HP Service Manager

Software Version: 9.34
For the supported Windows® and UNIX® operating systems

Release Notes

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Software Release Date: July 2014

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Contents

Introduction to Service Manager 9.34

HP Service Manager 9.34 has been designed to provide a fresh look and feel to the web client while keeping the overall day-to-day user experience that users are used to. We improved usability by adding an optional auto-complete feature as well as a new date picker widget. The message bar got a makeover, and SRC users can now submit new requests with less clicks. We continue to support the Windows client but have not made any changes to it.

We didn't stop at UI improvements: there is an entirely new change calendar feature as well as a case exchange framework so you can integrate Service Manager with other incident handling systems. We also added a new "delta migration" tool that automatically synchronizes changes between two Service Manager systems.

These great features and more are summarized in "What's new in this release" on page 9. But that's not all… the journey of improving overall product quality didn't stop either: we resolved over 200 defects and implemented over 20 customer-requested enhancements. And the Service Manager team is already busy working on the next set of features and product improvements. Stay tuned!

If you are running Service Managerin a Windows environment, we highly encourage you to download HP ITSM Deployment Manager and use it to re-deploy your environment when upgrading to Service Manager 9.34. Deployment Manager is a new free admin tool provided by HP to help you deploy and maintain your Service Manager environments as well as ease the setup and maintenance of Service Manager integration with other HP products. See this blog article for a quick overview: *The new HP ITSM Deployment Manager will shorten your on premise software deployment*. Deployment Manager can be download from HP Live Network for free and all related information regarding its compatibility matrix and features are accessible there: **https://hpln.hp.com/group/itsm-deployment-manager**

As always, we encourage you to actively participate in making Service Manager better. Please follow us on Twitter at @HPITSM, join our LinkedIn group "HP ITSM" or join the discussion on our blog.

What's new in this release

This section describes the important changes in this release.

Feature	Prerequisites
User experience improvements in the web client	• Service Manager 9.34 web client The Auto Complete features does not support applications versions prior to 9.32. Additionally, for applications versions 9.32 and 9.33, platform unload **QCCR1E103581_SM934_SM932.unl** shipped with Service Manager 9.34 must be loaded first to use Auto Complete. For details, see the *Auto complete* topic in the online help. The Branding feature supports applications versions 7.11 through 9.34. However, for applications versions earlier than 9.34, the **TAILORING** menu record must be manually updated to enable the new branding interface. For details, see the *Branding the web client* topic in the online help. If you are running on an applications version earlier than 9.34, you may see a vertical scroll bar outside the subforms in some out-of-box wizards. To solve this issue, use the workaround provided in "User experience improvements in the web client" on the next page.
Case Exchange framework	• Service Manager 9.34 server • Service Manager 9.34 applications
Service Manager Calendar	• Service Manager 9.34 server • Service Manager 9.34 web client • Service Manager 9.34 applications
Time Period Management	• Service Manager 9.34 server • Service Manager 9.34 applications
Delta migration tool	Any version of Service Manager (SM): SC6.2, SM7.x, SM9.2x, and SM9.3x. **Note:** For applications versions earlier than 9.34, **DeltaMigrationTool.unl** (which is shipped with the SM9.34 Upgrade package) must be loaded first.
Text Import Wizard enhancements	• Service Manager 9.34 server • Service Manager 9.34 applications

Survey Integration enhancement	• Service Manager 9.34 applications
Support of multiple OMi servers	• Service Manager 9.34 applications
JavaScript engine performance improvements	• Service Manager 9.34 server **Caution:** You need to disable mode “malloc” defined by server parameter “memmanager”. Otherwise you may run into out-of-memory issues.
Accessibility improvements	• Service Manager 9.34 web client (with JAWS 13 for Internet Explorer 8 or 9, and JAWS 15 for Internet Explorer 10 or 11)
Requesting support items from the ESS portal	• Service Manager 9.34 applications
New enhancements for Service Request Catalog	• Service Manager 9.34 applications • Service Manager 9.34 Service Request Catalog web client
KBI knowledge content	• Service Manager 9.3x server • Service Manager 9.3x applications • Service Manager 9.3x Knowledge Management Search Engine • Service Manager 9.3x KM Import Utility

Tip: As of Service Manager 9.33, the "Installation Information" section of the patch detail page will contain a link to a knowledge base article that contains links to all the previous release notes and patches. This article enables you to always find the most up-to-date release notes and the latest 9.3x patches:

http://support.openview.hp.com/selfsolve/document/KM00705452

User experience improvements in the web client

Service Manager 9.34 includes the following user experience improvements in the web client to reach a higher level of readability, efficiency, and consistency.

