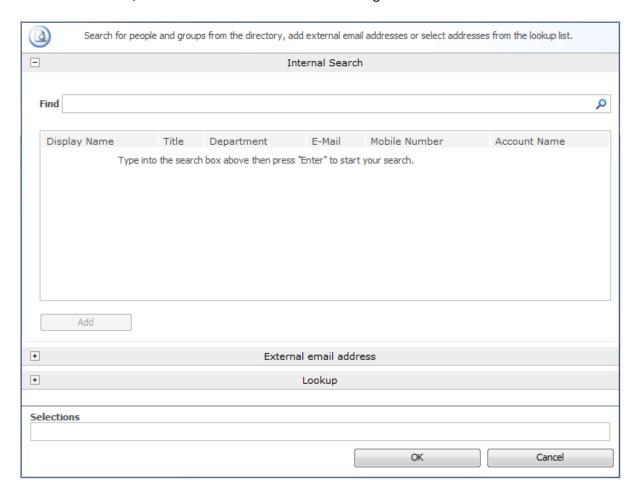




The users that are to be invited to the proposed meeting.

#### **Select People and Groups**

To search for users, click on the address book icon on the right.



The configuration dialog allows the workflow designer to search for and/or add users to the **Assignees** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email address or user account name and clicking on the magnifying glass will provide a list of matching users and groups from SharePoint as well as Active Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.
- **Lookup:** Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.
- Click the title bar to expand or collapse each option.





#### Start after

The beginning of the time span for the proposed meeting.

### End by

The end of the time span for the meeting suggestion.

### Meeting duration (minutes)

The length of the meeting suggestion.

#### Store result in

The results of the meeting suggestions will be stored in the workflow variable specified.

#### **Advanced**

### Maximum results per day

The maximum number of meeting suggestions that will be returned for any given day.

#### Maximum non-business-hours results

The maximum number of meeting suggestions that will be returned that occur outside of the business hours set on the Exchange server.

## Define "Good" threshold for attendance

The Good threshold for attendance is the percentage of attendees that must be able to attend a meeting suggestion for the suggestion to be given a "Good quality" status.

## Minimum suggestion quality

The minimum meeting suggestion quality that is required for a meeting suggestion to be returned.

#### **Result format**

The format that the results will be returned as.

## 1.52 Get user status

\*This topic applies to Nintex Workflow Enterprise only.





This workflow action will retrieve the OCS/Lync presence status of a user.

Note: Requires Office Communications Server 2007 or Lync Server 2010 and the **Instant messaging settings** option in <u>Global Settings</u> must be set and configured.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

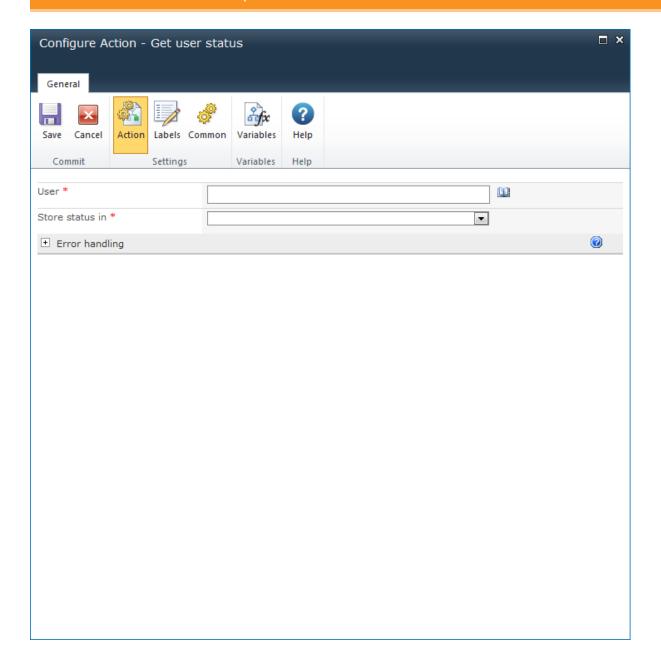
#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





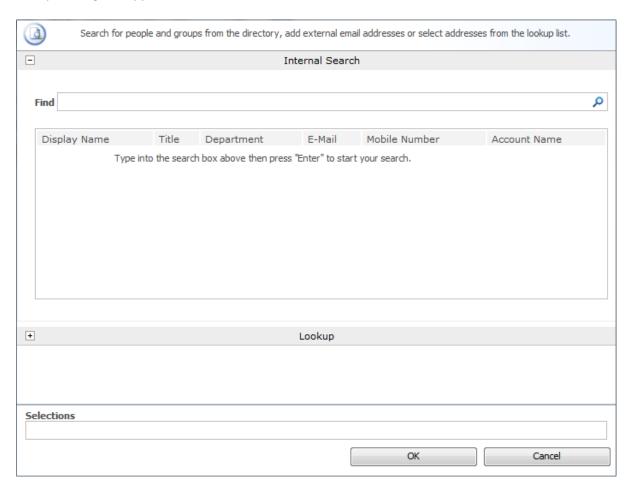


# **Options with this action**

#### User

The username of the user whose presence status is to be retrieved.

To search for users, click on the address book icon to the right of the input box. The Select People and Groups dialog will appear.



Only a single user can be selected.

### Store status in

The workflow variable to store the retrieved presence status of the user.

## 1.53 Log in the History List



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This workflow action will log a user-defined entry into the workflow history list.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

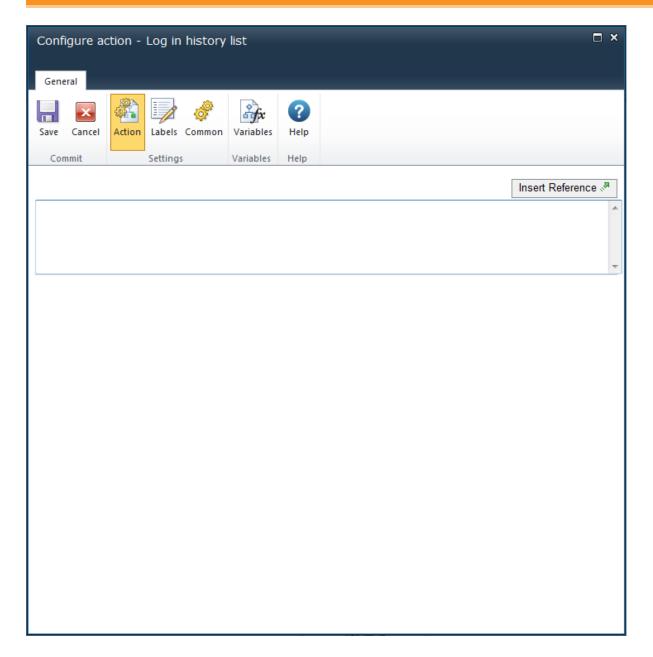
- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options for this action**

Add the required message into the text box either manually or use <u>Insert Reference</u> to build the string dynamically at run time.

There is a maximum length of 255 characters in the history list entry. Additional text will be trimmed.

For details on the SharePoint History List, please refer to the SharePoint Help Pages.

# **Troubleshooting**





### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

Connect: <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

## **1.54 Loop**

This workflow action runs a set of child actions while a condition evaluates to true.

Configuring this action is similar to the <u>Set a condition</u> action.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

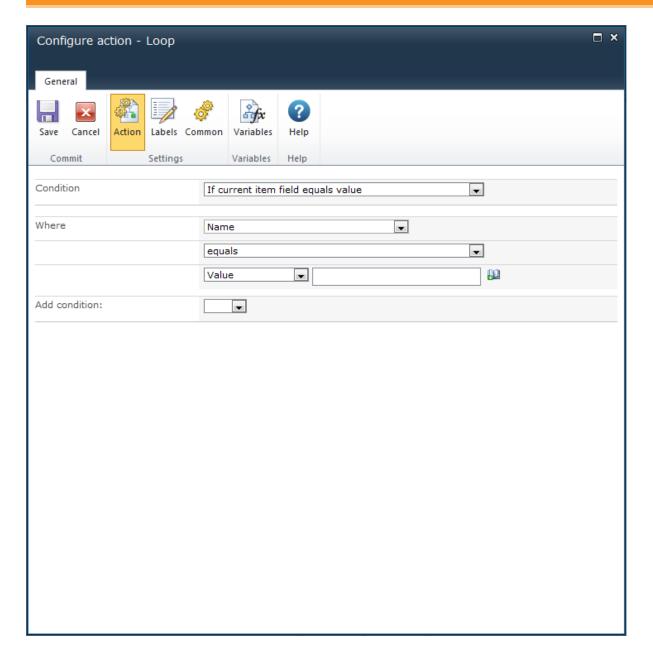
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# **Options within this action**

For more details on using this action, please refer to the Set a condition.

# Safe looping and delays between iterations

A loop that is configured to run for many iterations without a pause can cause the workflow to use excessive system resources. As a precaution, a hidden delay is automatically added at the end of each iteration if the child actions are not guarenteed to cause the workflow to stop and wait. This can cause a 2 - 7 minute pause between each run of the loop. This option is called 'Safe Looping'. Administrators can disable Safe Looping

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from the <u>Global Settings</u> in Central Administration. The hidden delay is added when the workflow is published, so if the Safe Looping option is changed it will only affect any newly published workflows. However, any exsiting workflows will need to be republished to see the change in the behavior.

## 1.55 Math operation

This action allows the workflow to perform basic calculations at runtime for use within other actions in the workflow.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

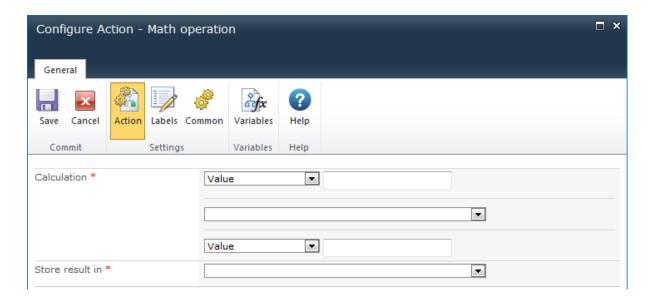
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# Options within this action

#### Calculation

To configure this action, two values need to be specified as well as the operation.

The mathematical operations available to be selected are:

- Plus
- Minus
- Divided by
- Multiplied by
- Modulus

Enter the value manually or use **Lookups** to reference variables and reference fields.

### Store result in

The result of the **Calculation** needs to be stored for future reference. The dropdown list will present the available workflow variables.

To create a variable, click the **Variables** button. For more information, see <u>Workflow variables</u>.

## 1.56 Pause for

This workflow action will pause the workflow at this step and delay it for a defined period of time.

To use the workflow action:







- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

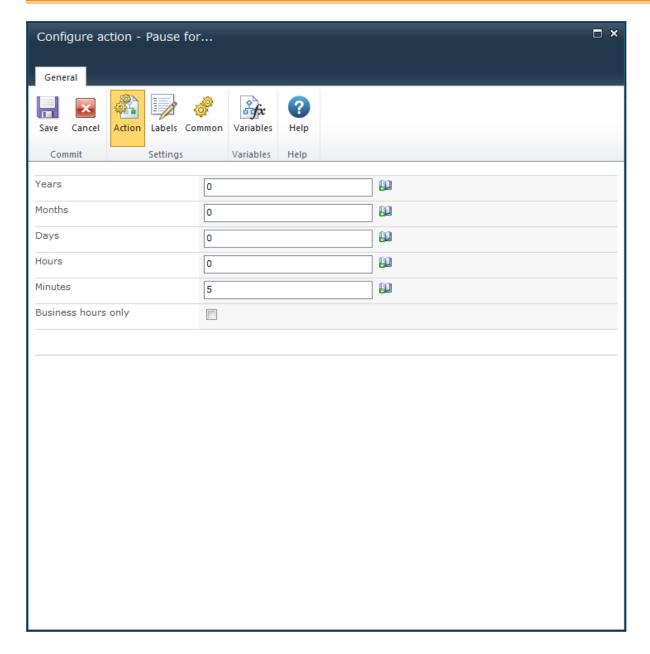
### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





# **Options within this action**

By default, the delay period will be set to 5 minutes.

## Set the delay period

- Years
- Months
- Days
- Hours







• Minutes (defaulted to 5)

Manually enter values or use <u>Insert reference</u> for dynamic values.

Set the **Business hours only** option to ignore non-business hours when counting down.

#### 1.57 Pause Until

This action will pause the workflow at this step and delay it until a set date and time defined.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

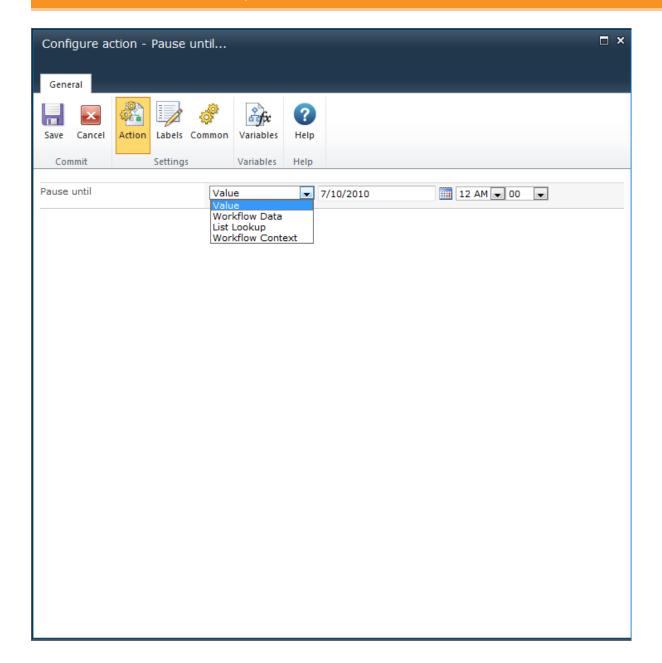
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.









# Options within the action

Set the date and time at which the workflow will recommence by:

- Manually entering the date (in the regional date format e.g: mm/dd/yyyy), then selecting the hour and minutes.
- Using Calendar Picker to select a date , then selecting the hour and minutes.
- Setting the date value to a date workflow variable or a date field within the site in which the workflow is associated.





For more details on using List lookups, please refer to the Using lookups.

# 1.58 Provision User In Exchange

\* This topic applies to Nintex Workflow Enterprise Edition only

The **Provision User in Exchange** workflow action will provision a mailbox for an Active Directory user account in the specified mailbox container or mailbox database location.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

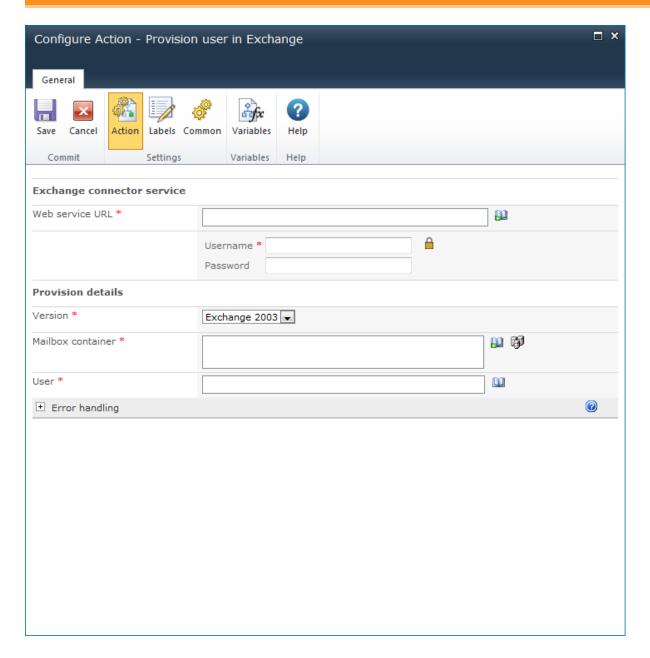
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## **Action Settings**

### **Exchange connector service**

#### **Web Service URL**

The path to the Nintex Workflow Exchange Connector Service. E.g. http://www.mycompany.com/siteECS/EmailProvisioning.asmx





In this example, the mycompany website contains a virtual directory called siteECS, which must be created by the Nintex Workflow Exchange Connector Service installer. EmailProvisioning.asmx is the web service created by the installer.

#### Username

The IIS account created in the prerequisite section of the Nintex Workflow Exchange Connector Service installation manual.

Note: Click on the padlock icon to select from a list of Credential Workflow Constants, maintained in Site Settings by the system administrator.

#### **Password**

The password of the IIS account created in the prerequisite section of the Nintex Workflow Exchange Connector Service installation manual.

#### **Provision details**

#### Version

Select the version of Microsoft Exchange Server. Supported versions are Microsoft Exchange Server 2003, 2007 and 2010.

**Version: Exchange 2003** 

## **Mailbox Container**

The LDAP path to the Mailbox container in which the mailbox will be located. E.g. LDAP://mycompany.com/CN=Mailbox Store (SERVERB),CN=First Storage Group,CN=InformationStore,CN=SERVERB,CN=Servers,CN=First Administrative Group,CN=Administrative Groups,CN=MLG,CN=Microsoft Exchange,CN=Services,CN=Configuration,DC=mycompany,DC=com

Click on the LDAP Picker button to browse for a Mailbox Container.

#### User

The sAMAccountName of the account to be created. E.g. jsmith

Version: Exchange 2007 and 2010

#### **Exchange Database**

The Exchange Database in which the mailbox will be located. This can be provided in the following formats:

Database name





- GUID of the database
- Server name\database name
- Server name\storage group\database name

Note: It is recommended to use Workflow Constants to store information about the Exchange Server Database.

#### User

The identity of the account to be created. This can be provided in the following formats:

- GUID
- Distinguished name (DN)
- Domain\Account
- User principal name (UPN)

#### Alias

Enter the alias for the email address of the new exchange user. The alias is the first section of the email address. For Example: The alias of bob.jones@corporation.com would be bob.jones.

Note: If Alias is left blank, Exchange will automatically provide an alias.

## 1.59 Publish Workflow

This workflow action can be used to publish a workflow that is going through the workflow change approval process.

\* This action is only available within the Workflow Change Approval process.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:





- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





Note: There are no Options to configure within this workflow action.

## 1.60 Query BCS

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

The Query BCS action will retrieve data from the Business Connectivity Service (BCS).

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

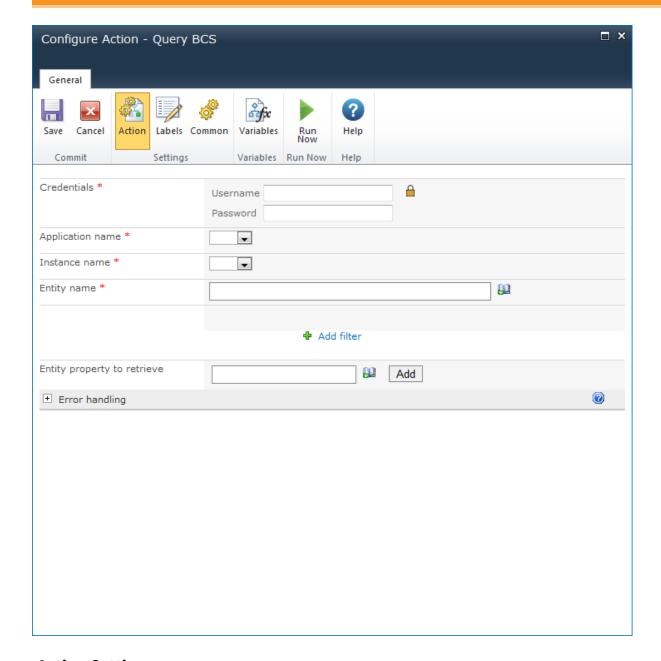
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.







## **Action Settings**

### **Credentials**

A valid username and password are required to access the BCS. This identity must have access to the external content type. If the external content type is configured to pass through credentials, the identity must also have access to the underlying data source.

### **Application name**







The BCS application to query.

#### Instance name

The instance of the application to guery.

#### **Entity name**

The type of entity in the BCS application to query.

#### **Filters**

the filter used to determine which instances of the selected entity to retrieve data from. Multiple filters can be added by clicking the **Add filter** link. Only entities matching all of the filters will be retrieved.

- Filter name: The property of the entity to filter on.
- Filter value: The value that the filter property must match for the entity to be retrieved.

## **Entity property to retreive**

The property of the entity to query. More than one entity property may be retrieved.

To specify entity property:

- 1. Enter desired property in the **Entity property to retrieve** box.
- 2. Click the Add button and the entity peroperty will appear below the Entity property to retrieve box.
- 3. Specify a workflow variable to store the values of the entity property to be retrieved.

Note: If a variable that is not a collection is selected, only the first result will be stored.

## 1.61 Query CRM

## \* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will retrieve data from Microsoft Dynamics CRM v4.0 and Microsoft Dynamics CRM 2011 or later. This action does not support connections with Microsoft Dynamics CRM Online. The action mimics the Advanced Find functionality available in CRM.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.





• Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





## **Options for this action**

## **Dynamics CRM Version**

The endpoint version of the Microsoft Dynamics CRM server to connect to.

### Server URL

The URL of the CRM server to connect to.

### **Organization name**

The Organisation located within CRM.

#### Credentials

The credentials used to connect to the CRM server and organization.

#### **Attributes To Return**

The results returned can either be in XML or individual attributes can be specified and stored in a workflow variable.

### **Entity**

The type of entity to be queried.

#### Return as

- XML: The returned results are structured as XML and all attributes of the primary entity will be returned for each record retrieved.
- Variable: Each specified attribute will be returned and can be stored in a workflow variable.

#### **Filters**

### Where there is

Used to specify/narrow down the records returned for the Primary entity selected.

## 1.62 Query Excel Services

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server





This workflow action will retrieve data from a Microsoft Excel workbook via Excel Services.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

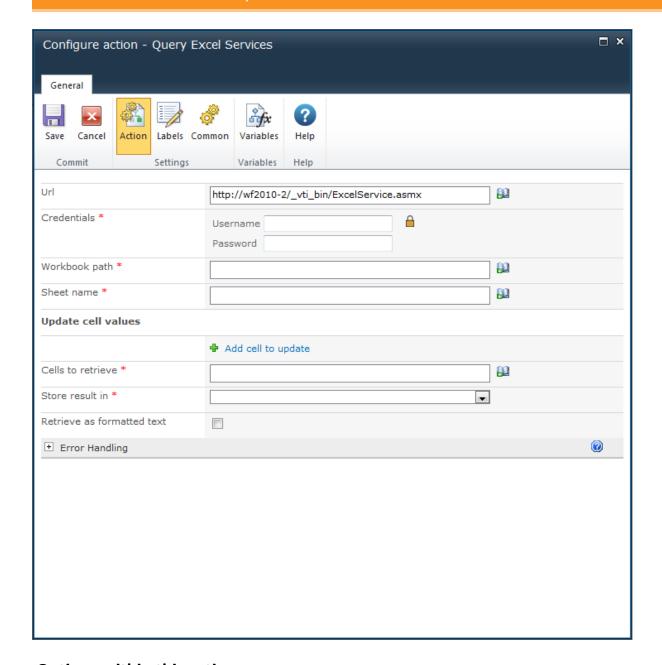
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the</u> Nintex Workflow designer.







# **Options within this action**

### URL

URL to the excel services web service.

Providing this URL is optional. If the URL is left blank, this action will use the default excel services URL based on the URL of the site workflow is running on.

## **Credentials**







### Username and password

Valid credentials to access the Excel Services web service. The credentials must have access to the workbook.

#### Workbook path

The location of the Excel workbook to query. The workbook must be in a configured Excel Service trusted location.

#### Sheet name

The name of the Excel sheet in the workbook that will be gueried.

#### **Update cell values**

Specifies cells that should be set in the workbook before data is retrieved. Changes to these cell values are not committed to the workbook, they are only used to determine the values of the cells to retrieve information.

For example, if the cell to retrieve is the sum of E2 and E4, E2 and E4 can be set in this section and the result will be reflected in the cell to retrieve that data. Multiple cells can be updated by clicking the **Add cell to update** link.

- **Cell position** the location of the cell to update. The cell location must be specified in the 'A1' format or be the defined name of a cell. Note that only single cells can be updated, you cannot specify a range with multiple cells.
- Cell value the value to update the cell with.

#### Cells to retrieve

The range of cells to retrieve values from. A single cell must be specified in the 'A1' format. Cell ranges must be specified in the 'A1:B2' format. If a cell or cell range is named, the defined name can also be specified.

#### Store result in

The workflow variable to store the resulting value in.

If the selected variable can only contain a single value and a range is returned, only the first cell in the range will be used.

In a collection, values are stored left to right, top to bottom. For example, if the range to return is A1:B3, the values will be stored in this order: A1, A2, A3, B1, B2, B3.

### Retrieve as formatted text





Specifies whether or not to keep the cell formatting, or only return the plain value. For example, if a cell is formatted to display numbers as currency, selecting this option will return a string with the currency symbol matching the display in Excel. If this option is not selected, only the numeric value of the cell is stored.

date values when an unformatted date value is stored into a collection, it will be stored as a numeric representation of the date (this is how Excel Services provides the data). The action cannot determine the difference between a number and a date represented as a number, so the value will be treated as a number when added to the collection. When returning a date result into a Date Time variable, the action will assume the value being retrieved is a date and store it as such.

## 1.63 Query LDAP

The Query LDAP action allows the workflow to query a LDAP compliant data source such as Microsoft Active Directory. This action is for advanced users.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

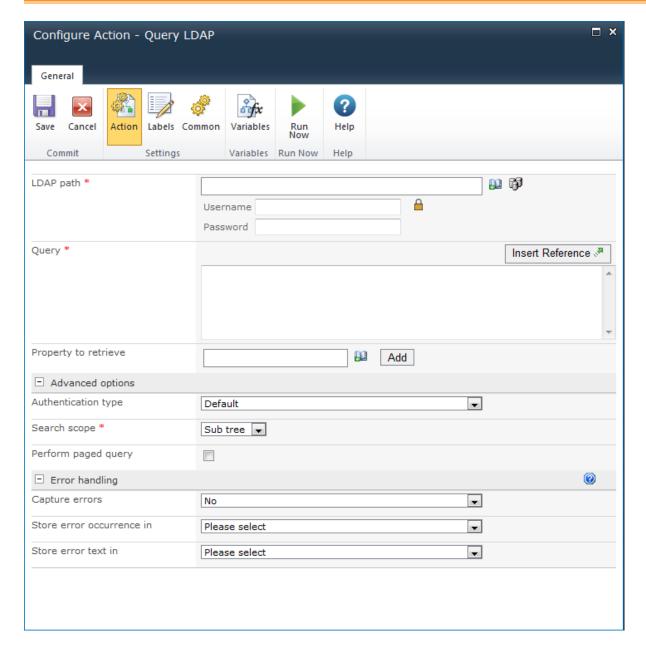
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.







## **Action Settings**

### **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

### Query

Select the LDAP query to run. The query can be added manually or use the <u>Inserting reference fields</u> to include runtime values in the query.







### **Property to retrieve**

The property to retrieve for the item found. More than one property may be retrieved. To specify the property to retrieve:

- 1. Enter the desired property in the **Property to retrieve** box.
- 2. Click the Add button and the property will appear below the Property to retrieve.
- 3. Specify a workflow variable to store the value of the property to be retrieved.

### **Advanced Options**

#### **Authentication type**

Specify the method used to authenticate to the LDAP server.

#### Search scope

Determines how the query should behave. The default search scope is 'Sub tree'. Details of each scope are as follows:

- Base: Limits the search to the base object, the result contains the maximum of one object.
- One level: Searches the immediate child objects of the base object, excluding the base object.
- Sub tree: Searches the whole sub tree, including the base object and all its child objects.

### Perform paged query

Check to specify that paging should be enabled on the result set. Enabling this option may help if the query result set does not contain all expected results. Note: This option is not supported in all environments.

## 1.64 Query List

The **Query List** action allows for list item data queries and stores the results in a workflow variable. The action performs a CAML site data query.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.





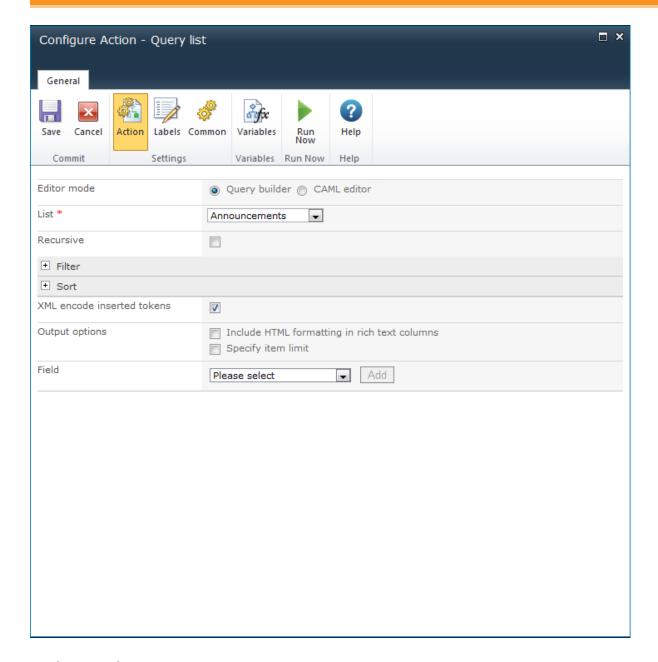
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







## **Action Settings**

## **Editor Mode**

Choose whether to use the UI to build the query, or edit the CAML manually.

- **CAML editor** use the CAML Editor mode to create more advanced cross list queries. View the CAML at any time by switching to the CAML Editor mode.
- Query builder can build queries for a single list in the same team site as the workflow.





### **Editor Mode: Query Builder**

In **Query builder** mode, the following elements will build the query:

#### List

Select the list to query data from. Lists in the current team site are displayed.

#### Recursive

Check this option to query for items within folders and subfolders.

#### **Filter**

The criteria that nominated list items must match in order to be selected.

#### Sort

The order in which selected values should be returned.

#### XML encode inserted tokens

This option ensures that the inserted tokens will be encoded and is able to support special characters.

### **Output options**

**Include HTML formatting in rich text columns:** This option determines how a value queried from a rick text field is returned. When this option is selected, the HTML mark-up from the field will be preserved. When this option is not selected, HTML mark-up is removed, leaving only the text.

**Specify item limit:** Specify the number of items to be returned from the query.

### Field

The field to retrieve the data from. More than one field can be selected.

- 1. Select the required field to retrieve the data from and click Add.
- 2. Specify a workflow variable to store the values from the field to be retrieved.

Note: If a variable that is not a collection is selected, only the first result will be stored.

### **Editor Mode: CAML Editor**

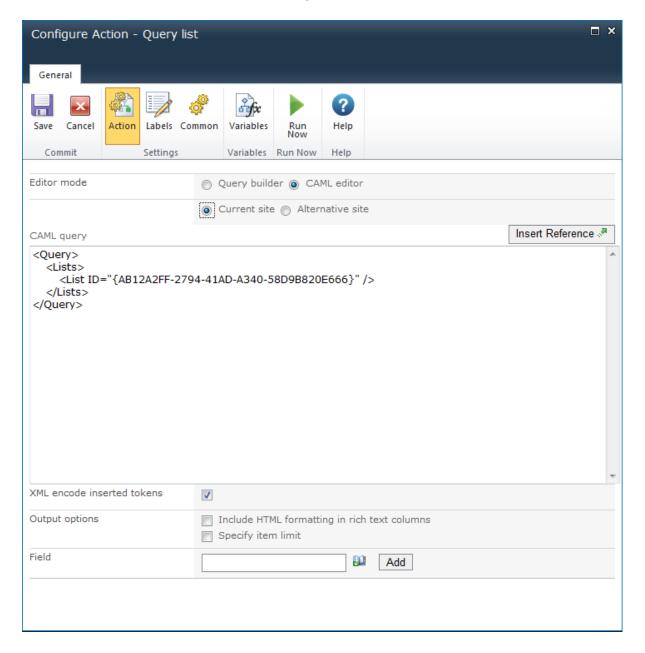
When **CAML editor** is selected, the query can be run on either the current site or an alternate site to the one the workflow is running in.





To query an alternative site, select the **Alternative site** option and enter the **Site URL** to a SharePoint site. The site must exist in the same farm as the workflow, but can be in a different site collection or web application.

When the Alternative site is selected, the Query builder mode is disabled.



#### XML encode inserted tokens

This option ensures that the inserted tokens will be encoded and is able to support special characters.





### **Output options**

**Include HTML formatting in rich text columns:** This option determines how a value queried from a rich text field is returned. When this option is selected, the HTML mark-up from the field will be preserved. When this option is not selected, HTML mark-up is removed, leaving only the text. For more information about CAML queries and Site Data queries, see the SharePoint SDK.

**Specify item limit:** Specify a number of items to be returned from the query.

Field: The field to retrieve the data from. More than one field can be selected.

- 1. Select the required field to retrieve the data from and click **Add.**
- 2. Specify a workflow variable to store the values selected from the field query.

Note: If a variable that is not a collection is selected, only the first result will be stored.

## 1.65 Query User Profile

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

The Query User Profile action will retrieve information about a user from their SharePoint user profile.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

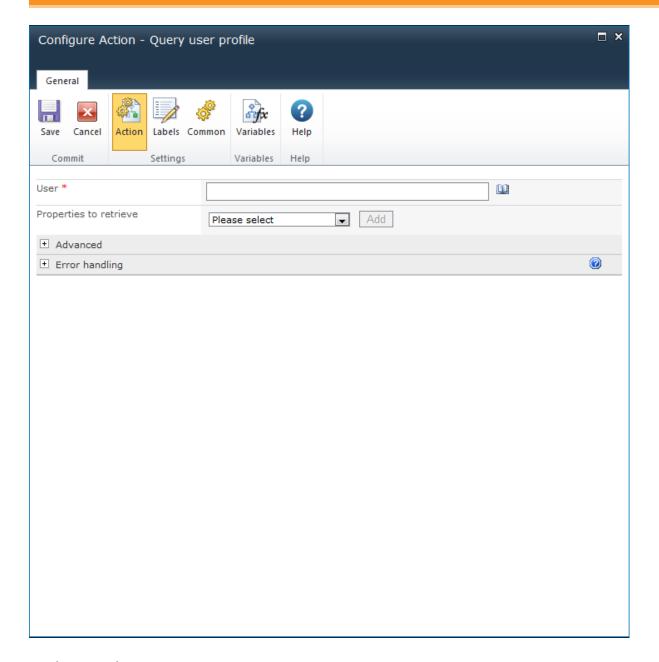
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# **Action Settings**

## User

The login name of the user whose profile should be queried. Multiple users can be specified.

## **Properties to retrieve**

A list of available profile properties that the action can read. More than one property may be retrieved.





To specify the property to retrieve:

- 1. Select the desired property in the drop-down menu.
- 2. Click the Add button and the property will appear below the Properties to retrieve box.
- 3. Specify a workflow variable to store the value of the property to be retrieved.

Note: If a variable that is not a collection is selected, only the first result will be stored.

#### **Advanced**

#### Credentials

An account with permissions to query the user profiles.

## 1.66 Query XML

The Query XML action allows the reading, transforming or querying of XML Data.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

To change the settings used by the action:

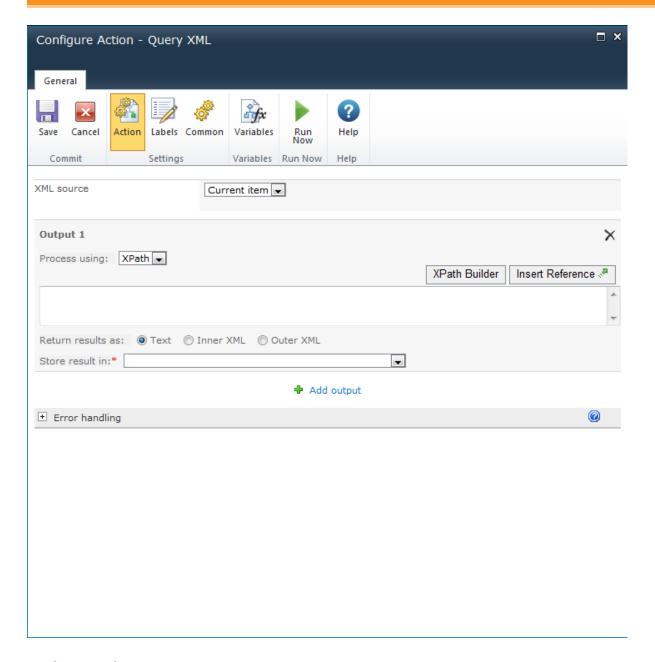
- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.



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## **Action Settings**

### **XML Source**

The XML source can be selected from these three options:

- **Current item:** The item in the list or library to which this workflow is associated. This option is only available if this action is being applied to a library.
- **URL:** A URL to the XML source to be processed. A username and password can be specified when accessing the URL. If no credentials are specified, the request will be made anonymously.







XML: Direct XML entered in the configuration dialog.

### **Process using**

- None: The resulting XML will not be processed. This allows the reading of the XML file or source without processing.
- XPath: Allows querying of XML to retrieve data from a node or node set. Click on the XPath Builder button to use the XML browser to navigate the XML structure and select an element from the XML data. Note: If the XML source specified for the action is available and all tokens and references are replaced with actual run time values, then the XPath Builder will use the XML source to display the XML structure within the XML browser. Otherwise, sample XML data will need to be provided in order to select the node using the XML browser. Note: The expression must return a node set. If the XML includes an explicit default namespace, then 'defaultNS' must be used as the prefix when selecting nodes in that namespace.
- XSLT: Allows the transformation of XML.

#### Return results as

Return the results of the guery as text, Inner XML or Outer XML.

#### **Store Result**

Use the drop-down to specify where the resulting text should be stored. More than one output value may be entered. To specify additional output select**Add output** and fill in the required information.

### 1.67 Read Document

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

This workflow action can be used to retrieve a value from a 'content control' within a Word document and store the value in a workflow variable.

PLEASE NOTE: The Word document must be in the docx format (either Word 2007 or Word 2010). Files in the format ".doc" cannot save content controls - it converts them to static content.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

Alternatively





• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

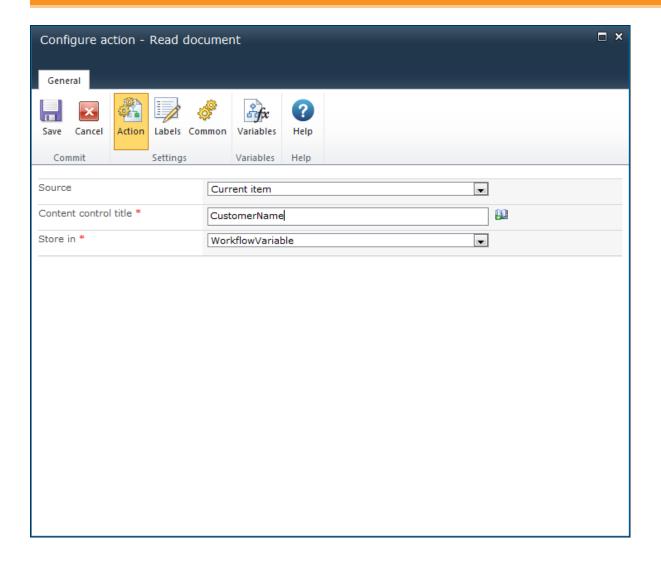
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.









## **Options within this action**

#### Source

The document where the 'content control' is to be read from. Select either:

- The Current item; OR
- **Source URL**. In the **Source URL** field, the full URL including the filename and type will need to be provided. E.g. 'http://mycompany.com/sales/Shared%20Documents/WordDocument.docx'

#### **Content control title**

The title of the 'content control' within the document.

Note: Be aware of the following when specifying a **content control title**:

• If there are 'content controls' with the same title within the document, the first **content control title** that matches the one specified will be used.

However if the selected workflow variable to store the content control values is type of **Collection**, all the values returned from all the content controls with the specified title will be saved.

• If a 'content control' specified is of rich text type, it will not include formatting or pictures that are within the 'content control'.

#### Store in

Select the <u>Workflow variable</u> to store the value retrieved from the 'content control' within the document. **Collection** type workflow variables can be used to save multiple content control values of the same title.

## 1.68 Regular Expression

This workflow action allows a regular expression to be performed on a block of text. A regular expression is a pattern that can match various text strings. It can be used to either check if the text matches a regular expression pattern or replace parts of the text that match a regular expression with different text.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.





## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

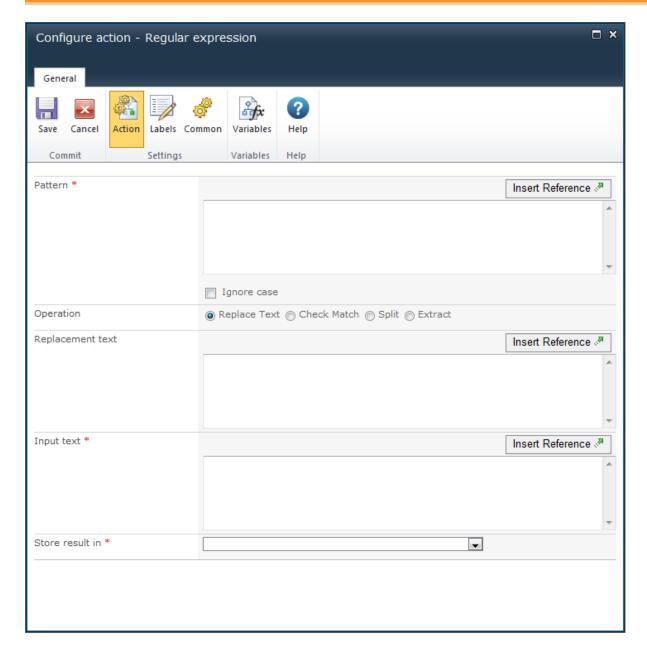
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# Options within the action

#### **Pattern**

The regular expression pattern to apply to the text. This action uses the Microsoft .NET regular expression syntax.

## Ignore case





Use this option to specify that the pattern should be treated as case insensitive. When this option is selected, a pattern that matches 'T' will also match 't'.

### Operation

- Replace text replaces the text matching the pattern with the replacement text.
- Check match outputs a yes/no value to indicate if the input text matches the pattern.
- **Split** divides the input text into sections using the pattern as a delimiter. The output value is a collection containing each portion of the split text.
- **Extract** searches the input text for sub strings that match the pattern. Each matching substring is stored in the collection output value.

#### Input text

The input text to which the regular expression will be applied.

### Store result in

The workflow variable in which to store the output from the operation. The drop-down will list:

- Yes/No variables in Check match mode.
- Text variables in Replace text mode.
- Collection variables in the **Split** and **Extract** modes.

## 1.69 Remove User From AD Group

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will remove a User from an Active Directory security group.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

On the action's title click the down arrow to activate a drop-down



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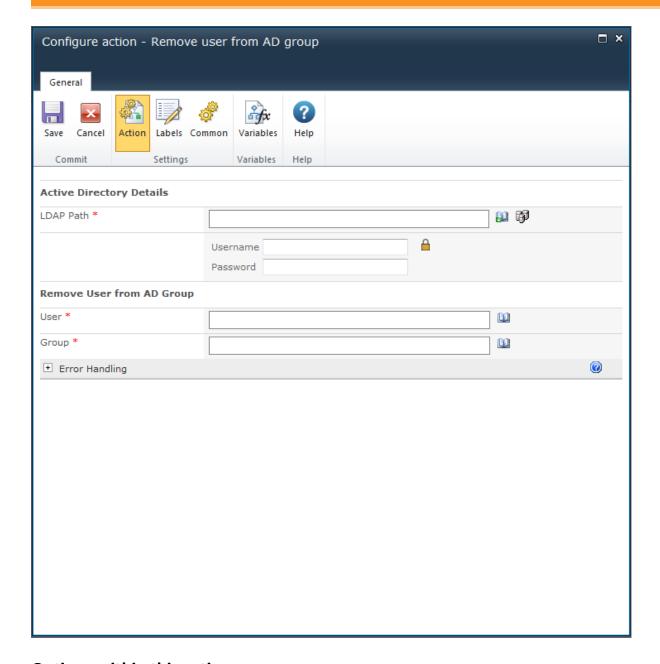


- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# **Options within this action**

## **Active Directory Details**

#### **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

## **Remove User from AD Group**





#### User

The Active Directory username (sAMAccountName) of the user. E.g. jsmith.

#### Group

The name of an existing Group from which the user will be removed. E.g. Finance.

## 1.70 Request Approval

This action allows the request of one or more users to process an approval as part of the workflow.

For more details on the actual process please refer to Approving, Rejecting and Reviewing Items.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

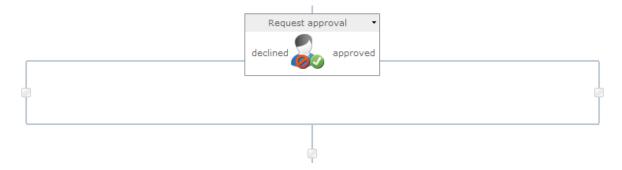
For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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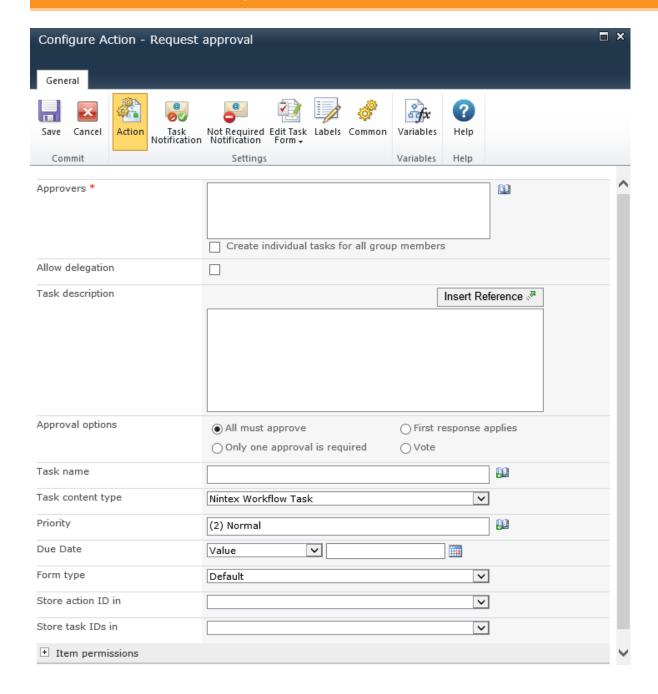


Visible on the design canvas will be two branches that dictate the path followed by the workflow depending on the response from the task approvers, to the right is the approval branch and the left the rejected branch.



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# **Options for this action**

**Ribbon Option: Action** 

**Approvers** 





The **Approvers** list contains all users or groups that will be assigned the approval task during the running of the published workflow.

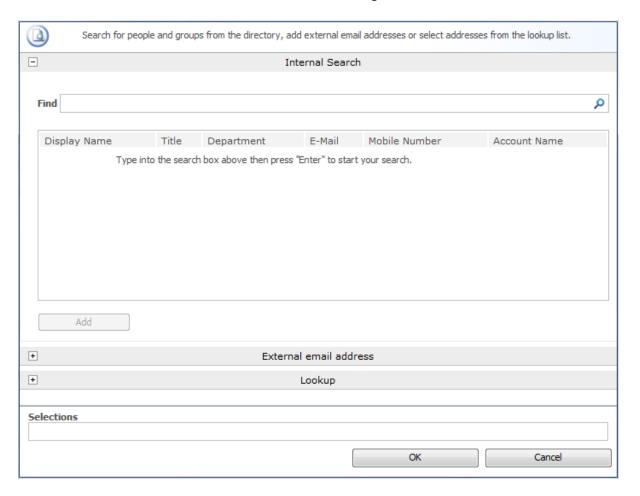
#### Users can be:

- Entered directly using their username, email address or full name and will be resolved where
  possible against the SharePoint user list or Active Directory.
- Search for users, click on the address book icon on the right.

Please note that users not part of the Active Directory can be added as **Approvers** by specifying their email address. However, the only way that they can respond to the Task is through <u>LazyApproval</u> as they will have no access to the SharePoint site.

#### **Select People and Groups**

To search for users, click on the address book icon on the right.







The configuration dialog allows the workflow designer to search for and/or add users to the **Approvers** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the
  magnifying glass will provide a list of matching users and groups from SharePoint as well as Active
  Directory
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.
- **Lookup:** Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

#### Create individual tasks for all group members

In the case that a group is assigned the approval task and **Create individual tasks for all group members** checkbox is:

- not selected, all users in that group will receive the task notification. The first respondent will represent the entire group.
- selected, an individual task will be assigned to every group member.

Users can be entered directly by their username, email address or full name and will be resolved where possible against the SharePoint user list. Users and groups that do not resolve automatically with the system users will require LazyApproval to complete their assigned task.

#### Allow delegation

When this option is selected the assigned approver at runtime can delegate the task to another user. For more information, please refer to the <u>Delegating Approval Tasks</u>.

# **Allow Lazy Approval**

If LazyApproval has been enabled on the server, the workflow can permit the approvers to use <u>LazyApproval</u>. Lazy Approval means that an approval or rejection can be registered when the approver replies to a notification email or an automated OCS / Lync conversation with an approved word or phrase. A system administrator can edit or add to the list of acceptable terms. For more information, please refer to the <u>Managing LazyApproval settings</u>.

# **Task description**





Allows entry of dynamic text that will display on the task response form. This can be used to communicate additional information about the task to the responding user. Insert Reference see <a href="Inserting reference">Inserting reference</a> fields.

#### **Approval options**

There are four options that will determine which approvals are required at runtime in case of multiple assigned users.

