

HP Service Manager – Process Designer Content Pack 9.30.2

Administrator's Guide

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1 Introduction

The Process Designer Content Pack 9.30.2 enhances the Change Management Module for Service Manager. The features are delivered as optional content available in the Service Manager Community on HP Live Network. This document describes all the Process Designer capabilities introduced in Service Manager 9.30/9.31 and in Process Designer Content Pack 9.30.2.

Because Process Designer Content Pack 9.30.2 is applied to an existing system, please pay particular attention to *Upgrading to new Change Management*.

Prerequisites

This content pack must be applied on a Service Manager system with:

- 9.31p1_HF-PDCP3 Server hotfix (RTE)
- 9.31p1_HF-PDCP3 Web tier / Windows client hotfix

Note:

- To obtain the hotfix package, contact your HP Support. To install sever update, Web tier, and Windows client, refer to the *Installation Notes* section in the 9.31p1 release notes.
- The 9.31p1_HF-PDCP3 hotfix does not contain the fixes introduced in 9.31p1_HF1.

Process Designer Content Pack 9.30.2 is compatible with following application, application patch and content pack:

- 9.31 Applications

Note:

- Although this content pack is also compatible with some other applications (that is, 9.30, 9.30 ap1, 9.30 ap2, and 9.30 ap3), the recommendation is to upgrade to 9.31 Applications before applying this content pack. If you apply this content pack on top of any applications prior to 9.31 and later you want to upgrade to 9.31 Applications, you will encounter conflicts and you will need to reconcile them manually.
- 9.31 Applications can be downloaded from <http://support.openview.hp.com/selfsolve/patches>.

- HTML Email Content Pack

Note: If you plan to use HTML Email function together with Process Designer Content Pack 9.30.2, apply the HTML Email Content Pack first. The HTML

Email Content Pack can be downloaded from HP Live Network (<http://www.hp.com/go/livenetwork>).

Installation

Applications Patch Manager is used to install this package. This is the same tool used to install Service Manger Cumulative Application patches but has been enhanced to install Content. Note that the content install is independent of Application Patches installs. Follow the *Installation Notes* section in the release notes and the *Applications Patch Manager Guide* provided in the content package for installation instructions.

Download

For more information and to download the installation and documentation, visit <http://www.hp.com/go/livenetwork> and navigate to the Service Manager Community Standard Content Area.

What's new in Process Designer Content Pack 9.30.0?

Process Designer Content Pack 9.30.0 contains several new and enhanced features. The following table outlines the features supported in this content pack.

| Feature | Description |
|--|---|
| Process Designer for Change Management | Changes and Change Tasks are now governed by the Process Designer workflow and rules in the same way Knowledge Management was converted to use Process Designer in Service Manager 9.30. |
| Out-of-box rules | The following are new Rule types: Run a Macro Send HTML Email Start or Stop Clock Validate Date Validate Text/Number |
| Change process workflows | Standard, Normal, and Emergency Change workflows that are aligned to ITIL v3. |
| Change model | A change model allows you to apply starting information for a change using templates and pre-defined tasks. Change models also have categorization attributes such as category, subcategory, and service which are then used to organize the change models to define a standard library of changes. |
| Task editor in change model | Task editor is a graphical interface which provides a set of tools to create tasks and task dependencies as part of a change model. Complex task dependency relationships can be created as well as which phases tasks can start and end. |
| ChM membership | The ChM membership provides information on members and approvers of change group. |
| Security role | Change profiles are replaced with security roles. Changes and tasks setting are set using the role-based security. |

The following Condition Editor enhancements support the content pack and were delivered in Service Manager 9.30 p1 and Service Manager 9.30 p2 platform patches.

- Flexibility to define an expression
- Ability to edit a pre-existing condition
- Negation of Condition Groups

What's new in Process Designer Content Pack 9.30.1?

Process Designer Content Pack 9.30.1 provides the following enhancements in addition to those in Process Designer Content Pack 9.30.0:

- Compatibility with Service Manager 9.30 Application Patch 1 (SM9.30 ap1)
- Support of the Service Manager integrations that are part of the CCRM solution (SM-OO, SM-RC, and SM-UCMDB).

What's new in Process Designer Content Pack 9.30.2?

Process Designer Content Pack 9.30.2 provides the following enhancements in addition to those in Process Designer Content Pack 9.30.0 and 9.30.1:

- Support of applying change model to existing change records. In addition, you can configure whether or not this “Apply Change Model” option is available for a specific workflow phase.
- Task planner (was called “task editor” before this release) has been enhanced:
 - Support of adding conditions for task creation by using the Condition Editor embedded in the task planner in change model.
 - Support of creating mandatory tasks in the task planner in change model.
 - Task planner now is also available in change records for you to view or plan change tasks.
- The Service Catalog connector "Open a Change" is enhanced to support the use of change model to open a change record.
- Support of configurable filtering of change models by using script function.
- Support of configuring custom fields to be copied from a change model to a change record by using link file.
- You can now use Mass Cancel to cancel all the opened tasks for a change record.
- Security improvement: some mappings between the old profiles and the new Process Designer security rights are corrected.

2 Process Designer Security Model

The Process Designer security model provides a consistent method of assigning permissions to users across all facets of Service Manager data and accounts for out-of-box rights that can be configured for a specified role within an area. It also provides standardized methods to manage user rights.

▶ Process Designer security model is implemented for the Knowledge Management and Change Management modules. For all other areas and modules, the traditional security features for Service Manager still apply.

The Process Designer security model includes the following components:

- **Area:** An area defines a specific functional area or module within Service Manager, such as Knowledge Management or Knowledge Management administration. Each area definition includes default rights that are copied to the role whenever a new role is created. In addition to the out-of-box areas, system administrators are able to define additional areas.
- **Rights:** The system includes a set of rights such as view, new, update, and delete that control an operator's data access. When an administrator creates a role, the default rights from each area are used to set the rights for that role. Rights can be modified for a specific area and role by an administrator that has update rights for the area and role. Each combination of role and area creates a collection of rights.
- **Settings:** Settings are configurable security extensions such as an initial view, a format to display a list, or an approval checkbox. Settings are added for an area. The types of settings include number, string, Boolean, date/time, global list, manual list, record, and condition.
- **Roles:** A role has a set of rights and settings assigned to it. Each operator is assigned a role or roles which, along with area, determine the access rights for the operator. Whenever the roles on an operator record are updated, the operator must log out and then log in for the changes to take effect.

▶ The out-of-box system includes a default role for the Security area that cannot be deleted.

- **Data Policy records:** The data policy records include an Area field used to specify the area associated with the table. An area needs to be associated with a Data Policy record in order to access the information from the table.
- **Allowed Statuses and Allowed Categories:** These fields display the list of statuses and categories available to the operator when accessing data. A System Administrator specifies the allowed statuses and allowed categories for a role within an area. When the rights do not include specific allowed statuses and allowed categories, all statuses and categories are available for the role within the area.

Related concepts

[Multiple roles](#)

Related tasks

[Add a role](#)

[Add an area](#)

Multiple roles

When an operator has multiple roles, the operator's data access rights are combined to give the operator the greatest data access.

When the rights do not include specific allowed statuses and allowed categories, all statuses and categories are available for the role within the area.

- Example, if an operator has view rights for one role in an area and update rights for another role in that area, then the operator has view and update rights for the area.
- Example, if an operator has allowed statuses and allowed categories specified in one role and not in another role, then the operator is able to access all categories and statuses for the area.
- Example, if an operator has multiple roles that include different allowed statuses and allowed categories, the allowed statuses and allowed categories are merged so that the operator has all allowed categories and allowed statuses. No allowed statuses and allowed categories are duplicated.
- Example, if an operator has multiple settings because the operator has been assigned multiple roles, the operator only has the actual settings for the first settings in the operator record.

Related tasks

[Add a role](#)

[Add an area](#)

Add a role

User Role: System Administrator

When you create a role, the rights from each area defined in the system are used to set the rights for that role record.

To add a role record:

- 1 Click **System Administration > Security > Roles**.
- 2 Click **New**.

- 3 Type the name for the role.
- 4 Type a description for the role.
- 5 Click **Save & Exit**.

Related concepts

[Process Designer security model](#)

[Roles in the operator record](#)

Related tasks

[Assign a role or roles to an operator](#)

Roles in the operator record

System Administrators assign roles to an operator in the Security Roles field of the operator record. When a System Administrator creates an operator record, the system assigns the default role to the operator if the System Administrator does not add a role for the operator. The System Administrator can update the operator record to change a role or add additional roles.

When an operator has multiple roles, the operator has the rights that provide the greatest data access. However, if each role has additional settings, the rights from the first role listed in the Security Rights field are used to determine an operator's access rights.

Related concepts

[Process Designer security model](#)

Related tasks

[Assign a role or roles to an operator](#)

Assign a role or roles to an operator

User Role: System Administrator

You assign a role or multiple roles to an operator to provide the operator access to Service Manager data. You can also update the operator's role in the operator record.

To assign a role or roles to an operator record:

- 1 Click **System Administration > Ongoing Maintenance > Operators**.
- 2 Enter the applicable search criteria to find an operator record and then click **Search**.
- 3 In Security Roles, select the role or roles you want to assign to the operator.
- 4 Click **Save**.

Related concepts

[Process Designer security model](#)

[Multiple roles](#)

Related tasks

[Add a role](#)

Add an area

User Role: System Administrator

When you create an area and define the rights and settings for the area, all roles will inherit the rights and settings for the area.

To add an area:

- 1 Click **System Administration > Security > Areas**.
- 2 Type the name for the role.
- 3 Click **New**.
- 4 Select the module for the area.
- 5 Type a description for the area.
- 6 Define the rights for the area.
- 7 Define the settings for the area.
- 8 Click **Save** to add the record.

Related concepts

[Process Designer security model](#)

[Roles in the operator record](#)

Related tasks

[Add a role](#)

[Assign a role or roles to an operator](#)

Add a setting within an area

User Role: System Administrator

You can add a new setting, such as record or format, in the area. A role inherits the new setting from the area when the new setting for the area is not already defined in the role. For example, this is useful when you want to have role within an area to have additional access to system data or another form.

When you add a new setting, it is only inherited when you add a new role.

To add a setting within an area:

- 1 Click **System Administration > Security > Areas**.
- 2 Add optional search criteria and then click **Search**.
- 3 Click the area to update.
- 4 Click **More** icon and then select **Administration > Add New Setting**.
- 5 On the New Setting Info wizard, provide the following:
 - **Id**: Uniquely identifies the setting so that it can be referenced programmatically.
 - **Display Label**: Defines display label for the setting.
 - **Description**: Describes the setting.
 - **Type**: Select the type of data used by the setting to match the type of setting you are creating. For the type selections, the format of the field on the form depends on the type you select. For example, if you choose Boolean, then the setting displays a check box and if you select record, the setting displays as a text field. When you select some of the types, the system prompts you for additional information. For example:
 - If you select Record, you are also prompted to specify the table and field name for the record.
 - If you select Manual List, you are prompted to provide a display type and a name - value pair to display in the list. The Value is the field name in the table and Display Value provides the list of items in the drop-down list for the field.
 - If you select Global List, you are prompted to provide a Global List and Display Type for the Global List.
- 6 Specify whether or not the setting is mandatory. When checked, a value is required for the setting you are adding.
- 7 Click **Next**.
- 8 In Adding Settings Validation, add an optional validation script.
- 9 Click **Finish**.

Related concepts

[Process Designer security model](#)

[Validation script for a new setting](#)

Related tasks

[Add an area](#)

[Add a role](#)

[Update a setting within an area](#)

[Validation script for a new setting](#)

When you add an additional setting you have the ability to create simple or complex validations for the setting using JavaScript. JavaScript automatically sets up an

XML variable named “result”, which has a child node named “message”. If the value of the result node is 0 (zero), the validation has succeeded. Any non-zero result is interpreted as a failure. When a validation fails, the contents of the message node display. The value of the setting being validated is set to a variable named “value.”

Example:

This example validates that the setting is a number between 1 and 10.

```
if ( value < 1 || value > 10 )  
  
{  
  
    result.setValue (-1);  
  
    message.setValue("The value must be between 1 and 10.");  
  
}
```

Related concepts

[Process Designer security model](#)

Related tasks

[Add an area](#)

[Add a role](#)

[Add a setting within an area](#)

[Update a setting within an area](#)

Update a setting within an area

User Role: System Administrator

Once you create a setting for an area, you can update the definition of the setting or delete it. You can also edit any labels that have been localized.

When you add a new setting to an area, it is only inherited when you add a new role.

To edit a setting within an area:

- 1 Click **System Administration > Security > Areas**.
- 2 Add optional search criteria and then click **Search**.
- 3 Click the area to update.
- 4 Click the **More** icon and then select **Administration > Edit/Delete Setting**.
- 5 Select the setting to edit or delete.
- 6 On the Edit Setting Info wizard, update the following:
 - **Id:** Uniquely identifies the setting so that it can be referenced programmatically.
 - **Display Label:** Defines a display label for the setting.

- **Description:** Describes the setting.
 - **Type:** Select the type of data used by the setting to match the type of setting you are creating. For the type selections, the format of the field on the form depends on the type you select. For example, if you choose Boolean, then the setting displays a check box and if you select record, the setting displays as a text field. When you select some of the types, the system prompts you for additional information. For example:
 - If you select Record, you are also prompted to specify the table and field name for the record.
 - If you select Manual List, you are prompted to provide a name-value pair to display in the list. You must also enter Display Type (Radio Button or Drop Down List).
 - If you select Global List, you are prompted to provide a Global List and Display Type for the Global List.
- 7 Specify whether or not the setting is mandatory.
 - 8 Click **Edit localized labels** to update localized labels.
 - 9 For each language available, you can localize the label text. After you localize the text, click **Save** and then **OK** to return to the wizard.
 - 10 Click **Next**.
 - 11 As an option, you can add or edit a validation script for the setting in Adding Settings Validation.
 - 12 Click **Finish**.

Related concepts

[Process Designer security model](#)

[Localization process](#)

Related tasks

[Add an area](#)

[Add a role](#)

[Add a setting within an area](#)

Localize an additional setting

User Role: System Administrator

Once you add a new setting, such as record or format, you can localize the setting for all of the languages that are active in the system.

To add a setting within an area:

- 1 Click **System Administration > Security > Areas**.
- 2 Add optional search criteria and then click **Search**.

- 3 Click the area to update.
- 4 Click the **More** icon and then select **Administration > Edit/Delete New Setting**.
- 5 In the Edit Setting Info wizard, click **Edit localized label**. A list of the messages displays for the user's current language.
- 6 Click the item you want to localize and then type the applicable text to localize the label you created for the setting.
- 7 Click **Save**.
- 8 Continue selecting items until you have localized all the labels for the languages active in the system.
- 9 To localize the data in the settings for global lists or manual lists, use the record tag localization utility.

Related concepts

[Localization process](#)

See "[Record tag localization utility](#)" in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

[Add a setting within an area](#)

Modify the rights for a role within an area

User Role: System Administrator

Once a role is created and rights are configured, an administrator updates the rights for a role within an area.

To modify the rights for a role within an area:

- 1 Click **System Administration > Security > Roles**.
- 2 Add optional search criteria and then click **Search** to find the role you want to modify.
- 3 Select the role and then select the area you want to modify.
- 4 Make the changes you want for default rights, folders, and settings.
- 5 Click **Save & Exit**.
- 6 For any other area, repeat steps 3 through 5 to update the rights for the selected role.