New look and feel

The new look and feel of the web client follows a clean and modern design that aligns with the HP brand. The new design refreshes almost all user interface (UI) elements, such as headers, toolbars, and icons.

- The new design increases the size of some UI elements (for example, widgets and the space between widgets) to improve readability.
- The new UI elements are clean and simple, and the newly introduced icons are more meaningful.
- The new design uses fewer background colors.

Note: If you use Internet Explorer, we recommend that you use Internet Explorer 10 or a higher version for better experience and performance. Internet Explorer 8 has some known limitations, for example:

- The browser cannot automatically adjust the size of the login graphic when the size of the browser window changes.
- The browser does not support certain HTML styles. For example, round corners of a box and the shadow effect when an item is in focus.

All these improvements help users to focus on the information, so users can find the information they want more easily.

User interface backward compatibility

Service Manager 9.34 provides the following capabilities for you to bring back some of the UI elements and styles of Service Manager 9.33:

- Bringing back the icons in toolbar and forms

  In the event that you prefer to retain the previous icons, you can download them from the HP Live Network: **https://hpln.hp.com/node/6/otherfiles/?dir=20276**

  To apply the icons, follow the instructions in the following online help topic:

  System Administration > Tailoring > Web tier > Branding the web client > Additional branding implementation options

- Using the compact layout

  The compact layout can bring back the page layout that is used in Service Manager 9.33. In your existing tailored forms, there is a possibility that the increased size of some UI elements in the new look and feel may introduce certain display issues, for example, truncated text or overlapped UI elements. You can use the compact layout to work around these issues. For more information, refer to the following online help topic:

  System Administration > Tailoring > Web tier > Using the compact layout

- Resolving the vertical scroll bar issue in Wizards

  Use the following workaround to resolve the issue that a vertical scroll bar appears outside the subforms of some wizards:

  a. Go to **Forms Designer**.

  b. Find the following forms for wizard templates:

     - wizard
     - wizard.large
     - wizard.list
     - wizard.list.mult
     - wizard.okonly
     - wizard.okonly.small
     - wizard.small

  c. Click **Search**.

  d. Click **Design**.

  e. Perform the following adjustments to meet your needs:

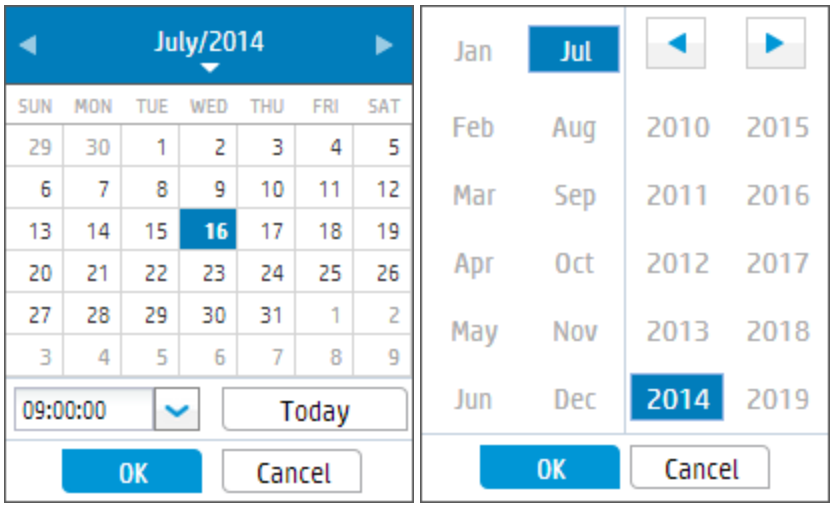
     - Reduce the height of the "wizard.subformat" subform.
     - Move the buttons at the bottom to a higher position.
     - If the vertical scroll bar appears inside of the "wizard.subformat" subform, reduce the vertical space between widgets on the form that is contained in the subform.

  f. Click **OK** twice.

  > **Note:** If you have language packs installed , perform the same steps for other languages. This solution also applies to Wizards created by yourself.

Date picker

The new date picker for the **Date** control provides a more efficient way to select a date and time. The date picker no longer opens a new window.

