HP Service Manager

Software Version: 9.41

For the supported Windows® and UNIX® operating systems

Service catalog help topics for printing

Document Release Date: September 2015
Software Release Date: September 2015

Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notice

Trademark Notices

Adobe® is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

UNIX® is a registered trademark of The Open Group.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

For a complete list of open source and third party acknowledgements, visit the HP Software Support Online web site and search for the product manual called HP Service Manager Open Source and Third Party License Agreements.

Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to: https://softwaresupport.hp.com/.

This site requires that you register for an HP Passport and to sign in. To register for an HP Passport ID, click **Register** on the HP Support site or click **Create an Account** on the HP Passport login page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Support

Visit the HP Software Support site at: https://softwaresupport.hp.com.

This website provides contact information and details about the products, services, and support that HP Software offers.

HP Software online support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support website to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and to sign in. Many also require a support contract. To register for an HP Passport ID, click **Register** on the HP Support site or click **Create an Account** on the HP Passport login page.

To find more information about access levels, go to: https://softwaresupport.hp.com/web/softwaresupport/access-levels.

HPSW Solutions Catalog accesses the HPSW Integrations and Solutions Catalog portal website. This site enables you to explore HP Product Solutions to meet your business needs, includes a full list of Integrations between HP Products, as well as a listing of ITIL Processes. The URL for this website is https://softwaresupport.hp.com/group/softwaresupport/search-result/-/facetsearch/document/KM01702710.

About this PDF Version of Online Help

This document is a PDF version of the online help. This PDF file is provided so you can easily print multiple topics from the help information or read the online help in PDF format. Because this content was originally created to be viewed as online help in a web browser, some topics may not be formatted properly. Some interactive topics may not

be present in this PDF version. Those topics can be successfully printed from within the online help.

Contents

Service Catalogs

A Service Catalog contains a comprehensive list of enterprise products and services available to internal and external customers, depending on their business role. Users submit service requests that follow the usual planning and approval workflows. Service Manager fulfills service requests by using an internal interface to route the requested data to the appropriate Service Manager application. The application that delivers the requested product or service opens any required fulfillment tasks.

Service Catalogs support the Information Technology Infrastructure Library (ITIL) goals for Service Management. They integrate seamlessly with Service Level Management to measure and report on service level objectives for service request fulfillments. Service Catalogs set expectations for both customers and service providers about the delivery, quality, and level of services. Any Service Manager Business Service owner can create or maintain a Service Catalog using a simplified Service Manager interface and wizards to guide them in adding or changing service offerings.

Service Catalogs can include Information-only items as well as items that your customers can purchase. Purchasable items include item picture, description, attachments, and purchasing options. Information-only items, such as instructions on how to order something from an outside service, include only the item picture description and attachments and do not include purchasing options.

Out-of-box Service Catalog

The Service Catalog includes hundreds of services and bundles that span major categories. The four main Service Catalog categories include:

- **Business and Department Services** – This category contains enterprise services for business units and departments, including Application Access, New Application Hosting, and Professional Consulting.
- **Employee Lifecycle Services** – This category contains life cycle services available to employees and managers, including New Employee requests, Personal Information Change, and Employment Status Change,
- **Personal Productivity Services** – This category contains common employee services such as telecommunications, collaboration support, accounts, network access, software, and hardware bundles.
- **Technical and Support Services** – This category contains common technical IT requests such as setup and support of Servers, Database, Applications, and Network.

You can use the categories, subcategories, and items provided, or you have the flexibility to modify, copy, and remove them to fit your needs.

Service Catalog capability words

Service Catalog controls access through Profile records and Operator records. This allows different people to see and order different items from the catalog. A catalog manager can also set capability words for catalog items, categories, or bundles on the Access tab of any definition record. When the system verifies that the user has at least one of the capability words from the list defined on the catalog item definition record, the user is able to see and order that item from the catalog. If there are no capability words set in the catalog item definition record, the item is available to all users.

Note that the Operator record overrides the Profile record. Enabling functional access with a capability word in the Profile record, but omitting it in the Operator record, means that access is disabled. Users must have an Operator record, but may (or may not) have a Profile record. The Execute Capabilities table in the Operator record specifies a user's permissions. Following are some of the capability words that enable user access to Service Catalog:

Capability word	Description
svcCatAdmin	Allows access to Service Catalog administration and is the hierarchical parent for all other capability words.
svcDeptRequester	Allows a department to request items from catalog.
svcEmployeeRequester	Allows an employee to request items from catalog.
svcCatManagerRequester	Allows a manager to request items from catalog.
svcCatTechRequester	Allows a technician to request items from catalog.
svcCatRequestOnBehalf	Allows an employee self-service (ESS) user to submit a service catalog request on behalf of another user.

Filter access to catalog items

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type the **Name** of a definition record.
3. Select the **Type** of record (category, bundle, or item) from the drop-down list and then click **Search**. The definition record you want to modify opens.
4. Click on the **Access** tab.
5. In the **Available to:** field, select a capability word from the list to control access to the catalog item.
   A user must have at least one of the capability words in the list in order to select the item from the catalog. If you don't select any capability words, the item is available to all users.
6. If you want to edit any filter criteria for this Service Catalog entry, click **Edit Access Filter** and follow the wizard instructions.
7. Click **Save**.
8. Click OK.

The shopping cart

When a user requests one or more services, products, or bundles, Service Manager uses a shopping cart to collect each service request that you make during that session. When the user completes their selections, Service Manager processes the contents of the shopping cart (one or more service requests) internally and submits each one to the appropriate application that fulfills the service request.

The Service Catalog interface

The Service Catalog management Web interface is simple enough for non-technical business managers to build and manage their own catalog. A visual workflow makes it easy to see the status of a service request. The simple interface enables managers and approvers to add approvals or make assignments to modify the workflow.

The Service Catalog interface allows users to print an order from the catalog. Users with appropriate access privilege can also print record lists for Service Catalog requests, a detailed record for a request, catalog item definition record lists and detailed records a catalog item definition.

Self-service access

Employee Self-Service (ESS) enables you to connect with a Service Manager application to request a service, provide information, or track previous requests. You do not need any special training or software. If you can connect to the Service Manager server using a supported browser, you can open, modify, and cancel service requests. There are two interfaces for self-service access; the one you choose depends on which option is configured on your system:

Standard ESS View: provides a simplified Service Desk interface for you to create, view, and update service requests. To learn more, see the related topics links.

Note: The ESS interface has been designed so that users can easily understand what they need to do; therefore, no Service Manager help icon is available. If users want to see the online help, their System Administrator can provide them with a URL that they can enter into their web browser.

Service Request Catalog (SRC): provides an an easy-to-use, questionnaire-style Service Desk interface, which allows you to create, view, and update service requests. SRC guides you through request creation, which enables the service request to be created more quickly and accurately. Self-service support for catalog and non-catalog items, approvals, and approval delegation is also provided. A dashboard shows the status of service requests and catalog requests. An Assistance panel provides quick and easy access to SRC online help. To learn more, see the embedded help and the SRC online help, both of which are accessible directly from SRC.

Note: For more information, see the *HP Service Request Catalog for Service Manager: Installation and Configuration guide*.

Searching the Service Catalog

The Service Catalog enables users to search for services, items, and bundles in the language in which the user is logged on to the system. For example, if a user logs on in French, the user enters a description in French when searching and the items or bundles available display in French. Also, when the user selects a category to search within, the list of categories displays all categories available to the user in French.

If a manager or a user searches the catalog in a localized language and there is not a localized version of the item, the search will not find the item. However, if a user or manager uses a search filtered on a category, any non-localized items or bundles within the category display in English because the base language in HP Service Manager is English.

This also means that items created in English but not localized are found by a search, but these items do not display in the search results if a user is logged in to the system in a language other than English. This occurs because there is no localized display name for the item in the system. To prevent this situation, as a best practice, localize all data to the desired language before users start using the Service Catalog.

Search for catalog items

1. Click **Service Catalog** > **Order from Catalog**.
2. Specify the **Category**, if you know it.
3. Specify the item name, if you know it.
4. Specify the search options if needed:
   - **Bundles and Items only**: Select this option to limit your search to catalog items whose Type is **Bundle** or **Item**.
   - **Any of these words**: Select this option to limit your search to catalog items that contain any of the keywords you enter in the **Search for** box.
   - **All of these words**: Select this option to limit your search to catalog items that contain all of the keywords you enter in the **Search for** box.
5. Click **Search**.
6. To view more items in the catalog, click **More results**.

What are Most Popular Requests?

The **Most Popular Requests** are listed on the **Order from Catalog** home page. This lists and tracks the most requested items in the catalog for the current calendar month. The results are based on all system activity and not individual requestor activity.

The Most Popular Requests panel displays as many items as your screen size allows.

Request a service catalog item or bundle

Applies to User Roles:

User

You can easily order products and services from Service Catalog without needing to contact the service desk. Items in the Service Catalog can include an item picture, description, attachments, and purchasing options. Some items in the Service Catalog are for information only, such as instructions on how to order items from an outside service. Information-only items only have an item picture, description, and attachments; they do not include purchasing options.

Note: You may also order one or more products and related service tasks by choosing a bundle.

To request an item or bundle from the Service Catalog, follow these steps:

1. Click **Order from Catalog**.
2. Select a category, and then click **Search** to view available products and services.
3. Click the item you want to request to view the Order Information for that item.

   Note: Some catalog items may be Information-only. You will not be able to add Information-only items to your cart.
4. In the Requested for field, select the Individual who will receive the good or service.
5. Select the quantity and any other item options, and then click **Add to Cart** to add the item you want to your cart.
6. From the Order from Catalog home page, click **View Cart/Checkout**.
7. Click **Submit Request**.
8. Type any required information justifying the request.
9. Click **Submit**.

Request a non-cart item

Applies to User Roles:

Self-Service user

When ordering services from the Service Catalog, you can order non-cart items. These items are for services, such as resetting a password, printer support, or desktop support. When you order a non-cart item, you do not need to place the service request in a cart and submit the cart. Instead, your request creates an interaction record and does not require any fulfillment.

To request a non-cart item from the Service Catalog:

1. Click **Non-cart Catalog Requests**.
2. In the **Service Catalog** pane, view the list of non-cart services available. Notice that each link is the detailed description of the item. For example, to select a Password Reset item, click the linked detailed item description **Help user reset password**.

   The non-cart service item opens.
3. Click **Submit** to order the item.
4. Enter the following information to describe what the request is for and when you need it:
   a. **Purpose**
   b. **Needed by** (select a date from the calendar)
   c. Urgency: **1-Critical**, **2-High**, **3-Average**, or **4-Low**
   d. **This Request is for**
   e. **Contact for this Request**
   f. **Preferred method of contact**
5. Click **Add Attachment** to add additional information.
6. Click **Submit**.

   Service Manager displays a message stating that the request has been submitted and an interaction record has been opened.

   - To go back to the Service Catalog and browse the available services, click **Back to catalog**.
   - To cancel the request and exit, click **Cancel**.
7. Click **Continue** to exit.

Make a request for multiple recipients

1. Click **Order from Catalog**.
2. Select a category, and then click **Search** to view available products and services.

3. Click the item you want to request to view the Order Information for that item.

   Note: Some catalog items may be Information-only. You will not be able to add Information-only items to your cart.

4. Change the Quantity to reflect the number of recipients you are requesting the item for.
5. Click **Split Items**.
6. From the Order from Catalog home page click **View Cart/Checkout**.
7. Click the name of the individual Item/service in your cart.
8. Select the recipient's name in the Requested for field.
9. Click **Save changes**.
   You are taken back to view the contents of your cart.
10. Repeat step 6 through step 9 for the other recipients.
11. Click **Submit request**.
12. Type any required information justifying the request.
13. Click **Submit**.

Save a shopping cart

1. Click **Order from Catalog**.
2. Select a category, and then click **Search** to view available products and services.
3. Click the item you want to request to view the Order Information for that item.

   Note: Some catalog items may be Information-only. You will not be able to add Information-only items to your cart.

4. In the Requested for field, select the Individual who will receive the good or service.
5. Select the quantity and any other item options, and then click **Add to Cart** to add the item you want to your cart.
6. From the Order from Catalog home page click **Save your Cart for later**.

7. Type a cart description.
8. Click **Finish**.
9. Click **OK** to confirm the saved cart.

Save a shopping cart template

1. Click **Order from Catalog**.
2. Select a category, and then click **Search** to view available products and services.
3. Click the item you want to request to view the Order Information for that item.

   Note: Some catalog items may be Information-only. You will not be able to add Information-only items to your cart.
4. In the Requested for field, select the Individual who will receive the good or service.
5. Select the quantity and any other item options, and then click **Add to Cart** to add the item you want to your cart.
6. From the Order from Catalog home page click **Save your Cart as a Template**.
7. Type a cart description.
8. Click **Finish**.
9. Click **OK** to confirm the saved cart.

Note: The items in a shopping cart template cannot be modified before you submit the request.

Submit a saved shopping cart

1. Click **Service Catalog** > **Saved Carts and Templates**.
2. Select the saved cart that you want to submit from the record list.
3. Click **Checkout**.
   The saved items are added to your active cart.

4. Click **Submit Request**.
5. Type the required information regarding this request.
6. Click **Submit**.
7. Click **OK** to confirm the request was submitted.

Submit a shopping cart template request

1. Click **Service Catalog** > **Saved Carts and Templates**.
2. Select the template cart that you want to submit from the record list.
3. Click **Checkout**.
   The items are added to your active cart.
4. Click **Submit Request**.
5. Type the required information regarding this request.
6. Click **Submit**.

Note: The items in a shopping cart template can not be modified before you submit the request.

Check the status of a request

1. Click **View Open Requests**.
2. Select an interaction that you created. The **Status** field displays the request status.

Modify a catalog request in progress

1. Click **View Open Requests**.
2. Select the interaction that you created.
3. Click **View/Edit Cart**.
   A list of the items currently in your cart opens.

4. Click **View Catalog**. The Service Catalog opens.
5. Add another item to your cart or remove an existing item.
6. Click **Return to Request**. The interaction you created opens.
7. Click **View/Edit Cart**.
   Your modified cart opens.

Cancel a request

1. Click **View Open Requests**.
2. Select the interaction that you created.
3. Click **Cancel Request**.
   The interaction is closed.

Service Catalog approvals

When an employee self-service (ESS) requestor submits an order from Service Catalog, Service Manager automatically creates an interaction that, based on approval requirements, may have to be approved before it can be fulfilled.

The Service Catalog manager can define two types of approvals for an item or bundle: request level, or line item level.