- All must approve: Each user in the Approvers list must approve the item for it to qualify as
  approved. If one of the users denies or rejects the item, the item will be considered denied or
  rejected.
- **First response applies:** The first response received will be used for the overall outcome. All other pending tasks will be set to 'not required'.
- Only one approval is required: The task will be deemed as approved as soon as one approval response is accepted. All other approval requests will subsequently no longer be required.
- **Vote:** The number of approvals from users required for the document to be considered approved can be set using the "Vote" option. A text field will appear and a whole number equal to or less than the total number of approvers set in the **Approvers** section can be entered.

#### Task name

Allows the title of the task to be defined. This is the title that appears in a SharePoint task list. If left blank, the action title will be used by default.

# Task content type

Allows a task content type other than the default to be used. This option will only display if an alternative content type is available on the site. Alternative content types are primarily used to enable custom task response forms.

### **Priority**

Specifies the value that should be assigned to the priority flag for the task.

#### **Due Date**

Set a date for the task to be completed by.

#### Form type

Choose which form type is presented to **Approvers**.

#### Store action ID in





Allows a unique identifier for the action to be stored in an Action ID workflow variable. This identifier can be used to link the action to <a href="Delegate Task">Delegate Task</a> and <a href="Task reminder">Task reminder</a> actions. Please note that the Action ID does not correspond to the ID of the SharePoint task item that is created.

#### Store task IDs in

When the workflow runs, the ID given to each task that is created will be stored into an Integer, List Item ID or Collection workflow variable.

#### **Item Permissions**

**Set user permissions to:** Sets the user permission on the item.

When task is complete, set user permissions to: Sets the user permission on the item after the task has been completed.

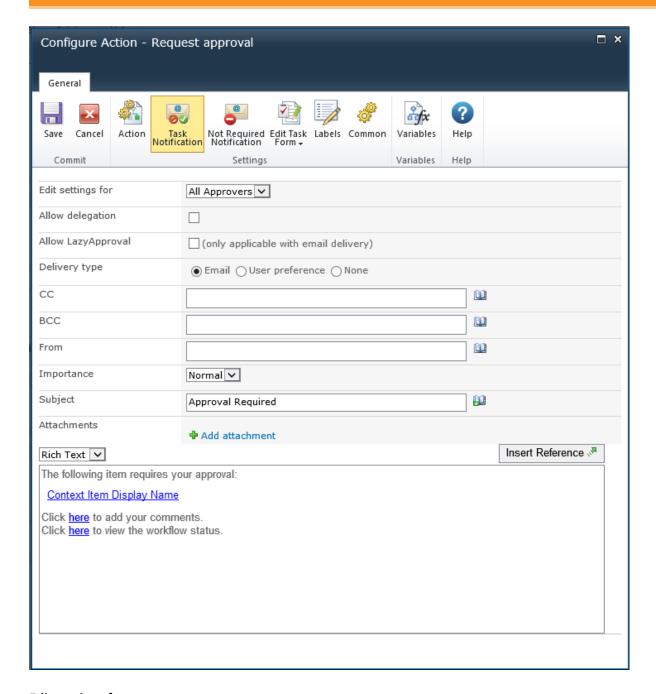
Note: Setting the item permissions could be useful when the task is delegated, this will give the delegated user the necessary permissions to view the item.

## **Ribbon Option: Task Notification**

Sent when the task is assigned to a user, also used when the task is delegated by one user to another.







# **Edit settings for**

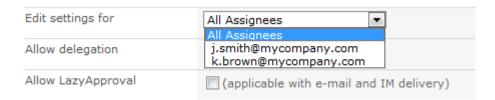
Changing this setting from the default **All Approvers** allows the setting of separate notification options for each **Approver** in the list. In such a case please check the settings for each user.

Changes to **All Approvers** will not affect users who are given custom settings.

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## Allow delegation

When this option is selected the assigned approver at runtime can delegate the task to another user. For more information, please refer to the <u>Delegating Approval Tasks</u>.

#### Allow LazyApproval

If LazyApproval has been enabled on the server, the workflow can permit the approvers to use <u>About LazyApproval</u>. Lazy Approval means that an approval or rejection can be registered when the approver replies to a notification email or an automated OCS or Lync conversation with an approved word or phrase. A system administrator can edit or add to the list of acceptable terms. For more information, please refer to the <u>Managing LazyApproval settings</u>.

## **Delivery type**

**Delivery type** is the method of delivering the notification to the recipients.

Available delivery options; None, Email, User preference or Instant Message (if enabled on the server). For information on User preference, please refer to the <u>Configuring user preferences</u>.

Please note: Nintex does not provide support for troubleshooting email, SMS / OCS systems.

If Allow LazyApproval is checked and Delivery type selected is IM. The option Send a conversation request to confirm if the user is available to respond will be available. Checking this option will ask the assignee if they are available to respond, if the assignee responds with "No", the Delivery type will be switched to Email and the assignee will receive a notification email instead.

If at anytime the assignee does not respond within 5 minutes to the automated OCS / Lync conversation, the conversation will end and a notification email to complete the tasks will be sent instead.

### CC

The **CC** field sets read only users who will receive the notification. **CC** recipients are not able to respond to the tasks.

To set the **CC** field click on 11 to open the Select People and Groups configuration dialog.

BCC





The **BCC** field sets read only users who will receive the email. **BCC** recipitants are not able to respond to the tasks. Other users addressed in the email via the **To**, **CC** and **BCC** fields will not be able to see any addresses in the **BCC** field. To set the **BCC** field, enter the account name, or alternatively, select the address book icon for additional options.

#### From

The **From** field sets the user or domain group that will appear as the sender of the message. This setting applies to emails only. If no **From** user or domain group is specified, the From address configured in <u>Global Settings</u> will be used.

#### **Importance**

The priority of the notification. This is only applicable when using email notifications.

### Subject

The **Subject** is the title of the notification being sent. If an Instant Message is being sent it will be pre-pended to the body of the notification.

Added manually or by clicking on u, to use Insert reference fields from within the runtime instance of the workflow.

#### **Attachments**

Allows file attachments to be added to the notification.

Files will not be received by a user when SMS or IM is selected as the delivery method. For information on User preference, please refer to the Configuring user preferences.

### **Format**

This sets the format of the email. Selecting:

- Rich Text enables italicize, bold, underline and indent information within the email using simple HTML styles provided by the SharePoint rich text tool bar.
- Plain Text is simply the text without any stylized formatting.

# **Notification body**

The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided enter the content for the notification as straight text, also available are <a href="Insert reference fields">Insert</a> reference fields from within the workflow.





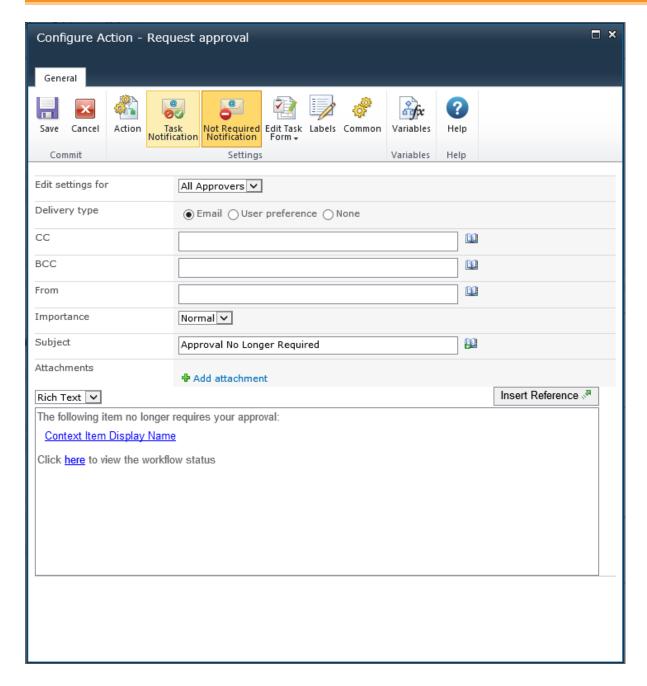
# **Ribbon Option: Not Required Notification**

Sent when the user no longer needs to respond to the task. This can occur when:

- A task is assigned to multiple users but only one is required to respond.
- The workflow is terminated prior to the task being processed.
- An error occurs in the workflow at runtime.

The notifications inherit default messages which can be edited by an Administrator. For more information, please refer to the <u>Defining message templates</u>.





See above Ribbon Option: Task Notification above for field descriptions.

# **Custom approval forms**

A custom task form can be used to respond to an approval task. Please download the Nintex Workflow SDK from <a href="http://www.nintex.com">http://www.nintex.com</a> for more information.





# 1.71 Request Data

This workflow action assigns a task to a specified user. To complete the task, the user must provide a value for each data item specified in the action configuration. The workflow will wait for the task to be completed before continuing the execution. Once the task is completed, the data that the user entered is available within the workflow.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

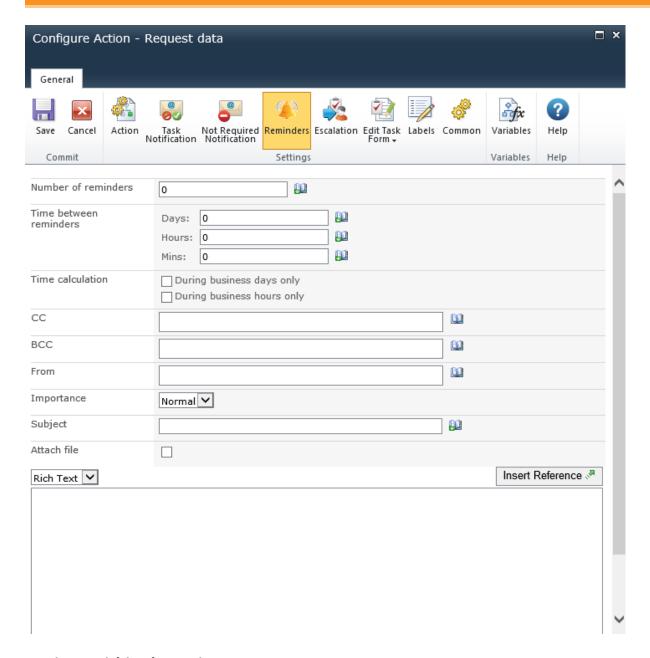
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.







# Options within the action

## **Ribbon Option: Action**

#### Collect data from

The user or group to retrieve data from. This task can only be assigned to a single user or group. If it is assigned to a group, the first group member to respond will act on behalf of the entire group.

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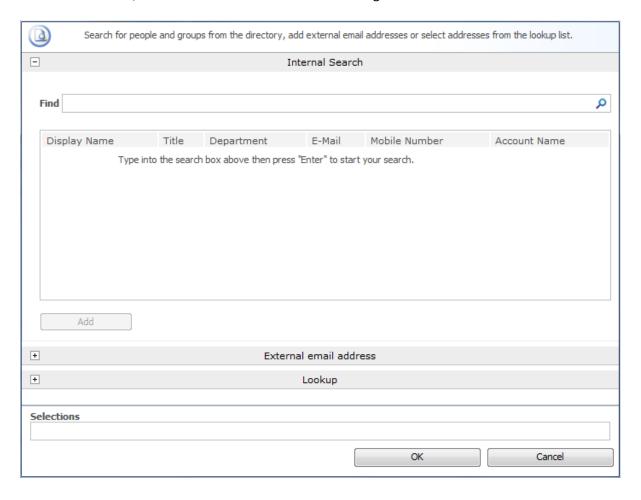




Note: Although the People Picker field will allow multiple users to be added, the first person added will be the only person notified and the only person who can approve the task. If a group is added, all will receive the notification, but only one person will be able to respond. This is because the workflow action will only create a single task, and only one user will be able to respond to the task. Also, once one person responds to the task, the task will be completed and the other user will not be able to provide input.

#### **Select People and Groups**

To search for users, click on the address book icon on the right.



The configuration dialog allows the workflow designer to search for and/or add users to the **Assignees** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the
  magnifying glass will provide a list of matching users and groups from SharePoint as well as Active
  Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.





 Lookup: Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

### **Content type**

When the action runs, it creates a task for the user to complete. Each data item is created as a field in a task content type, and this content type is used when creating a task.

An existing content type can be used, or a new content type constructed. The list of existing content types will show all content types that inherit from the 'Workflow Task' content type. The new content type will also inherit from this parent. See the SharePoint documentation for more information on content types.

If an existing content type is chosen, the option will appear to make changes to the content type. This can include removing, adding or modifying existing fields. This option should be used with caution, as changes may affect other workflows or applications that use the content type.

A content type is only created or modified when the workflow is published, not when it is saved. If you define a new content type, then save the workflow, your changes will be lost when you next edit the workflow.

#### Field list

In this panel the data items to request from the user are defined. Each represents a field in the selected Content Type.

Each field has the option to store the value in a workflow variable. This will enable the value to be used directly in the workflow without it having to be looked up manually with a Set Variable action.

Further options for each field can be set from the SharePoint Content Type settings page.

The content type is only updated when the workflow is published.

#### Publish task edit form

When the workflow is published, it will generate a form for the task. This form is associated with the task content type and will overwrite an existing form if it exists. This option allows the designer to specify whether to publish the form or not when the content type already exists. If other applications use the form, or the form has been customised, the designer may not want to republish it so the changes are not lost.

Only show fields with variables assigned





When this option is selected, only data fields that have a variable selected for 'Store Result In' will have a visible input field on the published form. If this option is not selected, all the data items displayed in the field list will have input fields on the form.

The generated form is a standard list item edit page and can be customized in SharePoint Designer. The form is stored in the Workflows/NintexWorkflows/workflowname folder and will be named the same as the content type.

Note that the form is only published when the workflow is published.

## Display link to workflow item on the task form

When this option is selected, the published task form will have a field called 'Link' containing a hyperlink back to the item that the workflow is running on. This is used to provide context about the workflow item for the user responding to the task.

#### Display the item properties panel on the task form

When this option is selected, the published task form will display a panel with the field names and values of the item that the workflow is running on.

#### Allow attachments

When this option is selected, the published task form will display a link to add attachments to the task item. The task respondent will then have the opportunity to optionally attach one or more files to the form.

#### Store attachment URLs in

This option allows the selection of a collection workflow variable in which to store the URL of each attachment that the task respondent added to the task. This option is only available if **Allow attachments** is enabled, or if **Publish task form** is disabled.

#### **Task description**

On the default task edit page, this text will appear at the top of the page before the input controls. It is stored in the task's description field.

## Allow delegation

When this option is selected, the user whom the task was assigned to will have the option to reassign it to another user.

# Enable responses by email using LazyApproval





When this option is selected, the user can complete the task by replying to the notification email. The email will contain a basic form, providing a location for the user to enter each requested value. By default, the form is appended to the message body. To control the location of the form, use the following token in the Input Required message:

{LAZY APPROVAL DATA FORM}

Note: the email form only shows fields that have variables assigned.

For more information see the About LazyApproval help topic.

#### Task name

The title that will be assigned to the task.

## **Priority**

Specifies the value that should be assigned to the priority flag for the task.

#### **Due Date**

Set a date for the task to be completed by.

### Store action ID in

Action IDs are used to link a task action to other actions in the workflow that are task related, such as the Task Reminder. Select an Action ID workflow variable to link this task to another action.

## Store task ID in

This will store the SharePoint list item ID of the created task into an integer <u>workflow variable</u>. This value can then be used to reference the task list item directly in workflow lookups.

#### **Item Permissions**

**Set user permissions to**: Sets the user permission on the item.

When task is complete, set user permissions to: Sets the user permission on the item after the task has been completed.

Note: Setting the item permissions could be useful when the task is delegated, this will give the delegated user the necessary permissions to view the item.

### Form type

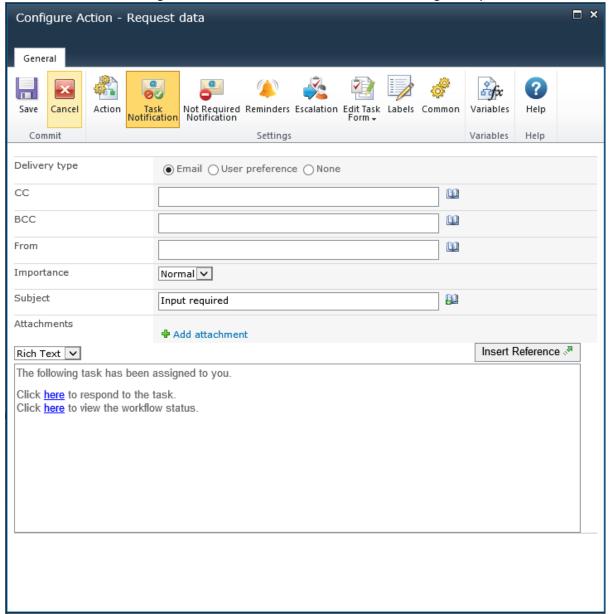




Select the Default form or an InfoPath form.

## **Ribbon Option: Task Notification**

Sent when the task is assigned to a user, also used when the task is delegated by one user to another.



## **Delivery type**

**Delivery type** is the method of delivering the notification to the recipients.





Available delivery options; None, Email, User preference or Instant Message (if enabled on the server). For information on User preference, please refer to the <u>Configuring user preferences</u>.

#### CC

The CC field sets read only users who will receive the notification. CC recipients are not able to respond to the tasks.

To set the CC field click on [10] to open the Select People and Groups configuration dialog.

#### **BCC**

The **BCC** field sets read only users who will receive the email. **BCC** recipitants are not able to respond to the tasks. Other users addressed in the email via the **To**, **CC** and **BCC** fields will not be able to see any addresses in the **BCC** field. To set the **BCC** field, enter the account name, or alternatively, select the address book icon for additional options.

#### From

The **From** field sets the user or domain group that will appear as the sender of the message. This setting applies to emails only. If no **From** user or domain group is specified, the From address configured in <u>Global Settings</u> will be used.

## **Importance**

The priority of the notification. This is only applicable when using email notifications.

## **Subject**

The Subject is the title of the notification being sent. Manually enter the text or click the button to use Insert reference fields to build the string dynamically at run time.

## **Attachments**

Allows file attachments to be added to the notification.

Files will not be received by a user when SMS or IM is selected as the delivery method. For information on User preference, please refer to the Configuring user preferences.

#### **Format**





This sets the format of the email.

## Selecting:

- **Rich Text** enables italicize, bold, underline and indent information within the email using simple HTML styles provided by the SharePoint rich text tool bar.
- Plain Text is simply the text without any stylized formatting.

## **Notification body**

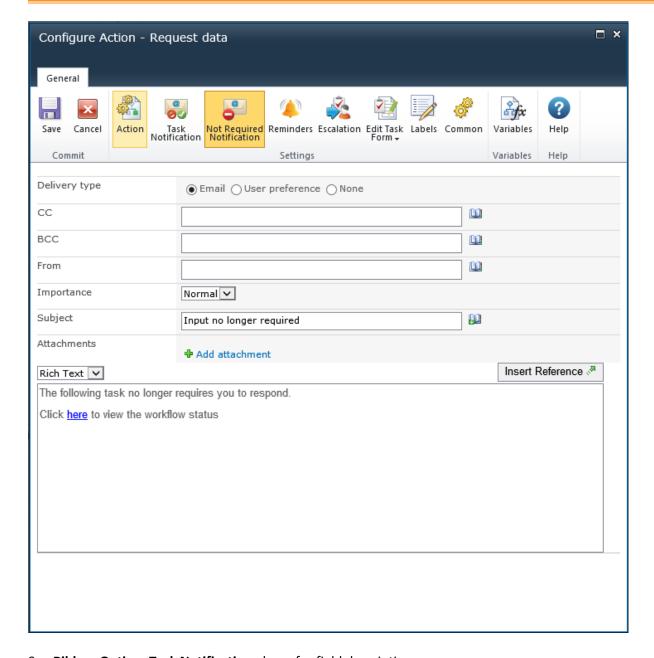
The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided enter the content for the notification as straight text and <u>Inserting reference</u> fields from with the workflow.

### **Ribbon Option: Not Required Notification**

Sent when the user no longer needs to respond to the task. This can occur when:

- A task is assigned to multiple users but only one is required to respond.
- The workflow is terminated prior to the task being processed.
- An error occurs in the workflow at runtime.





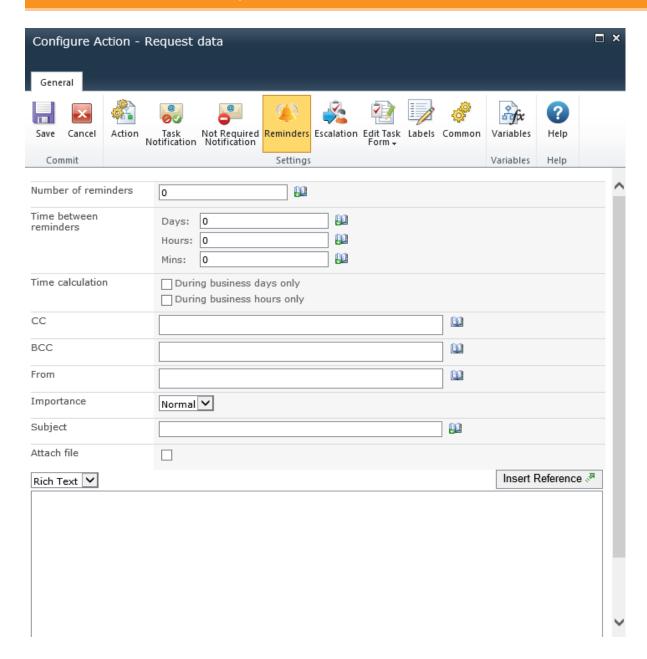
See **Ribbon Option: Task Notification** above for field descriptions.

# **Ribbon Option: Reminders**

Optional notification **Reminders** can be configured to be sent to each assignee who has not yet completed the task.







#### **Number of reminders**

The number of reminders to be sent.

## Time between reminders

The delay before sending each reminder in days, hours and minutes.



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The total time is calculated by summing all fields, regardless of the **Time calculation** option selected. For example, 4 days and 4 minutes will be calculated as 96 (24x4) hours and 4 minutes.

#### Time calculation

Specifies whether or not hours outside the work week should be included when counting down to send a reminder.

### **During business days only**

The **During business days only** option will specify that weekends or holidays are not included in the countdown, but after hours on a business day are.

#### Example:

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder (the work week is defined as Monday to Friday).
- o A reminder will be sent Monday morning: weekends are not included in the countdown.

#### **During business hours only**

The **During business hours only** option specifies that only business hours are used in the count down.

### Example:

- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder (the work day is defined as Monday to Friday, 8am to 5pm).
- A reminder will be sent at 11am on Thursday: after-business hours are not included in the countdown.

#### **Neither option**

If neither option is selected, all hours will be included in the count down.

#### **Examples:**

- The task is assigned Friday morning and is configured to wait 1 day before sending a reminder.
- A reminder will be sent Saturday morning: weekends **are** included in the countdown.
- The task is assigned Wednesday at 4pm and is configured to wait 4 hours before sending a reminder.
- A reminder will be sent at 8pm on Wednesday: after-business hours **are** included in the countdown.

Public holidays and any other special occasions are set using the "Site Settings > Nintex Workflow > Manage Holidays" page.





See **Ribbon Option: Task Notification** above for additional field descriptions.

## **Ribbon Option: Escalation**

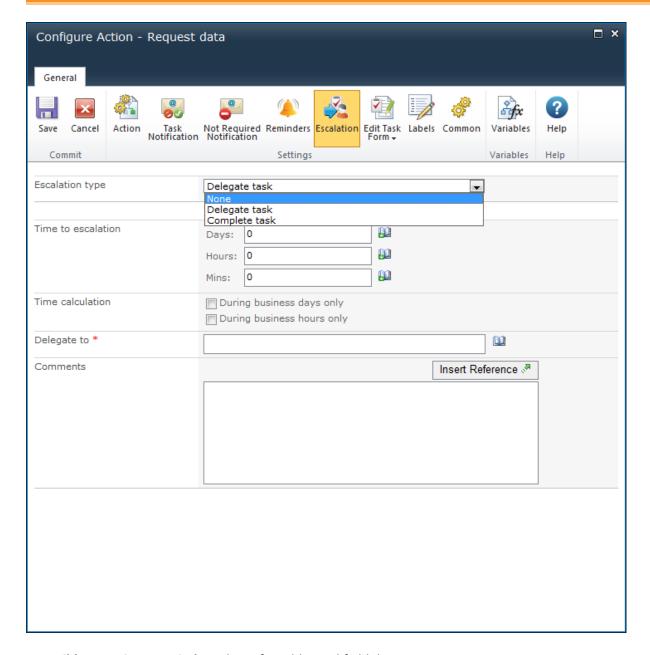
Escalation is optional, there are two possible escalation paths:

- Delegate task will re-assign all pending tasks to the nominated user after the specified time.
- **Complete task** will auto-respond to all pending tasks and set the overall outcome of the action to the indicated outcome after the specified time.
- The specified outcome does not have to be one of the configured possible **Outcomes** set in the Action.

Escalation occurs after all reminders have been sent and the specified "Time to escalation" has elapsed.







See Ribbon Option: Reminders above for additional field descriptions.

# 1.72 Request Review

This action is used to assign a task and send a notification to one or more users to review an item as part of the workflow. For more details on the review process please refer to <a href="Approving, Rejecting and Reviewing ltems">Approving, Rejecting and Reviewing ltems</a>.

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To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

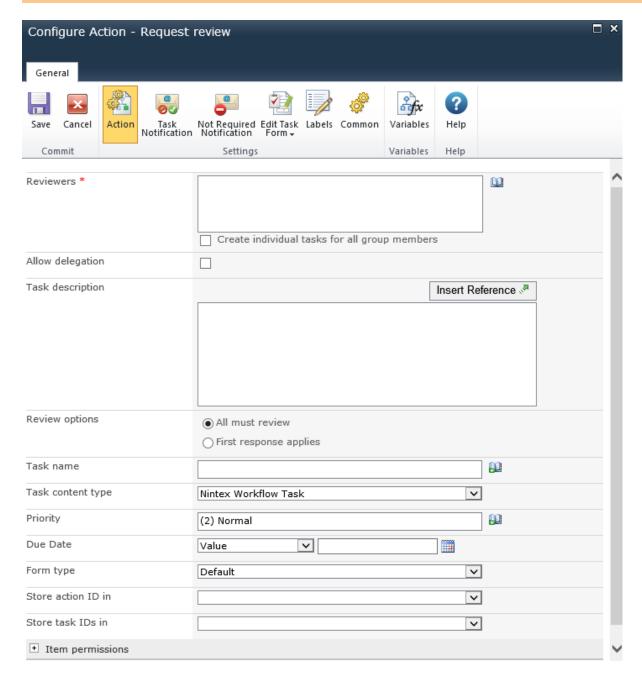
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





# **Options for this action**

**Ribbon Option: Action** 

**Reviewers** 



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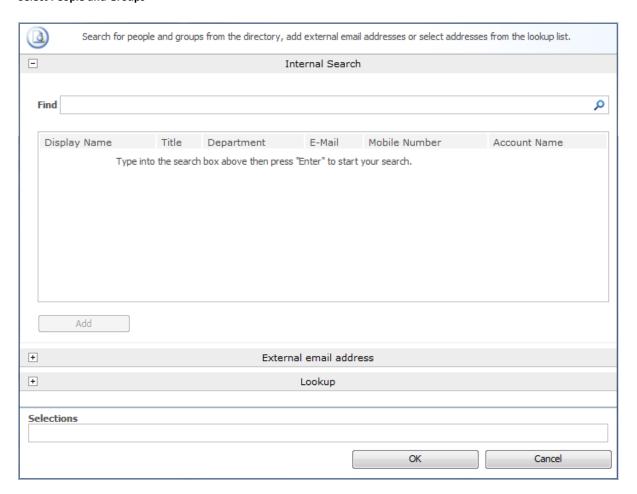
The **Reviewers** list contains all users or groups that will be assigned the review task during the running of the published workflow.

Users can be entered directly by their username, email address or full name, and will be resolved where possible against the SharePoint user list.

In the case that a group is assigned the review task and Expand Groups is not selected, all users in that group will receive the task but the first response will represent the whole group. If Expand Groups is selected, an individual task will be assigned to every group member. Note that groups will only be expanded at one level. Groups within groups will not be expanded.

In order to search for the reviewers click on the address book icon to the right of the reviewers input box. The **Select People and Groups** dialog will appear.

#### **Select People and Groups**



The **Select People and Groups** dialog allows the workflow designer to search for and/or add users to the **Reviewers** list by one or more of the following methods:





- Internal Search: Entering a partial display name, email or user account name and clicking on the magnifying glass will provide a list of matching users and groups from SharePoint as well as Active Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.
- **Lookup:** Select a property reference to add to the list. These are broken up into common types such as the initiator of the workflow and their manager, as well as properties from the current SharePoint list. The item properties that are included are any column that is of a "Person or Group" type or contains the word "Email" in the name.

## Create individual tasks for all group members

In the case when a group is assigned the task and **Create individual tasks for all group members** checkbox is:

- not selected, all users in that group will receive the task notification. The first respondent will represent the entire group.
- selected, an individual task will be assigned to every member of the group.

Groups will only be expanded to one level. Groups within groups will not be expanded.

Users can be entered directly using their username, email address or full name and will be resolved where possible against the SharePoint user list or Active Directory.

### Allow delegation

When this option is selected the assignee at runtime can delegate the task to another user. For more information, please refer to the Delegating Approval Tasks.

# **Allow LazyApproval**

If LazyApproval has been enabled, the workflow can permit the assignees to use <u>LazyApproval</u>. Lazy Approval means that a task response can be registered when the assignee replies to a notification email or an automated OCS / Lync conversation. In a Request Review action, the users response will be used for the task comments. Changing the allow LazyApproval option on the 'Action' ribbon option is the same as changing the 'Allow LazyApproval' option for all assignees on the 'Task Notification' ribbon option. See the 'Task Notification' ribbon option section below for more information.

## **Task description**





Allows entry of dynamic text that will display on the task response form. This can be used to communicate additional information about the task to the responding user. The description can be built up dynamically be using the Insert Reference function. For more information see <u>Inserting reference fields</u>.

#### **Review options**

There are two options that will determine which reviewers are required at runtime in case of multiple assigned users.

- **All must review:** Each user in the **Reviewers** list must review the item. The workflow will not proceed until a response has been received from each reviewer or reviewer's delegate.
- First response applies: The first response is registered and enables the workflow to continue. All
  other review requests will subsequently no longer be required and a no longer required notification
  will be sent to remaining reviewers if configured.

#### Task name

Allows the title of the task to be defined. This is the title that appears in a SharePoint task list. If left blank, the action title will be used by default.

### Task content type

Allows a task content type other than the default to be used. This option will only display if an alternative content type is available on the site. Alternative content types are primarily used to enable custom task response forms.

#### **Priority**

Specifies the value that should be assigned to the priority flag for the task.

# **Due Date**

Set a date for the task to be completed by.

#### Form type

Choose which form type is presented to **Reviewers**. Choices are Default, InfoPath, or Custom.

## Store Action ID in





Allows a unique identifier for the action to be stored in an Action ID workflow variable. This identifier can be used to link the action to <a href="Delegate Task">Delegate Task</a> and <a href="Task reminder">Task reminder</a> actions. Please note that the Action ID does not correspond to the ID of the SharePoint task item that is created.

#### Store task IDs in

When the workflow runs, the ID given to each task that is created will be stored into an Integer, List Item ID or Collection workflow variable.

#### **Item Permissions**

**Set user permissions to**: Sets the user permission on the item.

When task is complete, set user permissions to: Sets the user permission on the item after the task has been completed.

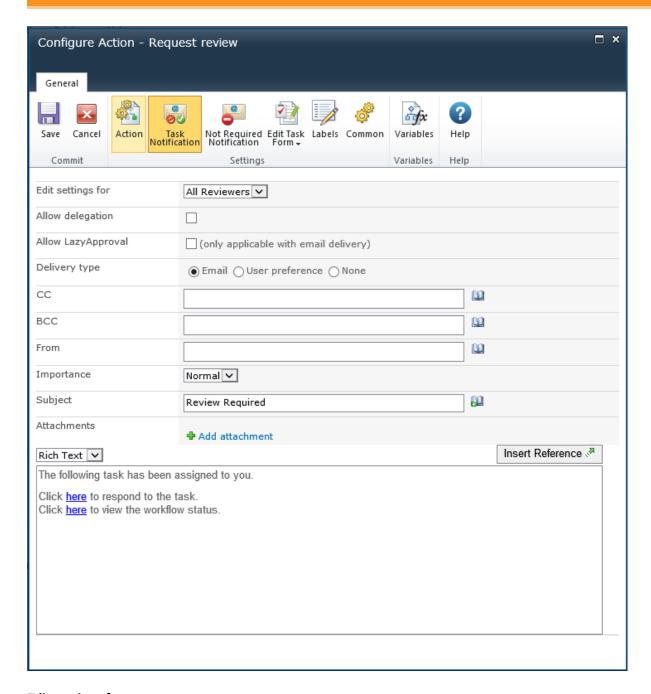
Note: Setting the item permissions could be useful when the task is delegated, this will give the delegated user the necessary permissions to view the item.

## **Ribbon Option: Task Notification**

Use the **Task Notification** area to configure the notification that is sent when the task is assigned to a user. The notification is also used when the task is delegated by one user to another.

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# **Edit settings for**

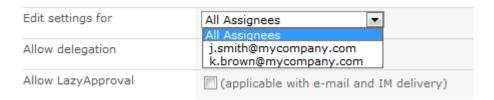
Changing this setting from the default **All Reviewers**, allows the configuration of unique notification options for each **Reviewer** in the list.

Unless specifically configured, assignees will use the **All Assignees** settings. To override settings for a specific **Reviewer**, select their name from the drop down list.

Changes to All Reviewer will not affect users who are given custom settings.







## Allow delegation

When this option is selected the assignee at runtime can delegate the task to another user. For more information, please refer to the <u>Delegating Approval Tasks</u>.

#### **Allow Lazy Approval**

If LazyApproval has been enabled, the workflow can permit the assignees to use <u>LazyApproval</u>. Lazy Approval means that a task response can be registered when the assignee replies to a notification email or an automated OCS / Lync conversation. In a Request Review action, the users response will be used for the task comments.

#### **Delivery type**

**Delivery type** is the method of delivering the notification to the recipients.

Available delivery options; None, Email, User preference or Instant Message (if enabled on the server). For information on User preference, please refer to <u>Configuring user preferences</u>.

If Allow LazyApproval is checked and Delivery type selected is IM. The option Send a conversation request to confirm if the user is available to respond will be available. Checking this option will ask the assignee if they are available to respond, if the assignee responds with "No", the Delivery type will be switched to Email and the assignee will receive a notification email instead.

If at anytime the assignee does not respond within 5 minutes to the automated OCS or Lync conversation, the conversation will end and a notification email to complete the tasks will be sent instead.

#### CC

The CC field sets read only users who will receive the notification. CC recipients are not able to respond to the tasks.

To set the CC field click on **to open the Select People and Groups** configuration dialog.

#### **BCC**

The **BCC** field sets read only users who will receive the email. **BCC** recipitants are not able to respond to the tasks. Other users addressed in the email via the **To**, **CC** and **BCC** fields will not be able to see any addresses





in the **BCC** field. To set the **BCC** field, enter the account name, or alternatively, select the address book icon for additional options.

#### From

The **From** field sets the user or domain group that will appear as the sender of the message. This setting applies to emails only. If no **From** user or domain group is specified, the From address configured in <u>Global Settings</u> will be used.

#### **Importance**

The priority of the notification. This is only applicable when using email notifications.

#### Subject

The **Subject** is the title of the notification being sent. If an Instant Message is being sent it will be pre-pended to the body of the notification.

The Subject line can be typed manually or built up dynamically at runtime using the <u>Insert reference</u> fields button ...

#### **Attachments**

Allows file attachments to be added to the notification.

Files will not be received by a user when SMS or IM is selected as the delivery method. For information on User preference, please refer to Configuring user preferences.

#### **Format**

This sets the format of the email.

### Selecting:

- Rich Text enables italics, bold, underline and indenting within the email using simple HTML styles
  provided by the SharePoint rich text tool bar.
- Plain Text is simply the text without any stylized formatting.

# **Notification body**

The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided enter the content for the notification as straight text, also available are <a href="Insert">Insert</a> reference fields from within the workflow.

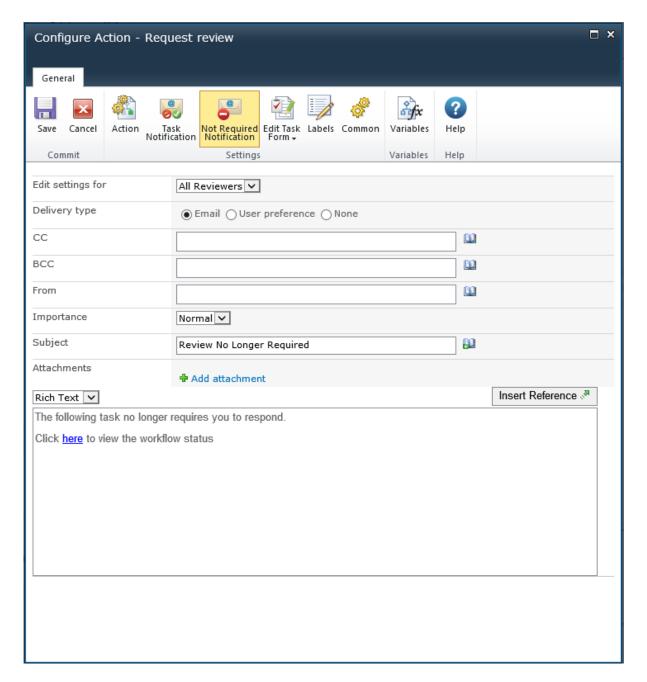
#### **Ribbon Option: Not Required Notification**





Use the **Not Required Notification** area to configure the notification that is sent when the user no longer needs to respond to the task. This can occur when:

- A task is assigned to multiple users but only one is required to respond.
- The workflow is terminated prior to the task being processed.
- An error occurs in the workflow at runtime.



See above **Ribbon Option: Task Notification** above for field descriptions.





#### **Custom review forms**

A custom task form can be used to respond to an approval task. Please download the Nintex Workflow SDK from <a href="http://www.nintex.com">http://www.nintex.com</a> for more information.

#### 1.73 Retrieve data

This workflow action can be used to retrieve data which has been stored using the Store data workflow action. Using both the Store data and Retrieve dataworkflow actions, it is possible to pass data between workflow instances.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

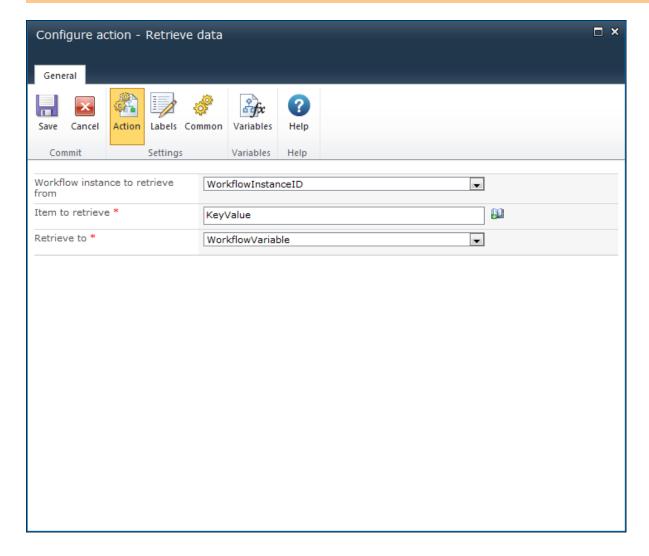
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.







# **Options within this action**

## Workflow instance to retrieve from

The instance ID of the workflow to retrieve data from. Select either:

- Current Workflow: This will retrieve the information from the current workflow.
- A workflow variable: Use this to specify a specific workflow instance ID that is set in a <u>workflow</u> <u>variable</u>.

Note: Using the <u>Start Workflow</u> workflow action within the current workflow, a new workflow can be started. The instance ID of the new workflow can then be stored in a <u>workflow variable</u> which then can be selected. This can be used by a parent workflow to start a child workflow and return a value to the parent workflow.

## Item to retrieve



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The same value that was specified in the 'Store as' field in the <u>Store data</u> workflow action of the **workflow** instance to retrieve from.

E.g. If the 'Store as' value specified in the <u>Store data</u> workflow action is 'KeyValue', the **Item to retrieve** value must be 'KeyValue'.

#### Retrieve to

Select the workflow variable that the data will be stored in.

## 1.74 Run If

This workflow action sets a condition to dictate the logic that is processed at runtime. E.g. the workflow actions contained within the Run If action will only execute if the condition evaluates to true.

Note: Any actions within the Run if action will run in the same context that the Run if action is configured to.

This action is similar to the <u>Set a condition</u> action.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

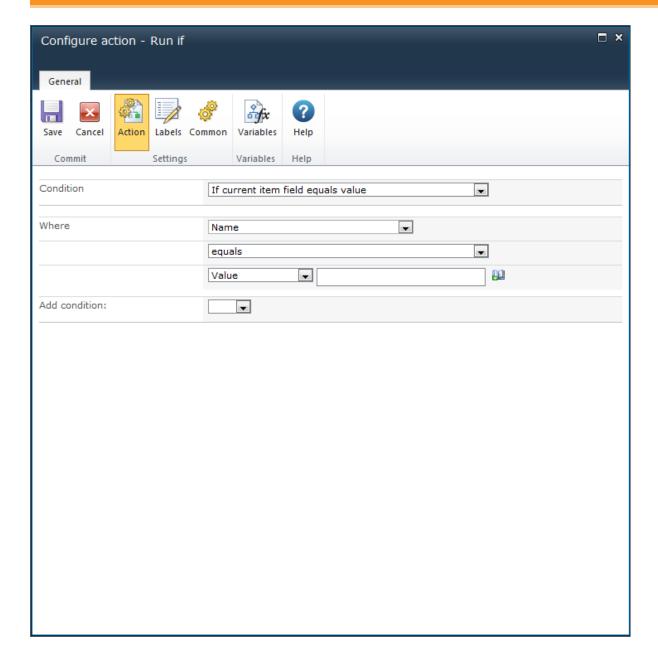
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.

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# **Action Settings**

## Condition

There are twelve types of conditions that can be used here. These are:



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## If current item field equals value

This condition type evaluates if an individual field of the current item matches or compares to a certain value/column.

### If any value equals value

This condition allows the use of two fields, two workflow variables or two lookups to compare at runtime.

## Title field contains keywords

This condition allows a comparison to be performed that determines if the item's title contains certain specific words.

## Modified in a specific date span

This condition evaluates to true if the current item is modified between two specified dates.

## Modified by a specific person

This condition evaluates to true if the item has been modified by a specific person. The username is case sensitive.

Once the name has been entered click **Check name** button to validate user.

### Person is a valid SharePoint user

This condition checks if the specified user is a member of the SharePoint site.

### Created in a specifc date span

This condition checks if the item was created between the specified dates.

If manually entering information, ensure that the date format matches that used in the SharePoint environment.

### Created by a specific person

This condition checks if an item was created by a specific user.

Once the name has been entered click the **Check name** button to validate user.

### The file type is a specific type

This condition checks if the file type extension of the current item is of the specified type.





### • The file type in a specific range kilobytes

This condition checks if the file size of a document is between the specified sizes, in kilobytes.

The following two conditions are available when running the workflow action as the workflow owner (impersonation):

### Check list item permissions

This condition checks if the permissions of a specified user matches or is higher than the specified permission level provided for an item in a list. It does not check that the users have specific permission levels. A user can be a single user, multiple users or a group. For the condition to evaluate as true, the user/s must have at least the permissions that the permission levels provide.

### Check list item permissions levels

This condition checks if permission levels of a specified user matches or is higher than the permission levels for an item within this list. A user can be a single user or multiple users but cannot be a group for this condition. For the condition to evaluate as true, the users must have the permission levels specified in the condition.

There are many operators that can be used within this condition, e.g. equals, not equals to, greater than, less than, is empty, contains etc. Enter data manually into the text box or use <u>lookups</u> to dynamically build the values at run time.

## **Add Conditions**

Multiple conditions can be constructed by using the Add condition option.

Specify **And** or **Or** between the condition statements.

When there are multiple conditions, they are evaluated bottom to top. For example, the last two conditions will be evaluated, then that result evaluated against the next condition. That pattern will continue until a final result is reached.

### **Related Topics**

Set a condition

## 1.75 Run parallel actions

This workflow action runs at least two workflow actions simultaneously.





To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the</u> Nintex Workflow designer.



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There is no configuration required for this workflow action. However, it is important to note that the workflow will not continue until all workflow paths have been completed. To run more than two actions at a time, left-click on the action title and select 'Add Branch'. If a branch is left empty the workflow will continue to run.

## 1.76 Search Query

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

This workflow action will retrieve property values by performing a SharePoint search query.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

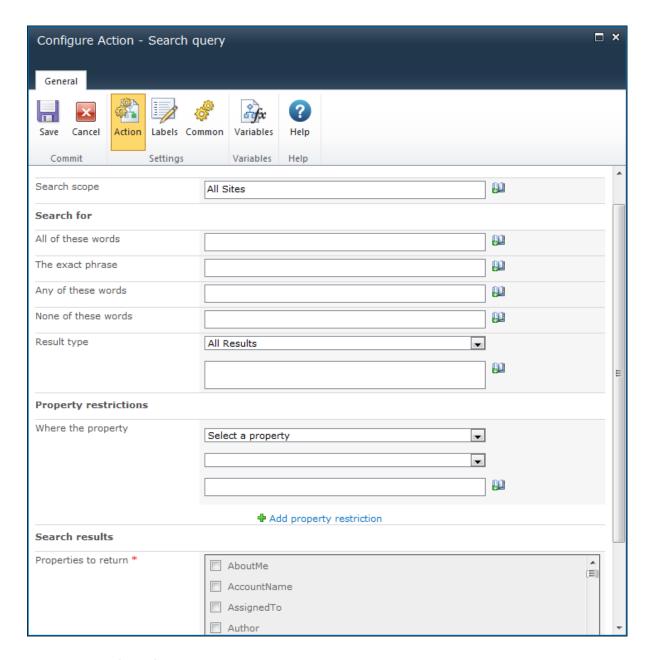
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





# **Options within this action**

## Search scope

The search scope to use for the query.

### Search for







Searches for SharePoint content that has properties matching the criteria. Individual words should be separated by a space character.

### Result type

Specify a file type filter for the search. A pre-defined file type can be selected, or a custom filter entered into the text input box. To retrieve all file types, select 'all results' or clear the text input box.

### **Property restrictions**

Allows further narrowing of the search results by only returning items where the property restriction rules are true.

#### **Properties to return**

Determines which property data will be retrieved from the search result. Multiple properties can be selected.

#### Results as XML

This option specifies whether to return the result set in an XML string. Returning the results as XML allows further processing and styling to be applied with the <u>Query XML</u> workflow action. A text workflow variable must be chosen to store the result if **Return as XML** is selected.

### Store result in

Specifies the workflow variable to store the search results in. If the workflow variable can only hold a single value, only the first property of the first search result will be returned. If a collection variable is selected, each property of each search result is stored.

# 1.77 Send / Receive Biztalk

\* This topic applies to Nintex Workflow Enterprise Edition only.

This workflow action is used to enable interaction with BizTalk Server 2006. The action can send messages into a BizTalk orchestration and/or wait for a message from BizTalk. The action allows a workflow to interact with any external system with which BizTalk interoperates.

For more information on setting up Nintex Workflow to interoperate with a BizTalk orchestration, please download the Nintex Workflow SDK fromhttp://www.nintex.com.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR





- o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

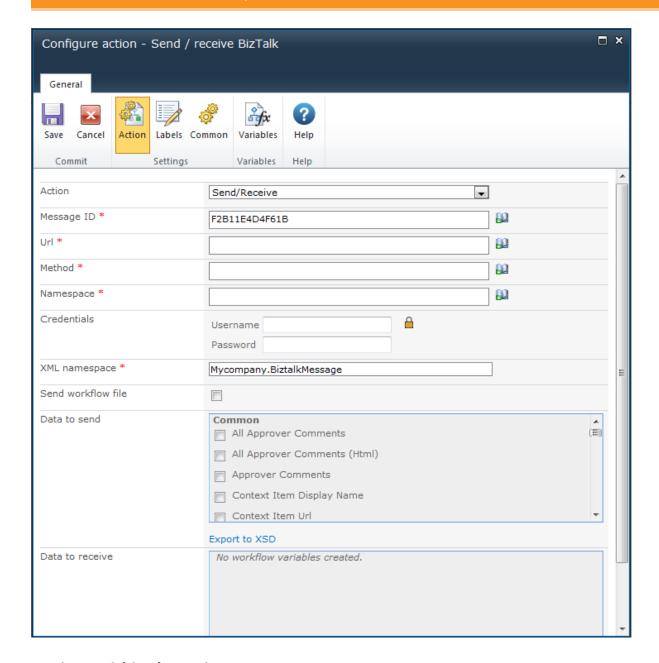
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.

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# Options within the action

### **Action**

Specifies whether the workflow is only sending a message to BizTalk, waiting for a message to arrive from BizTalk or both.

### Message ID





A unique identifier that is used by Nintex Workflow when the BizTalk message handler receives a message. Nintex Workflow uses this value to determine for which workflow a message is intended.

The following settings define the web service location where the BizTalk orchestration is published. These items are only required when the action is sending a message into BizTalk. These details are defined when running the BizTalk Web Services Publishing Wizard tool.