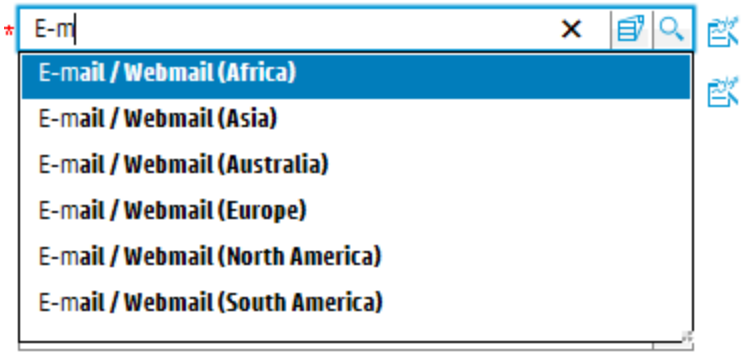


The new date picker also supports keyboard shortcuts. For more information, refer to the following topic in the online help:

Getting Started > Clients > Web clients > Web client keyboard shortcuts

Auto complete

The auto complete functionality in the Comfill widget displays matching values as you type. You can quickly select a value from the list, so you no longer need to jump back and forth through pages to select the value for the field.



Caution: Be aware that the auto complete feature will consume additional system resources (memory and CPU) of the Service Manager server. If your server already runs at high capacity, HP recommends that you analyze and understand the impact before deployment (see the *Service Manager 9.3x Deployment Sizing Guide* for reference information). Note that this guide does not contain Service Manager 9.34 related information until some time after the release.

The following table lists the parameters that control this feature. Their default values are intended to provide optimized user experience; however you may need to tune these parameters based on your system requirements to achieve balance between user experience and system performance.

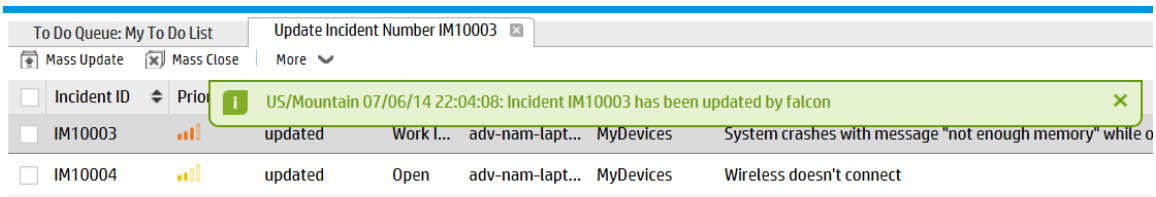
Web parameter	Default value	Description
"Web parameter: comfillAutoComplete" on page 45	true	This parameter enables auto complete for the Comfill control. If you want to disable auto complete globally in Service Manager, set it to **false**. To enable auto complete for a specific Comfill field, you must further enable the **Auto Complete** property of this Comfill control in Forms Designer. If this property is disabled, auto complete is disabled for this Comfill field regardless of the global *comfillAutoComplete* setting.
"Web parameter: autoCompleteDelayTime" on page 41	200 milliseconds	This parameter defines the delay time in milliseconds to trigger the auto complete feature after you stop typing characters in a Comfill field.
"Web parameter: autoCompleteListSize" on page 42	10 records	This parameter defines the maximum number of records that are fetched from the server side at one time and returned to an auto complete selection list.
"Web parameter: autoCompleteMinChars" on page 43	3 characters	This parameter defines the minimum number of characters you must type in a Comfill widget to trigger the auto complete feature.
"Web parameter: autoCompleteSkipCachingChar" on page 44	/ (forward slash)	This parameter specifies a special character that is used in the Link records of some Comfill fields as a separator to split a single field value into multiple levels, such as "/" in "mycompany/Asia."

For more information about how to configure the auto complete feature, see the following topic in the online help:

Guides and reference > Tailoring Best Practice Guide > Form tailoring > Selecting values from options in a control > Auto complete

Message bar

The new message bar floats over the page so that the content of the page no longer moves down. The message bar uses three background colors (green, yellow, and red) to identify the type of the message (info, warning, and error). For each type of messages, you can define whether the message bar appears and how long the messages are displayed.