Related concepts

[Roles in the operator record](#)

Related tasks

[Add a role](#)

[Assign a role or roles to an operator](#)

[Add an area](#)

Update rights to display allowed categories and allowed statuses

User Role: System Administrator

A System Administrator can add additional rights to a role within an area by adding the Allowed Categories and Allowed Statuses fields for an area. Once these fields are available, an administrator can then specify particular categories and statuses for which the role has rights. If an area has multiple tables that support category and status, the drop-down list in Allowed Categories and Allowed Statuses will have a combination of all categories and statuses from all tables.

The example below uses the data policy record for the cm3r table for Change Management to demonstrate how to display the Allowed Categories and Allowed Statuses fields.



When you add a new setting, it is only inherited when you add a new role.

To add a setting within an area:

- 1 Click **Tailoring > Data Policy**.
- 2 Use search to find the data policy record for the cm3r table.
- 3 Select an area from the drop-down list in the Area field. This list displays all the areas available for the selected data policy record.
- 4 Click **Save**. The Allowed Categories and Allowed Statuses fields now appear in the Default Rights section for the roles within the area you specified in step 3.

Related tasks

[Add an area](#)

[Add a role](#)

Modify allowed categories and allowed statuses

User Role: System Administrator

For both roles and areas, an administrator can specify in the Allowed Categories and Allowed Statuses fields the categories and statuses for which a role has rights within an area. Before you can do this, you must first update the applicable data policy record. These rights give a role in combination with the other rights access to the specific categories and statuses selected. When no selections are made for Allowed Categories or Allowed Statuses, the role has access to all categories or statuses within the area.

You must first ensure that the data policy record for the role within an area has been updated to include the Allowed Categories and Allowed Statuses fields.



When you add a new setting, it is only inherited when you add a new role.

To modify Allowed Categories and Allowed Statuses:

- 1 Click **System Administration > Security > Roles**.
- 2 Use search to display a list of roles.
- 3 Select the role to update.
- 4 Select the area you want to update.
- 5 Select the Allowed Categories and Allowed Statuses from the drop-down lists.
- 6 Click **Save**.

Related tasks

[Add an area](#)

[Add a role](#)

[Update rights to display allowed categories and allowed statuses](#)

3 Processor Designer

Process Designer provides a graphical interface to develop workflows that you can use to control the flow of a single record throughout its lifecycle within Service Manager. The Process Designer enables an implementer to graphically create or update a workflow without being an expert in RAD programming.

The Process Designer provides a platform to build ITIL compliant out-of-box processes. The features include:

- Define a workflow process in a graphical editor.
- Create business rules in a user-friendly interface to drive the workflow logic.
- Provide a platform to model complex processes that require branching and looping.
- Lower Total Cost of Ownership of Service Manager by enabling an intuitive and simplified configuration.
- Simplify future upgrades by enabling standardization and clarity of business logic.

Process Designer includes the following components:

- Workflow designer: Design and update a workflow using a graphical user interface.
- Rules editor: Create rules to enforce business logic in workflows and forms.
- Security model: Provide a common role-based security model.

A workflow is a collection of phases with transitions from one phase to another. Each phase represents the state of the workflow linked to a form for data capture. Transitions can connect phases in any manner to create a workflow with many branches and loops back to previous phases. Transitions may be manual, automatic, or default. A manual transition requires the workflow user to make a manual decision to move to the next workflow phase. An automatic transition moves the workflow to another phase based on data in the workflow record. A default transition is a special case that moves the workflow automatically, when no other automatic transition condition applies.

The rules editor enables administrators, such as business process owners, implementers, and developers, to add or remove the out-of-box rules and actions of a workflow to match particular business requirements. You can group rules into Rule Sets to allow their re-use within the process. You can configure Rule Sets to execute on events, such as saving or updating a workflow record. Rules can also be set up to run on a workflow transition.

You can also configure rules as actions, which allows operators to run rules on demand rather than wait for workflow processing. When an operator initiates an action, the system runs the associated Rule Sets for that phase of the workflow.

With the Condition Editor, you can apply conditions to rules. When a rule condition is met, the rule executes. You can also edit conditions for a rule.

The Process Designer security model provides a consistent method of assigning permissions to users across all areas of the system. You can use security model to configure out-of-box rights for a specified role within an area. It also provides standardized methods to manage user rights.

Process Designer features are implemented for Knowledge Management and Change Management. You can access the Process Designer features from the system navigator as follows: **Tailoring > Process Designer**

A typical Process Designer flow broadly comprises of the following major tasks:

- Create Rule Sets with Rules using out-of-the-box rule types to enforce business logic on traditional Service Manager forms.
- Create a workflow with phases and transitions to build a process flow.
- From workflow phases and transitions associate forms, rule sets, approvals, and alerts to implement your business process.

Related concepts

Using the Condition Editor

Upgrading to the new Knowledge Management workflow

Upgrading to the new Change Management workflow

Create a Rule Set

User Roles: System Administrator, Implementer

A Rule Set contains a list of rules that you may run against a record. Rules implement business logic to drive a workflow or a process. Rules can help perform calculations, validate fields based on data or Rule Sets, set required fields, invoke actions, and more. A Rule Set uses role-based security.

You can re-use Rule Sets in many processes when you require the same rules in many places. Rule Sets simplify the effort of implementing business logic. You can apply Rule Sets based on conditions, or configure them to run during an action. Rule Sets are most often associated with specific phases and transitions of a workflow.

To create a rule set:

- 1 Click **Tailoring > Process Designer > Rule Sets > New**.
- 2 Type a unique ID for the rule set. For example, `kmdocument_draft`.



The name must be unique within the Rule Sets records.


- 3 Select **Available as action** if you want to offer this Rule Set as an action within a workflow phase. An action is exposed as a button in the tool bar, option in the **More** options, or button on a form. For example, an action can be used to

preview the KM document, launch a web page, or pass data to an external system. Actions should not be confused with a transition that moves the record to another phase in the workflow.

- 4 Type the display name for the Rule Set, for example, Saving a draft.
- 5 Select the table(s) from the Table name list that you want the rule sets to apply to, for example, select kmdocument.

 If the list is blank, the Rule Set can be applied to all tables.

- 6 Click **Save** to add the Rule Set.

 If you want to edit an HP Proprietary Rule Set, create a copy of the HP Proprietary Rule Set. To add Rules to a Rule Set, you must first save the Rule Set.

Related concepts

[Adding a rule](#)

Related tasks

[Clone an existing Rule Set](#)

Clone an existing Rule Set

User Roles: System Administrator, Implementer

You can create an editable copy of an existing Rule Set by using the cloning option. Cloning a read only Rule Set marked as HP Proprietary creates an editable copy of the Rule Set.

To clone an existing Rule Set:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search**.
- 3 Select the Rule Set you want to clone.
- 4 Click **More > Clone**. A copy of the Rule Sets with both the ID and Name prefixed <CLONE> displays.
- 5 Rename both the ID and Name prefixed <CLONE> fields by typing something unique.
- 6 Click **Save**.

Related concepts

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

[Create a Rule Set](#)

Adding a rule

A rule defines a singular piece of functionality, such as making a field mandatory. A rule can perform calculations, validate fields based on data or lists, set required fields, and more. Rules can also specify conditions that determine when the rule should execute or who can execute Rules run in the order they appear in the Rule Set. The order can be changed using the **Move Up** and **Move Down** buttons. If there is an error executing a rule, rule processing will stop. It is important to order the rules such that validation rules come first in the list, and then any rules that will perform actions. For example, to validate data and send an HTML email, place rules to validate data first and then the rule to send an HTML email. If the rules were reversed, the HTML email will be sent with invalid data or an invalid workflow state if the rules are part of a transition.

All rules in a phase, except the "On Exit" rules, run before a change proceeds from one phase to another. The "On Exit" rules run after the next immediate transition.

The "On Exit" rules are the best place for notifications when a record leaves a phase especially when multiple transitions are used or when integration notifications are triggered. Transitions are used to add validations that are required before leaving to the current phase. For example, in a change phase, the start date and end date are entered before proceeding to the Approval phase and no input is required if you are abandoning the change. In this case, if the "On Exit" rules are run before the transition rules, you will be sending out notifications but the actual transition would not have happened. Therefore, the order of execution of rule is Transaction > On Exit > On Enter.

Examples of when rules run:

- A record enters or exits a specific phase of the workflow.
- A record is created, updated, or deleted in a certain phase of the workflow because of invoking a workflow action.
- A workflow transition is taken.
- A workflow action is invoked.

The following rule types are available in the out-of-box system:

- Launch an URL - Call an URL to launch a web page.
- JavaScript Validation - Use JavaScript to perform actions and validations.
- Run a macro - Run a Service Manager macro.
- Call a process - Call a Service Manager process record.
- Run a wizard - Run a Service Manager wizard.

- Clear Fields - Clear the specified field and related fields.
- Run JavaScript - Use JavaScript to perform actions and validations.
- Set Mandatory Fields - Set fields as mandatory.
- Set Mandatory Variables - Set variables as mandatory.
- Send Notifications - Send Service Manager notifications.
- Launch a Script - Launch a Service Manager script.
- Send HTML Email - Send an HTML Email to users or a group.
- Start and Stop Clock - Start and stop a Service Manager clock.
- Set Fields - Set a field value using JavaScript.
- Set Field from Number - Set field based on a number record.
- Validate Date - Validate a date against a date range.
- Field Validation Against a List - Validate a field against a list (global or defined).
- Field Validation Against a Table - Validate a field against a different table.



- You cannot modify out-of-box rules because they are labeled as HP Proprietary.
- You can edit a user-defined rule, for example to add or remove a condition.
- Many of the rules have a default description that may contain tokens that should get replaced with values. For example, the Set Mandatory Fields rule has a default description **<fields> are Mandatory**. The token **<fields>** will be replaced by the fields you select in the rule when you define the rule. You can edit the default description.
- If you do not specify a condition, rule will always trigger to perform the action specified in the rule.

Related concepts

[Process Designer](#)

Related tasks

[Create a Rule Set](#)

Add a JavaScript Validation rule

User Roles: System Administrator, Implementer

This rule enables you to validate any JavaScript code a user enters.

To add a JavaScript Validation rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.

- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **JavaScript Validation**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

You may reference the current record as `record` in the JavaScript. For example, if the field in a form is a category, it may be referred to as follows: `record.category=="xyz"`

- You may reference the original copy of the record (before any changes were made by the user) as **oldRecord** in the JavaScript (that is 'oldRecord.category').
 - You may set the **returnCode** variable in the JavaScript to specify whether this rule was successful or should be treated as a failed validation. A return code of 0 (zero) is considered successful (it is the default), any other code is unsuccessful. The return code must be a numeric value.
 - You may set the **message** variable in the JavaScript to specify a message that displays to the user if the rule is unsuccessful (returns a non-zero return code).
 - You may set the **cursorPosition** variable in the JavaScript to specify a field on the current form where the cursor should be placed if the rule is unsuccessful.
- 8 Enter the JavaScript in the text box.
 - 9 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Launch a URL rule

User Roles: System Administrator, Implementer

This rule enables you to launch a remote web address by its uniform resource locator (URL). Typically, this rule aids in integrating with other products.

To add a Launch a URL rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.

- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Launch a URL**.
- 6 Type the Rule Description: Call the URL: <URL name>
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

- 8 Type an XML string to set a condition for executing this rule.
- 9 **Note:** If you do not enter an XML string, the condition is set to **Always**.
- 10 Type the URL address of the remote resource you want to launch in the URL field.
- 11 Click **OK**.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Run a Macro rule


User roles: System Administrator and Implementer

This rule enables you to run a Service Manager macro, which executes a distinct action. Service Manager macros are specific actions driven by predefined conditions. For example, if you want to configure a macro to send an email, select the Service Manager macro type ‘Mail 1 Person’. You can configure this rule to send an email to an intended recipient when an incident ticket moves from one phase to another.


To add a Run a Macro rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Run a Macro**.
- 6 Type the Rule Description.

7 Click **Edit** to add a condition.

 If you do not specify a condition, it defaults to **Always**.

8 Select a macro name from the drop-down list.

 The drop-down list has macros related to the current table of the rule set.

9 Click **Ok** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Call a Process rule

User Roles: System Administrator, Implementer

This rule enables users to call a Service Manager process. You have to specify the process name and the conditions that call the process.

Caution: You cannot call a Service Manager process that expects an input, because there is no provision to pass the input through the rule. Calling a process that requires an input causes the rule functionality to fail and may generate an unrecoverable error message.

To add a Call a Process rule type:

1 Click **Tailoring > Process Designer** in the System Navigator.

2 Click **Rule Sets > Search** to open the Rule Set page.


3 Select the Rule Set to which you want to add the rule.

4 Click **Add Rule** to open the Select Rule Type page.

5 Click **Call a Process**.

6 Type the Rule Description.

7 Click **Edit** to add a condition.

 If you do not specify a condition, it defaults to **Always**.

8 Click **Fill Field Process**.

9 Select the process you want to call.

10 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Run a Wizard rule

User Roles: System Administrator, Implementer

This rule enables you to run a Service Manager wizard. The form helps you to specify the wizard to run when the rule executes.

To add a Run a Wizard rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Run a wizard**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

- 8 Click **Fill Field Wizard** to select a wizard to run when the rule executes.
- 9 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Clear Fields rule

User Role: System Administrator

From a rule set, you can clear the value of specified fields in a record. Optionally, the rule can also clear the value in fields related to the specified fields.

To add a Clear Fields rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Clear Fields**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it defaults to **Always**.

- 8 For those fields that will be part of the Clear Fields rule, select the fields in the drop-down list.
- 9 If you want to clear the value of related fields of the specified fields, select **Yes**.
- 10 If you do not want to clear the value of the related fields, select **No**.
- 11 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)


Add a Set Mandatory Fields rule

User Roles: System Administrator, Implementer

This rule enables you to make one or more fields mandatory and to specify a default value for each field, which will be set if the mandatory fields are empty.

To add a Set Mandatory Fields rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.

- 2 Click **Rule Sets > Search** to open the Rule Set page.
 - 3 Select the Rule Set to which you want to add the rule.
 - 4 Click **Add Rule** to open the Select Rule Type page.
 - 5 Click **Set Mandatory Fields**.
 - 6 Type the Rule Description.
 - 7 Click **Edit** to add a condition.
-  If you do not specify a condition, it will default to **Always**.
- 8 Select the error message type: **Pop-up** or **Screen** to display during validation.
 - 9 Click the **Show All Error Messages Together** check box if you want to display all error messages together during validation.
 - 10 Select the field name you want to set as mandatory.
 - 11 You can choose a default value, which will be set if the mandatory fields are empty.
 - 12 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Set Mandatory Variables rule

User Roles: System Administrator, Implementer



This rule enables you to set global and thread variables as mandatory. If mandatory variables are empty, then a default value is set if specified in the Rule.

Global or thread variables begin with the \$ symbol. However, the rule does not accept local variables beginning with \$L. Global variables are set when the operator logs on and the server automatically cleans them up when the session ends.

Thread variables do not have a consistent naming scheme. They are only valid for the current RAD thread. If the RAD thread terminates, the server automatically cleans up all thread variables.

To add a Set Mandatory Variables rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.

- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Set Mandatory Variables**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.
 If you do not specify a condition, it will default to **Always**.
- 8 Select the error message type: **Pop-up** or **Screen** to display during validation.
- 9 Click the **Show All Error Messages Together** check box if you want to display all error messages together during validation.
- 10 Select a global or thread variable.
 If a mandatory variable is empty, then the rule sets it to a default value.
- 11 Type the variable of the default value.
- 12 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)


Add a Send Notifications rule

User Roles: System Administrator, Implementer

This rule enables you to send notifications using a Service Manager notification record. The rule is typically mapped to a workflow or workflow phase. For example, you can use the rule to send a notification when a phase is entered. The rule type links to an existing notification record. If you need to send an email, use the Send HTML Email rule.

To configure a notification:

- 1 Click **Tailoring** > **Process Designer** in the System Navigator.
- 2 Click **Rule Sets** > **Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.

- 5 Click **Send Notifications**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.
 If you do not specify a condition, it will default to **Always**.
- 8 Click Fill Field Notification Name.
- 9 Select the existing notification record you want to send when this rule runs.
- 10 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

[Add a Send HTML Email rule](#)


Add a Launch a Script rule

User roles: System Administrator and Implementer


This rule enables you to launch a Service Manager script. Scripts enable you to interrupt the normal screen flow and gather the prerequisites before the form is displayed. For example, you can use a script to automatically close an incident in five days. The script closes the incident.

To add a Launch a Script rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Launch a Script**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.

 If you do not specify a condition, it will default to **Always**.

- 8 Click the **Fill Field Script** icon in the **Script text** box to select a Service Manager script.

 If you type an invalid script name, an error message appears.

9 Click **Ok** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Send HTML Email rule


User roles: System Administrator and Implementer

This rule enables you to send a formatted HTML email to intended recipients using pre-configured HTML templates. Recipients can be particular users or a group, either explicitly named or based on data in the form. This rule is used to send emails at specific points in a workflow as opposed to create a general Service Manager notification outside of Process Designer that, for example, would apply for all Change Requests.

This rule requires the HTML Email Solution Content Pack installed on your system. Download it at <http://www.hp.com/go/livenetwork> and visiting the Service Manager Community. You will not be able to configure this rule without this content pack.

To add a Send HTML Email rule:

- 1 Click **Tailoring** > **Process Designer** in the System Navigator.
- 2 Click **Rule Sets** > **Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Send HTML Email**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.

 If you do not specify a condition, it will default to **Always**.

8 Select an HTML template from the drop-down list.

9 Select one of the four recipient options: **Users**, **Group**, **Set Using Javascript**, or **Current Record**.

- a **Users:** Select a user type **Operators** or **Contacts**. After selecting the user type, select operators or contacts accordingly.
- b **Group:** Select one of the following group types: **Assignment Group** (assignment), **Change Management Group** (cm3groups), **Knowledge Management Group** (kmgroup), or **Request Management Group** (ocmgroups).
 - **Assignment Group:** Enter a group name in the **Group** field. Also, select **Operators**, **Manager**, or **All** from the **Send To** drop-down list for sending email.
 - **Change Management Group:** Enter the group name in the **Group** field. Also, select **Members**, **Approvers**, or **All** from the **Send To** drop-down list for sending email.
 - **Knowledge Management Group:** Enter the group name in the **Group** field. Also, select **Operators**, **Manager**, or **All** from the **Send To** drop-down list for sending email.
 - **Request Management Group:** Enter the group name in the **Group** field. Also, select **Operators**, **Manager**, or **All** from the **Send To** drop-down list for sending email.
- c **Set Using Javascript:** A script field appears where you can set the recipients in the **users** array variable with a valid operator login names or contact names. For example,

```
var users = new Array();
users[0]= "jennifer";
```
- d **Current Record:** Choose a field from the current record. Also, specify if the field is the ID of operator, contact, assignment, cm3groups, kmgroup, or ocmgroup using **Field Type**.
 - If you select any field type apart from **Operator** and **Contact**, then you have to select from **Send To** field. For example, if you select **Assignment Group**, then select **Operators**, **Manager**, or **All** from the **Send To** drop-down list for sending email.

10 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Start or Stop Clock rule

User role: System Administrator and Implementer

This rule enables you to start or stop a Service Manager clock to measure the time taken to reach one phase from another phase in a workflow. For example, if you want to know the time taken for an incident ticket to move from the Validation phase to the Risk and Impact Analysis phase, configure a rule to start a clock when the ticket enters the Validation phase. Then, configure another rule to stop the same clock when the incident ticket moves to Risk and Analysis phase. The time difference is stored in the clocks table along with start and stop times.

► You have to select the same clock for starting and stopping a clock in a rule set.

To add a Start or Stop Clock rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Start or Stop Clock**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.

► If you do not specify a condition, it will default to **Always**.

- 8 Select **Start Clock**.
- 9 To set a clock, select **Fixed Name**, under **Name of Clock**, and then type a clock name to add a new clock or select a clock name from the drop-down list.

► The values in the drop-down list are names of the existing clocks in the system.

- 10 To set a clock name using Javascript, under **Name of Clock**, click **Set Using Javascript**, and then create a clock name using Javascript. The following is an example of a clock using Javascript.

```
var clockName = "New Clock";
```

- 11 Click **Ok** to add the rule.
- 12 Repeat steps 4 to 11 to add stop clock by selecting the **Stop Clock** radio button in step 8 and make sure to select the same clock as the one started.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)


Related tasks

[Create a Rule Set](#)

Add a Set Field rule


User Roles: System Administrator, Implementer

This rule enables you to set a field with the value determined by a JavaScript. From a Rule Set, you can select a common field from multiple tables and set its value based on a JavaScript expression.

 Make sure that the field is set to the contents of the "value" variable. If it is not set to "value" variable, you cannot process JavaScript.

To configure a field based on JavaScript:

- 1 Click **Tailoring** > **Process Designer** in the System Navigator.
- 2 Click **Rule Sets** > **Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Set Field**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.

 If you do not specify a condition, it will default to **Always**.

- 8 Select an applicable field name from the drop-down list.
- 9 Type the JavaScript that sets the variable "value" to the desired value for the field in the text box.
- 10 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See "Process Designer security model" in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Set Field from Number rule

User roles: System Administrator and Implementer

This rule enables you to set a field based on a Service Manager number record. When this rule executes, unique sequential numbers for the records in the database are generated.

When a new record is added, the unique sequential number is incremented or decremented based on the prefix or suffix provided. For example, you can create a number record for the cm3r class with **Increment By** as **+1** and **Prefix** as **C**, **Last Number** as 10. Whenever a new change request is added in the system, it assigns the change request with a unique change ID C10, the next change request you add will have the change ID C11.

To add a Set Field from Number rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Set Field from Number**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

- 8 Select the field from the **Field Name** drop-down list.
- 9 Select the class from the **Class of Number Record** drop-down list.



You can select the **Overwrite When Record Is Saved** check box to overwrite the number when you save a record.

- 10 Click **Ok** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Validate Date rule

User roles: System Administrator and Implementer

This rule enables you to validate a date field against an absolute date or a range of relative dates. For example, you can add a rule to validate whether a document expiration date is greater than or equal to the document creation date.

To add a Validate Date rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.

- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Validate Date**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.
 - ▶ If you do not specify a condition, it will default to **Always**.
- 8 Select the error message type: **Pop-up** or **Screen** to display the error message during validation.
- 9 Select the field to validate from the drop-down list.
 - ▶ The drop-down list displays all fields with Date data type from the current table.
- 10 Select the comparison operator from the drop-down list.
- 11 Select the **Not** check box if you want to negate the comparison.
- 12 Click **Relative Date/Time** or **Absolute Date/Time** to validate against the date field.
 - a If you select **Relative Date/Time**, select a date field or **Current Date/Time** from the drop-down list.
 - b An offset time of days, hours, and minutes can be added or subtracted from the relative date/time by selecting + or -. For instance, an offset of +04:03:02 indicates the relative date/time is ahead by 4 days, 3 hours, and 2 minutes.
 - c If you select **Absolute Date/Time**, click the **Calendar** icon to select the date and time.
- 13 Click **Ok** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Validate against List rule

User Roles: System Administrator, Implementer

This rule enables you to select a field to validate against a list of values. This list may be global or manually defined.

To add a Validate against List rule:

- 1 Click **Tailoring > Process Designer** in the System Navigator.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Validate against List**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

- 8 Select the error message type: **Pop-up** or **Screen** to display during validation.
- 9 Select the field to validate from the drop-down list.
- 10 If you select **Global List**, select the global list from the drop-down list.
- 11 If you select **Manual List**, type the manual list names in the Value table.
- 12 Click **OK** to add the rule.



If the field value does not match a value in the specified list, the system displays a message and sets the cursor to that field when the rule is not followed.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add Validate Text/Number rule

User roles: System Administrator and Implementer

This rule enables you to validate a field against a range of text or number in another field of same table. You can define fixed values or select a field from the current table to validate against a field. For example, the field to validate is **Demo Number**, field to validate against is **Demo String1**, and the comparison operator is **Is greater than or equal to**.



If the field to validate against is blank, the rule is ignored. If you need to enforce the rule, then use a Set Mandatory Fields rule on the field you need to validate against.

To add a Validate Text/Number rule:

- 1 Click **Tailoring > Process Designer**.
- 2 Click **Rule Sets > Search**.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Validate Text/ Number**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

- 8 Select the error message type: **Pop-up** or **Screen** to display during validation.
- 9 Select the field to validate from the drop-down list.
- 10 Select the comparison operator from the drop-down list.
- 11 Select the **Not** check box if you want to negate the comparison.
- 12 To validate against a field or manually defined value:
 - To validate against a field, under **Values**, select **Field** and select the field you want to validate against from the drop-down list.
 - To validate against a manually defined value, Under **Values**, select **Custom** and type the value to validate against the selected field. For example, to validate if the “Risk Assessment” value is between 1 and 5, select the **Is between** comparison operator and type the value 1 and 5 in the **Custom** text box.
- 13 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Add a Validate against Table rule

User Roles: System Administrator, Implementer

This rule enables you to validate a field against a field in another table and fill data into other fields. You can also filter the data you are validating against, and fill data into other fields.

- ▶ If the field value does not match a value in the specified table, the system displays a pop-up message and sets the cursor to that field when the rule is not followed.

To add a Validate against Table rule:

- 1 Click **Tailoring > Process Designer**.
- 2 Click **Rule Sets > Search**.
- 3 Select the Rule Set to which you want to add the rule.
- 4 Click **Add Rule** to open the Select Rule Type page.
- 5 Click **Validate against Table**.
- 6 Type the Rule Description.
- 7 Click **Edit** to add a condition.

- ▶ If you do not specify a condition, it will default to **Always**.

- 8 Select the error message type: **Pop-up** or **Screen** to display during validation.
- 9 Select the field to validate from the drop-down list.
- 10 Select the name of the table you want to validate against.
- 11 Select the name of the field you want to validate against.
- 12 You can filter the data you are validating against using a standard RAD query.

For Example: The following field entries will validate only for cm3r with the current field name

(Demo String2 in this example) of the workflow:

Current Field Name field: **Demo String2**

Validate Against Table field: **ModuleStatus**

Validate Against Field field: **Status**

Filter field: **module="cm3r"**.

- 13 Click **Here to Add Fill Information** to enter Fill From and Fill To fields.

- ▶ The Fill From field represents the fields of the validation table against which it validates. The Fill To field represents the fields in the current table being validated.

- 14 Click **OK** to add the rule.

Related concepts

[Process Designer](#)

See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Adding a rule](#)

Related tasks

[Create a Rule Set](#)

Group rules

User Role: System Administrator, Implementer

You can group multiple rules into a Rule Group with an overall condition. The system runs all the rules in the Rule Group if the condition matches.

To group rules:

- 1 Click **Tailoring > Process Designer**.
- 2 Click **Rule Sets > Search** to open the Rule Set page.
- 3 Select the rule set where you want to add a group.
- 4 Click **Add Group**.
- 5 Type a rule group name, for example kmrules.
- 6 Click **Edit** to add a condition.



If you do not specify a condition, it will default to **Always**.

- 7 Click **OK** to add the group name.
- 8 Highlight the group by selecting it.
- 9 Click **Add Rule**.
- 10 Select a rule.
- 11 Type the attributes in the Rule page.
- 12 Repeat steps 8 to 11 if you want to add more rules.
- 13 Click **OK** to group rules.



You can add one or more rule groups within another Rule Group.

Related concepts

[Adding a rule](#)

See "More Actions menu" in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

[Create a Rule Set](#)

See "Remove an auto formatting rule" in *Service Manager 9.30/9.31 HelpServer topics*

Using the Condition Editor

The Condition Editor enables you to build a condition without any programming language knowledge. Conditions always evaluate to True or False. When a condition evaluates to True, the system runs the rule or applies an action that the condition controls. For example, you can use the condition to determine if a workflow transition should occur or if a rule should execute.

A condition is made up of one or more expressions connected by logical operators AND or OR. An expression is a query built from the fields, operators, and values that returns a Boolean value (True or False).

After you build a condition, Service Manager displays a user readable query describing the condition.

You can also build complex conditions with the Condition Editor. A complex condition typically has many expressions nested together with groups and sub groups. A group is a collection of multiple expressions within braces. The following is an example of a complex expression:

```
((description in Category = 100 OR display.name in Category = "Test") AND ((assoc.published.doc in CurrentFile !=true AND activity.mandatory.msg in Object <=20) OR error in SavedFile Starts With 101 OR ((the "edit.adaptive.learning" value in the "Knowledge Document" Security Area <= 123 AND the "update" value in the "Tailoring" Security Area = "always") OR test!=12)))
```



- After you have built a condition, you can add more expressions by linking them with OR and AND operators. If you change an OR to an AND operator, then the condition will group all expressions using an OR operator to ensure the condition makes logical sense.
- Make sure to build a proper condition. For example, a string field in a condition should have only alphanumeric characters. Improperly built conditions will show as Never and will not evaluate to either True or False.

With the Condition Editor, you can:

- Add a condition

- Add a group
- Edit a condition
- Negate a group of expressions
- Cancel a condition
- Clear a condition

Related concepts

[Process Designer](#)

Related tasks

[Build a condition](#)

[Add a group with a condition](#)

[Launch the Condition Editor](#)

Launch the Condition Editor

User role: System Administrator and Implementer

You can launch the Condition Editor only in the Web client. You can launch the Condition Editor in either of the following ways:

- To launch Condition Editor from a Rule:

- 1 Click **Tailoring** > **Process Designer** in the System Navigator.
- 2 Click **Rule Sets** > **Search** to open the Rule Set page.
- 3 Click **Add Rule**.
- 4 Select a Rule.
- 5 Type the rule description.
- 6 Click **Edit** to launch the Condition Editor.




If you do not specify a condition, it defaults to **Always** and the rule will always execute.

- To launch Condition Editor from Workflows:

- 1 From System Navigator, click **Process Designer** > **Workflows**.
- 2 Select an existing workflow or create a workflow.
- 3 Click a phase in the workflow.
- 4 You can launch Condition Editor from either of the following tabs:
 - **Details** – Click **Form Edit Condition** to launch the Condition Editor.
 - **Actions**– Click **Add** > **Action Condition** to launch the Condition Editor.