Additionally, Service Manager provides a default request-level approval definition record, named "Service Catalog Approval," that applies to the entire Service Catalog. This default approval definition can be configured by Approval Roles and Approval Activities.

	Request-level approval	**Line item level approval**
When a user submits a request that requires approvals	Request-level approvals start.	Line item level approvals do not start until all request-level approvals are approved.
When an approval rule creates an approval record	Each approval record that is created is for the whole request. The **Applies To** field in the **Approvals** section in the interaction record displays "Request."	Each approval record that is created is specific to a cart item. The **Applies To** field in the **Approvals** section in the interaction record displays the name of the cart item.
When an approver views an approval record in the approval inbox	The approval record shows the interaction ID in the title, such as "Interaction SD10327."	The approval record shows the cart item ID in the title, such as "Cart Item 20."
If a request is denied and returned	The denial record indicates that the request was denied. Line item level approvals for this request will not start.	The denial record indicates that the request was denied on one or more specific items. (The submitter can know which items were rejected, make modifications, and then resubmit the request.)

Approve a request

Applies to User Roles:

Service Catalog approver

1. Log on to Service Manager as a Service Catalog approver, for example, as a requestor's manager.
   Note: The manager is defined in a requestor's Contact Information.

2. You can approve requests through both the standard and the employee self-services web clients.
   - Through an index.do URL:
     Click **Approve Requests**. A list of all the interactions requiring approval opens.
     Note: It's possible to see the Approval Inbox as the default starting page, which is pre-configured in your operator record.

   - Through an ess.do URL:
     Click **Approve a Request**. A list of all the interactions requiring approval opens.
     Note: You can access the **Approve a Request** menu item only when **ESSSM-Approval** is selected for the Self Service Menu field on the Self Service tab of your operator record.

3. Click **View** to see the request details.

4. To approve the individual request, click **Approve**.

5. To approve multiple requests, select the check boxes you want and then click **Approve All Selected**.

   The records are now approved and disappear from the view list.

Deny a request

Applies to User Roles:

Service Catalog approver

As a Service Catalog approver, you can deny a request.

To deny a Service Catalog request, follow these steps:

1. Log on to Service Manager as a Service Catalog approver, for example, as a requestor's manager.
   Note: The manager is defined in a requestor's Contact Information.

2. You can approve requests through both the standard and the employee self-services web clients.
   - Through an index.do URL:
     Click **Approve Requests**. A list of all the interactions requiring approval opens.
     Note: It's possible to see the Approval Inbox as the default starting page, which is pre-configured in your operator record.

- Through an ess.do URL:
  Click **Approve a Request**. A list of all the interactions requiring approval opens.
  Note: You can access the **Approve a Request** menu item only when **ESSSM-Approval** is selected for the Self Service Menu field on the Self Service tab of your operator record.

3. Click **View** to see the request details.
4. To deny the individual request, click **Deny**.
5. To deny multiple requests, select multiple check boxes and then click **Deny All Selected**.
6. Type a denial reason and click **OK**. The records are now denied and disappear from the view list.

> **Note:** By default, if a Service Catalog request is denied and is not updated after seven days, this Service Catalog request will be automatically closed with the "Denied Service Catalog Request" closure code.

Default Service Catalog approvals

You can define default approvals that apply globally to all Service Catalog items.

To set up default approvals, the Service Catalog Manager needs to configure the Approval Roles and the Approval Activities that define the approvers, approval conditions and approval levels. For example, different levels of approval roles are required to approve a request depending on the order's cost value. After that, approvers can perform several types of approval tasks.

Note: Settings in Approval Roles and Approval Activities are saved in an approval definition record that is named "Service Catalog Approval," which is a request-level approval.

Define approval roles

User roles: Service Catalog Manager, System Administrator

Approval Roles are a way to identify which users have the capability to approve Service Catalog requests. You can view two OOB Service Catalog Approval Roles (Use Group and 1st Level Manager) in Service Manager.

In this example, the Service Catalog Manager adds a new Approval Role and the System Administrator assigns the new role to an operator.

1. Log on to Service Manager as Service Catalog Manager.
2. Click **Administration** > **Approval Roles**.
3. Click **Search**. You can see two OOB roles as examples displayed in the list: 1st Level Manager and Use Group.
   Notes:
   - 1st Level Manager is the manager specified in the user's contact record.
   - Use Group is a group comprising several operators; it is a sample role that shows how you can specify a group as an approver.
   - You can select **1st Level Manager** and view the JavaScript that defines the approver dynamically based on the Contact Record of the requestor. Or select **Use Group** and view the Expression that defines the approval role Use Group as SYSTEMS ADMIN.
4. Select **User Group** from the list.
5. Change the Role Name to **Technical IT Approver**.
6. Click the Expressions tab, and change the SYSTEMS ADMIN to **SYSTEMS SUPPORT**.
7. Click **Add**. A message displays saying the svcApprovalRole record was added.
8. Log out and log in as System Administrator.
9. Click **System Administration** > **Ongoing Maintenance** > **Operators**.
10. Search and select an operator to do the Technical IT approvals.
11. On the Login Profiles tab, add **SYSTEMS SUPPORT** to the list of Assignment Groups.
12. Click **Save**.

Define approval activities

Applies to User Roles:

Service Catalog Manager

The Service Catalog Manager can configure the approval sequence and approval conditions when defining Approval Activities. In this example, the Service Catalog Manager defines required approvals

based on the request cost. If the cost value of an order is more than 1000 US dollars, the 1st Level Manager is required to approve as the second level approver; if the order costs over 5000 US dollars, the Technical IT Approver is also involved as the third level approver.

1. Log on to Service Manager as Service Catalog Manager.
2. Click **Administration** > **Approval Activities**.
3. Select **Add New Approval Activity**. The Add / Edit an Approval Activity window opens.
4. To define approval activities for 1st Level Manager:
   a. Enter a Description. For example, **First Level Manager**.
   b. Select **Role.**
      Note: The option User means you can only specify a particular operator while the option Role allows you to dynamically configure who can approve. For instance, you can set it up so that the manager defined in a user's contact record can approve.
   c. Use the Fill button to select **1st Level Manager** from the list.
   d. Select **2** for the Approval Sequence.
   e. Click **Next**. The Approval Condition window opens.
5. To set up an approval condition for 1st Level Manager:
   a. Click **Add Condition**.
   b. Provide your approval condition. For example, enter the following values:
      - Field in Interaction – svc.cost
      - Comparison - Greater Than
      - Value - 1000
   c. Click **Next**. The Approval Condition is added.
   d. Click **Next**. The Add/Edit Approval window opens, with the new Approval Activity on the list.
6. To define approval activities for Technical IT Approver:
   a. Select **Add New Approval Activity**.
   b. Enter a Description. For example, **Technical IT Approval**.
   c. Select **Role**.

d. Use the Fill button to select **Technical IT Approver** from the list.

e. Select **3** for the Approval Sequence.

f. Click **Next**. The Approval Condition window opens.

7. To set up an approval condition for Technical IT Approver:
   a. Click **Add Condition**.

   b. Provide your approval condition. For example, enter the following values:
      - Field in Interaction – svc.cost
      - Comparison - Greater Than
      - Value - 5000

   c. Click **Next**. The Approval Condition is added.

   d. Click **Next**. The Add/Edit Approval window opens, with the new Approval Activity on the list.

8. Click **Finish**.

Note: When an employee self-service (ESS) requestor submits an order successfully from Service Catalog, a Service Desk interaction is created with each request. You can view all the required approvers in the Approvals section of the interaction.

Approval delegation

Approval delegation is an optional feature that enables users with approval rights to temporarily delegate their approval authority to another qualified operator. Operators with the **Delegate Approvals** or **Can Delegate Approvals** option enabled in their application profiles can delegate some or all of their approvals by using the Approval Delegation wizard.

Using the **Approval Delegation** wizard, an operator can grant another qualified operator the right to temporarily view and act on items in his or her approval queue. The wizard offers the following delegation options:

- Delegate all approvals to another qualified operator
- Delegate approvals from a particular application to another qualified operator

  - Delegate approvals directly assigned to you as an operator
  - Delegate approvals assigned to you as a member of an approval group
- Delegate approvals from a specified start date to a specified end date

The **Approval Delegation** wizard enables an operator to create any number of approval delegation combinations, including delegating the same approvals to multiple operators at the same time. Delegators can also update an existing approval delegation to change the delegation start and end dates, as well as change the delegate's name.

Note: HP Service Manager tracks all changes to approval delegations using the standard field auditing capability.

When delegates log on to Service Manager, they see both their own and any delegated approvals in their approval list. For security reasons, delegates always retain their original application profiles and operator records. Service Manager determines what temporary rights delegates have when they view or act on an approval.

Administering approval delegation

HP Service Manager supports approvals, and thus approval delegation, for the following applications:

- Change Management
- Request Fulfillment
- Service Catalog

To enable approval delegation for one of these applications, an Administrator must edit one of the application's security role records and select the **Can Delegate Approvals** option. Next, the Administrator must grant this security role to the operators who will be given approval delegation authority.

Note: If you want to support approval delegation for an application that does not support approvals out-of-box, you must first enable and customize approvals for the application.

Approval delegation never changes a delegate's original security role or operator record. Service Manager only changes a delegate's approval groups in memory when the following conditions occur.

- When the system notifies the delegate
- When a delegate views or acts on an approval

By default, Service Manager sends an email notification to the approval delegate when the following conditions occur:

- A new approval delegation is assigned to the delegate
- A new approval arrives in the approval owner's queue

Note: Service Manager also sends an email notification to the approval owner when a new approval arrives in the owner's queue. System Administrators can change the notification behaviors for approval delegation directly from the notification engine.

A delegated approval always retains its original operator assignment. Service Manager records the delegate's actions separately from the owner in the following new fields:

Field name	Label in approval record	Description
approved.by	Operator	The name of the operator who acted on the approval.
approved.for	Approved For	The name of operator who delegated the approval.

Note: Delegators and delegates can view these fields from the approval record and the approval log. However, in some cases, only a delegator may have the approval group necessary to view the records in the approval log. A delegate's temporary rights do not include viewing approvals in the log. In order to view approvals in the approval log, a delegate's application profile must include the required approval groups.

Enabling approval delegation

The **Can Delegate Approvals** security role setting controls whether an operator can view the **Approval Delegation** wizard.

Note: 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.

Refer to the following example for how to enable approval delegation for Change Management.

1. Log on to HP Service Manager as a System Administrator.
2. Click **System Administration** > **Security** > **Roles**.
3. In the **Name** field, type the name of the security role you want to grant approvals. For example, `change approver`.
4. Click **Search**. The **Security Roles** form opens.
5. Click **Change** in the **Area** column.
6. Under **Settings**, select the **Can Delegate Approvals** check box.
7. Click **Save**.

Enabling approval delegation for custom approvals

If you want to enable approval delegations for an application that does not offer approvals in the out-of-box system, you must first create and enable custom approvals for the application. For more information, see related topics.

Enabling approvals and approval delegation requires administrative access to the system database dictionary, the Forms Designer utility, application profiles, and the script library. You should also know which tables and fields the application uses.

Refer to the following checklist for how to set up an application to enable approvals and approval delegation for Problem Management.

Note:

- To complete this checklist, follow the step-by-step procedures described in the following examples found in the related topics.
- You must use the Windows client whenever you need to add a new field/key to a database dictionary table.

1. Edit the object definition for the application to enable approvals by category.
2. Edit the database dictionary for Problem Management to add an approval status field.
3. Edit the database dictionary for the Problem Management categories to add an approval field.
4. Edit the necessary forms to add the new approval fields.

5. Edit the database dictionary for the Problem Management profile record to add to an approval groups field.
6. Create a new approval definition record to manage the Problem Management approvals.
7. Edit the Problem Management category definitions to add your new approval definition.
8. Edit the Problem Management profile records that you want to have access to your custom approval group.
9. Edit the script that controls the approval inbox to add your custom approvals to the list of approvals the system displays.
10. Enable approval delegations for the custom approvals.

For more information, see "Example: Enabling Approval Delegation for custom Problem Management approvals" on page 40 and "Example: Enabling custom approvals for Problem Management" below.

Example: Enabling custom approvals for Problem Management

The following example illustrates how to enable approvals for Problem Management. At the end of this example, you will be able to:

- Create a problem record that requires an approval
- Assign the problem record to the approval queue
- View and act upon the problem approval

Note: In order to enable custom approvals for Problem Management, you must perform the entire sequence of example tasks. You must be a System Administrator, or have equivalent system privileges, to perform the steps in this example. Also, you must use the Windows client whenever you need to add a new field/key to a database dictionary table.

Task 1: Edit the object definition for the application to enable approvals by category.

1. Log on to HP Service Manager with a System Administrator account.
2. Click **Tailoring** > **Document Engine** > **Objects**.

3. Type `rootcause` in the **File Name** field, and then click **Search**.

   The **Object Definition** form opens.

4. Click the **Approvals** tab, and then type the following field values.

Field	Value
Approval condition	true
Approval location	Category
Approval field name	approvals
Approval status field	approval.status
Approval type	All must approve
Approval process	rootcause.save
Preapprove on open	false

   Note: The fields approvals and approval.status fields do not yet exist. You will add the field name to the Problem Management database dictionary in a later step.

5. Click **Save**.

Task 2: Edit the database dictionary for the application to add an approval status field.

1. Click **Tailoring** > **Database Dictionary**.
2. Type `rootcause` in the **File Name** field, and then click **Search**.
3. Select the **descriptor** row in the **Fields** tab, and then click **New Field/Key**.
4. Type the following field attributes.

Field attribute	Value
Name	approval.status
Type	character

5. Click **Add Field**.

6. Click **OK** to save the database dictionary.

   Service Manager prompts you to confirm how you want to change the tables in the RDBMS.

7. If Service Manager has write permissions to the RDBMS, click **SM Alters**. Otherwise, click **User Alters**.

   Service Manager displays the database dictionary.

   Note: Check your DDL output folder for DDL text you can use to update your RDBMS manually.

Task 3: Edit the database dictionary for the application's categories to add an approval field.

1. Click **Tailoring** > **Database Dictionary**.
2. Type `rootcausecat` in the **File Name** field, and then click **Search**.
3. Select the **descriptor** row in the **Fields** tab, and then click **New Field/Key**.
4. Type the following field attributes.

Field attribute	Value
Name	approvals
Type	array

5. Click **Add Field**. Service Manager prompts you to select the array's data type.
6. Select **character**, and then click **Add Field**.
7. Click **OK** to save the database dictionary.