#### **URL**

The URL of the published BizTalk web service.

#### Method

The web method of the web service to invoke.

## Namespace

The namespace of the web service.

### **Credentials**

Username and password, if required, to access the web service.

The following settings define the data that is sent to BizTalk, and the data that is expected in messages from BizTalk.

## **XML Namespace**

The XML Namespace for the messages that are generated. This will be reflected in the schema.

### Send Workflow file (Document and Form Libraries only)

This option allows the current workflow item to be sent to BizTalk, instead of defining individual data from the workflow. If this option is used, the schema must be provided by the user.

### Data to send

Allows selection of the data that must make up the message to send to BizTalk. Each data item will be presented as an element in the resulting message.

## Data to receive

Allows selection of the data that is expected in a message from BizTalk. Only workflow variables can be selected. After the message has been received, the workflow variables will hold the values that they were mapped to in BizTalk.



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### **Export to XSD**

Nintex Workflow generates the schema file for both the 'data to send' and 'data to receive' messages. These schema files can be imported into BizTalk to define messages. Each definition contains a header section containing information used by Nintex Workflow for routing the message and a content section containing the data items specified.

# 1.78 Send document set to repository

### \* This action requires Microsoft SharePoint Server

This workflow action can be used to specify by what method and to which repository or records center a document set is sent.

To be able to define rules and send documents, the **Content Organizer** site feature has to be enabled in the SharePoint site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

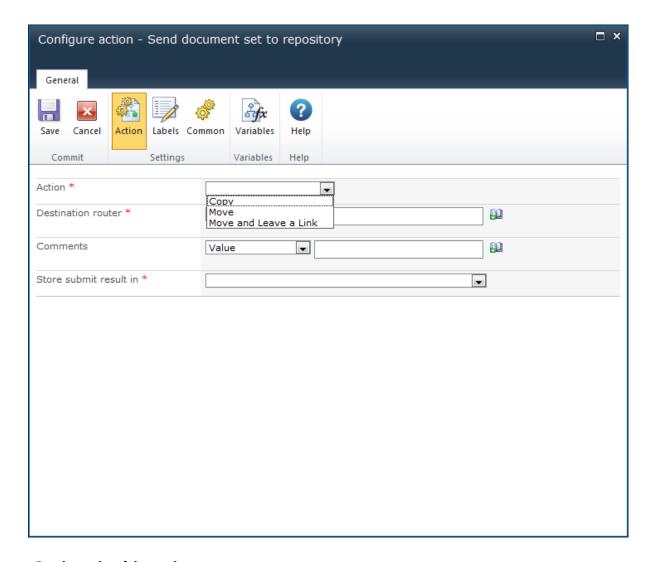
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





# **Options in this action**

### **Action**

Select how the document set will be sent. Select one of the following values:

- **Copy**: Select this option to create a copy of the document set and send the copy to the destination repository.
- **Move**: Select this option to copy the document set to the destination repository then delete the document set from its original location. Users will no longer be able to access the document set from its original location.





• Move and Leave a Link: Select this option to copy the document set to the destination repository, delete the document set from its original location and leave a link at the current location, indicating that the document set was moved. When a user clicks this link, a page will appear that displays the URL of the document set and the document set's metadata.

### **Destination Router**

Enter the URL to the Content Organizer for the destination site. The URL can be found in the **Submission Points** section of the 'Content Organizer: Settings' page of the destination repository, for example: 'http://mycompany.com/\_vti\_bin/OfficialFile.asmx'.

#### **Comments**

The information to be added to the audit log when the document set is sent to the repository.

#### Store submit results in

This refers to the 'submit result' provided by SharePoint on the status of the submission, for example: 'Success'. Select a <u>workflow variable</u> in which to store the results.

## 1.79 Send document to repository

This workflow action can be used to specify by what method and to which repository or records center a document is sent.

To be able to set rules and send documents, the 'Content Organizer' SharePoint site feature has to be enabled in the SharePoint site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

On the action's title click the down arrow to activate a drop-down



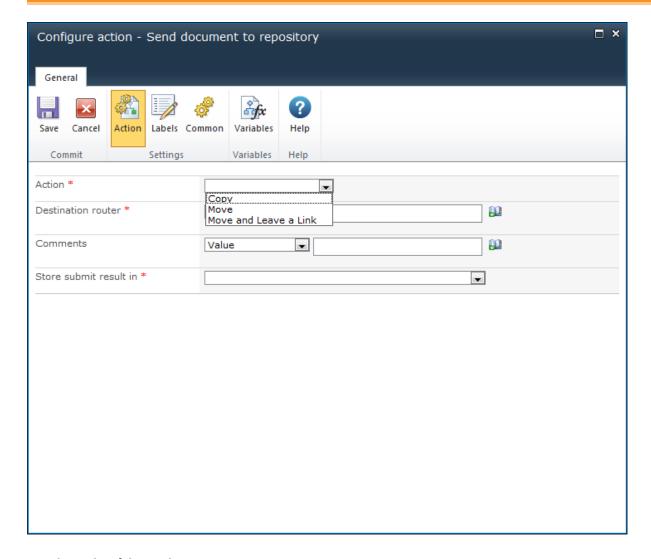


- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# **Options in this action**

## **Action**

Select how the document will be sent. Select one of the following values:

- **Copy**: Select this option to create a copy of the document and send the copy to the destination repository.
- **Move**: Select this option to copy the document to the destination repository and delete the document from its original location. Users will no longer be able to access the document from its original location.
- Move and Leave a Link: Select this option to copy the document to the destination repository,
  delete the document from its original location but leave a link at the original location, indicating that
  the document was moved. When a user clicks this link, a page will appear that displays the URL of
  the document and the document's metadata.



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### **Destination Router**

Enter the URL to the Content Organizer for the destination site. The URL can be found in the **Submission Points** section of the 'Content Organizer: Settings' page of the destination repository. For example: 'http://mycompany.com/\_vti\_bin/OfficialFile.asmx'.

#### Comments

The information to be added to the audit log when the document is sent to the repository.

#### Store submit result in

This refers to the 'submit result' provided by SharePoint on the status of the submission, for example 'Success'. Select a <u>workflow variable</u> in which to store the 'submit result'.

### 1.80 Send notification

This workflow action will send customizable workflow notifications to users via Email, SMS or Instant Message via Microsoft Office Communication Server or Live Communications Server.

For more information on Office Communication Server, please refer to the <u>Microsoft Office Communication</u> <u>Server website</u>.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





# **Options for this action**

#### To

Sets the primary users who will receive the customized notification.

To set the primary users click on 💷 to open the Select People and Groups configuration dialog.

### Send individual notifications

- When selected, each specified user will receive a separate notification that is only addressed to them
  in the To field.
- When it is not selected, only one notification will be sent, with all users in the **To** field. This option only applies to email notifications.

### CC

The CC field sets read only users who will receive the notification. CC recipients are not able to respond to the tasks.

To set the CC field click on 11 to open the Select People and Groups configuration dialog.

### **BCC**

The **BCC** field sets read only users who will receive the email. **BCC** recipitants are not able to respond to the tasks. Other users addressed in the email via the **To**, **CC** and **BCC** fields will not be able to see any addresses in the **BCC** field. To set the **BCC** field, enter the account name, or alternatively, select the address book icon for additional options.

### From

The **From** field sets the user or domain group that will appear as the sender of the message. This setting applies to emails only. If no **From** user or domain group is specified, the **From** address configured in <u>Global Settings</u> will be used. To set the from user click on 111 to open the Select People and Groups configuration dialog.

#### **Importance**

The priority of the notification. This is only applicable when using email notifications.

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## **Subject**





The **Subject** is the title of the notification being sent. Added manually or by clicking on , to use <u>Insert</u> <u>reference fields</u> from within the runtime instance of the workflow. The Subject field can be set within the list or library where the workflow is being used

If an email is sent it will appear as the header or title of the email.

If an Instant Message is being sent it will be pre-appended to the body of the notification.

#### **Attachments**

Allows file attachments to be added to the notification.

Please note: Files will not be received by a user when SMS or IM is selected as the delivery method.

#### **Format**

This sets the format of the email.

### Selecting:

- Rich Text enables italicize, bold, underline and indent information within the email using simple HTML styles provided by the SharePoint rich text tool bar.
- Plain Text is simply the text without any stylized formatting.

### **Notification body**

The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided enter the content for the notification as straight text, also available are <a href="Insert">Insert</a> reference fields from within the workflow.

### Include message header and footer

Specifies whether or not the configured message header and footer template should be used in this email notification. This option is only available when enabled by an administrator.

### **Delivery type**

**Delivery type** is the method of delivering the notification to the selected users. Available delivery options; Email, User preference or Instant Message (if enable on the server). For information on User preference, please refer to the <u>Configuring user preferences</u>.





### 1.81 Set a condition

This workflow action processes logic within the workflow that will run when a certain condition evaluates to true or false.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

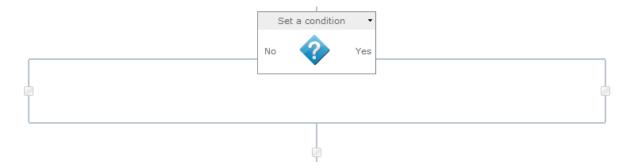
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



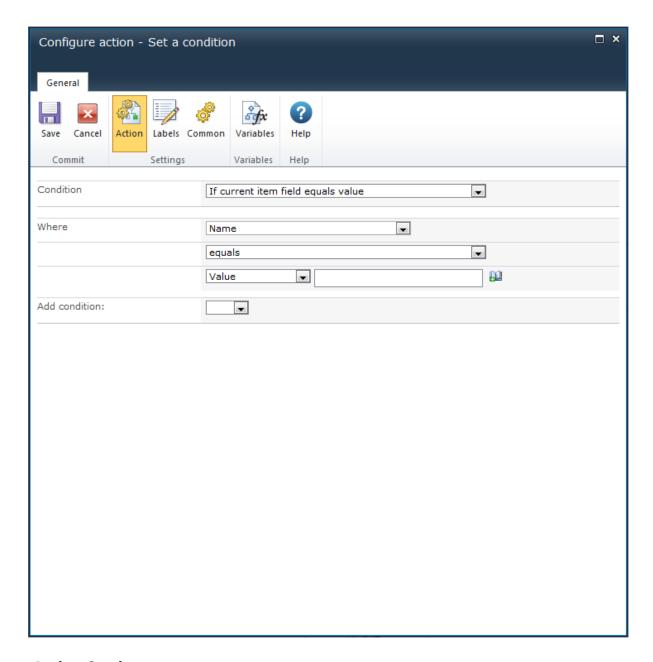


When the action is added to the design canvas there are 2 branches. To the right is the **Yes** branch which is the path followed if the condition evaluates to true, to the left is the **No** branch followed if the condition is false.









# **Action Settings**

## Condition

There are twelve types of conditions that can be used here. These are:





## • If current item field equals value

This condition type evaluates if an individual field of the current item matches or compares to a certain value/column.

Please note: When configuring the workflow action, the Where section is case sensitive.

### If any value equals value

This condition allows the use of two fields, two workflow variables or two lookups to compare at runtime.

Please note: When configuring the workflow action, the Where section is case sensitive.

### Title field contains keywords

This condition allows a comparison to be performed that determines if the item's title contains certain specific words.

## • Modified in a specific date span

This condition evaluates to true if the current item is modified between two specified dates.

### Modified by a specific person

This condition evaluates to true if the item has been modified by a specific person. The username is case sensitive.

Once the name has been entered click **Check name** button to validate user.

#### Person is a valid SharePoint user

This condition checks if the specified user is a member of the SharePoint site.

## • Created in a specific date span

This condition checks if the item was created between the specified dates.

If manually entering information, ensure that the date format matches that used in the SharePoint environment.

### Created by a specific person

This condition checks if an item was created by a specific user.

Once the name has been entered click the **Check name** button to validate user.





## • The file type is a specific type

This condition checks if the file type extension of the current item is of the specified type.

## The file size is in a specific range kilobytes

This condition checks if the file size of a document is between the specified sizes, in kilobytes.

The following two conditions are available when running the workflow action as the workflow owner (impersonation):

#### Check list item permissions

This condition checks if the permissions of a specified user matches or is higher than the specified permission level provided for an item in a list. It does not check that the users have specific permission levels. A user can be a single user, multiple users or a group. For the condition to evaluate as true, the user/s must have at least the permissions that the permission levels provide.

#### Check list item permission levels

This condition checks if permission levels of a specified user matches or is higher than the permission levels for an item within this list. A user can be a single user or multiple users but cannot be a group for this condition. For the condition to evaluate as true, the users must have the permission levels specified in the condition.

There are many operators that can be used within this condition, e.g. equals, not equals to, greater than, less than, is empty, contains etc.

Enter data manually into the text box or use lookups to dynamically build the values at run time.

### **Add Condition**

Multiple conditions can be constructed by using the Add condition option.

Specify **And** or **Or** between the condition statements.

When there is multiple conditions, they are evaluated bottom to top. For example, the last two conditions will be evaluated, then that result evaluated against the next condition. That pattern will continue until a final result is reached.

#### **Related Topics**





### Run If

### 1.82 Set a variable

This workflow action will set the value of a Workflow variable and works in conjunction with Using lookups.

Note: at least one workflow variable needs to be created for this action to be relevant.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

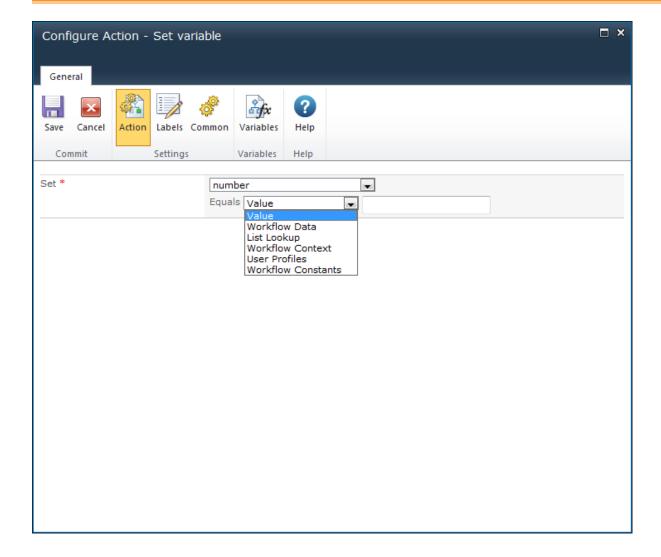
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options for this action**

## Set

Select the workflow variable to set from the drop-down menu. Either specify a value or use the <u>lookups</u> feature to set the value of the field selected.

Note: Depending on the type (text, integer, number, date, etc.) of the workflow variable selected the options available that can be set on the workflow variable will change to suite the type.

# 1.83 Set approval status





This workflow action is used by the workflow to update the built-in SharePoint approval status of the current item.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

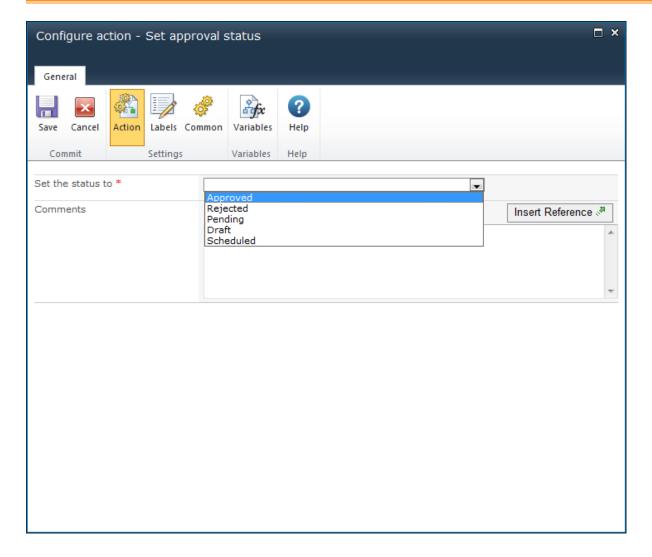
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# Options in this action

## Set the status to

This mandatory field determines the status attributed to the item. Select a value from the drop-down menu.

## Comments

The comments entered here will be associated with the update to the status of the item. Enter comments manually, or build up the string dynamically at run time using the <a href="Insert Reference">Insert Reference</a>.

## **List Settings**

In order for this workflow action to work properly, the library or list to which the workflow is associated to must have **Content Approval** activated. To activate Content Approval:





- In the library or list, select 'Library Settings' (or 'List Settings').
- In the 'General Settings' section, click on the 'Versioning settings'.
- In the Content Approval section, select Yes.
- When all settings have been configured, click the **OK** button.

### **Content Approval**

Specify whether new items or changes to existing items should remain in a draft state until they have been approved. Learn about requiring approval.

Require content approval for submitted items?

No

## **Troubleshooting**

## Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

Connect: <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

# 1.84 Set document set approval status

## \* This action requires Microsoft SharePoint Server

This workflow action is used by the workflow to update the built-in SharePoint approval status of the document set.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR



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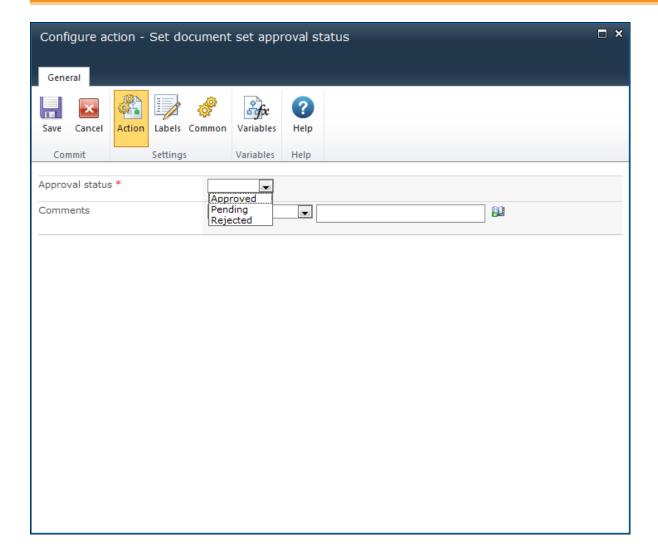


Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.







# **Options in this action**

### **Approval status**

This mandatory field determines the status attributed to the document set. Select a value from the drop-down menu.

### Comments

The comments entered here will be associated with the update to the status of the document set. To insert values to be evaluated at runtime, use the <u>lookups</u>feature.

# **List Settings**





In order for this workflow action to work properly, the library or list to which the workflow is associated must have **Content Approval** activated. To activate Content Approval:

- In the library, select 'Library Settings'.
- In the 'General Settings' section, click on the 'Versioning settings'.
- In the 'Content Approval' section, select Yes.
- When all settings have been configured, click the **OK** button.

#### Content Approval

Specify whether new items or changes to existing items should remain in a draft state until they have been approved. Learn about requiring approval.

## 1.85 Set field value

This workflow action updates one of the fields of the current item within the workflow.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

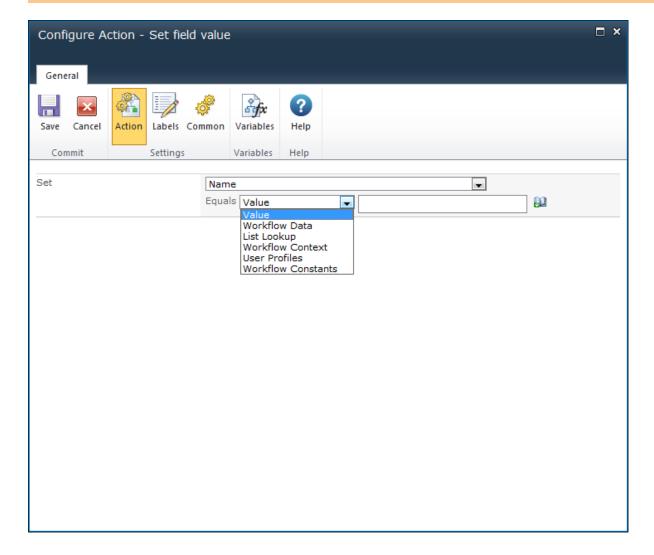
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options for this action**

## Set

Select the field that the workflow action will set from the drop-down menu. Either specify a value or use the <u>lookups</u> feature to set the value of the field selected.

# **Troubleshooting**

### **Action not executing**

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.





# 1.86 Set item permissions

This workflow action allows the permissions to be changed for an item on which the workflow is running.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

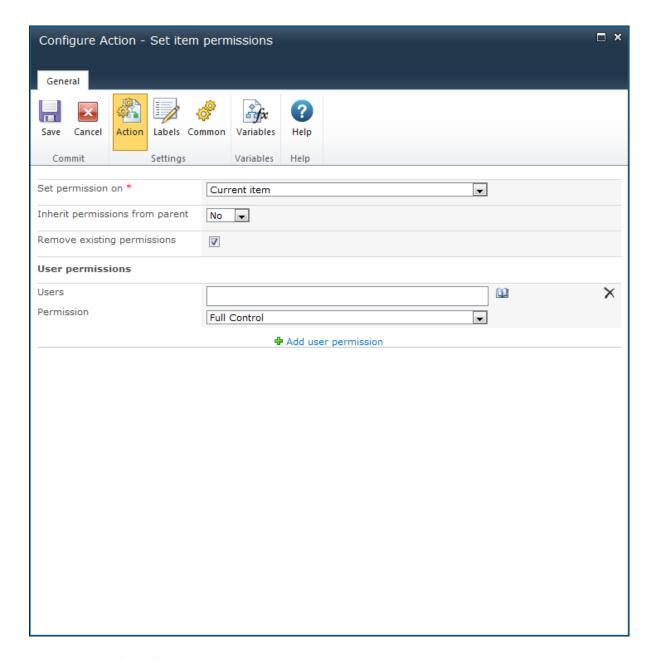
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



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# **Options within the action**

## Set permission on

Select either the **Current item** that the workflow is running on, or one of the available lists or libraries.

If selecting a library list or library location, the **Where** selector will appear.





## Inherit permissions from parent

This drop-down is used to break the link to the parent permission set (the permissions used in the library or list that contains the item in workflow). Once the option **No** is selected, specific permissions for specific users can be set.

### **Remove Existing Permissions**

This option specifies whether or not to clear the permissions that are currently set on the item before adding the new permissions defined in the action. When selected, permissions that are defined in the action will be the only resulting permissions on the item. When it is not selected, permissions that are defined in this action will be added to the current permissions. If the item currently inherits its permissions from the parent list when the action runs, unselecting this option will cause the inherited permissions to be copied to the item.

## User(s)

Select a user or group to assign access permissions for the item.

### **Permission**

The level of permission that can be assigned to a user or group for the item. Unless **Remove existing permissions** is selected, the permission will be added to the user's existing rights. Choose the **Remove** option in the drop down list to remove all permissions from a user or group. Permissions are processed in the order that they are configured, therefore permissions can be cleared from a user in the first panel, then a new permission level can be set for the same user in the second panel.

### Add user permission

Click this link to add more users or groups to apply permissions to.

Note: if the Initiating user of the workflow does not have read permissions, the workflow may error. This is because the workflow is running as the user and requires the ability to read the list item.

## **Troubleshooting**

### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

Connect: http://connect.nintex.com/forums/thread/7827.aspx.



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## 1.87 Set workflow status

This workflow action is used by the workflow to update the built-in SharePoint workflow status (e.g. In Progress, Cancelled, Completed, Errored) of the current item.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

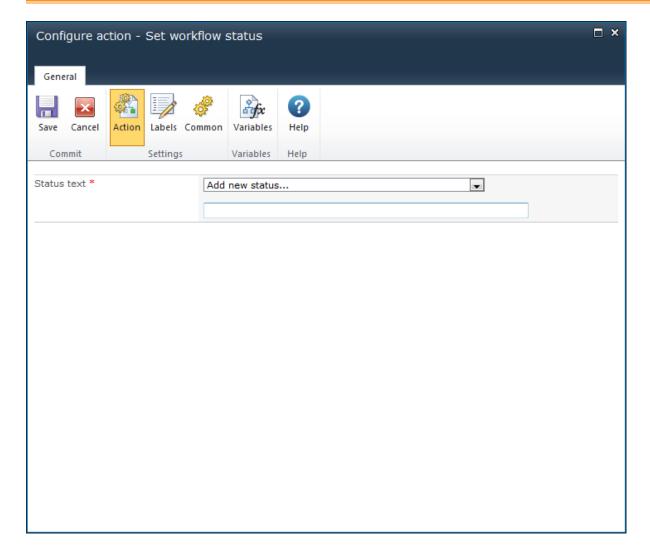
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







## **Options in this action**

### Status text

Select the status to set the current workflow to. Either select an existing Status that was created or specify a new status by selecting **Add new status...** from the drop down and the name of the status in the text field provided.

Note: Once a workflow status has been added, it can be selected from the drop down when the **Set workflow status** workflow action is used again elsewhere within the current workflow. A custom status can be used in the current workflow only.

### 1.88 Start workflow





This workflow action will initiate a site workflow or a different workflow in the current list or library. When designing a site workflow, you can only nominate another site workflow in the same site to use.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

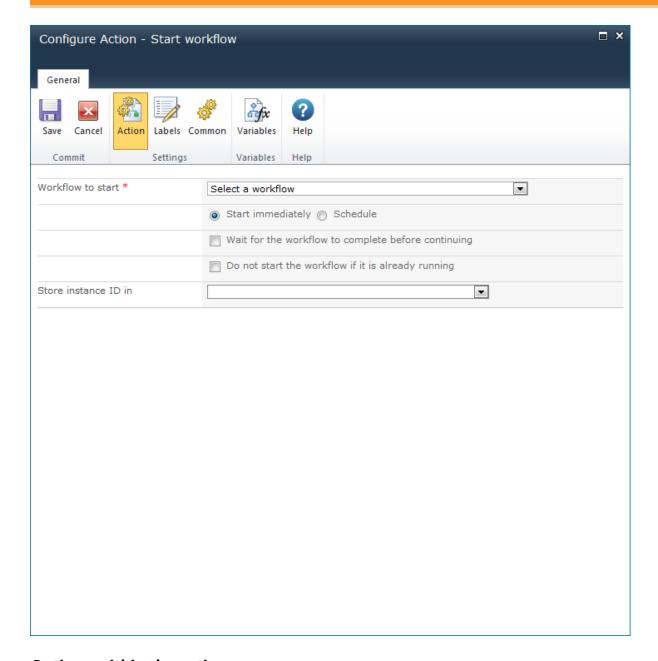
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







# Options within the action

#### **Workflow to Start**

From the drop-down that is presented, choose the title of a workflow to start. In lists or libraries, only published site workflows in the same site or published workflows in the list or library in which the current workflow is operating will be available. When designing a site workflow, only other published site workflows will be available.



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If the workflow was created with Nintex Workflow and has start data specified, a form will be displayed to provide values. For a workflow that is provided out of the box, or installed as a Feature, a panel will be provided to edit the association xml.

Set the Start mode with one of the following:

- Start immediately: Specifies that the target workflow will start when this executes.
  - Wait for the workflow to complete before continuing: When this option is checked, the current workflow will only run when the specified workflow has completed.
  - Do not start this workflow if it is already running: When this option is checked, the current workflow will not run the specified workflow if it is in progress.
  - Store Instance ID in: Select a workflow variable in which to store the workflow instance ID.
     The value in the workflow variable can then be used elsewhere in the workflow.
- **Schedule**: Creates a new workflow schedule for the target workflow. The target workflow will then execute based on the schedule. For more information on workflow schedules see the <u>Scheduling a workflow</u> help page.

#### Schedule Editor mode

When using the **Schedule** start mode, select one of the following schedule editor modes:

- Schedule Builder: Set the schedule settings for the workflow.
- Schedule XML: This is the format in which the schedule is stored and can be edited directly.

Note: When a date is typed in, it must be in the ISO8601 format.

Sharing data between workflows

The <u>Store data</u> and <u>Retrieve data</u> workflow actions can be used to transfer values between workflow instances. A workflow that is started by the <u>Start workflow</u> action can store a value with the <u>Store</u> data action, and the parent workflow can later retrieve that value with the <u>Retrieve data</u> action and the value stored from the <u>Store Instance ID</u> in option.

### **Troubleshooting**

#### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

#### 1.89 State Machine





This workflow action provides a construct to define a number of states that the workflow can be in. Each state contains actions that will execute when the workflow is in that state. The workflow moves between states until it is instructed to end the state machine.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

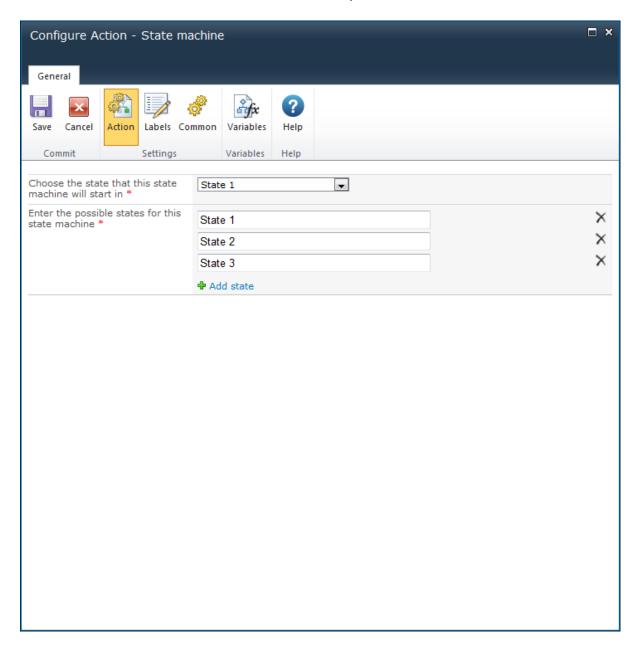
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.





Note: The **State machine** workflow action cannot be copied.



## **Action Settings**

Select a state from the drop-down to determine which will be used first when the workflow is run.

### **States**

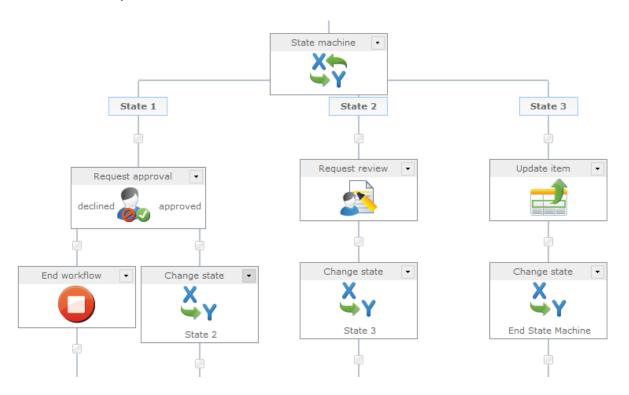
The **State Machine** supports the configuration of a number of states. States can be added, deleted and renamed. Deleting a state will delete all actions currently added to it.





The State Machine uses Change State actions to set which state to run next. For example, the actions in a state will repeat until a Change State action is used to set a different state. Workflow execution does not move to the next state instantly when the Change State action is run, it will only move to the next state once all actions in the current state have completed executing.

The following example image shows the 'Change State' actions in a **State Machine**. A 'Change State' action can set the next state to be any of the others available in the state machine. The states can be made to run in any order and conditions in one state can cause another state to be re-run. The State Machine part of the workflow will continue until the state has been set to 'End State Machine' in one of the 'Change State' actions. If there are other workflow actions below the State Machine, they will execute once the State Machine has completed.



The "Change State" action does not instantly change execution to the new state, it only sets which state should be run next. Selecting 'End State Machine' will exit the State Machine construct when the current state has finished running. Essentially, it always will occur at the end of all the actions in the step.

Nintex Workflow state machine construct is very different from a Visual Studio created State Machine. Nintex workflows' are Windows Workflow Foundation sequential workflows. Nintex made the 'state machine' by wrapping up loops, parallel branches, if statements and variables to control it. It's not a real state machine, but rather a construct to provide the ability to jump around between steps and mimic some of the scenarios that a state machine might be used for.

.NET 3.0 workflows come in 2 varieties. Sequential (like a flow chart) and state machines. With SharePoint declarative workflows (like the ones Nintex Workflow designs), these can only be sequential. To achieve the





effect of a state machine in a sequential workflow, under the covers there is some clever logic made up of a while loop, parallel actions and various conditions.

With each iteration of the loop, a common workflow variable, used to store the current state, is evaluated to see if it should exit. Otherwise, it begins down each branch of the parallel action. At the top of each branch (state) is a condition to determine if the workflow should process actions in this branch. (if state = current state) The change state action sets the value of the current state workflow variable. Upon the next iteration of the loop, this determines which branch (state) to execute.

Each 'state' may have complex logic within it to determine the next. Using the 'wait for item update' action, or 'request approval', will ensure the state machine wait on user input before deciding which state to process next.

For 'states' that transitioned based on mutually exclusive inputs, it may be better off having several workflows that run when the item is modified. At the start of each workflow, use the filter action to check if the input conditions are met. If it is not, the workflow will end. In this scenario, each workflow essentially becomes a state.

#### 1.90 Store data

This workflow action can be used to store data which can then be retrieved using the <u>Retrieve data</u> workflow action. Using both the **Store data** and <u>Retrieve data</u> workflow actions, it provides the ability to pass workflow variables (values) between workflow instances (running workflows).

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

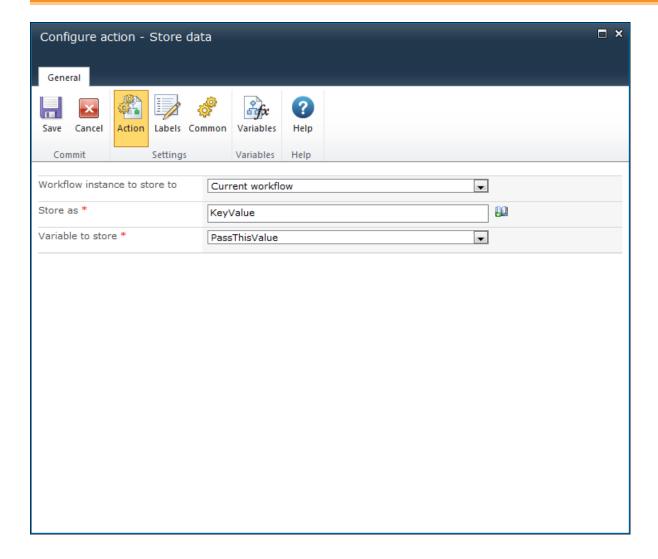
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







## Options within this action

### Workflow instance to store to

The instance ID of the workflow to store data to. Select either:

- Current Workflow: This will store the information to the current workflow.
- A workflow variable: Use this to specify a specific workflow instance ID that is set in a <u>workflow</u> variable.

Note: By selecting a workflow instance ID, the **Store data** workflow action can store data to the workflow instance. Using the <u>Retrieve data</u>workflow action, the 'Workflow instance to retrieve from' can be set to 'Current workflow' and the 'Item to retrieve value' written to a workflow variable.

### Store as





This is the user defined value that the data will be stored as.

E.g. If the 'Store as' value specified is 'KeyValue', the **Item to retrieve** value in the <u>Retrieve</u> data workflow action must be 'KeyValue'.

#### Variable to store

Select the workflow variable containing the data to be stored.

#### 1.91 Submit Record

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This workflow action applies to Microsoft SharePoint Server only

This workflow action will submit the item that the workflow is running on to the SharePoint Records Center that has been configured in the environment.

Note: This action is only available in workflows being created on document libraries.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

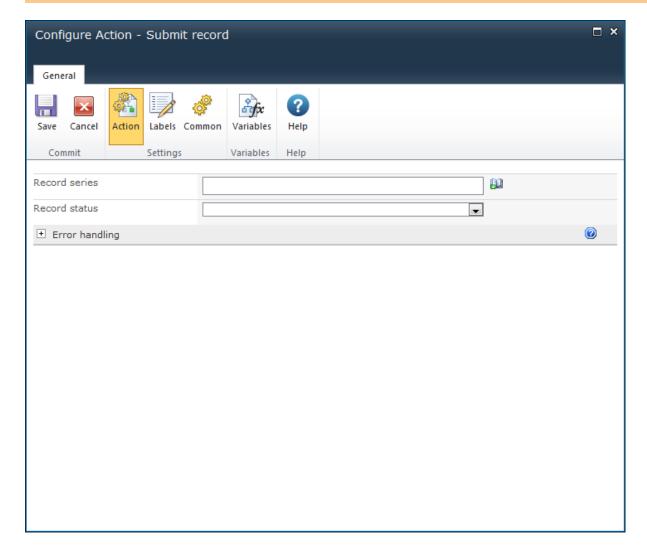
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







# **Options within this action**

### **Record series**

The 'Record series' can be used to overwrite the default Record Center behaviour by specifying which routing record this item should follow. If **Record series** is left empty, the default routing record for the item content type will be used.

### **Record status**

When a record is submitted, a status message is returned to describe the result of the submission process. The Record status can be used to select a workflow variable to store the outcome status message.

### 1.92 Switch





This workflow action directs the flow of actions based on the value of a single variable. A branch for each possible defined value is used to determine which branch of workflow actions will run.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - o Click on the **Category** listings to reveal the actions; *OR*
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

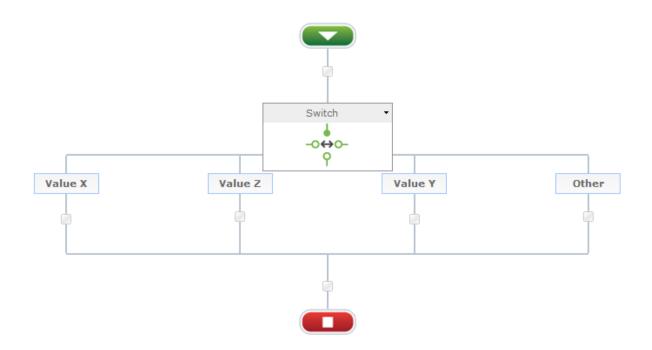
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



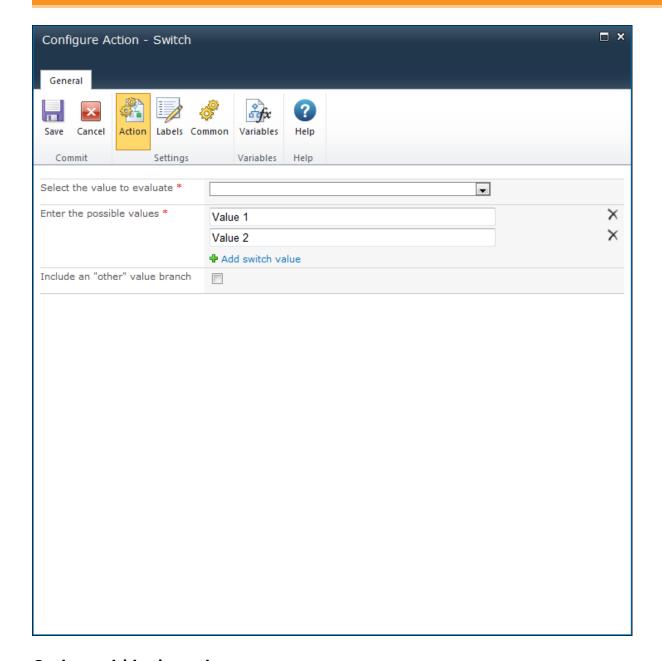
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Each time this action runs, either a single child branch or no child branch will execute - the workflow will continue to follow the main path of the workflow if none of the variables return matching values, bypassing the Switch construct completely.





# Options within the action

#### Select the value to evaluate

This is the value that the action will evaluate to determine which child branch to run. Either an item property or a <u>workflow variable</u> that is a number or text value can be chosen.

#### Enter the possible values





This section lists the allowed values for the variable. A child branch will be rendered in the workflow designer for each specified value. Each specified value must be compatible with the data type of the selected variable. Only one value is allowed for any single branch.

Click **Add switch value** to add a new value. Click the button to remove a value. Removing a value will remove any workflow actions configured to run when the variable is equal to the value specified.

#### Include an "other" value branch

Choose this option to add an additional child branch that will run if the variable value does not match any of the listed possible values. Using this option provides an alternative set of actions to the main workflow instead of the Switch construct simply being bypassed.

#### 1.93 Task reminder

This workflow action will send notifications to the approvers or reviewers of an outstanding task. This allows for reminder scenarios as seen below.

In this example, an approval task is assigned to a set of users and after a configured delay, if any approvers are still required to respond, they will receive a notification. The approval task will repeat waiting and sending messages 3 times. If the original approval task allows LazyApproval, the reminder notification will include the LazyApproval token in the subject to allow the workflow replies send to it.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - o Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

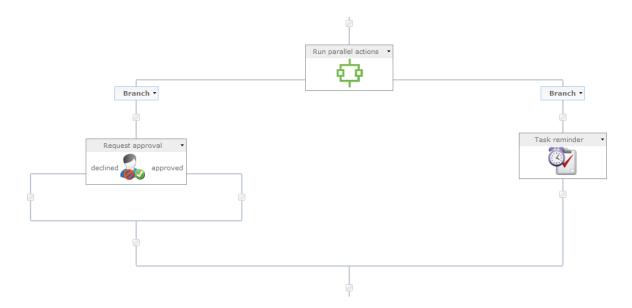
- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.

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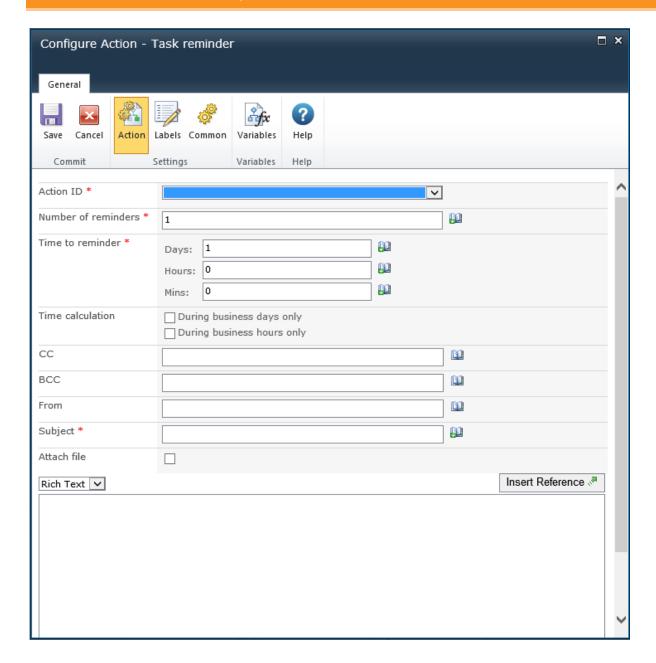












## Options within the action

#### **Action ID**

Specify this workflow variable to nominate which request approval/review/data action to send reminders regarding.

When configuring a Request Approval, Request Review or Request Data action, nominate a workflow variable of type **Action ID** to store the assigned workflow action ID.





#### **Number of reminders**

The action will repeat the delay and notifications this number of times.

#### Time to reminder

The delay the action will wait inbetween sending each reminder.

The action will start with a delay, so no external delay action is required. The total time is calculated by summing all fields, regardless of the **Time Calculation** option selected. For example, 4 days and 4 minutes will be calculated as 96 (24x4) hours and 4 minutes.

#### Time calculation

Specifies whether or not hours outside the work week should be included when counting down to send a reminder.

#### **During business days only**

The **During business days only** option will specify that weekends or holidays are not included in the count down, but after hours on a business day are.

#### **Example:**

- A reminder starts counting down Friday morning and is configured to wait 1 day (the work week is defined as Monday to Friday).
- A reminder will be sent Monday morning, weekends are not included in the count down.

#### **During business hours only**

The **During business hours only** option specifies that only business hours are used in the count down.

### **Example:**

- A reminder starts counting down Wednesday at 4pm and is configured to wait 4 hours (the work day
  is defined as Monday to Friday, 8am to 5pm).
- A reminder will be sent at 11am on Thursday, after business hours are not included in the count down.

#### **Neither option**

If neither option is selected, all hours will be included in the count down.

#### **Examples:**

A reminder starts counting down Friday morning and is configured to wait 1 day.





- o A reminder will be sent Saturday morning, weekends are included in the count down.
- A reminder starts counting down Wednesday at 4pm and is configured to wait 4 hours.
  - o A reminder will be sent at 8pm on Wednesday, after business hours **are** included in the count down.

Public holidays and any other special occasions are set using the "Site Settings > Nintex Workflow > Manage Holidays" page.

#### CC

The **CC** field sets read only users who will receive the notification. **CC** recipients are not able to respond to the tasks.

To set the **CC** field click on 11 to open the Select People and Groups configuration dialog.

#### **BCC**

The **BCC** field sets read only users who will receive the email. **BCC** recipitants are not able to respond to the tasks. Other users addressed in the email via the **To**, **CC** and **BCC** fields will not be able to see any addresses in the **BCC** field. To set the **BCC** field, enter the account name, or alternatively, select the address book icon for additional options.

#### From

The **From** field sets the user or domain group that will appear as the sender of the message.

This setting applies to emails only. If no **From** user or domain group is specified, the **From** address configured in <u>Global Settings</u> will be used.

### **Subject**

The subject field of the notification.

#### Attach file

Allows file attachments to be added to the notification.

Files will not be received by a user when SMS or IM is selected as the delivery method.

#### **Format**

This sets the format of the email.

Selecting:





- **Rich Text** enables italicize, bold, underline and indent information within the email using simple HTML styles provided by the SharePoint rich text tool bar.
- Plain Text is simply the text without any stylized formatting.

#### **Notification body**

The body of the notification will adapt depending on whether the **Rich Text** or **Plain Text** format is selected. Within the space provided enter the content for the notification as straight text and <u>Inserting reference</u> fields from with the workflow.

#### **Delivery type**

**Delivery type** is the method of delivering the notification to the recipients.

Available delivery options; Email, User preference or Instant Message (if enable on the server). For information on User preference, please refer to the <a href="Configuring user preferences">Configuring user preferences</a>.

Please note: Nintex does not provide support for troubleshooting email, SMS or LCS systems.

### 1.94 Terminate workflow

This workflow action can be used to terminate any running or errored workflow on the current item.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

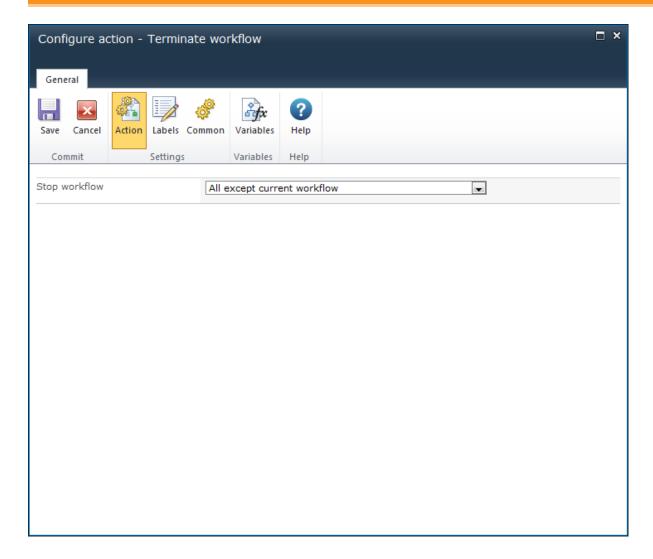
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







## **Options within this action**

### Stop workflow

Select a workflow from the drop-down box. Either select a specific workflow that has been associated with the parent list or **All except current workflow**which will terminate all other workflows except the current.

Note: Only workflow instances on the current item will be terminated.

## **Troubleshooting**

### **Action not executing**

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the





behavior of actions that use the job queue, please refer to this forum thread on **Nintex Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

#### 1.95 Undeclare as record

\* This action requires Microsoft SharePoint Server

This workflow action can be used to undeclare the current item as a record within the workflow.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





Note: There are no Options to configure within this workflow action.

## 1.96 Update AD User

### \* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will update the properties of an Active Directory user account.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

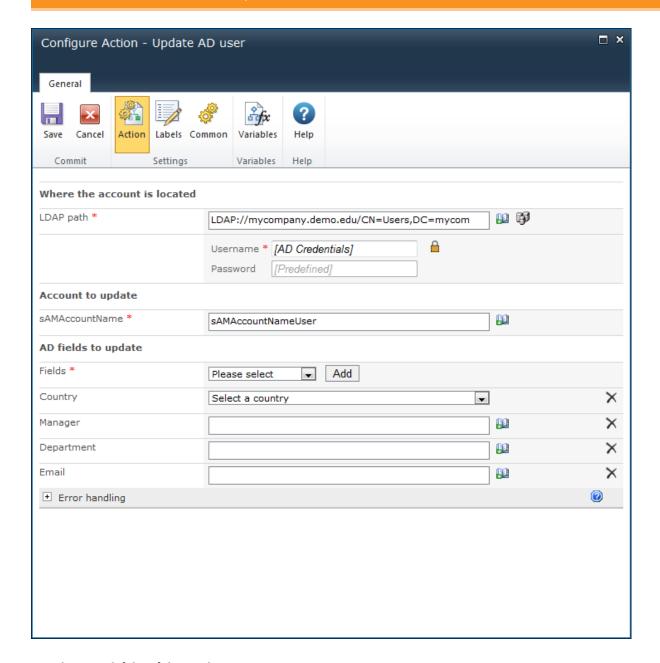
 Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# Options within this action

#### Where the account is located

### **LDAP Path**

To configure the **LDAP Path**, refer to the **LDAP Picker** for more information.