- **Approvals** – Click **Reset Condition** or **Recalculate Condition** to launch the Condition Editor.
- **Alerts** – Click **Reset Condition** or **Recalculate Condition** to launch the Condition Editor.
- **Transitions**– From a workflow page, click a transition > **Condition** in **Details** tab to launch the Condition Editor.

- To launch Condition Editor from the Task Planner for change model:
 - 1 Click **Change Management** > **Configuration** > **Change Models** in the System Navigator.
 - 2 Click **Search** to select a change model.
Or
Click **New** to create a new change model record. Then, select category from the drop-down list to view the **Task Planner** button.
 - 3 Click the **Task Planner** button from the **Task Information** section.
 - 4 Add a new task or select an existing task, and then click **Task Condition** to launch the Condition Editor.

 To close the Condition Editor, click **Cancel**.

Related concepts


See “Process Designer security model” in *Service Manager 9.30/9.31 HelpServer topics*

[Using the Condition Editor](#)

Build a condition

User Roles: System Administrator, Implementer

An expression has a Left-Hand-Side (LHS) and Right-Hand-Side (RHS) separated by an operator. There can be a combination of variables, types, and values on either side of the expression.

 Make sure that the RHS field matches with field data type in the LHS. For example, if the field data type in LHS is a Boolean, you must select a matching Boolean field in RHS. However, if you decide to choose a value rather than a field in RHS, the system provides you an option to type or select value that is of same data type of the field in LHS.

To build a condition:


- 1 Launch the Condition Editor.

- 2 Select **Expressions** from the drop-down list.
- 3 Select an expression data type on the LHS. The following table describes the available expression data types for LHS.

| Field | Description |
|----------------|--|
| CurrentRecord | A field in the name of the current record for comparison. |
| Object | A field in the Object definition of the current record for comparison. |
| SavedRecord | A field in the original copy of the current record (before the user made any changes) for comparison. |
| RAD Expression | <p>Evaluates a RAD expression typed in the text area. For example:</p> <pre>evaluate(cls.control in \$L.phase) and evaluate(\$L.tableAccess.delete) and open in \$L.file=true and nullsub(\$G.ess, false)=false and approval.status in \$L.file="approved" and (category in \$L.file~="KM Document" or category in \$L.file="KM Document"</pre> <p>If you have typed a RAD expression, click OK to build a standalone condition. You can ignore steps 4-8.</p> <p>Note: You cannot combine this expression with any other expression type. You can use the jscall RAD function to evaluate JavaScript.</p> |
| Category | A field in the associated category definition of the current record for comparison. |
| Phase | A field in the associated phase definition of the current record for comparison. |
| Security | <p>An operator's security rights. You can choose rights from the drop-down list of defined values: Change, Change Management Configuration, Change Tasks, Knowledge Management, Knowledge Administration, Security, or Tailoring.</p> <p>Note: The Knowledge Management value is displayed as "Knowledge Document" in the back-end RDBMS and after you build the condition.</p> <p>Important: If you selected a security right, go to step 5.</p> |
| Variable | <p>Evaluates the value of a global, local, or thread variable condition. For example:</p> <pre>\$G.test \$L.testNumber</pre> <p>Important: If you typed a variable expression, press Tab on your keyboard and go to step 5.</p> |

- 4 Select a field caption.
- 5 Select an expression operator for the expression type. The following table describes the expression operator.

| Field | Description |
|------------|-------------------------------------|
| = | Equals |
| != | Not equals |
| > | Greater than |
| >= | Greater than but equals |
| < | Lesser |
| <= | Lesser than but equals |
| StartsWith | Starts with an alphabet or numerals |

 For Boolean expression conditions evaluating to “!=true”, you can use the following RAD expression:

```
( nullsub(Boolean in $L.file,false) != true)
```

- 6 Select an expression value type on the RHS. The following table describes the available expression data types for RHS.

| Field | Description |
|---------------|--|
| CurrentRecord | A field in the name of the current record for comparison. |
| SavedRecord | A field in the original copy of the current record (before the user made any changes) for comparison. |
| Object | A field in the Object definition of the current record for comparison. |
| Security | Evaluates an operator’s security rights. You can choose rights from the drop-down list of defined values: Change, Change Management Configuration, Change Tasks, Knowledge Management, Knowledge Administration, Security, or Tailoring. For example, to trigger a rule set only if the logged in user has the “Any Draft” kmprofile enabled, set the following condition: <code>Security.Knowledge Management.Any Draft = true</code> |
| Variable | Evaluates the value of a global, local, or thread variable condition. |

| | |
|----------|--|
| Value | Allows you to type or select values as per the data type, which is based on selected caption on the LHS. |
| Phase | A field in the associated phase definition of the current record for comparison. |
| Category | A field in the associated category definition of the current record for comparison. |

- 7 Click **Apply**.
- 8 Click **OK** if you are done with the process of adding a condition. Once you add a condition, Service Manager displays a user readable description.
- 9 If you want to add another condition, select **Expression** from the drop-down list and repeat steps 3 through 8.



- You can edit a pre-existing condition. Click the pencil icon to view and edit existing values.
- To clear a condition, click **Clear**. You can now build a new condition based on your requirements.
- To cancel a condition, click **Cancel** to exit the Condition Editor page.

Related concepts

[Process Designer](#)

Related tasks

[Add a group with a condition](#)

[Launch Condition Editor](#)

Add a group with a condition

User Roles: System Administrator, Implementer

To add a group with a condition:

- 1 Launch the Condition Editor.
- 2 Select **AddExpression > Group** from the drop-down list.
- 3 Follow the procedure to build a condition.

A group with a condition has been added.

Related concepts

[Process Designer](#)

Related tasks

[Launch Condition Editor](#)

Negating condition groups

User Roles: System Administrator, Implementer

To negate a group, click the ! icon that appears in the group when you hover the mouse at the top left corner of a Condition Editor. Clicking this icon again will undo the negation. Negating a group refers to negating group of expressions bound to that group.

To negate a group of expressions, click ! icon in the Condition Builder. The icon becomes red after the negation. Click it again to undo the negation.



Service Manager does not support an expression combined with negate and !=. For example, the "Not(CurrentRecord.priority != 'high')" expression. The Condition Editor allows building such an expression, but it will always evaluate it to false.

Related concepts

[Process Designer](#)

Related tasks

[Launch Condition Editor](#)

[Add a group with a condition](#)

Creating a workflow

A workflow is a collection of phases with transitions from one phase to another. Each phase represents the state of the workflow linked to a form for data capture. Transitions can connect phases in any manner such as creating parallel branches or loop backs to previous branches.

A workflow enables an implementer to graphically layout the entire lifecycle of a process or record without any programming knowledge. The end user of the workflow views the same graphical workflow to see the current phase and past transitions.

Before you create a new workflow, you have to add Rule Sets, Rules to the phases and transitions of your intended workflow.

Related concepts

[Workflow phases](#)

[Workflow transitions](#)

Related tasks

[Create a manual workflow transition](#)

[Create an automatic workflow transition](#)

[Create a default workflow transition](#)

[Add a phase](#)

Create a workflow

User Roles: System Administrator and Implementer

You can create a workflow only in the Web client.

After you have a basic workflow, you can then modify it by adding additional phases, transitions, rules, and actions to match the business process.

You can click **Zoom in** or **Zoom out** in the toolbar either to zoom in or zoom out in the workflow page.

To create a workflow:

- 1 Click **Tailoring > Process Designer > Workflows**.
- 2 Click **New**.
- 3 Type a name for the workflow, for example Knowledge.



You cannot modify the workflow name once set.

- 4 Type a description for the workflow, for example Knowledge Document Workflow.
- 5 Select a Service Manager table from the drop-down list to associate the table with the new workflow, for example `kmdocument`.



You can use the `kmdocument` table to manage the Knowledge Management document process. You can use the `cm3r` and `cm3t` tables for the Change Management module. You can use the `WorkflowDemo` table to explore Process Designer capabilities.

- 6 Click **OK**.

The new workflow Knowledge appears in the Workflows list.



- For a workflow that is set as HP Proprietary, you should see a HP logo in the workflow list. For non-HP Proprietary workflows, the logo does not appear.
- If you want to edit an HP Proprietary workflow or use it as a model, create a copy of the HP Proprietary workflow.

After you created a basic workflow, modify the Object record of the table for the new workflow.

To modify the object record:

- 1 Click **Tailoring > Database Manager**.
- 2 Type Object in the **Table** field.
- 3 Click **Enter**.
- 4 Under File name, provide the table name of the associated workflow, for example KMDOCUMENT.
- 5 Select **In Object** in Workflow Location drop-down list.
- 6 Select the workflow name in Workflow drop-down list.
- 7 Click **Save**.



- For the changes to take effect in the Object record, log off and log on to Service Manager.
- By selecting **In Object** in the **Workflow Location** drop-down list, you are associating a single workflow to all categories in Change Management. You can select **By Category** from the **Workflow Location** drop-down list to associate workflows with their relevant categories. For example, you can associate the Hardware category in Change Management with the Hardware workflow and the Maintenance category with the Maintenance workflow.

Related concepts

[Workflow transitions](#)

[Workflow phases](#)

Related tasks

[Add a phase](#)

[Create a manual workflow transition](#)

Workflow phases

Workflow phases show the state of a record in the workflow and enforce business logic that must occur for the record to move to the next phase. Phases use transitions to move from one phase to another phase.

Within a workflow, you can specify a form to display when that phase is active. Use different forms on different phases to allow different information to be displayed and captured at various stages of workflow.

Rule Sets link the phase or transition to enforce business logic, such as checking if the user has filled in the required data or has proper security to perform a transition.

Related concepts

[Creating a workflow](#)

[Workflow transitions](#)

Related tasks

[Add a phase](#)

Add a phase

User Role: System Administrator and Implementer

You can add a phase to an existing workflow. You will use the graphical interface of the workflow editor to add a phase.



After you add a phase and click **Save**, you cannot modify its name. You can modify only its display name.

To add a phase to a workflow:

- 1 Click **Tailoring > Process Designer > Workflows** from the System Navigator to display the workflows list.
- 2 Select the applicable workflow for which you want to add a phase.
- 3 Click **Add phase**.
- 4 Drag the mouse to add a new transition and a phase.
- 5 Enter the details described in the table.

Details

| | |
|----------------------------------|--|
| Name | Type the name of the tab. |
| Display name | Type the display name of the tab. |
| Table name | The selected table name during workflow creation. You cannot modify it. |
| Form Edit condition | If the condition evaluates to true for a user, who will be able to edit the form. If it does not, the form will be read-only. |
| Records in this phase are active | Select the check box if you want the records in this phase to be active. |
| Make this the first phase | Click Make this the first phase if you want it to be the first phase. |
| Make this the default phase | Click Make this the default phase if you want it to be the default phase. Click Save . Note: If the current phase of a record is set to a phase that does not exist in the current workflow, it will be moved to the default |

| | |
|------------------------------|--|
| | <p>phase. This may occur if a phase is removed from a workflow or if data is imported from another source that did not share the same workflow.</p> |
| Additional Phase Information | <p>Click Additional Phase Information to open the Extended Phase Information page to modify phase information.</p> <p>Note:</p> <p>Only the Change Management module supports this feature.</p> <p>You cannot edit or delete a phase name from the Extended Phase Information page or the <code>cm3rcatphase.main</code> form.</p> <p>Change Management workflows have unique workflow phases but they will share change phases if the workflow phases have the same name. For example, if the Workflow1 and Workflow2 each have a phase named 'Build and Test' they will share the same change phase record.</p> |

Forms

| | |
|------------------|--|
| Display form | <p>The display form is the primary method to capture and display data. If you do not specify a form, the system will look for a form that has the same name as the current table name.</p> <p>Note:</p> <p>You may also specify a form in a RAD expression, for example "display.form in \$L.category".</p> <p>To add a display form: Select the display form from the drop-down list. Click Save.</p> |
| Additional Forms | <p>You can add, edit, and delete additional forms for a workflow phase.</p> <p>To add an additional form to a workflow record Click Add. Select the name from the drop-down list. Type a description. Click Additional Form Condition to enter a condition. Select a security right: Add, Update,</p> |

| | |
|-------------------------|---|
| | <p>Close, Expert, or Admin. Click Update to add the additional form.</p> |
| <p>Rule Sets</p> | |
| <p>Add</p> | <ol style="list-style-type: none"> 1. To add rule sets at various stages, click On enter, On exit, Initialization, On display, On update, or After successful update tabs. See Notes after step 4. 2. Click Add. 3. Select the appropriate Rule Sets check box you want to add. 4. Click Save. <p>Notes:</p> <ul style="list-style-type: none"> • On enter – Runs when the record moves from another phase into this phase. For example, the rule set can set the time at which the record first entered the phase or send notifications that the record has entered the phase. • On exit – Runs when the record moves out of this phase. For example, the rule set can set the time at which the record left the phase or send notifications that the record has left the phase. • Initialization – Runs once just before the record is displayed to the user. For example, the rule set can set up variables for display that are not meant to change while the user is viewing the record. • On display – Runs each time the record is displayed after a user action. For example, if the user uses the “fill” function to populate a field, the display rules will run after the action is completed and before the form is displayed. A possible use may be to populate a variable that is displayed on the form, which is calculated based on other values in the form. • On update – Runs immediately before the record is updated in the database (or created if this is a new |

| | |
|--|--|
| | <p>record). For example, the rule set can validate field data (the record will not be updated if validations fail), set default values, or perform calculations on existing fields.</p> <ul style="list-style-type: none"> • After successful update – Runs immediately after the record is updated in the database (or created if this is a new record). For example, the rule set can send notifications of the record update or update related records based on changes to this record. |
|--|--|

Actions

| | |
|------------|---|
| <p>Add</p> | <p>Actions perform a task for the phase. In Knowledge Management, Actions are used to preview the document. Actions refer to Rule Sets that are marked as Available as Action.</p> <ol style="list-style-type: none"> 1. Click Add to add an action, which runs associated Rule Sets for that phase of the workflow. 2. Type the identification name. 3. Select the action from the drop-down list. 4. Select the location of the action: Tray, More Options List, or Button. <p>Note: If you select Button, then manually add a button to the form with the option number of the action specified.</p> <ol style="list-style-type: none"> 5. Click Action Condition. 6. Select Add, Save, or Delete for action when complete. 7. Select Requires lock check box if you want to lock the record before the action can be performed. <p>Note: If another user has the record locked, you will not be able to perform the action.</p> <ol style="list-style-type: none"> 8. Click Save. |
|------------|---|

Approvals

| | |
|--|--|
| Reset condition or Recalculate condition | <ol style="list-style-type: none">1. Click Reset Condition or Recalculate Condition.2. Click Save. |
|--|--|

Alerts

| | |
|--|--|
| Reset condition or Recalculate condition | <ol style="list-style-type: none">1. Click Reset Condition or Recalculate Condition.2. Click Save. |
|--|--|



- To reposition the phase, select the phase and hover your mouse to see a crosshairs symbol and then move it to a desired place within the workflow page.
- To delete a phase, select the phase and either click the trashcan symbol next to the phase or **Delete** from the toolbar. You cannot delete either a default or a first phase.
- To move multiple phases at the same time, press `Ctrl` and select multiple phases, and then move the phases or section of the workflow to new location.
- In the **Rule Sets** tab, select a rule set and either double-click the rule set or click the **View** icon to open the Rule Set page.
- In the **Approvals** tab, select an approval name and either double-click the approval name or click the **View** icon to open the Approval Definition page.
- In the **Alerts** tab, select an alert name and either double-click the alert name or click the **View** icon to open the Alert Definition page.