   Service Manager prompts you to confirm how you want to change the tables in the RDBMS.

8. If Service Manager has write permissions to the RDBMS, click **SM Alters**. Otherwise, click **User Alters**.

Service Manager displays the database dictionary.

Note: Check your DDL output folder for DDL text you can use to update your RDBMS manually.

Task 4: Edit the necessary forms to add the new approval fields.

1. Click **Tailoring** > **Forms Designer**.
2. Type `problemcat` in the **Form** field, and then click **Search**.

   The **Problem Control Category Definition** form opens.
3. Click **Design**.
4. Click **Group**.
5. Click on an empty space on the form to add the group.
6. Edit the properties of the group as follows.

Property	Value
Caption	Approval Requirements
Width	152

7. Click **Comfill**, and then click within the **Approval Requirements** group.
8. Edit the properties of the combo fill field as follows.

Property	Value
Input	approvals
Array Length	5

9. Position the **Approval Requirements** group as desired.

   For example, you may want to position the group between the **Active?** check box and the **Phase name** table.
10. Click **OK** to exit design mode.

11. Click **OK** to save the form and return to the **Forms Designer** search screen.
12. Type `PM.pc.investigate.and.diag` in the **Form**field, and then click **Search**.

    The **Problem Control - Problem Investigation and Diagnosis** form opens.
13. Click **Design**.
14. Click **Label**, and then click in the open space beneath the **Record Number** label.
15. Edit the properties of the label as follows.

Property	Value
Caption	Approval Status:
X	2
Y	5
Width	34

16. Click **Text**, and then click to the right of the **Approval Status:** label.
17. Edit the properties of the text field as follows.

Property	Value
X	36
Y	5
Width	36
Input	approval.status
Read-Only	Selected

18. Click **OK** to exit design mode.
19. Click **OK** to save the form and return to the **Forms Designer** search screen.

Task 5: Edit the database dictionary for the application's profile record to add to an approval groups field.

1. Click **Tailoring** > **Database Dictionary**.
2. Type `rcenv` in the **File Name** field, and then click **Search**.
3. Select the **descriptor** row in the **Fields** tab, and then click **New Field/Key**.
4. Type the following field attributes.

Field attribute	Value
Name	approval.groups
Type	array

5. Click **Add Field**. Service Manager prompts you to select the array's data type.
6. Select **character**.
7. Click **Add Field**.
8. Click **OK** to save the database dictionary.

   Service Manager displays the database dictionary.

Task 6: Create a new approval definition record to manage the application's approvals.

1. Click **Tailoring** > **Forms Designer**.
2. Type `rc.profile.g` in the **Form** field, and then click **Search**.

   The **Problem Management Security Profile** form opens.
3. Click **Design**.
4. Click **Label**, and then click in the open space beneath the **Complex Mass Update** check box.
5. Edit the properties of the label as follows.

Property	Value
Caption	Approval Groups:
X	2
Y	31
Width	28

6. Click **Comfill**, and then click to the right of the **Approval Groups:** label.
7. Edit the properties of the combo fill field as follows.

Property	Value
X	31
Y	31
Input	approval.groups
Array Length	5
Value List Condition	select("name", "assignment", "name", "*")

8. Click **OK** to exit design mode.
9. Click **OK** to save the form and return to the Forms Designer search screen.

Task 7: Edit the application's category definitions to add your new approval definition.

1. Click **Tailoring** > **Tailoring Tools** > **Links**.
2. Type `rc.profile` in the **Name** field, and then click **Search**.
3. Add the following link entry at the end of the list of links.

Property	Value
Source Field name	approval.groups
Target File name	assignment
Target Field name	name

4. Click **Save**.
5. Click **Change Management** > **Maintenance** > **Approvals**.

   Note: You are using a Change Management menu link because by default, Problem Management does not have a menu item for Approvals.

6. Type the following field values.

Field	Value
Name	Problem Approval
Approval Condition	true
Group/Oper	HELPDESK
Sequence	1
Condition	true

   Caution: The **Group/Oper** field is case sensitive.

7. Click **Add**.
8. Click **Problem Management** > **Administration** > **Problem Control Categories**.

   Your customized **problemcat** form opens.

9. In the **Name** field, type the name of a Problem Management category that you want to trigger your custom approval process. For example, `ITIL`.

   Note: You can repeat this step for each Problem Management category you want to trigger approvals.

10. Click **Search**.

    Service Manager displays the current ITIL category definition.

11. In the **Approval Requirements** array, type `Problem Approval`.
12. Click **Save**.

Task 8: Edit the application profile records that you want to have access to your custom approval group.

1. Click **System Administration** > **Ongoing Maintenance** > **Profiles** > **Problem Management Profiles**.

   The **Problem Management Security Profile** form opens.

2. In the **Profile Name** field, type the name of a profile you want to grant approvals. For example, `SYSADMIN`.

3. Click **Search**.

   Service Manager displays the current Problem Management Security Profile.

4. In the **Approval Groups** array, type the name of the approval group you defined to manage approvals. For example, `HELPDESK`.

5. Click **Save**.

6. Log out the current operator and log on to Service Manager with an operator account that has the SYSADMIN Problem Management profile. For example, System.Admin.

7. Click **Problem Management** > **Problem Control** > **Create New Problem**.

8. Create a new problem record and note the record number. For example, PM0002.

   Note: The **Category** field on the **Problem Control** form maps to the Incident Management category, not the Problem Management category. Since there is only one approval category for ITIL Problem Management, any problem you create will automatically be part of the ITIL Problem Management category.

Task 9: Edit the script that controls the approval inbox to add your custom approvals to the list of approvals the system displays.

1. Click **Tailoring** > **Database Manager**.

2. Type `Approvals` in the **Table** field, and then click **Search**.

3. Select the **Approval** form from the list.

4. In the **Id** field, type the record number for the problem you created. For example, `PM0002`.
5. Click **Search** to display the pending approval.
6. Click **Tailoring** > **Script Library**.
7. Type `ApprovalCustomPlugin` in the Name field, and then click **Search**.
8. Locate the appendCustomApprovalSql() function.
9. Remove the comment lines /* and */ at lines 49 and 55 to enable the function.
10. Click **Save**.
11. Click **Compile**.
12. Click **Service Catalog** > **Approve Requests**.

    Service Manager displays the list of pending approvals. Check the list for your custom approval. For example, PM0002.

Example: Enabling Approval Delegation for custom Problem Management approvals

The following example shows how to delegate the custom Problem Management approvals you created in a previous example. At the end of this example, you will be able to:

- Delegate Problem Management approvals to another operator
- View Problem Management approvals in a delegate's approval queue

Note: In order to enable approval delegation for custom Problem Management approvals, you must perform the entire sequence of example tasks. You must be a System Administrator, or have equivalent system privileges, to perform the steps in this example. Also, you must use the Windows client whenever you need to add a new field or key to a database dictionary table.

Task 1: Add a new approval delegation field to the database dictionary.

1. Log on to HP Service Manager with a System Administrator account.
2. Click **Tailoring** > **Database Dictionary**.

3. Type `rcenv` in the **File Name** field, and then click **Search**.
4. Select the **descriptor** row in the **Fields** tab, and then click **New Field/Key**.
5. Type the following field attributes.

Field attribute	Value
Name	can.delegate
Type	logical

6. Click **Add Field**.
7. Click **OK** to save the database dictionary.

Task 2: Edit the Problem Management Security Profile form.

1. Click **Tailoring** > **Forms Designer**.
2. Type `rc.profile.g` in the **Form** field, and then click **Search**.

   The **Problem Management Security Profile** form opens.
3. Click **Design**.
4. Select the **assig.groups** comfill, and change its property as follows.

Property	Value
Y	23

5. Select the **Assignment Groups** label, and change its property as follows.

Property	Value
Y	21

6. Click **Checkbox**.
7. Click on the empty space between the **Assignment Groups** label and the **Skip Query Warning** check box.

8. Edit the properties of the check box.

Property	Value
X	80
Y	19
Caption	Can Delegate?
Input	can.delegate

9. Click **OK** to exit the design mode.
10. Click **OK** to save the form and return to the Forms Designer search screen.

Task 3: Edit the custom Problem Management Profile form.

1. Click **System Administration** > **Ongoing Maintenance** > **Profiles** > **Problem Management Profiles**.

   The **Problem Management Security Profile** form opens.

2. Type the name of a profile you want to grant approval delegation rights in the **Profile Name**field. For example, `SYSADMIN`.
3. Click **Search**.

   Service Manager displays the current Problem Management Security Profile.

4. Click **Can Delegate?** to enable it.
5. Click **Save**.

Task 4: Edit the ApprovalCustomPlugin functions in the script library.

1. Click **Tailoring** > **Script Library**.
2. In the **Name** field, type `ApprovalCustomPlugin`, and then click **Search**.
3. Locate the checkProfileForModule(filename, operator) function, and then remove the /* and */comment lines at lines 6 and 17 to enable the function.

This function makes problem records a valid choice in the approval type list of the **Approval Delegation** wizard.

4. Locate the getCustomApprovalGroups(module, operator) function, and then do the following:
   a. Delete the // comment characters at line 25 to activate the line.
   b. Remove the /* and */ comment lines at lines 27 and 40 to enable the function.

   This function returns all the approvals groups defined for the profile of the current application.
5. Locate the getAllCustomGroups(aDele) function, and then do the following:
   a. Verify that the line 100 lists **profile_rootcause** as the profile definition.

      To change the profile type, type a different profile definition.
   b. Verify that line 113 lists SCFile("rcenv") as the type.

      To use another application, type a different profile table name between the quotation marks.
   c. Verify that line 143 lists "Problem" as the module condition.

      To use another application, type a different approval module name.
   d. Verify that line 161 lists \"rootcause\" as the file name.

      To use another application, type a different file name.
6. Click **Save**.
7. Click **Compile**.
8. Click **OK** to return to the Script Library search screen.

Task 5: Edit the ApprovalDelegationGroups functions in the Script Library.

1. Click **Tailoring** > **Script Library**.
2. In the **Name** field, type `ApprovalDelegationGroups`, and then click **Search**.
3. Locate the getDelegationSql function.
4. Delete the // comment characters on line 29 to activate the line.

5. Delete the // comment characters on line 31 to activate the line.
6. Type the // comment characters at the beginning of line 32 to deactivate the line.
7. Click **Save**.
8. Click **Compile**.
9. Click **OK** to return to the Script Library search screen.

Task 6: Add a new approval delegation for the new Problem Management custom approvals.

1. Click **Approval Delegation**.

   The **Approval Delegation** wizard opens.

2. Add a new delegation with the following properties.

Property	Value
Delegated modules	Selected
Modules delegated	Problem Management
Assignment Groups and Operator delegated	HELPDESK, System.Admin
Delegate	Problem.Manager
Delegate from and to dates	From today to tomorrow

3. Log out the current operator and log on to Service Manager as the delegate. For example, Problem.Manager.
4. Click **Approval Inbox**.

   You should see the Problem approval you created previously. For example, PM0002.

Global variables available for approval delegation

HP Service Manager provides global variables for approval delegation. Administrators can use these global variables to create their own custom queries or views.

Global variable	Description
$G.delegated.cm3r.groups	Stores the assignment groups that are associated with Change Management changes that the current operator can view and act on as an approval delegate.
$G.delegated.cm3t.groups	Stores the assignment groups that are associated with Change Management tasks that the current operator can view and act on as an approval delegate.
$G.delegated.ocmq.groups	Stores the assignment groups that are associated with Request Management that the current operator can view and act on as an approval delegate.
$G.delegated.svc.groups	Stores the assignment groups that are associated with Service Catalog that the current operator can view and act on as an approval delegate.

What happens when I receive delegated approval authority?

If an operator delegates his or her approval authority to you, HP Service Manager sends an email to notify you of the new approval delegation. You are also notified when a new approval arrives in your approval queue.

Viewing approvals

When you log on to Service Manager, you will see both your own and any delegated approvals in your approval queue.

- To view approvals that another operator has delegated to you, you can use the **Active approval delegations assigned to me** view.
- To view approvals delegated to you in the past, you can use the **Past approval delegations assigned to me** view.
- To see which items in the approval queue are due to an active approval delegation, you can open the **Approve Requests** view from the System navigator. In this view, Service Manager indicates which approvals are in the queue due to an active delegation by displaying a value of **YES** in the As Delegate? column. You can use this view to view, approve, or deny approval requests.

Tracking approval actions

As a delegate, when you act on an approval, Service Manager tracks your actions by adding both your operator name and the delegator's operator name to the approval record.

- Service Manager lists your name in the Operator column of the Completed Approval Actions table.
- Service Manager lists the delegator's name in the Approve For column of the Completed Approval Actions table.

After the approval delegation expires

When an approval delegation expires, you are no longer considered a temporary member of the delegator's approval groups. This means that you can no longer view or act on items that belong exclusively to the delegator's approval groups.The restriction includes any approvals that you previously acted on during the delegation period. In some cases, this may mean that only the delegator can see a particular approval record.

Temporary rights of an approval delegate

An approval delegate temporarily gains the rights for the assignment group of the delegating operator while the approval delegation is active. After the approval delegation period ends, the delegate's temporary rights for the assignment group revert to their original status.

Approval delegation never changes a delegate's original application profile or operator record. HP Service Manager only changes a delegate's assignment group rights in memory when the following conditions occur.

- When the system notifies the delegate
- When a delegate views or acts on an approval

For example, a manager wants to delegate approval authority to a technician. When the manager delegates approval authority to the technician, the technician temporarily becomes a member of all of the assignment groups that the manager is an approver of.

What happens when I delegate approval authority?

When you delegate approval authority to a qualified operator, the delegate receives an email notification. Delegates are also notified when a new approval arrives in their approval queues.

As a delegator, you always retain your normal approval authority. Both you and any delegates you authorize have the ability to approve items while an approval delegation is active.

Viewing approvals

As a delegator, when you log on to HP Service Manager, you will see both your own and any delegated approvals in your approval queue.

- To view your active approval delegations, you can use the **Approval Delegation** wizard or the **My active approval delegations** view.
- To view your past delegations, you can use the **Copy Approval Delegation** wizard or the **My past approval delegations** view.

Tracking approval actions

When a delegate acts on an approval, Service Manager tracks the delegate's actions by adding both the delegate's operator name and your operator name to the approval record.

- Service Manager lists the delegate's name in the Operator column of the Completed Approval Actions table.
- Service Manager lists the delegator's name in the Approve For column of the Completed Approval Actions table.