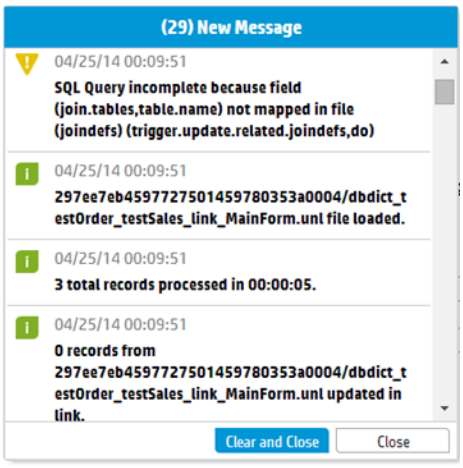
For more information on how to configure the message display properties, refer to the following topic in the online help:

Guides and reference > System Configuration Parameters > Client parameters for web clients > Web parameter: message display properties

Message history box

The new message history box is modeless, which means you can perform other tasks in Service Manager while leaving this box open. This feature is particularly helpful when you need to copy text from the message history box and paste the text into somewhere else in Service Manager.

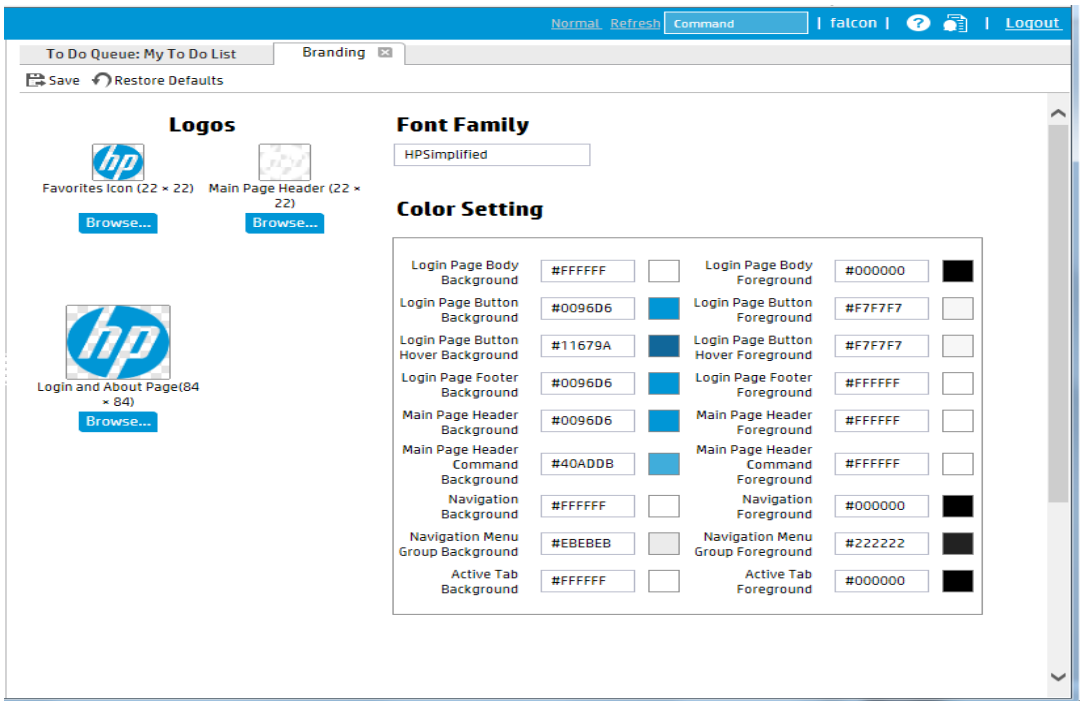
The new message history box no longer opens a new browser window, and hence is quicker than the old message history box.



Easy branding

In previous versions of HP Service Manager, there was no easy way to re-brand the web client to align with your corporate standards.

Service Manager 9.34 provides a graphic user interface that facilitates the branding, tailoring, and upgrading of the web client. Now you no longer need to clear the browser cache after branding, and the new branding settings can take effect immediately.



Note: Techniques used previously to do Service Manager branding may not work any more. Also, the Branding feature supports applications versions 7.11 through 9.34. However, in applications earlier than version 9.34, you must manually update the TAILORING menu to enable the branding interface.

Tip: Your branding settings are stored in the folder you specify in web.xml parameter **customize-folder**. To apply the branding settings from one Web tier to another, copy the customize-folder you specified from the source Web tier to the target Web tier.

For more information, refer to the following topic in the online help:

System Administration > Tailoring > Web tier > Branding the web client

If some of the current icons in Service Manger 9.34 become invisible when you set the background and the icon to the same color, you can download the Service Manager 9.34 icons for special backgrounds from the HP Live Network: **https://hpln.hp.com/node/6/otherfiles/?dir=20511**.