Related concepts

[Process Designer](#)

[Creating a workflow](#)

[Workflow phases](#)

[Workflow transitions](#)

[Upgrading to the new Knowledge Management workflow](#)

Related tasks

[Create a workflow](#)

[Create a manual workflow transition](#)

[Create an automatic workflow transition](#)

[Create a default workflow transition](#)

[Copy an existing workflow](#)

Workflow transitions

Process Designer workflow transitions occur when a record moves from one phase to another phase. Transitions can happen manually, automatically, or by default. An automatic transition is taken when its condition is met. For example, the condition might check if a field value is a specific value. In this case, the transition is taken automatically when the record is saved. An example of a manual transition is when an operator clicks a “Request Validation” as a button in the toolbar of a form. A default transition is a special case that moves the workflow automatically only when no other automatic transition conditions are satisfied.



Transitions govern the flow of the workflow but an operator with Administrator rights can use the “Change Phase” menu option to bypass the workflow and jump to any phase.

After you add a transition, you can reposition it to avoid transitions overlapping with phases or other transitions. To reposition the transition, select the transition and move the green rectangular dot to achieve a desired layout.

You can also move a transition from one phase to another. To move the transition, select the transition, hover your mouse near the blue rectangular dot to see a hand symbol and now move it to another phase.

Related concepts

[Creating a workflow](#)

[Workflow phases](#)

Create a manual workflow transition

User Roles: System Administrator, Implementer

In setting up a workflow, an administrator can require operator action to move a record from one phase to another. This type of transition, in which an operator must press a button or otherwise trigger an action, is a manual transition.

To create a manual workflow transition:

- 1 Click **Tailoring > Process Designer > Workflows**.
- 2 Open the applicable workflow from the Workflows list.
- 3 Click the phase where the manual transition will begin
- 4 Hover your mouse until you see a hand symbol and then drag the mouse to add another phase.
- 5 Enter the following information.

| Field | Description |
|------------------|---|
| Transaction Type | Evaluates to one of the transaction type: |

| | |
|--------------|---|
| | Manual, Automatic, or Default. Select Manual transaction type. |
| Command Name | Evaluates to command location: Tray, More Options List, or Button. |
| Condition | Evaluates to a condition that you can add to the transition. |
| Rule Sets | Evaluates to the rule sets you created for the transition. a. Click Add and then select the ID of the rule set you want to add. b. Click OK . |

6 Click **Save**.

You have added a manual transition.



Click the **Localize Command Label** icon in the **Command Name** text box to open the HP Service Manager Message page of a transition. In this page, you can add a message record for a new transition or view the message record of an existing transition.

Related concepts

[Creating a workflow](#)

[Workflow phases](#)

[Workflow transitions](#)

Related tasks

[Create a workflow](#)

[Create an automatic workflow transition](#)

[Create a default workflow transition](#)

Create an automatic workflow transition

User Roles: System Administrator and Implementer

An automatic transition moves the workflow to another phase based on data in the workflow record.

Note: You can add a condition and rule sets to the automatic transition.

To create an automatic workflow transition:

- 1 Click **Tailoring > Process Designer > Workflows**.
- 2 Open the applicable workflow from the Workflows list.
- 3 Click the phase where the automatic transition will begin

- 4 Hover your mouse until you see a hand symbol and then drag the mouse to add another phase.
- 5 Enter the following information.

| Field | Description |
|------------------|---|
| Transaction Type | Evaluates to one of the transaction type: Manual, Automatic, or Default. Select Automatic transaction type. |
| Condition | Evaluates to a condition that you can add to the transition. |
| Rule Sets | Evaluates to the rule sets you created for the transition. a. Click Add and then select the ID of the rule set you want to add. b. Click OK . |

- 6 Click **Save**.

You have added an automatic transition.

Related concepts

[Creating a workflow](#)

[Workflow phases](#)

[Workflow transitions](#)

[Upgrading to the new Knowledge Management workflow](#)

Related tasks

[Create a workflow](#)

[Create an automatic workflow transition](#)

[Create a default workflow transition](#)

[Add a phase](#)

[Copy an existing workflow](#)

Create a default workflow transition

User Roles: System Administrator, Implementer

A default transition is a special case that moves the workflow automatically only when no other automatic transition conditions are satisfied.



You can add rule sets to the default transition.

To create a default workflow transition:

- 1 Click **Tailoring > Process Designer > Workflows**.
- 2 Open the applicable workflow from the Workflows list.
- 3 Click the phase where the automatic transition will begin
- 4 Hover your mouse until you see a hand symbol and then drag the mouse to add another phase.
- 5 Enter the following information.

| Field | Description |
|------------------|---|
| Transaction Type | Evaluates to one of the transaction type: Manual, Automatic, or Default. Select Default transaction type. |
| Rule Sets | Evaluates to the rule sets you created for the transition. a. Click Add and then select the ID of the rule set you want to add. b. Click OK . |

- 6 Click **Save**.

You have added a default transition.

Related concepts

[Creating a workflow](#)

[Workflow phases](#)

[Workflow transitions](#)

[Upgrading to the new Knowledge Management workflow](#)

Related tasks

[Create a workflow](#)

[Create an automatic workflow transition](#)

[Create a manual workflow transition](#)

[Add a phase](#)

[Copy an existing workflow](#)

Copy an existing workflow

User Roles: System Administrator, Implementer

You can clone an existing workflow to use it in another business process or if you need to make changes to a HP Proprietary workflow. You also have an option to copy the rule sets of the existing workflow.

To copy an existing workflow:

- 1 Click **Process Designer > Copy Existing Workflow**.
- 2 In the Clone a Workflow page, select the workflow you want to copy.
- 3 Type a new workflow name.
- 4 Select **Copy rule sets** check box if you want to copy rule sets.
- 5 Type a rule set prefix.
- 6 Click **Next**.
- 7 Click **Workflows**.

The newly-copied workflow displays.

Related concepts

[Creating a workflow](#)

[Workflow phases](#)

[Workflow transitions](#)

[Upgrading to the new Knowledge Management workflow](#)

Related tasks

[Create a workflow](#)

[Create a manual workflow transition](#)

[Create an automatic workflow transition](#)

[Create a default workflow transition](#)

[Add a phase](#)

Workflow Viewer


The following sections explain the workflow viewer and how to integrate it into knowledge document.

View a workflow in Workflow Viewer

Workflow Viewer enables you to view a graphical layout of the entire lifecycle of a process or record. You can see color-coded phases and transitions of the workflow, as follows:

| Phase/Transition | Color Property Used |
|-------------------------|----------------------------|
| Current phase | Green highlight |
| Past phase | Green border |
| Future phase | Blue border |

| | |
|-------------------|-------------------|
| Inactive phase | Grey border |
| Past transition | Dotted green line |
| Future transition | Blue line arrow |

 To view a workflow in the Workflow Viewer, you should integrate Workflow widget into any form associated with a table that is enabled for Process Designer. This is currently available for Knowledge Mangement (kmdocument), Change Management (cm3r and cm3t), and WorkflowDemo.

The procedure to integrate the viewer into each module is very similar.

Related concepts

Creating a workflow

Related tasks

[Create a workflow](#)

Integrate Workflow Viewer into kmdocument form

User role: System Administrator and Implementer

A new icon **Workflow Viewer** is available in Forms Designer. The following example will help you to integrate the Workflow Viewer widget into the kmdocument.document form. After the integration, you can see a graphical view of the workflow in the **Contribute Knowledge > External > Workflow** tab. Using similar steps, you can integrate the Workflow Viewer with other forms.

To integrate the Workflow Viewer widget into the kmdocument form:

- 1 Log on as a System Administrator and open Forms Designer in the Windows client (In the System Navigator, click **Tailoring > Forms Designer**). For information on accessing Forms Designer and updating a form, see the following topics in the Help server: "Access Forms Designer" and "Update a form"
- 2 In the Form field, type **kmdocument.external** and click **Search**. The Contribute Knowledge form opens with the External Document Upload tab selected.
- 3 Add 'Workflow' tab in the form.
- 4 Set the visible condition to `[$showWF]=true` in the Workflow tab.

 The condition hides the tab in the Windows client, but is visible in the Web client.

- 5 Add the Workflow Viewer component to the new Workflow tab.
- 6 In the Workflow Viewer component, set the following variables in the properties.

Workflow Name: `$L.wfgWFName`

Workflow Table: `$L.wfgWFTable`

Workflow RecordID: `$L.wfgWFRecId`

Workflow Current Phase: \$L.wfgWFPhase

7 Add four text boxes at the bottom of the Workflow Viewer.

8 Set their input values in the properties to:

\$L.wfgWFName

\$L.wfgWFTable

\$L.wfgWFRecId

\$L.wfgWFPhase

► The four text boxes display workflow name, table name, document id, and phase of the record.

9 Set the Workflow Viewer variables in the **Main > Initialization** tab of display screens for `kmDocFlow.open` and `kmDocFlow.view`:

\$L.wfgWFName=workflowName in \$L.wfPhase

\$L.wfgWFTable=tableName in \$L.wfPhase

\$L.wfgWFPhase=phaseName in \$L.wfPhase

\$L.wfgWFRecId=id in \$L.file

if (sysinfo.get("environment")~="scguiwswt") then (\$showWF="true") else (\$showWF="false")

► To go to display screen, type `ds` in Service Manager command prompt and search for the `kmdocument.document` form.

10 Follow steps 1 through 7 to add Workflow View in the other Knowledge Management forms: `kmdocuments` (`kmdocument.probsol`, `kmdocument.howto`, `kmdocument.reference` and `kmdocument.errormsg`)

Related concepts

[Creating a workflow](#)

Related tasks

[Create a workflow](#)

Upgrades

The following sections explain upgrading to new Knowledge Management and Change Management workflows.

Upgrading to the new Knowledge Management workflow

As of Service Manager 9.30, Change Management no longer implements the workflow for Knowledge Management documents. Change Management records with Category “KM Document” close and creates equivalent Knowledge Management (KM) Document records, as Process Designer now manages KM Documents. Additionally, you do not need a Change Management license to operate Knowledge Management.

KM Document records are created with an applicable status, based on the current phase of the Change records. The mapping is as follows:

| cm3r (based on current.phase) | kmdocument (status) |
|--------------------------------------|----------------------------|
| KM 1 Triage | Triage |
| KM 2 Revise | Revise |
| KM3 Review read-only | Review |
| KM 4 Conclude | Conclude |

Two fields are also mapped from a Change Management record to a Knowledge Management document:

| Change Management | Knowledge Management |
|--------------------------|-----------------------------|
| assigned.to | assignedEditor |
| Coordinator | documentOwner |

Another functionality included in the upgrade script is that operators with capability word “SysAdmin” or “KMAAdmin” will have the security role mapped in their operator record to “system administrator” or “knowledge administrator” respectively.



When using the new Process Designer workflow, the following applies:

- All open change records of category ‘KM Document’ close with the completion code ‘1’ – Successful.
- The corresponding KM document status changes from working copy to the status based on the current phase of the change record.
- The upgrade to Process Designer for Knowledge Management is mandatory.

Related concepts

Creating a workflow

Related tasks

[Create a workflow](#)

Upgrading to new Change Management

After you upgrade to Process Designer Content Pack 9.30.2, note the following about the Change Management module:

- All existing Change Management workflows will be available and editable as Process Designer workflows. They will be linear and you may need to adjust the layout to accommodate large phase name labels if they overlap the phase boundaries. For example, if you had a Change Category called Maintenance, it would be available as a workflow called Maintenance. From within Process Designer, if you select a phase, and then click the Additional Phase Information link in the workflow phase details tab, you will see the previous change phase information. The configuration here is still functional, but it is strongly recommended you use Change Models and newer features to implement business logic.
- Each category has an associated workflow that is built using the Workflow Editor, as part of Process Designer. The workflow defines the phases and business logic for the process. It is no longer specified in the `Change Category` table as it was with the earlier versions of Service Manager. The existing change categories will still use the `Change Category` table.
- A new phase, **Closed**, will be added at end the of all existing Change Management workflows.
- Process Designer workflow controls the phase transitions of a Change and Task. The workflows of Change and Task are specified in their associated change category record and task category record respectively. When you open a new Change or Task, the **Phase** field is set to the current phase of the workflow. The **Next Phase** button in the change request form is replaced with the name of transition.
- Existing change phases and task phases will still function as they did. One difference is that if a change task is in the Withdrawn or Cancelled status, this task is considered as finished and you do not need to manually close it to move the change to the next phase.
- Existing business logic in format controls will still function as they did. They can co-exist with Process Designer Rule Sets which run before format controls.
- Pre-existing categories and subcategories will not be linked to a change model. You must create new change models if you want to use change models with pre-existing categories and subcategories.
- The new Change areas, such as Change, Change Tasks, and Change Management Configuration are added.
- The Display options in Change workflows will not be present after being converted to Process Designer workflows. For example, Change Categories such as Hardware and Software before upgrade had a Reject option which was implemented as a hard-coded Display option. After the upgrade, to implement the Reject functionality or any other Display option, use a Transition or Action in the Workflow Editor. For example, in the Standard or Normal workflow, consider the transitions that proceed to the “Abandoned” phase. This phase is not an

active phase and the transition rules enforce you to enter a closure code and comments.

- The following change models are added and are organized by category and subcategory:

| Category | Subcategory | Change Model |
|------------------|---------------------|------------------------------------|
| Standard Change | Hardware | Install Memory on Server |
| | Maintenance | Monthly Windows Server Maintenance |
| | Network | Install Routers |
| | Routine Job | Take Data Base Backup |
| | Software | Activate Patch |
| | User Admin Requests | Change User Rights |
| Normal Change | Major | Normal Major RFC |
| | Minor | Normal Minor RFC |
| Emergency Change | Emergency | Emergency RFC |



Previous OOB systems had categories such as Hardware and Software. Now subcategories with the same names and places them under the three main categories (Standard, Normal, and Emergency Changes). This may be a source of confusion due to duplicate categories and subcategory names. The recommendation is to adopt the new change model feature and let the three main categories drive the workflow with more granular subcategories under them.

- The following table outlines the new change templates for Standard Changes:

| Subcategory | Change Model | Template |
|---------------------|------------------------------------|---|
| Hardware | Install Memory on Server | Add or Modify Memory on Server |
| Maintenance | Monthly Windows Server Maintenance | Windows Server Maintenance |
| Network | Install Routers | Installation of Routers |
| Routine Jobs | Take Data Base Backup | Perform Data Base Backup |
| Software | Activate Patch | Software Patch Update |
| User Admin Requests | Change User Rights | Modify User Rights on Server or Application |

- The existing change application profiles are replaced with new security roles. At a high-level, a security role is created for each change profile.
- The following table outlines the mapping of change profile to new security roles:

| Change Profile | Security Role |
|---------------------------|-----------------------------|
| DEFAULT | default |
| SD agent/manager | change requestor |
| change analyst change | change owner |
| change analyst tasks | change owner |
| change approver | change advisory board (CAB) |
| change coordinator change | change coordinator |
| change coordinator tasks | change coordinator |
| change manager | change manager |
| emergency group | emergency CAB |
| Initiator | change requestor |
| problem manager | change requestor |
| Sysadmin | system administrator |

- The upgrade will map change profile rights into security rights and add them to the generated security role. In many cases we have merged change profile rights into much fewer security rights. For example, the Expert right represents several change profile rights. The new workflows reference security roles and after upgrade will use security roles that were converted from change profiles if they exist with the same name. If a workflow uses a security role that was not converted from a change profile, we will populate the system with that security role and assign it default rights. It is important to inspect the security roles and associate in the system and modify them as appropriate for usage in any of the new workflows.