After the approval delegation expires

When an approval delegation expires, a delegate is no longer considered a temporary member of your approval groups. This means that the delegate can no longer see or act on items that belong exclusively to your assignment groups. The restriction includes any approvals that the delegate previously acted on during the delegation period. In some cases, this may mean that only you as delegator can see a particular approval record.

Delegate approvals to another operator

Applies to User Roles:

System Administrator and other users with approval delegation authority

You can only delegate approvals to another operator if a System Administrator enables the **Delegate Approvals** or **Can Delegate Approvals** option for you in your security role.

To delegate approvals to another operator, follow these steps:

1. Click **Approval Delegation**. The **Approval Delegation** wizard opens and displays any active approval delegations assigned to you.
2. To create a new approval delegation, click **Add New Delegation**.
3. Select whether to delegate all your approvals or to select approvals.
4. If you are selecting approvals, make the following choices:
   a. Choose which application's approvals you want to delegate.
   b. Choose how you want delegate approvals assigned to you:
      - Assigned as part of an assignment group
      - Assigned directly to you as an operator

   Note: You can select multiple assignment groups or operators as needed.
5. Select the delegate to whom you want to grant approval authority.

   Note: HP Service Manager only displays operators who are eligible approval delegates. If you do not see a particular operator listed as a potential delegate, it means that the operator does not have one or more of the rights required to be eligible for approval delegation. Consult your System Administrator if you want to assign additional rights to a particular operator.
6. Select the date range during which the approval delegation will be active.

Update an active approval delegation

Applies to User Roles:

System Administrator and other users with approval delegation authority

You can change the delegate, the start date, or the end date of any currently active approval delegation by using the Approval Delegation wizard. If you want to use a delegation as a template for a new delegation, use the Copy Approval Delegation wizard.

Note: To change approvals delegated by a specified assignment group or operator name, you must disable the current delegation and create a new one with the new assignment groups and operator names. HP Service Manager requires a new delegation in order to determine which operators are qualified to be delegates.

To update an active approval delegation, follow these steps:

1. Click **Approval Delegation**. The **Approval Delegation** wizard opens and displays any active approval delegations assigned by you.
2. Select the approval you want to edit from the list of active delegations.
3. Click **Edit Current Delegation**.
4. Select the new start and end dates for the approval delegation.

   Note: Service Manager dates always default to midnight (00: 00: 00) of the selected day. If you want to set a different start time, manually type in the new start time using the twenty-four hour: minute: second format notation. For example `23: 59: 59` represents 11: 59 PM and 59 seconds.

5. Click **Next** to save your changes and close the wizard.

Disable an active approval delegation

Applies to User Roles:

System Administrator and other users with approval delegation authority

You can disable any currently active approval delegation. You cannot disable an inactive past delegation.

To disable an active approval delegation, follow these steps:

1. Click **Approval Delegation**.

   The **Approval Delegation** wizard opens and displays any active approval delegations assigned by you.

2. Select the approval you want to disable from the list of active delegations.

3. Click **Edit Current Delegation**.

4. Clear the **Enabled** check box.

5. Click **Next** to save your changes and close the wizard.

Note: To view your past delegations or delegations assigned to you, use one of the default approval delegation views.

Copy an approval delegation

Applies to User Roles:

System Administrator and other users with approval delegation authority

You can use an existing approval delegation as a template to create a new approval delegation. The wizard copies the values from the existing delegation and allows you to change the delegate and the delegation dates. You cannot change the application module, delegated approval groups, or operator when copying an approval delegation. If you want to change these values, you must create a new approval delegation.

To copy an approval delegation, follow these steps:

1. From the **To Do** view, select **Approval Delegation** from the **Queue** list. HP Service Manager displays the Approval Delegation view.

2. From the **View** list, select either **My active approval delegations** or **My past approval delegations**.

3. Select the approval you want to copy from the list of approval delegations.

4. Click **Copy Approval Delegation**. Service Manager displays the Copy Approval Delegation wizard and automatically fills in the delegate name, the delegated module, approval groups, and operator.

5. Select the new delegate if needed.
6. Select the new delegation start and end dates.
7. Select **Enabled**.
8. Click **Next** to create a new approval delegation.

Views available for approval delegation

HP Service Manager provides default views for delegators and delegates to manage approval delegations. Administrators can also view approval delegation records directly from the Database Manager by viewing the ApprovalDelegation table.

View	Description	Available Actions
My active approval delegations	A list of the currently active approvals that you delegated to other operators. This view does not display future delegations because they are not currently active.	• Start the Approval Delegation wizard • Export • Print
My past approval delegations	A list of the inactive approvals that you delegated to other operators in the past.	• Start the Copy Approval Delegation wizard • Export • Print
Active approvals assigned to me	A list of the currently active approvals delegated to you. This view only displays approvals where you are the active delegate. Use the other views to display your past or pending delegations.	• Export • Print
Past approvals assigned to me	A list of the inactive approvals that other operators have delegated to you in the past.	• Export • Print

Note: If you create or update an approval delegation record you may need to use the Service Manager **Refresh** option in order for the views listed above to display the new delegation record.

Service Catalog management

The Service Catalog requires some management so that users have access to the approriate items and services and that requests are approved efficiently. Service Catalog managers are able to organize items and services into categories and bundles and use Service Catalog capability words and catalog items definitions to manage access.

Best practice recommendation is for all Catalog Management to be done in a base language. Localization can be done item by item (using the Localization wizard), or it can be done in mass via export/import of the svcDisplay table contents. This allows for users in a particular locale to view approriate catalog items in a search results. However, note that this alone should not be used as means for access restriction of catalog content according to region or country. Customers who desire such access restrictions should also follow the normal procedures for defining access control to each catalog item.

Service Catalog hierarchies

A hierarchy describes a collection of IT products or services in a Service Catalog. This collection is broad enough to break down into subordinate categories and subcategories. For example, Desktop Services, Employee Services, and Telecommunication Services are examples of hierarchies with categories and subcategories. The following example shows the hierarchy of Desktop Services that includes Software and Hardware categories.

Desktop Services (hierarchy)

Software (category)

Productivity Tools (subcategory)
Catalog item 1
Catalog item 2
Catalog item 3

Microsoft Windows (subcategory)
Catalog item 1
Catalog item 2
Catalog item 3

Hardware (category)

Service Catalog categories

A category describes similar IT products or services that users can select from an online catalog. Similar categories can become components of a product hierarchy. The Service Manager Service Catalog feature includes out-of-box hierarchies, categories, and subcategories. Hierarchies contain categories; categories contain subcategories. Administrators can create new categories and subcategories to meet their operational needs. For example, the hierarchy of Desktop Services includes Software and Hardware categories. The Software category contains the Productivity Tools and Microsoft Windows subcategories.

Desktop Services (hierarchy)

Software (category)

Productivity Tools (subcategory)
Catalog item 1
Catalog item 2
Catalog item 3

Microsoft Windows (subcategory)
Catalog item 1
Catalog item 2
Catalog item 3

Hardware (category)

Add a Service Catalog category

1. Click **Service Catalog** > **Manage Catalog**.
2. Click **Add New Category**.
   When you launch the New Service Catalog Category wizard, Service Manager prompts you for the required information.
3. Type a **Category Name** and brief **Description**.
4. Click **Next**.
5. For a new category, click **Top Level**.

6. Click **Next**.
7. Specify whether the new category will contain subcategories or items/bundles.
8. Click **Next**.
9. Click **OK** to confirm the new category.

   Service Manager adds the new category.

Add a Service Catalog non-cart category

Applies to User Roles:

Service Catalog Manager

Before you can add non-cart items, you must create a non-cart category for them.

To add a non-cart category:

1. Click **Administration** > **Manage Catalog**.
2. Click **Add New Category**.
   When you launch the New Service Catalog Category wizard, Service Manager prompts you for the required information.
3. Type a **Category Name** and brief **Description**.
4. Click **Next**.
5. For a new category, click **Top Level**.
6. Click **Next**.
7. Specify that the new category will contain items/bundles.
8. Click **Next**.
9. Click **OK** to confirm the new category.

   Service Manager adds the new category, and the new category record is displayed.
10. Select the **Non-cart category** checkbox.

11. On the **Access** tab, select one or more capability words to make this item available to certain users; or leave this field blank to make it available to all users.
12. Click **Save**.

    Now you can add non-cart items to this category. The items will be displayed on the **Items/Bundles in this Category** tab of this category record.

Edit a Service Catalog category

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Select an existing category from the **In Category** drop-down list.
3. Click **Search**.
4. Select a category from the record list.
5. Add or change information on the form. If necessary, press Ctrl+H to view help for each field.
6. Click **Save**.
7. Click **OK**.

Delete a Service Catalog category

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Select an existing category from the **In Category** drop-down list.
3. Click **Search**.
4. Select a category from the record list.
5. Click **Delete**.
6. Click **OK**.

Service Catalog subcategories

Subcategories are a way to refine a category into smaller groups. For example, the hierarchy of Desktop Services includes Software and Hardware categories. The Software category contains the Productivity

Tools and Microsoft Windows subcategories. You could add more subcategories as the need arises.

Desktop Services (hierarchy)

Software (category)

Productivity Tools (subcategory)
Catalog item 1
Catalog item 2
Catalog item 3

Microsoft Windows (subcategory)
Catalog item 1
Catalog item 2
Catalog item 3

Hardware (category)

Subcategories are not localized and display in English.

Add a Service Catalog subcategory

1. Click **Service Catalog** > **Manage Catalog**.
2. Click **Add New Category**.
   When you launch the New Service Catalog Category wizard, Service Manager prompts you for the required information .
3. Type a **Category Name** and brief **Description**.
4. Click **Next**.
5. For a new subcategory, click **Subcategory of** and choose a parent category from the drop-down list.
6. Click **Next**.
7. Specify whether the new category will contain subcategories or items/bundles.
8. Click **Next**.

9. Click **OK** to confirm the new subcategory.

   Service Manager adds the new subcategory.

Service Catalog items and bundles

Items are standard catalog offerings with either a product or a service task. Catalog items can be Information-only. Information-only items can be viewed in the catalog but cannot be ordered.

Bundles are standard catalog offerings with both product and service components that a user can select with a single service request. Each bundle contains one or more products and related service tasks. You cannot put Information-only items in a bundle.

You can create new items and bundles or edit the existing ones.

Add a Service Catalog item

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Click **Add New Service Catalog Item**.
3. Select **Information-only item** , if desired. Some items in the Service Catalog are for information only, such as instructions on how to order items from an outside service. Information-only items only have an item picture, description, and attachments; they do not include purchasing options.
4. Mark **Restrict Request to Single Item** to limit the quantity of this item that a user can order to one, if desired. If you select this option, the quantity field on the order form will be inactive.
5. Specify the following information to create a new catalog item.
   a. Type the **Name** of the item. This must be unique for each item, as it is the unique identifier of the item in the catalog.

   b. Type the **Display Name**.

      Note: The display name you assign to the item does not have to be unique within the catalog.

   c. Type a detailed **Description** of the item.

      Note: You can format the text in this field. Refer to the HTML Editor help for more information.

d. Select **Active** to make this item available in the Service Catalog.

e. Enter the following cost information:

- **Cost**
- **Recurring Cost**
- **Currency**
- **Per (hour, day, week, etc.)**

Note: If you selected Information-only, you will not be prompted to specify the Cost, Recurring Cost, Currency, or Per information.

6. Click **Next**.
7. Select a parent **Category** and a **Connector** from the drop-down lists.
8. Click **Next**.
9. Depending on the connector you choose, you need to select either the Request Category, Request Model, Change Category, or Change Model.
10. Click **Finish**, and then click **OK** to confirm the new item.

Add a Service Catalog non-cart item

Applies to User Roles:

Service Catalog Manager

Non-cart items can be added to define a separate catalog of support services. For example, you can add items such as:

- Password Reset Service
- Printer Support
- Desktop Support

Each non-cart item is requested with a single-click; therefore, it does not require the user to place the service request in a cart and submit the cart. Instead, these are one-click items, meaning the request creates an interaction record and does not require any fulfillment.

Note: Before you can add a non-cart item, you must create a non-cart category for it.

To add a non-cart item to the Service Catalog:

1. Click **Administration** > **Manage Catalog** .

   The Search Catalog Item Definitions form opens.

2. Select **Active** to make this new non-cart item available in the Service Catalog.

3. Select **Non-cart item** to distinguish this catalog item as not requiring the fulfillment process.

4. Specify the following information to create the new non-cart catalog item.
   a. Type the **Name** of the new catalog item. This must be unique, as it is the unique identifier of the item in the catalog.

   b. Type the **Display Name**.

      Note: The display name you assign to the item does not have to be unique within the catalog.

   c. In the Type field, select **Item**.

   d. In the **Available to** field, select one or more capability words to make this item available to certain users; or leave this field blank to make it available to all users.

   e. Select a **Language**.

   f. Leave the **In category** field blank.

      Important: You must leave this field blank at this point, as non-cart categories are not available from the list. If you choose a category at this point, the classification of non-cart item is automatically changed and the item becomes a cart item.

   g. In the **Interface Type** field, select **Open a Service Desk Interaction**.This is how the user's request is going to be fulfilled.

   h. In the **Description** field, type the description of how this request should be fulfilled.

5. Click **Add New Service Catalog Item**.

   You will continue to add this new item in the New Service Catalog Item Wizard form.

6. Type the **Detailed Description**.

Note: You can format the text in the Detailed Description field. Refer to the HTML Editor help for more information.

7. Click **Next**.

   The New Service Catalog Category wizard opens. The Connector is set to **Open a Service Desk Interaction**.

8. In the **In Category** field, select the non-cart category you have created for this item.

9. Click **Next**.

   The Service Catalog Interaction wizard opens.

10. In the **Initial Impact Assessment** field, select an impact level for interaction records requesting for this item.

11. In the **Assignment** field, select an assignment group.

12. Click **Next**.

    Service Manager adds the catalog item.

13. Click **OK** to confirm the new item.

    The new catalog item record is displayed.

Add a Service Catalog bundle

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.

2. Click **Add New Bundle**.

3. Type a Bundle Name, Display Name, and a Description.

4. Click **Restrict Request to Single Bundle** to limit the quantity of this bundle that a user can order to one, if desired. If you select this option, the quantity field on the order form will display "1" and will not be editable.

5. Add a Detailed Description.

Note: You can format the text in the Detailed Description field. Refer to the HTML Editor help for more information.

