
HP Service Manager

for supported Windows® and UNIX® operating systems

Release Notes

Software version: 9.31.0022/ October 2012 (Updated June 18, 2013)

This document provides an overview of the changes made to HP Service Manager for the 9.31.0022 release. It contains important information not included in the manuals or online help.

Patch Release Strategy Change for Service Manager 9.3x

Over the last few years we have consistently received feedback from our customers that, while Service Manager is a great feature-rich product, a number of quality issues remain. We are pleased to announce that we have released just as many Service Manager patches over the last year as in the past, but with the following significant differences:

- After only three quarters of 2012, we have already fixed 50% more defects in those patches than in the entire of the last year.
- Over 60% of these fixed defects were on Service Manager 9.3x. We have dramatically enhanced our testing procedures for SM 9.30 to find more defects than ever before. This has enabled us to proactively fix these defects before customers can report them.
- We are not only fixing platform defects, but also releasing improvements to the applications, the documentation and the upgrade process.

Initial customer feedback indicates that our new strategy is working. However, we know that fixing defects is not enough to keep Service Manager ahead of our competitors. Our customers also want us to make smaller enhancements to the product to improve usability and supportability at a far more rapid pace. To that end, we are changing the patch release model for Service Manager 9.3x:

- We plan on creating a 9.3x minor-minor patch release (for example, SM 9.31, 9.32, and so on) every 6 to 9 months. These minor-minor releases will contain enhancements to functionality and new features.
- Once a new minor-minor patch is released, the build patches (for example, 9.30p5) on the previous release will stop. After the SM9.31 release, there will be no further patches on SM9.30.
- We will continue to release build patches (for example, 9.31p1) on a regular basis between minor-minor patch releases.
- Minor-minor patches can be adopted component by component. For example, if you only need the platform updates, you do not need to do an applications upgrade. When the release is posted on HP Software Support Online (SSO) portal, the components will be structured so that you can download only the parts you require. The release notes will clearly indicate any dependencies if they exist.

There is no change in release strategy for older versions of Service Manager, such as SM9.21 and 7.11.

We hope this release strategy will meet your needs for a continued high-quality Service Manager on-premise product.

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Documentation Updates

The first page of this release notes document contains the following identifying information:

- Version number, which indicates the software version.
- Publish date, which changes each time the document is updated.

To check for recent updates or to verify that you are using the most recent edition, visit the following URL:

<http://h20230.www2.hp.com/selfsolve/manuals>

This site requires that you register for an HP Passport and sign-in. To register for an HP Passport ID, go to:

<http://h20229.www2.hp.com/passport-registration.html>

Or click the **New users - please register** link 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.

Note: To view files in PDF format (*.pdf), Adobe Acrobat Reader must be installed on your system. To download Adobe Acrobat Reader, go to the following web site:

<http://www.adobe.com/>

In This Version

Note: Service Manager (SM) 9.31 includes all the features of SM 9.30.p5, SM9.30ap3, SM9.30up6, and previous releases. If you are upgrading from a version earlier than SM 9.30.p5, 9.30ap3, or 9.30up6, review the release notes for the following releases since SM9.30:

- SM9.30p1 through p5
- SM9.30ap1 through ap3
- SM9.30up1 through up6

Support of HP Service Request Catalog 1.40

Prerequisites:

Service Request Catalog 1.40 requires either of the following:

- The Service Manager 9.31 applications (if Knowledge Management is not enabled).
- The Service Manager 9.31 applications + 9.31 Solr Search Engine (if Knowledge Management is enabled).

Service Request Catalog is a front-end application that gathers data from Service Manager and organizes available products and services into a catalog format. Service Request Catalog 1.40 includes new features or enhancements in the following areas.

Service Request Catalog End User Enhancements

Service Request Catalog 1.4 includes a number of new features to expand the functionality of SRC and to provide a smooth and user friendly experience to end-users. For more information on how to use SRC from an end-user's perspective, consult the built in help server after installing SRC.

Global Catalog Search

This version of SRC enables extended search capabilities from the Service Catalog items, Support Catalog items, and Knowledge Management documents from Service Manager 9.31. Users can use search to quickly find items in the catalogs, knowledge bases, and also content from an outside URL. In addition, a shortcut has been added to allow users to a quick launch to request custom support options if they cannot find an applicable support item from the catalog. These search features greatly streamline service and support by enabling end users to resolve their issues independently.

Service Subscriptions

SRC now allows users to quickly view and manage their subscribed services through the introduction of a new Subscription page and Dashboard widget. Users can obtain a history of their subscribed items, or delete a subscription which they no longer need.

Approvals

SRC now supports Approvals and Approval delegation. Upon logging into SRC, users will see a new Approvals widget that displays the number of approvals in their queue. Users can view their current approvals and quickly approve or deny requests. In addition, users can designate an appropriate back-up Approver through the Settings window.

Service Request Catalog Administration Enhancements

Service Request Catalog 1.4 adds a number of new features that allow administrators to customize SRC to their organization's needs. The features include the creation of custom fields, more flexibility in customization, and new "Launcher" from which users can link to other Web sites or launch 3rd party support applications. For information on these features and how to customize SRC, see the "Service Request Catalog Customization Guide."

Support for Creating Custom Fields

Service Request Catalog 1.4 adds support for custom field in the panel of a request. These fields enable organizations to gather additional data beyond the standard SRC format. Such data might include customer specific information, such as location information, fax numbers, or similar. Custom fields are added from the Service Manager side.

Customization of the SRC

This version of SRC allows for greater control of the look and feel of the catalog. In this version, you can customize the visibility and arrangement of the widgets, brand the SRC by adding your organizations logo and modify the color scheme.

Built-in Applications Launcher

SRC also adds an area, called the Launcher, which allows you to add links to launch third party applications. Examples of third party links might include such things as a video for training, the launching of a chat support application, or link to a search Web site.

RecordList Improvements (Web Client only)

Prerequisite: This new feature requires the Service Manager 9.31 Web tier.

The RecordList functionality has been improved to achieve better performance and usability in the Web client. The performance has been significantly improved when users are working with record lists, and improvements have been made in the following areas: grouping, page navigation, drilldown, and keyboard/mouse operations. These improvements include:

- On a list-only page (for example, a To-Do queue), the first visible column in each row is a drill-down link. Clicking this link opens the record.
- On a list-only page, a single click on a row no longer opens the record, and it selects the row instead.
- The focused row now has a black border and an orange or gray background (when selected or not selected), while selected rows have an orange background but without a border. This distinction is helpful when users perform keyboard operations, which take effect only on the focused row.
- More keyboard shortcuts are supported.
- New grouping behavior when a list-only page is reloaded (for example, when users refresh or resort the record list): if `viewrecordlist` is set to true, the group that contains the current row (that is, the last selected row) is expanded; if `viewrecordlist` is set to false, the first group in the list is expanded (the first row becomes the current row).
- The controls on the paging bar now enable more efficient and convenient page navigation for record lists.

For details, see the *RecordList improvements (Web client)* and *Working with record lists* topics in the Service Manager help.

HP Service Manager Collaboration (SM Collaboration)

Prerequisites: SM Collaboration requires the following:

- Service Manager 9.31 Web tier
- Service Manager 9.31 applications
- HP Enterprise Collaboration (EC) 1.1

By integrating with HP Enterprise Collaboration (EC), HP Service Manager Collaboration (SM Collaboration) enables SM and non-SM users to collaborate in real time (or anytime) in the context of an Incident, Service Desk Interaction, Change, or Change Task. Non-SM users can participate in the conversation using the EC stand-alone web interface or using Microsoft Office Communicator/Lync. SM Collaboration suggests participants to be invited to the conversation based on the context of a record, such as contact, configuration item (CI), service, or assignment group. You can also search users by email address or user name, and invite them to the conversation. The conversation is stored as a permanent part of the corresponding record.

For more information, see the *Integrations* section in the Service Manager 9.31 online help.

SM-BSM Downtime Synchronization

Prerequisites: This new feature requires the Service Manager 9.31 applications and ServiceManagerAdapter9-x/UCMDB9.05 CP11 Update 2.

The integration between Service Manager (SM) and BSM now supports synchronization of scheduled downtimes from SM RFCs and tasks to BSM in order to suppress events. For more information, see the *Integrations* section in the Service Manager 9.31 help.

UCMDB Integration Enhancement

Prerequisites: This enhancement requires the following:

- Service Manager 9.31 applications
- Service Manager 9.31 server
- ServiceManagerAdapter9-x/UCMDB 9.05 or 10.0

The UCMDB integration has been enhanced in the following areas. For more information, see the *Service Manager 9.31 Universal CMDB Integration Guide*, which is available from the online help.

Support of UCMDB 10.0

The SM-UCMDB integration now supports UCMDB 10.0, in addition to UCMDB 9.x.

Note: The new features in this release are not supported for UCMDB versions earlier than 9.05.

Accessing the UCMDB Browser from the Service Manager UI

Prior to Service Manager (SM) 9.31, users can launch the UCMDB UI in the context of a CI record synchronized from UCMDB. In SM 9.31, users can launch the UCMDB Browser UI instead of the UCMDB UI, in the context of a CI record.

The Universal CMDB Browser is a lightweight UI designed for simple access to UCMDB configuration information. This is a tool for searching, locating and consuming configuration related data. It is an optional add-on to UCMDB. For more information, refer to the UCMDB Browser documentation.

Limitations

If the UCMDB server supports multi-tenancy, every user is associated to a tenant or tenants. No tenant-specific information is provided in the UCMDB Browser URL.

If the UCMDB server supports multi-customer, customer information is not provided in the UCMDB Browser URL. By default, users are logged in to the system of Customer 1.

Populating UCMDB with CI/CI Relationship Data from Service Manager

This feature is helpful for synchronizing several types of CIs that cannot be automatically discovered in UCMDB and CIs that are created and managed in Service Manager.

Improved Error Handling for UCMDB to SM Synchronization

The integration's error handling mechanism has been improved to ensure that a single CI failure does not cause a complete push to fail; instead the push job completes with a "Passed with failures" status. Full and differential pushes now run to completion without constant monitoring.

Performance Tuning for UCMDB to SM Synchronization

This enhancement enables the Service Manager Adapter to connect to multiple Service Manager Instances for parallel processing of data push.

Additional DEM Rule Options for Duplicated Logical Name Values

This feature enables push of CIs with a duplicated logical name in SM. You can configure DEM Rules on their Duplication Rule tab to either rename duplicated logical names or return an error:

- Rename to <name>_RENAMED_1/2/3
- Return Error

Note: The error message will contain this string: "This record contains an invalid duplicate key."

Automatically Loading Managed Fields in DEM Rules

A new button named **Load Fields** is now available on the Managed Fields tab of DEM Rules. This button enables you to load managed fields automatically.

Support for Enabling Outage Spreading

This feature enables all CI relationships pushed from UCMDB to SM to be involved in the outage dependency functionality. When a CI relationship is pushed from UCMDB to SM, the "Outage Dependency" is set to true, and the outage threshold is set to "1".

In a DEM rule record, if the Table Name is "cirelationship", a new option **Add the record, and set dependency as true** is available for **Action if matching record does not exist**.

New Options for Synchronizing CI Deletions from UCMDB to SM

In a DEM rule record, if the Table Name is not "cirelationship", new options are now available for **Action if record is to be deleted**.

Enriched CI and CI Relationship Mapping for UCMDB to SM Synchronization

The out-of-the-box integration content has been enriched to support more CI/CI Relationship types and subtypes for data push.

Mobility Client Enhancements

Prerequisites:

The Mobility enhancements require either of the following:

- The Service Manager 9.31 Mobility client + 9.31 applications
- The Service Manager 9.31 Mobility client + 9.30 or later applications + two unloads (QCCR1E76227_SM930P6_SM930.unl and QCCR1E78794_SM930P6_SM930.unl, available from the SM9.31 server's platform_unloads directory).

This release includes the following enhancements to the Service Manager Mobile Applications version 1.0:

- Localization support. The Mobile Applications now supports four additional languages: French, German, Japanese, and Spanish.

Note: To support localization of messages returned from the Service Manager RTE, the 9.31 RTE is a prerequisite.

- Support of custom date formats for date/time fields in Change Management views.
- Ability to reassign Incident and Change records.

For more information, see the *Service Manager 9.31 Mobile Applications User Guide*, which is available from the Service Manager 9.31 online help.

Lock Management

Prerequisite: This new feature requires the Service Manager 9.31 server.

In versions of Service Manager (SM) prior to version 9.31, the locking mechanism used multicasting to request and obtain a lock on a resource in Service Manager. This locking mechanism was implemented using a Peer Lock in the JGroups toolkit. However, there were several issues with this implementation, which are addressed with the new locking mechanism introduced in this release.

The new locking mechanism consists of a record entry for each locked resource in a database table. The new `lock` table (for exclusive locks) and `lockshared` table (for shared locks) have been created to house these records.

Limitations/Known Issues:

- No lock queue
- Resource Name is limited to 200 bytes.

For detailed information on the new locking system, see the *Lock Management* topic in the Service Manager 9.31 online help.

Dynamic Debugging of User Sessions or Schedulers

Prerequisites: This new feature requires the Service Manager 9.31 server and 9.31 applications.

Note: This feature does not work in non-English environments because of localization limitation [QCCR1E62656](#).

Prior to version 9.31, Service Manager (SM) provides the ability to enable debugging information by restarting or re-connecting the SM Server to reload the modified sm.ini file, which contains the settings of debugging parameters. However, in some cases, support personnel need the ability to turn on the SM debugging dynamically without disconnecting/stopping a user session/scheduler. For example, a session/scheduler is having a performance problem after a continuous running for a long time, and no debugging was enabled and history indicated that once the session/scheduler was disconnected/stopped and then re-connected/restarted the performance issue went away.

Service Manager 9.31 introduced the dynamic debugging feature, which enables administrators to enable or disable debugging or tracing information for a user/scheduler session, without the need to restart the server. When enabled, relevant debugging information of that session/scheduler will be written to the server log (sm.log). Once you have finished troubleshooting, you can then disable some debugging information for that user session or scheduler, using dynamic debugging; however some debugging information cannot be disabled using dynamic debugging, and in this case the user needs to reconnect to the server or an administrator needs to manually stop and then restart the scheduler, to disable such debugging information.

Important: If multiple sessions exist for one user account or scheduler (for example, one user logs in simultaneously from different clients or multiple instances of one scheduler have been started), the dynamic debugging settings specified for one of these sessions will take effect for all of the sessions of this user account or scheduler.

Set debugging parameters using dynamic debugging

Note: Some debugging parameters can be enabled and disabled using the dynamic debugging feature, while some can be enabled but cannot be disabled using this feature. For more information about these parameters, see [Dynamic debugging supported parameters](#).

To set debugging parameters for a user session/scheduler:

- 1 Click **System Status**.
- 2 Type “s” in the Command box of the user session/scheduler, and click **Execute Commands**. The Operator Status Display form opens.



Operator Status Display

User ID:	<input type="text" value="falcon"/>	Current Status	
Full name:	<input type="text" value="Jennifer Falcon"/>	Logged In At:	<input type="text" value="08/27/12 21:02:04"/>
Printer:	<input type="text"/>	Device Name:	<input type="text" value="SOAP-Web"/>
		Inactive Time:	<input type="text" value="00:00:00"/>
		Last Login:	<input type="text" value="08/27/12 21:02:06"/>

- 3 Click the **Send Debug Msg** button in the toolbar. The Send Debug Message form opens.
- 4 Set debugging parameters as needed. For supported parameters, see [Dynamic debugging supported parameters](#).

The following figure shows an example.

Send Debug Message to falcon

Debug Message

rtm:	<input type="text" value="3"/>
debugdbquery:	<input type="text" value="999"/>
<input checked="" type="checkbox"/> sqldebug	
<input type="checkbox"/> debughttp	
Other parameters: (format: param1:value1 param2:value2 ...)	
<input type="text" value="debuglk:1000"/>	

- 5 Click the **Send Debug Message** button. A message displays: Message sent to all users specified.
- 6 Click **End** to exit.
- 7 Check the server log file for relevant debugging information of the session/scheduler.
- 8 Once you have completed troubleshooting of the session/scheduler, you may want to disable the debugging parameters for the user session/scheduler. To do so, repeat the steps above and disable the parameters.

Note: Some parameters cannot be disabled using dynamic debugging. To disable such debugging information, disconnect the user session or manually restart the scheduler. See [Dynamic debugging supported parameters](#).

Dynamic debugging supported parameters

The following debugging parameters can be enabled and disabled in dynamic debugging.

Parameters that can be enabled and disabled using dynamic debugging		
dbmonitorfiles: [file1],[file2]...	debugscauto	ir_trace
debugca:n	debugvmmap	rtm
debughttp	debuglk	sqldebug
debugdiagnostics	debugrs	

The following parameters can be enabled but cannot be disabled using dynamic debugging.

Note: Once you have completed debugging of a user session or scheduler with any of these parameters enabled, you are recommended to re-connect the session or restart the scheduler to disable the parameters.

Parameters that can be enabled but cannot be disabled using dynamic debugging	Performance Impact
dbtriggertrace	Low
dbstats	Low
debugattachments	Low
debugjni	Medium (only affects the target session/scheduler)
debugjavascript	Medium (only affects JavaScript execution of the target session/scheduler)
debugadhocsql	Medium (only affects the target session/scheduler)
debugfileio	Low
debugshutdown	None
debugprocesses	Medium (only affects the target session/scheduler)
debugdbtypes	Low
debugdbquery	Low (Setting debugdbquery:0 can disable 99% of the relevant logs)

See also the *Dynamic debugging of user sessions/schedulers* and *Set debugging parameters using dynamic debugging* topics in the Service Manager 9.31 online help.

Planning CI Relationship Changes from a Change Record

Prerequisites: This new feature requires the Service Manager 9.31 applications and 9.31 server.

In Service Manager earlier than version 9.31, you can plan Configuration Item (CI) attribute changes from a change record, but you can only change relationships immediately rather than plan them for future changes. On the other hand, it is possible to have CI relationships be validated through UCMDB (which may result in unplanned changes), but it is impossible to plan CI relationship changes.

Service Manager 9.31 now provides the ability to plan CI relationship changes from a Change record of the Planned Change category. Two tables (dataModEventRel and dataModEventRelItem) were added to store the data modification events of relationship records and their downstream CIs. In addition, the same data modification event status change applies for both CI attributes and CI relationships. All changes will be logged incrementally. For example, if a change plans to add one downstream CI to an existing relationship that already has two downstream CIs, only the new downstream CI will be listed for tracking or approval.

The following describes two typical use cases of this enhancement.

Add a CI relationship to be changed in a planned change record

Use the **Add Attributes/Relationships** button or the **More > Set Expected States** option to add CI relationships to an existing change record of the Planned Change category.

- 1 From Change Management, open a change record that is not approved.
- 2 Click **More > Set Expected States**. Alternatively, open the **Associated CIs** section, and click the **Add Attributes/Relationships** button.
- 3 Select one CI you want to modify, and click **Next**.

Note: If the change record has only one affected CI, this step is automatically skipped; if the change record has no affected CIs, the **Set Relationship** option will not be selectable in the next step.

Warning: You can select only one CI in this step; otherwise the **Set Relationship** option will not be selectable in the next step. This is because you can add relationships for only one CI at one time.

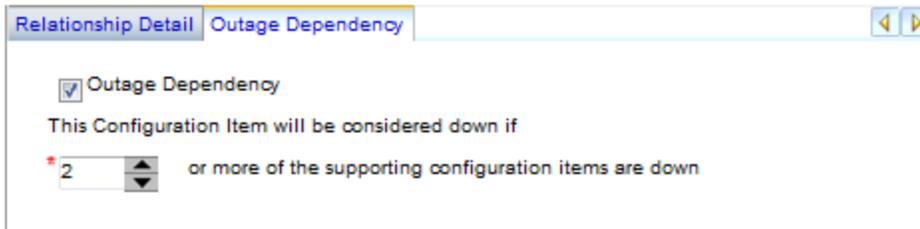
- 4 Select **Set Relationship**, and click **Next**.

A new form opens. If the selected CI has existing relationships, two options display: **Add New Relationship** and **Update/Delete Existing Relationship**; if the selected CI has no existing relationships, only the first option displays.