### Account to update







#### sAMAccountName

The username (sAMAccountName) of the Active Directory entry.

### **AD Fields to update**

#### **Fields**

Select fields from the drop down list. At least 1 field must be updated.

If a field to update is not available, select **Other**, and type the field name, then click the **Add** button.

Note: The **Add** button will appear when **Other** is selected.

The property name entered must be a valid Active Directory schema property. Some properties cannot be set within this workflow action. E.g. 'memberOf' must be updated via the 'Add User to AD Group' and 'Remove User from AD Group' workflow actions.

AD Fields to take note of:

- **Country**: If selected, this option correctly sets the 3 Active Directory properties; c, co and countryCode.
- **Password**: If selected, this option allows the resetting of a password. Use this drop down option to set password information correctly. The Password option provides the following additional settings:
  - o **Generate password**: If checked, a random password will be automatically generated by the action. If unchecked, specify the password for the account in the **New password** textbox.
  - Store generated password: The automatically generated password can be stored in a text type workflow variable. This can then be used in other actions.
- Manager: If selected, this value must be the sAMAccountName of an existing Active Directory account.
- Directory Location: Use this property to move the AD object from one location to another. Use the LDAP Picker to select a valid location, or enter an LDAP path, in the format LDAP://OU=someOU,DC=company,DC=country. E.g. LDAP://OU=archived users,DC=nintex,DC=com

Note: The credentials entered in the Username and Password fields at the top of the page will be used to connect to the new AD location.

• **Rename**: Use this property to rename an AD object. Use the format CN=[new name] or [new name]. E.g. CN=John Smith, or John Smith.

Note: Setting this property will only affect the cn, canonicalName, distinguishedName and name properties in AD. Setting the Display Name, Given Name and Last Name properties to complete a rename operation may also be required.





OCS properties such as SIP Address and email will need to be set separately. The 'Rename' field is available from the 'Other fields' drop down menu.

- Account Activation: Use this property for the following operations:
  - To unlock a locked-out account.
  - To re-enable a disabled account.
  - To disable an account.
  - Any combination of the above.

Note: An account can't be locked out. By unchecking **Enable**, the account is disabled. Leaving it checked ensures it will be left in, or change to an enabled state. Checking **Unlock** will unlock the account.

- Account Options: Use this property to set the following account options:
  - User must change password at next logon.
  - User cannot change password.
  - o Password never expires.
  - User cannot change password AND Password never expires.

Note: Leaving all 3 checkboxes unchecked will remove all options. The only valid multiple selection is **User cannot change password** AND**Password never expires**.

• Other: Allows a property that is not available in the list to be specified.

## 1.97 Update CRM record

\* This topic applies to Nintex Workflow Enterprise Edition only

This workflow action will update a record in Microsoft Dynamics CRM v4.0 and Microsoft Dynamics CRM 2011 or later. This action does not support connections with Microsoft Dynamics CRM Online. A record can be updated for any entity, including custom entities.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

#### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.





To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.





### **Options for this action**

### **Dynamics CRM Version**

The endpoint version of the Microsoft Dynamics CRM server to connect to.

#### **Server URL**

The URL of the CRM server to connect to.

### **Organization name**

The Organization located within CRM.

#### Credentials

The credentials used to connect to the CRM server and organization.

#### **Entity**

The type of CRM record to be updated.

#### Record to update

Specify the GUID of the CRM record to be updated.

Note: It is recommended that the Query CRM action be used to obtain the GUID of the record and stored in a workflow variable which can then be specified in the Record to update field.

#### **Attributes**

Selecting an Entity will load any Required and Business Required attributes. Select the attributes of the record to be updated and specify the updated value in the fields provided.

### 1.98 Update document

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

This workflow action can be used to update values in multiple 'content controls' within a Word document.

PLEASE NOTE: The Word document must be in the docx format (either Word 2007 or Word 2010). Files in the format ".doc" cannot save content controls - it converts them to static content.

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To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

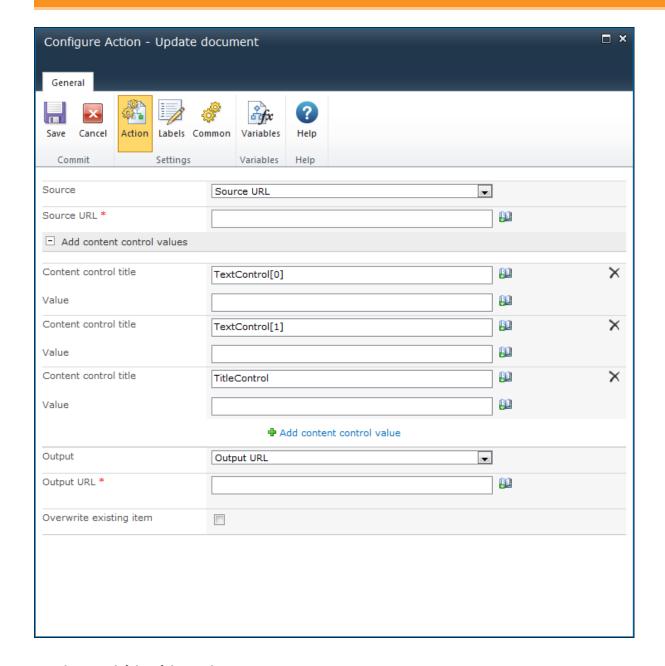
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.

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# Options within this action

#### **Source**

The document to be updated. Select either:

- The Current item; OR
- **Source URL**. In the **Source URL** field, the full URL including the filename and type will need to be provided. E.g. 'http://mycompany.com/sales/Shared%20Documents/WordDocument.docx'







#### Add content control values

The 'content controls' to update within the document. Expand the section and select **Add content control** value to specify a 'content control'.

Note: Be aware of the following when specifying a **content control title** to update:

- If there are 'content controls' with the same title within the document, it will update all the 'content controls' with the same title with the value specified.
- To update a specific 'content control' that has the same title as other 'content controls' within the document, specify the sequence of the 'content control' using an array.
  - E.g. If there are multiple content controls called 'TextControl' within the document and the 2nd 'TextControl' needs to be updated, set the Content Control Title field to 'TextControl[1]'. Arrays always start from 0.

#### Output

The destination where the document with its updated 'content controls' is to be placed. Select either:

- The Current item; OR
- Output URL.
  - o In the **Output URL** field, the full URL including the filename and type will need to be provided. E.g. 'http://mycompany.com/sales/Shared%20Documents/WordDocument.docx'.
  - In the Overwrite existing item checkbox, select to overwrite if a file already exists in the specified Output URL field.

## 1.99 Update item

This workflow action allows multiple fields in an item to be changed.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

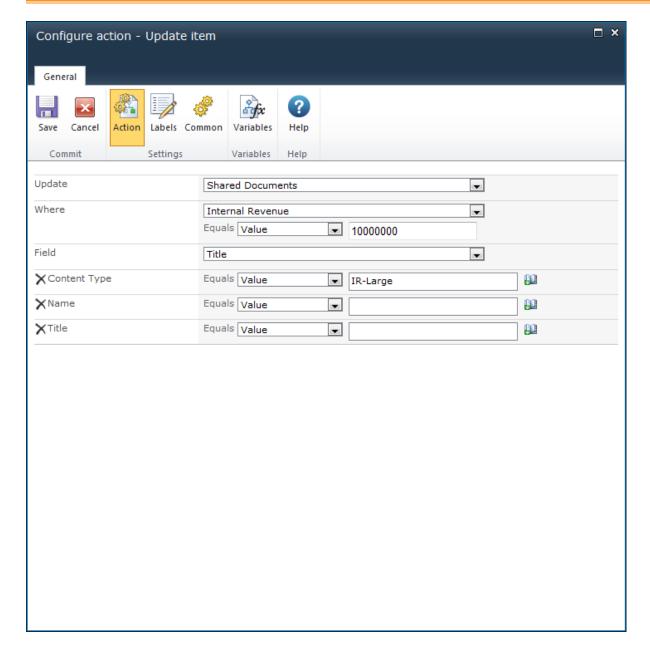




- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.







# Options within the action

### **Update**

Select either the **Current item** that the workflow is running on, or one of the available libraries.

If selecting a library location, the **Where** selector will appear.





#### Where

If not selecting the **Current item**, use this section to specify the filter criteria to identify which document should have a check out cancelled. Manually enter the value, or select a workflow variable to evaluate at run time. For more information on lookups, see Using Lookups.

Note: if the filter criteria returns more than one item, only the first item in the collection will be applied.

#### **Field**

Select the fields that the action will update. More than one field can be selected. When a field is selected, an input field is added to the dialog to allow a value to be specified. To remove a field click on  $\times$ .

### **Troubleshooting**

#### Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** http://connect.nintex.com/forums/thread/7827.aspx.

## 1.100 Update multiple items

This workflow action can be used to update the fields of multiple items within a library or list in a specified site.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

### Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

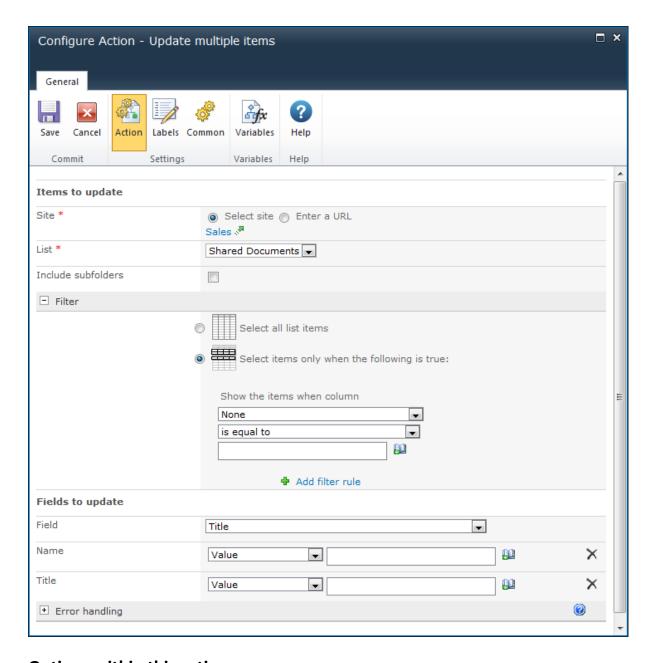




- On the action's title click the down arrow to activate a drop-down
- Select **Configure**; *OR*
- Double-click the action's icon.







## **Options within this action**

#### Site

The target site where items that are to be updated reside.

- **Select site:** Enables a site picker (Select a team site) to navigate through the portal structure and select the target location.
- Enter a URL: Allows manual entry of the URL or selection using inserting reference fields.



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### List

Drop down list containing available **Lists** at the selected site.

### **Include subfolders**

Specify whether to update items within subfolders by checking this option.

### **Filter**

The criteria that items in the list must match in order to be updated. Use the Filter to specify the update rules:

- Select all list items: Updates all items in the list.
- Select items only when the following is true:
- **Show the items when column**: Selects an item based on the values set in the column. Either specify a value or use the lookups feature.
- Add filter rule: Specify another rule. Use the And / Or options to specify if the item to be updated needs to meet conditions of a single rule or all rules.

## Fields to Update

Select the fields that the action will update. More than one field can be selected. When a field is selected, an input field is added to the dialog to allow a value to be specified. To remove a field click on  $\times$ 

## 1.101 Update User Profile

- \* This topic applies to Nintex Workflow Enterprise Edition only
- \* This action requires Microsoft SharePoint Server

This workflow action will update the SharePoint user profile information of a user.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.





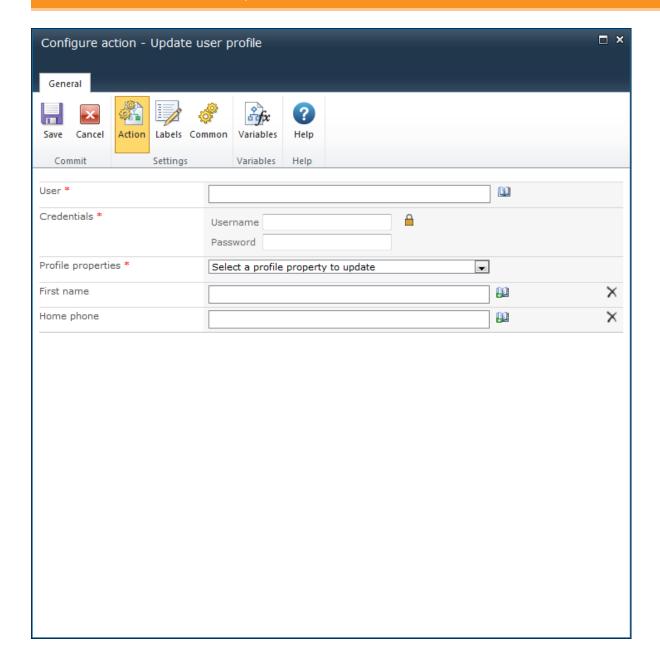
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.







# **Options within this action**

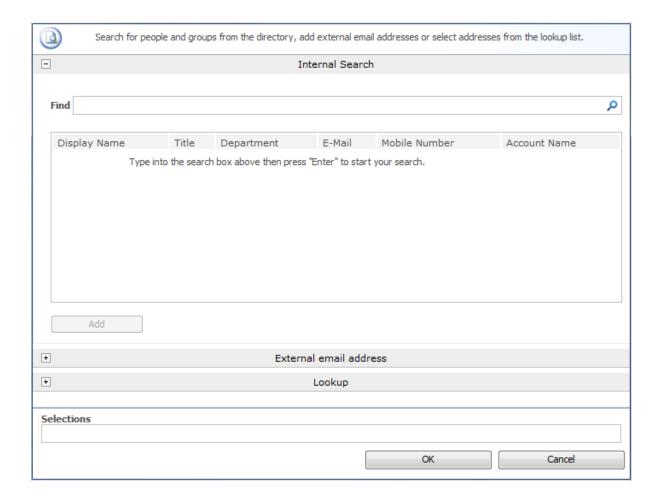
## User

The login name of the user whose profile should be updated. Multiple users can be specified.

To search for users, click on the address book icon to the right of the input box. The **Select People and Groups** dialog will appear:







The dialog allows the workflow designer to search for and/or add users to the **User** list by one or more of the following methods:

- Internal Search: Entering a partial display name, email or user account name and clicking on the magnifying glass will provide a list of matching users and groups from SharePoint as well as Active Directory.
- External email address: Enter an external email address manually. Where possible Nintex Workflow will resolve this to an actual user account.
- **Lookup:** Provides the option of adding a dynamic reference as an approver. e.g. Workflow variable, list field.

Click the title bar to expand or collapse each option.

## **Credentials**





An account with permissions to modify user profiles. Click on the padlock icon to get a list of predefined workflow constants which are of credential type.

## **Profile properties**

Select the profile properties that the action will update. More than one property can be selected. When a property is selected, an input field is added to the dialog to allow a value to be specified. To remove a field click on X.

# 1.102 Update XML

The **Update XML** action is used to alter XML data. It can be used to alter an XML file that the workflow is running on, including InfoPath forms.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the **Category** listings to reveal the actions; *OR*
  - **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

Left-clicking the pearl, mouse-over Insert Action and then the Categories to reveal the actions, click the required action from the list.

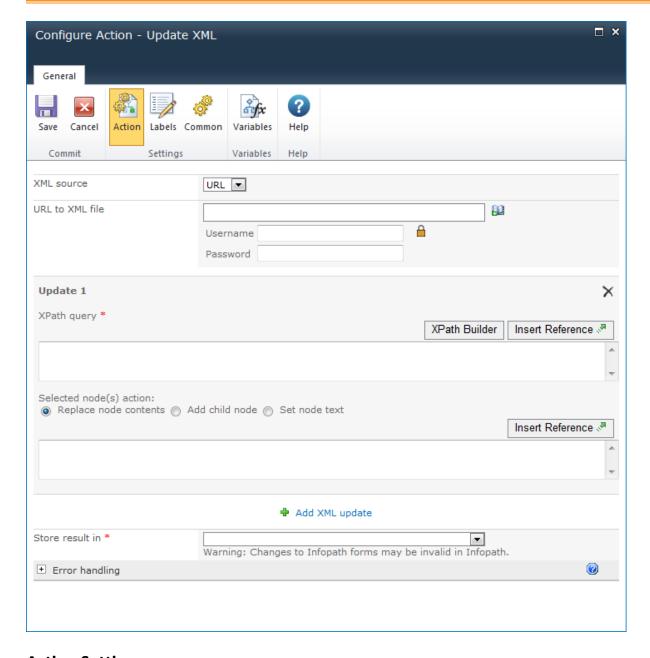
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the Getting started with the Nintex Workflow designer.







# **Action Settings**

## **XML** source

Specify the location of the XML to alter. A copy of this XML data is processed by the workflow action. Select one of the following options:

• **Current item**: The item that the workflow is running on will be used as the source. This option is available for workflows designed on libraries only.





- **URL**: Data located at a nominated URL will be used as the source. A username and password can be provided for the request. If no username or password is provided, the request will be anonymous.
- XML: Specify text or inserted references as the XML source.

## **Updates**

A number of update operations can be performed by a single Update XML action.

### XPath query

The XPath query to the XML nodes that will be altered. The XPath query can resolve to a single node, or a node list. If the result is a node list, the selected change will be applied to each node. Click on the XPath Builder button to use the XML browser to navigate the XML structure and select an element from the XML data.

Note: If the XML source specified for the action is available and all tokens and references are replaced with actual run time values, then the XPath Builder will use the XML source to display the XML structure within the XML browser. Otherwise, sample XML data will need to be provided in order to select the node using the XML browser.

## Selected node(s) action

The operation to perform on the selected node. Select one of the following options:

- Replace node contents: Replace all content within the XML node with the supplied value.
- Add child node: Adds a new node from the supplied XML fragment.
- **Set node text**: Sets the value of the XML node to the supplied text.

**Add XML update:** Select to define another update operation.

## Store result in

Specifies where the resulting XML should be stored. Select <u>Workflow variables</u> type or choose from the following options:

- **Current item**: The contents of the item on which the workflow is running will be overwritten with the new XML. Use this to update InfoPath form items. This option is available for libraries only.
- URL: The XML will be stored at a location specified by a URL. The URL does not have to point to a SharePoint location.

# **Troubleshooting**

## Action not executing





The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

# 1.103 Wait for an item update

This workflow action delays the workflow until a property (list or library column) of the current item meets a specified condition.

To use the workflow action:

- Locate the action in **Workflow Actions Toolbox** (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

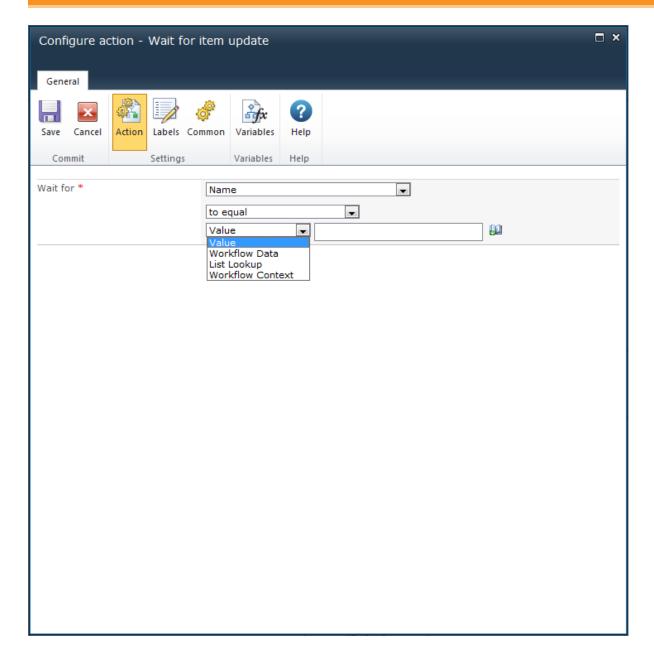
- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.









# **Options for this action**

## Wait for

The "Wait for" field allows a column in the list or library where the current item is located to be selected. This column's value will be the one that the following condition needs to evaluate as true against to proceed in the workflow.

## **Condition**





The condition contains the comparison that must be true for the workflow to move past this action. A comparison operator and a value must be specified. Refer to <u>Using lookups</u> for more information.

# **Troubleshooting**

## Action not executing

The work load for this action is added to a job queue, meaning it will not execute immediately. The workflow will execute jobs in the queue as a batch when it reaches a "commit" point. For detailed information on the behavior of actions that use the job queue, please refer to this forum thread on **Nintex** 

**Connect:** <a href="http://connect.nintex.com/forums/thread/7827.aspx">http://connect.nintex.com/forums/thread/7827.aspx</a>.

# 1.104 Wait for check out status change

This workflow action can be used to pause the current workflow on a document and wait for the check out status to change before proceeding.

To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - Search for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

# Alternatively

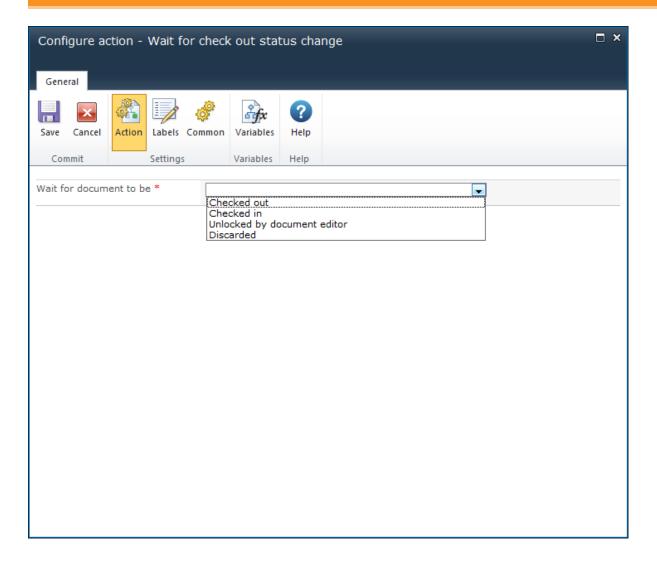
• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.





# **Options in this action**

## Wait for document to be

Select the 'Check out' state that should be monitored for change:

- Checked out: When the document is checked out.
- **Checked in**: When the document is checked in.
- Unlocked by document editor: When the document is no longer being edited in an editor.
- **Discarded**: When the document's checked out status is discarded.

## 1.105 Web Request

This workflow action performs an HTTP request to a URL. It can be used to perform a variety of HTTP operations.

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To use the workflow action:

- Locate the action in Workflow Actions Toolbox (located on the left hand-side);
  - Click on the Category listings to reveal the actions; OR
  - o **Search** for the action using a keyword.
- Select the action, drag it onto the design canvas and drop it onto a design pearl.

## Alternatively

• Left-clicking the pearl, mouse-over **Insert Action** and then the **Categories** to reveal the actions, click the required action from the list.

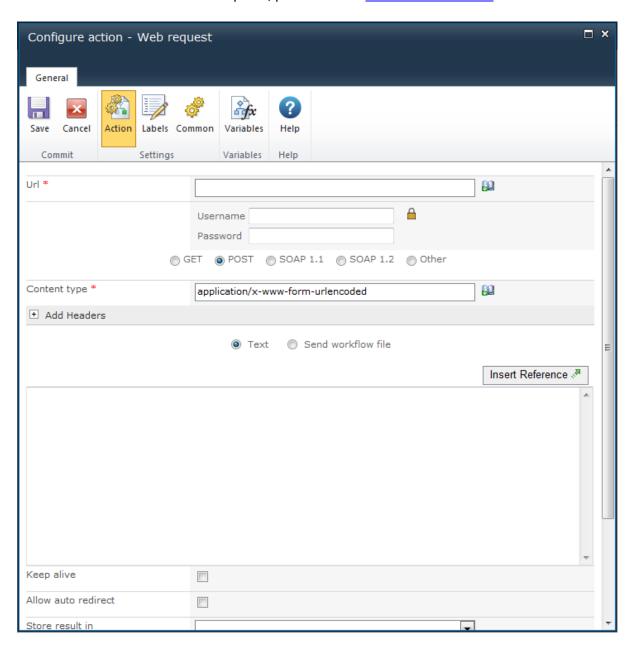
To change the settings used by the action:

- On the action's title click the down arrow to activate a drop-down
- Select Configure; OR
- Double-click the action's icon.

For more information on the other options in the drop-down, please refer to the <u>Getting started with the Nintex Workflow designer</u>.



For more information about web requests, please refer to this MSDN reference.





## Options within the action

## Url

The URL to which the HTTP request will be made.

## **Credentials**

The credentials that will be used for authentication to the URL. If no credentials are provided, the request will be made anonymously.

## Operation

The Web Request action is capable of making many common HTTP calls. GET, POST, SOAP 1.1 and SOAP 1.2 are predefined and Other can be selected to specify another operation. Input fields for headers will be displayed if they are required for the operation.

### Add headers

Specify the headers to be sent with the web request. Multiple headers can be selected by choosing the Add header option.

## **Text**

Specifies the textual data that is sent as the body of the web request. This option is available for all operations except GET. To include a base64 encoded copy of the file that the workflow is running on in the request text, type in [FileData] and it will be replaced at run time (libraries only).

## Send workflow file

Specifies that the bytes of the file on which the workflow is running should be sent as the web request body. This option is only available for workflows that are created on a document library.

## Keep alive

Allows for the **Keep alive** option to be specified for the request.

## Allow auto redirect

Allows for the **Auto redirect** option to be specified for the request.

## Store result in

The workflow variable of text type in which to store the contents of the response.

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## Store http status in

The workflow variable text or number type in which to store the numeric http response code.

## Store response headers in

The workflow variable of collection type in which to store each response header. Each header will be represented by a single item in the collection, and will be formatted as header name=header value.

## Store response cookies in

The workflow variable of collection type in which to store each response cookie. Each cookie will be represented by a single item in the collection, and will be formatted as cookie name=cookie value.

# 2 Using Nintex Live Connector for Nintex Workflow 2010

# 2.1 Access Management

The **Access management** page is used to allow and disallow access to the services available in Nintex Live. These settings apply to all the SharePoint farms of the organization using Nintex Live.

**Private services** are specific services that are provided from a specific service provider to a company. **Public services** are services that are available to all companies.

The **Always make new services from this service provider available** checkbox will automatically select any new private services added by the service provider and make them available in the Catalog.

New public services are automatically selected by default when they're made available by a service provider.

When a service is allowed:

 The service will be displayed in the Nintex Live Catalog, via the Catalog, workflow designers will be able to add services into the workflow action toolbox for use in workflows.

When a service is disallowed:

- The service will not be displayed in the Catalog.
- If the service is being used in a workflow; when the workflow reaches the step that uses that service (workflow action) it will not be allowed to access Nintex Live and an error will occur.
- The serivce (workflow action) will still be available in the workflow action toolbox and workflow designers will still be able to add them to workflows.





Note: Disallowing a service will only disable the service from making requests to Nintex Live. To remove the service (workflow action) from the workflow action toolbox, navigate to the **Manage allowed** actions settings page and uncheck the particular service.

# 2.2 Adding and removing services

In the <u>Nintex Live Catalog</u>, the administrator / workflow designer can select the services to be made available as workflow actions in the workflow toolbox.

To add a service into the workflow action toolbox:

- 1. In the workflow designer, click on the **Catalog** button in the Ribbon.
- 2. In the Catalog, select the service to add to the toolbox by clicking the **Add** button. You can select and deselect services before clicking OK
- 3. Click **OK** to add the selected pending service(s) to the toolbox.

The service will now be available in the workflow toolbox.

- A new Category is created in the workflow toolbox. By default all services are added to the Nintex Live category.
- The service is available and presented as a workflow action which can be used when designing workflows.
- Drag and drop the workflow action onto the designer canvas and configure as per normal Nintex Workflow actions.

To remove a service from the workflow action toolbox:

- 1. In the workflow designer, click on the **Catalog** button in the Ribbon.
- 2. In the Catalog, select the service to remove from the toolbox by clicking the **Remove** button. You can select and deselect services before clicking OK
- 3. Click **OK** to remove the selected service(s) from the toolbox.

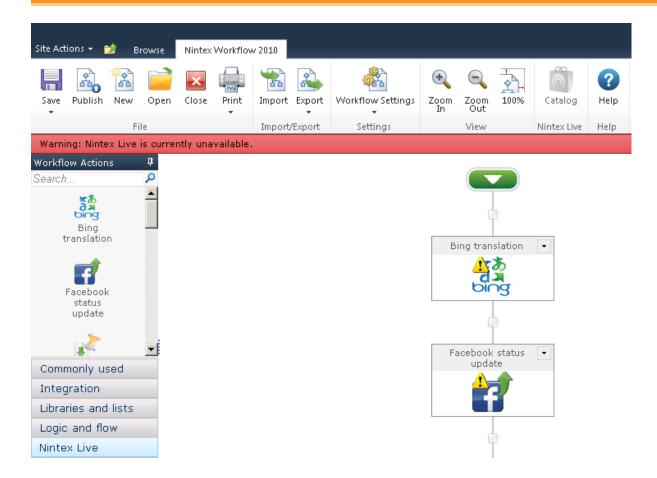
The service will no longer be available in the workflow toolbox.

Note: Removing the service does not delete the service from the list of available workflow actions that are displayed in the **Manage allowed action**settings page.

If Nintex Live is unavailable and there is a service action on the design canvas, a warning will be displayed below the Ribbon.







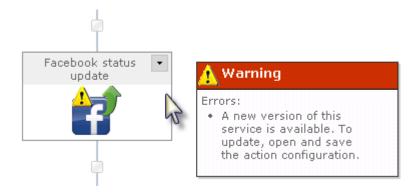








When a service is used in a workflow a warning will be displayed on the action when a more recent version of the service is available. To update, open and save the action configuration.











# 2.3 Nintex Live Catalog Settings

The Catalog Settings page is used to manage the options for the Nintex Live Catalog.

## Allow Catalog browsing in the workflow designer

This option determines if workflow designers can browse the Nintex Live Catalog.

When this option is set to **Yes**, workflow designers can browse the Catalog and add services into the workflow toolbox.

When this option is set to **No**, this will disable the Catalog button in the workflow designer. The Catalog will only be accessible from the Nintex Workflow **Manage allowed actions** page.

Note: The **Nintex Workflow - Nintex Live Catalog** site collection feature must be activated on the site collection(s) for this setting to be effective. If the site collection feature is not activated, the Catalog button will not be displayed at all.

## Allow comments and ratings to be viewed

This option determines the type of ratings and comments for services that can be viewed by users in the organization within the Catalog.

- From users within my organization only: Displays only ratings and comments by users within the organization. This is per company and not based on the SharePoint farm. For example, if a company has more than one SharePoint farm and both use Nintex Live and have enabled rating and commenting, the ratings and comments made in both farms are displayed.
- From all Nintex Live users: Displays ratings and comments made by all users of Nintex Live.

## Allow comments and ratings to be posted

This option determines if ratings and comments for services can be added by users in the organization.

Note: The option selections are enabled and disabled based on the **Allow comments and ratings to be viewed** selection.

- Allow posting to my organization only: Ratings and comments made by the users will only be visible to other users within the organization. The user's domain name will be displayed with the rating and comment made.
- Allow posting to all Nintex Live users: Ratings and comments made by the user will be visible to all
  users with access to the Nintex Live Catalog. The user will be asked for an alias when posting a rating
  and comment. Users within the organization viewing the rating and comment will see the domain
  name if the rating and comment was made from someone within the organization. If the rating and
  comment was made from someone outside the organization, the alias will be displayed.





# 2.4 Nintex Live Workflow Settings

Use the **Nintex Live Workflow settings** page to enable or disable the ability to connect to Nintex Live and allow workflow designers to add web services from the Nintex Live Catalog to the Nintex Workflow actions toolbox which can then be used in workflows.

Note: Ensure that the Nintex Live Framework and the certificates required to enable connectivity to Nintex Live have been installed.

If the "Install Nintex Live" option was not selected during Nintex Workflow 2010 installation, manually install and deploy the "nintexlivecore.wsp".

To enable Nintex Live Workflow settings:

- 1. In Central Administration, click on Nintex Workflow Management.
- 2. Click on Live Settings.
- 3. In the **Enable Nintex Live for Nintex Workflow** section, click on **Enable**.

Note: When Nintex Live Workflow is disabled, the workflows already published to Nintex Live will remain active.

Use the following as required:

**Update Services** 



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Forces an update of all service definitions.

**Update request tracking** 





Updates Live request tracking if a pending service request has become orphaned after a database migration.

# 2.5 Using the Nintex Live Catalog

The Nintex Live Catalog displays the list of available services that can be added to the workflow toolbox.

The list of services include a mix of free and paid for services. For example, StrikeIron are a subscription based provider. Most StrikeIron services offer a free trial of a limited number of calls per service. Any further usage will require paid subscriptions to be arranged directly with StrikeIron.

The **Service Information** (located at the right of the Catalog) will state if the service is free or paid and if registration is required to use the service.

## **Browsing the Catalog**

When browsing the Catalog, a number of options are available to help narrow down the services that you may be interested in.

## **Tabs**

Tabs that are located on the top right of the Catalog provide a quick way to change the focus of the Catalog:

- **Browse**: Lists all the services that are available.
- What's new?: Lists services that have been released in the last 7 days.
- **Search**: Provides the ability to search for services using advanced options.

## Sorting

The services can be sorted in ascending or descending order by the following:

- Title: The title of the service.
- **Release date**: The date that the service was published. If a new version of the service is published, the release date will reflect the new published date.
- Rating: The average rating of the service that has been given by a users within the organization or by all Nintex Live users. This is dependent on the ratings and comments that have been set in the Catalog settings.

## **Filtering**

The filter option narrows down the list of services that are displayed in the Catalog.

- **Category**: The category of the service.
- **Price**: The cost to use the service. A service can either be free, paid or have a trial available.





- **Service scope**: The scope of the service in relation to the region it may be useful for. i.e. a service which may only be useful in Australia will be listed as **Region specific**. This however does not restrict the usage of the service from users outside of Australia.
- Minimum rating: The minimum average rating of a service.

## Searching

To search for services, use the search box located on the top right of the Catalog or use the Search tab which provides advanced options to narrow down the search scope. The search query only searches against the service title and description. Searches do not include the comments made for the services.

## **Rating and Commenting**

In the Catalog, ratings and comments of services made by users (within the organization or from outside the organization) may be displayed. The displaying of the rating and comments is set at an administration level. Users browsing the Catalog would be able to:

- View ratings and comments of a service
- Post ratings and comments for a service

To view the rating and comments of a service:

Click on the **Show most recent ratings and comments** link for the service. This will display the three most recent rating and comments that have been made for the service. The **View all ratings and comments** displays all the ratings and comments of the service, including any ratings and comments made about the previous version(s) of the service.

When posting a rating and comment, the user's domain username will be displayed with the rating and comments made when it is viewed by users within the organization. The option to put an **Alias** will be available if ratings and comments have been set to all Nintex Live users (includes users outside the organization).

To post a rating and comment for a service:

Click on the **Rate and comment** link for the service.

- Rating: The rating for the service. A rating of at least 1 star must be selected.
- Comments: Comments about the service. To comment, the service must be rated.
- Alias: The alias will be displayed to external Nintex Live users. However, the domain username will be displayed to users in your organization. Note: The alias will only be displayed if the rating and comments settings have been set to all Nintex Live users (includes users outside the organization).





A user can only make a rating and comment once. By rating and commenting on the service again, the previous rating and comments that was made will be displayed and the user will be able to modify them.

## Adding and removing services

For help on adding and removing services, please refer to Adding and removing services topic.

# 3 Workflow Interaction with SharePoint

# 3.1 About LazyApproval

The LazyApproval feature of Nintex Workflow enables approvals or rejections of an item to be registered when the approver replies to the notification email or respond to the automated OCS or Lync conversation with a permitted word or phrase. That word or phrase is recognized and interpreted by the system and applied to the item in the workflow.

LazyApproval is not automatically enabled at the time of installation, it has to be manually enabled. For more information, please refer to the <u>Managing LazyApproval settings</u>.

The LazyApproval feature is only available with the <u>Request Approval</u>, <u>Request Data</u>, <u>Request Review</u> and <u>Assign Flexi Task</u> workflow actions.

There are two LazyApproval methods that can be enabled for Nintex Workflow:

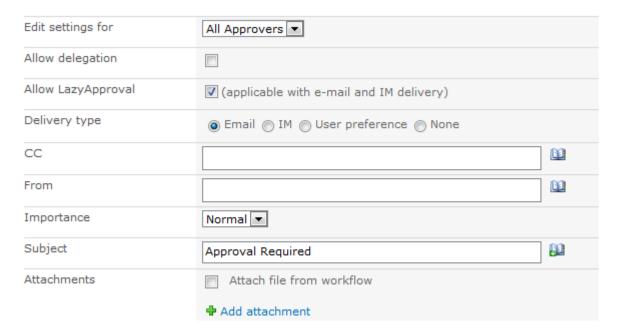
- LazyApproval via email: Workflow tasks actions can be configured to accept responses from users via an email reply.
- LazyApproval via OCS / Lync:Workflow task actions can be configured to accept responses via an automated OCS or Lync conversation.

Not all workflow actions support both methods. **LazyApproval via email** is supported by the workflow actions that have been mentioned above. **LazyApproval via OCS / Lync** is only supported by the <u>Request Approval</u>, Request Review and Assign Flexi Task workflow actions.

At the time of configuring the workflow action, the designer needs to check the box "Allow LazyApproval".







When LazyApproval via email is used, an addition to the standard email template footer is added that explains how to use LazyApproval. When the system receives the return email it will scan the first 20 lines of the reply for a recognized LazyApproval term. It scans from the top of an email downwards and uses the first recognized term it finds that is an exact match for a permitted whole word or whole phrase on a line by itself. Recognized words or phrases that appear with unrecognized words or phrases on the same line will be ignored and skipped.

You can customize the footer text from the Managing LazyApproval settings in Central Administration.

If a term is not found, a return email will be sent to the user informing him/her that their response was not able to be interpreted. The user can then reply to that email with a recognized term for the 'approve' or 'deny' to take effect.

**IMPORTANT NOTE:** When LazyApproval emails are sent, a specific piece of identification code is appended to the email subject. Do not edit or remove the identification code as any change to it will mean that the LazyApproval thread cannot be traced and approval by email will not be possible for the user involved. That user will have to approve the item by navigating through the SharePoint library or list where the item and workflow are being used. For more information, please refer to the Approving, Rejecting and Reviewing Items.

A system administrator can edit or add to the list of acceptable and recognized terms. For more information, please refer to the Managing LazyApproval settings. LazyApproval terms are not case sensitive. The default set of terms is: "approve", "approved", "decline", "declined", "no", "ok", "reject", "rejected" and "yes" as seen below:





Phrase	Outcome
approve	Approve
approved	Approve
decline	Deny
declined	Deny
no	Deny
ok	Approve
reject	Deny
rejected	Deny
yes	Approve

# 3.2 Approving, Rejecting and Reviewing Items

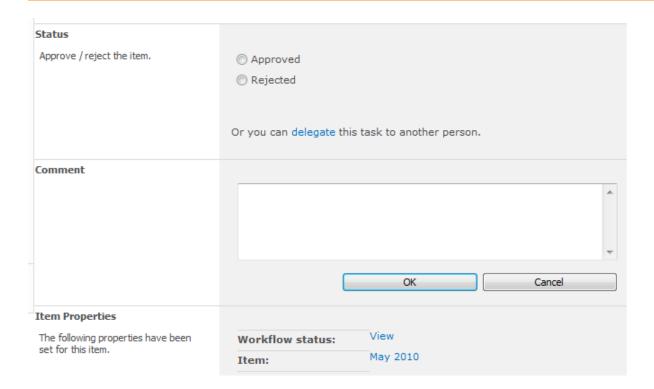
During runtime, when a user interaction task is created as part of a workflow, tasks will be assigned and the notification message(s) sent. The task(s) assigned to a user can be seen at any time via the <a href="My Workflow">My Workflow</a> <a href="Tasks web part">Tasks web part</a> or the Nintex workflow task list setup within the site.

My WORKHOW Tasks				
Item	Workflow	Status	Waiting since	Current action
June 2010.docx	Financial Reports		7/6/2010 9:49 AM	Accounting Approval
May 2010.docx	Financial Reports		7/6/2010 9:49 AM	Finance Manager Approval

To process an assigned task, click the item's hyperlink (if configured and allowed) within the notification email or on the hyperlink within the **Item** column of the <u>My Workflow Tasks web part</u> web part. This will open the 'Approve Reject' page ready for the user's response.







# The 'Approve Reject' page

## **Status**

When a task is generated by the 'Request approval' action, the user can choose to approve or reject the item in the workflow. The selection made will determine the path followed by the workflow.

When a task is generated by the 'Request review' action, there is no response to process as the item is deemed satisfactory when the user is finished with it.

Depending on the configured workflow action, the user may be given the option of <u>Delegating Approval</u> Tasks the task to another user.

## Comment

Use this field to enter any comments about why the item was approved or rejected.

## **Item Properties**

Listed in the Item Properties section is the meta data related to the item in the workflow. To view the full details of the item click the hyperlink next to the **Item** property heading. Similarly, to view the status of the workflow graphically, click on the **View** link provided.





The Item Properties panel also displays the field values of the item the workflow is running on (not shown in this screenshot). You can determine which fields are displayed by creating a view called 'Workflow Task View'. The name of the view to use is configurable in the **Global settings** in SharePoint Central Administration.

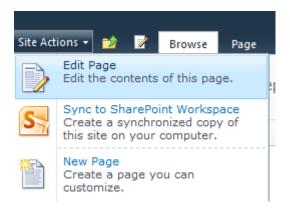
## 3.3 Configuring the Chart Viewer Webpart

## \* This topic applies to Nintex Workflow Enterprise Edition only

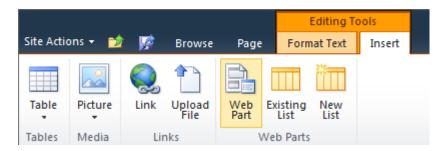
Use the Nintex Chart Viewer web part to display a Nintex Workflow report in graph/chart view on a page within a site.

To use the Workflow Chart Viewer web part:

- Navigate to the page of the site to which you want to add the web part.
- Click on the Site Actions menu, then click on Edit Page.



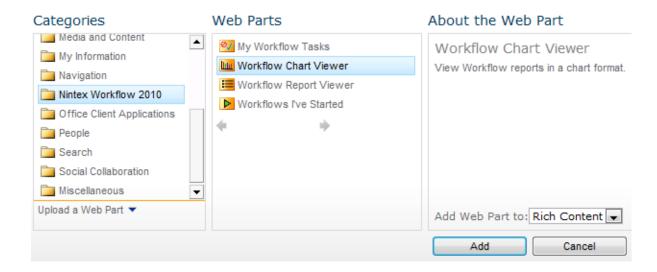
- Click within the **Rich Content** area, where the web part is to be inserted.
- In the **Ribbon**, click on the **Insert** tab, then click on **Web Part**.



- In the Categories section, click on Nintex Workflow 2010.
- In the **Web Parts** section, click on the **Workflow Chart Viewer**.
- Click the **Add** button.





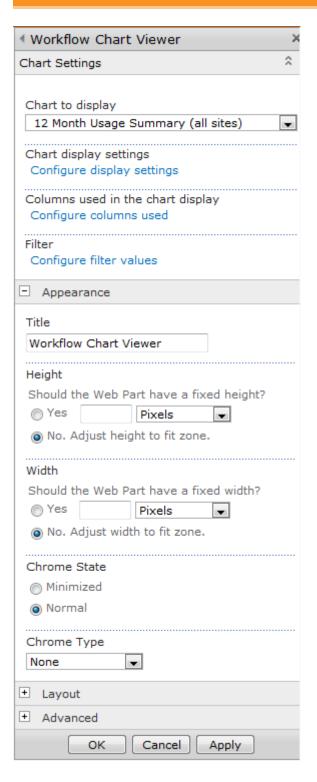


• Edit the settings for the web part, click the \* to activate the web part menu, then click on **Edit Web**Part.



• A series of options will be shown in the tool pane to the right of the page that are specific to this web part.





**Web Part Settings: Chart Settings** 

Chart to display





• Select the chart to display from the drop down list.

Note: This list is configurable by the Administrator in SharePoint Central Administration.

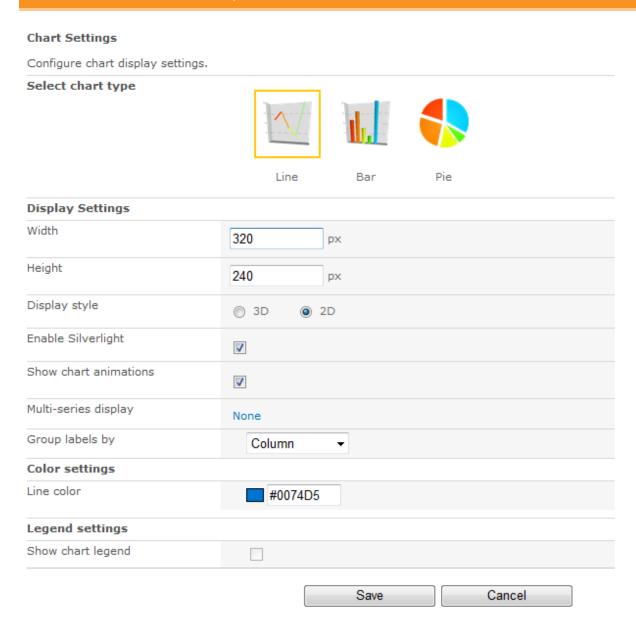
## **Chart display settings**

- Click on the **Configure display settings** link to set the chart type, display settings, color settings and legend settings of the chart.
- When all settings are configured, click the **Save** button.

Note: If **Enable Silverlight** is checked, ensure that users have Microsoft Silverlight installed in order to view the Workflow Charts.







## Columns used in the chart display

- Click on the **Configure Columns used** link to select which columns are to be shown in the chart. By default, all columns are included.
- Select a column in the **Shown** section and click on  $\Rightarrow$  to remove from the Chart display.
- Select a column in the Hidden section and click on 

  to shown in the Chart display.
- When all settings are configured, click the **Save** button.



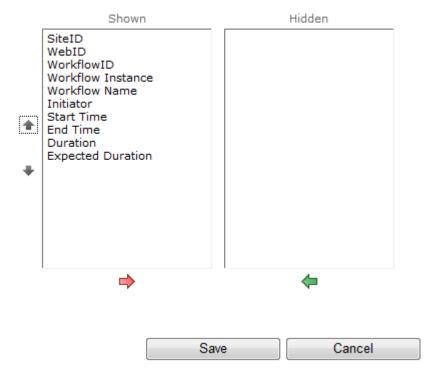




Note: The first column displayed in the list becomes the x-axis value. The remaining columns become the y-axis. For example: To chart the number of tasks for each approver, add the "Approver" column as the first column and place the numerical value columns below the "Approver" column.

## Column Settings

Select the columns to display



## **Filters**

- Click on the **Configure Filter Values** link to set filter values for the report.
- When all settings are configured, click the **Save** button.

Note: Not all reports accept filter values.





# Set Filters Configure filter values. Initiator Workflow All Save Cancel

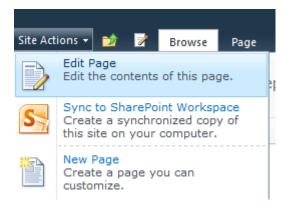
# 3.4 Configuring the Report Viewer Webpart

\* This topic applies to Nintex Workflow Enterprise Edition only.

Use the Nintex Report Viewer web part to display a Nintex Workflow report in tabular view on a page within a site.

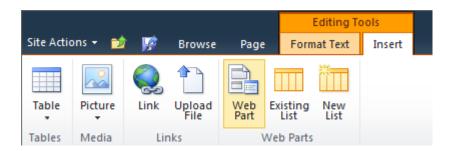
To use the Workflow Report Viewer web part:

- Navigate to the page of the site to which you want to add the web part.
- Click on the Site Actions menu, then click on Edit Page.

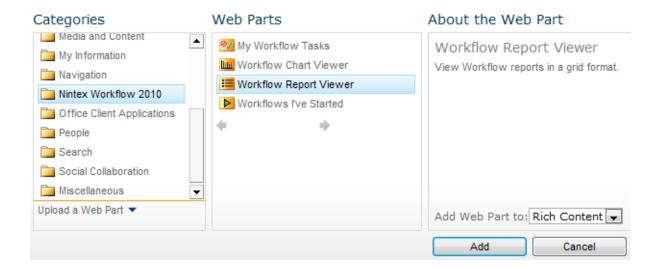


- Click within the **Rich Content** area, where the web part is to be inserted.
- In the Ribbon, click on the Insert tab, then click on Web Part.





- In the Categories section, click on **Nintex Workflow 2010**.
- In the Web Parts section, click on the Workflow Report Viewer.
- Click the Add button.

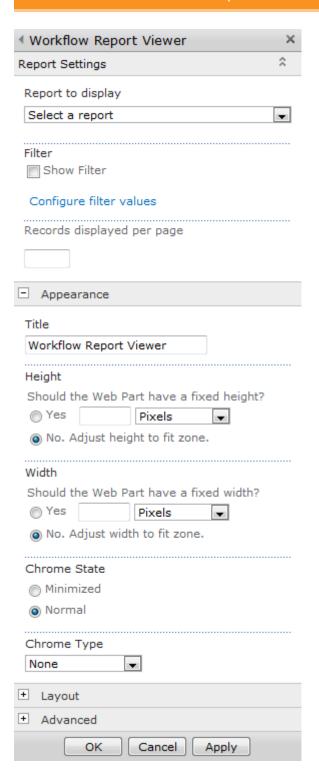


• Edit the settings for the web part, click the \* to activate the web part menu, then click on **Edit Web**Part.