6. Click **Next**.
7. Choose a parent category for the bundle to belong to from the drop-down list.
8. Click **Next**.
9. Choose whether it is a New Item or an Existing Item.
   - If you select New Item, the New Service Catalog Item Wizard opens. You must complete the steps in the New Service Catalog Item Wizard before you can finish adding a new bundle.
   - If you select Existing Item, continue to follow the steps in this topic.
10. Enter the information for the existing item or bundle that you want to add to the new bundle.

    Note: You cannot add items tagged Information-only to a bundle.

    - Choose an item or a bundle to add from the drop-down list. The drop-down list will not include information-only items.
    - Select the quantity of the item or bundle to add.
    - Select whether the item or bundle is Mandatory, Default, or Optional.
11. Click **Next**.
12. Select the number of items that should be included in the bundle.
13. Click **Next**.
14. Continue to add additional items and bundles to this new bundle until you are satisfied with its contents.
15. When the bundle is complete, select **No** if you do not want to add additional items to this bundle now.
16. Click **Next**.
17. Optionally, perform the following actions to add a Create New Request connector for the bundle:

a. On the **Connector Details** tab, click **Change Connector** to open the Service Catalog Connector page.

> **Note:** You can update the connector by clicking the **Add/Edit Information** button or remove the connector by clicking the **Clear Connector** button on this tab after you add a new connector successfully.

b. Select **Create New Request** from the **Connector** drop-down list.

c. Click **Next**.

d. Select a Request Category, Request SubCategory, and Request Model for the bundle.

e. Click **Next**.

f. Configure the **Urgency**, **Impact**, and **Assignment** fields.

g. Click **Finish**.

- If a bundle has a connector specified, an interaction is created when it is ordered. Once the interaction is approved, a request (for example, RF10002) is created and related to the interaction. The request contains all the items in the bundle.
- If a bundle has no connector specified, an interaction is created when it is ordered. Once the interaction is approved, a related record is created for each item in the bundle based on the item's connector setting on its Connector Details tab.

18. Click **OK** to confirm the new bundle.

Add user selections in a Service Catalog item or bundle

Applies to User Roles:

Service Catalog Manager

You can add user selections for a Service Catalog item or bundle so that users can provide additional information in their requests. For example, after you add a new Service Catalog item or bundle that has a Currency value, you can add user selection options to it for cost adjustment purposes.

To add user selections, follow these steps:

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select search criteria for the item or bundle you want to modify and click **Search**.
   Click the item or bundle in the search list to select it, if necessary. The catalog item or bundle definition record (for example, **Access 2000**) opens.
3. On the **User Selections** tab, click **Definition**, and then click **Add User Selection**.

   The Dynamic Field Description form opens.
4. Complete the following fields:
   - If desired, in the Form Instructions text box, type instructional text of how to use the user selections you will create. The text will be displayed on the user selection subform being created.
   - In the **Name** field, type a field name for the user selection. For example, **City**.

     Note: The field name must be alphanumeric, contain no spaces and start with a character.
   - In the **Label** field, type a display name for the user selection. For example, **City**.
   - In the **Display Type** field, select a display type. For example, select **Pick List**.

     Note:

     - If you select **Text** for **Display Type** and then select **Date/Time** for **Type** on the next wizard screen, you can only enter a static date/time value, for example: `07/31/2008 00:00:00`. The value you entered will be parsed according to the Date Format defined in your operator record.
     - If you select **Text** for **Display Type** and then select **String** for **Type** on the next wizard screen, do not select the field in array type when you define the field validation rule as the field in array type is not supported in user options.

     Caution: Dynamic date/time values (for example, `tod()+'10 00:00:00'`) are not supported.
5. Click **Next**.

6. Complete the following fields:
   - **Value**: the actual value of the field selection. For example: **California**, and **New York**.
   - **Label**: the display value of the field selection. For example: **CA**, and **NY**.
   - **Cost Adjustment**: the cost adjustment value (numeric). For example: **10**, and **20**.

     Note: Do not include the currency symbol (for example, $) in the **Cost Adjustment** value; otherwise the cost calculation of the bundle or item will be incorrect.

7. Select **Drop-Down List** or **Radio Buttons** to display the user selection options.
8. Click **Next**.

   The Dynamic Field Validations form opens.

9. In the **Mandatory Condition** and **Visible Condition** fields, enter a RAD expression that specifies under which condition the user selection is mandatory or visible.

   Tip: Be sure to use the correct syntax for RAD expressions. The following is an example: `affected.item in $L.file>"222323"`. To learn the syntax of RAD expressions, see the *System language* section in the *Service Manager Programming Guide*.

   For example, enter the following conditions:

   - Mandatory Condition: `false` (which indicates the user selection is not mandatory when users order the item or bundle)
   - Visible Condition: `true` (which indicates the user selection is always visible)

10. Click **Next**. The user selection is added.
11. Click **Save** to save the item or bundle.
12. If desired, repeat the steps above to add more user selections.

    All the user selections you added are now displayed on the **User Selections** > **Definition** tab of the bundle or item.

13. You can change how your list will be displayed to users, if desired.
    - Select one or more items in the list and click **Remove User Selection** to remove them from the list.
    - Select one or more items in the list and click **Move Up** or **Move Down** to move them up or down on the list.
14. Click the **Preview** tab to see a preview of the updated user selection subform.

    Note: This subform will appear on the order form when a user orders this bundle or item from the Service Catalog. If the user selects one or more options on the subform, Service Manager automatically adjusts the total cost of the order.
15. Click **Save** to update the catalog record.

Add multiple selections for Service Catalog item user options

Applies to User Roles:

Service Catalog Manager

Note: This function is only available for the web client and Service Request Catalog (SRC).

You can add multiple selections for Service Catalog item user options so that users can select multiple values in an Item Option field when ordering a catalog item.

In addition, you can save the existing User Selections in a catalog item as a template, and then apply the template to another or multiple catalog items.

Add multiple user selections

To add multiple user selections for a Service Catalog item, follow these steps:

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select search criteria for the item you want to modify, and then click **Search**.

   Click the item in the search list to select it, if necessary. The catalog item definition record opens.

Note: You must select an item of the "item" type. You cannot select a bundle or category.

3. On the Definition tab in the User Selections page, click **Add User Selection** to open the Dynamic Filed Description form.
4. Populate the fields in the form as follows:
   - In the **Name** field, type a field name for the user selection. For example, City.

     Note: The field name must be alphanumeric, contain no spaces, and start with a character.

   - In the **Label** field, type a display name for the user selection. For example, City.
   - In the **Display Type** drop-down list, select **Text**.
5. Click **Next**.
6. Populate the fields in the form as follows:
   - In the **Type** drop-down list, select **String**.
   - Specify the **Mandatory Condition** and **Visible Condition** fields based on your business need.
7. Click **Next**.
8. In the **Validation Rule** option box, select **Record in Table**.
9. Complete the following fields:
   - In the **Table Name** field, type or select the name of a lookup table.
   - In the **Field Name** field, type or select a field of the lookup table as a lookup field.

     Note: Do not select the field in array type as it is not supported in user options.

   - In the **Multiple Selections** field, type an integer equal to or greater than 2 to allow users to select multiple values that match the selected table and fields.
   - Complete the other fields as needed.
10. Click **Next**.

Now you have successfully created multiple user selections for one service catalog item.

To edit the User Selection, double-click it. The User Selection modification wizard opens. You can click **Next** to modify the User Selection, and click **Finish** to save it.

Define a User Selection template

To define a User Selection template, follow these steps:

1. On the Definition tab in the User Selections page, select the desired user selection, and then click **Save As Template** to open the User Selection Templates Information wizard.
2. Populate the fields in the form as follows:
   - In the **Template Name** field, type a name for your template.
   - In the **Template Description** field, type description of your template.
3. Click **Finish**.

Note:

- To modify the saved template, navigate to **Service Catalog** > **User Selection Templates**, click **Search**, and then select the template to modify it.
- To add User Selections in the selected template, click **Add User Selection**.
- To remove User Selections in the selected template, click **Remove User Selection**.

Apply a User Selection template

You can apply the created template to one single catalog item, or apply it to multiple catalog items.

To apply the template to a single catalog item, follow these steps:

1. Navigate to **Service Catalog** >**Administration** > **Manage Catalog**, and then open the catalog item through a search.
2. On the Definition tab in the User Selections page, click **Apply template**. A list of templates is displayed.
3. Select the template from the list to apply. The User Selections from the template are automatically added to the catalog item.

To apply the template to multiple catalog items, follow these steps:

1. Navigate to **Service Catalog** >**Administration** > **Manage Catalog**.
2. Perform a search by using appropriate search criteria to display a list of desired catalog items.
3. Select all items or some of the items, and then click **Mass Apply User Selection Template** from the list toolbar.
4. Select the template from the list. The User Selections from the template are automatically added to the selected catalog items.

Accessing user selections

After a fulfillment record is generated, the options selected by the user are saved to the "userOption" table together with the fulfillment record ID and the interaction ID. Compared to saving user options in xml format to fulfillment records, you can easily access the user selection information from this table for purposes such as reporting.

Displaying currency in the Service Catalog

Catalog items prices are stored in the currency in which the item was added to the catalog. This allows the definition of catalogs in a baseline currency. A catalog administrator views the catalog item in the currency in which it was added, which is not necessarily the item's display currency. When editing an item, the catalog manager views the catalog items in the currency in which the items were added.

There is a display currency field defined in the operator record for each operator. The value is selected from a drop-down list of the active currencies in the system. The value of display currency defaults to the root currency of the system as defined in the company record. In addition, the currency information record for a currency defines how to display the currency and any associated currency symbol. There is a currency information record in the system for each of the available currency codes. You can use this record to define how you want a currency to display.

The currency of items in a bundle defaults to the main bundle currency. This means that a bundle cannot have items with different base currencies. For example, a line item of $20 US dollars within a bundle with a currency of Franks will be viewed by the bundle as Franks, and the $20 item then displays as 20 Franks. The system does not convert currencies within bundles.

Warning: You should not configure a bundle with any items (bundles or line items) of a different currency as they will not be converted to the proper currency value. The sub bundles and line items will simply have the face value taken and have the bundle's currency applied to it.

When a users orders from the catalog, the item price displays in the display currency set by the user's operator record. A currency conversion table is used for this display. Conversions are rounded to two decimal places. The conversion rates do not display. Approvers see the cart item price displayed in the display currency setting for the approver's operator record.

The user selection items always displays in the original currency that the requester (operator) used to order the item. For example, if an approver is viewing the request, but the approver uses a different currency than the requester, the item cost displays in the currency of the requester.

New or modified catalog items use the conversion rate available in the conversion table at the time item is added to the cart. The item is not approved at this point in the process. If there is no rate for that date in the conversion table, then the system uses a fuzzy logic to select a rate before the date. Catalog managers are responsible for the maintenance of the conversion table and should update their conversion tables only as often as they need for accuracy. The cart item prices are stored in the root currency of HP Service Manager as converted from the catalog currency using the rate specified in the conversion table.

Format a currency for display

Applies to User Roles:

System Administrator

You must have the **SysAdmin** capability word to use this procedure.

To format a currency for display:

1. Click **System Administration** > **Base System Configuration** > **Currencies**.
2. Click **Search**.
3. Select the currency to format.
4. Specify the symbol to use when the currency is displayed.
5. Use the drop-down list to specify whether the currency symbol displays before or after the numeric display.
6. Specify the symbol for decimal placement (. or ,).
7. Specify the number of digits after the decimal.

8. Specify the symbol used to separate groups of numbers in the currency display (. or ,).
9. Click **Save**.

Defining a catalog item that results in the creation of a subscription

The Service Catalog manager can define whether a request for a Catalog Item results in the creation of a subscription linked to the goods and services delivered. When the **Create Subscription** check box is selected on the Catalog Item Definition record, a subscription record is created after the request is approved.

Note: The **Create Subscription** check box is not available for Support Catalog Items.

The Service Catalog manager can flag a Catalog Item as available for individual and/or department subscription. When browsing the catalog to request a subscription, the Department Requester can select either individual or department based on what is selected in the Catalog Item definition record.

A collection of items within a bundle can also be made available for subscription. It is important to note that a bundle can only contain items that are defined as available for Individual subscription. If a bundle includes an item that is defined exclusively as Department, the user receives an error message when they attempt to select the bundle from the catalog listing.

A user is not be able to request items that they are already subscribed to or that are in a pending status.

Define which catalog items are available for subscription

1. Verify that the subscription mode is set to *Service Catalog* in the Configuration Management environment record.
2. Click **Service Catalog** > **Administration** > **Manage Catalog**.
3. Type `Item` in the **Type** field and click **Search**.
4. Select a Catalog Item from the record list and click on the **Connector Details** tab.
5. Select the **Create Subscription** check box.

When the check box is selected, two additional fields open.

Note: The **Create Subscription** check box is not available for Support Catalog Items.

6. In the **Subscription Item** field, fill or find the name of the item that will post to the Subscription record and Change record that is created during the fulfillment process.
7. In the **Subscription Availability** field, select either **Individual** or **Department**.
   This indicates whether an individual or department subscription can be made against the Catalog Item.
   Note: If you select Department, the user will not be able to specify a quantity.
8. Click **Save**.
9. Click **OK**.
   Users can now subscribe to this catalog item.

Adding delivery objectives for a catalog item or bundle

Each catalog item or bundle definition record contains a Delivery Targets tab where a catalog manager can add or remove multiple objectives. The following information is available on the Delivery Targets tab:

Column name	Description
Name	A character field that contains the title of a delivery objective.
Deliver Within	A numerical field that contains the length of time that it is expected for the delivery of the catalog item or bundle.
Calendar	A character field that contains a custom work schedule.
Limit Access to Users with these SLAs	An array field that allows the service provider to offer delivery objectives only to requesters with a listed SLA. For example, consider a delivery objective of 3 Business Days that provides one service level with associated limitations: **Name** **Limit Access to ...** 3 Business Days Sales Gold, Marketing Gold, Executive Gold As defined above, the three business day delivery objective is only available as a choice to requesters with other listed Gold SLAs. Everyone else requesting the service is given only one (and thus defaulted) choice: Silver.

Add a delivery objective to a catalog item or bundle

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select any search criteria for the item or bundle you want to modify and click **Search**.

   The catalog item or bundle definition record opens.
3. On the Delivery Targets tab, click **Add**.

   This launches a wizard that prompts you to select an objective from a list.
4. Click **Save**.
5. Click **OK**.

   Service Manager updates the item or bundle definition record.

Remove a delivery objective from a catalog item or bundle

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select any search criteria for the item or bundle you want to modify and click **Search**.
   The catalog item or bundle definition record opens.
3. On the Delivery Targets tab, select the objective that you want to delete and click **Remove**.
   The delivery objective is deleted from the list.
4. Click **Save**.
5. Click **OK**.
   The item or bundle definition record is now updated.