- 5 Select **Add New Relationship**, and click **Next**. The Relationship Definition form opens.
- 6 Complete necessary fields on the **Relationship Detail** and **Outage Dependency** tabs, and click **Finish**. See the following figures for examples.

The screenshot shows the 'Relationship Definition' form with the 'Relationship Detail' tab selected. The form contains the following fields and options:

- Upstream CI:** *adv-afr-desk-104
- Relationship Name:** *desk104connection101
- Relationship Type:** Logical (unselected), Physical (selected)
- Relationship Subtype:** *Connects
- Downstream CIs:** A list containing 'adv-afr-desk-101' and two empty rows, each with a search icon.



A message similar to the following displays: Change Event for relationship "desk104connection101" linked to Change "C10002".

- Go to the Associated CIs section of the change record, and locate the new relationship in the “CMDB relationships need to be changed for CIs in the list” table. The new relationship has a Status of Proposed.

CMDB relationships need to be changed for CIs in the list

desk104connection101	adv-afr-desk-104	adv-afr-desk-101	Add	false	Proposed
--------------------------------------	------------------	------------------	-----	-------	----------

- Click the link of the new relationship to view the relationship details.
- If needed, change the Status from Proposed to Cancelled, and save your change. If cancelled, the relationship changes will not be processed.

Note: When the change record has been approved and moved to the implementation phase, the status of the new relationship (if not cancelled) changes from Proposed to Planned, and the relationship changes will then go through the rest of the change workflow.

Next, you can view the new CI relationship from the affected CIs. In this example, the affected CIs are “adv-afr-desk-104” and “adv-afr-desk-101”.

View the CI relationship from the affected CIs

Once you have added a new relationship for an affected CI of a change record, you can find the relationship in the **Relationship Changes** sections of the upstream and downstream CI records, with a link to the change record.

See the following figure for an example.

Relationship Changes

Pending Relationship Changes

Upstream CI	Relationship Name	Downstream CI	Action	Status	Linked Record	Start Time	End Time
adv-afr-desk-104	desk104connection101	adv-afr-desk-101	proposed	add	C10002	09/22/07 19:51:00	09/22/07 19:51:00

See also the *Plan CI relationship changes from a change record* topic in the Service Manager 9.31 help.

Enhanced Web Client Session Management to Prevent Data Loss

Prerequisite: This new feature requires the Service Manager 9.31 Web tier.

Prior to version 9.31, if a user has already logged in to the Service Manager Web client and then opens a new Web client in the same session, the session may collide and unexpected behaviors will occur. For example, if a user logs into the web client in POWER mode, and then opens another page in ESS mode, the newly opened page will cause the original working page to automatically log out. This may result in front tier data loss depending on the application modes of the two pages (see defect [QCCR1E73015](#)).

As of version 9.31, Service Manager (SM) allows only one live web client in the same web browser session to avoid potential data loss. The following describes two typical example scenarios.

Typical Scenarios

The following describes the current web client behavior in two typical scenarios. In these scenarios you attempt to open the web client in two browser tabs in the same session.

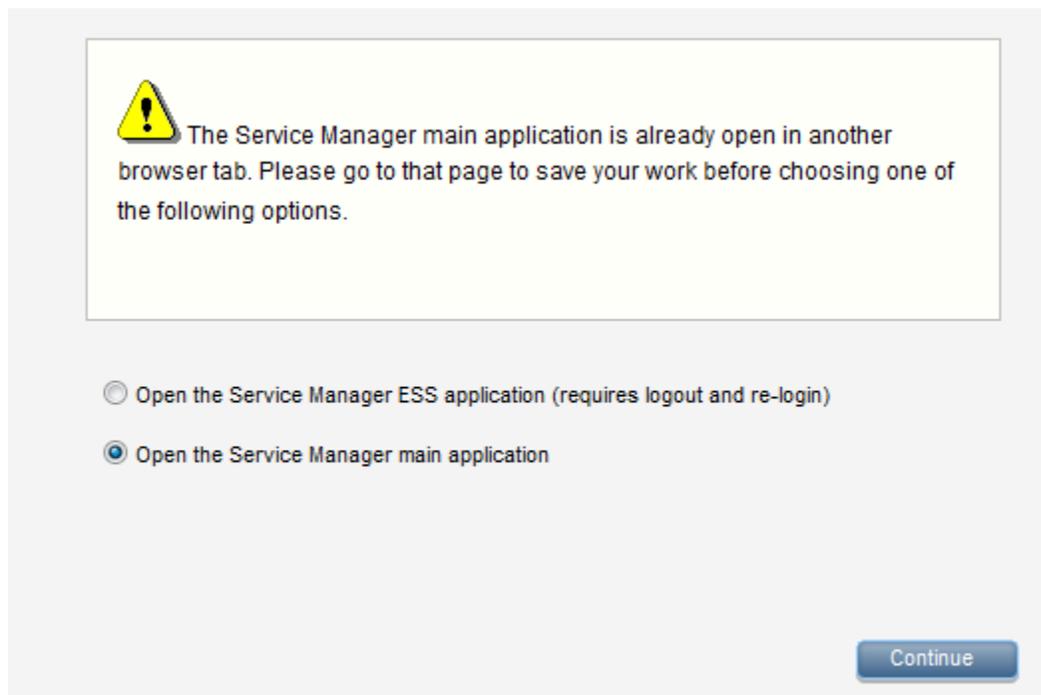
Scenario 1. Access the web client in different modes in two browser tabs.

In this scenario, you log in to the web client in one mode (index.do for example) and try to access the web client in another mode (ess.do for example) in another browser tab. In the following example, you log in to the web client in the index.do mode, and then you attempt to open an Incident record link in the ess.do mode from an HTML email notification.

- 1 Log in to the web client (index.do) in your default web browser, and open one or more SM tab pages (for example, a Service Catalog page).
- 2 Click the link in your email notification.

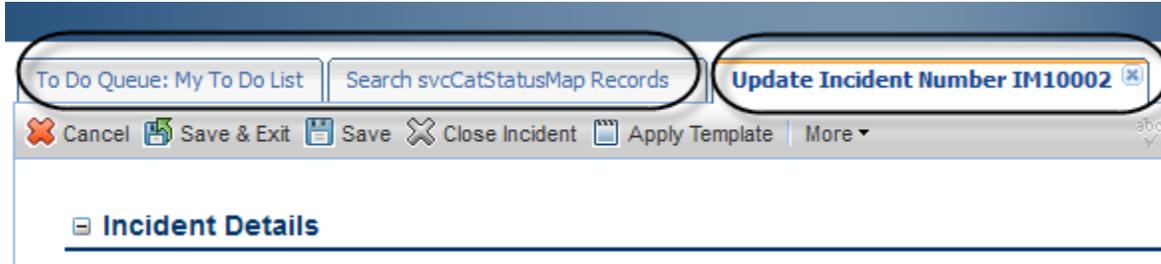
The link opens in another tab in your default browser (if your browser is configured such that it opens external links in a new tab).

- 3 The following warning screen displays. The two options allow you to select in which mode you want to open the web client in the new browser tab. By default, the mode used in the first browser tab (which requires no re-login) is selected. **Note:** The options vary with the web client modes used in the two browser pages.



- 4 Save your work in the original browser tab.

- In the new browser tab page, select one mode, and click **Continue** or press Enter.
 - If you select **Open the Service Manager ESS application**, a login page opens. After you log in, the web client opens in the new mode. **Note:** If you are using Trusted Sign-On (TSO), a “Login in progress” page will display instead and no login is required.
 - If you select **Open the Service Manager main application**, the web client directly opens in the original mode with the original SM tab pages recovered and the linked record displayed.

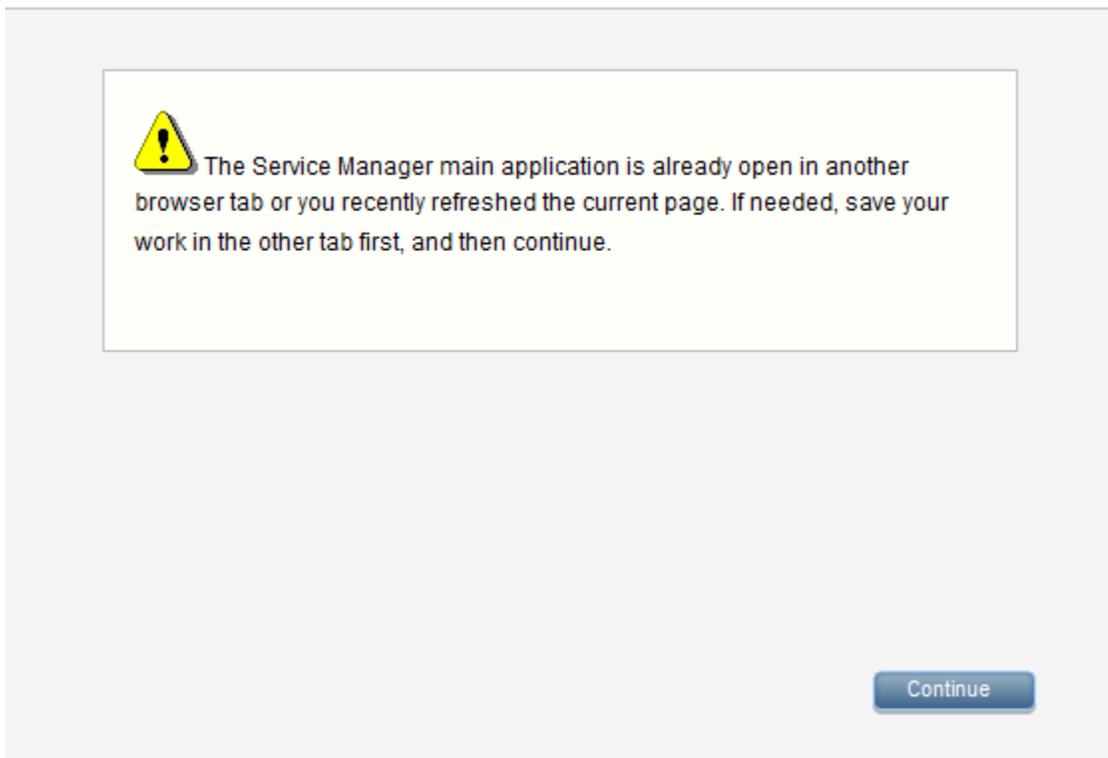


- Return to the original browser tab. The following message displays: The page has expired. Please close it. Close this browser tab, and continue your work in the new one.

Scenario 2: Open the web client in the same mode in two browser tabs.

In this scenario, you open the Service Manager web client in the same mode (for example, index.do) in two browser tabs in the same session. **Note:** The following example uses the Power (index.do) mode. In the ess mode, you can open only one tab page, and therefore the original tab page may not be recovered in the new browser tab if a different tab page is open.

- Log in to the Service Manager web client (index.do), open multiple SM tab pages and update one or more of the pages (for example, update a Service Catalog item) without saving.
- Launch the web client (index.do too) in another browser tab in the same browser session. The following warning occurs:



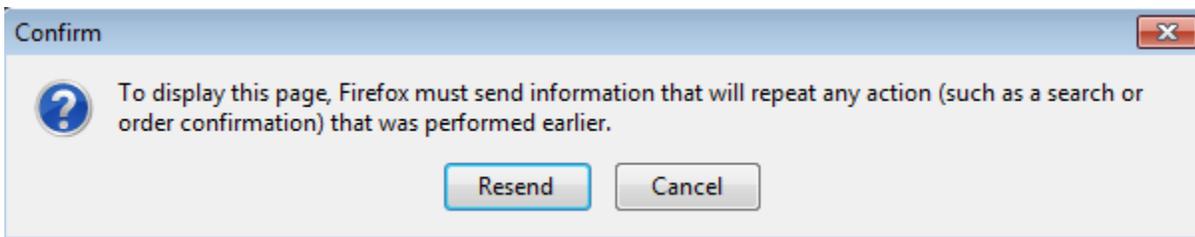
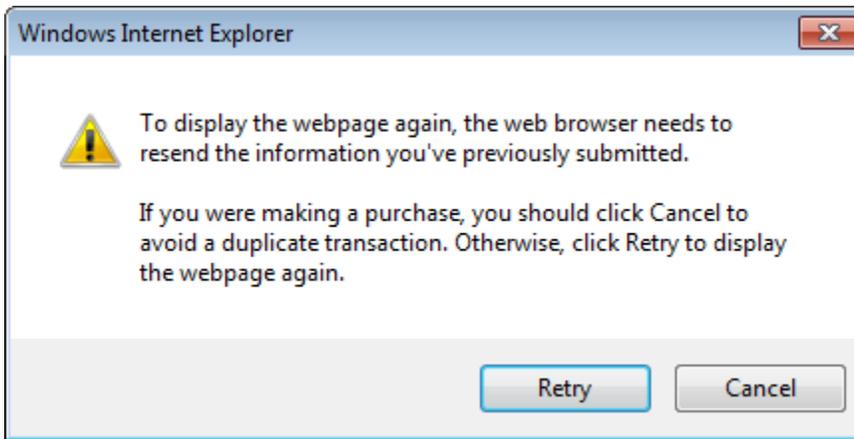
- 3 Save your changes in the original browser tab.
- 4 Go back to the new browser tab page, and click **Continue** or press Enter. The web client opens in the new tab page, with the original SM tab pages recovered.
- 5 Go back to the original browser tab. The following message displays: The page has expired. Please close it. Close this browser tab, and continue your work in the new one.

Known Issues

This enhancement has the following known issues.

Issue 1: Process Designer workflow tab pages (**Tailoring > Process Designer > Workflows**) that are open in the original browser tab cannot not be recovered in the new browser tab.

Issue 2: When refreshing the Service Manager web client in the new browser tab using the browser's Refresh feature, you may see a browser warning. Ignore the warning, and click **Retry** (in Internet Explorer) or **Resend** (in Firefox) to continue.



Issue 3: A warning page displays when downloading files from the browser. See [QCCR1E78426](#).

Issue 4: In a TSO environment, opening multiple links to the SM Web tier rapidly may cause unexpected errors or session timeouts.

Service Manager creates a temporary session during login. If a user opens multiple links too fast, the following may occur:

- The subsequent requests may be sent before the first request gets returned with a temporary session. The server therefore does not know if these requests are from the same browser session.
- The temporary session may be terminated at the server side after a successful login, and therefore all requests with the temporary session may result in a logout. This logout will direct the web client to a goodbye page, which will terminate the user's session at the server side.

- If the user has logged on to the web client, all subsequent requests will open up a warning page; only the most recent page is kept active, and the others are expired.

Accessibility Improvements

This release includes the following accessibility improvements for the accessible Web client.

Prerequisites: The accessibility features require the Service Manager 9.31 Web tier.

Ability to Use HTML Headline Tags in the Label, Wrap Label, and Group Widgets

Prior to version 9.31, the Web client does not use appropriate HTML headline tags (h1, h2, etc.) for HTML headers. This is problematic for screen readers used for accessibility.

To solve this issue, the following features have been introduced, which take effect only in the accessible mode (accessible.do and accessible-ess.do):

- In Forms Designer, a new property **Heading Level** is available for three types of controls: Label, Wrap Label, and Group. Its valid values are: 1 through 6 (1 represents h1, and so on). The Heading Level property has no default value. Once a valid value is specified, when rendered to HTML, the text for these widgets will be enclosed in the corresponding paired headline tags.
- The tab title of the current active tab is enclosed in the <h1> tag.

Accessing the System Navigator Using Keyboard Shortcuts

Prior to Service Manager 9.31, the Tab key can move the focus around all fields on the screen, but the focus never reaches the System Navigator. There are no other keyboard shortcuts that can be used to access the navigator area. See [QCCR1E59306](#).

As of Service Manager 9.31, users can use keyboard shortcuts to access the System Navigator. All elements in the navigator tree (buttons, tree panel, and tree nodes) are reachable by using **Tab** or **Shift + Tab** key commands in a default browser sequence.

Note: This enhancement works for all Web client modes: index.do, ess.do, accessible.do, and accessible_ess.do.

Limitations

- When JAWS is running, only Internet Explorer is supported.
- The keyboard shortcuts are not functioning when the focus is moved to the MySM content pane.
- If you navigate to pages opened from **Manage Favorites**, you cannot return to the system navigator using ALT + Q.

New Keyboard Shortcuts

The following table describes the supported shortcut keys.

Shortcut Key(s)	Description
Space	Expands or collapses the tree panel. Expands or collapses tree nodes that have children. Note: If JAWS is running with Virtual PC Cursor enabled (default), use " Ctrl +

Shortcut Key(s)	Description
	Space " instead.
Left/Right Arrow	The Left and Right keys expand or collapse tree nodes that have children. Note: If JAWS is running, this is not supported.
Ctrl + Alt + N	Moves the focus to the first toolbar button in the navigator.
Ctrl + Alt + M	Moves the focus to the first toolbar button in the main content pane.
Ctrl + Alt + L	If the current page is a list/detail page, moves the focus to the first toolbar button in the list pane.
Ctrl + Alt + D	If the current page is a list/detail page, moves the focus to the first toolbar button in the detail pane.
Alt + Q	Navigates through the following panes (not including the toolbar buttons) on the page: <ul style="list-style-type: none"> • Navigator + main content • Navigator + list pane + detail pane (if the active tab page is in the list/detail view) Notes: On triggering the Alt-Q keys, instead of focusing on the first element of each pane, the focus is remembered. Therefore, the remembered element is re-focused when the user returns to the panes. However, if the content of that pane is refreshed, the navigator will focus the first tree panel. Or, if it is the main content pane, the focus will target the frame window of that section. Pressing Tab once will cause the focus to target the first element in the browser's default sequence.

See also the *Service Manager 9.31 Accessibility Guide*, which is available from the Service Manager 9.31 help.

Manual Updates Required for Knowledge Management

Important: These manual updates are required only when you have upgraded your Service Manager server and clients to version 9.31 and stay with a previous version of the applications. If you have already upgraded to the 9.31 applications, these updates are no longer required.

Note: If you do not make these updates, an “Unexpected script” line will display on the Search Knowledgebase page:

```
Unexpected script: <script> //modify htmlviewer border in firefox var
iframe=parent.document.getElementsByTagName("iframe")[0]; if(iframe!=null) {
iframe.setAttribute("frameborder",0); } </script>
```

Perform the following steps to prevent the error line from occurring:

- 1 Log in to the Service Manager Windows client as a system administrator.
- 2 Update the Knowledge Management environment record.

- a Navigate to **Knowledge Management > Administration > Environment**.
 - b In the **Style text for search results** box, remove the following lines:


```
<script>
//modify htmlviewer border in firefox
var iframe=parent.document.getElementsByTagName("iframe")[0];
if(iframe!=null)
{
    iframe.setAttribute("frameborder",0);
}
</script>
```
 - c Save the environment record.
- 3 Update the kmknowledgebase.search.g format.
- a In Forms Designer, open the kmknowledgebase.search.g format in the Design mode.
 - b Select the HTML Viewer widget, and set its **Frameborder** property to 0 (zero). No border will be displayed for the HTML Viewer.
 - c Save the format.
- 4 Log off Service Manager and log back in for the changes to take effect.

Upgrade to LW-SSO v2.5 (Server and Web Tier)

As of version 9.30p5, the Service Manager Web tier and server have upgraded to LW-SSO version 2.5.

In the Web tier's lwssofmconf.xml file, a new parameter, secureHTTPCookie, has been introduced. The default is "true". This parameter must be set in combination with the secureLogin parameter in the Web tier configuration file (web.xml) so that LW-SSO can work correctly:

- If secureHTTPCookie is set to true, secureLogin must also be set to true;
- If secureHTTPCookie is set to false, secureLogin can be set to true or false as needed (you are recommended to set both to true in a production environment).

For more information, see the *Configure LW-SSO in the Service Manager Web tier* and *Configure LW-SSO in the Service Manager server* topics in the Service Manager 9.31 help.

New JavaScript Global Methods, JavaScript Functions, and Parameters

The following JavaScript global method was introduced in this release.

JavaScript Global Method	Description
setAppMessage	This function defines the message returned in the "message" attribute in a SOAP response. For details, see the <i>Service Manager 9.31 Programming Guide</i> .

JavaScript Function	Description
getBinary	A JavaScript function that returns the binary representation of a field. For details, see the <i>Service Manager 9.31 Programming Guide</i> .