To apply the icons, follow the instructions in the following online help topic:

System Administration > Tailoring > Web tier > Branding the web client > Additional branding implementation options

For step-by-step instructions and branding examples, see white paper *Branding the Service Manager web client*.

Case Exchange framework

HP Service Manager Case Exchange is a solution to exchange data between two Service Manager systems or between Service Manager and another product. The Case Exchange framework mainly facilitates the following operations:

- Sending and receiving data
- Viewing and processing the exchanged data in the native environment

The Case Exchange framework enhances the existing Service Manager Integration Suite (SMIS), which provides an interface to enable the Case Exchange solution. Case Exchange takes advantage of SMIS and provides the following core features:

- **Connector**

  Case Exchange is enabled by connectors, which can open, update, and close records in the ticketing system of another provider. Connectors can also perform the following tasks:

  - Listen for events or updates related to ticket exchange.
  - Take care of the physical communication to the ticketing system via REST-based web services in JSON format.
  - Manage appropriate authentication and identity credentials required by the connected ticketing system.

- **Field mapping and value mapping**

  Field mapping and value mapping determine how the record data is transformed into the internal or external normalized case format.

  Field mapping ensures that the data from one system is send to the correct field on the second system. To avoid interface failures the field names and the field name description should *not* contain any special characters.

  Value mapping ensures the data is correctly transformed according to the rules required in each system. The value mapping supports expressions and calculations to ensure the data is correctly manipulated prior to sending or updating records in the local database.

- **Outbound trigger rules**

  The outbound trigger rules determine which kind of record shall be sent to the external system. The Case Exchange framework includes a dedicated rule type in Rule Sets. This type of rules can trigger the Case Exchange request from Service Manager to the integrated systems.

If Process Designer is implemented in the object of the exchanging record, you can invoke a Rule Set from workflows. However, if Process Designer is not implemented, you must invoke a Rule Set from the table trigger by using the following new API:

```
lib.CaseExchange_RuleExecute.executeSingleRuleSet (record,oldrecord,RuleSetID)
```

- **Error handling**

  In addition to the existing retry mechanism on the failed exchange request, the Case Exchange framework introduces this new feature to better handle errors. With this feature, SMIS can automatically submit a new Incident record for the failed exchange request.

- **Audit and logging**

  For administrators, the Case Exchange framework introduces the new SMIS task log feature to track all transactions of exchange requests. Administrators can access this log from SMIS. For users, the Case Exchange framework introduces the **Case Exchange** section in the Incident record detail. When a Case Exchange integration instance is active and a Case Exchange task has occurred to an Incident record, the **Case Exchange** section appears and contains the details of the Case Exchange information.

With these core features of the Case Exchange framework, you can set up the Case Exchange integration with an easy and flexible approach.

For more information about the Case Exchange framework, refer to the following section in the online help:

System Administration > Integrations > Case Exchange framework

SMIS enhancements

To enable the Case Exchange framework, SMIS includes the following enhancements:

- **Integration templates for Case Exchange**

  SMIS includes an out-of-box template for the Case Exchange integration: **CaseExchangeDefaultTemplate**. When you set up the integration, you can use and modify the out-of-box template as needed.

- **Dynamic connector form**

  Instead of the legacy table format, connector parameters are currently maintained within a dynamic form, which is customizable in the SMIS template.

- **Configurable background scheduler**

  To save system resources, multiple integration instances can share the same background scheduler. When you create an integration template, you can define a default shared scheduler for the instances that are based on this template. All instances that are based on this template can use

the same shared scheduler. However, if you create an instance that specifies a different scheduler, SMIS creates a new scheduler accordingly.

- **Task log**

  The SMIS task log keeps all transactions of exchange requests. An integration administrator or a user has access to the SMIS task log to view the transaction details. A log entry in the SMIS task log always links to a task in the SMIS task queue. Through the link, you can manually solve an unsuccessful exchange request when needed.