The following table is the mapping of fields in change profile and the security role settings.

| Change profile settings field names | Security roles settings field names |
|-------------------------------------|-------------------------------------|
| Copy and open | New |
| New | |
| Open | |
| Alternate views | View |
| Can count records | |
| Can notify | |
| Clear | |
| fill | |
| find | |

| Change profile settings field names | Security roles settings field names |
|--|--|
| irquery | |
| Show parent | |
| Tasks | |
| View | |
| Alerts | Expert |
| apprdism | |
| Can mass approve | |
| Complex Mass Update | |
| Duplicates | |
| Expert Search | |
| List Pages | |
| Template Mass Update | |
| Update when closed | |
| Change category | Admin |
| Change phase | |
| Can override approvals | |
| Allowed categories | Allowed categories |
| Allowed status | Allowed Status |
| Append Query | Append Query |
| Approval Groups | approver.of in \$G.myGroups |
| Area | Area |
| Can access approvals | Can Approve |
| Can Delegate Approvals | Can Delegate Approvals |
| Change Manage Format | Change Manage Format |
| Close | Delete/Close |
| Default Change Category | Default Category |
| Default Task Category | Default Task Category |
| Inefficient Query | Allow Inefficient Query |
| Initial Change View | Initial Change View |
| Initial Format | Initial Format |
| Initial Task View | Initial Task View |

| Change profile settings field names | Security roles settings field names |
|-------------------------------------|-------------------------------------|
| Manager Group | member.of in \$G.myGroups |
| Modify Template | Modify Template |
| Name | Role |
| QBE Format | List Format |
| Reopen | Reopen |
| Skip Warning | Skip Inefficient Query Warning |
| Task Manage Format | Task Manage Format |
| Update | Update |

- The records in `myGroups` are populated based on the records in `cm3groups`. A new section, `ChM Membership`, is added to the operator form that lists the groups a user is a member of. Approval groups are no longer attached to Change Profile which is no longer used. Instead they are attached directly to the user through `ChM Membership` which controls what group the operator is a member of and which group the operator is an approver for. See [ChM Membership](#).
- A new Change Management menu with Change Management administration items will be displayed. The following table outlines the mapping of the new and old menu items in the System Navigator.

| Change Management Activities | Service Manager 9.30/9.31 Change Management Menu Items | Process Designer Content Pack 9.30.2 Change Management Menu Items |
|--|--|--|
| Change administration and environment settings | | Change Management >Administration > Groups > Settings |
| Environment settings | Change Management >Tasks > Task Environment System Administration > Ongoing Maintenance > Environment Records > Change Management Request Environment > Change Management | System Administration > Ongoing Maintenance > Environment Records > Change Management Request Environment > Change Management Task Environment |

| | Task Environment | |
|---------------------------------|--|--|
| Change Management configuration | Change Management >Maintenance >Alerts >Approvals >Messages >Subcategories | Change Management > Configuration > Alerts >Approvals >Change Categories >Change Models >Change Workflows >Messages >Subcategories >Task Categories |
| Change Management tasks | Change Management >Tasks >Open New Task >Search Tasks >Task Categories >Task Environment >Task Phases >Task Queue | Change Management >New Task >Search Tasks >Task Queue |
| Change Management changes | Change Management >Changes >Change Categories >Change Phases >Change Queue >Open New Change >Search Changes | Change Management >New Change >Search Changes >Change Queue |



The **Change Management Profile** option under **System Administration > Ongoing Maintenance > Profiles** is no longer available.

- As a general principle, the new Content does not conflict with previous out-of-box Content. For example, all the forms are new and do not share names with previous out-of-box forms. In some cases, the new workflow content may have used an existing out-of-box phase name. We supply new Categories and

subcategories. These do not conflict with previous out-of-box but there is a chance, the target system uses the same names. If that is the case you may run into conflicts that the Applications Patch Manager will detect and give you the opportunity to resolve.

- As an exception to the previous point, newly added workflow phases will likely reference previous change phases. Legacy functionality being used on the change phase will still run and could be a source of confusion. To illustrate this, open the Normal change workflow in Process Designer and select the Build and Test phase. From phase details tab, select the Extended Phase Information link and it will open the Build and Test change phase. Legacy functionality such as auto opening of tasks may be defined previously and still run. Most of this functionality should be moved to Process Designer capabilities.
- The setting “Require update if an activity record is NOT generated?” on the Activities tab of the cm3r Object record is unchecked. Previous out-of-box content had this setting checked. The content pack unchecked it so that the new workflows would function better as updates are not always required. You may change this setting back to require updates.
- Process Designer Content Pack 9.30.2 has been tested with Release Control 9.13. If you intend to use the new workflows (Standard, Normal, Emergency), the Release Control Service Desk Adapter for Service Manager (pd4sm93-adapter) will need modification. The convertChange.js script references previous out-of-box phases to set the RC status. This script will need to be modified to refer to the corresponding new phase names in the new flows. For example, “Change Logging” has been renamed “Registration and Categorization”.

4 Change Management

The following sections explain the changes and enhancements in the Change Management module after you upgrade the Service Manager to Process Designer Content Pack 9.30.2.

Change workflow

The change workflow is a sequence of connected steps in the life cycle of a change request. In the workflow, a change request goes through several phases to complete the life cycle. Workflow phases consist of one or multiple tasks to be completed to proceed to the next phase.

Process Designer Content Pack 9.30.2 includes out-of-box change workflows and task workflows.

The following are the out-of-box change workflows:

- Emergency Change
- Standard Change
- Normal Change
- Generic Task

The change and task workflows are applied to change and task records when you create change and task categories respectively.

Related concepts

[Process Designer](#)

[Creating a workflow](#)

Related tasks

[Create a workflow](#)

Create a change category

User Roles: System Administrator

If you are an HP Service Manager Administrator, you may want to create new change or task categories. You can create new category records by copying and modifying an existing record, or by creating a new record. HP Service Manager provides default category records that you can use or modify.

To create new category record:

- 1 Click **Change Management**.
- 2 Do one of the following:
 - Click **Configuration > Change Categories**.
 - Click **Configuration > Task Categories**.
- 3 Click **New**.
- 4 Type the name of the category.
- 5 Type the category description.
- 6 Type the availability value.
- 7 Select a workflow for the category.
- 8 Select template for the category.
- 9 Click **Save** to view the **Workflow** tab and other associated tabs.
- 10 For change category, click **Subcategories** tab to create subcategories for the change category.
- 11 For task category, click the **Available Phases** tab and select a change phase from the drop-down list to associate the task category with the change phases. The newly created task category definition will be applied to the change workflow phases.

If you leave **Available Phases** blank for a task category, then you can use this task category in all change phases.

- 12 Click **Save**.

Related concepts

See “Managing categories and phases” in *Service Manager 9.30/9.31 HelpServer topics*

See “Search for a record” in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

See “View a change category record” in *Service Manager 9.30/9.31 HelpServer topics*

Add a new subcategory

User roles: System Administrator and Implementer

Subcategories are a way to refine a Change Category into smaller groups. For example, Change Category Hardware can have Install Hardware and Move Hardware subcategories.

To add a subcategory:

- 1 Click **Change Management > Configuration** in the System Navigator.
- 2 Click **Subcategories**.

- 3 Type a category name in the **Category** text box.
- Or
- 4 Click the **Fill Field Category** icon to select a change category.
- 5 Type the subcategory name in the **Subcategory** text box.
- 6 Type the subcategory description.
- 7 Click the **Fill Field** icon in the **Company** text box to associate a company record with the subcategory.
- 8 Click **Save** to add the new subcategory of a change category.

Related tasks

[Add a new subcategory from change category](#)

[Create a change category](#)

Add a new subcategory from change category

User roles: System Administrator and Implementer

You can add a new subcategory directly from a change category. This reduces the number of access points required for you to have access in order to create a subcategory. You can view a list of subcategories and their record details associated with the current category.

- 1 Click **Change Management > Configuration** in the System Navigator.
- 2 Click **Change Categories > Search**.
- 3 Select the Change Category for which you want to add a subcategory.
- 4 In the Change Category Definition page, click the **Subcategories** tab.
- 5 Click **Add subcategory**.
- 6 Type a subcategory name.
- 7 Type a description for the subcategory.
- 8 Click the **Fill Field** icon in the **Company** text box to associate a company record with the subcategory.
- 9 Click **Save** to add the new subcategory.

Related tasks

[Add a new subcategory](#)

[Create a change category](#)

Add workflow from change category

User roles: System Administrator and Implementer

You can create a new workflow record directly from a change category.

To add workflow from a Change Category:

- 1 Click **Change Management > Configuration** in the System Navigator.
- 2 Click **Change Categories > Search**.
- 3 Select the change category for which you want to add a workflow.
- 4 In the Change Category Definition page, remove the currently assigned workflow from the **Workflow** text box.
- 5 Click **More > Add new workflow**.
- 6 Type the new workflow name in the New Workflow Definition page.
- 7 Select a table name to associate the workflow.
- 8 Type a start phase name.
- 9 Click **Next**.
- 10 Click **Save** to add the new workflow.
- 11 Click **OK** to return to the Change Category definition page.
- 12 Type the workflow name in **Workflow** text box.

Or

- 13 Click **Fill Field Workflow**.
- 14 Select the workflow.
- 15 Click **Save** to associate the workflow to the change category.

Related tasks

[Add a new subcategory](#)

[Add a new subcategory from change category](#)

[Create a change category](#)

Create a change task

User role: Change Coordinator

After a change is scheduled, you can create the tasks for building, testing, and implementing the change. You have several ways to create a change task for a change record.

To create a change task from **New Task** in the System Navigator:

- 1 Click **Change Management > New Task**.
- 2 Double-click the change record for which you want to create a task.

- 3 Select a category for the new task.



If the current phase of the change is listed in the **Available Phases** tab of a change task category, then this task category will appear here for your selection. If **Available Phases** is left blank in a change task category, then this task category is visible for all changes phases.

Service Manager opens a task information form.

- 4 Complete the form with all required information.
- 5 Click **Save**.

To create a change task from the **More** menu:

- 1 Do one of the following in the System Navigator:
 - a Click **Change Management > Change Queue**
 - b Click **Change Management > Search Changes**, enter your search criteria, and then click **Search**.
- 2 Find the change request you want to create tasks from, and then double-click the record to open it.
- 3 Click **More** and then click **Open New Task**.



The **Open New Task** option will be available only for the change phases that match the phases in the **Available Phases** tab of change task category. For example, if the current phase of the change request is “Change Review”, then the **Open New Task** option will list all the task categories which have the “Change Review” phase listed under the **Available Phases** tab.

If **Available Phases** is blank in task category, then this task category is visible for all phases.

- 4 Select a category for the new task.

Service Manager opens a task information form.
- 5 Complete the form with all required information.
- 6 Click **Save**.

Related tasks

[Use task planner to plan change tasks in a change record](#)

[Cancel multiple opened tasks for a change record](#)

See “Close a change task” in *Service Manager 9.30/9.31 HelpServer topics*

See “Search for a record” in *Service Manager 9.30/9.31 HelpServer topics*

Related references

See “Coordinate change implementation” in *Service Manager 9.30/9.31 HelpServer topics*

Use task planner to plan change tasks in a change record

User role: Change Coordinator, Change Manager

By using the task planner in the change record, you can plan change tasks for current or future phases in the ongoing change.

To plan a change task in the task planner from a change record:

- 1 Do one of the following in the System Navigator:
 - a Click **Change Management > Change Queue**
 - b Click **Change Management > Search Changes**, enter your search criteria, and then click **Search**.
- 2 Find the change request you want to create tasks from, and then double-click the record to open it.
- 3 Click the **Task Planner** button in the **Tasks** section.
- 4 Click **Add Task**, and then do the following:
 - a Type task description in the **Description** text box.
 - b Select task category from the drop-down list.
 - c Select a task template from the drop-down list. (Optional)
 - d Select a change phase to start the task from the drop-down list.
 - e Select a change phase to end the task from the drop-down list. (Optional)
 - ▶ The end phase must be no earlier than the start phase. If left blank, the end phase will match the start phase.
- 5 Click **Add Task** to add another task.

Or

To create a sequential task, hover the mouse on the new task added in the graphical interface until you see a hand symbol, and then drag the mouse pointer to add a new task.

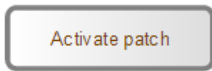
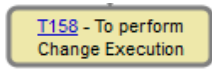
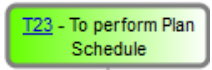
- 6 Click **OK** to save the planned tasks.

If the Start Phase in the change task you just planned is the same as the current phase of the change record, the change task is created with a Task Number assigned. Otherwise, the task will be in the planned status until the change reaches the Start Phase defined for this task.



- Once a task is created, you cannot delete this task or modify its properties in the task planner. You can click the task number in graphical interface to modify the details of a created task.

- If you see a red dot on the top left corner of a task, it means that this task cannot be modified or deleted in the task planner of the change record, because the “**Mark as required/Set properties as read-only in change**” option is selected for this task in the change model.
- The “**Task Condition**” and “**Mark as required/Set properties as read-only in change**” fields can only be set for the tasks defined in the task planner in change model. These fields are read-only here in the task planner in change for your reference.
- If a task is not marked as required in change model and has not been created, you can click **Delete** to remove this planned task, or you can modify its properties. However, you cannot move the start phase of a planned task to a phase prior to the current phase of the change.
- If you open the task planner before a change has been created or after a change has been closed, the task planner will be read-only. The **Add Task** and **Save** buttons are invisible.
- In the graphical interface of the task planner, you can specify tasks as dependent on other tasks by adding a connector between two tasks.
- After you finish adding tasks, click **Auto Layout** to allow the editor to arrange the tasks and dependencies.
- The task planner graphical interface supports panning.
- You can click **Zoom in** or **Zoom out** in the toolbar or use the mouse wheel to zoom in or zoom out the task planner graphical interface.
- You can reposition the workflow by moving the outline box within the graphical interface.
- You can resize the task planner graphical interface by expanding the details form or resizing the task planner window.
- The following is the various statuses of a task and their graphic styles in the task planner:

| Task Status | Graphic Style | Remarks |
|--------------------|---|--|
| 0-Planned |  | |
| 0-Planned (opened) |  | This style appears when a task is created but still in Planned status because it is dependent on another task to complete. |
| 1-Ready |  | |

| | | |
|---------------------------|---|--|
| 2-Assigned |  | |
| 3-In Progress |  | |
| 4-Blocked |  | |
| 20-Completed |  | |
| 21-Completed with problem |  | |
| 30-Cancelled |  | |
| 31-Withdrawn |  | |
| 32-Failed |  | |

Related tasks

[Create a change task](#)

[Cancel multiple opened tasks for a change record](#)

[Add a task to a change model](#)

See “Close a change task” in *Service Manager 9.30/9.31 HelpServer topics*

See “Search for a record” in *Service Manager 9.30/9.31 HelpServer topics*

Related references

See “Coordinate change implementation” in *Service Manager 9.30/9.31 HelpServer topics*

Cancel multiple opened tasks for a change record

User role: Change Coordinator, Change Manager, Change Analyst

If a change record has more than one opened task, you can cancel multiple or all opened tasks by using the Mass Cancel feature.