The following new parameters were introduced in this release. For more information, see the *System Configuration Parameters* section in the Service Manager 9.31 online help.

Parameter	Description	Location
deadnodelocktimeout	The new locking mechanism implements the deadnodelocktimeout parameter. This parameter specifies the amount of time that must elapse before a process forcibly removes a lock from the Lock or LockShared table. Default: 10 (10 minutes must elapse before a record is forcibly removed.) Possible Values: No less than 10 minutes	<ul style="list-style-type: none"> Initialization file (sm.ini) Note: Does not require a restart of the Service Manager server.
fetchnotnullsystemp	This parameter specifies whether or not to fully enable the template merge functionality for tables that have a systemplate field (for example, the operator table). When this parameter is set to 1 (enabled) in the sm.ini file, records that have a non-NULL systemplate field merge the template record before they are passed to the query condition filter. As a result, records whose systemplate field is not empty will be included in query results. Default: 0 (Do not fully enable the template merge functionality). Possible Values: 0 (Do not fully enable the template merge functionality). 1 (Fully enable the template merge functionality).	<ul style="list-style-type: none"> Server's OS command prompt Initialization file (sm.ini) Note: Does not require a restart of the Service Manager server.
grouptimeout	This parameter allows you to configure the timeout value (in milliseconds) for Jgroups remote procedure calls. You can tune this value to keep the number of available nodes stable. It is recommended to set this parameter to a minimal value as long as it can keep the number of the available nodes stable. Meanwhile, the network latency between the web server and the HP Service Manager server should be small, otherwise the load balancer may forward	<ul style="list-style-type: none"> Server's OS command prompt Initialization file (sm.ini) Note: Does not require a restart of the Service Manager server.

Parameter	Description	Location
	<p>a request to a node that is not able to handle the request due to network latency.</p> <p>Default: 1000 (milliseconds)</p> <p>Possible Values: Any number of milliseconds from 300 to 10000</p>	
<p>jsaccesscmdregex: <regex> jsaccessfilewriteregex:<regex> jsaccessfilereadregex:<regex></p>	<p>These parameters specify access restrictions from JavaScript code for file access and command execution. This is required for security reasons so that users with Process Designer tailoring rights are not able to use the available Service Manager JavaScript APIs to directly access the underlying host file system and command line in an unauthorized way. These restrictions are described below:</p> <ul style="list-style-type: none"> • System administrator (sysadmin) users are allowed unrestricted access to the file system and command line • Non-sysadmin users are allowed unrestricted access as well by default (none of these configuration parameters is present); if any of these parameters is present, access is restricted as follows. <p>jsaccessfilereadregex:<regex>: A regular expression for the absolute paths of all files allowed to be read using the readFile(), and uncompressFile() JS functions</p> <p>jsaccessfilewriteregex:<regex>: A regular expression for the absolute paths of all files allowed to be written using the writeFile(), deleteFile(), makeDir(), uncompressFile() (output dir), and writeAttachmentToFile() JS functions.</p> <p>jsaccesscmdregex:<regex>: A regular expression for OS commands (including parameters) allowed to be executed using the sysExec() JS function.</p> <p>Notes:</p> <ul style="list-style-type: none"> • The following strings are not allowed in the command line run by sysExec(): " ", " ", ";", "`" (backquotes), "&&", "&", ">>", and ">" 	<ul style="list-style-type: none"> • Server's OS command prompt • Initialization file (sm.ini) <p>Note: Changing any of these parameters requires a restart of the Service Manager server.</p>

Parameter	Description	Location
	<ul style="list-style-type: none"> If the use of any of these mechanisms in the command line is needed, administrators can put the real command line in a .sh or .bat file, and run the .sh/.bat file in sysExec() instead. Audit warning messages will be logged in sm.log, if SM found that any JavaScript attempted to access unauthorized file/paths or run unauthorized commands, or used those forbidden strings in the command line run by sysExec(). The messages include the file/paths to be accessed, or the commands to be run, and the user's login name. <p>Default: By default, none of these parameters is present, which means no JavaScript access restrictions for file access or command execution.</p>	
maxGroupCacheSize	<p>This parameter defines the maximum number of groups that can be cached in the user's browser when the user navigates through the groups in a record list.</p> <p>Default: 300</p> <p>Possible Values: No less than 300</p>	<ul style="list-style-type: none"> Web tier configuration file (web.xml) <p>Note: Requires a restart of the Web application server.</p>
recordListArrayDisplayStyle	<p>This parameter defines how array fields are displayed in record lists (for example, To-Do queue lists, lists in the list pane of list/detail pages, and lists generated by clicking the Fill button), and it takes no effect on table objects (for example, tables in the detail pane of a list/detail page). The parameter can be set to one of the following values:</p> <ul style="list-style-type: none"> 1 (default): The original content length of each array column value is truncated to the value defined in the recordListArrayMaxChars parameter. 2 (recommended): Array type columns are not displayed in record lists. This option is recommended because displaying array fields in record lists can have a negative impact on performance. 3: Keep the original content length of each array column value in record lists. This is the old behavior when 	<ul style="list-style-type: none"> Web tier configuration file (web.xml) <p>Note: Requires a restart of the Web application server.</p>

Parameter	Description	Location
	<p>this parameter was not introduced.</p> <p>Note: The setting of this parameter has no effect on the Export to Text File functionality. When you export a record list to a text file, array fields are always exported with their original content.</p> <p>Default: 1 Possible Values: 1, 2, and 3</p>	
recordListArrayMaxChars	<p>This parameter defines the maximum allowed field length of any array fields that appear in record lists. It takes effect only when the recordListArrayDisplayStyle parameter is set to "1".</p> <p>Default: 100 (bytes) Possible Values: No less than 1</p>	<ul style="list-style-type: none"> Web tier configuration file (web.xml) <p>Note: Requires a restart of the Web application server.</p>

Obsolete Parameters

Server parameter releasesem is obsolete in this release. See [QCCR1E79393](#).

Open Source and Third-Party Redistributables Package

In this release, the web tier package and each of the server packages contain a compressed file, sm9.31.0022_Redistributables.zip. This zip file contains all open-source and third-party source code used in this release, as well as associated license agreement files.

Note: The content of this .zip file is an updated version of that in the Redistributables folder on the Service Manager 9.30 installation media.

For a complete list of open source and third-party acknowledgements, see the *Service Manager 9.31 Open Source and Third-Party Software License Agreements* manual (in PDF format).

Documentation Release

The Service Manager and SRC online help, and other documents have been updated for this release. You can download them from the HP Software Manuals site at: <http://h20230.www2.hp.com/selfsolve/manuals>

Service Manager Documentation

- *Service Manager 9.30 Interactive Installation Guide* (SM_930_Interactive_Installation_Guide.zip)
- *Applications Patch Manager Guide*
- *List of Objects Added or Updated by the 9.31 Applications Patch Release*
- *Interactive Upgrade Guide* (SM_931_Interactive_Upgrade_Guide.zip)

- *Upgrade Guide (in PDF format)*
- *Upgrade Assessment Toolkit User Guide*
- *Mobile Applications User Guide*
- *Knowledge Management Search Engine Guide*
- Online help (SM9.31_help.zip)
- *Open Source and Third-Party License Agreements*

About the updated Service Manager 9.30 Interactive Installation Guide

This release includes an updated version of the *Service Manager 9.30 Interactive Installation Guide*. Some document fixes and enhancements have been made to this document; this document is still based on Service Manager 9.30. However, KM Solr Search Engine installation and configuration information has been moved from this document to the *Service Manager 9.31 Knowledge Management Search Engine Guide*, which applies to the Service Manager 9.31 Solr Search Engine.

How to access PDF manuals from the online help

A large number of PDF manuals (*Processes and Best Practices Guide*, *Web Services Guide*, *Document Engine Guide*, etc.) are embedded in the online help. You have several ways to access them:

- If your online help is deployed on a web server and accessible from a URL like http://<web_server_host>:<port>/SM_help, you can access a list of embedded PDF manuals from this URL: http://<web_server_host>:<port>/SM_help/Content/Resources/PDF
- Search the online help or use document links in the help
- From the SM9.31_help.zip\Content\Resources\PDF folder

Important: PDF manuals embedded in the online help may be updated after the initial release. To check for recent updates or to verify that you are using the most recent edition, visit the following URL: <http://h20230.www2.hp.com/selfsolve/manuals>. You can download the latest version of a PDF manual to replace the old version in your online help (in the PDF folder described above) so that you can keep your online help up-to-date.

How to update your online help

To deploy the new online help, extract the SM9.31_help.zip file, and then deploy the content in a new folder or simply replace the entire help content in your existing folder with the new version. For detailed instructions, see the *Service Manager 9.30 Interactive Installation Guide*.

Service Request Catalog Documentation

- *Interactive Installation Guide (SRC_1.4_Installation_Interactive_Guide.zip)*
- *Deployment and Sizing Guide*
- *Customization Guide*
- Online Help (embedded in the product)
- *Open Source and Third-Party License Agreements*

Support Matrix

The *Service Manager 9.31 Support Matrix* document includes support matrix information for both Service Manager and Service Request Catalog 1.4. The document is available from:

http://support.openview.hp.com/sc/support_matrices.jsp

Certifications

- VMWare vSphere 5

VMWare vSphere 5 (VMWare ESXi 5.0) has been certified in this release, with vMotion supported.

As the response time will increase during the vMotion, it is important to consider tuning SM's Failure Detection (FD) settings to prevent the premature removal of SM nodes from the cluster. This is especially important if you have set the FD setting to a value smaller than the default (Default: timeout=10 seconds; max_tries=5). The FD settings are defined in udpcluster.xml and udp.xml located in the Service Manager server's RUN directory.

For information about vMotion recommendations and known issues, see whitepaper *Service Manager 9.31 vMotion Test Report*, which is available from the HP Software Support web site at:

www.hp.com/go/hpssoftwaresupport

- SQL Server 2012

- Firefox 15

Firefox 15 has been certified on the Service Manager Web tier and Service Request Catalog in this release.

- Oracle Enterprise Linux 6.3/6.2/6.1/6.0

- Red Hat Enterprise Linux 6.3/6.2/6.1/6.0

Enhancements

This release includes the following enhancements.

Service Manager Enhancements

SCR	Module	Problem	Fix
QCCR1E77839	Server	SRC has an issue in which it cannot authenticate a password if there is a special character, such as a colon (:), entered into the password field. Note: SRC cannot use the same encryption algorithm as the SM Windows or Web client.	Refined the protocol between the SRC client and the SM server.

SCR	Module	Problem	Fix
QCCR1E76409	Server	The SM server cannot read the language parameter in the SOAP header of a Web Service call and respond with proper localized messages. Because of this limitation, when a user logs on from Mobility with a non-English client, the messages are not localized.	When users log on from Mobility with a non-English client, the messages are properly localized.
QCCR1E76796	Server Applications	Service Manager needs to provide the ability to turn on debugging dynamically.	Service Manager now provides the ability to turn on debugging dynamically for a user session or scheduler. For more information, see Dynamic Debugging of User Sessions or Schedulers .
QCCR1E76016	Server	Search results do not show the verb with suffix "suru" when users search for the related Japanese noun.	Search results now show the verb with suffix "suru" when users search for the related Japanese noun.
QCCR1E58439	Applications	There is a need for proposing relationship changes for CIs that need to be approved and only be processed after a defined change workflow has been followed. Currently it is only possible to change relationships immediately but not to plan them for future change.	Users now can plan CI relationship changes using the "Expected State" Wizard, which is used for both CI attributes and relationships. For more information, see Planning CI Relationship Changes from a Change Record .
QCCR1E76329	Applications	When a user searches "Order from Catalog" to search the Catalog by using keywords, the search retrieves items as well as categories and subcategories. There should be an option to show only bundles and items when searching in "Order from Catalog."	There is now an option (the Bundles and Items only checkbox) to show only bundles and items when searching in "Order from Catalog."
QCCR1E76985	Applications	When a search for terms like "server monitoring" is performed, the search produces results for either "server" or "monitor" separately (server OR monitoring). Instead, the search results should be for the combined search terms (server AND monitoring).	Now two radio buttons are available to change the search mechanism to AND or OR: Any of these words: Search for catalog items that contain any of the keywords you enter. All of these words: Search for catalog items that contain all of the keywords you enter.
QCCR1E76093	Applications	The UCMDB Content Pack should be merged into the Service Manager OOB functions.	Merged the UCMDB related functions into SM OOB and enhanced the UCMDB Integration Guide.

SCR	Module	Problem	Fix
			For more information, see UCMDB Integration Enhancement .
QCCR1E79068	Windows Client	The Enterprise Collaboration integration only supports the Incident Management and Service Desk Interaction modules. Records in the Change Management module do not have conversations saved or linked to them. Change Management users also expect to see this collaboration feature in the Change Management module.	The Enterprise Collaboration integration now also supports the Change Management module. Conversations can be created and saved in Change or Change Task records. For more information, see HP Service Manager Collaboration (SM Collaboration) .
QCCR1E78234	Web Client	In the Web client, when users have an array for which they have to select CI's, the multiple selection feature is available in device.qbe.g. When they click the checkbox "check all" and then click on one single marked CI, all records are transferred to the Change or Incident that they are updating. However, there is no mechanism to deactivate the "Check All" checkbox, retain the "Fill Selected" button, and then be able to check single CI's.	Users can now deactivate the "Check All" checkbox but retain the "Fill Selected" button and then check single CI's, by clicking single rows (not their first-column drilldown links).

Service Request Catalog Enhancements

SCR	Problem	Fix
QCCR1E78743	Add Service Request Catalog (SRC) support for fulfillment approvals (for example, change and request management approvals). Currently, SRC only supports interaction approval.	This feature is implemented as of SRC 1.4.
QCCR1M2569	In the SRC client, prices display as 0.00 when a catalog item does not have a price value in the underlying SM database.	Prices are no longer displayed when the SM value is NULL.
QCCR1E75761	SRC always passes the date/time field value as it is specified in user selections. This behavior does not change even when there is a "Mandatory" requirement for this user selection.	The Date/time field will now allow an empty value if a field is not mandatory.
QCCR1E78729	Enhancement Request: The customer would like the full screen to be available for inputting customer information when submitting a catalog request.	The UI design has changed in the latest version of SRC to use space more efficiently.
QCCR1E78728	Enhancement Request: Make SRC screen blurring on submit request configurable.	The UI design has changed and the blurring effect is removed.

SCR	Problem	Fix
QCCR1M2376	This is an enhancement request for more information on how to use SRC in different languages.	SRC derives its language specifications from the default language specified in the end-user's Web browser. This is now specified in the SRC Web Help for end-users. More in-depth discussion of the language settings for system administrators is discussed in the Installation Guide.
QCCR1E78235	<p>The "Who is the request for?" field in SRC request submission page should be removed or made read-only.</p> <p>OOB SRC allows the requester to change the service recipient (Who is the request for?) while submitting the request. The following issues have been identified when User A submits the request for User B:</p> <p>The Interaction for this request has the requester's name in both contact and service recipient fields in SM.</p> <p>The Requests created using this option do not display in the recipient's dashboard in SRC.</p> <p>The system allows User A to submit requests for User B that User B is not entitled to.</p> <p>The system enforces Interaction approval (Line Manager Approval) based on the requester instead of the recipient.</p>	The switch that makes the "Who is the request for?" field editable is set to false by default.
QCCR1E78956	SRC contains the Request Inbox, where the service requests and support requests are listed. The title of the Service Requests list is as follows: "Your subscription requests". Some catalog items can be linked to a subscription, but not all of them will have a subscription. For these items, the title is incorrect and confusing.	Changed the name to "Your Service Requests" in Account Inbox.
QCCR1M3475	SRC loads Service Categories when the user logs in. However, if the number of Service Categories is high, the login process can take a very a long time.	Service Categories are now loaded after the user logs in.
QCCR1E73794	When an end user selects an information-only item from the Support Catalog in SRC, it displays the following information. This information causes confusion to end users, as they are not actually submitting a request.	Removed this information for information-only items.
	<p>-----</p> <p>When you submit the request, provide this information</p> <p>Description:</p>	

SCR	Problem	Fix
	Describe what you need to solve your problem. Contact Information: Tell us the best way to contact you. Attachments: Attach any related documents or specifications. -----	
QCCR1M996	The SRC 1.20 documentation is full of errors and missing information.	Documentation has been improved in the Installation Guide and a new Customization Guide has been created to provide more thorough explanation of Service Request Catalog features and configuration.

Fixes

This software release includes the following fixes.

Server

SCR	Problem	Fix
QCCR1E31861	Failed login count does not increase when using LDAP. As a result, users who enter their passwords incorrectly too many times are never locked out.	Failed login count will increase when using LDAP, and the account will be revoked if the attempt count exceeds the specified limitation.
QCCR1E32145	Search Results are inaccurate against the operator table if an operator's Template (systemplate) field has a value. The operator record will not display in a Search, even though the selection criteria says it should.	Operator records that have a non-NULL systemplate field now will merge the template record before they are passed to the query condition filter. In the old versions, these records were passed to the query filter before they merged the template and were thus incorrectly filtered out. A new parameter (fetchnotnullsystemp) is introduced in sm.ini. You need to set "fetchnotnullsystemp:1" to enable the template merge functionality. However, it may cause performance issues if the operator table has more than 10 thousand records whose systemplate field is not NULL.

SCR	Problem	Fix
QCCR1E54795	Exporting a large data set (for example, 40,000 incidents) to Excel resulted in a servlet crash with an out-of-memory error.	Added a limit as to how much Java heap is expended for a large XML response. The default threshold will be 50% of max Java heap.
QCCR1E75022	There is a dedicated thread in the software loadBalancer that periodically requests the RTE Server to update the nodes information. However, the timeout value for this thread appears to be too small, which prevents the node information from being updated correctly. As a result, the number of available nodes fluctuates wildly.	To resolve this issue, the grouptimeout parameter has been introduced in sm.ini. This parameter allows you to configure the timeout value (in milliseconds) for Jgroups remote procedure calls. You can tune this value to keep the number of available nodes stable. Default is 1000, minimum is 300, and maximum is 10000. It is recommended to set this parameter to a minimal value as long as it can keep the number of the available nodes stable. Meanwhile, the network latency between the web server and the SM server should be small; otherwise the load balancer may forward a request to a node that is not able to handle the request due to network latency.
QCCR1E75861	An array of structures nested within an array of structures in a dbdict table does not work in Oracle databases.	An array of structures nested within an array of structures in a dbdict table works as expected in Oracle databases.
QCCR1E75975	In a vertically scaled system, one of the servlets hangs and a core file is generated on the production server. Every time a user logs in on the servlet, a "Signal 11" error is generated, and most times a core file as well.	The defect that caused the "Signal 11" when connecting to an LDAP Server over SSL has been fixed.
QCCR1E76056	Cannot search Change tickets with a Change ID.	Now, tickets that have a Change ID can be searched as expected.
QCCR1E76258	Memory Leak messages are found in the log file after the Service Manager system starts and then shuts down on Unix.	Fixed the memory leak after the Service Manager system starts and then shuts down on Unix.