• A series of options will be shown in the tool pane to the right of the page that are specific to this web part.





**Web Part Settings: Report Settings** 

Report to display





Select the report to display from the drop down list.

Note: This list is configurable by the Administrator in SharePoint Central Administration.

To allow users to specify filter values, click the Show Filter checkbox.

#### **Filter**

- Click on the Configure Filter Values link to set filter values for the report.
- When all settings are configured, click the **Save** button.

Note: Not all reports accept filter values.

#### Set Filters



#### Records displayed per page

• Enter a number to specify how many records should be displayed per page. Leave this setting blank to display all records on the one page.

### 3.5 Delegating Approval Tasks

Delegation is processed from the <u>Approving, Rejecting and Reviewing Items</u> task pages when the user interaction task is configured to allow delegation.

To delegate a task:

• In the 'Approve Reject' page, in the Status section, click on **delegate**.

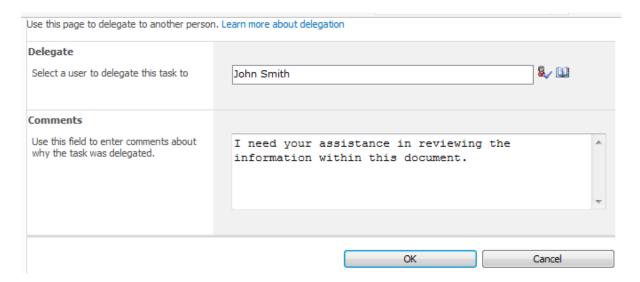
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- In the Delegate page:
  - The **Delegate** field is used to specify the user to assign the selected task to. To select a
    user, click on the address book icon on the right to select a user from the Select People or
    Group dialog box.
  - The Comments field is used to provide instructions or additional information to the user the task is being delegated to. This text is appended to the 'Approval Required' notification that is sent to the delegated user.
  - o When all settings are configured, click the **OK** button.
- The task is now reassigned to the selected user.



# **Setting personal delegation preferences**

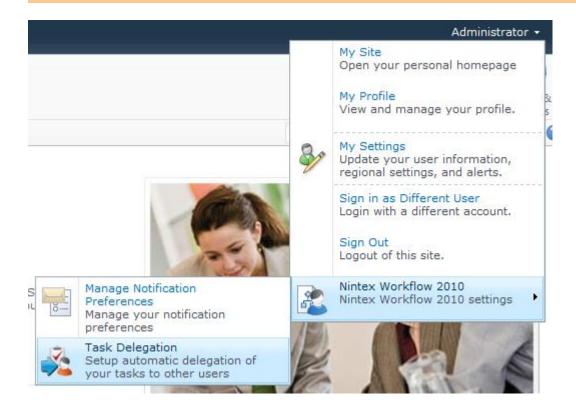
A user can delegate their tasks to another user for specified duration, or may delegate their tasks due to absence within the organisation.

To set your personal preferences:

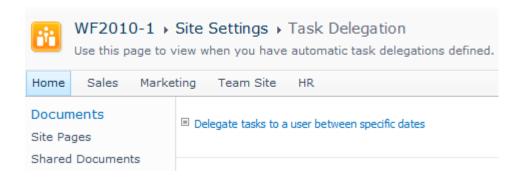
- Activate the drop down from the logged-in user name link at the top of a page.
- Mouse-over Nintex Workflow 2010 then click on Task Delegation.







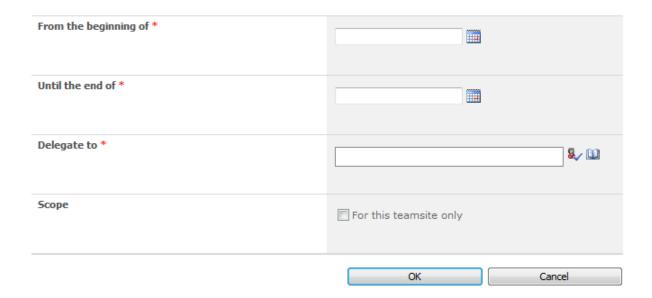
• If you have not set up delegation before, the summary area will be empty. Click on **Delegate tasks to** a user between specific dates.



- The following 4 sections that need to be set:
  - From the beginning of: the date when delegation begins, at midnight in the morning. Click
    the date picker tool icon to ensure the date is set in the appropriate format for your
    environment.
  - Until the end of: the date when delegation ends, at midnight that night. Click the date picker tool icon to ensure the date is set in the appropriate format for your environment.
  - Delegate To: click the Lookup button and search for the appropriate user to delegate your tasks to within the specified dates.
  - Scope: check the box for delegation to apply only to the current site, otherwise delegation will be applied throughout the entire SharePoint farm.







**Note:** Task delegations done through **Task Delegation** feature are only used when a task is initally assigned to a user. If a task is reassigned via the 'Delegate workflow task' action, or by another user manually, the task will be assigned to the specified user, even if they have long term delegations defined.

#### 3.6 InfoPath Forms

The Nintex Workflow InfoPath Forms feature allows workflow designers to edit start and task forms using Microsoft InfoPath 2010.

InfoPath forms can be defined for the following:

- Start form
- Request data
- Assign Flexi task
- · Request approval
- Request review

### Server requirements

- The server must have Microsoft SharePoint Server 2010 installed (not just SharePoint Foundation 2010).
- Clients must have Microsoft InfoPath 2010 installed.

### **Assigning Form type**

Nintex Workflow supports the use of either the Default form (which is an .aspx form provided out of the box and is not editable by end users), an InfoPath form (which is editable in Microsoft InfoPath 2010) and Custom (pre-developed .aspx) forms.

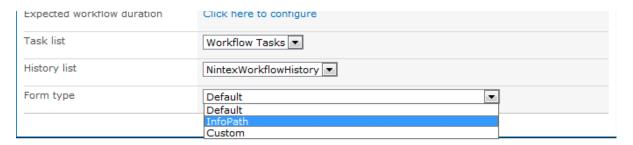




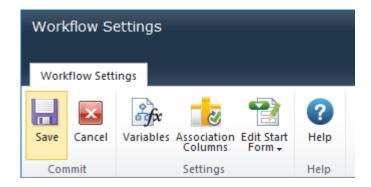


### To assign the form type:

- Open the action dialog (for start forms open from the Workflow Settings dialog).
- Select the **Form type**.



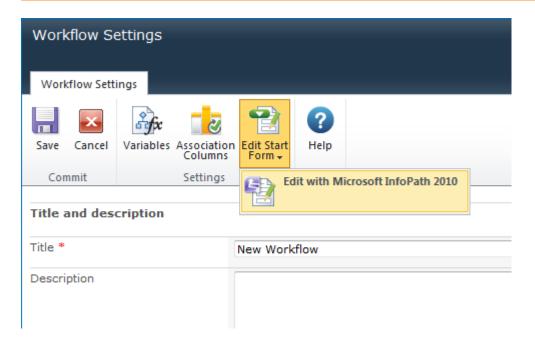
Click Save



### Edit a Microsoft InfoPath 2010 form

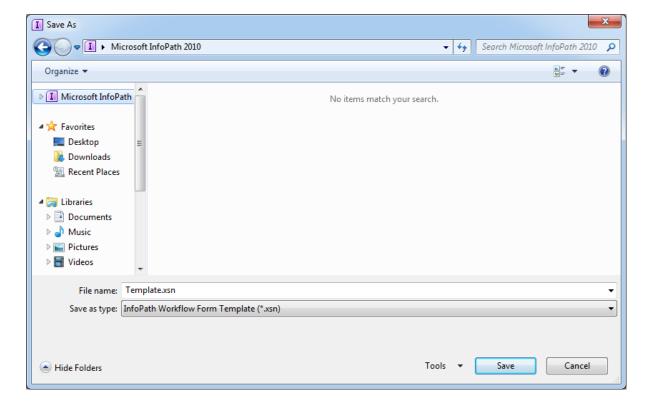
- Open the action dialog (for start forms, open from the Workflow Settings dialog).
- Click Edit Task Form or Edit Start Form button, then select Edit with Microsoft InfoPath 2010.



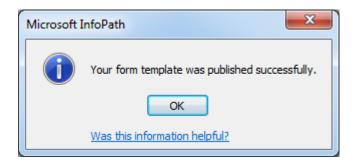


- Microsoft InfoPath 2010 will open.
- Edit the form as required.
- To save the changes, click Quick Publish (Ctrl+Shift+Q).
- The **Save As** dialog box will appear. InfoPath requires you to save the form to local location before it can publish it to SharePoint. Save the form to a local location -"Temp" can be used. The file saved to this location will then save the changes back to SharePoint/Nintex Workflow and not required to be used again, i.e. the next time the form is edited, a new instance in InfoPath is created.





• Once the publish back to Nintex Workflow has completed, the "published successfully" message will appear.



- Close InfoPath.
- The **Form type** will be automatically changed to InfoPath.
- The changes will take effect once the workflow is published.

#### **Shared forms**

When a workflow action using InfoPath is copied and pasted, the form will be shared by both actions by default.

 Prior to editing the form in InfoPath, Nintex Workflow will confirm if the form is to remain a shared form or a separate instance of the form should be created.







- Clicking **OK** will create a copy of the shared form. Changes to the form from this point onwards will apply only to this action. The original form will not be modified.
- Clicking Cancel will edit the shared form. Changes will affect this action and all other actions using this form.

#### Important note

Nintex Workflow will automatically attempt to update fields in the InfoPath form when the action configuration changes. However, if the Cancel button within the form is modified, the form fields will no longer update automatically but can still be added manually in InfoPath.

### Data context (Advanced)

The InfoPath forms contain a data source called NWContext which provides additional information relevant to the current item, list and user permissions. A developer or designer can use this information to extend the functionality of the form.

To access the data source:

Click Show advanced view.

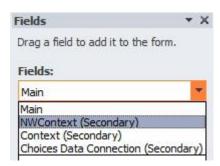


Change the Fields dropdown to NWContext.

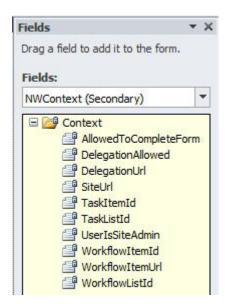


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A list of available context fields will be displayed.



These fields can be used to extend the functionality of the form. Some examples are:

- o Call a Nintex Workflow web service to delegate a task.
- Show additional information to a site administrator.
- o Display information about the item the task is for.

## 3.7 Managing Workflow Change Approval

When the <u>Workflow Change Approval</u> is enabled on a site, all workflows will need to be approved before the workflow can be used.

The workflow status page displays the workflows that are currently awaiting approval, have been approved, cancelled and errored.









Approvals in process				
Name	Started by	Started	Idle time	Status
Log History Workflow	Administrator	11/9/2010 9:29 AM 48 minutes		In progress
Simple Approval Workflow	Administrator	11/9/2010 9:27 AM	50 minutes	In progress
Completed approvals				
Name	Started by	Started	Completed	Status
Financial Reports	Administrator	11/9/2010 10:16 AM	11/9/2010 10:17 AM	Completed
Cancelled & Errored approval	s			
Name	Started by	Started	Ended	Status





When new and existing workflows are published, the workflow must be approved by the assigned 'Approvers group' before it can be used on items.

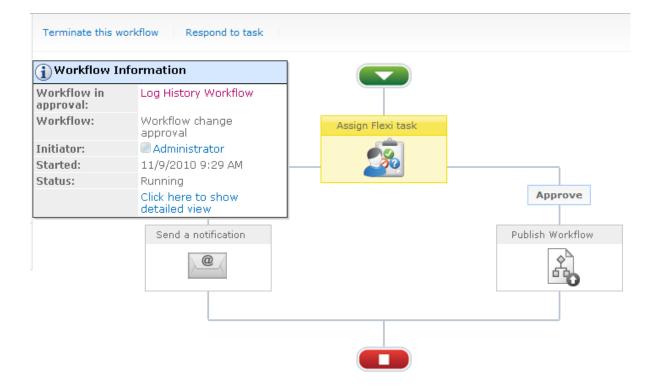
If the workflow is started on an item before the latest version is approved, the current live version (most recently approved) of the workflow will still be used.

To view the changes made to the workflow:

- Navigate to the View approvals in progress in the Workflow Change Approval page.
- Click on the Name of the workflow.

To approve or reject the changes to the workflow:

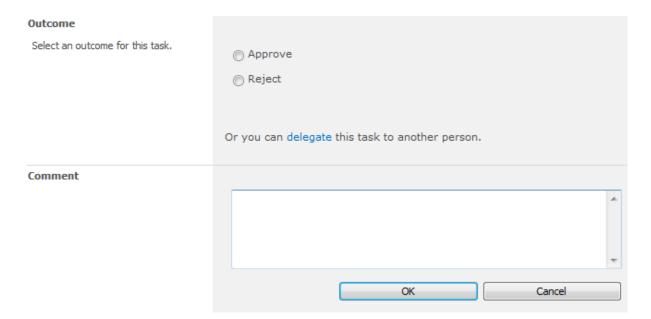
- Navigate to the View approvals in progress in the Workflow Change Approval page.
- In the Approvals in process section, click on the Status (In progress).
- In the Workflow Information page, click on Respond to task.



- Select either **Approve** or **Reject**.
- Click **OK**.









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#### In the Workflow details section:

- Workflow status: Displays the workflow status of the 'workflow change approval' workflow.
- **Workflow**: The workflow that is being published.
- **Previous version**: Displays the current published version of the workflow.

#### **Workflow details**

The details of the workflow that was published.

Workflow status:	View	
Workflow	Log History Workflow	
Previous version	Current live version	
Workflow type	List workflow	
Modified by	Administrator	
Modified at	11/8/2010 4:54 PM	
Change notes	Added a description.	



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### 3.8 Managing workflow history lists

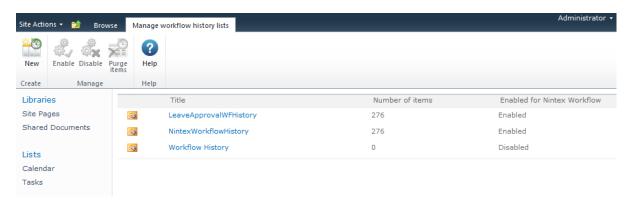
The **Manage workflow history lists** provides the ability to create new SharePoint workflow history lists and enable existing SharePoint workflow history lists for use with Nintex Workflow within a team site.

A SharePoint workflow history list stores messages generated by a workflow. Everything from approval activity (approve/reject), updates to a workflow, comments, cancellations and even workflow errors.

By default Nintex Workflow creates a SharePoint workflow history list that is enabled for Nintex Workflow. The enablement deploys event receivers into the list for workflow reporting. The standard SharePoint workflow history list cannot be used with workflows in Nintex. To use a standard SharePoint workflow history list it must first be enabled for Nintex Workflow.

To manage the history lists for use with Nintex Workflow:

- Navigate to the site level homepage.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow group, click on Manage workflow history lists.









To create a new history list for use with Nintex Workflow:

- Navigate to the Manage workflow history lists settings.
- In the Ribbon, click on the **New** button.
- In the Create a history list dialog:
  - o **Title**: The name of the history list.
  - o **Description**: Additional notes about the history list.
  - Hidden: Check this option to hide the history list from being displayed on the "All Site Content" page.

Note: To edit the **Title** and **Description** of the history list, navigate to the **Lists Settings** and under the General Settings, click on the **Title**, **description** and **navigation** link and make the required changes. To delete the list, navigate to the **Lists Settings** and under the Permissions and Management, click on the **Delete this list** link.

To enable an existing history list to be used with Nintex workflows:

- Navigate to the **Manage history lists** settings.
- Select the SharePoint workflow history list to be enabled
- In the Ribbon, click on the **Enable** button.

Note: All history lists that are enabled for Nintex Workflow can be selected in the <u>Workflow Settings</u> when designing a workflow within the site.

- To disable an existing history list that is enabled for Nintex Workflow:
- Navigate to the Manage history lists settings.
- Select the SharePoint workflow history list to be disabled.
- In the Ribbon, click on the **Disable** button.

#### Purge items from the workflow history lists

The **Manage workflow history lists** also provides the option to delete workflow history messages from the workflow history list on a site. This option is also available as an NWAdmin operation. This option can be used for maintenance on the history list to prevent the number of history items exceeding 2000 which can have performance implications. Deleting history messages does not affect the operation of a running workflow.

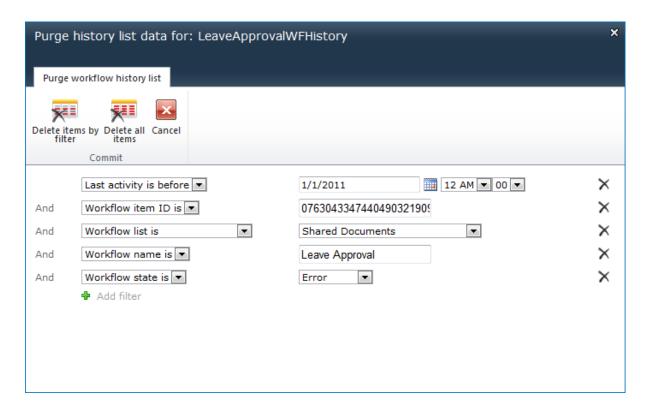
To remove/purge items from a history lists:

- Navigate to the Manage workflow history lists settings.
- Select the SharePoint workflow history list to purge items from.
- In the Ribbon, click on the **Purge items** button.
- In the dialog box:
  - To purge specific items from the history list, configure the different filter options and click **Delete items by filter**.





- Last activity is before: removes history list items for workflows that have had no activity since a specific date.
- Workflow item ID is: removes history list items for workflows associated with a specific workflow item ID.
- Workflow list has been deleted: removes history list items for any workflow that is associated to a list that has been deleted.
- Workflow list is: removes history list items for workflow associated with a specific
- Workflow name is: removes history list items for workflows with a specific name.
- Workflow state is: removes history list items for workflow with a specific state (Running, Completed, Cancelled, Error or any state).



To purge all items from the history list, click on **Delete all items**.

### 3.9 My Workflow Tasks web part

The My Workflow Tasks web part is used to display a list of workflow related tasks that have been assigned to the user currently logged on. The web part is used on a page within a site.

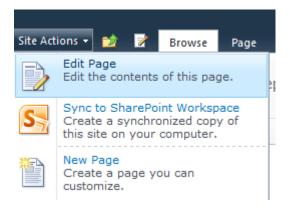




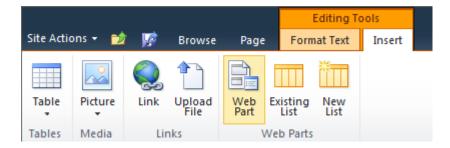
Note: Tasks that are no longer valid due to missing information will display a link to remove the entry from the web part.

To use the My Workflow Tasks web part:

- Navigate to the page of the site to which you want to add the web part.
- Click on the Site Actions menu, then click on Edit Page.

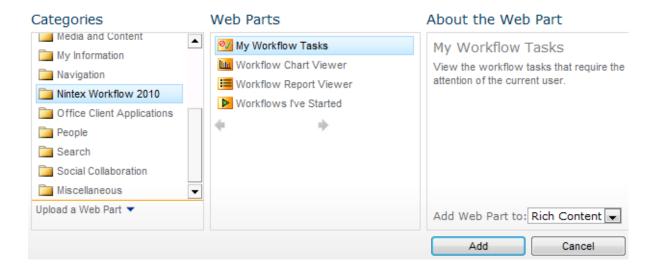


- Click within the **Rich Content** area, where the web part is to be inserted.
- In the Ribbon, click on the Insert tab, then click on Web Part.



- In the Categories section, click on **Nintex Workflow 2010**.
- In the Web Parts section, click on the My Workflow Tasks.
- Click the Add button.

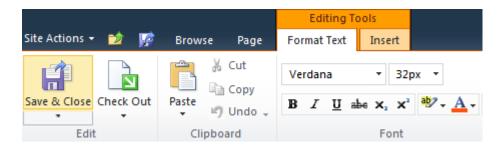




• The page will reload with the web part in place.



- The default web part settings will display:
  - Item: The title of the item.
  - Workflow: The name of the workflow.
  - Status: The status of the workflow related task (relative to the 'expected duration' set at the time of workflow construction).
  - Waiting since: How long the current task has been necessary and not completed.
  - o **Current Action**: The action for which the running workflow is waiting.
- If you would like to use the web part with its default settings, then click **Save & Close**.



• Edit the settings for the web part, click the \* to activate the web part menu, then click on **Edit Web**Part.





• A series of options will be shown to the right of the page that are specific to this web part.



Web Part Settings: My Workflow Tasks



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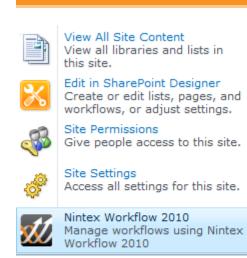
- **Show tasks from:** Set to show workflows from the current site or from all the sites in the site collection. Organizations that are licensed for the Nintex Workflow Enterprise version will be provided the additional option to choose the entire Farm.
- Paging: Set how many items are displayed on the page by the webpart.
- Display:
  - Prefer filenames: By default, document titles are displayed in the web part. If there is no document title set, the document's filename is displayed.
  - Show tasks for all users: Displays the tasks for the current user only (default) or for all users (another column is added).
  - Show the Status Column: The status indicator has three states, 'New', an orange circle and a red circle. Setting the interval here determines how much time before the "Expected duration" the red circle is displayed. The same interval is used for the other two states. For example, if the status indicator interval is set at 8 hours then the red indicator will be displayed 8 hours before the 'Expected duration' is reached, the orange indicator will be displayed 8 hours before the red indicator is displayed and all time before that, the status indicator will be 'New'.
  - Show the time elapsed since the item was created: Shows the time elapsed since the item was created.
  - Display the user who initiated the workflow: Displays the user who initiated the workflow.
- **Item name URL:** Specifies where the user is direct to when they click on the list item name in the web part.
  - Task display form: Directs to the view page of the task item. Please note: The default view form for 'Request approval', 'Request review' and "Assign a Flexi task' has the same behavior as the edit form.
  - o Task edit form: Directs to the edit page of the task.
  - o **Item display URL:** Directs to the item that the task is associated to.
  - Custom: Specify a custom page to direct to. The following placeholders can be added to the query string:
    - {TaskListID}: The GUID of the task list.
    - {TaskID}: The ID of the task item in the task list.
    - **{ListID}:** The GUID of the list that the workflow associated to the task is running in.
    - {ItemID}: The ID of the item that the workflow associated to the task is running on.
- **Default sorting:** Specifies the order that records are displayed in.

#### 3.10 Reusable Workflows

A **resusable workflow template** allows the workflow to be used on a content type, list or library through the default SharePoint Workflow settings option.

Reusable workflow templates can be created for use within a single site or an entire site collection.







#### Create Reusable Workflow Template

Create a reusable workflow template that is available for the current site



#### Manage Reusable Workflow Templates

Manage reusable workflow templates that are available for the current site



#### Create Site Collection Reusable Workflow Template Create a reusable workflow

Create a reusable workflow template that is available for the entire site collection



Manage Site Collection Reusable Workflow Templates Manage reusable workflow templates that are available for the entire site collection

## **Site Reusable Workflow Templates**

To create a reusable workflow template:

- In the **Site Actions** menu, select **Nintex Workflow 2010**, click on **Create Reusable Workflow Template**. Refer to **Getting started with the Nintex Workflow designer** on how to create a workflow.
- In the Set Title and Description dialog, refer to <u>Set Title and Description for Reusable Workflow</u>
   Template.

To manage reusable workflow templates:

In the Site Actions menu, select Nintex Workflow 2010, click on Manage Reusable Workflow
Templates. Refer to Managing Workflows on how to manage workflows created using Nintex
Workflow.

# **Site Collection Reusable Workflow Templates**

To create a site collection reusable workflow template:

- In the Site Actions menu, select Nintex Workflow 2010, click on Create Site Collection Reusable
  Workflow Template. Refer to Getting started with the Nintex Workflow designer on how to create a
  workflow.
- In the **Set Title and Description** dialog, refer to <u>Set Title and Description for Reusable Workflow</u> Template.

To manage site collection reusable workflow templates:





 In the Site Actions menu, select Nintex Workflow 2010, click on Manage Site Collection Reusable Workflow Templates. Refer to Managing Workflows on how to manage workflows created using Nintex Workflow.

#### **Workflow Settings**

To use a reusable workflow template for a content type:

- Navigate to the settings page of the Content Type, click on Workflow Settings.
- In the Workflow Settings page, click on Add a workflow.
- In the Add a workflow page, select the reusable workflow template from the list of Workflows.
- Configure the other settings of the page, when done, click the **OK** button.

To use a reusable workflow template for a list or library:

- Navigate to the settings page of the list or library, click on Workflow Settings.
- In the Workflow Settings page, click on Add a workflow.
- In the Add a workflow page, select the reusable workflow template from the list of Workflows.
- Configure the other settings of the page, when done, click the **OK** button.

## 3.11 Scheduling a workflow

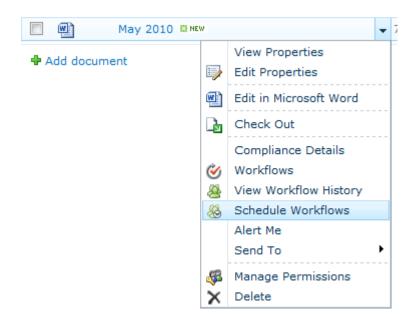
Workflows can be configured automatically to run at a certain time.

A library or list item can be regularly subjected to a workflow. This might be useful for running recurring checks on items.

To schedule a workflow for an item:

- Navigate to the item's location.
- Click on the item to activate the Item Context menu, then click **Schedule Workflows**.





• If no schedules have been defined before, none will be shown. To create a new Scheduled Workflow, click the **Add Schedule** button.

Use this page to configure workflows to run automatically at a certain time.



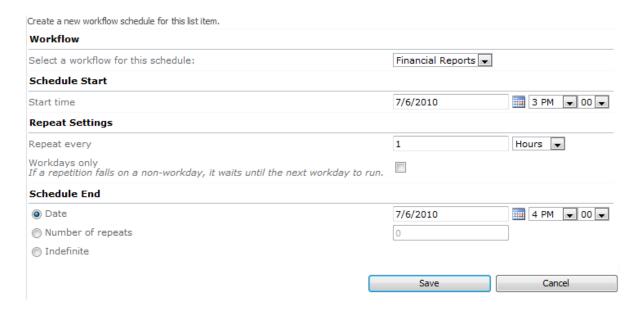
- Configure the workflow schedule for the item:
  - o **Workflow**: Select an existing workflow from the drop-down menu.
  - o **Schedule Start**: Set a date and time when the workflow schedule is to begin.
  - Repeat Settings: The frequency of the scheduled repetition for the workflow. Select the hours, days or months. There is no maximum number which can be entered. Numbers entered must be integers (whole numbers, not decimals).
  - Workdays only: Checking this option will ensure that the scheduled workflow will only run on workdays.

Note: Workdays are set by the Administrator via the 'Site Settings > Site Administration > Regional settings' section. Public holidays and any other special occasions are set using the 'Site Settings > Nintex Workflow > Manage Holidays' page.

- Schedule End: The end of the scheduling cycle. Either set a specific end date and time or by defining the number of times the workflow should run or set it to run indefinitely.
- When all settings are configured, click on the Save button. The scheduled workflow will
  now appear on the Scheduled Workflows page.







To configure an existing schedule, click the hyperlink of the schedule in the list and edit the settings in the same manner as above.

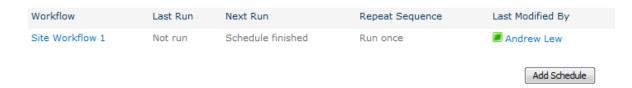
Note: If you make a change to a schedule it will take effect immediately. If the item is currently in the workflow, changing the schedule will not disrupt it, the schedule will be updated once the workflow has been completed.

Site Workflows can also be set up to run according to a schedule.

To schedule a site workflow:

- In the Site Actions menu, hover over Nintex Workflow 2010.
- Click on Schedule Site Workflows.

Use this page to configure workflows to run automatically at a certain time.





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- Click on the Workflow link to modify/delete an existing Site Workflow schedule.
- Click Add Schedule button to add a new Site Workflow schedule.

Site Workflow 1	•	
7/01/2010	■ 8 AM • 00 •	
1	Hours 🔻	
7/01/2010	10 AM 🔻 00 🔻	
0		
Save	Cancel	
	7/01/2010  1  7/01/2010  0	

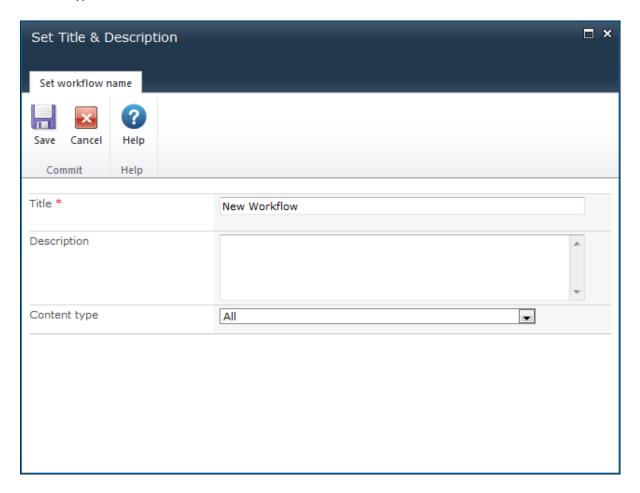


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# 3.12 Set Title and Description for Reusable Workflow Template

When creating a <u>reusable workflow template</u>, the reusable workflow template can be associated to a specific content type.



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To associate a reusable workflow template:

- Save the reusable workflow template: the Set Title & Description dialog will appear.
- In the **Set Title & Description** dialog the following options are available:
  - Name: The name of the workflow when listed in the SharePoint Workflow Settings page.
  - Description: The description of the workflow when listed in the SharePoint Workflow Settings page.
  - Content Type: Select the Content Type that this reusable workflow template will be associated with. When selecting a specific content type, take note of the following:
    - Associating it with a parent content type will make the reusable workflow template available to the child content types of the parent.
    - Selecting a content type, will only allow fields that are associated to that content type to be available when configuring workflow actions.
    - Best practice: To prevent lengthy content type evaluation when saving or publishing reusable workflow templates, avoid selecting "All" or "Item" for the content type.
       Instead, create a content type based on Item and then select the created content type when defining the reusable workflow template.

#### 3.13 Site Workflows

A Site Workflow is a workflow that is not attached to a list or library but rather to a site itself.

The creation and management of site workflows is the same as for workflows that are attached to a list or library.

Note: When creating a site workflow in the <u>Nintex Workflow Designer</u>, some actions which are list and library specific will not be available.



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Site Act	ions 🕶 📝 📝 Browse Page		
	Edit Page Edit the contents of this page.		
S	Sync to SharePoint Workspace Create a synchronized copy of this site on your computer.		
	New Page Create a page you can customize.	e to	your site!
	New Document Library Create a place to store and share documents.	ne. cha	nge this welcome text or add new lists
	New Site Create a site for a team or project.	ate new team events. Use the links in the get	
	More Options Create other types of pages, lists, libraries, and sites.	iments	
	View All Site Content View all libraries and lists in this site.	****	Name Create Site Workflow
<b>%</b>	Edit in SharePoint Designer Create or edit lists, pages, and	4	Create a workflow that can be run without a list item
	workflows, or adjust settings. Site Permissions	25	Manage Site Workflows Manage workflows that can be
	Give people access to this site.		run without a list item View Workflow History
(A)	Site Settings Access all settings for this site.	A	View the details of a running or completed site workflow
	Nintex Workflow 2010 Manage workflows using Nintex Workflow 2010	<b>\$</b>	Schedule Site Workflows Create and manage schedules for site workflows
	WOIKIOW 2010	بسيسياح	Create Reusable Workflow









To create a site workflow:

• In the **Site Actions** menu, hover over **Nintex Workflow 2010** and click on **Create Site Workflow**. Refer to <u>Getting started with the Nintex Workflow designer</u> on how to create a workflow.

To manage a site workflow:

• In the **Site Actions** menu, hover over **Nintex Workflow 2010** and click on **Manage Site Workflows**. Refer to **Managing Workflows** on how to manage workflows created using Nintex Workflow.

To view the site workflow history:

- In the Site Actions menu, hover over Nintex Workflow 2010 and click on View Workflow History.
   Refer to:
  - Viewing Workflow History on how to view the details of completed workflows.
  - o <u>Viewing Workflow Status</u> on how to view the details of a running workflow.

To schedule site workflows:

• In the **Site Actions** menu, hover over **Nintex Workflow 2010**, click on **Schedule Site Workflows**. Refer to **Scheduling a workflow** on how to create and manage schedules for workflows.

### 3.14 Starting a workflow

There are three options to start a workflow. How the workflow starts is dependent on how the workflow is configured.

Following are the various ways to start a workflow:

- **Start manually:** When this setting is checked for a workflow, the user has the option to start the workflow manually. **This help page** will explain how to start a workflow manually.
- **Start when items are created:** When a library or list item is created or uploaded, all workflows in the library or list with this option enabled will start.
- Start when items are modified: When a library or list item is modified, all workflows in the library or list with this option enabled will start. Conditions can be set to start the workflow when a specific column is modified. Refer to Workflow Settings.

Note: For list and library workflows, folders and sub-folders are subject to the same workflows as the parent library. Therefore, if you set a workflow to start when items are created or modified, any item, regardless of how many folders or sub-folders the item is stored within, it will trigger all the workflows that are set to start automatically. That behavior is governed by SharePoint.

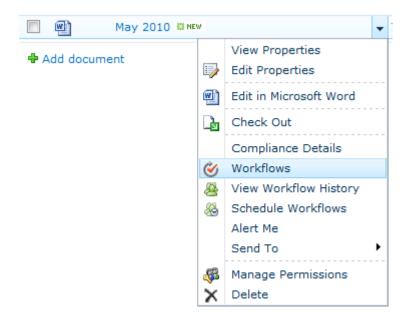


### Starting a workflow manually

To start a workflow manually:

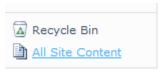
For List/Library Workflows

- Navigate to the list or library that contains the item that the workflow is to be started on.
- Click on the item to activate the Item Context menu then click Workflows.



For Site Workflows

• Click on All Site Content in the navigation pane



Click on Site Workflows button

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- The SharePoint workflows page will load. A list of workflows that have been published and are available for manual initiation is displayed.
- To select a workflow, click the corresponding workflow's hyperlink.

#### Start a New Workflow



#### Approval - SharePoint 2010

Routes a document for approval. Approvers can approve or reject the document, reassign the approval task, or request changes to the document.



#### Collect Feedback - SharePoint 2010

Routes a document for review. Reviewers can provide feedback, which is compiled and sent to the document owner when the workflow has completed.



Collect Signatures - SharePoint 2010 Gathers signatures needed to complete a Microsoft Office document.



#### Financial Reports

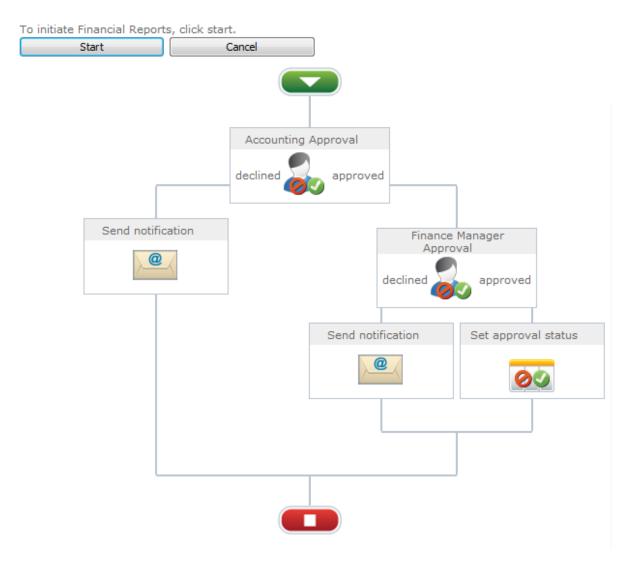
Financial Report Approval Workflow

Workflows			
Select a workflow for more details on the current status or history. Show my w	orkflows only.		
Name	Started	Ended	Status
Running Workflows			
Financial Reports (Previous Version:7/6/2010 9:36:08 AM)	7/6/2010 9:40 AM		In Progress
Completed Workflows			
Financial Reports (Previous Version:7/6/2010 9:19:07 AM)	7/6/2010 9:27 AM	7/6/2010 9:33 AM	Completed

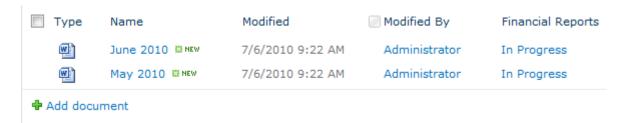
- The selected workflow will be displayed.
- Verify if it is the right workflow, click the **Start** button to initiate the workflow.







• The page will then display the library or list with the progress of the selected workflow displayed inline with the item. The item could be a part of a number of different workflows and their states will be displayed in the same way under the column with the workflow's name as the heading.



# 3.15 Updating User Defined Action in Published Workflows



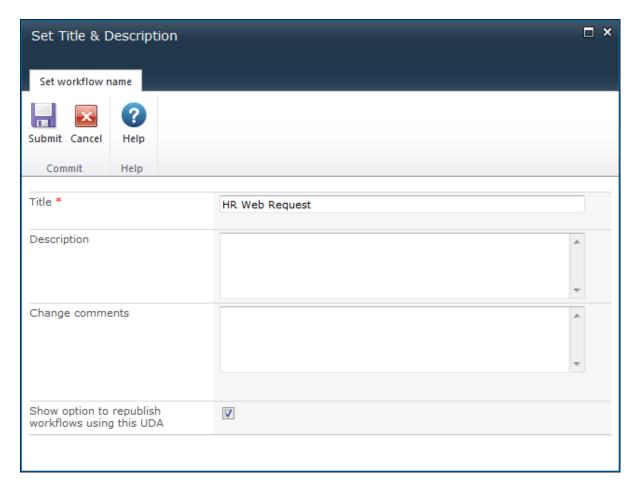


Published workflows that use a User Defined Action must be republished whenever a change is made to the instance of the UDA. Until the published workflow is republished, it will continue to reflect the last published version of the UDA when it was used and published in the workflow.

When republishing a UDA, an option is available to analyze the UDA (Analyze UDA function) to show all instances of the UDA in published workflows and republish the workflows.

To update all instances of the UDA in published workflows through the workflow designer:

- In the workflow designer, click on Publish.
- Check the Show option to republish workflows using this UDA checkbox.

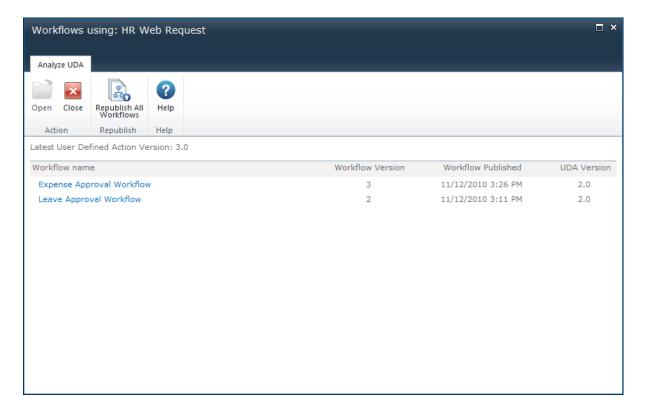




- Click on Submit.
- The **Analyze UDA** tab for the UDA will be displayed. This will display a list of published workflows that use the UDA.

Note: This is the same function as clicking on the **Analyze UDA** through the <u>Manage User Defined</u> <u>Actions</u> function.

• Click on Republish All Workflows.

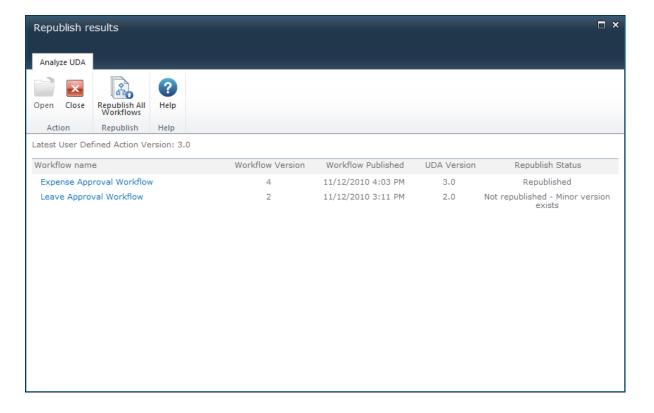






If the current published workflow has a minor version, the workflow will not be republished. In the **Republish results** of the Analyze UDA, the **Republish Status** will be **Not republished - Minor version exists**.

If required, manually republish the workflow to ensure that the workflow has no minor version. Click on the Workflow name and republish. The current opened Analyze UDA dialog will need to be closed and reopened to reflect the latest changes.





### 3.16 User Defined Action Parameters

**User Defined Action Parameters** can be defined to obtain and supply information when using the User Defined Action within a workflow.











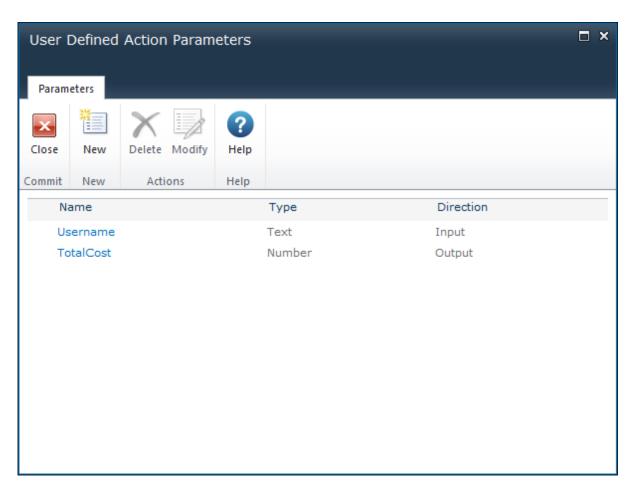
### **Managing User Defined Parameters**

To manage a workflow parameter:

- In the Nintex Workflow Designer Ribbon, click on **UDA Settings**.
- In the **User Defined Action settings** dialog, within the Ribbon, click on **Parameters**.

### Alternatively:

- In the Nintex Workflow Designer, below the **UDA Settings** in the Ribbon, expand the available options by clicking .
- Click on **Parameters**.

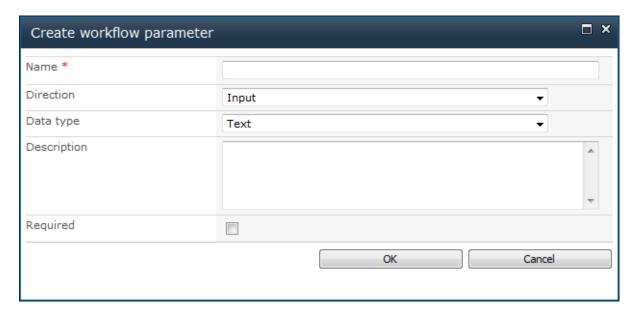


• The **User Defined Action Parameters** dialog will be displayed listing all of the current workflow parameters that are configured with their type and if it is an input or output field



To create a new workflow parameter:

- In the User Defined Action Parameters Ribbon, click on New.
- The **Create Workflow Parameter** dialog will be displayed.
  - o **Name**: The name of the workflow parameter.
  - o **Direction**: Select either an input or an output workflow parameter.
  - o **Data Type**: The data type of the workflow parameter.
  - o **Description**: The description of the field that will be shown on the User Defined Action form when configuring the UDA (the description will only appear for Output Parameters).
  - **Required**: Specify if the workflow parameter is required.



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To modify an existing workflow parameter:

- In the **User Defined Action Parameters** dialog, select the workflow parameter in the list.
- In the Ribbon, click on **Modify**.
- In the **Modify workflow parameter** dialog, make the changes. Changes to the type cannot be made.
- When all changes have been made, click **Save**.





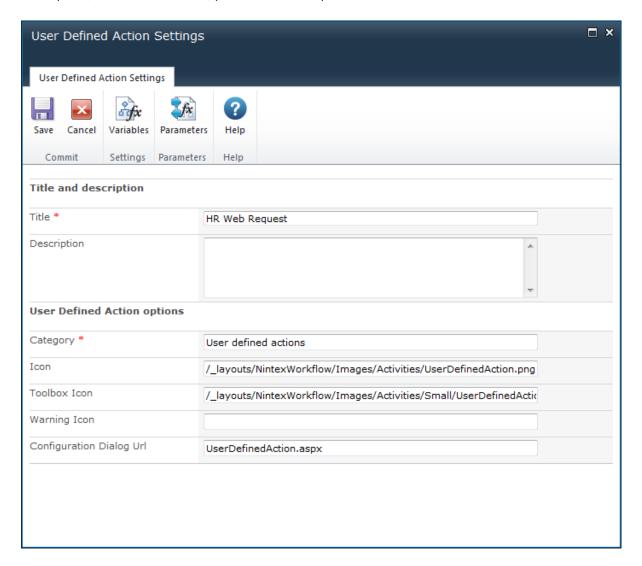
To delete an existing workflow parameter:

- In the User Defined Action Parameters dialog, select the workflow parameter in the list.
- In the Ribbon, click on Delete.

:

# 3.17 User Defined Action Settings

Use the **User Defined Action Settings** dialog to set the User Defined Action (UDA) title and description, workflow variables, parameters and options.















### **User Defined Action options:**

- Category: Specify the category under which to list the UDA in the Workflow Actions Toolbox.
- **Icon:** The location path of the image that the UDA is to use when represented on the workflow designer canvas. If nothing customized is specified, the default Nintex Workflow icon will be used.
- Toolbox Icon: The location path of the image that the UDA is to use when represented in the Workflow Actions Toolbox. If nothing customized is specified, the default Nintex Workflow icon will be used.
- Warning Icon: The location path of the image that the UDA is to use when represented on the workflow designer canvas and all required parameters for the UDA have not been configured. If nothing customized is specified, the default Nintex Workflow icon will be used.
- **Configuration Dialog URL**: To use a custom form, specify the URL of the custom form. For more information on how to use custom forms with the UDA, refer to the Nintex Workflow 2010 SDK (available from www.nintex.com or http://connect.nintex.com).

#### Ribbon menu buttons:

- Variables: Create workflow variables and start data. Please refer to Workflow variables.
- **Parameters:** Create input and output parameters for the UDA. Please refer to <u>User Defined</u> Action Parameters.

### 3.18 User Defined Actions

**User Defined Actions (UDA)** provides the ability to string together a predefined set of multiple workflow actions for workflow designers to use when creating a workflow. The **UDA** feature is similar to using <u>workflow snippets</u>, however a **UDA** will allow for Input and Output parameters to be defined which can then be used as a single action within a workflow.

An example of when a **UDA** might be useful is preconfiguring a web request workflow action and saving it as a **UDA** which a workflow designer can then drag and drop into their workflow without having to configure any of the settings within the web request workflow action. In addition to that, an input parameter can be defined for a user to provide their credentials for the web request and the output parameter for any values that might be returned by the web request.

Note: Only Site Administrators, Site Collection Administrators and Farm Administrators can manage **User Defined Actions**.





### **Managing User Defined Actions**

A **UDA** can be defined globally for the farm in SharePoint Central Administration, for a specific site collection or for individual sites.

Note: **UDA**s must be initially created at a Site level. They can then be used at the:

- Site Collection Level by Promoting the UDA, OR;
- Web Farm level by Exporting and Importing the UDA.



To manage UDAs for a Site:

- Navigate to the Site home page.
- Activate the Site Actions menu, hover over Nintex Workflow 2010, click on Manage User Defined Actions.

To manage UDAs for the Site Collection:

- Navigate to the Top level site home page.
- In the Site Actions menu, hover over Nintex Workflow 2010, click on Manage User Defined Actions.
- Click on Switch to site collection level settings.

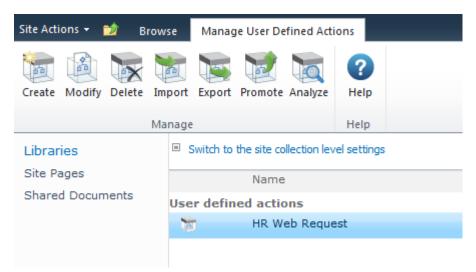
To manage User Defined Actions for the Web Farm:

- Navigate to **SharePoint Central Administration**.
- In the Quick Launch pane, click on Nintex Workflow Management then Manage user defined actions.



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### Things to note when using UDAs:

- For UDAs that have been modified but are currently in use in a workflow, the new settings of the UDA will only be in place once the workflow using the UDA is republished.
- A UDA containing a disallowed action will still run, but can only be imported if the user importing has rights to use all the workflow actions in the UDA.
- A UDA has a unique GUID ID. When importing a UDA, if the UDA has the same name but a different unique GUID ID, the UDA can be imported, however if the UDA has been renamed and an existing UDA with the same GUID ID exists, the user will be presented with options to overwrite or create a new UDA.

#### **Create a User Defined Action**

#### To create a UDA for a site:

- Navigate to the Manage User Defined Actions page.
- Click on **Create**. Design the UDA in the same manner you would to create any other Nintex Workflow. Refer to <u>Getting started with the Nintex Workflow Designer</u> on how to create a workflow.
- Configure the <u>User Defined Action Settings</u>. Refer to <u>User Defined Action Settings</u> for more information.
- Save and Publish the UDA.