Adding Agreements to a catalog item or bundle

Each catalog item or bundle definition record contains a Agreements tab where a catalog manager can add or remove multiple Agreements. Note that access to the SLA record is based on the user's SLA privileges. The following information is available on the Agreements tab:

Column name	Description
Name	A character field that contains the title for the Service SLA.
Limit Access to Users with these Customer SLAs	An array field that allows the service provider to offer a Service SLA only to requesters with a listed Customer SLA. For example, consider an Email service that provides two service levels with associated limitations: **Service SLA** **Limit Access to ...** Email Gold Sales Gold, Marketing Gold, Executive Gold Email Silver none As defined above, the Email Gold SLA is only available as a choice to requesters with other listed Gold SLAs. Everyone else requesting the service is given only one (and thus defaulted) choice: Email Silver.

Add a Service SLA to a catalog item or bundle

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select any search criteria for the item or bundle you want to modify and click **Search**.

   The catalog item or bundle definition record opens.
3. On the Agreements tab, click **Add**.

   This launches a wizard that prompts you to select an SLA. You can click the **Find** button to view the details of an SLA before selecting it.
4. After selecting the SLA, the wizard prompts you to create the Limit Access to Users with these Customer SLAs list.
5. Click the **Fill** button and select the Customer SLAs that you want to associate with the Service SLA.
6. Click **Finish**.
7. Click **Save**.
8. Click **OK**.

   Service Manager updates the item or bundle definition record.

Remove a Service SLA from a catalog item or bundle

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select any search criteria for the item or bundle you want to modify and click **Search**.

   The catalog item or bundle definition record opens.
3. On the Agreements tab, select the SLA that you want to delete and then click **Remove**.

   The SLA is deleted from the Service SLA list.
4. Click **Save**.
5. Click **OK**.

   Service Manager updates the item or bundle definition record.

Edit a Service SLA for a catalog item or bundle

1. Click **Service Catalog** > **Administration** > **Manage Catalog**.
2. Type or select any search criteria for the item or bundle you want to modify and click **Search**.
   The catalog item or bundle definition record opens.
3. On the Agreements tab, double-click on the Name of the SLA that you want to modify.
   This launches a wizard that allows you to change the Service SLA and access list information.
4. Edit the Service SLA and access list information as necessary.
5. Click **Save**.
6. Click **OK**.
   The item or bundle definition record is now updated.

Localizing Service Catalog items, bundles, and categories

A Service Catalog manager can localize a catalog item, category, and bundle. The Service Catalog localization wizard enables a catalog manager to view and localize the name, descriptions (short and long), and user options in any of the languages HP Service Manager supports for catalog items and bundles. The localization wizard also enables a Service Catalog manager to localize the name and descriptions (short and long) for a Service Catalog category.

To localize a Service Catalog item, bundle, or category the Service Catalog manager should first log on to the system in English and then use the localization wizard to localize items, bundles, and categories.

If you have a large number of Service Catalog records to localize or you want you use an external service to localize your data, use the import/export functions to create text files and then import the translated files into Service Manager. You can also export data to Excel using the functions available in Service Manager.

The parameter, language:utf8, in the HP Service Manager initialization file (**sm.ini)** is required to Import and Export catalog items. The best practice is to localize all data to the desired language before a user starts using the Service Catalog.

Viewing localized catalog items

In the Service Catalog, catalog managers are able to search for and view a list of catalog items in any of the languages supported by the system. From this list of records, managers can export the data for localization by using the Export/Unload functionality. Managers can also use this view to update any of the details of the record. This view is also useful for identifying those item records that need to be localized and verifying that the localized records will display correctly to end users.

View localized Service Catalog items

1. Click **Service Catalog** > **Localized Catalog Items**.
2. Select the language you want to use to search.
3. If you are searching for particular item, provide the additional search parameters to limit your search.

4. Click **Search**.
5. Click the catalog record to view the record details for the item.
6. You can use the detail record to update any of the details on the record currently being displayed.

Localize a Service Catalog item

1. Click **Service Catalog** > **Manage Catalog**.
2. Click **Search** or use the Search Catalog Items Definition form to search for a specific item record.
3. Select an item record.
4. Click **Localize this record** in the More Actions menu in the detail section.
5. Select the language to use for localization.
6. Click **Next**.
7. Specify the localization data for the catalog item.

Field	Description
Display Name	The is the localized name of the item.
Short Description	This is the localized description from the catalog definition that displays to the user.
Long Description	This is the localized detailed description from the catalog definition that displays to the user.
Form Instructions	These are any form instructions defined by the catalog item definition.
Options	This field has XML that represents the user options defined for the item in the catalog definition. For example, here is XML for an item with a single check box option: `<form><check box id="XYZ" label="This is a label"/></form>.` The text enclosed in quotes (" ") should be localized.

8. Click **Finish**.
9. Continue to localize by selecting another item record or exit by clicking **OK** and then **Back**.

Localize a Service Catalog bundle

1. Click **Service Catalog** > **Manage Catalog**.
2. Click **Search** or use the Search Catalog Items Definition form to search for a specific bundle record.
3. Select a bundle record.
4. Click Localize this record in the More Actions menu for the detail section.
5. Select the language to use for localization.
6. Click **Next**.
7. Specify the localization data for the bundle.

Field	Description
Display Name	The is the localized name of the bundle.
Short Description	This is the localized description from the catalog definition that displays to the user.
Long Description	This is the localized detailed description from the catalog definition that displays to the user.
Form Instructions	These are any form instructions defined by the catalog bundle definition.
Options	This field has XML that represents the user options defined for the item in the catalog definition. For example, here is XML for an item with a single check box option: `<form><check box id="XYZ" label="This is a label"/></form>.` The text enclosed in quotes (" ") should be localized.

8. Click **Finish**.
9. Continue to localize by selecting another bundle record or exit by clicking **OK** and then **Back**.

Localize a Service Catalog category

1. Click **Service Catalog** > **Manage Catalog**.
2. Click **Search** or use the Search Catalog Items Definition form to search for a specific category record.
3. Select a category record.
4. Click **Localize this record** in the More Actions menu in the detail section.
5. Select the language to use for localization.
6. Click **Next**.
7. Specify the localization data for the bundle.

Field	Description
Display Name	The is the localized name of the category.
Short Description	This is the localized description from the catalog definition that displays to the user.
Long Description	This is the localized detailed description from the catalog definition that displays to the user.

8. Click **Finish**.
9. Continue to localize by selecting another category record or exit by clicking **OK** and then **Back**.

Using export and import for localization

When you have large number of items to localize it the Service Catalog you can use the export and import capabilities of HP Service Manager to create a text file or Excel file. You can then edit the file or provide it to a translation service for localizing. For additional information about exporting and importing files see the related topics.

When using export and import consider the following:

- When you generate the list of records to export, be sure to include key fields (the name field and syslanguage, for example) and all of those fields you intend to localize (description, display name,

detailed description).

- The language parameter is the language code defined by the language identifier in the language table. You need to have SysAdmin access to view the language table in the database.
- Select characters as delimiters that are not found in the data you are exporting. For example use ^^ as delimiters instead of tabs, commas, or spaces.
- Use a UTF-8 compliant text editor such as Textpad for a text file.
- When you import the translated file, use the same delimiter you used when exporting. and .
- Define the same fields and in the correct order in the import wizard to match the exported fields and field order.

Service Catalog connectors

Service Catalog connectors are the fulfillment mechanisms for creating new records in the database. The following table lists the out-of-box connectors for Service Catalog.

Connector	Description
Open a Change	Adds a Change record.
Open a Record Using Web Service	Adds a record in an external system using web services.
Open a Standard Request in Asset Manager	Creates a record in Asset Manager using a web service.
Open a Subscription Change	Adds a Change record when a user requests a subscription to a published service.
Open an Incident	Adds an Incident record.
Open New Request	Adds a Request fulfillment record.

Connector Detail tab

The Connector Detail tab contains information about each of the Service Catalog connectors.

Field	Description
Name	Contains the name of the service request.

Field	Description
Record Type	Contains the type of record to be created for this service request.
Link Record	Contains a link record that describes the fields that relate information from one type of record to the other.
Process	Contains a process for this service request. This process routes the service to the appropriate Service Manager application.
Wizard	Contains the name of the wizard that runs when you add or edit the connector information of a Service Catalog item that uses this connector.
Description	Contains a description of the process for this service request.
XML Fields	Contains a field name that is used in the process to create the appropriate record in the appropriate Service Manager table.
Field Name	Contains the actual database field name that maps to the XML field in the record.
Validity Check	Contains an expression to validate the value of the field
Target Files	Contains the name of the file where this target field matches with.
Target Fields	Contains the name of the field in the target file where the XML field matches with.
XML Caption	Contains a field caption for the field that will be used in the process to create the appropriate record in the appropriate Service Manager table.

Expressions tab

The Expressions tab contains information about the JavaScript expressions contained within each of the Service Catalog connectors. It contains an initialization expression that needs to be processed before adding the record.

This is an example of an initialization expression for the Create New Request connector.

```
if (filename($L.file)="request") then (category in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "category"))
if (filename($L.file)="request") then (subcategory in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "subcategory"))
if (filename($L.file)="request") then (bill.to.dept in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "department"))
if (filename($L.file)="request") then (company in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "company"))
if (filename($L.file)="request") then (model in $L.file=jscall
```

```
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "requestModel"))
if (filename($L.file)="request") then (modelname in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item,
"requestModelName"))
if (filename($L.file)="request") then (severity in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "severity"))
if (filename($L.file)="request") then (impact in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "impact"))

if (filename($L.file)="request") then (assigned.group in $L.file=jscall
("svcCatInterface.getXMLFieldValue", interface.info in $L.item, "assigngroup"))

if (bundle in $L.cartItem=true and bundle.options in $L.cartItem~=NULL and
bundle.options in $L.cartItem~="<bundle></bundle>") then (svc.options in
$L.file=bundle.options in $L.cartItem)
if ((bundle in $L.cartItem=false or bundle in $L.cartItem=NULL) and options in
$L.cartItem~=NULL and options in $L.cartItem~="</form>") then (svc.options in
$L.file=options in $L.cartItem)
```

Modify an existing Service Catalog connector

1. Click **Service Catalog** > **Tailoring** > **Catalog Connectors**.
2. To bring up a record list of all the out-of-box connectors click **Search**.
3. Select a connector. For example, click **Open a Change**.
4. Add **XML Fields** for any customized fields you have in your forms.
5. Change the **Link Record** to move any additional fields from the interactions record to the change record.
6. Change **Process** to include anything that needs to happen to create the record.
7. Change the wizard messages to include any new fields.
8. Add, delete, or modify any of the RAD expressions on the Expression tab.
9. Click **Save**.
   The connector is modified.

Import an existing Request Management catalog into the Service Catalog

Applies to User Roles:

System Administrator

1. Log on to Service Manager as System Administrator.
2. Click **Service Catalog** > **Administration** > **Request Management Conversion**. The Request Management to Service Catalog Utility wizard opens.
3. Click **Next**. The existing Request Management catalog structure is converted to the new Service Catalog structure.
4. Go to **Service Catalog** > **Administration** > **Manage Catalog** > **Search**.
5. Confirm that the items converted in the Service Catalog are correct.

Importing user options for an item through Web Services

After importing Service Catalog items using web services, any options for that item can also be made available when it is ordered. At the time of import and when the **optionList** and **optionOptions** fields are populated in the *svcCatalog* record, a JavaScript function is called via a *svcCatalog extaccess* expression that parses these two fields, generates an XML string, and populates the **Options** field for the catalog item.

These are the two new character fields in the *svcCatalog extaccess* record that are required to import user options.

- **optionList** - provides a placeholder for options.
- **optionOptions** - provides a placeholder for sub-options related to the options of *select* type.

The fields for **optionList** need to be comma delimited character fields that are listed in the following order. If any field is blank, then you must use a comma (“, ”) as a placeholder for that field.

```
option type, option id, option label, option attribute, option attribute value
```

The fields for **optionOptions** need to be comma delimited character fields in the following order. The option ID must match the option ID used in the **optionList** field above.

```
option id, options id, options label
```

Data examples

The following is an example of cart item options that need to be imported for a record.

```
"text,comment,Comment"

"text,delivery,Delivery Instructions,multiline,true"

"checkbox,printer,Printer Included"

"select,color,Color,style,combo"

"select,size,Size,style,radio"
```

The data for **optionList** uses the following format:

```
optionList="text,comment,Comment,,,text,delivery,Delivery
Instructions,multiline,true,checkbox,printer,Printer
Included,,,select,color,Color,style,combo,select,size,Size,style,radio,"
```

The data for **optionOptions** or sub-options of the *select* type have the following format:

```
optionOptions="color,green,Green,color,red,Red,color,blue,Blue,color,yellow,Yellow,
size,small,Small,size,medium,Medium [+$100.00],size,large,Large [+$200.00],"
```

Results in the Options field

The following is the XML string that populates the **Options** field in the *svcCatalog* record.

```
<form>
 <text id="comment" label="Comment"/>
 <text id="delivery" label="Delivery Instructions" multiline="true"/>
 <checkbox id="printer" label="Printer Included"/>
 <select id="color" label="Color" style="combo">
  <option label="Green">green</option>
  <option label="Red">red</option>
  <option label="Blue">blue</option>
  <option label="Yellow">yellow</option>
 </select>
```

```
 <select id="size" label="Size" style="radio">
  <option label="Small">small</option>
  <option label="Medium [+$100.00]">medium</option>
  <option label="Large [+$200.00]">large</option>
 </select>
</form>
```

Importing connector details for an item through Web Services

After importing Service Catalog items using web services, any connector information for that item can also be imported. At the time of import and when the **connectorInfo** and **connectorSubInfo** fields are populated in the *svcCatalog* record, a JavaScript function is called via *svcCatalog extaccess* expression that parses these two fields, generates an XML string and populates the **interface.info** field for the catalog item.

The following two fields in the *svcCatalog* record are required to import connector information for an item. The first one is a character field and the second one is an array of characters.

- **connectorInfo** - provides a placeholder for basic connector information.
- **connectorSubInfo** - provides a placeholder for information on repeating fields related to one or more basic connector fields.