SCR	Problem	Fix
QCCR1E76399	<p>Partial System Outage occurs when a node in the cluster quit responding to requests. This behavior occurs when the Transparent Application Failover (TAF) feature on Oracle is enabled. When this issue occurs, the following messages are logged repeatedly:</p> <pre> 9568468(36438057) 05/06/2012 13:50:37 RTE E Unable to parse date for column SYSMODTIME 9568468(36438057) 05/06/2012 13:50:37 RTE E Incomplete record, could not process data for table NUMBERM1 in file number identified by key: name="incidents" 9568468(28049409) 05/06/2012 13:50:37 RTE E Error in fetching sequence number for file incidents 9568468(36438057) 05/06/2012 13:50:37 RTE E date format '06-MAY-12' unrecognized in sqllda </pre>	<p>Service Manager now detects the TAF configuration and prints warning messages to the sm.log at startup.</p> <p>The warning messages are listed below:</p> <pre> 2852(2844) 07/31/2012 13:06:34 RTE !!!!!!!!!!!!!!!!!!!!!!!!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! 2852(2844) 07/31/2012 13:06:34 RTE ServiceCenter does not support Oracle TAF. Please remove TAF configuration and restart ServiceCenter to avoid running into outages. 2852(2844) 07/31/2012 13:06:34 RTE !!!!!!!!!!!!!!!!!!!!!!!!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! </pre>
QCCR1E76623	<p>Signal 11 errors are still received when SpiderMonkey executes Garbage Collection even after a hotfix to address the problem was applied. However, the occurrence of the Signal 11 error is not as frequent as before and it seems to occur only in the SMOO process. Because of this, SM users can continue without interruption.</p>	<p>This issue occurred when the functions of a JavaScript package were enumerated. Protecting the iterator from being freed when enumerating the JS package functions prevents the issue.</p>
QCCR1E76875	<p>JavaScript does not properly handle binary data.</p>	<p>Added a new JS function, getBinary, to retrieve the binary representation of a field. Following is an example of using this JS function:</p> <pre> var bb = new SCFile("bbtosysattachments"); var rc = bb.doSelect("true"); var attachmentObj= new Attachment(); attachmentObj.value = bb. getBinary("att_attachment") attachmentObj.name = bb.att_filename; attachmentObj.type = "excel"; </pre>
QCCR1E77025	<p>One of the SM Servers (nodes) is generating core dumps and causes all other servers to fail.</p>	<p>Now, when the rc cache is cleared, a flag will be set. Before accessing the rc cache again, this flag will be changed; If the flag is set, accessing the cache will be skipped, and prevent the Signal 11 error from happening.</p>

SCR	Problem	Fix
QCCR1E77101	<p>Investigate if any improvements can be made in the timing of the following messages, to avoid unnecessary actions by the end user:</p> <p>"Server running low on memory, close some application tabs and try again"</p> <p>"Server running low on memory, relogin to the system"</p>	<p>When the low memory condition is detected, SM will call the JVM Garbage Collection to decrease Java memory usage. SM will not send a "low on memory" message unless the server is still low on java memory after garbage collection is called.</p>
QCCR1E77126	<p>When using "all of these words" in Advanced Search, other forms of the search term do not appear in the results. For example, a search that includes the term "ran" does not return results that contain "run", "running" and "runs."</p>	<p>When using "all of these words" in Advanced Search, different forms of the search term appear in the results.</p>
QCCR1E77312	<p>The following warning message is recorded incorrectly in the sm.log file:</p> <p>"W could not find field "1" in dbdict for file activity"</p>	<p>The warning message will not be recorded in the sm.log file.</p>
QCCR1E77305	<p>Windows core dump file is very difficult to analyze with Microsoft Visual Studio or Windbg. The stack in the dump file is of little use.</p>	<p>Improved the core dump file generation to make it easier to analyze with Windbg.</p>
QCCR1E77491	<p>After applying a hotfix, a Signal 11 error is still received but only during the SMOO process.</p>	<p>No Signal 11 error is received during the SMOO process.</p>
QCCR1E77559	<p>When applications use the SQLSelect RAD panel, the associated database cursors are left open.</p>	<p>Now when the panel exits, the statement handle is closed as well as the cursor.</p>
QCCR1E77589	<p>Signal 11 errors and core dumps are still being created after applying 9.30.p3.hf9. This issue occurs when a column's name is too long.</p>	<p>When a column's name is too long, an error is recorded in the server log (sm.log) to suggest the use of an alias.</p>
QCCR1E77983	<p>Using a view that executes a bad query may result in a large memory leak. When this occurs, servlets that have the LowMem flag set to "Y" do not accept sessions.</p>	<p>Fixed the memory leak when using a view that executes a bad query.</p>

SCR	Problem	Fix
QCCR1E78435	Users have been reporting LDAP servers respond slowly to SM 9.30. The issue seems to occur because of the DomainDnsZones.us.qdx procedure, which should be ignored. Other applications have had this issue and the solution was to prevent the applications from calling the DomainDnsZones procedure. One way to do this would be to have a parameter to turn off LDAP_OPT_REFERRALS.	The openldap library has a problem when calling the ldap_set_option() function to turn LDAP_OPT_REFERRALS off with parameter value LDAP_OPT_OFF saved in a variable. This is resolved by a code fix.
QCCR1E78530	Executing a query that does not parse results in a small memory leak.	This issue occurs because when the RAD parser fails to parse a query, the parser will process the query with escape chars, and then try to parse again. However, the first pass of query will not free the allocated String which contains the parsed result, which causes the memory leak to occur. The allocated string is now released, and eliminates the memory leak.
QCCR1E78828	The BSM/SM integration using the CI Alert Retrieval Service fails to parse JSON data.	This issue occurred when the JSON file length exceeded 32KB. The RTE code now works as expected when the JSON file length is larger than 32KB.
QCCR1E78959	When running the Mobility client with memdebug:1 or memdebug:400, a memory leak may occur when a user logs in and then logs out.	The memory leak from the Mobility client is fixed.
QCCR1E79274	A memory leak occurs in string.cpp.	Fixed the memory leak.
QCCR1E79393	A semaphore is not released and locks the entire production environment, and the releasesem SM command cannot release the semaphore. An error similar to the following occurs in the server log: "WARNING: semaphore 9 held by pid <xxx> tid <yyy> for <zzz> milliseconds."	Removed the releasesem command, because it cannot work on Windows or Unix.

SCR	Problem	Fix
QCCR1E80282	Some users cannot work in Service Manager because their all lower-case operator record name fields are being changed when they try to log in to SM. Specifically, the Service Manager operator name field is populated with all lower-case values. The sAMAccountName field in Active Directory has mixed case. When the operator logs in the operator record name field will be updated with mixed case. This issue occurs if the user enters a wrong password during the log in.	The user name is no longer updated with the mixed case username.

Web Tier

SCR	Problem	Fix
QCCR1E48469	The Web client ignores special characters when retrieving a source record for hover pop-up, and incorrectly displays records that should not be considered a match.	The Web client now includes special characters in searching for source records to display in hover pop-ups, and correctly displays the message ("No record found."), if a match cannot be found.
QCCR1E57203	Focus is not returned to the Related Records subsection of a record after opening and returning from a related record. Instead, the focus is set to the Assignment Group field. The focus should be returned to the Related Records subsection.	By saving the correct focus value on the Web tier, the focus can be returned to the selected related record.
QCCR1E59306	The navigation pane (system navigator) cannot be reached by using the Tab key. The Tab key can move the focus around all fields on the screen, but the focus never reaches the system navigator. There are no other shortcut keys that can be used to access the navigator area.	Users now can access the system navigator, using different combinations of keyboard shortcuts. For details, see accessibility improvement Accessing the System Navigator Using Keyboard Shortcuts .
QCCR1E59445	Users receive no warning when JavaScript is disabled in their web browser.	If JavaScript is disabled in a user's browser, the user is redirected to a separate page displaying a message that states Service Manager requires JavaScript be enabled. In addition, the user is allowed to navigate to the login page again once JavaScript is enabled.
QCCR1E59611	Need to offer the accessible Web client for disabled users. Messages and alerts are classified with an icon. Those icons do not have alternative text that can be used by screen readers. All icons and graphical elements should have an alternative text like the following: 	Alternative text has been provided for icons used in messages and alerts.

SCR	Problem	Fix
QCCR1E67814	<p>Performing a copy of a field in a record by using CTRL+C in the Web client locks the record, even if lock on display is set to false or NULL.</p> <p>Note: This behavior does occur in the Windows client.</p>	Performing a copy (CTRL+C) from a field on a record in the Web client will not lock the record.
QCCR1E67966	Marquees are not displaying on Employee Self Service (ESS) formats when the format is first loaded.	Marquees now display as expected.
QCCR1E70795	When views in the Web tier are refreshed multiple times, the columns of any views that are grouped shrink.	When views in the Web tier are refreshed multiple times, the columns of any views that are grouped no longer shrink.
QCCR1E71520	The hover sub-form for the Affected CI field has a scrollbar. This is inconsistent with other hover sub-forms.	The sub-form width has been adjusted properly to avoid the scrollbar.
QCCR1E73015	When a user follows a link from a Service Manager HTML email, modern browsers with tab browsing support open this link in a new browser tab page by default. However, if user has already logged in to the Service Manager Web Client, the newly opened page causes the original working page to automatically log out. This may result in front tier data loss depending on the application modes of the two pages.	<p>Changes have been made to allow only one live Service Manager Web client in the same Web browser session. Provide an interactive page and options to the user to determine how to proceed, and to give the user an opportunity to save their current work.</p> <p>For more information, see Enhanced Web Client Session Management to Prevent Data Loss.</p>
QCCR1E73498	When editing a field that allows a hover, such as a contact on an Interaction, the hover field data conflicts with the hover form. The hover maintains the original information regardless of whether the data in the field has changed or is blank. Additionally, when a user begins editing the contact data, the cursor jumps to the end of the contact when the first letter is typed.	When editing a field that allows a hover, the hover form changes accordingly to return correct data. Additionally, the cursor stays in place while a user is editing the field data.
QCCR1E75728	<p>In the accessible Web client, the paging controls and Count Records button do not work. Because of this, users cannot navigate through the pages.</p> <p>Note: This behavior only occurs in Internet Explorer.</p>	In the accessible Web client, the paging controls and Count Records button now work well.

SCR	Problem	Fix
QCCR1E76022	The Web client does not use appropriate HTML headline tags (H1, H2 etc.) for HTML headers. This is problematic for screen readers used for accessibility.	<p>The Web client now uses appropriate HTML headline tags (H1, H2 etc.) for HTML headers. To achieve this, in Forms Designer, a new property "Heading Level" is available for the following widgets:</p> <ul style="list-style-type: none"> - Label - Wrap Label - Group <p>Valid values of "Heading Level" are 1 to 6 (default is empty). Once a value is specified, when rendered to HTML, the text for these widgets will be enclosed in the corresponding HTML headline tags (h1 to h6).</p> <p>In addition, the tab title of the current active tab page is enclosed with the <h1> tag.</p> <p>Important: These features are only applicable to the accessible mode (/accessible.do and /accessible_ess.do).</p>
QCCR1E76395	Service Manager does not track sub-tabs when a user starts a sequence of changes (such as in a wizard). When the sequence is finished, the previously active sub-tab is not restored.	<p>The active sub-tab will be restored after a sequence of changes, except for specific focuses that are set by SM Apps. The tab containing the focused field will become active when the focus is set by SM Apps.</p> <p>Known issue in Internet Explorer 7: A tab containing an HTML Editor often becomes active after a sequence of changes.</p>
QCCR1E76667	On the Web client login page, when you use a non-English locale and log in with a wrong username/password, the error message is displayed as the following: "?????".	By directly outputting the error message without conversion, the error message is displayed in the Web client login page correctly.
QCCR1E76793	If users are kicked off from the Service Manager (for example, by the inactivity timer), they cannot continue to operate in BSM 9.12.	The LW-SSO token is no longer cleared when users are kicked off from Service Manager, so users can continue to operate in other applications with LW-SSO enabled.
QCCR1E77415	When a record contains special characters in a multi-line text field, the Web client converts the characters into their HTML code representations in Print Preview. For example, quotation marks are replaced by ", and a greater than sign (>) by >.	Print Preview can display the quotation and greater than markers correctly.

SCR	Problem	Fix
QCCR1E77488	The auto-complete function for "select only" combo box fields has incorrect behavior in the Web client. For example, if first value is "two" and the second value is "tw" in the Web client, when you select "tw" and then click anywhere, the auto-complete function incorrectly uses the value "two."	The combo box now matches the whole string before matching the prefix of the available options.
QCCR1E77494	There is a hint when you highlight the "last interaction" button in the Web tier: "Go to Most Recently Saved Interaction Alt+F5". However, nothing happens on clicking Alt+F5. If you select the button via mouse cursor, you will go to the last interaction as expected.	Re-added key handling for the F5 key. Now, the Alt-F5 key command (last interaction) works as expected.
QCCR1E79109	Web client images are not displayed at the correct size when forms are first rendered in the Web client of Service manager 9.30 Patch 3.	Images are rendered at the appropriate size in the Web client.
QCCR1E79474	The first record in an associated record list is always deleted even if the record you are trying to delete is not the first.	The selected record is deleted as expected.
QCCR1E79840	No results are returned when using MySM with non-English characters defined in a RAD Query.	The correct records are returned.
QCCR1E80208	In the old style menus that were used to navigate Service Manager, the JAWS screen reader reads the following when hovering over the icons for Service Desk, Incident Management, and similar: "OP 16 /cm graphic on mouse over link graphic."	This issue occurs because the image and the link have the same function. This issue has been resolved by setting the image so that it cannot receive focus.

Windows Client

None.

Applications

SCR	Problem	Fix
QCCR1E80005	Search results are not constrained by the "Max Number of Documents Returned from a Search" setting in a KM environment record. The Search result count is wrong.	The behavior of the pagination function has been changed to prevent this issue.
QCCR1E80049	An unexpected page is displayed after you search Incidents with the "Autoformat Date View" view.	Incident qbe list is displayed after you search Incidents with the "Autoformat Date View" view.
QCCR1E80035	The Approval Log is uneditable.	The Approval Log is now editable.
QCCR1E80053	The Cancel button does not work as expected in the Incident qbe list.	The Cancel button works as expected in the Incident qbe list.
QCCR1E79689	<p>When searching knowledge from an Interaction record and then clicking the Use Solution button in a knowledge document, a JavaScript error occurs:</p> <pre> Process panel run.pre.exp in RAD se.call.process encountered error in line 12 (se.call.process,run.pre.exp) Cannot evaluate expression (se.call.process,run.pre.exp) Cannot evaluate expression (se.call.process,run.pre.exp) Script <UNKNOWN> line 4: ERROR TypeError: vars.\$query has no properties at char 1 Unrecoverable error in application: se.call.process on panel run.pre.exp </pre>	The JavaScript error will no longer display in the kmdocument page.
QCCR1E79969	The Request for field cannot be re-selected due to the operator validation.	The request for field can now be re-selected.
QCCR1E79584	The functions, Export to Text and Export to Excel, do not work in Service Catalog QBE lists.	The functions, Export to Text and Export to Excel, now work as expected in Service Catalog QBE lists.
QCCR1E79520	When you select the "Contact Full Name" field in a QBE list, the query will contain one join table and is not handled properly.	The join table scenario is now handled properly, and the query is appended to the correct table. Therefore, the "Contact Full Name" field appears in the QBE list as expected.
QCCR1E79324	A full re-index on the knowledge library fails if there is an empty default locale.	The default locale is set to "en" for English if user's login language code is not set.
QCCR1E78966	Columns that were added when a view was created are not displayed.	Columns that were added display correctly when a view is created.

SCR	Problem	Fix
QCCR1E78794	Users cannot set an empty value for assignee.	Users can reassign incident assignee in the Mobility console.
QCCR1E78591	Service Request Catalog (SRC) does not accept case-insensitive login.	This issue occurs because of the JavaScript ScAPI_svcCatOperator canRequestOnBehalf() function. The JavaScript function has been modified so that SRC now accepts case-insensitive login.
QCCR1M4186	Service Manager allows a user to check Subscription for a Support Catalog Item.	Modified format svcCatalog.item and related formatctrl to disable the "Create Subscription" check box when it is a Support Catalog item.
QCCR1E77985	After setting up Mandanten security, the order on behalf feature does not consider the Mandanten settings of the user we order for. This behavior occurs when special additional input is requested by using the User Options. This creates a major security issue, because the data cannot be correctly validated. Additionally, because SRC caches the data, the system shows only the data from the cache of the logged in user, but does not start a new query for the person for whom we order on behalf of.	The getOptionsLookup function in the SRC API has been modified.
QCCR1E77825	An Error record appears in the schedule table when closing an Incident which is related to an Interaction. The \$allow.save equals false statement prevented the Incident from being updated.	Changed the background status to set \$allow.save=true and therefore to pass the validation.
QCCR1E77640	When submitting a new interaction request, the start time of SLA is not calculated correctly. If you wait for more than 5 minutes after an interaction was created, and then update and save the interaction, the SLOs are displayed incorrectly. However, if you make the update before the 5 minutes passed, then the SLOs appear as expected.	Now, when the Interaction is escalated, the SLOs are related and will be active and display as expected.
QCCR1E77586	The caption on Config Change files is still not always shown even after applying a fix.	This issue is resolved from the application patch side. The am.join.query process has been modified to properly set the \$join.query local variable to true when there is already a CI type selected.
QCCR1E25301	Error occurs when processing the cm3rin eventin record if an array of structures is the last field in the cm3r dbdict.	No error occurs when processing the cm3rin eventin record.
QCCR1E31207	Focus is not maintained on Advanced Filter tab of the Search screen after adding filter criteria. The applications appear to not keep track of the focus in this case.	Focus is set to the Filter tab when the wizard exits.

SCR	Problem	Fix
QCCR1E5878	When adding filter criteria, a fill value sometimes displays incorrect values when using a multi-level field chooser. The link is generated by the filter based on field type. However, for a related object such as a multi-level field chooser, the link does not apply.	The fill value will display correct values when using a multi-level field chooser.
QCCR1E31628	The context search wizard does not work properly on a non-English system. Selecting from the list of context definition actions fails to take you to the next appropriate screen. Instead, you are prematurely exited out of the wizard and taken back to the previous screen.	The context search wizard works properly on non-English systems. Selecting from the list of context definition actions takes you to the next appropriate screen.
QCCR1E55084	When saving a change record that has a non-numeric value in the EXT. Project Ref field and the RDBMS is Oracle, the following error message is received: "sqociExec error: sqlcode=1722 message=ORA-01722: invalid number"	Added a Format Control Validation entry that prevents users from entering non-numeric values.
QCCR1E55765	When a relationship between a problem and a known error record is deleted using the Options Menu in a problem record (click Related > Known Error > View, select a related known error record and then click the Delete button), Service Manager is not clearing the parent.problem field in the known error record. This causes an issue when someone tries to close the problem record. Note: There is a RAD routine called check.open.related that is called from the rca.close Process record in the rootcause object record that checks to see if there are any open known errors before it allows you to close the problem. The RAD routine checks to see if the parent.problem record is populated in the known errors.	When a relationship between a problem and a known error record is deleted using the Options Menu in a problem record, the parent.problem record in cleared in the known error record, so that the user can successfully close the problem.
QCCR1E59338	Calculating data intervals using the RAD application "calendar.calc.interval" can return incorrect results if the holiday records are not in chronological order.	Added a sort field as start.date in get.holiday panel of the calendar.calc.interval application.
QCCR1E67341	Copying a closed change task record can result in an open task associated to an invalid change phase.	Copying a change task is allowed only if the current phase of the relevant change matches the category-phase definition for the task category. Note: This fix does not work if you have Process Designer Content Pack 9.30.1 installed. See Process Designer Content Pack 9.30.1 Limitations .

SCR	Problem	Fix
QCCR1E69389	The cc.save.incident RAD application is missing the check.bg and check.bg.update panels.	The application and code dbdict contents are now consistent for RAD application "cc.save.incident".
QCCR1E70107	Activity Type cannot be localized.	Activity Type (activity.name) can now be localized.
QCCR1E70106	Closure Code cannot be localized.	Implemented necessary changes to ensure localization of Closure Code (Resolution Code).
QCCR1E71099	Users need to display Value Lists instead of the data directly retrieved from the database in a QBE list when adding a field by using Modify Columns.	Value Lists can be displayed instead of the data directly retrieved from the database in a QBE list when adding a field by using Modify Columns. Note: This issue requires fixes at both the server and applications sides. See server fix QCCR1E71099 in the 9.30p5 Release Notes.
QCCR1E71139	When Service Manager is configured to use LDAP as the authentication data source, the user is still forced to change the password if the user is expired in the local database.	When Service Manager is configured to use LDAP as the authentication data source, the user will not be forced to change the password if the user is expired in the local database. The fix is also available as an unload file, QCCR1E71139_SM930P5_SM930.unl, which can be obtained from the server's platform_unloads directory. Note: This issue requires fixes at both the server and applications sides. See server fix QCCR1E71139 in the 9.30p5 Release Notes.
QCCR1E73115	When an operator logs into ESS by using a 'Self service' role, the license report (sm -reportlic) shows that the ESS user consumes an Incident Management, Service Desk, Problem, Change, and Knowledge Licenses. However, an ESS user should only consume a Limited Login License.	ESS users now only consume a Limited Login License.
QCCR1E73386	Edge names do not display correctly when viewing a relationship diagram.	This issue occurred because only the downstream CI name was used to search for a CI relationship. This made all edge names the same. Now, both the downstream and upstream CIs are used to determine a specific relationship.
QCCR1E73516	When creating a new interaction or a self-service ticket, the following error is logged intermittently in sm\${portnumber}.log: "The record being added contains a duplicate key."	Now, the database is queried to check whether a record already exists before trying to insert new records to DB. This behavior avoids the duplicate key error.