#### To create a UDA for a Site Collection:

- Create the UDA in a site.
- Once completed, return to the Manage User Defined Actions page at the Site level.
- Promote the UDA. Refer to the 'Promote User Defined Actions' section below for more information.

#### To create a UDA for a Web Farm:

• Create the UDA in a site.





- Once completed, return to the Manage User Defined Actions page at the Site level.
- Perform an Export and Import process of the UDA. Refer to the 'Import and Export User Defined Actions' section below for more information.

#### **Modify a User Defined Action**

UDAs for a Site and Site Collection level can be modified. However, UDAs on the web farm level will need to be modified at the site level and re-imported at the site collection level.

### To modify a UDA:

- Navigate to the Manage User Defined Actions page.
- In the Manage User Defined Actions page, select the UDA from the list, click the Modify button

#### **Delete a User Defined Action**

UDAs can be removed from a site, site collection or web farm level.

#### To delete a UDA:

- Navigate to the Manage User Defined Actions page.
- In the Manage User Defined Actions page, select the UDA from the list, click the Delete button.

### **Import and Export User Defined Actions**

UDAs can be exported and imported.

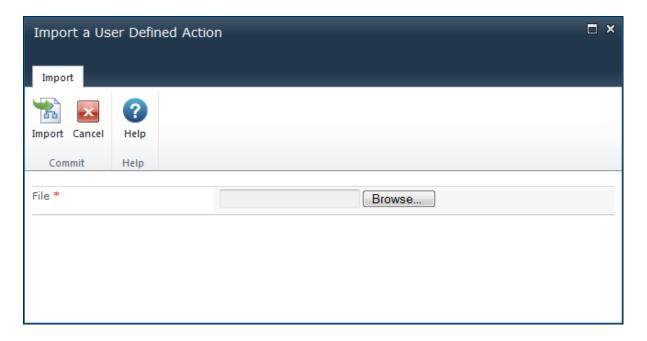
### To import a UDA:

- In the Manage User Defined Actions page, click the Import button.
- The **Import a User Defined Action** dialog will appear.



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- Click the **Browse** button and locate the '.uda' file to import.
- Click the **Import** button. The settings page will appear click **Publish**.
- The **User Defined Action** dialog, with all its settings, should now be listed in the **User defined** actions list.

### To export a UDA:

- In the Manage User Defined Actions page, select a UDA from the list and click the Export button.
- The export file will be created and will trigger the file download process in the web browser.
- Click the Save button and follow the standard procedure for downloading and saving files from the
  web browser. Consult the web browser documentation for more information on downlading and
  saving files.

#### **Promote User Defined Actions**

This will move the UDA to be managed from the parent scope. To promote a UDA:

- In the **Manage User Defined Actions** page, select the UDA from the list and click the **Promote** button.
- In the **Confirmation** dialog, click the **OK** button.

Note: Once a site level UDA has been promoted to the site collection level it cannot be undone.

### **Analyze User Defined Actions**

This function displays all workflows that currently use the UDA. It provides information such as the Workflow name and Workflow Version that uses the UDA and the version of the UDA it's using.



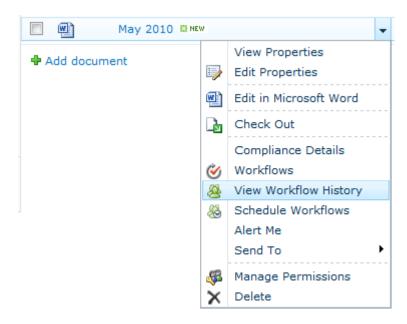


### 3.19 Viewing workflow history

A history of the various workflows ran on an item are kept. The workflow history provides a trail on how many workflows have been completed on the item or how many workflows have been cancelled or errored in relation to the item.

To view the item's workflow history:

- Navigate to the item's location.
- Click on the item to activate the Item Context menu, then click View Workflow History.



The Workflow Status page will be loaded. It shows workflows that are Running, Completed and Cancelled & Errored. For more information on the workflow, click on the title of the workflow.

Note: In the Completed Workflows and Cancelled & Errored Workflows sections there could be multiple identical titles, this means the item has been through the same workflow a number of times before. Ensure that the relevant workflow instance is clicked on. Use the **Started** date to help differentiate workflows.

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Nintex workflows that are running for this list item.

Running Workflows			
Name	Started by	Started	Idle time
Financial Reports	Administrator	7/6/2010 3:30 PM	5 minutes
Completed Workflows			
Name	Started by	Started	Completed
Financial Reports	Administrator	7/6/2010 9:40 AM	7/6/2010 3:30 PM
Financial Reports	Administrator	7/6/2010 9:27 AM	7/6/2010 9:33 AM
Cancelled & Errored W	orkflows		
Name	Started by	Started	Ended

The workflow will be loaded into the Workflow Viewer which gives a visual representation of the workflow. A summary is shown in the top left corner.

#### **Workflow Information** May 2010.docx Item: Workflow: Financial Reports Initiator: Administrator Started: 7/6/2010 9:27 AM Status: Completed 7/6/2010 9:33 AM Click here to show detail view

- To access the Workflow History, click the link Click here to show detail view.
- The Workflow History has three sections:
  - **Action History:** Shows every completed action associated with the workflow in order. Actions are added to the bottom of the list, so the first action to have completed is always at the top of the list. The action's start and end times and its time taken to complete (duration) are shown. Many workflow actions are instant, so expect to see many durations of '0
  - Task History: The Task History section shows the status of tasks that were created by user interaction workflow actions such as the 'Request approval' action. The start time, end time, outcome and any comments entered for the task are listed.
  - Workflow Messages: This section shows all messages that are generated by actions in the workflow. It also shows comments made by users (when required) and messages that are programmed to appear when the 'Log in the history list' action is used.
- To toggle between the Workflow History view and the Graphical view of the workflow click Show **Graphical View** above the Action History

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Action History				
Action	Start	E	nd	Duration
Finance Manager Appr	roval 7/6/20	010 9:49 AM 7/	/6/2010 3:30 PM	5 hours 40 minutes
Accounting Approval	7/6/20	010 9:40 AM 7/	/6/2010 9:49 AM	9 minutes
Task History				
Task: Finance Mana	ger Approval. Started at: 7	7/6/2010 9:49 AM, ended	d at: 7/6/2010 3:30 PM	
User	Assigned Time	Completed Time	Outcome	Comments
Administrator	7/6/2010 9:49 AM	7/6/2010 3:30 PM	Approved	(Administrator)
Task: Accounting A	pproval. Started at: 7/6/2	010 9:40 AM, ended at: 7	/6/2010 9:49 AM	
User	Assigned Time	<b>Completed Time</b>	Outcome	Comments
Administrator	7/6/2010 9:40 AM	7/6/2010 9:49 AM	Approved	(Administrator)
Workflow Message	s			
Time	Event		Message	Outcome
rime				
7/6/2010 9:49 AM	Task Cor	mpleted	(Administrator)	Approved

### 3.20 Viewing workflow status

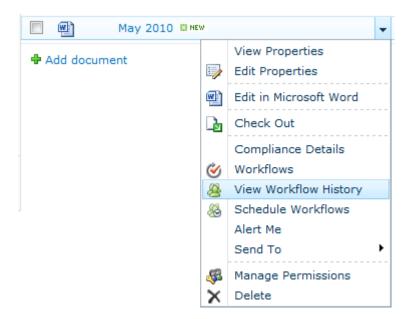
When an item is in a workflow, it may be is necessary to know what stage the item has reached in the workflow.

To view the item's workflow status:

- Navigate to the item's location.
- Click on the item to activate the Item Context menu, then click View Workflow History.







• The Workflow Status page will be loaded. It shows workflows that are **Running, Completed** and **Cancelled & Errored**. For more information on the workflow, click on the title of the workflow.

Note: In the **Completed Workflows** and **Cancelled & Errored Workflows** sections, there could be multiple identical titles: this means the item has been through the same workflow a number of times before. Ensure that the relevant workflow instance is clicked on. Use the **Started** date to help differentiate workflows.

Nintex workflows that are running for this list item.

Running Workflows			
Name	Started by	Started	Idle time
Financial Reports	Administrator	7/6/2010 3:30 PM	5 minutes
Completed Workflows			
Name	Started by	Started	Completed
Financial Reports	Administrator	7/6/2010 9:40 AM	7/6/2010 3:30 PM
Financial Reports	Administrator	7/6/2010 9:27 AM	7/6/2010 9:33 AM
Cancelled & Errored W	orkflows		
Name	Started by	Started	Ended

• The workflow will be loaded into the Workflow Viewer, which gives a visual representation of the workflow. A Workflow Information summary is shown in the top left corner. It contains the title of the item in the workflow, the name of the workflow, the initiator of the workflow, the date and time it was initiated and its status. As mentioned above, the possible workflow states are 'Running', 'Completed', 'Cancelled' and 'Errored'.

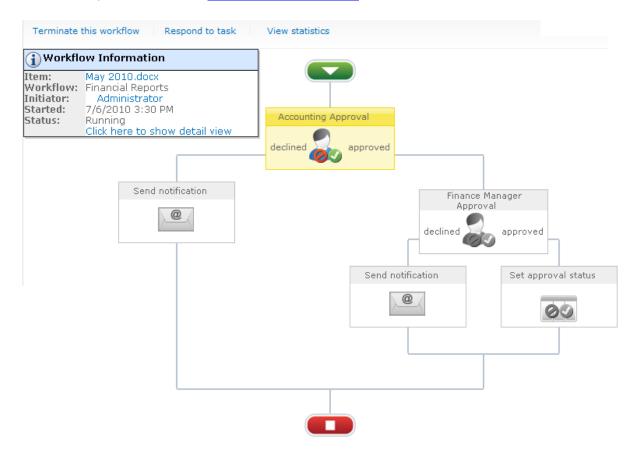






Status: Completed 7/6/2010 9:33 AM
Click here to show detail view

Note: Clicking the **Click here to show detail view** will display the workflow history in text format. For more information, please refer to the <u>Viewing workflow history</u>.



• In the Workflow Viewer, mouse over an action's icon, it will provide information about it in a dialog box. In the case of the 'Request approval' and 'Request review' actions the states can be Approved, Rejected, Pending, Cancelled, Not required and Continue (Request review only).





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### **Color Coding on Workflow Actions**

- Yellow When an action is current, or waiting for some sort of action.
- Green When an action is complete, or 'Request approval' or 'Request review' action is approved.
- Red When a 'Request approval' or 'Request review' action is rejected.
- Grey If an action has not yet occurred, or was not necessary.

### 3.21 Workflow Change Approval

This page is used to configure a change approval workflow for when users modify Nintex Workflows for the current site.

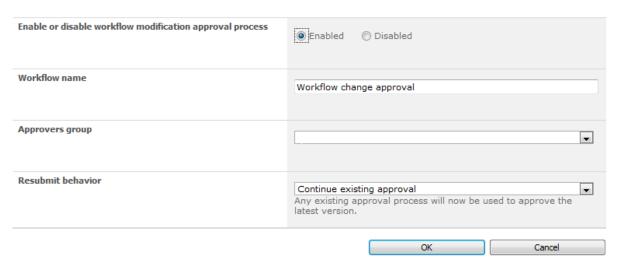
To configure a Workflow Change Approval for a Site:

- Navigate to the Site.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow Management group, click on Workflow change approval.

To enable workflow change approval:

- Click on Modify workflow change approval behaviour.
- Select Enabled radio button.
- Workflow name: The name of the change approval workflow that will be created.
- **Approvers group**: Choose the SharePoint security group that will be requested to Approve/Reject the changes when a workflow is modified.
- **Resubmit behaviour**: Specify the behavior when a workflow is resubmitted before the current change approval process has completed.

#### Modify workflow change approval behavior





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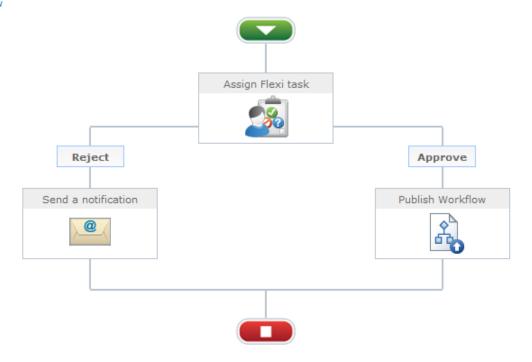
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Once configured, a standard change approval workflow will be displayed and links will appear allowing the user to **View approvals in progress** and **Edit workflow**.

- Modify workflow change approval behavior
- View approvals in progress
- Edit workflow



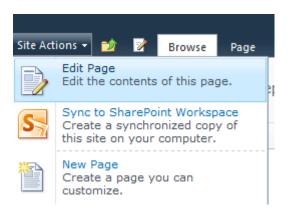
## 3.22 Workflows I have started web part

Use the **Workflows I've started** web part to display a list of workflows that have been started by the user that is currently logged in on a page within a site.

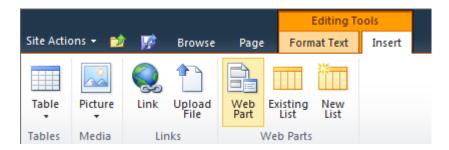
To use the Workflows I've Started web part:

- Navigate to the page of the site to which you want to add the web part.
- Click on the Site Actions menu, then click on Edit Page.

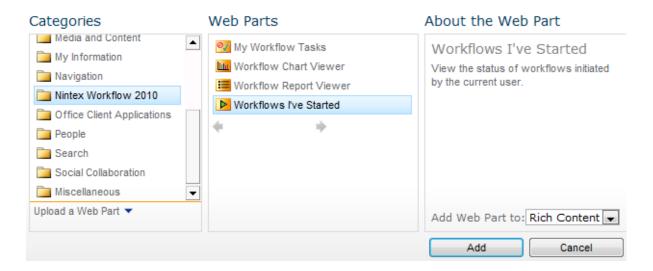




- Click within the **Rich Content** area, where the web part is to be inserted.
- In the Ribbon, click on the Insert tab, then click on Web Part.



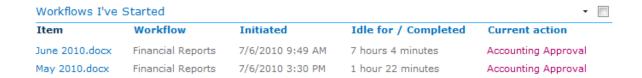
- In the Categories section, click on Nintex Workflow 2010.
- In the Web Parts section, click on the Workflows I've Started.
- Click the Add button.



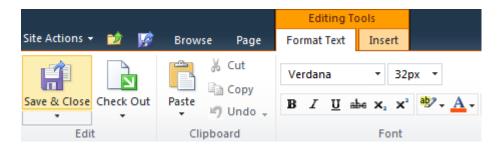
The page will reload with the web part in place.







- The default web part settings will display:
  - Item: The title of the item.
  - Workflow: The name of the workflow.
  - o **Initiated**: When the workflow was initiated.
  - o **Idle for / Completed**: How long it has been idle or completed.
  - Current Action: The action for which the running workflow is waiting (effectively the workflow's status).
- To use the web part with its default settings, click Save & Close.



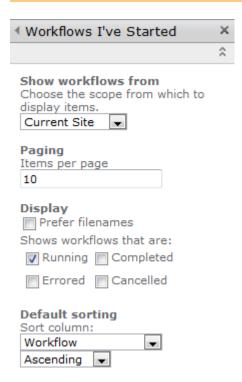
• To edit the default settings for the web part, click the \* to activate the web part menu, then click on **Edit Web Part**.



A series of options will be shown to the right of the page that are specific to this web part.

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### Web Part Settings: Workflows I've Started

- **Show workflows from:** Set to show workflows from the current site or from all the sites in the site collection. Enterprise Licenses version will be provided the option to choose the entire Farm.
- Paging: Set how many items are displayed on the page by the webpart.
- Display:
  - Prefer filenames: By default, document titles are displayed in the web part. If there is no document title set, the document's filename is displayed. Checking this option displays filenames instead of document titles.
  - Show workflows that are: Check the various options to display workflows that are either 'Running', 'Completed', 'Errored' or 'Cancelled'. The status will be displayed in the 'Current action' column.
- **Default sorting:** Specifies the order that records are displayed in.

# **4 Administration and Configuration**

### 4.1 Support packages

Support packages are used to collect key diagnostic information about Nintex products and their configuration for troubleshooting purposes.

Note: Support package information may include configuration information about the SharePoint farm, Nintex products including license details, workflow designs, workflow configuration, and log extracts. Please consider the contents of each support package carefully before passing to a third party.





### Support package types

The following types of support packages are available:

- Farm support packages
- Workflow support packages

Each support package type contains the following information.

Information	Farm support package	Workflow support package
SharePoint farm	Χ	X
Nintex configuration	Χ	X
<b>ULS logs</b>	Χ	X
Workflow instance		Χ

### Support package contents

The contents of a support package depends on the support package type.

#### **SharePoint farm information**

The SharePoint farm information contains the following data:

- SharePoint database information
- · Email configuration including incoming and outgoing
- Alternate access mapping information
- Servers within the farm
- SharePoint products installed, including patch levels
- SharePoint services status
- Farm feature status
- Farm solutions installed and deployment status

### Nintex configuration information

The Nintex configuration information contains the following data:

- Nintex Workflow global settings information
- LazyApproval Settings
- Nintex database configuration and mapping information
- Nintex Live information
- Nintex Form information
- Nintex workflow for Project Server information
- Nintex license information

### **ULS log information**



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The ULS log information contains a time-bound extract of the farm ULS Logs for each server within the farm as logged via SharePoint.

- For farm support packages, the extract covers the last hour.
- For workflow support packages, the extract covers the duration of the workflow, up to a maximum
  of five minutes.

The level of detail in the ULS logs is determined by the farm logging configuration in SharePoint.

#### Workflow instance information

The workflow instance information contains the following data:

- The workflow design as exported from the designer (the .nwf file)
- The workflow history for the specific workflow instance
- The compiled workflow code as used by the workflow engine
- Verbose logging information, if that feature is enabled within Nintex Workflow

#### **Related topics**

Monitoring workflow errors Creating support packages

### 4.2 SharePoint IDs for Nintex Features

Error messages displayed in SharePoint may reference identifiers for Nintex features. Following is the list of Nintex SharePoint feature IDs for Nintex Workflow 2010.

Note: Some features are hidden. Contact Support if you have further questions.

**Nintex SharePoint Feature NintexLiveAdminLinks** 29e9a673-31a4-46a3-b0d2-d8e1db1dbd92 **NintexWorkflow** 0561d315-d5db-4736-929e-26da142812c5 NintexWorkflowAdmin f7937973-0cf9-4f2d-a549-be2d3c25b772 NintexWorkflowClaimsMigration 4db97f4c-e643-4b1b-9f6a-43a9d817e6a2 NintexWorkflowContentTypeUpgrade 86c83d16-605d-41b4-bfdd-c75947899ac7 NintexWorkflowEnterpriseAdmin aa61ef91-ee2b-42d5-9911-7c6557ad90c2 NintexWorkflowEnterpriseWeb 2fb9d5df-2fb5-403d-b155-535c256be1dc NintexWorkflowEnterpriseWebParts 53164b55-e60f-4bed-b582-a87da32b92f1 NintexWorkflowInfoPath 80bf3218-7353-11df-af9f-058bdfd72085 NintexWorkflowLiveAdminWeb 485f5158-4b8a-453f-9eeb-7b33f5112adf NintexWorkflowLiveSite 54668547-c03f-4bb5-aaab-d9568ebaf9c9 NintexWorkflowWeb 9bf7bf98-5660-498a-9399-bc656a61ed5d **NintexWorkflowWebParts** eb657559-be37-4b91-a369-1c201183c779

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# 4.3 Creating support packages

You can create, download, and delete support packages for error-containing workflows and for the entire farm.

For more information about support packages, see **Support packages**.

To create a workflow support package

In the Workflow Errors section, in the Actions column, click Create Workflow Support Package for the desired workflow.



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Note: Workflow support packages can be created for error-containing workflows only.

To create a farm support package

In the Farm Support Packages section, click Create Farm Support Package.

To download a support package

Click the linked package file name: For workflows, these links are in the Actions column; for the farm, these links are in the Package Name column.





Example file names: SupportPkg-Workflow-10142014-05.zip, SupportPkg-Farm-10142014-01.zip

To delete a support package

• In the Action or Actions column, click **Delete**.

#### **Related topics**

Monitoring workflow errors
Support packages

### 4.4 Monitoring workflow errors

You can monitor error-containing workflows on the site using Nintex Workflow Support Console.

To access Nintex Workflow Support Console

- 1. On the Central Administration Home page, click Nintex Workflow Management.
- 2. Click Support Console.

To view a list of workflow errors on another content database

 In the Workflow Errors section, select the content database from the Content database drop-down list.

To view a workflow containing errors

• In the Workflow Name column, click the linked workflow.

To access the site for the workflow

• In the Site URL column, click the linked site.





#### Related topics:

<u>Creating support packages</u> Support packages

#### 4.5 Licensing settings

Nintex Workflow uses a license file (.nlf) for server licensing. A single license file is used to store information about all servers in your organisation that are licensed for Nintex Workflow.

#### **Nintex Licensing Options**

Nintex Workflow 2010 is available in three editions – Workgroup, Standard and Enterprise.

#### Nintex Workflow 2010 - Enterprise Edition and Standard Edition

A license is required for each SharePoint front-end server where user interaction with Nintex Workflow 2010 components occurs.

Please contact our sales team if you need advice at <a href="mailto:sales@nintex.com">sales@nintex.com</a>.

#### Nintex Workflow 2010 - Workgroup Edition

This license covers a single SharePoint front-end server environment with up to five team sites. Only one Workgroup Edition license can be purchased. If more than five site activations or multiple front-end servers are required, a Standard or Enterprise Edition license is required.

Note: Administrators are able to manage which sites Nintex Workflow has been activated on and deactivate Nintex Workflow on sites that no longer require Nintex Workflow functionality.

Please contact our sales team if you need advice at sales@nintex.com.

#### **Software Assurance**

Valid Software Assurance is required in order to update to the latest version of Nintex Workflow.

#### 4.6 Database settings

The **Database setup** allows an Administrator to configure and manage the Nintex Workflow database settings.

To configure and manage the Nintex Workflow database settings:

Navigate to the SharePoint Central Administration.





• In the Quick Launch, click on Nintex Workflow Management, click on Database setup.







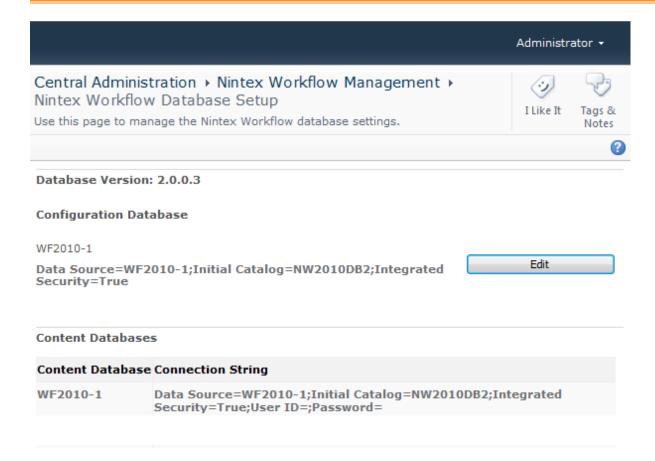
#### Nintex Workflow Management

Licensing | Database setup | Web Application activation | Manage allowed actions |
Global settings | LazyApproval settings | Message templates | Manage workflow constants |
Manage user defined actions | Manage context data | Manage reports | Administration reports

• These settings need to be configured second after the licensing but prior to other settings to allow Nintex to store its configuration settings.







#### **Configuration Database**

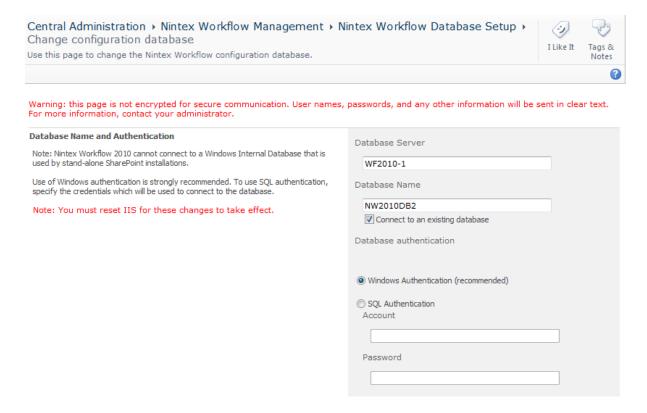
Each Nintex Workflow installation requires that one configuration database be specified to store the server specific configuration settings required for running the application.

There are essentially two options here, firstly a new database can be created by Nintex Workflow, or alternatively an existing database can be used by marking the **Connect to existing database** check box. For either option, the properties of the connection string need to be configured. These being the name of the SQL Server database server, the name of the database and the authentication settings.









#### To change the Configuration Database:

- On the Nintex Workflow Database Setup page, click on the Edit button.
- Make the changes required.
- When all settings are configured, click the OK button.

#### **Content Databases**

At runtime each workflow requires a content database. Hence at minimum, Nintex Workflow requires at least one content database to be configured.

# Content Databases Content Database Connection String WF2010-1 Data Source=WF2010-1;Initial Catalog=NW2010DB2;Integrated Security=True;User ID=;Password= @ Add content database @ View database mappings @ Manage database mappings

Again there are essentially two options here, firstly a new database can be created by Nintex, or alternatively an existing database can be used by marking the **Connect to existing database** check box. For either option,





the properties of the connection string need to be configured. These being the name of the SQL Server database server, the name of the database and the authentication settings.

Note: By adding multiple content databases, Nintex Workflow can automatically distribute the workflows within each site collection to their separate content databases to help spread the load. In small farm scenarios it is reasonable to use the same database for the content and configuration databases.

#### **KNOWN ISSUE**

Title	Error establishing connection to SQL Server		
Problem	'An error has occurred while establishing a connection to the server. When connecting to SQL Server, this failure may be caused by the fact that under the default settings SQL Server does not allow remote connections. (provider: Named Pipes Provider, error:40 - Could not open a connection to SQL server)'.		
Resolution	If you receive the abovementioned error or something very similar and the default Server name in the Add Configuration Database page is:  "LOCALSERVERNAME\Microsoft##SSEE", then here is some information.  When the user has installed SharePoint as standalone and not connected to any existing install of SQL Server, an embedded instance is used called Microsoft##SSEE. This instance is locked down to other applications.  To install Nintex Workflow 2010, an additional database instance must be installed. This can be SQL Server Express 2005 or 2008, which is free and available from: <a href="http://www.microsoft.com/">http://www.microsoft.com/</a> It can coexist on the same server as SharePoint.  The Nintex Workflow configuration pages must then be changed to point to this new database.		

#### 4.7 Manage content databases

#### Add content database

The add content database page is used to configure and setup additional content databases for Nintex Workflow. Nintex Workflow supports the use of multiple content databases. All data generated from a particular site collection is stored within a single content database. By default, when a workflow is first run on a site collection, a content database is selected automatically based on how many site collections it already contains.

To add a new content database:

• In the Content Databases section, click Add content database.





- In the Database Server text box, enter the name of your database server. (Note: it defaults to the default SharePoint database server).
- In the Database Name text box, enter a name for the database.
- Click OK.

## View database mappings

The view database mappings page is used to determine which workflow content database stores the data for a particular site collection. The page lists all site collections and their corresponding database.

#### Manage database mappings

The manage database mappings page allows selection of which workflow content database to use when the site collection Feature is activated on a new site collection. This is done per SharePoint content database, so all site collections held within a particular SharePoint content database will use the specified workflow content database. Site collections that already have the workflow Feature activated will not be affected by changes in these settings.

To change a database mapping:

- In the Content Databases section, click Manage database mappings.
- To map a **SharePoint Content Database** select the desired database in the **Map to Workflow Content Database** drop-down.
- Click OK.

#### 4.8 Web Application activation settings

The **Web Application Activation** page provides the option to activate the Nintex Workflow solution to the web farm. These settings must to be configured after importing the <u>Nintex Workflow license</u> and configuring the <u>database settings</u>.

To activate Nintex Workflow on web farm:

- Navigate to SharePoint Central Administration.
- In the Quick Launch, click on Nintex Workflow Management click on Web Application activation.



#### Nintex Workflow Management

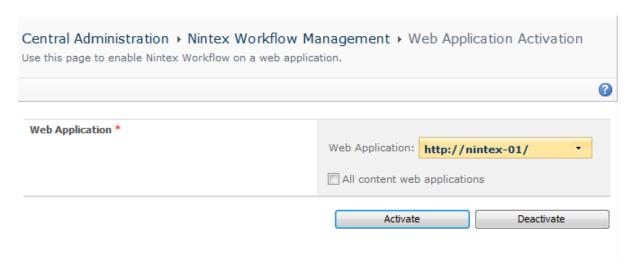
Licensing | Database setup | Web Application activation | Manage allowed actions |
Global settings | LazyApproval settings | Message templates | Manage workflow constants |
Manage user defined actions | Manage context data | Manage reports | Administration reports

• The default web application name should be chosen automatically - if not, select it using the drop-down, then click the **Activate** button.





Note: By checking All content web applications, Nintex Workflow will be activated across the web farm.



It is now best to configure the email-related Global Settings.

## 4.9 Managing workflow actions

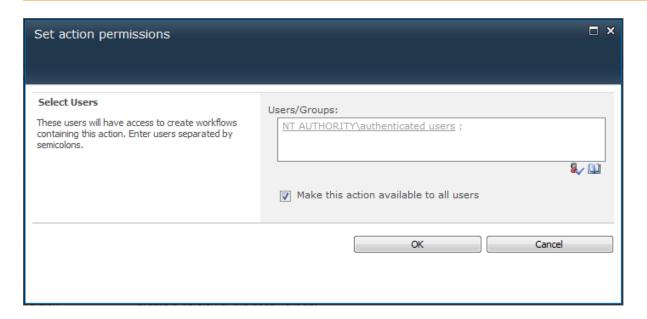
This page is used to manage the Nintex Workflow actions that are available to workflow designers for the current farm, site collection or site. Workflow actions can either be restricted by permissions or not be made available at all to all users by unchecking the workflow action.

To modify the settings for the web farm:

- Navigate to **SharePoint Central Administration**.
- In the Quick Launch, click on Nintex Workflow Management, click on Manage allowed actions.
- By default, actions are accessible to all users. Permissions can be set individually for each action by selecting the workflow action's row and clicking the **Edit permissions** in the Ribbon.







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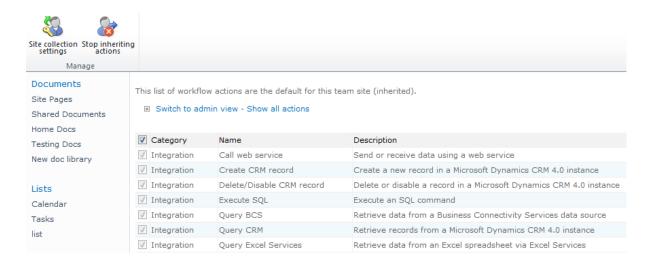






To modify the settings for a site collection or site:

- Navigate to the Site Collection or Site.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow Management group, click on Managed allowed actions.
- To set permissions for a workflow action:
  - o Select the workflow action's row, in the **Ribbon**, click on **Stop inherting actions**.



- o **Edit permissions** button will be enabled when a action row is selected.
- To allow specific workflow actions to be used, check the boxes of the actions you want to appear in the Workflow Designer then click **OK** (not shown).

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This list of workflow actions is the default for this farm.

#### Add an action

Category	Name	Description
▼ Integration	Call web service	Send or receive data using a web service
▼ Integration	Create CRM record	Create a new record in a Microsoft Dynamics CRM 4.0 instance
▼ Integration	Delete/Disable CRM record	Delete or disable a record in a Microsoft Dynamics CRM 4.0 instance
✓ Integration	Execute SQL	Execute an SQL command
✓ Integration	Query BCS	Retrieve data from a Business Connectivity Services data source
✓ Integration	Query CRM	Retrieve records from a Microsoft Dynamics CRM 4.0 instance
▼ Integration	Query Excel Services	Retrieve data from an Excel spreadsheet via Excel Services
✓ Integration	Query LDAP	Retrieve data from an LDAP source
▼ Integration	Query XML	Retrieve and process XML from a specified source
▼ Integration	Search query	Retrieve data by performing a SharePoint search
▼ Integration	Send / receive BizTalk	Send and or receive data to a BizTalk orchestration
✓ Integration	Update CRM record	Update a new record in a Microsoft Dynamics CRM 4.0 instance
▼ Integration	Update XML	Retrieve XML from a specified source, modify and save to a specified location
▼ Integration	Web request	Send or receive information using a HTTP request
Libraries and lists	Capture document set version	Create a version of the document set

Note: If an action is not checked it will not be selectable in the workflow designer. If an imported workflow contains an action that is not allowed, the workflow cannot be saved or published.

#### Enforce allowed actions at run time

The Enforce allowed actions at run time option is available in the Global Settings from the Nintex Workflow Management section in Central Administration. When this option is enabled, a workflow that contains an action that is not marked as **Allowed** will cause the workflow to error. However, not all actions are affected by this option. Actions that don't apply to this option are actions that are native within Microsoft SharePoint Server 2010.

## 4.10 Global Settings

The Global Settings page is used to set Nintex Workflow settings including email, verbose logging, allowed actions and other application options for the web farm. The "Global Settings" page is available from the Nintex Workflow Management section in Central Administration. These settings need to be configured after importing Nintex Workflow licensing, configuring database settings and configuring web application activation.

To configure the Global Settings:

- Navigate to **SharePoint Central Administration**
- In the Quick Launch, click on Nintex Workflow Management, click on Global settings.

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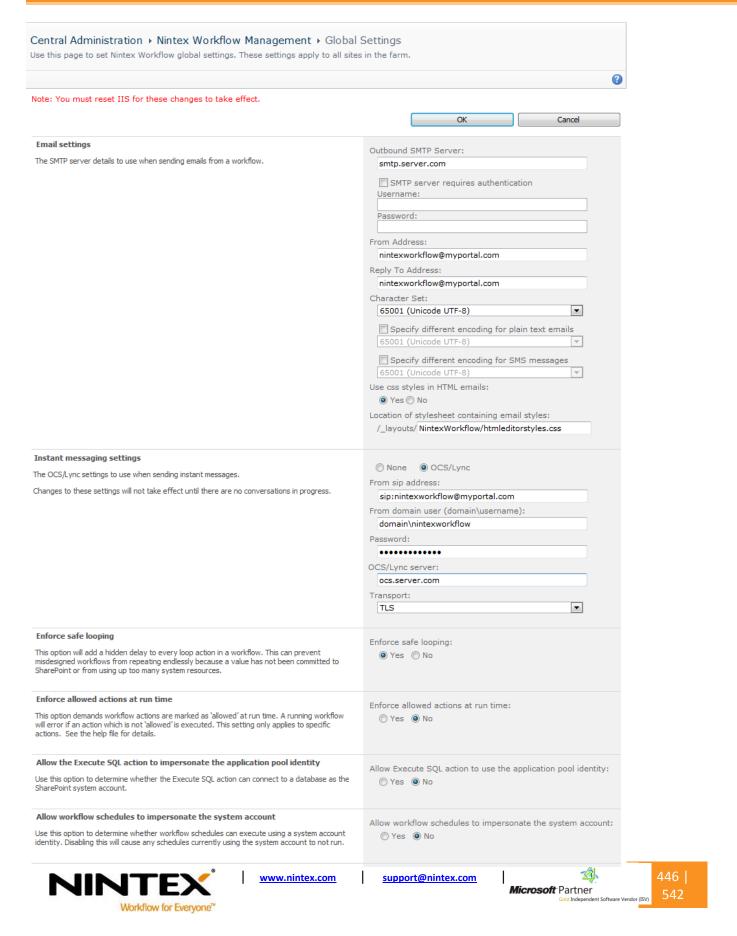
#### Nintex Workflow Management

Licensing | Database setup | Web Application activation | Manage allowed actions |
Global settings | LazyApproval settings | Message templates | Manage workflow constants |
Manage user defined actions | Manage context data | Manage reports | Administration reports

• Fill in the appropriate details for your environment and click the **OK** button.









It is now possible to Activate Nintex Workflow.

There are a number of other settings to change global options. Please read the descriptions on the page to understand each option.

#### **OCS/Lync settings**

Configure the server settings to allow Nintex Workflow 2010 to integrate with OCS/Lync. Enabling OCS/Lync integration allows the Get user status action, the Get users by status action and LazyApproval via instant messaging to be used.

Upgrade note: If the *Nintex Workflow 2010 OCS Integration component* is installed and configured for the web farm, the **Instant messaging settings**section will be configured to use **LCS** by default. If Office Communication Server 2007 is used, select the option **OCS/Lync** to enable the new functionality. If Live Communications Server 2003/2007 is used, leave the setting as **LCS**. The **Get current status** action, **Get users by status** action and **LazyApproval via instant messaging** is not compatible with Live Communications Server 2003/2007.

#### Enforce allowed actions at run time

When the **Enforce allowed actions at run time** option is enabled, a workflow that contains an action that is not marked as <u>Allowed</u> will cause the workflow to error. However, not all actions are affected by this option. Actions that don't apply to this option are actions that are native within Microsoft SharePoint Server 2010.

Global settings are cached and refreshed automatically every 15 minutes. For changes take effect immediately, perform an IISRESET and restart the Windows SharePoint Services timer service.

#### 4.11 Managing LazyApproval settings

This page is used to manage the LazyApproval feature of Nintex Workflow. It provides the options to edit the current list of recognized terms or add others, edit the LazyApproval notification footer and set phrases to ignore. LazyApproval must first be enabled for the system. Please refer to the <a href="About LazyApproval">About LazyApproval</a> for more information.

#### **Enabling / Disabling LazyApproval**

There are two LazyApproval methods that can be enabled for Nintex Workflow:

- LazyApproval via email: Workflow task actions can be configured to accept responses from users via an email reply.
- LazyApproval via instant message: Workflow task actions can be configured to accept responses via an automated OCS or Lync conversation. This feature is only available for Nintex Workflow Enterprise only.





#### To enable **LazyApproval** for the farm:

- Navigate to SharePoint Central Administration on your server.
- In the Quick Launch, click on Nintex Workflow Management, click on LazyApproval settings.
- Click on Enable / Disable LazyApproval.



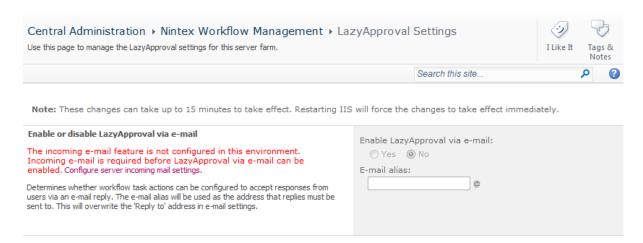
Enable / Disable LazyApproval for the current server farm.

#### LazyApproval via email

Note: If the link **Configure server incoming mail settings** is shown in the **Enable or disable LazyApproval via email** option then those settings are not configured for SharePoint. Please configure them according to your SharePoint configuration documentation. Return to this page after completing your configuration. If those settings are configured, the link **Enable / Disable LazyApproval** which be shown instead.

#### To configure LazyApproval via email:

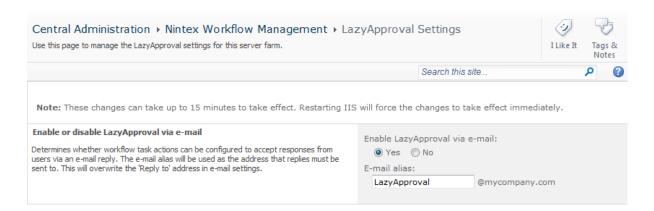
• In the Enable LazyApproval via email option, select Yes.



- The **Alias** is the name that will be used in the email address that sends the notifications and accepts the LazyApproval replies.
- When all settings are configured, click the **OK** button.





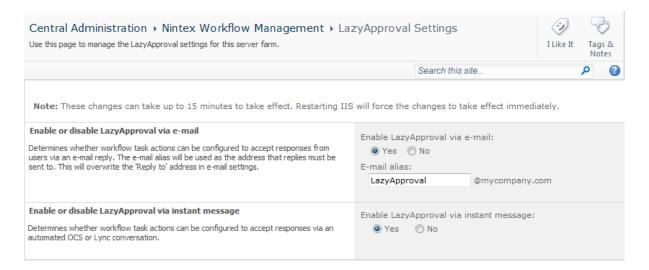


#### LazyApproval via instant message

Note: If the **Enable or disable LazyApproval via instant message** option is not available, please ensure that **Instant messaging settings** have been configured in the <u>Global Settings</u>.

To configure LazyApproval via instant message:

• In the Enable LazyApproval via instant message option, select Yes.



• Click the **OK** button.

#### **Managing Phrases**

A list of allowed words will appear which are those that will be recognized by the LazyApproval process. Phrases or terms can be added or removed as required.

To create a new phrase:



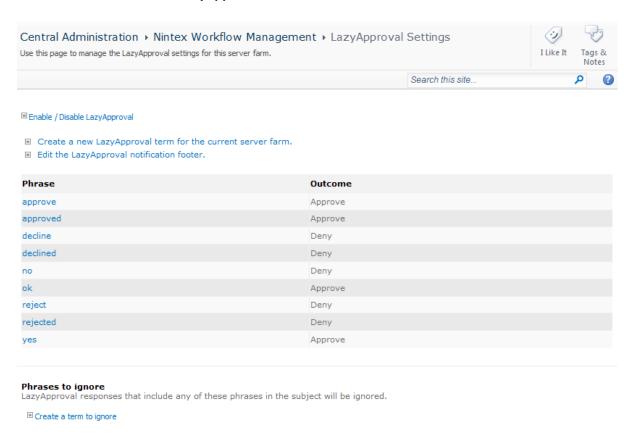
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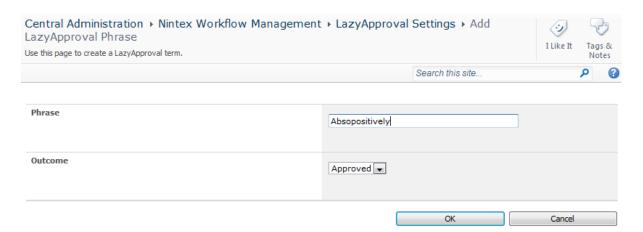




• Click Create a new LazyApproval term for the current server farm.



- Enter a phrase that will be recognized by the LazyApproval system, as well as an outcome (**Approve** or **Deny**). The maximum string length is 255 characters.
- When all settings are configured, click the **OK** button.

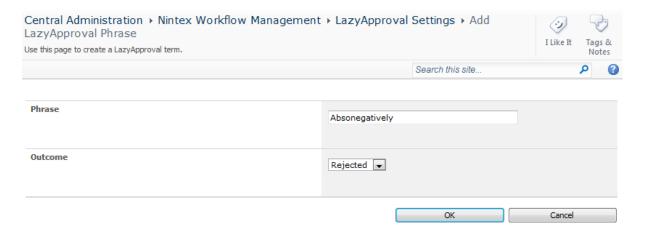


To edit or delete an existing phrase:





- Click the phrase hyperlink and make the changes required.
- Click the **OK** button to commit the changes.

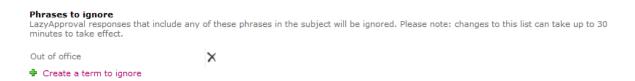


#### **Managing Phrases to Ignore**

By creating a phrase to ignore, the LazyApproval will discard email messages that contain the phrase in the subject line. This is useful for out of office and automated replies that an approver may have. If this is not configured, when a automated reply is sent to the LazyApproval alias it will cause the LazyApproval feature to go into a loop where the LazyApproval alias will send a response to the sender each time the sender sends an automated reply.

To create a phrase to ignore:

- Navigate to **Central Administration**.
- In the Quick Launch, click on Nintex Workflow Management, click on LazyApproval Settings
- In the Phrases to ignore section, click on **Create a term to ignore**.
- Enter a term/phrase, click OK.



To delete an existing phrase to ignore:

• In the Phrases to ignore section, for the term which needs to be deleted, click the **Delete** hyperlink.

## 4.12 Defining message templates





Message templates used by the 'Request approval' action can be defined globally for the farm in SharePoint Central Administration, for a specific site collection or for individual sites.



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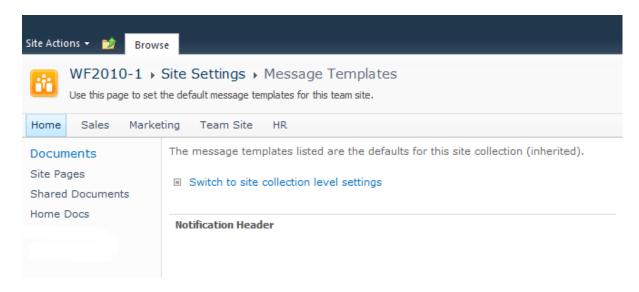
To change the Message Template for the Web Farm:

- Navigate to **SharePoint Central Administration**.
- In the Quick Launch, click on Nintex Workflow Management, click on Message Templates.



To change the Message Template for the Site Collection:

- Navigate to the top level site home page.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow section, click on Message Templates.
- Click on Switch to site collection level settings.



To change the Message Template for a Site:

- Navigate to the Site level home page.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow section, click on Message Templates.





#### The Message Templates page displays:

- The current settings for the standard message header and footer.
- The current default messages used for the scenarios 'Approval Required' and 'Approval No Longer Required'.

Note: The default content style for the message templates is Rich Text, which provides the ability to use different fonts, colours and simple HTML styles. Nintex Workflow uses the Rich Text toolbar provided by SharePoint.





Various sections of the email messages can be edited. One of the important features is to add content that is dynamically created using the <u>insert reference</u> function.

• Once you have made all the changes necessary to the various sections of the message template, click the **OK** button.

Note: Changes made to the message templates will not affect workflows in progress. Changes will only be seen when new instances of the workflow are started.

## 4.13 Activating Nintex Workflow

In order to design workflows and interact with Nintex Workflow the product needs to be activated in the site where the functionality is required.

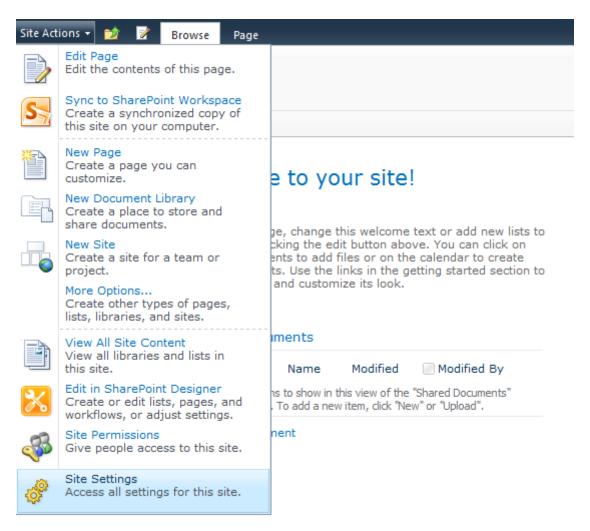


The first step is to activate the product for the Site Collection (see Step 1 below) and the second step is to activate Nintex Workflow per site (see Step 2 below).

#### 1. Activating Nintex Workflow for the Site Collection

To activate Nintex Workflow in a site collection:

- Navigate to the Top Site level home page.
- In the **Site Actions** menu, click on **Site Settings.**



In the Site Collection Administration group, click on Site Collection Features.





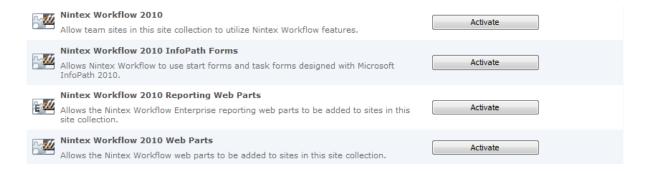


#### Site Collection Administration

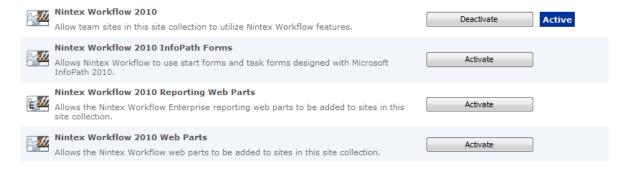
Portal site connection Site collection policies

Search settings
Search scopes
Search keywords
FAST Search keywords
FAST Search site promotion and demotion
FAST Search user context
Recycle bin
Site collection features
Site hierarchy
Site collection audit settings
Audit log reports

• In the Nintex Workflow 2010 section, click the Activate button.



After a short delay, the page will refresh and the status will become Active.



It is now possible to activate Nintex Workflow 2010 features in the sites within this site collection.

#### 2. Activating Nintex Workflow in a site

Nintex Workflow must be activated at the site collection level before it can be activated on the site level.





To activate Nintex Workflow in a site:

- From the Site level home page, in the **Site Actions** menu, click on **Site Settings**.
- In the Site Actions group, click on Manage site features.



Site Actions

Manage site features
Save site as template
Reset to site definition
Delete this site
Site Web Analytics reports
Site Collection Web Analytics
reports



Reporting Services
Manage Shared Schedules
Reporting Services Site Settings

- In the **Nintex Workflow 2010** section, click the **Activate** button.
- After a short delay, the page will refresh and the status will become Active.

It is now possible to start using Nintex Workflow within this site.