The fields for **connectorInfo** need to be comma delimited character fields. If any field is blank, then you must use a comma (", ") as a placeholder for that field. The number of fields and the order of them can be different depending on the type of connector being imported. The following is a list of possible fields that can be imported via **connectorInfo**:

```
Interface type, category, subcategory, initial impact, severity, reason,
assignment, assigned department, coordinator, type, release type, part number,
parts, assets
```

The fields for **connectorSubInfo** are passed as an array of characters. Each element of the array needs to be comma delimited character fields. The first field in each element must match a corresponding field in **connectorInfo** field above. The following is a list of possible fields for **connectorSubInfo**:

```
parts,partNo,vendorNo,quantity,option,group

assets,logical.name
```

The following is a list of all the out-of-box connectors and the fields they use that can be imported for a record. To see data examples for each out-of-box connector, see the related topics.

It is important to note that only the **Open a Change of RFC category** and **Create New Request** connectors contain sub-information and use the **connectorSubInfo** field.

- "Open a Subscription Change,Subscription,initial.impact,severity"
- "Open a Change,Application,initial.impact,severity"
- "Open a Change,CI Group,initial.impact,severity"
- "Open a Change,HW server,initial.impact,severity"
- "Open a Change,Hardware,initial.impact,severity"
- "Open a Change,Security,initial.impact,severity"
- "Open a Change,Subscription,initial.impact,severity"
- "Open a Change,RFC - Advanced,subcategory,initial.impact,severity,assign.dept"
- "Open a Change,Release Management,coordinator,reason,initial.impact,severity,release.type"
- "Open a Service Desk Interaction,impact,assignment"
- "Open a Record Using Web Services,partNumber"
- "Open a Standard Request in Asset Manager,partNumber"
- "Open a Change,RFC,coordinator,reason,initial.impact,severity,assets"
- "Open New Request,category,parts,parent_group,dependent_group,dependency_group"

Example: Importing details for Open a Change of Application category

The following is an example of the format required to import the connector details for Open a Change of Application category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,Application,4 - User,3 - Average,"
```

Result

```
<info>
  <category>Application</category>
  <initial.impact>4 - User</initial.impact>
  <severity>3 - Average</severity>
</info>
```

Example: Importing details for Open a Change of CI Group category

The following is an example of the format required to import the connector details for Open a Change of CI Group category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,CI Group,4 - User,3 - Average,"
```

Result

```
<info>
  <category>CI Group</category>
  <initial.impact>4 - User</initial.impact>
  <severity>3 - Average</severity>
</info>
```

Example: Importing details for Open a Change of Hardware category

The following is an example of the format required to import the connector details for Open a Change of Hardware category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,Hardware,4 - User,3 - Average,"
```

Result

```
<info>
  <category>Hardware</category>
  <initial.impact>4 - User</initial.impact>
  <severity>3 - Average</severity>
```

```
</info>
```

Example: Importing details for Open a Change of HW Server category

The following is an example of the format required to import the connector details for Open a Change of HW Server category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,HW server,4 - User,3 - Average,"
```

Result

```
<info>
  <category>HW server</category>
  <initial.impact>4 - User</initial.impact>
  <severity>3 - Average</severity>
</info>
```

Example: Importing details for Open a Change of Release Management category

The following is an example of the format required to import the connector details for Open a Change of Release Management category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,Release Management,CM 1,Incident/Problem Resolution,2 -
Site/Dept,1 - Critical,Hardware Release,"
```

Result

```
<info>
  <category>Release Management</category>
  <coordinator>CM 1</coordinator>
  <reason> Incident/Problem Resolution</reason>
  <initial.impact>2 - Site/Dept</initial.impact>
  <severity>1 - Critical</severity>
  <release.type> Hardware Release </release.type>
```

```
</info>
```

Example: Importing details for Open a Change of RFC - Advanced category

The following is an example of the format required to import the connector details for Open a Change of RFC - Advanced category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,RFC - Advanced,facilities,2 - Site/Dept,3 - Average,CAB,"
```

Result

```
<info>
  <category>RFC - Advanced</category>
  <subcategory>facilities</subcategory>
  <initial.impact>2 - Site/Dept</initial.impact>
  <severity>3 - Average</severity>
  <assign.dept>CAB</assign.dept>
</info>
```

Example: Importing details for Open a Change of RFC category

The following is an example of the format required to import the connector details for Open a Change of RFC category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,RFC,CM 1,Incident/Problem Resolution,1 - Enterprise,1 -
Critical,assets,"
```

connectorSubInfo data

```
['assets,DEFAULTpc012,',
'assets,DEFAULTpc015,',
'assets,DEFAULTserver002,']
```

Result

```
<info>
  <category>RFC</category>
```

```
  <coordinator>CM 1</coordinator>
  <reason>Incident/Problem Resolution</reason>
  <initial.impact>1 - Enterprise</initial.impact>
  <severity>1 - Critical</severity>
  <assets>
    <logical.name>DEFAULTpc012</logical.name>
    <logical.name>DEFAULTpc015</logical.name>
    <logical.name>DEFAULTserver002</logical.name>
  </assets>
</info>
```

Example: Importing details for Open a Change of Security category

The following is an example of the format required to import the connector details for Open a Change of Security category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,Security,4 - User,3 - Average,"
```

Result

```
<info>
  <category>Security</category>
  <initial.impact>4 - User</initial.impact>
  <severity>3 - Average</severity>
</info>
```

Example: Importing details for Open a Change of Subscription category

The following is an example of the format required to import the connector details for Open a Change of Subscription category. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Change,Subscription,4 - User,3 - Average,"
```

Result

```
<info>
  <category>Subscription</category>
```

```
  <initial.impact>4 - User</initial.impact>
  <severity>3 - Average</severity>
</info>
```

Example: Importing details for Open a Record Using Web Services

The following is an example of the format required to import the connector details for Open a Record Using Web Services. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Record Using Web Services,12345,"
```

Result

```
<info>
 <partNumber>12345</partNumber>
</info>
```

Example: Importing details for Open a Service Desk Interaction

The following is an example of the format required to import the connector details for an Open a Service Desk Interaction. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Service Desk Interaction,1 - Enterprise,AUTO,"
```

Result

```
<info>
  <impact>1 - Enterprise</impact>
  <assignment>AUTO</assignment>
</info>
```

Example: Importing details for Open a Standard Request in Asset Manager

The following is an example of the format required to import the connector details for Open a Standard Request in Asset Manager. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Standard Request in Asset Manager, DEMO-REQ1,"
```

Result

```
<info>
 <partNumber>DEMO-REQ1</partNumber>
</info>
```

Example: Importing details for Open a Subscription Change

The following is an example of the format required to import the connector details for Open a Subscription Change. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open a Subscription Change,Subscription,2 - Site/Dept,2 - High,"
```

Result

```
<info>
  <category>Subscription</category>
  <initial.impact>2 - Site/Dept</initial.impact>
  <severity>2 - High</severity>
</info>
```

Example: Importing details for creating new requests

The following is an example of the format required to import the connector details for creating a new request. The result is an XML string that populates the **interface.info** field in the *svcCatalog* record.

connectorInfo data

```
"Open NEW Request,customer,parts,parent_group,dependent_group,dependency_group,"
```

connectorSubInfo data

```
['parts,266,10,1,required,speaker,',
'parts,211,10,1,required,cpu,',
'parts,281,51,1,optional,upgrade,',
'parts,261,4,1,optional,monitor,',
'parent_group,speaker,',
'parent_group,monitor,',
'dependent_group,cpu,',
'dependent_group,upgrade,',
'dependency_group,instock,',
'dependency_group,closed,']
```

Result

```
<info>
<category>customer</category>
<parts>
 <part>
  <partno>266</partno>
  <vendorno>10</vendorno>
  <quantity>1</quantity>
  <option>required</option>
  <group>speaker</group>
 </part>
 <part>
  <partno>211</partno>
  <vendorno>10</vendorno>
  <quantity>1</quantity>
  <option>required</option>
  <group>cpu</group>
 </part>
  <partno>281</partno>
  <vendorno>51</vendorno>
  <quantity>1</quantity>
  <option>optional</option>
  <group>upgrade</group>
 </part>
 <part>
  <partno>261</partno>
  <vendorno>4</vendorno>
  <quantity>1</quantity>
  <option>optional</option>
  <group>monitor</group>
 </part>
</parts>
<parent_group>
  <item>speaker</item>
  <item>monitor</item>
</parent_group>
<dependent_group>
```

```
    <item>cpu</item>
    <item>upgrade</item>
  </dependent_group>
  <dependency_group>
    <item>instock</item>
    <item>closed</item>
  </dependency_group>
  </info>
```

Using the Service Catalog WSDL for external fulfillment of requests

Service Manager allows you to connect to and consume external Web Services. When you connect to an external Web Service, Service Manager retrieves the Web Service Description Language (WSDL) file for the service and converts it into a set of JavaScript functions. Service Manager stores the JavaScript functions in its local ScriptLibrary. You can then write custom JavaScript to call these Web Services JavaScript functions and send and receive SOAP messages to the remote Web Service.

For example, you can query external Web services to enable fulfillment of Service Catalog requests from external applications such as Asset Manager. The Service Catalog Web Services and Asset Manager Out-of-Box (OOB) connector is already setup to consume external web services through Service Manager's standard support. See the related topics for an example of the Service Catalog WSDL.

Example: Service Catalog fulfillment WSDL

The following is the Service Catalog fulfillment Web Service Description Language (WSDL) that conforms to Web Services standard practices. This procurement services WSDL is used to connect to external applications such as Asset Manager.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<definitions xmlns="http://schemas.xmlsoap.org/wsdl/" xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/" xmlns:ns="http://schemas.hp.com/ServiceCatalog/1"
 xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" targetNamespace="
http://schemas.hp.com/ServiceCatalog/1" xsi:schemaLocation="http://schemas.xmlsoap.org/wsdl/
http://schemas.xmlsoap.org/wsdl/">
   <types>
      <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeFormDefault="unqualified"
elementFormDefault="qualified" targetNamespace="http://schemas.hp.com/ServiceCatalog/1" xmlns="
http://schemas.hp.com/ServiceCatalog/1" >

            <xs:complexType name="ArrayType">
               <xs:attribute name="type" type="xs:string" use="required" fixed="Array"/>
            </xs:complexType>

            <xs:complexType name="MessageType">
               <xs:simpleContent>
                  <xs:extension base="xs:string">
                     <xs:attribute name="severity" type="xs:int" use="optional"/>
                     <xs:attribute name="module" type="xs:string" use="optional"/>
                  </xs:extension>
               </xs:simpleContent>
            </xs:complexType>

            <xs:complexType name="MessagesType">
               <xs:sequence>
                  <xs:element name="message" type="MessageType" maxOccurs="unbounded"/>
               </xs:sequence>
            </xs:complexType>

                  <xs:complexType name="OptionsType">
                        <xs:sequence>
                              <xs:element name="option">
                                    <xs:complexType>
                                          <xs:attribute name="name" type="xs:string"/>
                                          <xs:attribute name="value" type="xs:string"/>
                                    </xs:complexType>
                              </xs:element>
                        </xs:sequence>
                  </xs:complexType>

            <xs:simpleType name="StatusType">
               <xs:restriction base="xs:string">
                  <xs:enumeration value="SUCCESS"/>
                  <xs:enumeration value="FAILURE"/>
               </xs:restriction>
            </xs:simpleType>

         <xs:complexType name="CreateFulfillmentRequest">
            <xs:sequence>
               <xs:element  name="RequesterRequestID" nillable="true" type="xs:string"/>
               <xs:element  name="RequestedBy" nillable="true" type="xs:string"/>
               <xs:element  name="CallBackContact" nillable="true" type="xs:string"/>
               <xs:element  name="NotifyBy" nillable="true" type="xs:string"/>
               <xs:element  name="Description" nillable="true" type="xs:string"/>
               <xs:element  name="NeededBy" nillable="true" type="xs:dateTime" minOccurs="0"/>

               <xs:element  name="Severity" nillable="true" type="xs:string" />
               <xs:element  name="CartItemID" nillable="true" type="xs:int"/>
               <xs:element  name="Completed" nillable="true" type="xs:boolean"/>
               <xs:element  name="Submitted" nillable="true" type="xs:boolean"/>
```

```
            <xs:element  name="Status" nillable="true" type="xs:string"/>
            <xs:element  name="SLAAgreementID" nillable="true" type="xs:int"/>
            <xs:element  name="Cost" nillable="true" type="xs:decimal"/>
            <xs:element  name="Duration" nillable="true" type="xs:duration"/>
            <xs:element  name="Quantity" nillable="true" type="xs:int"/>
            <xs:element  name="SLADeadline" nillable="true" type="xs:dateTime" minOccurs="0"/>
            <xs:element  name="UnitCost" nillable="true" type="xs:decimal"/>
            <xs:element  name="Currency" nillable="true" type="xs:string"/>
            <xs:element  name="RequestTime" nillable="true" type="xs:dateTime" minOccurs="0"/>
            <xs:element  name="StartTime" nillable="true" type="xs:dateTime" minOccurs="0"/>
            <xs:element  name="ServiceCatalogID" nillable="true" type="xs:int"/>
            <xs:element  name="ItemDescription" nillable="true" type="xs:string"/>
            <xs:element  name="PartNumber" nillable="true" type="xs:string"/>
            <xs:element  name="RequestedFor" nillable="true" type="xs:string"/>
            <xs:element  name="options" minOccurs="0" maxOccurs="unbounded" type="OptionsType"/>
         </xs:sequence>
      </xs:complexType>

      <xs:complexType name="CreateFulfillmentResponse">
         <xs:sequence>
            <xs:element  name="ProviderRequestID" nillable="true" type="xs:string"/>
            <xs:element  name="RequesterRequestID" type="xs:string" />
            <xs:element  name="messages" type="MessagesType"/>
         </xs:sequence>
         <xs:attribute name="status" type="StatusType" use="required"/>
         <xs:attribute name="message" type="xs:string" use="required"/>
         <xs:attribute name="returnCode" type="xs:decimal" use="optional"/>
      </xs:complexType>
   </xs:schema>
</types>

<message name="CreateFulfillmentRequest">
   <part name="CreateFulfillmentRequest" type="ns:CreateFulfillmentRequest"/>
</message>
<message name="CreateFulfillmentResponse">
   <part name="CreateFulfillmentResponse" type="ns:CreateFulfillmentResponse"/>
</message>

<portType name="ServiceCatalog">
   <operation name="CreateFulfillment">
      <documentation/>
      <input message="ns:CreateFulfillmentRequest"/>
      <output message="ns:CreateFulfillmentResponse"/>
   </operation>
</portType>
<binding name="ServiceCatalog" type="ns:ServiceCatalog">
   <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
   <operation name="CreateFulfillment">
      <soap:operation soapAction="CreateFulfillment" style="document"/>
      <input>
         <soap:body use="literal"/>
      </input>
      <output>
         <soap:body use="literal"/>
      </output>
   </operation>
</binding>
<service name="ServiceCatalog">
   <port name="ServiceCatalog" binding="ns:ServiceCatalog">
      <soap:address location="http://yourservicelocationURL"/>
   </port>
</service>
</definitions>
```

Field mappings between Service Catalog and Asset Manager

These are the Asset Manager fields that are populated from the procurement WSDL fields when a Service Catalog user requests an item that is mapped to the **Open a Standard Request in Asset Manager** connector. After a user requests the item and the request is approved, the information is routed to Asset Manager. All of the Asset Manager fields are found within the *amRequest* table.