SCR	Problem	Fix
QCCR1E73711	The Approve button does not appear in the Mobility client if there is an expression that contains an "=" under the "Approval Controls" section of a Change phase record. The Windows and Web clients both display the Approve button correctly.	The Mobility client now displays the Approve button correctly.
QCCR1E74162	When creating a Knowledge Document by using the 'external' doctype, the Preview button does not show the contents of the file being used. Instead, the HTML viewer is blank.	Once an external type of Knowledge Document has been submitted or published, clicking the Preview button brings up a dialog, asking if the user wants to save the document in order to continue to preview. Once the user clicks OK, the document is saved, and the user can click the Preview button to preview it.
QCCR1E74683	Running a search without specifying a library will return the following message: "Search Failed".	When a user tries to search without specifying a library, a message appears to tell the user to select one or several knowledge libraries. If the user does not select a library, the search result is empty.
QCCR1E74812	When performing an advanced search with the Query Language and Locale set to Arabic, all Arabic locale documents are returned in the search results regardless of the keyword entered.	The KM Search Engine should search for Arabic documents by keyword.
QCCR1E75201	When submitting a Service Catalog request, Service Manager creates multiple identical schedule records.	When the trigger executes a check is now made to verify whether there is a need to create the SLA schedule.
QCCR1E75217	The "As Delegate?" column value in the consolidated approval inbox (approval.inbox.display) form always shows YES, regardless of whether the approver is approving as a delegate or not.	The "As Delegate?" column value in the consolidated approval inbox (approval.inbox.display) form always shows the correct value.
QCCR1E75310	Custom alerts are not removed from the schedule table after an Incident is closed.	Custom alerts will be removed from the schedule table after an Incident is closed.
QCCR1E75455	Images in the Page Gallery of MySM are missing.	Images of the Incident and Interaction labels are shown correctly.
QCCR1E75763	A knowledgebase search performed in ess.do will log out unexpectedly if the search server is not configured.	A knowledgebase search now shows a dialog with following message: "Could not connect to Search Engine, please verify settings".
QCCR1E75800	Exception calendar in the Scheduled Maintenance module does not work correctly when the timezone was set in the task.	Scheduled Maintenance works correctly with exception calendar and timezone.
QCCR1E75854	Hanging locks on parent records such as SLA or cm3r.	The parent records are unlocked as expected.
QCCR1E75852	The order of expressions in the se.external.action RAD needs to be adjusted to allow customization of response messages for Web service calls.	Moved the message retrieve statements to the end of panel. This will help to receive all messages, including the customized ones.

SCR	Problem	Fix
QCCR1E75862	Submitting a Service Catalog request creates identical schedule records.	Duplicated schedule records will no longer be created.
QCCR1E76007	RAD sm.update.affected.services still performs unnecessary update as a result of faulty condition.	The RAD application performs update only when necessary.
QCCR1E76122	When a matching.ci structured array field on a Known Error record is populated and then saved, the following validation error is received: "Please provide an update." After the validation has been resolved (that is, the update is provided), the data in the matching.ci field is not saved correctly. The data is saved in the following format: {{ "CI_NAME" }}	The data structure has been formatted to the following: {{[]}} For example: {{["adv-afr-copier-fin"]}}
QCCR1E76088	The Relevancy score increases automatically when you return to the previous page on the Search Knowledgebase screen.	The Relevancy remains unchanged.
QCCR1E76161	The Mass Approve functionality approves all tickets instead of just the ones that were selected.	Now, the Mass Approve button functions as follows: <ul style="list-style-type: none"> • If two or more records are selected in a list, the Mass Approve function will approve only the selected records. • If one or no records are selected in the list, the Mass Approve function will approve all the records in the list
QCCR1E76227	In the Mobility client, the incident/change Priority and Urgency strings are all English, even when a non-English language is selected.	Implemented the feature to support localization. Note: This fix is also available as an unload file. See Unload Files Included in Current Patch .
QCCR1E76285	With a Knowledge Base of 500K documents or more, the KMUpdate process will take many hours each pass to calculate how many documents it may need to index. This issue seems to be caused by a design flaw in the counting algorithm in the KMCollection_Update script library record.	The design flaw is fixed, and results are now returned in a much shorter time.
QCCR1E76420	When an approver is logged into the ESS Web client as sdapprover (or other approvers) and then attempts to approve a request that has been modified by other users, there is a message that explains the record had been modified and will be reloaded. However, the reloaded approval list no longer shows the interaction. Note: The request is approved.	Modified RAD approval.approve to temporarily suspend the normal approval process while detecting whether the cart has changed.

SCR	Problem	Fix
QCCR1E76467	When users save an Incident that has an outage start time during a different outage time for the same CI, they receive several error messages.	When users save an Incident that has an outage start time during a different outage time for the same CI, they no longer receive any error messages.
QCCR1E76566	Alert Time has an incorrect value in Incident Alert records if a non-24 hour Work Schedule is specified.	Alert Time is calculated correctly with any work schedule specified.
QCCR1E76700	When updating a probsummary record from the Scripts tab of the controlerror format, the following error is received: "Source file variable is not a relation."	This issue was resolved by changing the \$file thread variable to a local \$L.file variable in the pm.eval.alerts RAD application.
QCCR1E76862	The exit and action variables limit the functionality of RAD se.external.action. Additionally, the Web service may return an error if the RAD is not called with specified parameter(s).	Now, if the RAD application that is invoked does not have a "\$L.exit" parameter specified, the value of \$L.exit is set to the default value.
QCCR1E76859	Cannot execute the se.call.process RAD Application by using the Application Pass Through option in Web Services.	The specified RAD can be executed by using the Application Pass Through option in Web Services.
QCCR1M3906	In SRC, there is more than one subscription record under a bundle.	A bundle that has a subscription record cannot be submitted.
QCCR1E77177	Alerts are not being scheduled if the status of the Problem Task is Past Due and the alert has already run.	Alerts will regenerate if the due date is updated and status is past due.
QCCR1E77586	The caption on Config Change files is still not always shown even after applying a fix.	This issue is resolved from the application patch side. The am.join.query process has been modified to properly set the \$join.query local variable to true when there is already a CI type selected.
QCCR1E77640	When submitting a new interaction request, the start time of SLA is not calculated correctly. If you wait for more than 5 minutes after an interaction was created, and then update and save the interaction, the SLOs are displayed incorrectly. However, if you make the update before the 5 minutes passed, then the SLOs appear as expected.	Now, when the Interaction is escalated, the SLOs are related and will be active and display as expected.
QCCR1E77825	An Error record appears in the schedule table when closing an Incident which is related to an Interaction. The \$allow.save equals false statement prevented the Incident from being updated.	Changed the background status to set \$allow.save=true and therefore to pass the validation.

SCR	Problem	Fix
QCCR1E77985	After setting up Mandanten security, the order on behalf feature does not consider the Mandanten settings of the user we order for. This behavior occurs when special additional input is requested by using the User Options. This creates a major security issue, because the data cannot be correctly validated. Additionally, because SRC caches the data, the system shows only the data from the cache of the logged in user, but does not start a new query for the person for whom we order on behalf of.	The getOptionsLookup function in the SRC API has been modified.
QCCR1M4186	Service Manager allows a user to check Subscription for a Support Catalog Item.	Modified format svcCatalog.item and related formatctrl to disable the "Create Subscription" check box when it is a Support Catalog item.
QCCR1E78591	Service Request Catalog (SRC) does not accept case-insensitive login.	This issue occurs because of the JavaScript ScAPI_svcCatOperator canRequestOnBehalf() function. The JavaScript function has been modified so that SRC now accepts case-insensitive login.
QCCR1E78794	Users cannot set an empty value for assignee.	Users can reassign incident assignee in the Mobility console. Note: This fix is also available as an unload file. See Unload Files Included in Current Patch .
QCCR1E78966	Columns that were added when a view was created are not displayed.	Columns that were added display correctly when a view is created.
QCCR1E79324	A full re-index on the knowledge library fails if there is an empty default locale.	The default locale is set to "en" for English if user's login language code is not set.
QCCR1E79520	When you select the "Contact Full Name" field in a QBE list, the query will contain one join table and is not handled properly.	The join table scenario is now handled properly, and the query is appended to the correct table. Therefore, the "Contact Full Name" field appears in the QBE list as expected.
QCCR1E79584	The functions, Export to Text and Export to Excel, do not work in Service Catalog QBE lists.	The functions, Export to Text and Export to Excel, now work as expected in Service Catalog QBE lists.

SCR	Problem	Fix
QCCR1E79689	<p>When searching knowledge from an Interaction record and then clicking the Use Solution button in a knowledge document, a JavaScript error occurs:</p> <pre> Process panel run.pre.exp in RAD se.call.process encountered error in line 12 (se.call.process,run.pre.exp) Cannot evaluate expression (se.call.process,run.pre.exp) Cannot evaluate expression (se.call.process,run.pre.exp) Script <UNKNOWN> line 4: ERROR TypeError: vars.\$query has no properties at char 1 Unrecoverable error in application: se.call.process on panel run.pre.exp </pre>	The JavaScript error will no longer display in the kmdocument page.
QCCR1E79969	The Request for field cannot be re-selected due to the operator validation.	The request for field can now be re-selected.
QCCR1E80005	Search results are not constrained by the "Max Number of Documents Returned from a Search" setting in a KM environment record. The Search result count is wrong.	The behavior of the pagination function has been changed to prevent this issue.
QCCR1E80049	An unexpected page is displayed after you search Incidents with the "Autoformat Date View" view.	Incident qbe list is displayed after you search Incidents with the "Autoformat Date View" view.
QCCR1E80035	The Approval Log is uneditable.	The Approval Log is now editable.
QCCR1E80053	The Cancel button does not work as expected in the Incident qbe list.	The Cancel button works as expected in the Incident qbe list.
QCCR1E75788	<p>[SRC API]: Searching for all records in the contacts table when using a newly created lookup field in SRC does not work as expected. Only 32,678 records are returned, when more than 80,000 are available in SM.</p> <p>In the Windows client all the expected results are returned (> 80,000).</p>	All expected results are now returned.
QCCR1E76218	[SRC API]: If a user modifies a request while the request is being approved by a manager or approver, the modifications can be submitted, but not updated for the manager. Therefore, the manager can inadvertently approve the new requests.	The SRC API has been modified to detect changes to the current approval and return proper return code to the SRC UI.

SCR	Problem	Fix
QCCR1E76248	[SRC API]: When a catalog item in Service Manager has a Recurring Costs value without a recurring type (Per week, for example), the catalog item is displayed in SRC with a recurring price but without any of the following values: hourly fee, daily fee, weekly fee, monthly fee, or yearly fee.	The SRC API now handles the Recurring Costs and Per fields as follows: If either field is empty, a Null is returned for both fields; if both fields have a value, their correct values are returned.
QCCR1E76307	[SRC API]: Comments cannot be added to approval info in SM from ApproveApproval API even if the "Require appr. comments" is checked in Object.	The comments can be sent properly by setting the appropriate variable.
QCCR1M3977	[SRC API]: The CreateAllCatalog functionality takes too much time for a large catalog.	A new API has been substituted for the original one and resolved the performance issue.

Upgrade Utility

SCR	Problem	Fix
QCCR1E73717	After upgrading from SM 9.21 to SM 9.30 by using Upgrade Patch 3, the following error message is logged in the upgrade.log: "This message did not provide enough arguments:Building Distribution object for %S %S"	The code was changed to provide the missing arguments to the "Building Distribution object for %S %S" message template.

Knowledge Management Solr Search Engine

None.

Mobility Client

SCR	Problem	Fix
QCCR1E71958	In the SM Mobility interface, a ticket cannot be reassigned to another Assignee by using the mobile client. The ticket can be assigned to another group, but there is no way to reassign or assign it to an operator/assignee. The assignee field cannot be modified at all.	In the SM Mobility interface, users can reassign a ticket to another Assignee via the mobile client.

SCR

Problem

Fix

Service Request Catalog

SCR

Problem

Fix

QCCR1M1241 After a request is submitted for an item with options and you review the Interaction of the end user, the options cannot be displayed fully if the option label is too long.

Options can now be displayed fully.

Additionally, for a user option that is defined by check box, the cost is displayed as zero (0) even if the cost is not defined.

QCCR1M1374 One SRC UI operator session may initiate multiple SM sessions.

One SRC UI operator now will only have one corresponding SM session.

SCR	Problem	Fix
QCCR1M1622	<p>SRC provides the option to alter the value displayed in the SRC interface for contacts. By updating the applicationContext.properties file and updating the src.sm.contactListDisplayPattern parameter, the value displayed for a contact can be changed from contact.name to FullName, FirstName, LastName, ContactName, or Name.</p> <p>If the display pattern is changed, SRC does not pass the contact.name value in the record and instead stores the displayed value. As a result, the creation of the SM ticket fails on submit.</p> <p>The following is the relevant information from the applicationContext.properties file:</p> <p>Contact Display Property</p> <p>The default value for the contact name search result list is ContactName \${C}. If you want to display a different format, specify a different value. For example, to display ContactName (FirstName.LastName), you can specify the parameter as follows:</p> <pre data-bbox="355 974 1057 1220"> src.sm.contactListDisplayPattern=\${C}(\${F}.\${L}) Pattern for contact search result list \${N} -: Name \${C} -: ContactName \${U} -: FullName \${F} -: FirstName \${L} -: LastName src.sm.contactListDisplayPattern=\${C} </pre> <p>Note: This is necessary because contact.name is the unique key for contacts in Service Manager. However, in the real world, it cannot be used for the full name of the contacts (or you could not have two contacts with the same name).</p> <p>In a large percentage of builds, contact.name is therefore set to a truly unique value (often an HR ID or some other number that an end-user would not be able to identify for another person). SM can be tailored to allow users to view and fill contact information based on full.name (QBE lists display additional columns to allow a user to select the correct contact should multiple contacts exist with the same name).</p>	<p>The display pattern will only be used for display. SM will take the contactName for verification and storage.</p>

SCR	Problem	Fix
QCCR1E70757	<p>When clicking on the email link inside Service Request Catalog (SRC), extra characters are displayed, as shown in the following example:</p> <pre>Please%20provide%20responses%20to%20the%20followi ng%20questions%20before%20submitting%20your%20ema il% 20Project%20request%3A%0D%0A%0D%0APoint%20of%20Co ntact%20for%20IT%20Relationship%20Management%20fo r% 20this%20Project%20Request%0D%0AName%3A%0D%0APhon e%3A%0D%0ALOB%20Name%3A%0D%0A%0D%0A1.%20Briefly% 20describe%20your%20business%20need%3A%20%0D%0A%0 D%0A2.%20Will%20this%20request%20require%20the% 20involvement%20of%20an%20External%20Vendor%3F%20 %20%0D%0A%0D%0A3.%20Is%20there%20approved%20budge t% 20for%20this%20request%3F%20%20</pre>	SRC will no longer show escaped HTML characters.
QCCR1M1901	The SRC UI detailed description does not show correctly and is truncated in some cases. A SOAP API call to catalog item returns the data correctly, but the SRC UI cannot display the data correctly.	Flex only supported a subset of HTML tags. The SRC server will now filter and convert unsupported tags before sending to Flex.
QCCR1M2142	Users cannot log in to SRC using a password that contains a colon (:). The special character is causing the current SRC credential pack incorrectly parsed in the SM RTE.	Improved the way of packing credential string so that the string can be correctly parsed in the SM RTE.

Documentation

SCR	Problem	Fix
QCCR1E75711	The vertical scroll bar on a sub-form in the Web client does not appear. Instead, it overlaps the other fields.	<p>Updated the "Add a subform to a form" topic in the online help with the following note:</p> <p>Limitation: If a subform contains only a table, make sure that the table and subform have the same height. This way, a vertical scroll bar will appear for the table if needed when the total height of all table rows exceeds the specified table height. If you specify a table height greater than the subform height, the table rows may overflow outside the subform and overlap other fields on the form. If a subform contains multiple widgets, make sure that the subform height is set to be large enough to hold all the widgets; otherwise overlaps may also occur.</p>

SCR	Problem	Fix
QCCR1E76433	<p>Particular error pages only display in the WebSphere log but not in the browser. For example, the "The session is busy, please try again later" message that occurs when the lockWaitTimeout setting is exceeded.</p> <p>This is because of a WebSphere problem ("An error code always returns even though there is a matching error exception type defined in web.xml.")</p>	<p>Created knowledge article KM1449176, which provides the steps to add a Web container custom property setting when deploying the web tier on WebSphere 6 or later.</p> <p>Also updated the Service Manager 9.30 Interactive Installation Guide to include this additional step for WebSphere.</p>
QCCR1E78706	<p>After Service Manager (SM) was last recycled (using SM 9.21 patch 5 RTE), sometimes accessing an SM WSDL can cause a signal 11 error. Also, SM is not processing any web services transactions.</p> <p>This is because of an Oracle bug ("Multi-Threaded OCI Client Dumps Core after Reconnecting To Database"), which exists on Oracle 11.1 and above and is triggered when ADR tracing is enabled. Once this bug is triggered, the SM server will crash every time when setting up a connection to the Oracle Server.</p>	<p>Added the following step to the "Prepare your RDBMS" section in the Service Manager 9.30 Interactive Installation Guide:</p> <p>For Oracle 11.1 or above only, disable ADR tracing by turning off the diag_adr_enabled parameter in the sqlnet.ora file: diag_adr_enabled=OFF. ADR tracing is enabled by default.</p> <p>Note: An Oracle bug ("Multi Threaded OCI Client Dumps Core After Reconnecting To Database") is triggered when ADR tracing is enabled. Once this bug is triggered, the Service Manager server will crash every time when setting up a connection to the Oracle server.</p>
QCCR1E83710	<p>When upgrading Service Manager, records are prefixed with "OLD." However, these records are not removed from the display cache and display options in Service Manager.</p>	<p>Added notes to instruct users that older records must be cleared manually.</p>

Known Problems, Limitations, and Workarounds

This software release has the following known issues and limitations.

Service Manager Limitations and Known Issues

Note: The following is a cumulative list of known issues and limitations in Service Manager 9.31, including those that already exist in previous releases (Service Manager 9.30 GA and patches).