To cancel multiple opened tasks for a change record:

- 1 Click **Change Management > Search Changes**, enter your search criteria, and then click **Search**.
- 2 Select a change and then click **More > View opened tasks**.
A task list appears if this change contains multiple opened tasks.
- 3 Select the tasks that you want to cancel and then click **Mass Cancel**.
- 4 Click **Yes**.
- 5 Enter your closure comments and then Click **Finish**.

The selected opened tasks are now cancelled:

- The status of the opened tasks is set to “Cancelled”.
- The automatic transition in the task workflow moves the phase to “Cancelled”.
- The Closure Code is set to “6 – Cancelled”.

Related tasks

[Create a change task](#)

See “Close a change task” in Service Manager 9.30/9.31 HelpServer topics

See “Search for a record” in Service Manager 9.30/9.31 HelpServer topics

Change model

A change model is a record that is used to pre-define the contents of a specific type of Request for Change (RFC), including the information used to populate the RFC and tasks needed to complete the change. When you open a change request using a change model, all information is added automatically to the change without any action needed by the operator.

When creating a new change model, you can define the tasks to be completed and the dependencies between multiple tasks. When you create a new change, a list of change model templates appears. In the change model template, change models are grouped by category and subcategory. You can apply a change model to a change using the change model template.

Create a new change model

User roles: Change Coordinator, Change Manager

To create a new change model:

- 1 Click **Change Management > Configuration > Change Models** in the System Navigator.
- 2 Click **New**.
- 3 Type the change model ID.
- 4 Type the change model name.
- 5 Type the change description.
- 6 Click the **Fill Field Category** icon in the **Category** text box to select a change category.
- 7 Click the **Fill Field Subcategory** icon in the **Subcategory** text box to select a change subcategory.
- 8 Select a change template from the drop-down list.



If needed, you can specify more than one template. When users open a new change from this model, Service Manager automatically applies all specified templates in the order listed by merging their field values. The following table lists two example templates and their merge result:

| Sequence of Template | Field | Value |
|----------------------|-------------------|--|
| 1 | Description | Install Windows Vista on new employee's laptop |
| | Brief Description | Install Windows Vista |
| | Assignment Group | (empty) |
| 2 | Description | (empty) |
| | Brief Description | Install Windows 7 |
| | Assignment Group | Hardware |
| Merge Result | Description | Install Windows Vista on new employee's laptop |
| | Brief Description | Install Windows 7 |
| | Assignment Group | Hardware |

- 9 Select a wizard from the drop-down list.



The wizard helps you to accomplish certain tasks when it executes. When you open a change model from a change, the wizard associated with the change model executes. For example, you can run a wizard to prompt the user for a device type when adding a device record.

- 10 Complete the form with all of the required information.

11 Click **Save**.

Related concepts

[Change model](#)

[Change Management](#)

Related tasks

[Add a task to a change model](#)

Add a task to a change model

User roles: System Administrator and Implementer

Using the task planner, you can add, edit, or delete tasks, which are part of change model record. In the graphical interface, you can specify tasks as dependent on other tasks by adding a connector between two tasks. Tasks that do not have dependencies may be open in parallel but are still governed by the Start and End Phase attributes, as well as the task condition.

When adding a task to a model, specify the following attributes:

- Description
- Task Category
- Task Template
- Start Phase – A task opens at this change phase. If the task is dependent on another task, it will be in the ‘Planned’ status.
- End Phase – Specifies what change phase the task must end. If there are still open tasks for a phase, the change will not be allowed to go to the next phase. If left blank, the end phase will match the start phase.
- Mark as required/Set properties as read-only in change – Specifies whether or not this task can be re-planned or removed when you plan tasks using the task planner from a change record.
- Task Condition – Defines the conditions for task creation.
 - The task condition is evaluated at each update of the change record when the change is in the Start Phase defined for this task.
 - If you leave this field blank, the condition will be evaluated as true.
 - When the condition is evaluated as true after a change update, the task is created and linked with the change record.
 - Once a task has been created and linked with the change, the condition for this task will not be re-evaluated anymore.
 - When the condition is true in the first instance but false after the change is updated, the system does not automatically close the task and you need to close it manually.

- The condition of the planned tasks is shown as read-only in the task planner from the change record.
- If a task is dependent on a conditional task that has not been created because its condition is evaluated as false, this task will still be created (in Ready status) when the change reaches the Start Phase defined for this task.

As these tasks are created for a Change, task information is automatically applied to the new task record.

For task dependencies to function, the task statuses must follow a convention to use a numeric value for the task status value. The content pack installs the global list “Change Task Status” which contains the following statuses in the table.

| Value List | Display List |
|------------|-------------------------|
| 0 | Planned |
| 1 | Ready |
| 2 | Assigned |
| 20 | Completed |
| 21 | Completed with Problems |
| 3 | In Progress |
| 30 | Cancelled |
| 31 | Withdrawn |
| 32 | Failed |
| 4 | Blocked |

Tasks that do not have any dependencies are automatically opened with the “1=Ready” status. Tasks that are dependent on other tasks are opened with the “0=Planned” status. Once all tasks that another task is dependent on have reached a status of 20 or greater, the dependent task will have its status changed to “1-Ready”.

To see a working example, view the **Generic Task** workflow. It utilizes format “chm.task”, and the statuses above. The initial “Waiting” phase will transition to “Active” when the task status > 0 which means it is not planned.

Using the behavior of the tasks statuses set by Process Designer, you can create your own task flow or modify a copy of the **Generic Task** workflow. If you are using task statuses that are not using the numeric values, task dependencies will not function.

You can move a task from one phase to another by setting appropriate conditions. The following condition is an example to move a task from the “Waiting” phase to “Active”.

```
(Status in CurrentRecord> 0 AND Variable $L.tableAccess.update = true)
```

- You can set multiple dependencies for a task. If a task is set with dependencies, the task can start only after all the dependent tasks are completed. The following table outlines the various statuses of a child task which is “dependent” on the parent task when you open a change.

| Parent Task | Child Task |
|-------------------------|------------|
| Ready | Planned |
| Completed | Ready |
| Completed with Problems | Ready |
| Cancelled | Ready |
| Withdrawn | Ready |
| Failed | Ready |
| Blocked | Ready |


To add a task to a change model:

- 1 Click **Change Management > Configuration > Change Models** in the System Navigator.
- 2 Click **Search** to select a change model.
Or
Click **New** to create a new change model record.



Select category from the drop-down list to view the **Task Planner** button.


- 3 Click the **Task Planner** button to add tasks to the change model.
- 4 In Task-Properties, do the following:
 - a Type task description in the **Description** text box.
 - b Select task category from the drop-down list.
 - c Select a task template from the drop-down list. (Optional)
 - d Select a change phase to start the task from the drop-down list.
 - e Select a change phase to end the task from the drop-down list. (Optional)

 The end phase must be no earlier than the start phase.

- f Select the **Mark as required/Set properties as read-only in change** check box if you do not want this task to be modified or deleted when you plan tasks in the task planner from a change record. (Optional)

After you select the check box, a red dot appears on the top left corner of the task.

- g Define the task conditions if you want to add conditions to create the task. (Optional)

 The “CurrentRecord” in the condition editor here refers to the Change record.

- 5 Click **Add Task** to add another task.

Or

Hover the mouse on the new task added in the graphical interface until you see a hand symbol, and then drag the mouse pointer to add a new task.

- 6 Click **OK** to save the change model tasks.



- You cannot add a new task until you define mandatory details of the previous task in the task planner window.
- You can click **Delete** in the toolbar to delete a task.
- You can edit a task by selecting the task in graphical interface and modify its properties.
- After you finish adding tasks, click **Auto Layout** to allow the editor to arrange the tasks and dependencies.
- The task planner graphical interface supports panning.
- You can click **Zoom in** or **Zoom out** in the toolbar or use the mouse wheel to zoom in or zoom out the task planner graphical interface.
- You can reposition the workflow by moving the outline box within the graphical interface.
- You can resize the task planner graphical interface by expanding the details form or resizing the task planner window.

Related concepts

[Change model](#)

[Change Management](#)

[Using the Condition Editor](#)

Related tasks

[Create a new change model](#)

[Use task planner to plan change tasks in a change record](#)

Apply change model to existing change record

User roles: Change Manager, Change Coordinator, Change Requester

You can apply a change model to an existing change record that does not have a change model applied or you can apply a change model to replace the change model previously applied.

In the out-of-box setting, the “Apply Change Model” option is only available for the change records using the Emergency Change, Normal Change, or Standard Change workflows when the change is in the phases before Approval (or before Execution for Standard Change).

After you apply a new change model to a change record:

- The change will automatically go back to the first phase of the workflow.
- The field values defined in the change model will overwrite the values in the change record.
- All the tasks in waiting phase are automatically cancelled as these tasks have not been worked on; the tasks after waiting phase must be manually cancelled before the change model is applied, so that you are aware applying the new change model will disrupt your original change process as you might have already started working on some tasks.

To apply a change model to a change record:

- 1 Do one of the following in the System Navigator:
 - a Click **Change Management > Search Change**, and then Click **Search**.
 - b Click **Change Management > Change Queue**.
- 2 Open the change record to which you want to apply a new change model.
- 3 Click **More > Apply Change Model**.



In the out-of-box setting, the “Apply Change Model” option is only available for the change records using the Emergency Change, Normal Change, or Standard Change workflows when the change is in the phases before Approval (or before Execution for Standard Change).

If the change record has opened tasks, you will be prompted to cancel all the opened tasks manually before applying a change model.

- 4 Select the desired change model from the list.
- 5 Click **Yes** to apply the change model.

The selected change model is applied to the change record and the change phase is changed to the first phase in the workflow.

If you want to configure whether the “Apply Change Model” option is available for a phase of a workflow, you can add or remove the `chm.apply.change.model` action in the workflow phase.

To add the “Apply Change Model” option for a phase of your workflow:



If you want to edit an HP Proprietary workflow or use it as a model, create a copy of the HP Proprietary workflow.

- 1 Click **Change Management > Configuration > Change Workflows** from the System Navigator to display all the change workflows.
- 2 Open the workflow that you want to configure.
- 3 Click a phase in the workflow and then click the **Actions** tab.
- 4 Click **Add** to add an action with the following settings:
 - **Id:** Apply Change Model
 - **Action:** `chm.apply.change.model`
 - **Location:** More Options List
 - **Action Condition:** `$L.tableAccess.update=true`
 - **Requires lock:** true
- 5 Click **Save**.

Related concepts

[Change model](#)

[Workflow phases](#)

Related tasks

[Add a phase](#)

Map change model fields into change record

User roles: System Administrator and Implementer

By configuring the link file, you can customize the fields to be copied from a change model to a change record. You can modify the global link file used as the default for all change models or you can specify a link file for an individual change model. If a link file is specified for a specific change model, it takes precedence over the global link file.

To configure the default change model field mapping for all the change models:

- 1 Click **Change Management > Administration > Settings** in the System Navigator.

The Change Setting screen appears. The default link file for all the change models is specified in the **Default Open/Apply Link** text box.

- 2 Click the **Find Related Information** icon on the right of the **Default Open/Apply Link** text box to open the link file.
- 3 Click the line containing the mapping information in the table, and then click **More > Select Line**.
- 4 Modify the fields mapping in the **Source Field (Fill To/Post From)** column and the **Target Field (Fill From/Post To)** column.
 - ▶ Enter the field names of the `changeModel` table in the **Source Field (Fill To/Post From)** column, and enter the field names of the `cm3r` table in the **Target Field (Fill From/Post To)** column. The fields mapping each should be in the same data type.
- 5 Click **Save**.
 - ▶ If you want to use a different link file, enter the name of your link file in the **Default Open/Apply Link** text box.

To configure the fields mapping for one specific change model:

- 1 Click **Tailoring > Tailoring Tools > Links** in the System Navigator.
- 2 In the **Name** field, type the name of the form or file. If desired, type a descriptive name or phase in the **Description** field.
- 3 Click **New** to create the new link record.
- 4 Click a line in the table, and then click **More > Select Line**.
- 5 Type the descriptive relationship information in the appropriate text boxes.
- 6 Configure the mapping using the **Source Field (Fill To/Post From)** column and the **Target Field (Fill From/Post To)** column.
 - ▶ Enter the field names of the `changeModel` table in the **Source Field (Fill To/Post From)** column, and enter the field names of the `cm3r` table in the **Target Field (Fill From/Post To)** column. The fields mapping each should be in the same data type.
- 7 Click **Save** to add the new link record.
- 8 Click **Change Management > Configuration > Change Models** in the System Navigator.
- 9 Click **Search** to select a change model.

Or

Click **New** to create a new change model record.
- 10 Click the **Fill Field Open/Apply Link** icon in the **Open/Apply Link** text box to select the link file you created.

11 Click **Save**.

Related concepts

[Change model](#)

[Change settings](#)

See “Understanding links” in Service Manager 9.30/9.31 HelpServer topics


Use change models in Service Catalog connector

User roles: System Administrator and Implementer

When adding a new Service Catalog item using the “Open a Change” connector, you can select a change model to open a change.

To use a change model when creating a service catalog item using the “Open a Change” connector:

- 1 Click **Service Catalog > Administration > Manage Catalog** in the System Navigator.
- 2 Click **Add New Service Catalog Item**.
The New Service Catalog Item Wizard appears.
- 3 Enter the information as needed for the new Service Catalog item, and then click **Next**.
- 4 Select **Open a Change** as the connector type and specify the parent category this new item belongs to.
- 5 Click **Next**.
- 6 Select change category, change subcategory, and change model, and then click **Next**.
- 7 Specify all the fields to define the initial state of the change request this item creates.

 All these fields are mandatory for creating the change requests. They must be specified either here or in the selected change model. If you leave any of these fields empty here, make sure this field has been defined in the selected change model. Otherwise, the change will not be created automatically after a request is approved.

The values specified here take precedence over those defined in the selected change model (or in the change templates used by the change model).

- 8 Click **Finish**.

After completing these steps, a Service Catalog item is created with the “Open a Change” connector. When a user orders this Service Catalog item and the request gets approved by the approver, a change record using the selected change model will be created.

Related concepts

[Change model](#)

See “Service Catalog connectors” in Service Manager 9.30/9.31 HelpServer topics

Related tasks

See “Add a Service Catalog item” in Service Manager 9.30/9.31 HelpServer topics

Create a new change request

User roles: Problem Manager, Change Coordinator, Release Manager

Sometimes you will need to create a new change request that is not based on an existing interaction or known error.

To create a new change request:

- 1 Click **Change Management > New Change** in the System Navigator.
- 2 Drill down the change categories to select a change model for a new change request. Service Manager displays a new form and populates the following fields based on your previous selections.
 - Change ID
 - Phase
 - Category
 - Subcategory



To create a new change request based on a change model, click **Change Management > Administration > Settings**. Click **Change Model** under **Select on Open**. You can group the change model based on category, subcategory, or up to four change model fields by specifying them in the **Group Change Model by** text box.

- 3 Complete the form with all of the required information and any additional information.
- 4 If you are logged in as a Problem Manager and want to associate an existing known error with this change, use the **More** button to associate a known error record with this change.
- 5 Click **Save**. A notification of the change is sent to the selected change initiator.