## 4.14 Configuring user preferences

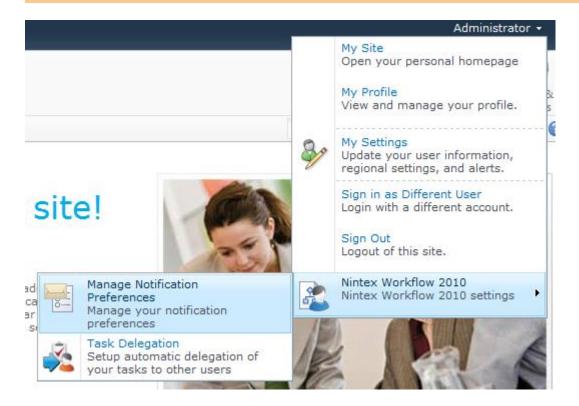
Nintex Workflow notifications can be sent via email, Office Communication Server (OCS) or SMS, depending on how the SharePoint environment is configured. Each user can then set their preferred method of notification for both business hours and after hours.

To set your personal preferences:

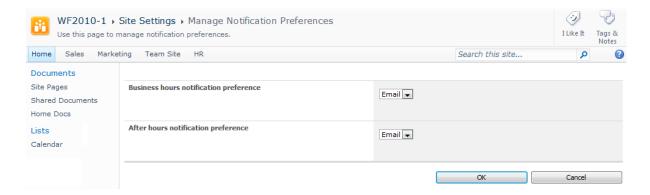
- Activate the drop-down from the logged-in user name link at the top of a page.
- Mouse-over Nintex Workflow 2010 then click on Manage Notification Preferences.





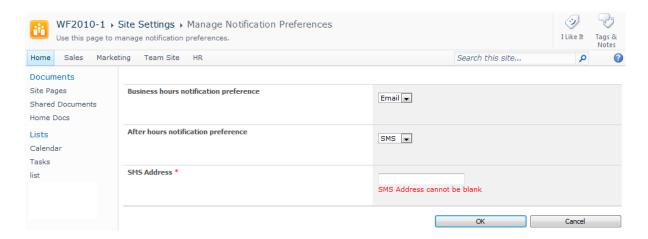


- There are sections for Business hours notification preference and After hours notification preference. The default settings are set to Email.
- In the drop-down, select an option that is available within the current network setup.



- The values for Email and OCS are automatically determined by the user account currently signed in
- If selecting **SMS**, enter the SMS address in the textbox provided.





The SMS address is often something like a mobile telephone number plus a domain. However, to
ensure the correct address is provided, please contact the System Administrator or equivalent for
the right format and settings.

Note: Nintex does not provide support for troubleshooting Email, SMS or OCS systems.

• When all settings are configured, click the **OK** button.

### 4.15 Security Settings

According to how a user is required to interact with Nintex Workflow there are different security considerations to be made. The table below outlines the minimum permissions required to perform the actions described. In general, the runtime permissions can be inherited from the site or the parent site but must be the effective permissions for the given user at the list level.

Nintex Role	Required "SharePoint Permission Level"	Note
Approver/Reviewer	Contribute (at the item level at least)	This role includes all users who will be a of the workflow from the SharePoint sit these permissions.
Lazy Approver	None	This role includes all users who will be a their assigned task. The user however w to visit the site.
Workflow Designer	Design	This role includes all users who are resp With these permissions the user can use related tools and pages. In order to be a be configured as a Workflow Designer.
Site Administrator	Full Control (on the site)	This role is responsible for activating an settings from the "Site Settings" page.
Server Administrator	Full Control (on the central administration site)	This role is responsible for the installation Workflow.





Workflow user	Contribute	Can start workflows, add schedules, vie
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#### **Configuring Allowed Workflow Designers**

There is a known permissions quirk with SharePoint 2010 workflows created using either Nintex Workflow or SharePoint Designer (SPD).

A Workflows list is used to hold all defined workflows for a team site. Upon creating your first workflow in SPD or activating the "Nintex Workflow 2010" feature, this list is given unique permissions, which copies the current permissions assigned within the site. As a result, the only people who will be able to modify permissions on this list are site owners or those who were given explicit 'Full Control' access before the list was created.

Nintex have exposed the list through the user interface to work around the permission quirk described. To add/remove users as designers, the user assigning the permissions must be a site owner or have Full Control access to the Workflows list.

To add a user or group to the Workflow designers group:

- Navigate to the site.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow group, click the link Allowed workflow designers.



Manage workflow constants Manage holidays Workflow change approval

Manage User Defined Actions View reports

From the permissions page the members can be maintained by adding them in the standard SharePoint manner. Ensure that users who require full access to the designer have "Full Control" set for their permissions.

#### **Configuring Workflow Action Security**

Permissions for each workflow action can be configured in the Manage workflow actions page.



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## 4.16 Manage Context Data

This page is used to manage context data that are available when designing Nintex Workflows. Users can edit existing context data or create new custom context data and deploy them using this settings page.

To configure context data:

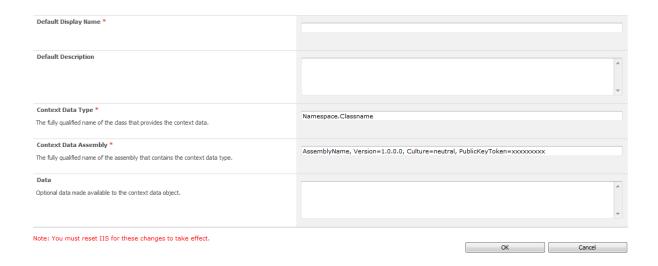
- Navigate to **SharePoint Central Administration**.
- In the Quick Launch, click on Nintex Workflow Management, click on Manage context data.



#### **Add new Context Data**

To add a new Context Data item:

- Click the Add new Context Data link.
- Fill in the appropriate details for the Context Data and when completed, click the **OK** button.





#### **Edit/Delete Context Data**

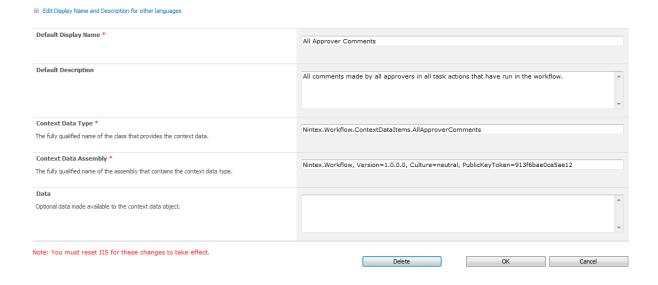
To edit an existing item:

- Click on the Context Data **Display Name** link in the Manage Context Data screen.
- Make the changes required for the Context Data and when completed, click the **OK** button.

Note: If other languages are available in the SharePoint environment, the **Display Name** and **Description** for the Context Data can be set for a specific language. Click on the **Edit Display Name and Description for other languages** link to edit the details for other languages.

To delete an existing item:

- Click on the Context Data **Display Name** link in the Manage Context Data screen.
- Click the **Delete** button.



## **Edit Display Name and Description for other languages**

Configure Display and Description labels for the context data item when used in sites of a non default language.

To edit the Display Name and Description for other languages:

- Click on the Context Data **Display Name** link in the Manage Context Data screen
- Click on the Edit Display Name and Description for other languages



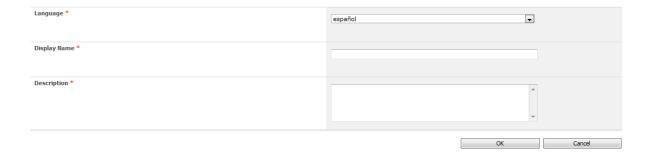
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- In the Language drop-down, select the language of the Context Data to be edited
- Make the changes required and when complete, click the OK button.



## 4.17 Purge workflow data

The Purge workflow data provides the option to delete historic data from the Nintex Workflow database. This option is also available as a NWAdmin operation. Reasons that data may need to be removed:

- Deleting old data to decrease the size of the Nintex Workflow content database(s).
- Deleting data added during testing of a workflow.
- Deleting data from lists that have been deleted.

Workflow data can be purged globally for the web farm, a specific site collection or individual sites.

To purge workflow data for the web farm:

- Navigate to SharePoint Central Administration.
- In the Quick Launch, click on Nintex Workflow Management, click on Purge workflow data.

To purge workflow data for the site collection:

Navigate to the top level site home page.

- In the **Site Actions** menu, click on **Site Settings**.
- In the Nintex Workflow section, click on **Purge workflow data**.
- Click on Switch to site collection settings.

To purge workflow data for a site:

- Navigate to the top level site home page.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow section, click on Purge workflow data.

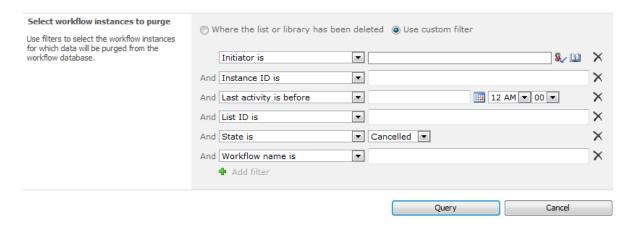






Purging workflow data is performed in two stages. When 'Query' is pressed, the matching workflow instances will be displayed for review. Pressing 'Purge' will delete the data.

Once data has been purged, it cannot be recovered without restoring a previous version of the database.











To purge workflow data:

- Navigate to the Purge workflow data settings.
- In the **Select workflow instances to purge**, specify filters to select the workflow instances for which data will be purged.
  - Where the list or library has been deleted: removes historic data for any workflows that are associated to a list that has been deleted.
  - **Use custom filter**: set the filter parameters
    - Initiator is: removes historic data for workflows that were started by a specific user.
    - Instance ID is: removes historic data for a specified workflow instance where the instance ID matches the GUID.
    - Last activity before local is: removes historic data for workflow where the last action was before a specific time, specified in server local time.
    - List ID is: removes historic data for workflows associated with a specific internal GUID of a list.
    - **List name is**: removes historic data for workflows associated with a specific list name. Please note that this option is only available when purging workflow data on a site level
    - State is: removes historic data for workflows with a specific state (Completed, Cancelled, Error).
    - Workflow name is: removes historic data for workflows with a specific name.
- Click on Query. This will provide a preview of the database entries matching all entered criteria.
- Click on Purge. This will delete historic data as specified from the content database(s).

Note: Once data has been purged, it cannot be recovered without restoring a backed up version of the Nintex Workflow content database.

#### 4.18 Managing workflow error notification settings

The **Workflow error notification** settings provides the options to specify to whom workflow error and cancellation notifications are sent.

Workflow error and cancellation notification can be set globally for the web farm, a specific site collection or individual sites.

To set the workflow notification settings for the web farm:

- Navigate to SharePoint Central Administration.
- In the Quick Launch, click on Nintex Workflow Management, then Workflow error notifications.





Note: By default the settings will inherit from the parent settings. A site will inherit its settings from the site collection and a site collection from the farm. If the setting is changed at a specific level, it will no longer inherit the settings from the parent.

To set the workflow notification settings for the site collection:

- Navigate to the top level site home page.
- In the **Site Actions** menu, click on **Site Settings**.
- In the Nintex Workflow section, click on Workflow error notifications.
- Click on Switch to site collection level settings.





To set the workflow notification settings for a site:

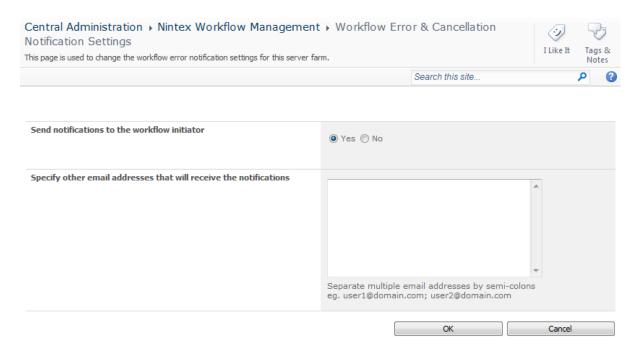
- Navigate to the site level home page.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow section, click on Workflow error notifications.

#### **Workflow Error and Cancellation Notification Settings**

The **Send notifications to the workflow initiator** option notifies the user who started the workflow if the workflow errors or is cancelled.

For additional users to be notified when a workflow errors or is cancelled, specify the email address of the user in the **Specify other email addresses that will receive the notifications** text field.

Notifications can be turned off by selecting **No** for **Send notifications to the workflow initiator** and leaving the **Specify other email addresses that will receive the notifications** text field empty.



# 5 Using the Workflow Designer

# 5.1 Getting started with the Nintex Workflow designer

Getting started with the Nintex Workflow designer.

## **Creating a workflow**





A workflow can be created in one of two ways.

To create a new workflow from within a Document Library:

- 1. Select the Library tab on the Ribbon.
- Click the Workflow Settings button and select Create a Workflow in Nintex Workflow from the menu options.

To create a new workflow from the Workflow Gallery:

- Click the Workflow Settings button in the Ribbon and select Manage Workflows with Nintex Workflow.
- 2. Click the Create link above the Published Workflows list.

Note: If the **Show template page when creating a new workflow** box ix checked (the default setting) the template selector will appear. To design a new workflow on a blank canvas, select **Blank**, or alternatively select a template from one of the categories.

The Nintex Workflow designer will open in the current window.

## The Nintex Workflow Designer

The Nintex Workflow designer page has three main areas; the **Workflow Actions** toolbox on the left, the **Ribbon** at the top and the design canvas in the center.

#### The Workflow Actions toolbox

The **Workflow Actions** toolbox lists the actions that can be used in the design canvas to create workflows. The actions are divided into groups of related actions. Click the heading of a group to view the actions in that group. The default groupings are:

- Commonly used
- Integration
- Libraries and lists
- Logic and flow
- Operations
- Provisioning
- User Defined Actions (shown only if the User Defined Actions have been created)
- User interaction
- My snippets (shown only if snippets have been created)

The names of workflow actions and the groupings can be edited by the Administrator. For more information please refer to the Managing workflow actions.





### Resizing and hiding the Actions toolbox

To resize the toolbox: Click and drag on the expander bar on the inside edge of the toolbox.

**To hide the toolbox:** Click the drawing pin icon located on the top right corner of the toolbox header. The toolbox will collapse, leaving a visible **Workflow Actions** tab.

**To access the toolbox:** Hover over the **Workflow Actions** tab. The toolbox will remain visible until the mouse is clicked elsewhere in the design canvas.

**To make the toolbox remain visible:** The toolbox will be visible when the mouse is over it, and will be hidden when the mouse is clicked anywhere in the design canvas.

To make the toolbox remain visible: Click the drawing pin icon to pin the panel open.

#### Adding actions to the design canvas

To design a workflow, add the desired actions onto the design canvas and configure each action. An action can be placed onto the design canvas by one of two methods:

- Left-click and drag an action from the Actions toolbox and drop it onto a drop zone on the design canvas; OR
- Right-click on a drop zone on the design canvas, click Insert Action and select the required action from the list.

### **Configuring actions**

To configure an action, select the drop-down menu in the title bar of the workflow action once it is on the design canvas.

**Configure:** Open the action settings dialog to configure the settings of an action.

**Copy:** Select to copy an action (includes all its configuration settings) and paste in to another location on the design canvas. Once the action has been copied, find the desired location on the design canvas, right-click on a drop zone and select **Paste.** 

Note: The configuration of the pasted action can then be modified independently of the original.

**Delete:** Select to remove the action and any modifications made to it from the workflow.

**Disable:** Select to disable the action from the workflow. Once the action is disabled it will be omitted when the workflow is run and hidden from status views. The action will appear dimmed when it is disabled.





Note: When an action is disabled, its child actions are also disabled.

The workflow action can also be disabled from the Actions dialog box. To do this, click **Common** in the Ribbon and check the **Disable** box.

#### The Ribbon Menu

The Ribbon menu can be found at the top of the design canvas. The options and related Help files are all listed below.

- Save: Please refer to Opening and saving workflows
- **Publish:** Please refer to Publishing a workflow
- **New:** Click **New** to clear the current design canvas and start a new blank workflow. A warning message will be shown if the current workflow has not been saved.
- Open: Please refer to Opening and saving workflows
- Close: Click to close the workflow designer and return to the original location. If the current workflow has not been saved, a prompt will appear to save before closing. If the workflow is not saved, the unsaved work will be lost.
- Print: Please refer to Printing
- Import: Please refer to Importing and exporting workflows
- Export: Please refer to Importing and exporting workflows
- Workflow Settings: Please refer to Workflow Settings
- **Zoom options:** Click the zoom buttons to increase or decrease the designer canvas viewing size. Click the **100%** button to restore the view to its normal state.
- **Nintex Live Catalog:** Click to display the list of services that can be added to the workflow toolbox. Please refer to <u>Using the Nintex Live Catalog</u>.

### 5.2 Association columns

The Association Columns feature is used to associate site columns with the workflow definition. Association columns are useful where you may need to reference columns for the 'current item' from within a reusable workflow. Association columns are automatically added to a list or library when a reusable workflow is associated to that list or library.

The Association Columns dialog allows associations to site columns to be created, added, deleted or modified.

Each Association Column is defined within the workflow definition. If these columns exist in the target library or list, they will be used. If they do not exist, they will be added to the target library or modified and deleted. Whilst Association Columns are predominantly used in reusable workflows associated with content types,



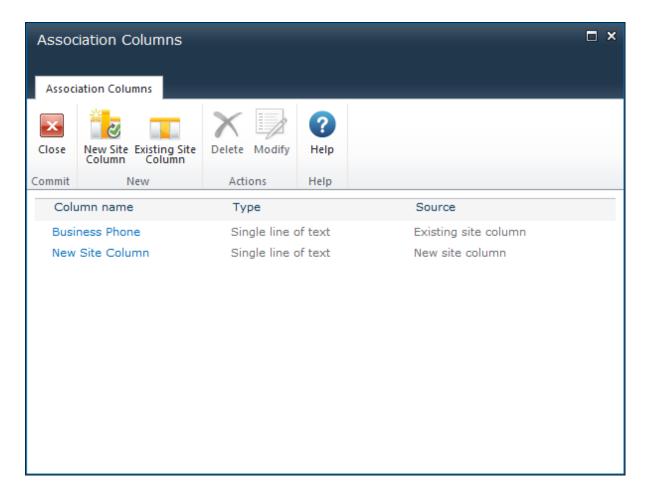


they do not associate with the content type itself, instead any defined columns are added to the relevant list or library where the content type is deployed.

Please note: Association columns do not work on site workflows.

#### To access the Association Column dialog box:

- 1. Navigate to the List Workflow you want to create Association Columns on.
- 2. Click on Workflow Settings in the Ribbon.
- 3. Select Association Columns.

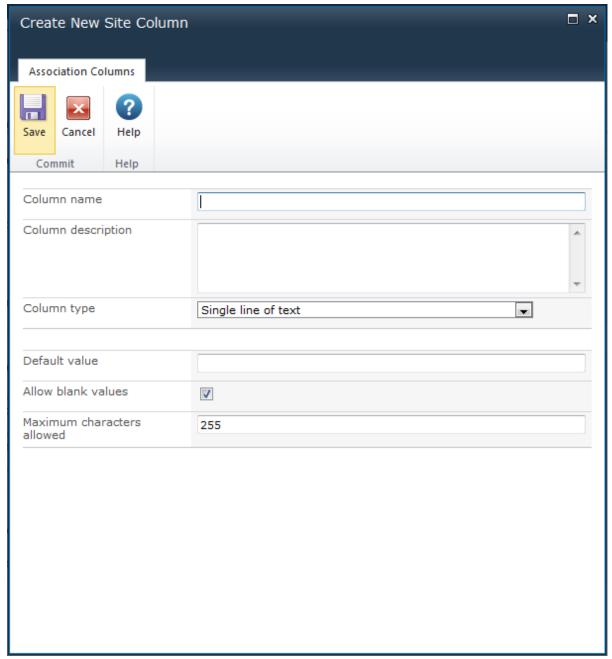


#### **Create New Site Column**

To create a new site column and associate it with this workflow, click the **New Site Column** button in the Ribbon.







Set the column properties as described below:

- Column name: Enter the column title
- **Column description:** Enter a description for the column
- Column type: Select from one of the following column types
  - Single line of text:
    - **Default value:** Leave blank for no default value, or enter the text for the default
    - Allow blank values: Check this option to allow the column to be left empty
    - Maximum characters allowed: Set the maximum length of text up to 255 characters







### Multiple lines of text:

- Default value: Leave blank for no default value, or enter the text for the default.
- Allow blank values: Check this option to allow the column to be left empty
- Rich text: Use rich text editor for advanced style and format options
- Enhanced rich text: Add tables, pictures, and hyperlink abilities to the rich text editor
- Append changes to existing text: Set the column to preserve all previous entries and append new additions to the end
- Number of lines: Set the maximum number of lines of text

#### o Number:

- Default value: Leave blank for no default value, or enter the text for the default
- Allow blank values: Check this option to allow the column to be left empty
- Number of decimal places: Set the number of decimal places from 0 to 5, or Automatic
- Show as percentage: Format the display as percentage
- Minimum value allowed: Check this option and set the minimum value, or leave unchecked for no minimum
- Maximum value allowed: Check this option and set the maximum value, or leave unchecked for no maximum

### Currency:

- Default value: Leave blank for no default value, or enter the text for the default
- Allow blank values: Check this option to allow the column to be left empty
- Number of decimal places: Set the number of decimal places from 0 to 5, or Automatic
- Minimum value allowed: Check this option and set the minimum value, or leave unchecked for no minimum
- Maximum value allowed: Check this option and set the maximum value, or leave unchecked for no maximum

#### Date and time:

- Default value: Choose between None or Today's date
- Allow blank values: Check this option to allow the column to be left empty
- Display format: Choose between date and time or date only

#### Choice:

- **Choices:** Enter the selection choices to be displayed to the user. Place each choice on a new line using the Enter key
- Default value: Leave blank for no default value, or enter the text for the default
- Display format: Select from Radio buttons; Check boxes; or Drop down list
- Allow blank values: Check this option to allow the column to be left empty
- Allow 'fill in' choices: Check this option to provide a blank space for the user to enter their own text

### o Lookup:

- List: Select the list to lookup values from
- Show field: Select the column from the list to lookup values from
- Allow blank values: Check this option to allow the column to be left empty
- Allow multiple values: Check this option to return a collection of values if more than one item meets the lookup criteria





- o Yes/No:
  - Default value: Select either Yes or No as the default
- Person or Group:
  - Show field: Select the user account property to display
  - Allow selection of: Select either People and Groups, or People only
  - Choose from: Select either All users, or SharePoint Groups
  - Group: If selection of Groups is set, this drop down list will be active, otherwise it will be disabled
  - Allow blank values: Check this option to allow the column to be left empty
  - Allow multiple values: Check this option to return a collection of values if more than one item meets the filter criteria
- Hyperlink or Picture:
  - Display format: Select from Hyperlink, or Picture
  - Allow blank values: Check this option to allow the column to be left empty

Once the workflow is published, the new site column will be created.

#### Associate the workflow with a site column that already exists

- 1. Select Existing Site Column to associate the workflow with a site column that already exists in the SharePoint site.
- 2. In the Add existing site column dialog, select the desired site column from the list.
- 3. Click the **OK** button.

#### **Other Options**

#### **Delete**

To delete an association with a site column:

- 1. Select the site column from the list
- 2. Click the **Delete** button in the Ribbon.
- 3. And then OK.

Please note: This does not delete the site column itself, only the association between the site column and this workflow. In the case of a **New site column** association that has not yet been published, the site column has not been created in the SharePoint site yet, and the site column definition will be lost when the association is deleted.

### Modify

Only a **New site column** definition can be modified.

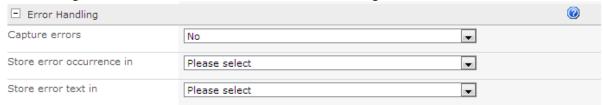




- 1. Select the **New site column** from the list and click the **Modify** button.
- 2. The **Modify site column** dialog will appear with the same configuration options as the **Create New Site Column** dialog, above.

# 5.3 Error Handling

The error handling panel is available in some actions. It allows the workflow designer to capture errors that occur during the execution of the action and create custom logic to handle it.



# **Error handling options**

### **Capture Errors**

This option specifies whether or not to turn on the capturing of errors. If this option is set to 'Yes', an error in the action will no longer cause the workflow to fail. Instead, the values described in the next two sections will be populated. Apart from using the values provided in the drop-down, a Yes/No workflow variable can be used.

#### Store error occurrence in

Specify a Yes/No workflow variable that will store whether or not an error has occurred. The variable will be set to Yes if an error occurred and No if the action execution completed.

#### Store error text in

Specify a text workflow variable that will store the details of an error if one occurs. This value will be set to empty if no error occurs.

Note: The **Store error occurence in** and **Store error text in** workflow variables will not be modified if Capture Errors is set to No.

# 5.4 Importing and exporting workflows

Nintex workflows can be imported and exported to the local file system as '.nwf' files. This can be used to copy workflows from one server to another, or other file transfer scenarios.

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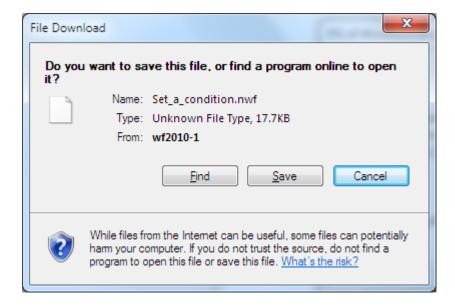


For Reusable Workflow Templates, the workflow designer ribbon button **Export to VS** is enabled, allowing users to export the workflow as a '.wsp' file which can be imported into Microsoft Visual Studio 2010. Please refer to the SDK for further details.

#### **Exporting a workflow**

To export a workflow:

- Click the Export button.
- The export file will be created and will trigger the file download process in the web browser. For example, in Internet Explorer 8 the following dialog will appear:



Click the Save button and follow the standard procedure for downloading and saving files from the
web browser. Consult the web browser documentation for more information on downloading and
saving files.

The **Export** button also contains a drop down menu option **Export to Visual Studio.** Click this option to export the workflow as a Visual Studio 2010 solution file.

Note: Not all workflow types such as list workflows or site workflows can be exported to Visual Studio. Only Reusable Workflows created in Nintex Workflow can be exported to Visual Studio.

### Importing a workflow

To import a workflow:

- Click the **Import** button.
- The **Import Workflow** dialog will appear:







• Click the **Browse** button and locate the '.nwf' file to import.

The previously exported workflow, with all its settings should now be displayed on the design canvas.

Note: Only workflows created by Nintex Workflow 2010 can be imported.

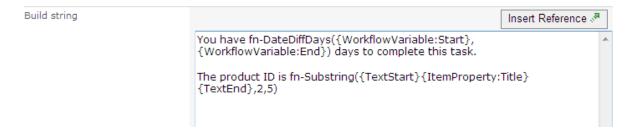
## 5.5 Inline functions

In any text input that supports <u>Inserting reference fields</u>, an inline function can be entered that will be resolved at workflow run-time.

A number of functions are provided out of the box, and additional functions can be added with the NWAdmin.exe tool.

Functions can also be used as arguments for other functions.

#### Example:







### **Function behavior**

The parsing engine first replaces any inserted reference tokens, and then the resulting text is evaluated for functions.

If a function contains another function as an argument, the inner most function will be evaluated first.

As reference tokens are replaced first, the reference token can also contain function syntax that will be evaluated.

If text used for a function argument contains function syntax (i.e. a brace or comma character) wrap the argument with {TextStart} and {TextEnd} to indicate a block of text that should not be parsed further.

For example, if a number variable that contains a decimal value is passed to the function, and the decimal separator for your region is a comma, the {TextStart} and {TextEnd} tokens will need to be used.

In the example shown above, when the "Title" of the item is returned, if it were to contain a comma, and the {TextStart}{TextEnd} blocks were not used, then the Substring function would treat the text after the first comma as the second argument, instead of the number "2" provided, and the function would error.

### **Function reference**

### fn-Abs

Returns the absolute value of a number.

# **Example**

fn-Abs({WorkflowVariable:Number})

#### **Arguments**

• Number The number to return the absolute value of.

#### fn-Currency

Represents a numeric value as a currency formatted text.

#### **Example**

fn-Currency({WorkflowVariable:Cost})

#### **Arguments**





Number A variable containing a numeric value.

### fn-DateDiffDays

Determines the number of days between two dates. The result can be a decimal value including partial days.

#### Example

fn-DateDiffDays({WorkflowVariable:StartDate}, {WorkflowVariable:EndDate})

#### **Arguments**

- Start date The starting date and time to calculate the difference between.
- End date The end date and time to calculate the difference between.

#### fn-DateDiffHours

Determines the number of hours between two dates. The result can be a decimal value including partial hours.

#### **Example**

fn-DateDiffHours({WorkflowVariable:StartDate}, {WorkflowVariable:EndDate})

### **Arguments**

- Start date The starting date and time to calculate the difference between.
- End date The end and time date to calculate the difference between.

#### fn-DateDiffMinutes

Determines the number of minutes between two dates. The result can be a decimal value including partial minutes.

#### **Example**

fn-DateDiffMinutes({WorkflowVariable:StartDate}, {WorkflowVariable:EndDate})

### **Arguments**

- Start date The starting date and time to calculate the difference between.
- End date The end and time date to calculate the difference between.

#### fn-DateDiffSeconds





Determines the number of seconds between two dates. The result can be a decimal value including partial seconds.

#### Example

fn-DateDiffSeconds({WorkflowVariable:StartDate}, {WorkflowVariable:EndDate})

#### **Arguments**

- Start date The starting date and time to calculate the difference between.
- End date The end and time date to calculate the difference between.

#### fn-FormatDate

Represents a date time value in text of a specific format.

#### **Example**

fn-FormatDate({WorkflowVariable:MyDate}, d)

#### **Arguments**

- Date A variable containing a date value.
- Format string Text describing how the date time value should be formatted. Information on how to
  format the value can be found on this page: <u>Standard Date and Time Format Strings</u> and this
  page Custom Date and Time Format Strings.

#### fn-Insert

Adds text in to a larger string.

### **Example**

fn-Insert({WorkflowVariable:Text}, 4, {ItemProperty:Title})

### **Arguments**

- Text The text to modify.
- **Start position** The character position to insert the new text at. The first character in the string is at position 0.
- New text The additional text that will be added at the start position.

#### fn-Length

Returns the number of characters in a string.





### **Example**

fn-Length({WorkflowVariable:Text})

#### **Arguments**

Text The string to count the characters of.

#### fn-Max

Returns the greater of two numbers.

#### Example

fn-Max({WorkflowVariable:Number1}, {WorkflowVariable:Number2})

#### **Arguments**

- Number 1 The first number to compare.
- Number 2 The second number to compare.

#### fn-Min

Returns the lesser of two numbers.

### **Example**

fn-Min({WorkflowVariable:Number1}, {WorkflowVariable:Number2})

### **Arguments**

- **Number 1** The first number to compare.
- Number 2 The second number to compare.

#### fn-NewGuid

Generate a globally unique identifier.

#### **Example**

fn-NewGuid()

#### fn-PadLeft

Returns the provided string right aligned and padded to the total length with a specific character.





### Example

fn-PadLeft({WorkflowVariable:Text}, 6)

fn-PadLeft({WorkflowVariable:Text}, 6,-)

### Arguments

- Text The string to pad.
- Length The target total length of the padded result.
- **Character** Optional. The character to pad the original string with. A space character is used by default.

#### fn-PadRight

Returns the provided string left aligned and padded to the total length with a specific character.

#### **Example**

fn-PadRight({WorkflowVariable:Text}, 6)

fn-PadRight({WorkflowVariable:Text}, 6,-)

#### **Arguments**

- Text The string to pad.
- Length The target total length of the padded result.
- **Character** Optional. The character to pad the original string with. A space character is used by default.

#### fn-Power

Raises a number to the specified power.

### Example

fn-Power({WorkflowVariable:Number}, {WorkflowVariable:Power})

### Arguments

- Number The number to raise to the power.
- Number The power to raise number to.

#### fn-Remove





Removes a section of text in a larger string.

#### Example

fn-Remove({WorkflowVariable:Text},0,3)

#### **Arguments**

- Text The text to modify.
- **Start position** The character position from which to remove the following characters. The first character in the string is at position 0.
- Length Optional. The number of characters from the start position to remove. All remaining characters will be removed by default.

#### fn-Replace

Replaces a section of text in a larger string.

#### **Example**

fn-Replace({WorkflowVariable:Text},abc,{ItemProperty:Title})

#### Arguments

- Text The text to modify.
- **Old value** The text to search for and replace.
- New value The text to replace Old value with.

#### fn-Round

Rounds a decimal value to the nearest integer.

#### **Example**

fn-Round({WorkflowVariable:Number})

#### **Arguments**

• Number The decimal number to round.

### fn-SubString

Extracts a portion of text from a string.

### **Example**





fn-SubString({WorkflowVariable:Text},5,10)

### **Arguments**

- Text The text to extract a value from
- **Start index** The position in the text of the first character to retrieve. The first character in the string is at position 0.
- Number of characters The number of characters to retrieve from the start index.

#### fn-ToLower

Formats text in a string to all lower case.

#### **Example**

fn-ToLower({WorkflowVariable:Text})

#### **Arguments**

• **Text** The string to convert to all lower case.

#### fn-ToTitleCase

Formats text in a string to title case.

### **Example**

fn-ToTitleCase({WorkflowVariable:Text})

### **Arguments**

• **Text** The string to convert to title case.

### fn-ToUpper

Formats text in a string to all upper case.

### Example

fn-ToUpper({WorkflowVariable:Text})

#### **Arguments**

Text The string to convert to all upper case.



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#### fn-Trim

Removes leading and trailing whitespace from a string.

### **Example**

fn-Trim({WorkflowVariable:Text})

#### **Arguments**

Text The text to remove leading and trailing whitespace characters from.

#### fn-XmlEncode

Encodes a string to make it safe for viewing in html.

#### Example

fn-XmlEncode({WorkflowVariable:Text})

### **Arguments**

• **Text** The text to encode.

#### fn-XmlDecode

Decodes a html safe string to regular text.

#### **Example**

fn-XmlDecode({WorkflowVariable:Text})

#### **Arguments**

Text The text to decode.

### 5.6 Inserting reference fields

By using references, content containing context specific information pertaining to the list item and this instance of the workflow can be constructed for use within workflow actions.

To insert a reference:

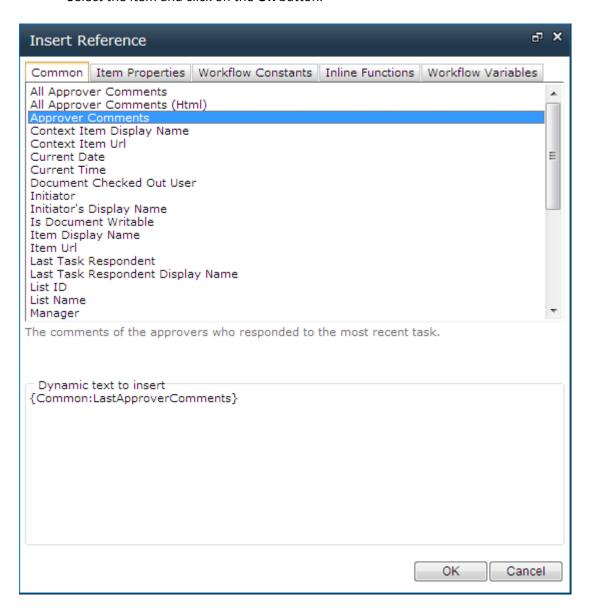
• In the Insert Reference dialog, select the reference and double click on an item from the list; OR



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• Select the item and click on the **OK** button.







Reference information is divided into different categories:

- **Common:** These are lookup values specific to the workflow, the context of the item and the current task within the workflow.
- Item Properties: These are metadata columns for the item for which the workflow is associated.
- Workflow Constants: These are values that have been set globally either on a web farm, site
  collection or site level that can be used within the workflow. Refer to Workflow Constants for more
  information.
- **Inline Functions:** Allows for additional processing to be done on a text or value. Refer to <u>Inline</u> functions for more information.
- Workflow Variables: these are the Workflow variables configured for the workflow.

Note: Available tabs on the **Insert Reference** dialog may change depending on the options available within the workflow action from which the Insert Reference link was clicked.

#### 'Common' Lookup References

The following are references available in the **Common** tab:

- All Approver Comments: All comments made by all approvers in all task actions that have run in the workflow.
- All Approver Comments (Html): All comments made by all approvers in all task actions that have run in the workflow, formatted for HTML.
- **Context Item Display Name:** The display name of the item that the workflow is running on. For example, in a list workflow, the display name will be the name of the SharePoint list item that the workflow is running on.
- **Context Item URL:** The URL to the item that the workflow is running on. For example, in a list workflow, the url will direct to the SharePoint list item that the workflow is running on.
- Current Date: The current date.
- Current Time: The current time.
- **Document Checked Out to User:** The username (domain\username) of the user who has the item that the workflow is running on checked out. Applies to libraries only.
- Initiator: The username (domain\username) who caused the item to be entered into the workflow.
- **Initiator's Display Name:** The display name of user who caused the item to be entered into the workflow.
- **Is Document Writable:** Resolves to 'Yes' if the file in a library can be updated. Resolves to 'no' if it is checked out or being edited. Note this will always resolve to 'yes' in a list.
- Item Display Name: The display name of the item on which the workflow is running.
- Item URL: The URL of the item in workflow.
- Last Task Respondent: The username (domain\username) of the user who last registered a response to a task.
- Last Task Respondent Display Name: The display name of the user who last registered a response to a task.
- List ID: The unique ID of the list containing the item in workflow (Advanced).
- List Name: The name of the list in which the workflow item is located.





- Manager: The username (domain\username) of the workflow initiator's manager (if configured in Active Directory).
- Manager's Display Name: The display name of the workflow initiator's manager (if configured in Active Directory).
- **New Line:** The new line character.
- **Site Collection ID:** The ID of the site collection in which the workflow is running.
- **Site ID:** The ID of the site in which the workflow is running.
- **Site Name:** The title of the site in which the workflow item is located.
- Site Owners: A semicolon delimited list of the usernames (domain\username) of users in the site owners group.
- **Start Date:** The date the item's workflow was started.
- **Start Time:** The time the item's workflow was started.
- **Tab:** The tab character.
- **Task Description:** The text provided in the task description field for the task, formatted for plain text.
- Task Description (Html): The text provided in the task description field for the task, formatted for HTML.
- **Task Name:** The text provided in the task name field for the task.
- **Web Url:** The full URL of the site in which the workflow item is located.
- Workflow Instance ID: The unique ID given to the running workflow instance (Advanced).
- Workflow Log URL: The URL where the status of the workflow can be viewed in textual form.
- **Workflow Owner:** The user who published the workflow.
- Workflow Status URL: The URL where the status of the workflow can be viewed.
- Workflow Title: The title of the workflow.

The following references are available from within request approval notifications:

- **Approval Url:** The URL in SharePoint where an approval for the item in the workflow can be made.
- **Approve:** A URL that will approve the task without requesting further input. Can be appended with a querystring confirmationpage=url to show to display a custom confirmation page. Can be appended with querystring hsl=[true|false] to determine whether to show the workflow status link on the default confirmation form.
- **Approver Comments:** The comments of the approvers who responded to the most recent task.
- **Approver Name:** The display name of the user currently required to approve the document.
- **Approver's Manager:** The display name of the manager of the user assigned to the current task.
- **Approver's Manager's Display Name:** The display name of the user assigned to the current task.
- **Delegate Url:** The URL in SharePoint where an approver can delegate a task if allowed.
- Reject: A URL that will reject the task without requesting further input. Can be appended with a querystring confirmationpage=url to show to display a custom confirmation page. Can be appended with querystring hsl=[true|false] to determine whether to show the workflow status link on the default confirmation form.

### Create a hyperlink using a reference

When inserting a reference into a Rich Text box, the reference can be inserted as a hyperlink.





To insert a reference as a hyperlink:

- In the workflow action dialog box, within the Ribbon, click on the **Insert** tab.
- Then click on **Link**.



- In the Insert Reference dialog, select the reference and double click on an item from the list.
- The reference will be inserted into the Address textbox.
- In the **Hyperlink text to display** textbox:
  - o Enter the text that will be displayed which will be clickable by the user; OR
  - Select a reference and double click on an item from the list.

Note: By placing the cursor in either **Address** or **Hyperlink text to display textboxes**, a combination of lookup data and manually typed plain text can be used.

When all settings have been configured, click the OK button.

Add lookup data items to the Address or Hyperlink text to build a dynamic URL.



Other uses for inserting a hyperlink using the reference:

- Specify a URL for a reference. In the Address, type in a URL and then insert the reference.
- Building strings based on a starting URL followed by a reference. Type in a starting URL (for example a portal search address or a Google search address) and then insert the reference. Remember to use the correct protocol (http:// or https:// etc).

#### 5.7 LDAP Picker



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#### LDAP Picker, Home Server Picker and Mailbox Picker within Workflow Actions

Some workflow actions require connection information to lookup Active Directory.

To configure the settings for the LDAP Path, Primary home server or Mailbox Store, click on ...



#### **Using the LDAP Picker**

Workflow actions such as 'Query LDAP' and 'Create AD User' require an LDAP address in order to connect to an Active Directory data store.

When the LDAP Picker is initially opened, it will attempt to connect to Active Directory using the information in the workflow action's dialog 'LDAP Path' text box. An error will occur if further credentials are required.

To configure the Active Directory details for the LDAP Path:

- Select an Active Directory object by clicking on it.
- Then click the Close button. The selected object's LDAP path will be inserted into the appropriate section within the workflow action dialog.

#### **Using the Home Server Picker**

### \* This topic applies to Nintex Workflow Enterprise Edition only

The **Enable OCS** workflow action requires an LDAP address in order to specify the Primary Home Server. Generally, this will be an object called 'LC Services'.

When the Home Server Picker dialog is initially opened, it will attempt to connect to Active Directory using the information in the workflow action's dialog 'LDAP Path' text box. It will then attempt to find any available 'LC Services' folders. An error will occur if further credentials are required.

To configure the Active Directory details for the **Primary Home Server**:

- Select an 'LC Services' object by clicking on it.
- Then click the **Close** button. The selected object's LDAP path will be inserted into the appropriate section within the workflow action dialog.

#### **Using the Mailbox Picker**

#### \* This topic applies to Nintex Workflow Enterprise Edition only

The Provision User in Exchange workflow action requires an LDAP address in order to specify the Mailbox Container (or Exchange Database if provisioning an Exchange 2007/2010 mailbox). Generally, this will be an object called 'Mailbox Database', residing under a 'Storage Group' object





When the **MailStore Picker** dialog is initially opened, it will attempt to connect to Active Directory using the information in the workflow action's dialog 'LDAP Path' text box. It will then attempt to find any available 'Mailbox Database' folders. An error will occur if further credentials are required.

To configure the Active Directory Details for the Mailbox Store:

- Select a 'Mailbox Database' object (or another location in which you want the mailbox to reside) by clicking on it.
- Then click the **Close** button. The selected object's LDAP path will be inserted into the appropriate section within the workflow action dialog.

## Options within LDAP Picker, Home Server Picker and Mailbox Store

#### **LDAP Path**

An LDAP path specifying the Active Directory location. E.g. LDAP://MyPortal.com/DC=nintex,DC=com

If the domain name is MyCompany.com, then the LDAP Path will be LDAP://MyCompany.com/DC=MyCompany,DC=com

Containers or Organizational Units (OU) may be specified by adding "CN=" or "OU=". E.g.:

- LDAP://MyCompany.com/CN=Configuration,DC=MyCompany,DC=com OR
- LDAP://MyCompany.com/OU=Servers,DC=MyCompany,DC=com

Note: To access 'Exchange MailStore' objects, it must be connected to a Configuration Container. E.g.:

LDAP://MyCompany.com/CN=Configuration,DC=MyCompany,DC=com

#### Username

A username with the required permissions to access the LDAP Path entered.

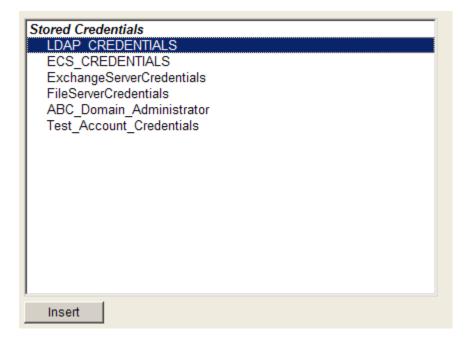
### **Password**

A password for the above username.

Click on the padlock to select from a list of Credential Workflow Constants.







# 5.8 Managing Start Variable Order

The Manage Start Variable Order page allows you to change the display order of variables on the Start Workflow page. Any variables which have been enabled to show on the start form will appear on the Manage Start Variable Order page.

Note: Start Variables (Start data) will only appear if the workflow is set to start manually, if the workflow starts automatically, the start variables fields will not appear and if default values are set, they will be used for the variables.

To access the Manage Start Variable Order page;

Click on the Workflow Settings drop down and select Manage Start Variable Order.

Or

• From directly inside the **Workflow Settings** dialog, click on the **Manage Start Variable Order** button in the Ribbon.



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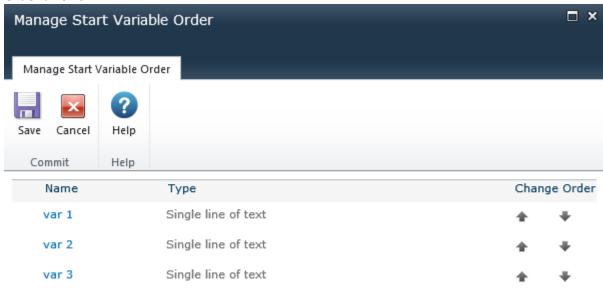








In the **Manage Start Variable Order** page, change the order of the start variables with the **Change Order** arrows.

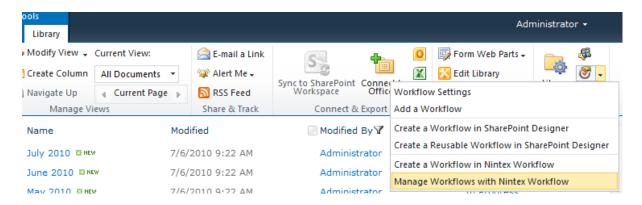


The changes to the start variable order will be reflected:

- On the Start Workflow page, above the Start workflow button.
- In the New Workflow Schedule SharePoint page, in the Start Data section.
- In the Start Workflow action, in the Start Data section.

# 5.9 Managing Workflows

The **Manage Workflows** option allows both published and unpublished workflows to be viewed. Workflows can also be managed (create, edit and delete) for the list or library. Each list or library in a site enabled with Nintex Workflow will have two additional options in its workflow settings menu.



To get to the Manage workflows page:





- Select the **Library** tab on the Ribbon toolbar.
- Click the Workflow Settings button, then select Manage Workflows with Nintex Workflow from the menu options

In the **Manage Workflows** page a list of all the workflows that belong to the current list will be displayed. The list of workflows are divided into workflows that are published (available for selection by users) as well as those which are unpublished (saved but unavailable for selection by users).

Published Workflows				
Name	Modified By	Modified	VersionParent	Delete
Financial Reports	Administrator	7/7/2010 4:01 PM	5.0 Shared Documen	ts 🗶
Financial Report Approval Workflow				
Notification Workflow	Administrator	7/7/2010 6:11 PM	2.0 Shared Documen	ts 🗶
Automated notification workflow when an iter	n is updated to 'Ready for Review	v'.		
Unpublished Workflows				
Name	Modified By	Modified	VersionParent	Delete
Document Check	Administrator	7/7/2010 6:23 PM	0.1 Shared Document	s 🗙
Check document workflow				

The following are the options available within the **Manage Workflows** page:

- Create a new workflow:
  - Click on the **Create** button in the toolbar. Refer to <u>Getting started with the Nintex Workflow</u> <u>designer</u> on how to create a workflow.
- Edit an existing workflow:
  - Click on the workflow name link of an existing workflow. The workflow designer will be displayed.
  - o When changes have been made, click on **Save** and then **Publish**.
- Delete an existing workflow:
  - o Click on the X button next to the workflow to be deleted.
  - o In the **Confirmation** dialog, click the **OK** button.



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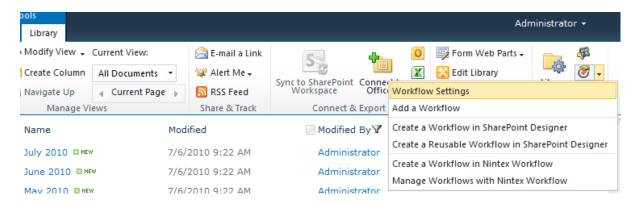


### **Unpublishing A Workflow**

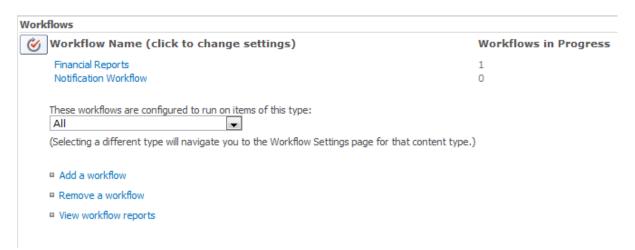
A Nintex Workflow can be unpublished using the standard SharePoint Workflow Settings page.

To un-publish a workflow:

- Navigate to the list or library, that the workflow is to be unpublished from.
- Select the Library tab on the Ribbon toolbar.
- Click the Workflow Settings button, then select Workflow Settings from the menu options



- A list of all published versions of the active workflows within the list or library with the number of currently running workflows are displayed.
- To remove one or more workflows from the 'Published' list, click on Remove a workflow.