Platform (Server, Web Tier, and Windows Client)

SCR	Problem	Workaround
<i>Service Manager 9.31</i>		
QCCR1E84455	When clicking the Line Items button on the toolbar of a Quote record, its associated line items do not appear in the list pane.	To solve this issue: <ol style="list-style-type: none">1 From the ToDo queue, select "Quote" from the Queue field.2 From the Quote queue, drill down to the Quote record and click its Line Items button.
QCCR1E84453	In Internet Explorer, the list of display options cannot be displayed. If users execute the do command in the Service Manager command line and then click Search , a blank page is displayed. This issue does not occur in Firefox.	There are two ways to solve this problem: <ul style="list-style-type: none">• Use Firefox instead of Internet Explorer.• This issue occurs only when users try to open a record list in which one of the columns is mapped to a field in a table and the field name is in the list of reserved keywords (see the list below). Either changing the field name in the table or removing the column from the record list will prevent this problem from occurring. Reserved keywords: case, catch, class, const, continue, debugger, default, delete, do, else, enum, export, extends, false, finally, for, function, if, import, in, with, while, void, var, typeof, try, true, throw, this, switch, super, return, resizeTo, null, and new

SCR	Problem	Workaround
QCCR1E78426	<p>In Internet Explorer 7 and 8, users may see a warning from their web browser when exporting a list to a text file:</p> <p>To help protect your security, Internet Explorer blocked this site from downloading files to your computer. Click here for options...</p> <p>When users click Download File, the following message may display:</p> <p>To display the webpage again, the web browser needs to resend the information you've previously submitted.</p> <p>If you were making a purchase, you should click Cancel to avoid a duplicate transaction. Otherwise Retry to display the webpage again.</p> <p>When users click Retry, the following message may display:</p> <p>The Service Manager main application is already open in another browser tab. Please go to that page to save your work, and then continue.</p> <p>When users click Continue, the file downloading works correctly.</p>	<p>There are several ways to work around this issue.</p> <ul style="list-style-type: none"> • On the export to text screen, hold down the Ctrl key when clicking the OK button until the file download dialog pops up. • Add the host of the web server or web application server to the trusted sites, and configure IE security settings to enable the option Automatic prompting for file downloads for trusted sites (Security tab > Custom Level). • Enable this feature by utilizing the security policy or through a security feature control registry key. For more information, see http://msdn.microsoft.com/en-us/library/dd565669%28v=vs.85%29.aspx
QCCR1E78840	<p>You cannot start Service Manager (SM) if the parent directory in which SM is installed contains a special character, such as the following: % @ &.</p> <p>Note: This behavior occurs when you are using LW-SSO. The issue occurs because the LW-SSO implementation in a third-party product used in SM cannot correctly read a directory that contains these characters.</p>	<p>To work around this issue, do not install SM in a directory that contains special characters.</p>
QCCR1E75711	<p>The vertical scroll bar on a sub-form in the Web client does not appear. Instead, it overlaps the other fields.</p>	<p>If a subform contains only a table, make sure that the table and subform have the same height. This way, a vertical scroll bar will appear for the table if needed when the total height of all table rows exceeds the specified table height. If you specify a table height greater than the subform height, the table rows may overflow outside the subform and overlap other fields on the form. If a subform contains multiple widgets, make sure that the subform height is set to be large enough to hold all the widgets; otherwise overlaps may also occur.</p>
QCCR1E80257	<p>In Internet Explorer 7, the focus is incorrectly set on the htmleditor when it should be set on another field.</p>	<p>No workaround at this time.</p>

SCR	Problem	Workaround
QCCR1E69176	When you run "sm -shutdown -group" directly on the SM Server, the smservice does not stop.	Stop the Windows service or run a net stop command (for example, C:\Program Files\HP\Service Manager 9.30\Server\RUN>net stop "HP Service Manager 9.30 Server").
<i>Service Manager 9.30 or 9.30 patches</i>		
QCCR1E62584	In the Windows client on an Arabic operating system, Arabic strings are displayed from the left side of a field when and after you enter them in the field.	Add a system property in client config.ini file in installation directory to enforce right-to-left. Navigate to the Windows client configuration file, <client installation path>/configuration/config.ini. The default is location is C:\Program Files\HP\Service Manager 9.30\Client\configuration\config.ini. Open the file and add this line at the end. eclipse.orientation=rtl
QCCR1E28000	If the Equal sign (=) is the first character in an array field, it will be truncated.	No workaround is available at this time.
QCCR1E57385	When Service Manager is running on Unix, the legacy listener may log intermittent signal 11 upon CIT initial connectivity test if exec-shield is not set properly.	Use the workarounds to solve this issue. Solution 1: Connect Connect-It to the Web Services connector instead of the Legacy Listener connector. Solution 2: Before connecting Connect-It to the Legacy Listener connector, do the following: <ol style="list-style-type: none">1 Add usethreading:0 in the sc.ini file, which is located in <Service Manager server installation path>\LegacyIntegration\RUN. Note: For 64-bit RedHat Linux servers only, you can alternatively run the following shell commands as root: <pre># systemctl -w kernel.exec-shield=0 # systemctl -w kernel.randomize_va_space=0</pre>2 Start the legacy listener.

SCR	Problem	Workaround
QCCR1E32086	A Knowledge document with attachments can have hypertext links to those attachments. When a user needs to update an attachment, the user may double-click the attachment to open it from within the knowledge document edit format, update the attachment, and then save it. This will result in a broken link to the file attachment	When a user needs to update an attachment, the document needs to be sent into the Knowledge Management workflow so that administrators can edit the document, view the attachment, and then save the attachment to the desktop to make changes to the attachment. Once the attachment is updated, re-upload the attachment to the knowledge document, re-link to the attachment, and then re-publish the document.
QCCR1E59371	In the web client, when a QBE form is displayed as the result of a Fill operation, many tab operations are required to position the cursor on the list to select from when using Internet Explorer, while only one tab operation is required when using Firefox.	No workaround available at this time.
QCCR1E63548	On an android phone, the username and password labels in the log-in screen are inside the text field.	No workaround available at this time.
QCCR1E64268	When creating a new workflow using Process Designer for the first time or after clearing the browser cache, the workflow canvas will be blank and not display an initial starting node.	There are two ways to work around this issue: <ol style="list-style-type: none"> 1 Load an existing workflow first. After that, creation of a new workflow for the first time will work properly. 2 Attempt to create a new workflow again. The second attempt to create a new workflow for the first time (or after a browser cache flush) will succeed.
QCCR1E64377	In the web client, when you open a Configuration Item (CI) record, the CI label does not show (or only shows for the first time) in the CI Visualization (Relationship Graph).	No workaround available at this time.
QCCR1E65527	Some lines on the SM Client Uninstall Feature Selection dialog are not fully displayed	Run the SM Client uninstaller from the command line, using the -console option, as follows: <ol style="list-style-type: none"> 1 Open a cmd shell and change to the Client_uninst subdirectory of the ServiceManager install folder. 2 Run "uninstaller -console" in this folder. 3 Follow all prompts. <p>Note: Repeated install/uninstall cycles can cause the uninstaller to be installed into the folder "_uninst2" instead. If this happens, then use this folder and its uninstaller.exe instead.</p>

Mobility Client

SCR	Problem	Workaround
QCCR1E84298	In the Mobility Client, if a user closes an Incident and then opens the list of Incidents assigned to the user, the closed Incident still shows up in the list.	When opening the list of incidents assigned to you, remember to click the 'Refresh' button in the upper right corner, so that closed incidents will disappear from the list.

Applications

SCR	Problem	Workaround
QCCR1E77935	After an SLO is created, it is not attached and displayed in the change record. The SLO displays correctly only after the user logs out and then logs in again.	Not available at this time.
QCCR1E84450	Archived incident records cannot be imported into Service Manager.	Not available at this time.

Localization Limitations

SCR	Known Issue
QCCR1E58439	There is a need for proposing relationship changes for CIs that need to be approved and only be processed after a defined change workflow has been followed. Currently it is only possible to change relationships immediately but not to plan them for future change.
QCCR1E59076	Within a category or item display list, there should be the ability to sort based on an internal priority rather than only in alphabetical order.
QCCR1E62656	JavaScript performance issues occur when a table contains too many rows. In non-English environments, the "Execute Commands" function in System Navigator > System Status does not work.
QCCR1E63806	Callback.type dropdowns have their values defined in formats instead of in a global list.
QCCR1E64688	The RAD scheduler queries too frequently.

In the English environment, a new parameter has been introduced (**System Information Record > General > Schedule Batch Size**), which allows a System Administrator to tailor the number of schedule records that can be processed by one query.

However, in non-English environments, this configuration option is not activated and therefore not user-configurable. This means all schedule records will be processed in one query in non-English environments.

QCCR1E66140	A "Visible to Customer" update on a Change record is not replicated to the related Interaction as a Visible to Customer update on an Incident record is replicated to the related Interaction.
QCCR1E67750	In Knowledge Management, users cannot specify their search result sort preference, other than by relevance score.

SCR	Known Issue
QCCR1E70106	Closure Code cannot be localized.
QCCR1E70107	Activity Type cannot be localized.
QCCR1E72143	Clicking on the table lines of the Change form does not display the details of the ApprovalLog.
QCCR1E72721	When you open an existing CI, the status of the CI can be saved with a wrong Status-value.
QCCR1E74326	There is currently no information presented by the user interface on the progress of a Weblib crawl or indexing. If an error is encountered (for example, due to a proxy issue, or a typo in the targeted URL, or a random survey popup requesting OK be clicked) there is no indication of such issues in the user interface (the Manage Knowledgebase function).
QCCR1E75490	If the same approver is identified in two different approval sequences of an approval definition, the "pending approvals" listed appears to consolidate them to a single approval sequence, and remove them from the smaller sequence id.
QCCR1E75800	Exception calendar in the Scheduled Maintenance module does not work correctly when the timezone was set in the task.
QCCR1E76093	The UCMDB Content Pack should be merged into the Service Manager OOB functions.
QCCR1E76329	When a user searches "Order from Catalog" to search the Catalog by using keywords, the search retrieves items as well as categories and subcategories. There should be an option to show only bundles and items when searching in "Order from Catalog."
QCCR1E76985	When a search for terms like "server monitoring" is performed, the search produces results for either "server" or "monitor" separately (server OR monitoring). Instead, the search results should be for the combined search terms (server AND monitoring).
QCCR1E77409	When search results contain large documents (for example, software manuals in pdf format), the search response time is significantly longer. This behavior occurs because the content of the attachments is added to the "docbody_lang" field. Highlighting on this field takes a lot more processing time to markup the entire document.
QCCR1E78009	SM should not allow a user to check Subscription for Support Catalog Item.

Process Designer Content Pack 9.30.1 Limitations

SCR	Problem	Workaround
QCCR1E67341	<p>Copying a closed change task record can result in an open task associated to an invalid change phase.</p> <p>Note: This issue has been fixed in the 9.31 applications. However, if you have Process Designer Content Pack 9.30.1 installed together with the 9.31 applications, the 9.31 fix will not work. Loading QCCR1E78589_SM931_PD2.unl cannot solve this problem.</p>	No workaround available at this time.

SCR	Problem	Workaround
QCCR1M5236	<p>With Process Designer Content Pack 9.30.1 applied in Service Manager, after logging in to SRC, an operator who has required change security role (for example, a system administrator) cannot select the Change Management module for Approval Delegation (on the Approval Delegation page, the Change Management module is not available from the Choose Type dropdown list).</p>	<p>Perform the following steps to resolve this problem:</p> <ol style="list-style-type: none"> 1 Log in to the Service Manager Windows client. 2 Open the specific operator record. 3 From the menu bar, click Window > Show View > Other... > RAD Debugger, and then click OK to open the RAD Debugger. 4 In the RAD Debugger command line, execute command d profile.change in \$L.file to get the Change profile of this operator. If the operator record was created before the PD Content Pack was applied, a non-NULL value should be returned; otherwise a NULL value is returned. 5 If the command returns a NULL value, execute x profile.change in \$L.file={"DEFAULT"}, and then save the operator record. This assigns the operator the DEFAULT change profile. 6 Navigate to Tailoring > Database Manager, open table "cm3profile", and then search for the Change profile returned in step 4 or step 5. On the profile's Approvals/Groups tab, select the Can Delegate Approvals option. 7 Save the profile and log out.

SCR	Problem	Workaround					
QCCR1E78589	After applying Process Designer Content Pack 9.30.1 and SM 9.31 Applications Patch, some issues fixed in the SM 9.31 Applications reoccur.	<p>Reconcile the differences between the Process Designer Content Pack 9.30.1 (PD CP2) and the 9.31 applications patch, and then load QCCR1E78589_SM931_PD2.unl into your system. This way the features in both PD CP2 and 9.31 applications will work properly.</p> <p>For details, see Reconciling Differences between Process Designer Content Pack 2 and the 9.31 Applications and Application Unload Installation.</p> <p>Recommended installation sequences</p> <p>The following are recommended installation sequences for different combinations of the 9.30 content packs and the 9.31 applications.</p>					
		<table border="1"> <thead> <tr> <th data-bbox="943 749 1471 800">Installation Order</th> </tr> </thead> <tbody> <tr> <td data-bbox="943 800 1471 888"> <ol style="list-style-type: none"> 1. Survey Integration 2. 9.31 applications </td> </tr> <tr> <td data-bbox="943 888 1471 1016"> <ol style="list-style-type: none"> 1. PD CP2 2. 9.31 applications 3. QCCR1E78589_SM931_PD2.unl </td> </tr> <tr> <td data-bbox="943 1016 1471 1184"> <ol style="list-style-type: none"> 1. Survey Integration 2. PD CP2 3. 9.31 applications 4. QCCR1E78589_SM931_PD2.unl </td> </tr> <tr> <td data-bbox="943 1184 1471 1394"> <ol style="list-style-type: none"> 1. HTML Email 2. Survey Integration 3. PD CP2 4. 9.31 applications 5. QCCR1E78589_SM931_PD2.unl </td> </tr> </tbody> </table>	Installation Order	<ol style="list-style-type: none"> 1. Survey Integration 2. 9.31 applications 	<ol style="list-style-type: none"> 1. PD CP2 2. 9.31 applications 3. QCCR1E78589_SM931_PD2.unl 	<ol style="list-style-type: none"> 1. Survey Integration 2. PD CP2 3. 9.31 applications 4. QCCR1E78589_SM931_PD2.unl 	<ol style="list-style-type: none"> 1. HTML Email 2. Survey Integration 3. PD CP2 4. 9.31 applications 5. QCCR1E78589_SM931_PD2.unl
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<ol style="list-style-type: none"> 1. PD CP2 2. 9.31 applications 3. QCCR1E78589_SM931_PD2.unl 							
<ol style="list-style-type: none"> 1. Survey Integration 2. PD CP2 3. 9.31 applications 4. QCCR1E78589_SM931_PD2.unl 							
<ol style="list-style-type: none"> 1. HTML Email 2. Survey Integration 3. PD CP2 4. 9.31 applications 5. QCCR1E78589_SM931_PD2.unl 							

Reconciling Differences between Process Designer Content Pack 2 and the 9.31 Applications

If you have already installed the Process Designer Content Pack 9.30.1, when applying the SM9.31 applications, a certain amount of renamed records will be generated. The following table lists these renamed records. Make sure you keep the Process Designer 9.30.1 version (do not merge it with the SM9.31 applications). Loading QCCR1E78589_SM931_PD2.unl will help resolve the conflicts. See known issue [QCCR1E78589](#).

Note: If you tailored any objects listed in the following table, loading QCCR1E78589_SM931_PD2.unl will overwrite your tailoring changes. To preserve your tailoring changes, you need to:

- 1 Before loading QCCR1E78589_SM931_PD2.unl, make a backup of your tailored objects.
- 2 Load QCCR1E78589_SM931_PD2.unl.
- 3 Merge the updated objects with your tailored objects.

Object Type	Object Name
Application Cluster	cm.change.catphase
Application Cluster	cm3.last.task.process
Application Cluster	db.mass.functions
Application Cluster	display
Application Cluster	sla.refresh.active
Application Cluster	trigger.cm3t.post.edit
Object	cm3r
Process	cm.chg.cat
Process	cm.chg.phase
Process	template.init
ScriptLibrary	ApprovalUtil
ScriptLibrary	ChangeOperatorInfo
ScriptLibrary	changeManagement
ScriptLibrary	tableAccess
activityactions	Update Activitiescm3r
format	CM.change.approvalen
format	CM.change.approvalprepen
format	CM.change.closureen
format	CM.change.implementationen
format	CM.change.loggingen
format	CM.change.planningen
format	CM.change.reviewen
formatctrl	cm3r
formatctrl	cm3rcatphase.main
link	cm3r

Integration Limitations and Known Issues

UCMDB Integration

For a list of known issues and limitations of the UCMDB Integration, see the *Service Manager 9.31 Universal CMDB Integration Guide*, which is available from the online help.

SM-BSM Downtime Synchronization

SCR	Problem	Workaround
QCCR1E83962	<p>In an environment with Process Designer Content Pack 2, Service Manager 9.31 applications and QCCR1E78589_SM931_PD2.unl applied, the SMIS (Integration Manager) Change category/final approval phase validation works incorrectly for the "Normal Change" and "Emergency Change" categories, while the outage calculation works properly.</p> <p>The problem occurs because SMIS validates the Workflow name while Process Designer validates the description.</p>	No workaround available at this time.

Enterprise Collaboration Integration (SM Collaboration)

SCR	Problem	Workaround
QCCR1E84711	<p>Users cannot open an existing conversation created by OMi.</p> <p>This issue occurs in the following scenario:</p> <ul style="list-style-type: none">• Both Service Manager and OMi are integrated with Enterprise Collaboration (EC).• The OMi-SM integration has been set up so that events can be forwarded to Service Manager as incidents. <p>When a user creates a conversation for an event in OMi, and then in Service Manager opens the incident created from this event and clicks the Open Conversation button, a dialog displays, asking if the user wants to create a new conversation.</p> <p>This is incorrect. The expected behavior is that the existing conversation created by OMi opens.</p>	No workaround available at this time.

SCR	Problem	Workaround
QCCR1E80227	An EC down message is received if an LW-SSO cookie refresh occurs between the time a request is sent and the response is received.	To work around this issue, set expirationPeriod to a large value in EC and the SM Web tier LW-SSO configuration file as shown in the following example: <pre> <creation> <lwsssoCreationRef useHTTPOnly="true" secureHTTPCookie="false"> <lwsssoValidationRef refid="ID000001"/> <expirationPeriod>5000</expirationPer iod> </lwsssoCreationRef> </creation> </pre> Doing this will significantly reduce the chance of encountering this issue.

Upgrade Utility

SCR	Problem	Workaround
QCCR1E61837	After running the Upgrade Utility, messages in the upgrade.log file are timestamped with the time zone of the logged-in user instead of the server's time zone. Therefore, timestamps in the upgrade.log file may be inconsistent with equivalent messages in the sm.log file.	No workaround available at this time.
QCCR1E65346	The Upgrade Utility cannot be run when logged in with a non-English language on a localized system. This version of the Upgrade Utility does not provide a localized interface.	Select English as the language when logging into the system for an upgrade.
QCCR1E65585	The application upgrade fails with the following error message: "The record being added contains a NULL key." This issue occurs when the Upgrade Utility tries to update the dbdict for a table that has unmapped fields.	No workaround available at this time.

SCR	Problem	Workaround
QCCR1E65660	<p>The Upgrade Utility may add field mappings for SQL fields that are already mapped in tailoring. After an upgrade, the following error message may occur when trying to operate a record in that table: "Duplicate mapping. HP Service Manager fields (fax) and (pa.otopr.name) are both mapped to SQL field (FAX). Filename =probsummary"</p>	<p>To work around this issue, follow this example. Assume that two fields are mapped to the same field, as follows: CUS_A map to SQL_A OOB_A map to SQL_A Steps to re-map to fix this issue:</p> <ol style="list-style-type: none"> 1 Type dbdict, and then open the "probsummary" table. 2 Edit field CUS_A and rename SQL field from SQL_A to SQL_B, save and exit. 3 Re-open the "probsummary" table, edit field OOB_A, and clear SQL field mapping by removing SQL Name, SQL Type and SQL Table. 4 Save, click "SM Alert" when it occurs, then SQL_A will be created. 5 Re-open the "probsummary" table, edit field OOB_A, rename SQL field from SQL_A to SQL_C, save and exit. 6 Re-open the "probsummary" table, edit field CUS_A, rename SQL field from SQL_B to SQL_A, save and exit.

SCR	Problem	Workaround
QCCR1E65713	The Chinese language is not activated correctly after an upgrade. For example, menus are displayed in English, and some formats cannot be found.	<p>To activate English and Chinese languages, do the following:</p> <ol style="list-style-type: none"> 1 Go to System Definitions, and open table "language." 2 Click View all records in the table. 3 Locate the record with Name='English' and ID='OLDSM7en', and then clear checkbox "Active for logins." 4 Locate the record with Name='Chinese Simplified' and ID='OLDSM7zh-Hans', and then clear checkbox "Active for logins." 5 Locate the record with Name='English' and ID='en', and then select checkbox "Active for logins." 6 Locate the record with Name='Chinese Simplified' and ID='zh-Hans', and then select checkbox "Active for logins." 7 Log out and then log in again with the Chinese language. All menus should be displayed in Chinese now, and all formats can be opened correctly.
QCCR1E65742	For customers upgrading to SM 9.30, the option menu items: Administration, Export/Unload, or View Localized Record Tags are not available from the Security Area screen that is accessed via the menu path System Administration > Security > Area . You will not be able to add or edit Security settings from the Administration menu item. Security Area is new functionality in SM 9.30, and security settings are not used in any OOB configuration.	No workaround available at this time.
QCCR1E60910	Reports generated by the Assessment Toolkit do not include certain tables with invalid "nulltable" fields. For example, the requested.for field in the ocmcowork table is not defined as "nulltable" in the "sql.tables" field in the corresponding dbdict. This is not a valid "nulltable" field even though the "sql.table.alias" field is set to "n1."	Not available at this time.