Service Catalog field	Asset Manager field
RequestedBy	Requester.BarCode
RequestedFor	User.BarCode
Description	Description and Purpose (truncates the string to the first 150 characters)
NeededBy	dtService
Severity	Priority
Quantity	ReqLines.fQty
PartNumber	The PartNumber is not stored in an AC field. This number should match the ID of a Standard Request instance in AC.

Service Catalog Access

The Service Catalog—along with all other HP Service Manager modules—is available through a web interface. All catalog management features are accessible through this interface.

Restricting Service Catalog Access

HP Service Manager security utilities allow administrators to define role-based views of the Service Catalog. This allows administrators to easily enable a Service view or a Technical view so the Catalog is specific to the end user and his/her role. Role-based views can include full access for designing the catalog, catalog hierarchy, orderable items, service levels, and request fulfillment. Users will have a view of the Service Catalog for ordering only, and access to catalog items can also be limited based on the user's job role, position in the organization, business unit, and so on. Finally, other views into the Service Catalog can be defined to meet an organization's unique requirements.

Service Catalog Self Help

The Service Catalog provides an easy-to-use web interface for Business Users (end users) that allows them to browse and order available services and follow up their requests' status.

Service Catalog Access Control

Service Catalog Management involves configuration management, which is controlled by security profiles. These user profiles allow authorized users to create, modify, and close CI records. The system provides options for Never, Always, and When Assigned. For example, one user may be able to create and close CIs but only modify items assigned to them. Access to functionality within each module is governed by HP Service Manager security utilities, which define access based on role and user.

HP Service Manager also provides a security control to segment data between multiple customers. "Mandanten" controls identify which customer data a particular user or group can access, update, or both.

Catalog Design

Catalog Managers can design the catalog using native tools within HP Service Manager. The catalog structure is flexible and can be modified to accommodate any content structure. Here are some examples of the flexibility of the framework:

- Any HP Service Manager business service owner can create or maintain a catalog using a simplified HP Service Manager interface and wizards to guide them in adding or changing service offerings.
- Catalog items can include any type of service, from password reset to new application access, from mail box capacity upgrade to new service request (for example, a request for application hosting service not yet provided).
- Each business service can be associated with one or more categories thus reflecting the multiple facets of some of the more complex business services.
- The categories themselves are organized in a hierarchical manner, which is not only useful to the Catalog Manager, but also to the business users when they need to find a catalog item.
- The Service Catalog module allows Catalog Managers to create their own hierarchy of categories to more closely match their organization's nomenclature.

Service Catalog Attachments

The Service Catalog provides a way to attach documentation to the catalog items. This allows Catalog Managers to include additional information about a catalog item, such as functional specifications of a requested workstation, or other instructions related to the service requested.

Bundle Design

Services are represented as CIs in HP Service Manager, which enables their access to all related support and delivery processes. Out-of-box lifecycle processes include:

- Defining a new service
- Discovering, defining, and managing CI relationships
- Adding service levels (service-oriented SLA)

- Publishing a service to the HP Service Manager Service Catalog
- Signing up customers and managing their subscriptions
- Fulfilling subscription requests through HP Service Manager Change Management
- Monitoring and supporting through Incident, Change, and Problem Management
- Monitoring SLAs and optimizing service delivery

Services are provided by IT to satisfy a range of business needs. Services can be delivered to individuals, departments, or an entire enterprise as defined by service subscriptions. Sample services can include email, a billing system, workstation backup or office automation. The service instance is the deployment of a service, modeled as a CI in the CMDB, and it can have related CIs, customers, incidents, and changes.

Once the service is deployed, the Service Catalog lists and describes all of the services that IT offers, providing customers with a view to browse and make requests. Catalog items can range from single user workstations to department or enterprise application support.

The Service Catalog module provides the ability to create bundles of services in customer- and business-relevant packages. Out-of-box it includes dozens of predefined bundles that span major categories. Bundles are exposed in the service catalog as other services. They are part of the same service category tree as simple catalog items. Bundles can be described with the same expressiveness as regular catalog items, with multiple descriptions, an image, attached documents, service level options, access rights, and other information. A wizard allows the Catalog Manager to add bundles in a very simple way, letting him add components from existing catalog items, or from brand new ones created specifically for the bundle. A bundle can be composed of simple catalog items, and can also contain other bundles. Some of the components can be mandatory, others can be optional.

Service Catalog Connectors Overview

The Service Catalog module allows the Catalog Manager define how a service request must be routed for fulfillment.

Request processing is automated using other appropriate HP Service Manager modules. For example, the HP Service Manager Request Management module may be used to automate a “new employee setup” request, because this type of request has goods and services components that require defined ordering and sequencing processes that can be facilitated by the Request Management module.

Other types of service requests can be fulfilled in the Service Desk, Change Management, or other modules.

A catalog administrator defines the modules required to fulfill each service catalog item. Fulfillment can include creating sequenced or parallel tasks to fulfill the request, routing tasks to appropriate groups or staff, gathering required approvals, generating notifications and alerts, measuring response time based on applied SLAs, and so on.

The service catalog uses an open connector architecture, where new fulfillment connectors can be added to integrate with third-party or legacy tools.

Service Descriptions

The HP Service Manager Service Catalog provides a user interface that allows the Catalog Manager to create and publish a comprehensive list of services available to the business user.

Within each catalog item, the Service Catalog collects information for a service, including such details as service descriptions, categorization, costs, access rights, service request approval rules, delivery and support service levels, and custom options. The out-of-box definitions can be used as templates to start defining the specific services supported in an enterprise. In addition, new services can easily be defined through a web-based, wizard-guided process.

The service offering description can be made as detailed as desired, from a simple text description, to a more detailed rich-text description, to attaching documents to the catalog item.

The Service Catalog lets the catalog manager define the service's base price, which can be a onetime cost, a recurring cost, or both.

The Catalog Manager can also:

- Expose service options, which, when selected, can affect the price of subscribing to the service (for example, it is possible to describe access to optional modules of an application, or an optional data plan to a cell phone service).
- Expose optional service levels.
- Restrict access to business users based on their role.

Finally, the management user interface also allows Catalog Managers to duplicate existing services, thereby facilitating the creation of new catalog items.

After a service is defined, its details can be exposed to end users browsing or requesting services on the corporate intranet. For example, an email service may list available options, costs, and service levels.

Service Level

The Service Catalog user interface allows the Catalog Manager to describe the different service level available to the business users. The Service Catalog also has the ability to limit each business user's access to specific service levels.

When ordering a service, a user can select his or her service SLA (if applicable) on the order screen.

Catalog Templates

The Service Catalog is hierarchical. Companies can use the categories, subcategories, and items that are provided. Companies also have the flexibility to modify, copy, and remove any of these to fit their needs. Any HP Service Manager business service owner can create or maintain a catalog using a simplified HP Service Manager interface and wizards to guide them in adding or changing service offerings.

Types of catalog entries within categories and subcategories can include the following:

- A pure service request—for example: office move
- A pure goods request—for example: business cards
- A single good with a service delivery component—for example: memory upgrade
- Bundle of goods and services—for example: new employee setup
- Project or Request for Services—for example: application-hosting service

It is very easy to create service templates from existing catalog items, and conversely to create services from services templates.

Service Catalog Configuration Management: Service States

In the Service Catalog, which represents the business-user view of the catalog, a catalog item can be simply made active or inactive. In the Configuration Management database, where business services are represented as CIs, HP Service Manager allows Catalog Managers to designate the state of the service. Service state codes can be created to meet an organization's requirements.

Service Catalog Subscriptions

The HP Service Manager Service Catalog can capture and display information on services that can be obtained by individual users or departments on a usage or subscription basis. In particular, a business user is able to see all his or her subscriptions to business services—those subscribed directly or subscribed through a department. In addition, a manager can see all the subscriptions to business services subscribed through the department under his or her control.

Service Catalog Integration

The Service Catalog is fully integrated with other HP Service Manager modules, including Service Desk, Change Management, Configuration Management, and Request Management.

HP Service Manager can automatically generate records to fulfill Service Catalog requests in these other modules. As the request is being fulfilled, status information is passed back to the service request so that the business user can be informed of the progress.

Service Catalog Integration: Request Fulfillment

Service requests are created and approved in the Service Catalog module. The end user, through the Employee Self-Service web interface, can browse the service catalog and submit service requests. The Service Catalog allows users with approval permission to review and approve service requests through the same Employee Self-Service web interface:

- The IT technicians can monitor the service request processing in more depth. They have access to the resulting service request, which is a Service Desk interaction of a specific type, or can monitor the progress of the request through the fulfillment module.
- End users can track the status of their requests through the Service Catalog end-user interface. End users can also review the details of their requests. They can make changes to a request and resubmit it. If a request is held up in the approval process, the requester can see the problem and act on it. Empowering the users helps minimize frustration and prevents more calls to the help desk.
- Service managers can track the status of service delivery through fulfillment records created in HP Service Manager.

The Service Catalog will automatically synchronize the state of the service request with the state of the underlying fulfillment processes, even when, for some complex requests, the fulfillment is carried out in parallel in different modules.

Service Catalog Integration: CMDB

The Service Catalog documents services at a general level so that they can be requested by business users. Catalog items can be linked to services managed in the Configuration Management database. This is how, when a request is fulfilled, a new subscription can be added to the service CI.

The technical service catalog itself is implemented in the Configuration Management database. The technical services and their components are modeled as CIs in the HP Service Manager Configuration Management module (the Configuration Management Database (CMDB)). At the top level, each service is also modeled as a CI with links to its related systems and components definition in the CMDB.

Note: HP Service Manager also defines business services as a CIs.

Service Catalog Integration: Business Agreements

Several business agreements can be managed in the Service Catalog. You can define operational SLAs that apply to the catalog item (service). Or, you can define agreed-upon delivery objectives and the delivery objective options in the catalog item.

Service Catalog Integration: Vendor Performance

Performance is measured against Service Level Objectives (SLOs), which are defined within SLAs and Operational Level Agreements [OLA], and assigned to relevant records. SLOs can be created for Service Catalog requests, as well as the records created in other HP Service Manager modules to fulfill these requests. Fulfillment records can be assigned to vendors/suppliers, and their performance can be measured against applied SLOs.

Service Catalog Integration: Service Level Management

There are several ways to measure the request fulfillment using Service Level Agreements (SLAs).

Monitoring the Service Request

All catalog requests are opened and associated with the requester's default SLA. This SLA is defined in the requester's department or at the company record level, or at the system level.

Note: There is a default SLA defined in the HP Service Manager Service Level Management module.

In the SLA, you can define Response Time Service Level Objectives against catalog requests. These objectives will typically define the agreed-upon time for the request to move from one state to another. In particular, administrators can define a time agreement from request approval to request fulfillment. It is possible to have multiple response time objectives that will each only apply to certain kind of service requests. HP Service Manager offers flexibility in that area. In particular, it is possible to link the

response time to selected delivery objectives. Delivery objectives are delivery options that can be defined as part of the Service Catalog module, which helps define the target delivery date.

Each catalog item or bundle definition record contains a Delivery Targets tab where a catalog manager can add or remove multiple objectives and list dependencies for these objectives.

Delivery Targets can be limited to specific group of users, based on their default SLA. For example, consider a delivery objective of three business days that provides one service level with associated limitations:

Delivery Target	Limit Access to ...
3 Business Days	Sales Gold, Marketing Gold, Executive Gold
6 Business Days	All other users

As defined above, the three-business-day delivery objective is only available to specific requesters with listed Gold SLAs. Everyone else requesting the service is given only one (and thus defaulted) choice: six business days.

Monitoring the Fulfillment Process

It is also possible to monitor directly the fulfillment processes that are spawned from the service requests. The same default user SLA that was used for the service request will be used for the fulfillment request. Any response-time service level objective that applies will help measure the fulfillment process.

Service Catalog Ordering: Service Request Forms

The Service Catalog module provides the ability to add dynamic fields to a catalog item, as well as specific instructions to fill in those values. The application then uses this information to generate a custom request form. The dynamic fields are described by their name (not user visible), a label, a widget type and a data type.

The Catalog Manager has the ability to preview the dynamic fields the way the users would see them. The Service Catalog takes care of all the validation logic based on the simple definitions.

Service Catalog Audit Trail

HP Service Manager does not audit the Service Catalog items but has a utility by which the system can create a copy of the catalog item record every time it is updated. In this way all changes to the items are fully documented.

HP Service Manager date/time and user stamps to each record when the record is created or saved. HP Service Manager uses this to provide an audit trail capability that identifies the updates to the CIs/services. Each time the CI record is updated (whether manually or automatically), updates document the attributes that were updated.

HP Service Manager also provides an auditing feature that records modifications to fields within the HP Service Manager database. Field modifications are detected by comparing the fields in the original version of a record to the updated version. When modifications are detected, an Audit Log entry is recorded for each changed field showing the name of the modified field, the old and new version of the data, the current date/time, and the current operator's user ID.

Service Catalog: Search

The Service Catalog interface has built-in search capabilities. The end user can search the entire catalog or can restrict the service to a specific category. In either case, HP Service Manager allows the end user to see search results based on items available to that user.

The search engine performs a word search in the service catalog item description field. The search technology is flexible enough to find a match if the search terms share a common root. For example, a search for “security” will return items whose description uses the words “security,” “secure,” or “securely.”

This leniency speeds up the search throughout the catalog, especially for business users that are not exposed daily to the catalog, or may not be familiar with its exact wording of the item being sought.

- IR search must be enabled for Service Catalog search. To enable IR search, set the **ir_disable** parameter to 0.
- To enable Service Catalog search, the **description** and **desplayName** fields in the svcDisplay DBDICT are set as the IR key by default.

Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Service catalog help topics for printing (Service Manager 9.41)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to ovdoc-ITSM@hp.com.

We appreciate your feedback!


Java™
COMPATIBLE