 In the Remove workflows page, select the Remove radio button to the right of the workflow title to remove it

Note: When removing a workflow, it is not removed from the system, only from the list of workflows available to users (published workflows).







• When all settings have been made, click the **OK** button to commit the changes.

# 5.10 Opening and saving workflows

This help topic describes how to open and save workflows. For information about making a workflow available to users in libraries and lists, please refer to the <u>Publishing a workflow</u>.

# Opening a workflow

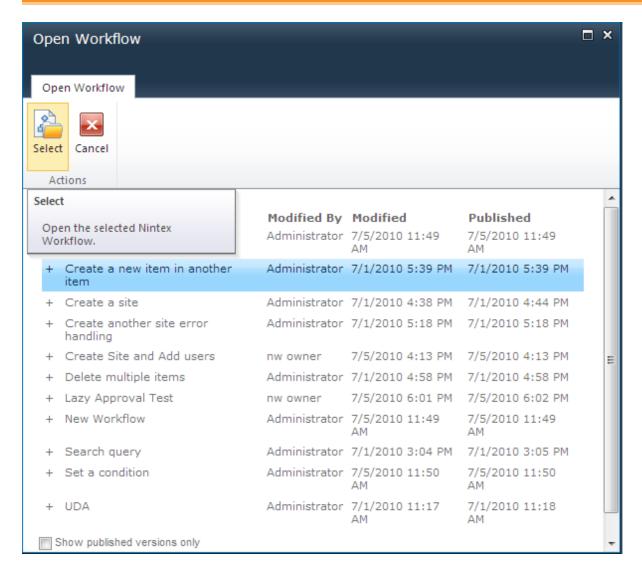
There are two ways to open an existing workflow:

- 1. Using Workflow Designer:
  - While in the Workflow Designer window, click the **Open** button on the ribbon toolbar.



• The **Open Workflow** dialog will open.





- Click on the desired workflow and then click the **Select** button to open the selected workflow.
- 2. Existing workflows can also be opened from the **Manage Workflows** page. For more information, please refer to the <u>Managing Workflows</u>.

### Versioning

The **Open Workflow** dialog supports opening a previous version of a workflow. To see the available versions click the plus symbol (+) located to the left of the workflow title. A minor version is created every time the workflow is saved and a major version when published. Double clicking the workflow title will open the latest version, which may not be the current published version. To open a previous version, select one of the versions from the list and click the **Select** button (or double click the version row). The version selected will





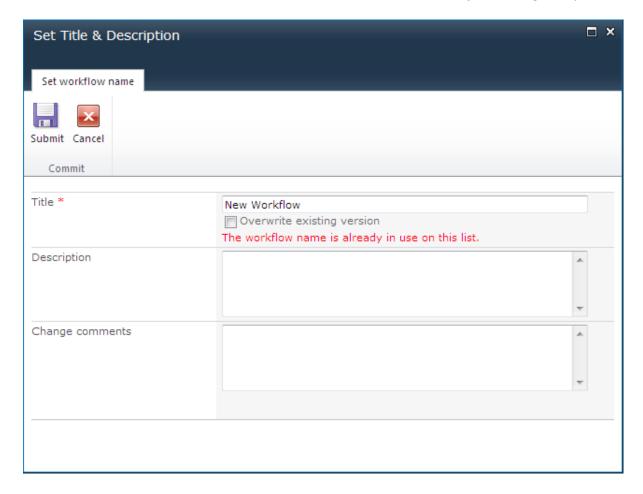
open in the workflow designer. If this workflow is then modified and published, a new version will be created and this new version will be the current version that is used when a workflow is started.

# Saving a workflow

A workflow can be saved at any point in the design process and edited again at a later time.

To save a workflow:

• In the Ribbon toolbar, click the **Save** button. The **Set Title & Description** dialog will open.



The workflow **Title** will default to **New Workflow**, and a warning message will appear if a workflow with the same name already exists. To overwrite an existing saved workflow, check the **Overwrite existing version** checkbox.

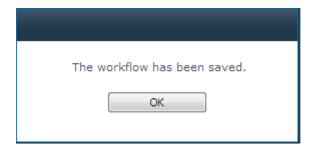
The **Description** field can be used to add comments about the workings and purpose of the workflow. These comments are displayed in the **Open Workflow** dialog, and on the **Manage Workflows** page.





The **Change comments** field can be used to add comments about the changes made to the latest saved version of the workflow. These comments are displayed in the **Open Workflow** dialog as a tooltip, and displayed to the Approver of a <u>Workflow Change Approval</u> process.

When all of the desired information is complete, click the **Submit** button to save the workflow. A progress indicator will display while the saving process occurs, and then the following message will be dispayed:



#### **Save As options**

A workflow can be saved for different usages.

To save the workflow with a different name:

- Click the drop down menu arrow under the **Save** button.
- In the Set Title & Description dialog, uncheck the Overwrite existing version option.
- Change the workflow Title and Description.
- Click the **Submit** button to save the workflow.

Save As Snippet: see Workflow Snippets

Save As Template: see Workflow templates

### 5.11 Printing

Use the **Print** button on the main ribbon toolbar to print the workflow design.

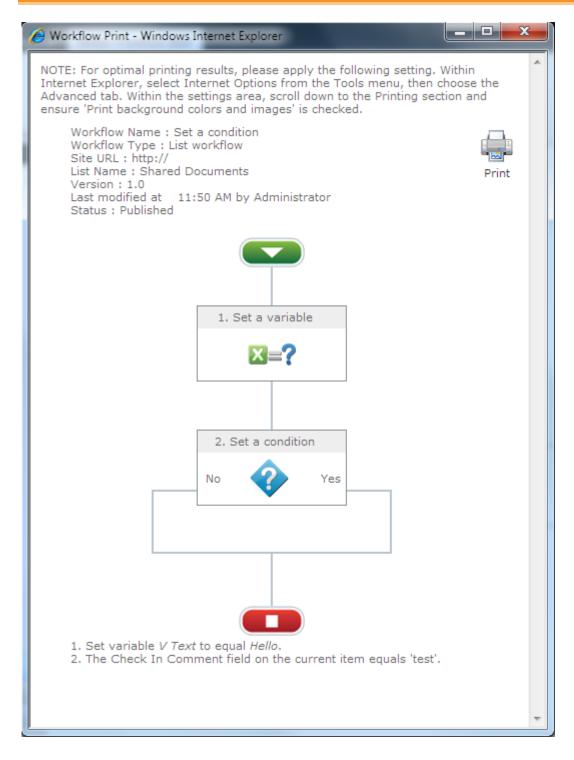


Note: the Print feature prepares the workflow design page for printer-friendly viewing in the web browser. The browser's standard printing function is then used to send the page to the printer.

The **Print** button contains two menu options:

- **Print:** Print the workflow design only.
- **Print with Notes:** Print the workflow design plus the default or custom comments added to each Action. A reference number is added to each Action, and the corresponding comments are listed at the bottom of the page. See example below:





Click the **Print** icon on the page to launch the browser's standard print functions.

# 5.12 Publishing a workflow





Before a workflow becomes available to users within SharePoint lists and libraries it must be published.





### To publish a workflow:

- Click the **Publish** button on the main Ribbon toolbar.
- The application will then validate the workflow and publish it.

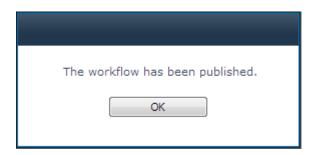




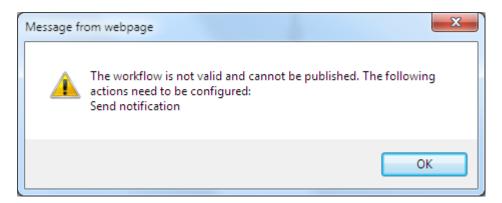
Note: the workflow is automatically saved before it is published, so it is not necessary to **Save** and then **Publish** a workflow.

Note: Not all users have permission to publish workflows. For information about which users can publish workflows, please refer to the <u>Security Settings</u>.

The process of validation and publishing may take a few seconds before the published message is shown:



If there are errors in the workflow, including actions that are not configured, the workflow will not publish, and the following message is displayed:



Once the workflow is published it can be managed from the Managing Workflows page.

#### **5.13 Run Now**

Use the **Run Now** button to test an action without republishing the whole workflow design. Click on the **Run Now** button in the action Ribbon to open the Run Now dialog.

# **Run Now dialog**

Note: Run Now is not a simulation, any executions such as create, query, update and delete that are made will be committed when executing the Run Now. Use this page to temporarily change parameter values and test the configuration settings of the action.





The Run Now dialog shows the current configurations for the action and allows reference tokens to be replaced before the Run Now dialog is executed.

By default, the Run Now dialog will:

- Automatically replace any tokens with a value if possible
- Evaluate any inline functions in the action when the run now is executed

Note: The replacements and changes made to parameter values used in the Run Now is only temporary; these parameter values are not saved to the action once the Run Now dialog is closed.

#### **Parameters**

The parameters will reflect the available configuration settings of the action the Run Now dialog is launched from.

#### **Test connection**

This will verify that the connection details to an external system are correct. This option appears on selected Run Now dialogs depending on the action it is launched from.

#### Result

Displays the output of the action once the Run Now has been executed.

Some actions with Run Now, interact with data or systems outside of the workflow. By default, the Run Now feature is allowed on all sites that do not have workflow change approval enabled.

To change the Run Now preferences:

- 1. Navigate to **Central Administration**, click on **Nintex Workflow Management**.
- 2. Click on Global settings.
- 3. Locate Allow 'Run now' on actions that interact with external data and make the desired change.
- 4. Click OK.

Actions that support **Run Now** and only operate on workflow context data will always have the **Run Now** feature available.

### 5.14 Set action labels



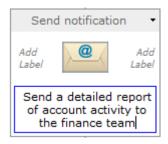


The text displayed around an activity can be configured. Adding labels to a workflow action provides a user with more context around what the action is doing without the need to see the workflow action configuration.

#### **Editing the Labels**

There are two ways to edit the labels for a workflow action.

- 1. To edit the label in-line on the workflow action itself:
  - In the design canvas where the workflow action is located, click on the title bar.
  - Enter the text desired in the different label areas on the workflow action.
  - Click away from the workflow action to commit changes to the label.



- 2. To edit the label within the 'Configure action' dialog:
  - In the workflow action, click the title bar and select **Configure** from the drop down menu options.
  - In the Configure action dialog, within the Ribbon, click on Labels.
  - Configure the action title and text to display to the left, right and bottom of the action.

Note: The action title is used in workflow reports to indicate the current status of a running workflow.

### **Action Notes**

The action notes are displayed in the print with notes view.

### Notes to display:

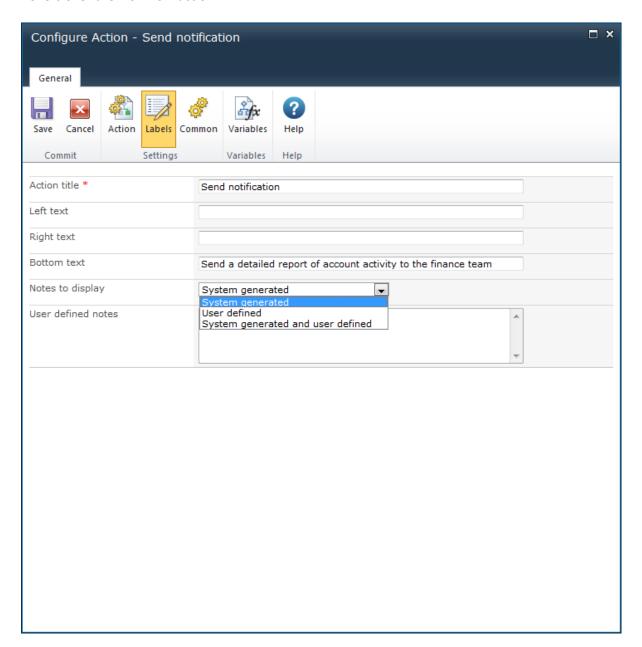
- **System generated:** The default workflow action notes are used.
- **User defined:** Custom notes that can be defined by the user in the **User defined notes** for the workflow action .
- **System generated and user defined:** The default workflow action notes and custom notes can be defined and used for the workflow action.





#### **User defined notes**

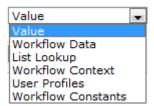
The textbox is only enabled when the **Notes to display** selected is **User defined** or **System generated and user defined**. Entering a value will display the custom notes in the <u>print with notes</u> view and when a user hovers over the workflow action.





### 5.15 Using lookups

In many workflow actions within Nintex Workflow, values can be set at run time with **lookups**. A **lookup** provides the ability to reference and use a value within the workflow action. When the option to select a **lookup** is available, four options will be presented in a drop down menu.



#### Value

The **Value** option allows a literal value to be entered, or use <u>Insert Reference</u> to build the value dynamically at run time.



#### **Workflow Data**

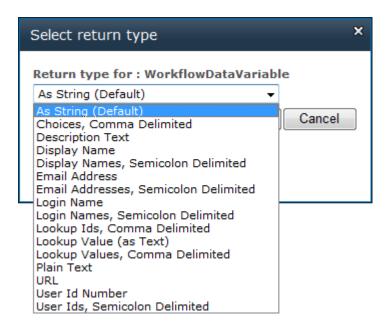
The Workflow Data source allows a workflow variable to be referenced.



Click the button to set the return type for the Workflow Data.

The **Select return type** dialog will appear:



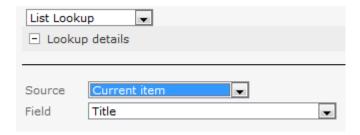


Select the **Return type for** the workflow data from the drop down provided.

When all settings have been made, click the **OK** button.

### **List Lookup**

The **List Lookup** source allows a reference to be made to any property of the current item or any item within a list or library in the current site. When **List Lookup** is selected, additional options are provided where the **Source** and **Field** of the List Lookup will need to be set.



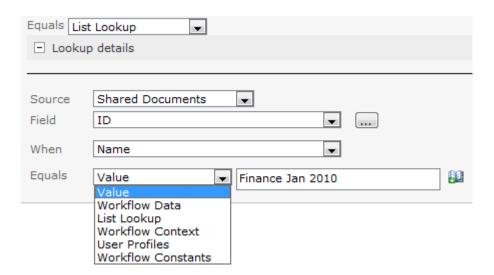
The default source is set to use the current item. All available properties that are defined for the **Source** will be listed in the **Field** list.

Alternatively, a property on another item in any list within the site can be set. After selecting a **Source**, select a **Field** containing the value to be used. Using the **When** and **Equals** options, an item in the source list can be located.

E.g. In the **Shared Documents** library, select the **ID** of an item where the **Name** of the item is **Finance Jan 2010**.







Note: Using a **List Lookup** is a useful solution for solving the problem of environment-specific configuration values. By creating a list to hold the configuration variables, lookups can be used to retrieve the settings at runtime that may differ between the different environments such as 'Development' and 'Production'. This helps to avoid hard-coding these settings into the workflow templates and having to change them as they are deployed between the environments.

For information about lookups used in the Nintex Workflow Message Templates, please refer to <a href="Defining">Defining</a> message templates.

#### **Workflow Context**

The **Workflow Context** option allows a value associated with the current workflow to be set and used within the workflow action.



The available values selectable within the **Workflow Context** is the same as the values provided in the 'Common' tab when Insert Reference is used within the **Value** source.

The main difference in using the **Workflow Context** vs **Value** is that the **Workflow Context** method allows the returned value to be set as a different data type (string, number, etc.); whereas selecting a value through the <u>Insert Reference</u> function within the **Value** source sets the value returned with its default type with no ability to change the data type.

#### **User Profiles**

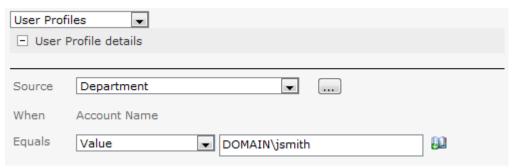
The **User Profiles** source allows a reference to be made to a user profile property of the specified Account Name. When **User Profiles** is selected, additional options are provided where the **Source** and **Account Name** value will need to be set.





The **Source** is the value that will be retrieved based on the value of the Account Name. All available user profile properties will be listed in the **Source**field.

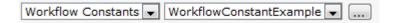
E.g. John Smith has the Account Name of 'jsmith'. The following example will return John Smith's department value specified in his SharePoint user profile property.



User Profile lookups are only available in environments that have Microsoft SharePoint Server 2010, and not available in Microsoft SharePoint Foundation 2010.

#### **Workflow Constant**

The Workflow Constant option alows a value that has been set globally either at the Farm, Site Collection or Site level to be used within the workflow action.



The values contained within the workflow constant are not made visible to a user when designing the workflow. Users are only shown the name of the workflow constant.

### 5.16 Verbose logging

Verbose logging adds increased context data when viewing the history of a workflow instance. The value of all workflow variables and item properties are stored before and after each workflow action, along with additional diagnostics information such as the process the workflow was running in and the server which was executing the workflow.

#### **Enabling verbose logging**

Verbose logging must first be enabled in the farm before it can be enabled in a workflow.

To enable verbose logging:

- Navigate to <u>Global Settings</u> page.
- In the Allow verbose workflow logging section, set to Yes.





In the Number of days to keep verbose logs, set the number of days to keep verbose workflow logs. Logs will be deleted when the workflow completes after the specified number of days.

Note: A workflow with verbose logging enabled will add more data to the workflow database than one without, therefore there is an automatic purge process to remove verbose information after a number of days.

#### Allow verbose workflow logging Allow verbose workflow logging: When this option is enabled, workflow designers will have Yes No the option to enable verbose workflow logging to assist with Number of days to keep verbose logs: debugging workflows. Verbose workflow logs will be automatically deleted when the workflow completes after ▼ the specified number of days.

Global settings are cached and refreshed automatically every 15 minutes. For changes to take affect immediately, perform an IISRESET and restart the Windows SharePoint Services timer service.

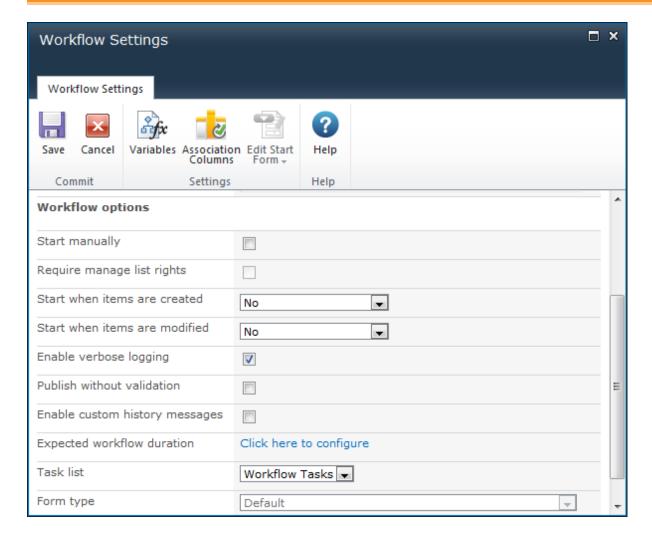
Once verbose logging is enabled on the web farm, it can be enabled on a workflow.

To enable verbose logging for a workflow:

- Click on Workflow Settings button in the main Ribbon toolbar.
- In the Workflow Settings dialog, check the Enable verbose logging option.
- Click on the Save button.







### Viewing verbose logs

Verbose information is available from the <u>Viewing workflow status</u> of a workflow. If the instance is run with verbose logging enabled, and the verbose data has not yet been cleared, a message in the workflow information panel will state that verbose logging information is available. If verbose data is available, each workflow action can be clicked on to bring up the verbose information panel. The panel shows each data item available to the workflow, with the values before and after the action executed. If any value changed, it will be highlighted.

There are options to export the verbose information for a particular action or the entire verbose log to an xml file.

### Considerations when using verbose logging

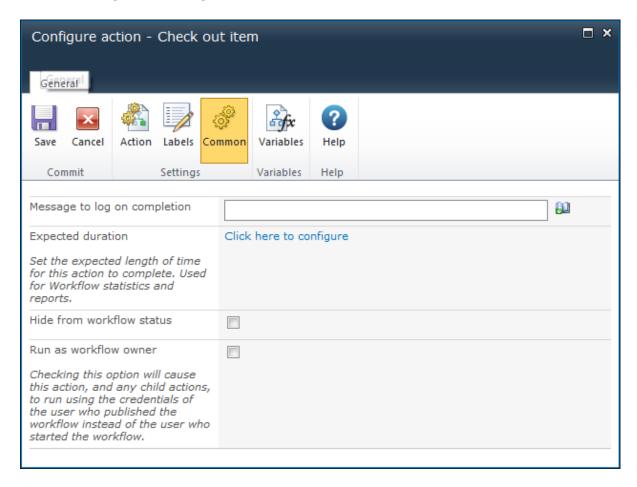
Verbose logging adds a significant amount of data to the Nintex Workflow database. The data is not intended to be kept for a long time. The verbose logging feature is intended as an assistant for workflow development and testing, and is not intended to be left on in production.





## **5.17 Workflow Action Common Settings**

Common settings can be configured for each workflow action.



### To configure the Common settings:

- 1. In the workflow action, left-click the title bar and select **Configure** from the drop down menu options.
- 2. In the Configure action dialog, within the Ribbon, click on **Common**.
- 3. The following options will be presented:



 Message to log on completion: Setting a value here will log a message in the workflow history when the action has completed. To view workflow history, refer to <u>Viewing workflow</u> <u>history</u>.

Note: For a message to be logged on completion, the *Enable custom history messages* must be selected for the workflow. Refer to Workflow settings.

o **Expected duration**: Set the expected length of time for this action to complete.

Note: This is typically used in actions that require human interaction. The expected duration will be recorded in the database for reporting purposes.

 Hide from workflow status: Checking this option will cause this action, and any child actions, to be hidden from the workflow history or graphical progress view. This will also cause the action to not be tracked in the workflow database.

Note: The 'Request Approval', 'Request Review' and 'Request Data' actions can be hidden from the graphical status view, but will still be displayed in the workflow history and logged in the database.

 Run as workflow owner: Checking this option will cause this action, and any child actions, to run using the credentials of the user who published the workflow instead of the user who started the workflow.

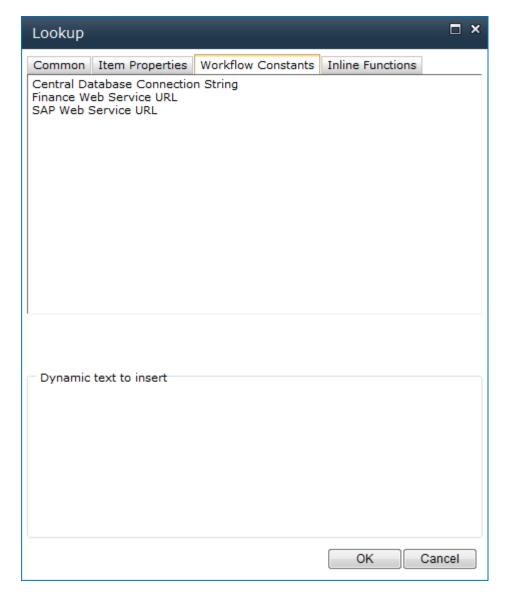
Note: The **Run** as **workflow owner** option will only appear when the action is in the root level of the workflow. If it is embedded in a "Run If" action, a branch of a "State Machine", a "Parallel" action, "Flexi Task" action or "Loop" action, this option is not available. This is due to a limitation in SharePoint, all actions inside a parent action must run using the same user.

#### 5.18 Workflow Constants

Workflow Constants are values that can be set globally for all workflows, either at the web farm, site collection or site level. Once defined, they can be used within workflows by inserting them from the <u>Inserting reference fields</u> dialog or through <u>lookups</u>.







The values contained within the workflow constant are not made visible to a user when designing the workfow. Users are only shown the name of the workflow constant. Hence, workflow constants are good for storing data such as Credentials, URL's, LDAP paths or SQL Connection Strings. Another use for workflow constants is when a particular value needs to be used in multiple workflows.

Workflow constants are managed within the Manage workflow constants settings page. Within it, an administrator, can create, edit and delete workflow constants.

To navigate to the workflow constants for the web farm:

- Navigate to **SharePoint Central Administration**.
- In the Quick Launch, click on Nintex Workflow Management, click on Manage workflow constants.



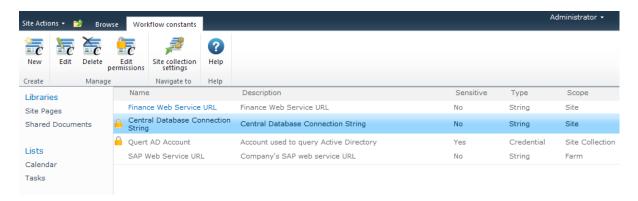


To navigate to the workflow constants for the Site Collection:

- Navigate to the Top Site level home page.
- In the **Site Actions** menu, click on **Site Settings**.
- In the Nintex Workflow group, click on Manage workflow constants.
- In the Ribbon, click on the **Site collection settings** button.

To change the workflow constants for a Site:

- Navigate to the site level home page.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow group, click on **Manage workflow constants**.









To create a new workflow constant:

- Navigate to the Manage workflow constant settings.
- In the Ribbon, click on the New button.

In the Add Workflow Constant dialog:

- **Title**: The name of the constant that will be displayed in the Lookup section within the Insert Reference dialog.
- **Type**: The data type of the workflow constant. Select from on of the following data types:
  - o String: The value that the constant will be replaced with then the workflow is run.
  - o **Number**: A numeric value that the constant will be replaced with when the workflow is run.
  - o **Date**: A date value that the constant will be replaced with when the workflow is run.
  - o Credential:
    - Username: The Username that the constant will be replaced with when the workflow is run. If entering an AD username, remember to include the domain.
    - **Password**: The Password that the constant will be replaced with when the workflow is run. Enter the password of the username used.
  - Secure string: A text value that can only be used in workflow action input fields that do not show the value to an end user. The value is also masked in the constant management screen. This constant data type is useful for security tokens used in Nintex Live enabled workflow actions.
- **Description**: Additional notes about the constant.
- Sensitive: Checking this option will also make it available for use within certain workflow actions only.

#### Sensitive

If a constant is marked as sensitive, it will only be available for use in certain insert reference dialogs where a sensitive value may be required and the value will not be seen by the end user. For example, the 'Execute SQL' action connection string field supports sensitive constants but the body and subject fields of the 'Send a Notification' does not.

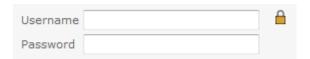
Sensitive constants are stored encrypted.

#### **Credential Type**

The Credential type allows a username and password to be stored securely. Constants that are created as Credentials are available for inserting when a workflow action specifically has a username and password field with a padlock icon. They cannot be used in regular insert reference lookups.







Administrators can set Credential constant that represent a username and password with access to an external system that is needed by a workflow. The user building the workflow can use this credential to configure an action without knowing the username and password. Credential constants are stored encrypted.

#### **Edit permissions**

Permissions can be set on workflow constants so only specified users or groups are allowed to see and use the workflow constant when designing a workflow.

If an existing workflow is modified by another user (workflow designer) who does not have permissions to see and use a workflow constant being used in that workflow, the workflow will save but cannot be republished. Only users (workflow designers) that have been granted permission to see and use the workflow constant will be able to publish the workflow.

The security check for a workflow constant is performed when the workflow is published. Therefore, if the permissions for a workflow constant are changed, a workflow that is already using the constant will continue to use the value successfully.

To add/edit permissions for a workflow constant:

- Navigate to the **Manage workflow constant** settings.
- Select the workflow constant to apply permission on.
- In the Ribbon, click on the **Edit permission** button.

By default permissions is set to "Everyone".

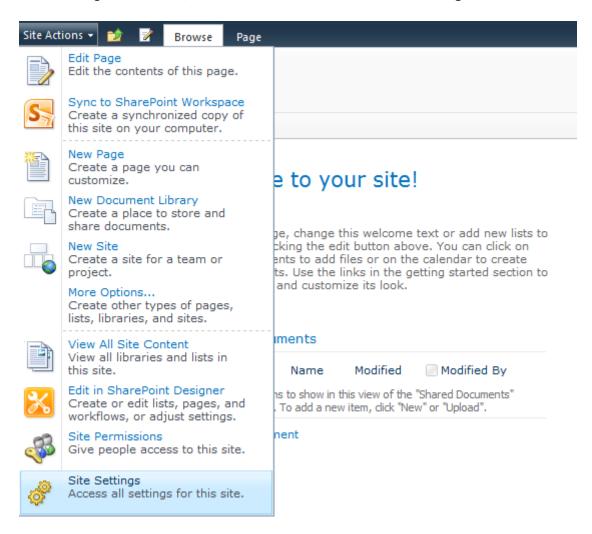
### 5.19 Workflow gallery

The **Workflows Gallery** displays all workflows that have been created within the site. It provides the options to manage the workflows in the site. An administrator may view the statistics of a particular workflow or export or edit workflow within the site.



### To access the Workflow Gallery:

Navigate to the site, in the Site Actions menu, click on Site Settings.



• In the Nintex Workflow group, click on Workflows gallery.







Nintex Workflow
Workflows gallery
Message templates
Workflow templates
Allowed workflow designers
Manage allowed actions
LazyApproval settings
Scheduled workflows
Manage workflow constants
Manage holidays
Workflow change approval
Manage User Defined Actions
View reports

• The Workflow Gallery will list all the currently published workflows for the site. The name of the workflow including the description, who last modified the workflow, version and what list the workflow is associated to will be displayed.

#### View statistics

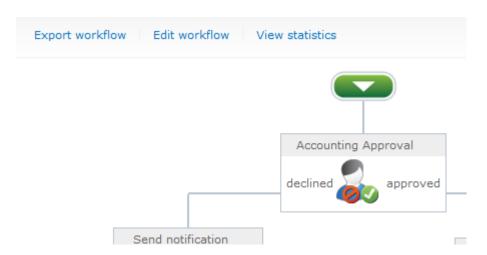
#### Workflows

Name	Modified By	Modified	VersionParent		Delete
Financial Reports	Joshua Tan	7/6/2010 3:15 PM	4.0	Shared Documents	×
Financial Report Approval Workflow					
AutoStartWorkflow	Joshua Tan	7/6/2010 5:49 PM	1.0	Drop Off Library	×

- Clicking on any of the workflows will present a graphical display of the workflow that is not editable.
   Scrolling over each workflow action will provide information on how the workflow action is configured.
- From this display an administrator can:
  - Export workflow: Exports the workflow to .nwf which can be reused in another site.
  - o **Edit workflow**: Displays the workflow in Workflow Designer, ready for editing.
  - View statistics: Displays the statistics of the workflow such as Total Runs, In progress, Cancelled, Max. Duration, etc.



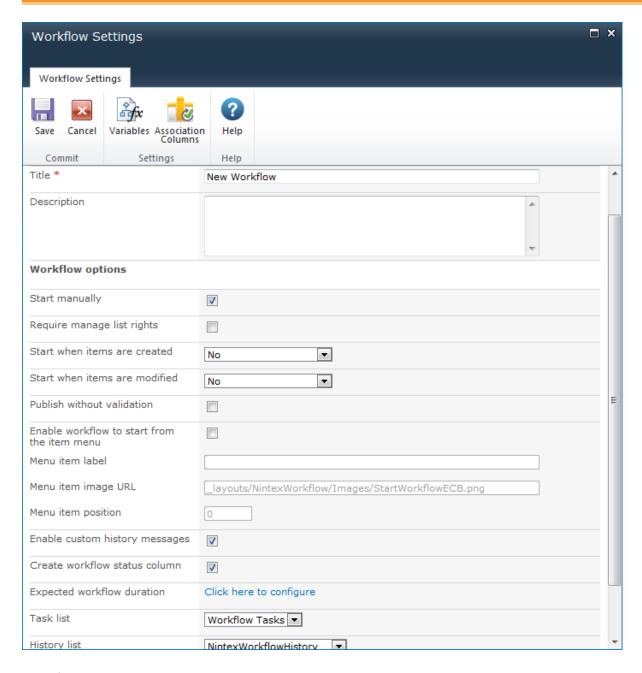




# **5.20 Workflow Settings**

Use the Workflow Settings dialog to set the workflow title and description, workflow start options, workflow variables and start data, association columns, and select a custom start form.





#### **Workflow options**

- Start manually: When this setting is checked for a workflow, the user has the option to start the workflow manually from the list item
- Require manage list rights: When this setting is checked, the user starting the workflow will require manage list rights which by defaut, the minimal SharePoint security permission required is Contributor.
- **Start when items are created:** When a library or list item is created or uploaded, all workflows in the library or list with this option enabled will start.





- Start when items are modified: When a library or list item is modified, all workflows in the library or list with this option enabled will start. Checking-in a document will not trigger a workflow to start.
- Enable verbose logging: When this setting is checked, verbose information is available for the workflow. Please refer to <u>Verbose logging</u>.
- Publish without validation: Advanced option. Specifies that a validation step is skipped when the workflow is published. Not validating the workflow is not recommended. If the workflow is large and takes a significant length of time to publish, choosing to skip validation will help decrease how long the publish operation takes. However, if a validation issue is missed, the workflow may show unexpected errors.
- **Enable workflow to start from the item menu:** When this setting is checked, the workflow is displayed and can be started from the item's context menu. All other menu item related options are dependent on this setting being checked.
- Menu item label: The label for the workflow when displayed in the item's context menu.
- Menu item image URL: The URL of the icon for the workflow when displayed in the item's context menu. The URL can be absolute or site relative.
- Menu item position: The order priority of the workflow within the item's context menu relative to the other menu items.
- **Enable custom history messages:** When this setting is checked, actions which have 'Message to log on completion set' will be included in the Workflow History. Please refer to Workflow Action Common Settings.
- Create workflow status column: When this setting is checked, a column with the workflow's name will be added to the list or library when this workflow runs.
- **Expected workflow duration:** The workflow will record this duration in the database for reporting purposes.
- Task list: All tasks created by a workflow are stored in a SharePoint tasklist on the teamsite. This option allows the task list that the workflow uses to be changed from the default.
- **History list:** As the workflow progresses, each step within the workflow is recorded in the SharePoint workflow history list. This option allows a history list that has been enabled for Nintex Workflow to be selected. Please refer to Managing workflow history lists.
- Form type: Specify if the start form to be used is the default, custom, or InfoPath form.

#### Ribbon menu buttons

- Variables: Create workflow variables and start data. Please refer to Workflow variables.
- Association Columns: Specify site columns that will be associated with this workflow. Please refer to Association columns.
- Edit Start Form: Edit the start form with Microsoft InfoPath 2010. If InfoPath 2010 is not installed on the user's PC, an alert will be shown and no form editing will occur.

Note: Workflows are associated with a library or a list. Folders and sub-folders within libraries are subject to the same workflows as the parent library. Therefore, if a workflow is set to start when items are created or modified, any item, regardless of how many folders or sub-folders down it is stored, will trigger all the workflows that are set to start automatically.

### 5.21 Workflow Snippets





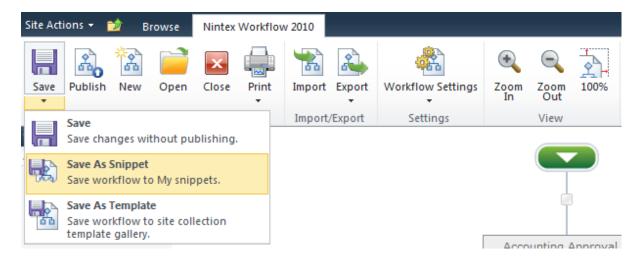
The Snippets feature provides the ability to reuse a predefined set of actions in the same sequence easily. For a set of actions which may be reused frequently, the user can choose to save the set of actions as a snippet. The saved snippet can then be used within the current workflow or in other workflows within the same site collection.

#### Creating a snippet

There are two ways to create a snippet.

- 1. To save an entire workflow as a snippet:
  - In the Nintex Workflow Designer Ribbon, below the **Save**, expand the available options by clicking ▼.
  - Click on Save as Snippet.

Note: This will save the entire workflow as a snippet.



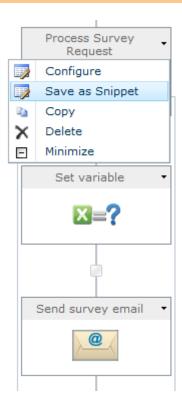
- 2. To save an 'Action Set' action as a snippet:
  - In the 'Action Set' action, click on ▼ the title bar.
  - In the menu presented, click on Save as Snippet.

Note: This will save the workflow action including its nested workflow actions as a snippet.

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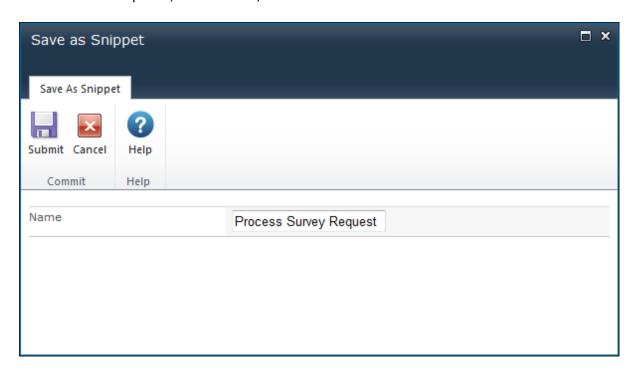






In both ways when a snippet is saved, the **Save as Snippet** dialog will be displayed.

- In the **Name** field, provide a unique value to save the snippet.
- When completed, in the Ribbon, click **Submit**.







### **Using Snippets**

Once a snippet has been saved a new section will appear in the Workflow Actions toolbox called **My snippets**. It is from here that a snippet with all its preconfigured settings can be used in the workflow.

To add a snippet to the worfklow:

• In the Workflow Actions Toolbox, click on My snippets.



• Drag the selected snippet and drop it onto the drop zone on the design canvas.

Note: When the snippet is released onto the drop zone, it will be rendered as a set of workflow actions - the snippet icon will not appear on the workflow canvas.

To delete a snippet:

- Locate the snippet in the Workflow Actions Toolbox and right-click on the snippet itself.
- In the Context menu, select the **Delete** option.

### 5.22 Workflow start data

Start data is data that must be collected when the workflow is started. When a user starts the workflow, they will be presented with a form requesting this information.





Start data is configured by creating workflow variables and setting the **Show on start form** option to 'True' for the variable to be shown.

For more information please refer to the Workflow variables.

### 5.23 Workflow templates

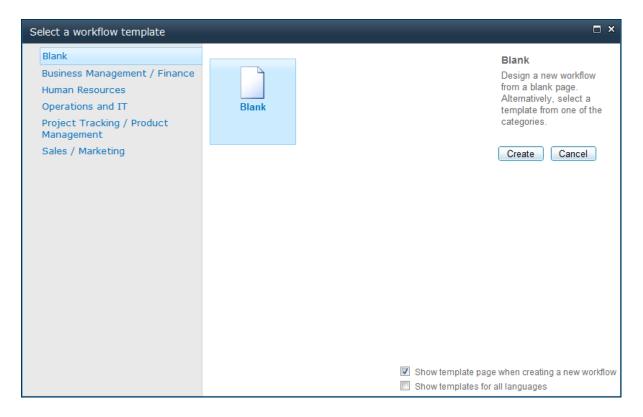
Workflow templates provides the ability to create a new workflow using the basis of a saved workflow template. By using workflow templates, workflow designers are able to save a considerable amount of time without the need to build a similar workflow already in existence from scratch.

Workflow templates are associated at a Site Collection level. Saved workflow templates will only be available for reuse within the site collection the workflow was saved from. In order to use a workflow template from a different site collection, use the export workflow and import workflow features. Refer to <a href="Importing and exporting workflows">Importing and exporting workflows</a>.

### Selecting a workflow template

To create a new workflow based on a workflow template:

- Navigate to the site, list or library (depending on the type of workflow to be created).
- Click on Create a Workflow.
- The **Select a workflow template** dialog is displayed.







Note: Templates shown may differ from those available. Also, depending on what version of Nintex Workflow installed, pre-loaded templates may differ.

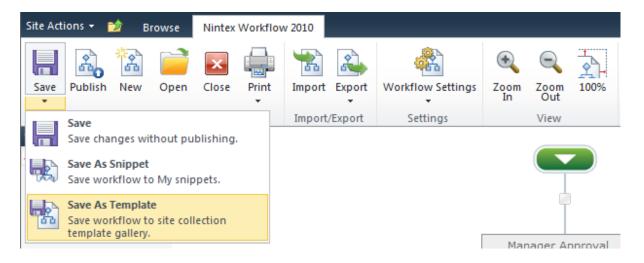
- By default, the option of starting a blank workflow is presented. Any template categories available will be listed in the template box. By hovering over a template the description of the template. This description is also shown in the right hand column under the template name, along with the category of the template, the last date modified and the last person who modified the template.
- Select a template, by clicking on the Template and then click on the Create button; OR
- Double click the template selected.

#### Show template page when creating a new workflow:

- To disable the dialog from appearing each time the Create a Workflow is clicked, uncheck Show template page when creating a new workflow.
- To re-enable the dialog to appear each time the Create a Workflow is clicked:
  - o In the Workflow Designer, within the Ribbon, click on **Open**.
  - o Check Show template page when creating a new workflow.

### Saving a workflow as a template:

- Once the design of the workflow has been completed.
- In the Nintex Workflow Designer Ribbon, expand the available options by clicking below the **Save** icon.
- Click on Save as Template.

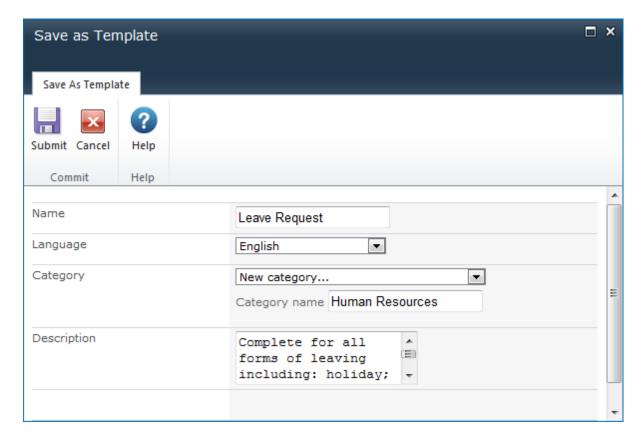


- In the Save as Template dialog:
  - o **Name:** The title of the workflow template.
  - Category: Select an existing category to list the workflow template under or select New
     Category... and specify a Category Name for the workflow template to be listed under.





 Description: Brief description of the purpose of the template which could help users identify which template they might select.



### Deleting a workflow template

Only an Administrator can delete workflow templates.

To delete a workflow template:

- Navigate to the Top Site level home page.
- In the Site Actions menu, click on Site Settings.
- In the Nintex Workflow group click on Workflow Templates.
- The full list of workflow templates for the site collection will be displayed.
- Click on the workflow template to be deleted.
- In the Edit workflow template page, click Delete Item.
- In the Confirmation dialog, click OK.

### 5.24 Workflow variables





Workflows retrieve data from a data source at run time, workflow variables provides the ability to store data somewhere in order to use it in the conditions and actions within the workflow. Different types of data can be stored in a workflow variable. A workflow variable can also be used to get data from users on workflow start.

Some examples of when workflow variables are useful:

- The workflow requires a value for conditional actions which is a combination of values that exist already in the system. For example, these values can be set using the Math operation or Build **Dynamic String actions.**
- Workflows developed in a development environment for deployment to testing and then subsequently deployed to production environments. To avoid using hard coded values in the workflow that must be manually updated during deployment, workflow variables can be used to load values from other lists via Using lookups. e.g. a URL to be used in an email may be different for each environment, this can be sourced at runtime from a configuration list within each environment using the Set a variable action.
- A workflow may require the creation of another list item that will need to be queried later using a lookup or deleted automatically depending on further logic in a workflow. E.g. a new report requires that a meeting is organised, but during the workflow an administrator has rejected the report. Therefore the calendar event needs to be deleted.

It is not always appropriate or possible to store some of these values as meta data of the item attached to the workflow. To provide the means and flexibility to handle these kinds of scenarios Nintex Workflow provides workflow variables.



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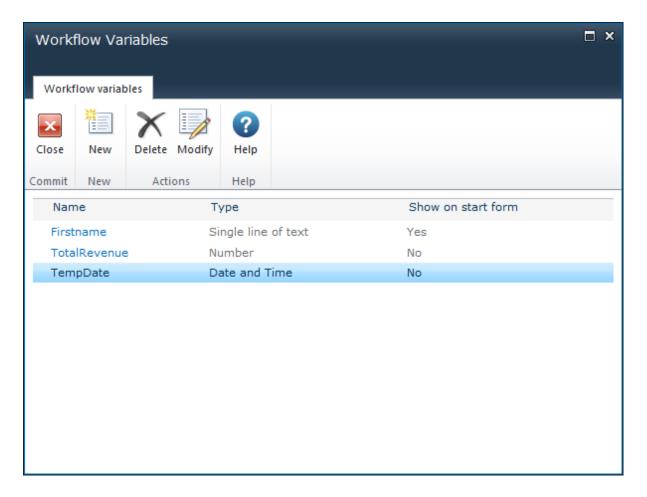
### **Managing Workflow Variables**

To create or delete a variable attached to a workflow:

- In the Nintex Workflow Designer Ribbon, click on Workflow Settings.
- In the Workflow Settings dialog, within the Ribbon, click on **Variables**.

#### Alternatively:

- In the Nintex Workflow Designer, below the **Workflow Settings** in the Ribbon, expand the available options by clicking .
- Click on Variables.



• The **Workflow Variables** dialog will be displayed listing all of the current variables that are configured with their type and if the workflow variable is used at the start of the workflow as indicated in the **Show on start form** column.

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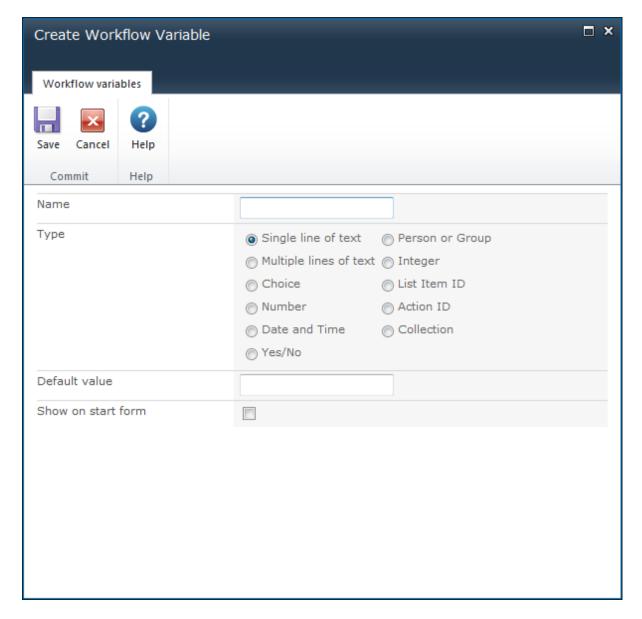
#### To create a new workflow variable:

- In the Workflow Variables Ribbon, click on **New**.
- The Create Workflow Variable dialog will be displayed.
  - o **Name**: The name of the workflow variable.
  - Type: The data type of the workflow variable.
  - Default value: The default value given to the workflow variable when the variable is used within the workflow.
  - Show on start form: Checking this option will allow users to specify a value for the workflow variable when the workflow is first started. Note: Start Variables (Start data) will only appear if the workflow is set to start manually, if the workflow starts automatically, the start variables fields will not appear and if default values are set, they will be used for the variables.
  - Required: Only available when a variable has the Show on start form option checked.
     Checking this option will ensure users enter a value into the workflow variable on start of the workflow before a workflow can start.

Note: Not all Types can be used to get value from a user on the start of the workflow. The **Show on start form** checkbox will be greyed out if the type is not supported.







To modify an existing workflow variable:

- In the **Workflow Variables** dialog, select the workflow variable in the list.
- In the Ribbon, click on Modify.
- In the **Modify Workflow Variable** dialog, make the changes. Changes to the type cannot be made.
- When all changes have been made, click **Save**.

To delete an existing workflow variable:

- In the Workflow Variables dialog, select the workflow variable in the list.
- In the Ribbon, click on Delete.



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Note: Workflow actions that use workflow variables are restricted to specific variable data types. For example:

- For Math operation you will only be able use number variables;
- When creating a new item only a List Item ID variable can be used to store the ID of the new item;
- A <u>Set a condition</u> action that is comparing the created date can only use a DateTime variable.

### 5.25 XPath Query Builder

The XML Browser is found within the XPath Query Builder.

The XML Browser is used to select an element in the XML structure. If the XML source specified for the action is available and all tokens and references are replaced with actual run time values, then the XPath Builder will use the XML source to display the XML structure within the XML Browser.

If the XML source specified for the action is not available, the XML data that is required to generate the Tree View in the XML Browser must be provided manually. Use the XML Source button in the Ribbon to provide sample XML data. This will provide the XML data required to populate the Tree View.

Sample XML data can be entered by:

Typing the XML data into the text box.

Or

Select Import XML and upload a file or URL to populate the text box.

Note: If the workflow is being designed on an InfoPath form library, the XML Browser will load the InfoPath form template that has been uploaded to the form library in the Tree View if the action's XML source selected is Current item.

To select the node to be used within the action:

- 1. Once the sample XML is available, select **Tree View** in the Ribbon.
- 2. Expand the nodes to select the element or attribute.
- 3. Click **Apply** in the Ribbon.