SCR	Problem	Workaround
QCCR1E60206	Database types with non-standard names cause database connection to fail. This issue occurs because the Assessment Toolkit recognizes only standard database type names, such as sqlserverXXXXX, oracleXXXXX, and DB2XXXXX.	Not available at this time.
QCCR1E59536	The Assessment Toolkit does not support testing connections on port 12670 even though port 12670 is also a default port in addition to port 13080.	Not available at this time.
QCCR1E67351	ServiceCenter or Service Manager timeout errors may occur.	For Service Manager 7 and later: Add the heartbeatinterval parameter and set the value to 6000 in the sm.ini configuration file. For ServiceCenter 6.2.8: Add the sctimeramount parameter and set the value to 6000 in the sc.ini configuration file.
QCCR1E65618	When exporting reports to RTF files, the HP logo is truncated.	Not available at this time.
QCCR1E67432	When re-running reports using the Run Last feature, some of the reports may include only the last page.	Every time you generate reports, the reports are temporarily saved in a folder named after the corresponding timestamp. You can manually copy the specific reports into the latest folder from an earlier folder, and then view or export the reports.
QCCR1E68559	Some application data becomes corrupted after you upgrade the server run-time environment to Service Manager 9.30. Some records that still exist in the RDBMS cannot be displayed in Service Manager applications. The following error message is displayed on the client interface and logged in the sm.log file: SQL code=1046 message=ORA-01406: fetched column value was truncated This problem occurs if the Service Manager server is working on an Oracle database that does not use the AL32UTF8 character set.	To fix this issue: <ol style="list-style-type: none"> 1 Open the dbdict for the record type that cannot be displayed. 2 Increase the lengths of the fields that may be too small to hold the required data. Fields that require an increase in length have all the following characteristics: <ul style="list-style-type: none"> ¼ Contains multi-byte characters. ¼ Has a data type of char, nchar, or vchar. ¼ Is used for a value that is likely to reach the field length limit, for example, a description field. 3 Log off the Service Manager Client and log back on.

SCR	Problem	Workaround
QCCR1E68779	<p>Some application data becomes corrupted after you upgrade the server run-time environment to Service Manager 9.30. Some records that still exist in the RDBMS cannot be displayed in Service Manager applications. An error message that resembles the following is displayed on the client interface and logged in the sm.log file:</p> <pre>ORA-02374: conversion error loading table "SC_OWNER"."PROBLEMM1" ORA-12899: value too large for column BRIEF_DESCRIPTION (actual: 257, maximum: 255) ORA-02372: data for row: BRIEF_DESCRIPTION : 'An e-mail addressed to you from'</pre> <p>This problem occurs if the Service Manager server is working on an Oracle database that does not use the AL32UTF8 character set.</p>	<p>To fix this issue:</p> <ol style="list-style-type: none"> 1 Open the dbdict for the record type that cannot be displayed. 2 Increase the lengths of the fields that may be too small to hold the required data as indicated in the error message. 3 Log off the Service Manager Client and log back on.
QCCR1E68320	<p>The upgrade process fails and error messages that resemble the following are displayed on the client interface and logged in the sm.log file:</p> <pre>" 2860(532) 09/05/2011 01:45:39 RTE I dbInsert: The record being added contains a duplicate key 2860(532) 09/05/2011 01:45:39 RTE I dbInsert: file:(notification) key:(id=PRE7.11.000ChM Change Open_1) 2860(532) 09/05/2011 01:45:39 RTE E Error: SQL code=1 message=ORA=00001: unique constraint(SM.NOTIFICATIONM1_P) violated 2860(532) 09/05/2011 01:45:39 RTE I dbInsert: The record being added contains a duplicate key 2860(532) 09/05/2011 01:45:39 RTE I dbInsert: file:(svcCatInterface) key:(interface.name=Open an Incident)"</pre>	<p>To fix this issue, follow these steps before starting the upgrade:</p> <ol style="list-style-type: none"> 1 Open the dbdict for the svcCatInterface table, and remove the service_request_id unique key. 2 Log in to the RDBMS, and removed the mapped index for the service_request_idunique key. Example: For an Oracle RDBMS, run this SQL statement: rdbms drop index SVCCATINTERFACEM1_2. 3 In the RDBMS, remove the mapped constraint and index for the notification table. Example: For an Oracle RDBMS, run these SQL statements: alter table notificationm1 drop constraint NOTIFICATIONM1_P drop index NOTIFICATIONM1_P

Service Request Catalog Limitations and Known Issues

The following is a cumulative list of known issues and limitations in SRC 1.4, including those that already exist in SRC1.3.

SCR	Problem	Workaround
<i>SRC 1.40</i>		
QCCR1M1985	The buttons on all pop-up dialogue boxes do not support keyboard access.	No workaround available at this time.

SCR	Problem	Workaround
QCCR1M4436	<p>When user A requests items on behalf of user B in ROB (request-on-behalf) mode, user A can only select the items that user B can see, which is right.</p> <p>The problem is when user A resubmits an interaction submitted on behalf of user B in ROB mode, user A can add items that user A can see, instead of the ones that user B can see. This behavior is not consistent with ROB mode.</p>	No workaround available at this time.
QCCR1M5104	<p>If the name of one custom doc type (for example, myDocType) is a substring of another doc type name (for example, myDocType2), the Doc Type filter on the KM search result page does not work precisely. For example, myDocType2 documents appear in the myDocType search results.</p>	Do not use doc type names that are a substring of another doc type name.
QCCR1M5040	<p>Catalog trees are missing in Mandanten mode. A catalog tree does not display in SRC, if the categories/items on the tree belong to more than one company.</p> <p>For example, if the catalog administrator defines a category item for Company B and its parent category for Company A, users of Company A and Company B can search out the category item, but none of them will see a catalog tree.</p>	<p>To solve this issue:</p> <ul style="list-style-type: none"> • In multi-company mode, do not specify more than one company for the entire catalog tree. • For existing data, separate the whole catalog tree into separate companies.
QCCR1M2786	<p>When users log in to SRC with a non-English language, the Subscription facet options (Requested, Active, Cancellation, Canceled, and Denied) display in English.</p>	Define a multi-language label for the subscription status in the SM global list.

SCR	Problem	Workaround
QCCR1M5235	<p>With Process Designer Content Pack 9.30.1 applied in Service Manager, after logging in to SRC, an operator who has required change security role (for example, a system administrator) cannot select the Change Management module for Approval Delegation (on the Approval Delegation page, the Change Management module is not available from the Choose Type dropdown list).</p>	<p>Perform the following steps to resolve this problem:</p> <ol style="list-style-type: none"> 1 Log in to the Service Manager Windows client. 2 Open the specific operator record. 3 From the menu bar, click Window > Show View > Other... > RAD Debugger, and then click OK to open the RAD Debugger. 4 In the RAD Debugger command line, execute command d profile.change in \$L.file to get the Change profile of this operator. If the operator record was created before the PD Content Pack was applied, a non-NULL value should be returned; otherwise a NULL value is returned. 5 If the command returns a NULL value, execute x profile.change in \$L.file={"DEFAULT"}, and then save the operator record. This assigns the operator the DEFAULT change profile. 6 Navigate to Tailoring > Database Manager, open table “cm3profile”, and then search for the Change profile returned in step 4 or step 5. On the profile’s Approvals/Groups tab, select the Can Delegate Approvals option. 7 Save the profile and log out.
QCCR1M4457	<p>SRC does not support Arabic right-to-left display.</p> <p>When users log in with the Arabic locale (for example, select [ar] from Internet Explorer's Language Preference), SRC cannot display Arabic text, the UI layout and user input text in a right-to-left mode.</p>	<p>No workaround available at this time.</p>

SCR	Problem	Workaround
QCCR1M5356	A user cannot log in to SRC in an LDAP environment until after logging in to the SM Windows or Web client as the same user.	<p>To solve this issue:</p> <ol style="list-style-type: none"> 1 In the Service Manager sm.ini file, make sure that ldapauthenticateonly is disabled (not present or commented out). 2 In the sm.ini file, enter ldapdisable:1. 3 Restart the SM server. 4 Log in to Service Manager as a system administrator. 5 Based on an existing operator record, create a template that you want to use to create operator records for first-time users. <ol style="list-style-type: none"> a Open an existing record that you want to use as a template. b Replace the Login Name with *SYSDEFAULTS. c Edit any other fields that you want and delete all fields that you plan to map to LDAP. d Make sure the "SOAP API" capability word is added for this operator. e On the Security tab, select the Template Operator checkbox. f Click the Add button to add your template to the operator file. 4 Click OK and Back to return to the menu.gui.home form. 5 Click System Administration > Ongoing Maintenance > System > LDAP Mapping. 6 Configure necessary fields for the operator and contacts files in LDAP mapping. 7 Make sure LDAP is set to be the Primary Data Source. 8 Be sure that the SM Unique Key Contained in the LDAP DN field is unchecked (not NULL). 9 Click Save button and then OK. 10 In the server sm.ini file, change the ldapdisable value from 1 to 0: (ldapdisable:0). 11 Restart the SM server.

SCR	Problem	Workaround
QCCR1M1900	In the SRC UI, the detailed description of a catalog item is not showing correctly and getting truncated in some cases. A SOAP API call to the catalog item returns the data correctly, but SRC UI is unable to display that data correctly.	No workaround available at this time.
QCCR1E77087	When searching employees and one of the employees in the returned search list has a contacts record with no value for the operator.id, the following error message is received: "An Error occurred"	Make sure to set a value for the operator.id field in all contacts records.
QCCR1E78460	The display list for Urgency displays incorrectly in SRC when creating request.	No workaround available at this time.
QCCR1E79281	When you open an Incident of the Request for Change type in the SM Web Client or Windows Client, the category is displayed as a Request for Change. However, if you now go into SRC and look at the same interaction, the category is displayed as "Incident."	No workaround available at this time.
QCCR1E79588	The popup window for contact lookup in SRC is not resized correctly when the contact name is long in length. As a result, some contact names are not displayed successfully.	No workaround available at this time.
QCCR1E79594	The statuses of the individual items in a bundle are not displayed. If the items that make up the bundle are ordered as individual items and then submitted as one SD, the item status values can be displayed correctly.	No workaround available at this time.

SCR	Problem	Workaround
QCCR1E77950	<p>If you fill "99999999999999999999999999999999" as the value in a number-field in a Service Request, the value is replaced by "2147483647." If the order process is continued, the following error is received one-click before the SD is created:</p> <p>"NewServer - Validation failed Additional Harddisk Size in GB (1) is mandatory Additional Harddisk Size in GB (1) is mandatory"</p>	No workaround available at this time.
QCCR1E80249	<p>Date formats display in the US date format (where the server is located) despite users logging the request from another country (so the regional settings on the PC differ). This behavior occurs even though these users' Operator and Contact records also have Australian time zones and date formats applied.</p>	No workaround available at this time.
QCCR1E79169	<p>When adding a comment to a request in SRC in a locale other than English, the comment is not posted and a (localized) error is received.</p>	No workaround available at this time.

Back-out Instructions

If you want to restore your Service Manager system to its original state after installing Service Manager 9.31, follow these guidelines.

Server

Before applying the server patch, make a backup of the server installation folder. For example, C:\Program Files\HP\Service Manager 9.30\Server.

To roll back your server to its original state, remove the existing server installation folder and copy the old one back.

Applications

When loading an unload file

Before loading an unload file, perform the following steps to make a backup of the files to be modified by the unload file:

- 1 Go to **Database Manager**, select **Import/Load** from **More** or the More Actions menu, and browse to the unload file.
- 2 Click **List Contents** on the menu bar, to view a list of files that have been updated in this unload.
- 3 Go to **Tailoring > RAD Editor**, search for the files you got in step 2, and click **More > Export/Unload**.
- 4 In the popup window, specify your backup upload file path/name, and click **Unload Appl**. **Note:** Make sure that **Append to file** is selected.

When applying an application patch

Before applying an application patch, make a backup of your database. To roll back your application changes, restore your database to the backup.

Web Tier

Before deploying the new web tier, back up your `web.xml` file, `application-context.xml`, splash screen, style sheets, and any other customizations you made, including your `webtier-9.30.war` (`webtier-ear-9.30.ear`) file.

To roll back to the old web tier:

- 1 Delete or uninstall the existing web tier.
- 2 Redeploy the old web tier.
- 3 Restore your old customizations.

Windows Client

You can only uninstall the new Windows client, and then reinstall the old version.

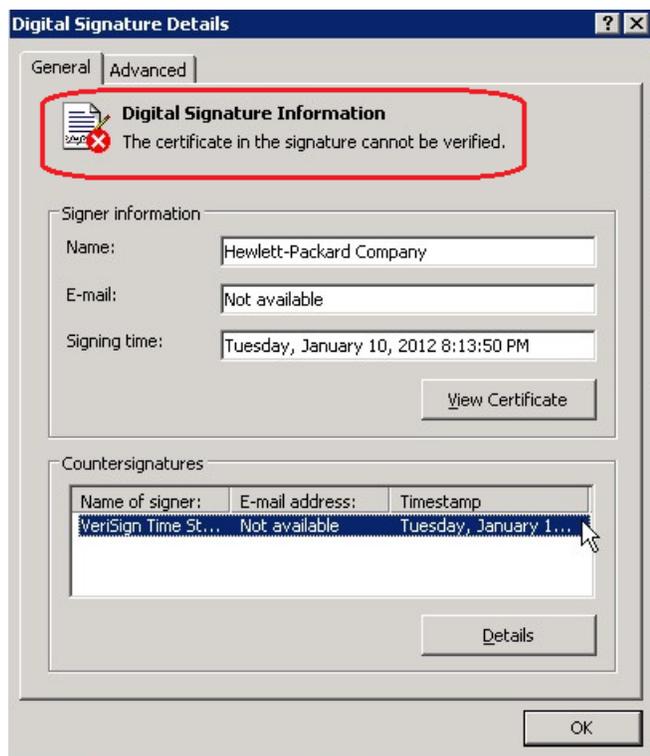
Installation Notes

Note: Service Manager (SM) 9.31 includes all the features of SM 9.30.p5, SM9.30ap3, SM9.30up6, and previous releases. If you are upgrading from a version earlier than SM 9.30.p5, 9.30ap3, or 9.30up6, review the release notes for the following releases since SM9.30:

- SM9.30p1 through p5
- SM9.30ap1 through ap3
- SM9.30up1 through up6

Digital signature notice

HP signs Windows executable files with a digital signature. Since SM 9.30.p3, this process has been updated to use a new VeriSign root certificate. On a Windows system that does not have the new VeriSign root or intermediate certificate installed, when the user right-clicks the file and then goes to **Properties > Digital Signatures > Details**, a verification error will display: “The certificate in this signature cannot be verified.”



To resolve this issue, either enable Windows Update or download and install the G5 Root certificate as documented at: <https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&actp=CROSSLINK&id=SO19140>

Applications Update Installation

Before applying the 9.31 applications, pay attention to the following.

Content Patch Dependencies

There are a number of Service Manager 9.30 content packs (CPs) that were released before this release. In general, you should install these content packs and the 9.31 applications in their release order to minimize conflicts. For instance, if you install the 9.31 applications before Process Designer Content Pack 2 (PD CP2), conflicts (renamed records) will occur.

- The application patch is compatible with the following HP Standard content packs that have been released for Service Manager 9.30:
- HTML Email Solution
- UCMDB Integration Enhancement Content Pack 9.30.0 (This Content Pack has been merged into the out-of-the-box 9.31 Application Patch)
- Process Designer Content Pack 9.30.1

There are some conflicts between Process Designer Content Pack 9.30.1 and the 9.31 Applications Patch. For information on how to resolve these conflicts, as well as recommended content pack installation sequences, see [Process Designer Content Pack 9.30.1 Limitations](#).

Prerequisites

- Service Manager application release level: 9.30 or 9.30 Applications Patch 1, 2, or 3
- Service Manager application release language: All languages for 9.30
- Service Manager client/server release level: 9.31 or higher
- The Service Manager server process must have read-write access to the database

Upgrading to the 9.31 Applications

Existing customers and new customers can upgrade to the 9.31 applications using different approaches. For detailed instructions, see the *Applications Patch Manager Guide* and *Upgrade Guides* for Service Manager 9.31.

For a list of changed objects, see the Service Manager 9.31 Applications Patch Manager Guide (*SM9.31_ApplicationPatchObjectChangedList.pdf*).

For existing customers:

- To upgrade from the SM9.30 applications or 9.30 Applications Patch 1, 2, or 3, use the SM9.31 Applications Patch Manager.
- To upgrade from the 7.11 or 9.21 applications, use the SM9.31 Upgrade Utility.

For new customers:

Install SM9.30 GA first, and then upgrade to the SM9.31 applications using the SM9.31 Applications Patch Manager.

Notes for Service Request Catalog Customers

If you are upgrading from an applications version earlier than 9.30 using the Upgrade Utility, the following requirements must be met for SRC to work properly:

- The type of the "id.attach" field in the "svcCatalog" table must be "number".
- The Unique Key of the "Approval" table must be {"unique.key", "file.name", "name", "component"}.
- The Unique Key of the "ApprovalLog" table must be {"counter", "file.name", "unique.key", "component"}.

For detailed instructions, see the "Handle key change failure" and "Data type mismatches" sections in the upgrade guide.

Web Tier Installation

The Web Tier update consists of a compressed file, `sm9.31.0022_Web_Tier.zip`. The specific upgrade process depends on your particular Web application server, but follows the same steps as deploying a new installation.

The Service Manager Web Tier contains a J2EE-compliant web application that runs on your web application server. Each web application server has its own method of deploying web applications. See your web application server documentation for specific instructions on deploying a web application.

The upgrade does not automatically save your Web Tier customizations. To keep your changes, you must save your customized files and replace the new version of these files with your customized version. For more information, refer to the *Service Manager Interactive Installation Guide*.

Note on Tomcat 7.0: If you plan to deploy the web tier on Tomcat 7.0 using the Tomcat Manager, be sure to set the `max-file-size` and `max-request-size` parameters (default: 52428800) in the `<Tomcat 7.0_Home>webapps\manager\WEB-INF\web.xml` to an appropriate value greater than the web tier .war file size; otherwise the deployment request will be rejected because the web tier .war file exceeds the default maximum values. This restriction does not exist in Tomcat 6.0.

- 1 Back up your `web.xml` file, `application-context.xml` file, splash screen, style sheets, and any other customizations you made, including your `webtier-x.xx.war` (`webtier-ear-x.xx.ear`) file.
- 2 Delete or uninstall the existing .war or .ear file.
- 3 Deploy the new `webtier-9.31.war` (.ear) file by following the instructions in the Service Manager 9.30 Interactive Installation Guide.

Note: HP recommends that you deploy with a unique context root, for example `/webtier-9.31.0022`.

- 4 Use a diff utility to compare the new Web tier's `web.xml` file against your backed-up version to ensure that any new parameters are properly merged into the files used in your final deployment. Do this for `application-context.xml` as well as any other files you may have customized (such as style sheets and splash screens).
- 5 Make any new customizations necessary for your deployment.
- 6 Restart the Application server.

Note: Before accessing the new Web Tier, HP recommends that all users empty their browser cache.

Windows Client Installation

The Windows client update consists of a compressed file, `sm9.31.0022_Windows_Client.zip`, which contains the executable installation files.

To install the Windows client update:

- 1 Stop the Service Manager Windows client.
- 2 Uninstall the Service Manager Windows client. (Your connection and personalized settings are retained.)
- 3 Run `setup.exe` and install the client by following the instructions in the Service Manager 9.30 Interactive Installation guide.
- 4 Check the version in **Help > About Service Manager Client**.
The client should be Release: 9.31.0022.

Server Update Installation

The server update for your operating system (OS) consists of a compressed file, `sm9.31.0022_<OS>.zip` (or `.tar`), which contains the Service Manager server files. These files add to or replace the files in the `[SM Server Root]\([SM Server Root]/) RUN, irlang, legacyintegration, and platform_unloads` directories.