- The toolbar in the change request form contains a button with the name of the transition. You can navigate a change workflow using this button. You can use the **More** menu for other workflow actions that you can perform, such as **Abandon**. If you are creating new Change, you must click **Save** first before any transitions buttons or options appear.
- The **Tasks** section in the change request form lists the tasks associated with their phases in the workflow. You can click the **Task Planner** button to view or plan the tasks for the current change record.
- The **Approvals** section in the change request form lists the approvals associated with the current phase in the workflow.
- You can also create a new task from a change request by using the **Open New Task** option in the **More** menu. This option is available only for the phases that match with the change phases under the **Available Phases** tab in task category. If you leave **Available Phases** blank for a task category, then you can use this task category in all change phases.
- You cannot reopen a Standard, Emergency, and Normal change category request.

Related tasks

See “Create change request from user interaction” in *Service Manager 9.30/9.31 HelpServer topics*

See “Update a change request” in *Service Manager 9.30/9.31 HelpServer topics*

See “Withdraw a change request” in *Service Manager 9.30/9.31 HelpServer topics*

Approvals in Change Management

Change Management requires approvals to be complete before the change request can move to the next logical phase. Approvals are based on associated Service Level Agreements (SLA). Managers and sponsors associated with the SLA must be listed as approvers for each phase.

After the approvals are complete, you can move the request to any desired phase by setting condition in condition editor of transitions. You can set the transition condition to move the change request to another phase or remain in the current phase by setting the statuses to “Denied” and “Pending” respectively. For example, you can set the following conditions for the transitions in the “ECAB Approval” phase to move the change request to different phases.

| Condition | Action Performed |
|---|--|
| Set the following condition in the transition from the “ECAB Approval” phase to the “Build and Test” phase Approval Status in CurrentRecord= | Change request moves from the “ECAB Approval” phase to the next phase, “Build and Test”. |

| | |
|---|--|
| approved AND Build Test Required in CurrentRecord= true | |
| Set the following condition in the transition from “ECAB Approval” to “Implementation” | Change request moves from the “ ECAB Approval” phase to “Implementation”. |
| Approval Status in CurrentRecord= approved AND Build Test Required in CurrentRecord= false | |
| Set the following condition in the transition from “ECAB Approval” to “Risk and Impact Analysis”. | Change request moves from the “ECAB Approval” phase to the previous phase, “Risk and Impact Analysis”. |
| Approval Status in CurrentRecord= denied | |

A change request may require other approvals, depending on the category listed in the categorization field:

- Change requests with an impact of 3 (Major Impact) also require approval by an IT director.
- Change requests with an impact other than 1 (Minor Impact) must be approved by a member of the Change Advisory Board (CAB).

Related concepts

See “Change Management” in *Service Manager 9.30/9.31 HelpServer topics*

See “What is an approval?” in *Service Manager 9.30/9.31 HelpServer topics*

See “What is an approval sequence?” in *Service Manager 9.30/9.31 HelpServer topics*

See “What is approval status?” in *Service Manager 9.30/9.31 HelpServer topics*

See “Approval options in Change Management” in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

See “Approve, deny, or retract a change” in *Service Manager 9.30/9.31 HelpServer topics*

See “Approve multiple change requests” in *Service Manager 9.30/9.31 HelpServer topics*

Change Management administration

Change Management administration provides the capability to control the Configuration Management application functionality, manage change groups, and create change request based on change model, category, or subcategory.

Change Management administration consists of the following:

- **Change Environment:** Change Management contains an environment record for changes. This record contains an option that defines the functionality of the Change Management application for all Change Management users.
- **Groups:** This enables you to group operators to be a member or approver of change groups.
- **Settings:** You can create a change request based on the change model or category by selecting the appropriate option in the Change Settings page. You can also enable sending email notifications through Event Messages to Change management.
- **Task Environment:** Change Management contains an environment record for tasks. This record contains an option that defines the functionality of Change Management application for all Change Management users.

Related Concepts

[Change Management](#)

[Change model](#)

Configure a Change Management environment record

User roles: System Administrator

To configure a Change Management environment record:

- 1 Click **System Administration > Ongoing Maintenance > Environment Records > Change Management Request Environment** or **Change Management Task Environment**.
- 2 Choose the parameters for the entire change system.

| Parameter | Description |
|--|---|
| Allow Operator Access without Profile Record | Permit users without an Operator profile for Change Management to access the application using the default profile. |
| Change Manager | Enables you to specify the change manager. |

- 3 Click **Save**.

Related concepts

See “Change Management environment records” in *Service Manager 9.30/9.31 HelpServer topics*

Change settings

User roles: System Administrator

To configure change settings:

- 1 Click **Change Management > Administration > Settings** in the System Navigator.
- 2 To enable sending email notifications using Event Messages to Change Management, select the **Enable Legacy Event Messages** check box.
- 3 To specify the default link file for mapping change model fields to change records, enter the name of the link file in the **Default Open/Apply Link** text box.
- 4 To enable change model filtering based on the script function you defined, enter the script function name in the **Change Model Restriction Script Function** text box. For example, `ChangeModelRestriction.getRestrictionSql`.



The specified script function is used to filter change models that you can see when creating a new change or applying a change model to a change, according to the conditions defined in the script.

To define the query conditions in the script, click **Tailoring > Script Library** in the System Navigator, search for the script or create a new script, and then define the script function for change model filtering.

- 5 To create a new change request based on change category, select **Category** under **Select On Open**.
- 6 To create a new change request based on Change Model, select **Change Model** under **Select On Open**.
- 7 To configure the change model hierarchy, type up to four column names to group the change model in the **Group Change Model by** text box. For example, to group the change model by category and template, type **category, changeTemplate**.



- Make sure to select **Change Model** under **Select on Open** to configure the change model hierarchy.
 - Use the column names specified in the `changeModel` table.
 - You can configure maximum of four levels in the change model hierarchy specifying the columns in a comma separate list.
- 8 Click **Save**.



You can create or edit custom settings by using the **More** menu.

Related concepts

[Change Management administration](#)

Related tasks

[Create a new change request](#)

Change group

User roles: System Administrator

Change group enables you to group operators who can be members or approvers of the same change group. You can create change groups to contain members and approvers who operate on common area of responsibility.

Service Manager sends a notification to members of the corresponding groups whenever a new change request is created or the existing change is modified. Approvers of a group can accept or deny the approval requirement of a change.

To configure a change group:

- 1 Click **Change Management > Administration > Groups** in the System Navigator.
- 2 Type the name of the new change group in the **Group Name** text box.
- 3 Select the area.
- 4 Type the description of the new group.
- 5 Type the name of the manager of the change group.
- 6 Select the work schedule of the change group from the **Calendar** drop-down list.
- 7 Select time zone.
- 8 Type the name of the members of the change group.
- 9 Type the name of the approvers of the change group.
- 10 Click **Add**.

Related concepts

Change Management administration

ChM Membership

ChM Membership

User roles: Change Manager

ChM Membership contains the information of an operator being a member or approver of particular Change Management groups.

The fields in the ChM Membership record are as follows:

- **Name:** Name of the operator
- **Member Of:** Name of the change groups the operator is a member of
- **Approver Of:** Name of the change groups the operator is an approver of



The `myGroups` (ChM Membership) and `cm3groups` (Change Management Groups) tables are synchronized. For example, in the `myGroups` table, if operator

is OPER1 and **Application** is the change group in the **Member Of** field, then OPER1 will be added to **Members** field in cm3groups.

Related concepts

[Change Management administration](#)

[Change group](#)

Security

The following sections explain the Change Management security roles, security areas, and rights.

Setting rights to changes and tasks

User roles: Change Manager

The Change Administrator can set rights to changes and tasks using the role-based security. The Changes, Change Tasks, and Change Management Configuration areas contain default security rights and settings. The rights are copied to new roles created for these areas. However, the settings are inherited only if there are no settings specified on the roles.

Note: Whenever the roles in an operator record are updated, the operator must log out and then log in for the changes to take effect.

Related concepts

[Change security areas](#)

[Security roles](#)

[User roles](#)

Change security areas


User roles: System Administrator

The security areas in Change Management are Changes, Change Tasks, and Change Management Configuration. These areas contain the default security rights and settings for Change Requests in the Change Management module. The security right settings will be inherited by the new roles created in an area when no settings are specified in the security role.

The change areas are used to set permissions to operators to provide access to particular area of Change Management. For example, for the Change Coordinator security role, set change area as Change Management Configuration and rights as **View** and **Admin**. Then, an operator with this security role can view and configure only the Change Management Configuration items under Change Management. The

following table lists the areas and the relevant Change Management menu items the operators can access.

| Change area | Change Management System Navigator menu items for this area |
|---------------------------------|--|
| Change | This area contains the default security rights and settings for change requests in the Change Management module. For example, New Change, Change Queue, Task Queue, Search Changes, and Change Calendar. |
| Change Tasks | This area contains the default security rights and settings for change tasks in the Change Management module. For example, New Tasks and Search Tasks. |
| Change Management Configuration | This area contains the default security rights and settings for Change Management configuration. For example, Alerts, Approvals, Change Categories, Change Models, Change Workflows, Messages, Subcategories, and Task Categories. |

 While setting permission for security roles, if you grant **Admin** rights, then the operators can perform the administrative activities listed under the **Administration** menu of Change Management.

Related concepts

[Security roles](#)

[User roles](#)

Add security roles and settings

User roles: System Administrator

To create a security role and assign rights and settings:

- 1 Click **System Administration > Security > Roles**.
- 2 Click **New**.
The security role form is displayed.
- 3 Type the security role name.
- 4 Type the security role description.
- 5 Click **Save**.
- 6 Select the security area.

The security rights and settings form is displayed.

- 7 Under **Rights**, select the rights to be assigned to the security role. For example, set **Expert** rights for the security role. The **Expert** security right enables the operator to view alert log, opened tasks, affected services, and clocks of change request. It also enables you to set reminders, send notifications, create hot news, and associate change request to changes, incidents, interactions, quotes, and know errors.
- 8 Under **Settings**, add required settings.
- 9 Under **Folders**, add folder permissions to the security role.

The out-of-box security folders available in Service Manager are DEFAULT and advantage. You can also create security folders to meet your business needs. By default, all security folders are assigned to a new security role created. Once a role is created and rights are configured, you can modify the security rights for a role within an area.

Related concepts

[Change security areas](#)

[User roles](#)

User roles

The out-of-box Change Management user role descriptions use these application profiles and capability words. In order to use Change Management, you must assign the appropriate user role descriptions to your personnel. If necessary, you can modify these user role descriptions or add new ones.

| User Role | Configuration Management Profile | Service Desk Profile | Incident Management Profile | Problem Management Profile | Security Roles | Request Management Profiles | Service Level Management Profile | Contract Management Profile | Capability Words |
|--------------------|----------------------------------|----------------------|-----------------------------|----------------------------|--|-----------------------------|----------------------------------|-----------------------------|--|
| Change Analyst | DEFAULT | DEFAULT | DEFAULT | DEFAULT | change analyst change change analyst tasks | | | | partial.key change request change task problem management expedite change service desk user.favorites incident management |
| Change Approver | DEFAULT | DEFAULT | DEFAULT | DEFAULT | change approver | | | | partial.key change request change task problem management expedite change service desk user.favorites incident management |
| Change Coordinator | DEFAULT | DEFAULT | DEFAULT | DEFAULT | change coordinator change change coordinator tasks | request reviewer | | | partial.key change request change task problem management expedite change service desk user.favorites incident management |

Process Designer

| | | | | | | | | | |
|----------------|---------|---------|---------|---------|-----------------|--------------------------------------|---------|---------|--|
| Change Manager | DEFAULT | DEFAULT | DEFAULT | DEFAULT | change manager | requestor request coordinator | | | partial.key change request change task problem management expedite change service desk user.favorites incident management ChMAdmin OCMQ OCML |
| E-CAB | DEFAULT | DEFAULT | DEFAULT | DEFAULT | emergency group | DEFAULT | DEFAULT | DEFAULT | partial.key change request change task problem management expedite change service desk user.favorites incident management EditContacts data administrator public.favorites data administrator OCMQ OCMO OCML |

Related concepts

[Change security areas](#)

[Security roles](#)

Enabling approval delegation

To enable other operators to delegate approval authority, a System Administrator must make the following changes to an application profile of an operator.

| To delegate approval authority for this application | Requires enabling this application profile option |
|--|---|
| Change Management | Can Delegate Approvals |
| Request Management | Delegate Approvals |
| Service Catalog (controlled by Service Desk profiles) | Delegate Approvals |

The Delegate Approvals or Can Delegate Approvals profile option only controls whether an operator can view the Approval Delegation wizard. Separate application profile options control whether an operator can view or approve objects in an application.

The following example illustrates how to enable approval delegation for the Change Management application:

To edit the application profile record to which you want to grant approval delegation authority:

- 1 Log in to Service Manager with a System Administrator account.
- 2 Click **System Administration > Security > Roles**.
Service Manager displays your custom Change Management security roles form.
- 3 In **Role** text box, type the name of the security role you want to grant approvals, for example “change approver”.
- 4 Click **Search**.
Service Manager displays the current Change Management Security Roles.
- 5 Under **Settings**, select **Can Delegate Approvals**.
- 6 Click **Save**.



It is a best practice to only enable the **Delegate Approvals** or **Can Delegate Approvals** option for operators who can also view and approve objects in the application.

Related concepts

See “Approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

See “Enabling approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

See “Example: Enabling Approval Delegation for custom Problem Management approvals” in *Service Manager 9.30/9.31 HelpServer topics*

See “Example: Enabling custom approvals for Problem Management” in *Service Manager 9.30/9.31 HelpServer topics*

See “Temporary rights of an approval delegate” in *Service Manager 9.30/9.31 HelpServer topics*

See “What happens when I delegate approval authority?” in *Service Manager 9.30/9.31 HelpServer topics*

See “What happens when I receive delegated approval authority?” in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

See “Copy an approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

See “Delegate approvals to another operator” in *Service Manager 9.30/9.31 HelpServer topics*

See “Disable an active approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

See “Update an active approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

Related references

See “Approval delegate qualifications” in *Service Manager 9.30/9.31 HelpServer topics*

See “Global variables available for approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

See “Views available for approval delegation” in *Service Manager 9.30/9.31 HelpServer topics*

Add folder permissions to a security role in Change Management

User Role: System Administrator

To add folder permissions to a security role in Change Management:

- 1 Click **System Administration > Security > Roles**.
- 2 Click **Search** to select a security role from the record list.
- 3 Click the security role to be viewed.
- 4 Under **Rights**, select the applicable default rights parameters for the security role.
- 5 Under **Security Folders**, select folders.
- 6 Click **Save**.

Related concepts

See “Folder entitlement” in *Service Manager 9.30/9.31 HelpServer topics*

See “Change Management” in *Service Manager 9.30/9.31 HelpServer topics*

Related tasks

See “Enable folder entitlement” in *Service Manager 9.30/9.31 HelpServer topics*

See “Disable folder entitlement” in *Service Manager 9.30/9.31 HelpServer topics*

See “Add a folder” in *Service Manager 9.30/9.31 HelpServer topics*

See “Delete a folder” in *Service Manager 9.30/9.31 HelpServer topics*

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