Upgrade Paths

This server patch must be applied on top of one of the following versions/patch levels of the SM server:

- SM9.30 GA
- SM9.30 Patch/Hotfix

The following server upgrade paths are recommended:

- New customers: Install the SM9.30 GA server, and then directly apply this server patch;
- Existing SC6.2, SM7.11 and 9.21 customers: Uninstall the old server, install the SM9.30 GA server, and then apply this server patch;
- Existing SM9.30 customers: Apply this server patch.

For installation instructions of the SM9.30 GA server, see the *Service Manager 9.30 Interactive Installation Guide*, which is available from the HP Software Manuals Site:
<http://h20230.www2.hp.com/selfsolve/manuals>

For installation instructions of the server patch, see the following.

Server Patch Installation Steps

Note: If you have a horizontally scaled system, you must upgrade all server instances.

Important: This server update will upgrade the embedded Tomcat to version 6.0.35. It will also update the `schemastub.xml` file (`\RUN\km\styles\schemastub.xml`), which contains changes required for the KM Solr search engine (see [Knowledge Management Update Installation](#)). In addition, your server's `lwwsofmconf.xml` file will also be updated.

To install the Server update:

- 1 Stop all Service Manager clients.
- 2 Stop the Service Manager server.
- 3 Make a backup of the **RUN** directory.
- 4 Delete the **RUN/tomcat** directory. Tomcat in this directory will be upgraded to version 6.0.35 when you extract the server files later.
- 5 Delete the **RUN/lib** directory.
- 6 Extract the compressed files for your operating system into the main Service Manager directory on the server. The default path is: C:\Program Files\HP\Service Manager 9.30\Server.
- 7 For UNIX servers, set the file permissions for all Service Manager files to 755.
- 8 If you have made any customizations/changes to the original **RUN/tomcat** folder, restore them in the new **RUN/tomcat** folder.
- 9 Your server's old lwssofmconf.xml file has been overwritten. If you have configured LW-SSO in the old file, merge the parameter settings in the old file from your backup of the RUN directory into the new lwssofmconf.xml file.
- 10 Your old schemastub.xml file (in the <SM_Server_Home>\RUN\km\styles\ directory) has been updated to a new version. If you want to use the new KM Solr search engine features, follow the steps described in the [Solr Search Engine Update Installation](#) section; otherwise, copy your old schemastub.xml file back.
- 11 Make sure the server is stopped, and run the "sm -unlockdatabase" command.

The purpose of this step is to prevent stale license information from being kept in the system. In a scaling implementation, you can run this command from any one of your servers.

Note: This step is required the first time you upgrade to 9.30p4 or later; it is also required whenever you change the server's IP address after your upgrade to 9.30p4 or later.
- 12 Restart the Service Manager server.
- 13 Restart the Service Manager clients.
- 14 Check the version in **Help > About Service Manager Server**.
The server should be Release: 9.31.0022.

Application Unload Installation

Important: Unlike in Service Manager 9.30 patch 5 or earlier, all unload files in the server's **platform_unloads** directory in this release have been already merged into the Service Manager 9.31 applications. These files are provided just in case you do not plan to upgrade to applications 9.31 while still want to take advantage of the relevant new features/fixes.

When you extract sm9.31.0022_<OS>.zip (or .tar), the unload files included in this release are added to your [SM Server Root]\platform_unloads ([SM Server Root]/platform_unloads) directory.

An unload file is provided when a platform fix (in most cases, a server fix) in a platform patch also requires an applications change to resolve an issue. Unload files introduced in earlier patches are also included in each cumulative patch release. If you have not already applied them for a previous patch, you should also apply those that are intended for your applications version. For more details about these applications updates, see the Release Notes for those patches.

Note: Unload files should be installed in their patch order. That is, those introduced in patch 1 should be applied first, then those introduced in patch 2, and so on. However, unload files introduced in the same patch normally can be installed in a random order (there might be occasional exceptions).

Unload File Naming Convention

The unload files use the following naming convention: <CR_ID>_SMxxxPxx_SMxxx.unl, where:

- <CR_ID>: The identification number of the applications defect that the unload file fixes. For example, QCCR1E12345. Note that this is always the number of the parent CR of a CR family (if any).
- SMxxxPxx: The minimum Service Manager patch level that requires the unload file. For example, SM921P2, which means the unload file comes with the server updates in Service Manager 9.21 patch 2 and should be used for patch 2 or later.

Note: Sometimes this portion contains an additional hot fix number, for example, SM711P16HF8. This example means the unload file is intended for Service Manager 7.11 patch 16 Hot Fix 8 or later.

- SMxxx: The Service Manager applications version that requires the unload file. For example, SM711, which means the unload file is intended only for Service Manager applications version 7.11.

Note: If the applications version suffix is omitted, the unload file is then intended for all applications versions compatible with the server version, unless otherwise specified. For example, QCCR1Exxxx_SM930P4.unl is intended for applications versions 7.11, 9.20, and 9.30 (which are compatible with Service Manager server 9.30), unless otherwise specified in the unload file description. For information on the applicable applications versions for each unload file included in the current patch, see [Unload Files Included in the Current Patch](#).

Unload Files Included in the Current Patch

The following are unload files included in the current patch release.

Unload file	Introduced in	Used for apps version(s)	Description
QCCR1E78589_SM931_PD2.unl	9.31	9.30	Fixes the conflicts that occur after installing Service Manager 9.30 PD CP2 and then upgrading to the Service Manager 9.31 applications. Installation sequence: 1. PD CP2 2. 9.31 applications 3. This unload Note: This unload file is not needed if you do not have PD CP2 installed.
QCCR1E76227_SM930P6_SM930.unl	9.31	9.31	Contains the code changes to support localization of incident/change priority and urgency strings for the Mobility Client.
QCCR1E78794_SM930P6_SM930.unl	9.31	9.30	Removes incident.assignee when a Web Service call specifies the assignee as 'NULL' via the Mobility Client. See QCCR1E78794 .

Unload file	Introduced in	Used for apps version(s)	Description
QCCR1E76796_SM930P6_SM930.unl	9.31	9.30	Provides the ability to turn on debugging dynamically for user sessions or schedulers. Note: This unload requires the SM9.31 server.
QCCR1E71099_SM930P5_SM930.unl	9.30p5	9.30	Displays Value Lists instead of the data directly retrieved from the database in a QBE list when adding a field by using Modify Columns. Associated server fix: QCCR1E71099 (see the 9.30p5 Release Notes)
QCCR1E71139_SM930P5_SM930.unl	9.30p5	9.30	Works with server fix QCCR1E71139 to solve this issue: When Service Manager is configured to use LDAP as the authentication data source, the user is still forced to change the password if the user is expired in the local database.
QCCR1E31941_SM930P4_SM930.unl	9.30P4	9.30	Enables users to use a pre-configured decimal symbol when completing numeric fields. See QCCR1E31941. Notes: This enhancement requires a 9.30p4 or later server; however if you are using RTE version 9.30 with applications version 7.11 or 9.20, do not load this unload file; you can safely upgrade your server to 9.30p4 or later without applying this applications change. Associated server fix: QCCR1E31941.
QCCR1E73452_SM930P4.unl	9.30P4	7.11 - 9.30	Enables Mandanten restricting queries to be updated correctly after a profile is edited. Associated server fix: QCCR1E71897.
QCCR1E67072_SM930P4.unl	9.30P3	7.11 and 9.20	Enables users to take advantage of the new KMStatusListener background process. Note: This unload file is not needed for applications version 9.30 or later, which supports only the Solr Search Engine. Associated server fix: QCCR1E67071.
QCCR1E70163_SM930P4_SM711.unl	9.30P3	7.11	Fixes the issue that the KMUpdate process terminates abnormally. Associated server fix: QCCR1E69687.

Unload file	Introduced in	Used for apps version(s)	Description
QCCR1E70163_SM930P4_SM920.unl	9.30P3	9.20	Fixes the issue that the KMUpdate process terminates abnormally. Associated server fix: QCCR1E69687.
QCCR1E70163_SM930P4_SM930.unl	9.30P3	9.30	Fixes the issue that the KMUpdate process terminates abnormally. Associated server fix: QCCR1E69687.
QCCR1E67647_SM930P3.unl	9.30P3	7.11 - 9.30	Updates the exception message that occurs in the request response when closing an interaction by calling CloseInteraction from a web service without specifying the localSolution field in the request. Associated server fix: QCCR1E54192.
QCCR1E67610_SM930P2.unl	9.30P2	7.11 - 9.30	Enables you to block potentially dangerous attachments. Associated server fix: QCCR1E64290.

To load an unload file:

- 1 Select either client or server-side unload, depending on the location of the unload files.
 - a From the Windows client, go to **Window > Preferences > HP Service Manager**.
 - b Flag **Client-Side Load/Unload** if the files are on the client machine, and clear the flag if they are on the server.
 - c Restart the Windows client if you changed the setting.
- 2 Open **Tailoring > Database Manager**.
- 3 Right-click the form or open the options menu and select **Import/Load**.
- 4 Fill in the following fields.

Field	Description
File Name	Type the name and path of the file to load.
Import Descriptor	Since unload files do not require an Import Descriptor record, leave this field blank.
File Type	Select the source operating system of the unload file.
Messages Option — All Messages	Select this option to see all messages that Service Manager generates loading the file.
Messages Option — Totals Only	Select this option to see only the total number of files Service Manager loads.
Messages Option — None	Select this option to hide all messages that Service Manager generates when loading the file.

Note: You can view the contents of an unload file before importing it by clicking **List Contents**.

5 Click **Load FG**.

Knowledge Management Update Installation

Important: All unload files in the Knowledge Management package in this release are already part of the Service Manager 9.31 applications. These unloads are provided in case you do not plan to upgrade your applications to version 9.31. If you plan to upgrade to applications version 9.31, you do not need to load these unload files.

The Knowledge Management package (sm9.31.0022_KM.zip) updates the KM Solr Search Engine and the KM Import Utility:

KM Solr Search Engine:

Note: The KM Solr Search Engine is supported only for the SM9.30 or later applications. If you are using the SM7.11 or 9.21 applications, ignore this Solr Search Engine update.

- The **kmsolr_unloads** folder, which contains unload files that will update your KM Solr search engine:
 - QCCR1E67750_SM930P5_SM930.unl
 - QCCR1E77409_SM930P5_SM930.unl
 - QCCR1E75104_SM9.30P5_SM930.unl
- The **knowledgemanagement** folder: This folder contains updated files for the KM Solr search engine:
 - knowledgemanagement\kmsearchengine\KMCores\kmcore\conf\schema.xml
 - knowledgemanagement\kmsearchengine\KMCores\kmcore\conf\solrconfig.xml
 - knowledgemanagement\kmsearchengine\languages\data\jp.uhtagger
 - knowledgemanagement\kmsearchengine\lib\tg_solr.jar

Note: These files should overwrite the old files in your search engine's kmsearchengine folder (for example, C:\Program Files (x86)\HP\Service Manager 9.30\Search_Engine\kmsearchengine).

KM Import Utility:

- **km-import-9.31.zip:** This file is an updated version of the KM Import utility.

KM Solr Search Engine Update Installation

Note: The KM Solr Search Engine is supported only for SM9.30 or later applications. Ignore this section if you are on the SM7.11 or 9.21 applications.

The Solr Search Engine update aims to enable the following features or fix for Knowledge Management searches:

- Support of Knowledge Management search for Service Request Catalog (SRC) 1.4
- Ability to specify search result sort preferences in Knowledge Management (by Modified Date, Status, or Relevancy). For more information, see the SM9.30p4 Release Notes.
- Ability to select whether or not to highlight attachment content in KM search results. A new option (**Highlight content of attachment in search result?**) is available in the KM environment record. By default, this option is not selected, and therefore attachment content in user's KM search results will not be highlighted. This can significantly improve search performance when there are a large number of large-size attachments like PDF manuals in the knowledgebases. For more information, see the "Highlighting Attachment Content in Search Results Optional" section in the 9.30p5 Release Notes.

- Fix QCCR75104 (Searches that use "NOT" or '-' to exclude terms produce unexpected results. For example, the search results when using the 'None of these words' option in Advanced Search may include the search terms that should have been excluded.) For more information, see the 9.30p5 Release Notes.

To install the Solr Search Engine update:

- 1 Make sure you have already installed the 9.31 server package.

Note: The server package will update your schemastub.xml file to support the new features. If you do not want to use the new features, copy your old schemastub.xml file back from the backup of your server's RUN directory so that your Search Engine can continue to work.

- 2 Make a backup of your Search Engine installation folder.

- 3 Update your Search Engine's kmsearchengine folder (for example: C:\Program Files (x86)\HP\Service Manager 9.30\Search_Engine\kmsearchengine) with the new files under the knowledgemanagement\kmsearchengine folder from the 9.31 KM package.

- 4 If you want to enable the "Search Result Sort Preferences" feature, follow the instructions in the 9.30p4 Release Notes.

Note: If you have already upgraded to applications 9.31 or have already enabled this feature for 9.30p4 or 9.30p5, ignore this step.

Warning: QCCR1E67750_SM930P5_SM930.unl must be loaded before the other two KM unload files, otherwise conflicts will occur.

- 5 If you want to enable the "Highlighting Attachment Content in Search Results Optional" feature, follow the instructions in the 9.30p5 Release Notes.

Note: If you have already upgraded to applications 9.31 or have already enabled this feature for 9.30p5, ignore this step, because the **Highlight content of attachment in search result?** option should be already available in your KM Environment record (**Knowledge Management > Administration > Environment**).

- 6 Load QCCR1E75104_SM9.30P5_SM930.unl to take advantage of the fix QCCR1E75104 to the "Filter by..." functionality for Advanced Search.

- 7 Log off Service Manager and log back in for your changes to take effect.

- 8 Perform a full re-indexing for all of your knowledgebases.

- 9 Verify that the Search Result Sort Preferences feature is working correctly, by doing a knowledgebase search and then changing your sort preference. For details, see the 9.30p4 Release Notes.

- 10 Verify that the "Highlighting Attachment Content in Search Results Optional" feature is working properly.

- a Open the KM Environment record. The **Highlight content of attachment in search result?** option is not selected by default.

- b If you want the keywords in both document bodies and attachments are highlighted in search results, select the **Highlight content of attachment in search result?** option; otherwise leave it unselected to highlight only keywords in document bodies.

Note: Selecting this option could increase the search response time when there are large attachments like PDF manuals.

- c Perform a knowledgebase search, to verify that in your search results the keywords in attachments are highlighted or not highlighted according to your setting.

- 11 Verify the "Filter by..." functionality fix by doing an advanced knowledgebase search.

Knowledge Management Import Utility Installation

Note: The km-import-9.31.zip file included in this release is in same with the Import Utility .zip file in the SM9.30p4 and SM9.30p5 releases.

Extract km-import-9.31.zip in the Knowledge Management package to a local drive. For detailed instructions on the use of the import utility, see the README file packaged in this .zip file.

Mobile Applications Update Installation

The Mobile Applications package (sm9.31.0022_Mobility.zip) contains an updated version of the mobileItsmWebApp.war file.

To install the Mobile Applications update:

- 1 Install Service Manager Mobile Applications version 1.0 shipped with the Service Manager 9.30 DVD, if you have not already done so. For detailed instructions, see the *HP Service Manager 9.31 Mobile Applications User Guide*.
- 2 Make sure that the Apache Tomcat SMMobility Windows service or the Mobile Applications Tomcat server is stopped.
- 3 If you have already configured Mobile Applications version 1.0 on your system before installing this patch, make a backup of the following folder by renaming it:
<SM_Mobility>\Tomcat\webapps\mobileItsmWebApp

For example, rename it to **mobileItsmWebApp_old**.

- 4 Copy the mobileItsmWebApp.war file packaged in the sm9.31.0022_Mobility.zip file to the following folder to overwrite the old file: <SM_Mobility>\Tomcat\webapps\
5 If you have already configured Mobile Applications before installing this patch, do the following:
 - a Restore your customizations by copying your old AppConfig.groovy and CustomConfig.groovy files back to overwrite the configuration files in the new mobileItsmWebApp.war file.
 - b At the end of the CustomConfig.groovy file, add **itsm.PageMaxRecords=10**. You can change the parameter value from the default (10) to better suit your needs.

Note: This is a new parameter introduced in version 9.31 (default: 10). It defines the maximum number of records that can be displayed on each page of the following types of lists:

- Home page: the Incident (Awaiting My Approval, and Assigned to My Groups), and Change (Awaiting My Approval, and Assigned to My Groups) lists
- Incident Detail page: Status, Activities, Assignee, and Group lists
- Change Detail page: Activities, Group, Approvals, and Tasks lists

Warning: The **itsm.PageMaxRecords** parameter is mandatory. If it is not specified in the CustomConfig.groovy file, the Mobility Client will not work.

- c If needed, in the restored CustomConfig.groovy file, continue to configure language and dateFormat settings (supported only in this Mobility patch). For details, see the SM9.31 Mobile Applications user guide.
- 6 If you have not yet configured Mobile Applications before installing this patch, configure the Mobile Applications by following the instructions in the SM9.31 Mobile Applications user guide. In this case, you use the new CustomConfig.groovy file, which already contains the **itsm.PageMaxRecords** parameter.

- 7 In <SM_Mobility>\Tomcat\conf\server.xml, add the **URIEncoding="UTF-8"** attribute for the HTTP connector as shown below:

```
<Connector port="8080" protocol="HTTP/1.1"
           connectionTimeout="120000"
           redirectPort="8443" URIEncoding="UTF-8" />
```

- 8 Start the Apache Tomcat SMMobility Windows service or start the Mobile Applications Tomcat server. The following new folder is created: <SM_Mobility>\Tomcat\webapps\mobileItsmWebApp

ODBC Driver Update Installation

Note: The ODBC .zip file is same with the one shipped with the SM9.30p4 and SM930p5 releases.

The ODBC Driver update consists of the sm9.31.0022_ODBC.zip file, which contains the following updated files:

- Scodbc32.dll
- sci18n.dll
- scl32.dll

To install the ODBC Driver update:

- 1 Extract the files to your ODBC Driver installation folder, for example: C:\Program Files\Peregrine Systems\ServiceCenter 6.2\ODBC Driver.
- 2 When prompted, replace the three old DLL files with the new ones.

Service Request Catalog (SRC) 1.4 Installation

Extract the serviceRequestCatalog_SRC1.40.zip file, and install SRC 1.4.

For detailed instructions, see the *Service Request Catalog 1.4 Interactive Installation Guide*.

Verified Environments

The Support Matrix lists supported versions of operating systems, browsers, HP Software products, and other compatibility and support information.

To access the Support Matrix:

- 1 Use a browser to navigate to the Software Support Online (SSO) web page:
http://support.openview.hp.com/sc/support_matrices.jsp
- 2 Log on with your Customer ID and password or your HP Passport sign-in.
- 3 Navigate to the applicable information.

Local Language Support

UTF-8 is part of the Unicode standard, which enables you to encode text in practically any script and language. Service Manager 9.31 supports UTF-8 as an encoding method for new or existing data. It can support multiple languages that adhere to the Unicode standard on the same server.

Mobility Localization Support

Service Manager 9.31 Mobile Applications support the following languages: English, French, German, Japanese, and Spanish.

Service Request Catalog 1.4 Localization Support

Service Request Catalog 1.4 supports the following languages: Arabic, Brazilian Portuguese, Czech, Dutch, English, French, German, Hungarian, Italian, Japanese, Korean, Polish, Russian, Simplified Chinese, and Spanish.

Appendix. Server Created New Tables

The following table lists the new tables (files) the server patch creates in your database.

Note: If you need to roll back after applying the server patch, you can either keep the new tables or delete them from your database.

Table	Description	Introduced in Version
lock	Introduced for the new locking mechanism to store exclusive locks.	9.31
lockshared	Introduced for the new locking mechanism to store shared locks.	9.31

Support

You can visit the HP Software support web site at:

www.hp.com/go/hpsoftwaresupport

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

HP Software online software 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 site 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 sign in. Many also require an active support contract. To find more information about support access levels, go to the following URL:

http://h20230.www2.hp.com/new_access_levels.jsp

To register for an HP Passport ID, go to the following URL:

<http://h20229.www2.hp.com/passport-registration.html>

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