- **Field Mapping**

  Field mapping has the following enhancements:

  - Field Mapping is currently configurable in the SMIS template. You can directly import the field mappings from the template when you create a SMIS instance.
  - You can specify an Alias when you define the field, and use the Alias in value mapping to represent the field.
  - Field mapping introduces a new field type: `variable`, which can be used to define a variable field. For example, the **Update** field (activity log) for the Incident object.
  - When you use the `when` callback function in field mapping, you can define multiple entities with different conditions, and use placeholders to express a condition that is more complex than `true` and `false`. For more information about how to use placeholders, refer to the following topic in the online help:

    System Administration > Integrations > Service Manager integration methods and tools > Integration Manager > Add or delete an integration instance > Integration Instance Mapping > Use placeholders

- **Value Mapping**

  Value mapping has the following enhancements:

  - When you configure value mapping entries, you can set a condition to an entry. The condition can be `true`, `false`, or an expression that uses placeholder. For more information about how to set a condition for a value mapping entry, refer to the following topic in the online help:

    System Administration > Integrations > Service Manager integration methods and tools > Integration Manager > Add or delete an integration instance > Integration Instance Mapping > Configure a condition

  - To make the value mapping customization more flexible, SMIS introduces the pre script and post script. For more information, refer to **Pre script** and **Post script** in the online help under the following path:

    System Administration > Integrations > Service Manager integration methods and tools > Integration Manager > Add or delete an integration instance

Service Manager Calendar

Prior to version 9.34, HP Service Manager allowed you to set up a calendar through the Release Control integration. As of version 9.34, Service Manager additionally provides a calendar that is based on the Calendar widget. Service Manager Calendar can display time period records and associated business records in a graphic and intuitive user interface. It enables users to perform the following tasks and optimize their task planning accordingly:

- To easily see how their activities will be affected in a specific time range. For example, they can see if a performance degradation or service outage will happen this week.
- To easily see which business records (changes, incidents, interactions, and so on) are scheduled for or associated with a specific time range. For example, they can see if a change is planned to start or end this week.
- To directly view important details of time period records and associated records from tooltips.
- To directly open records from the calendar to view their details.
- To view time conflicts of object records from either conflict icon tooltips and shadow bars.

Service Manager Calendar also allows high-level tailoring through a set of configurations. For time period records and associated records, you can set color preferences, maximum number of records to display, field mappings, filters, and so on.

Enable Service Manager Calendar

Caution: Calendar will consume additional system resources (memory and CPU). Therefore, if you plan to embed the calendar in forms that are heavily used in your organization's daily operation (such as incident or interaction forms), and if your server already runs at high capacity, HP recommends that you analyze and understand the impact before deployment (see the *Service Manager 9.3x Deployment Sizing Guide* for reference information). Note that this guide does not contain Service Manager 9.34 related information until some time after the release.

By default, Service Manager Calendar is disabled and the Release Control Calendar is used. To use Service Manager Calendar instead of the Release Control Calendar, perform the following steps:

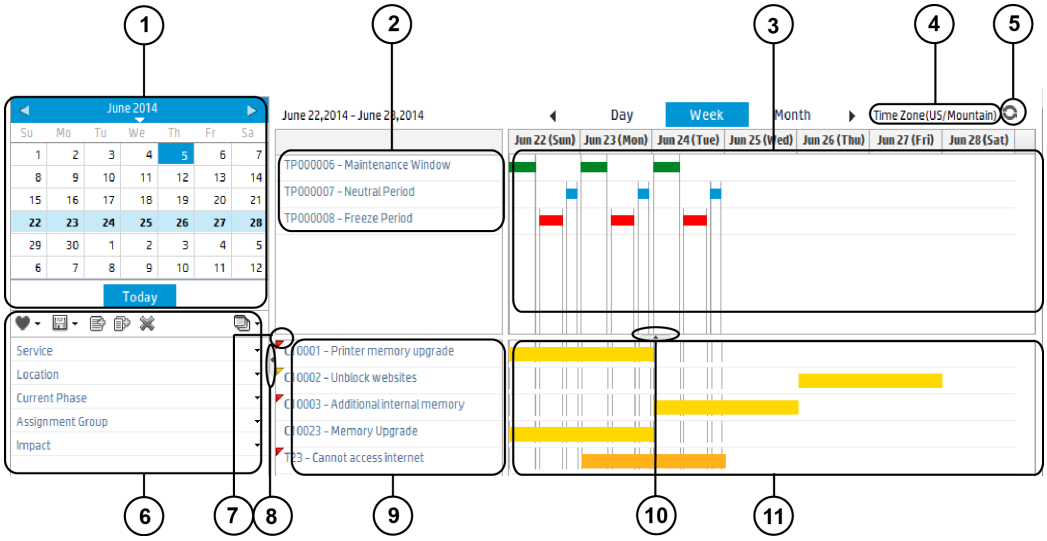
1. Log in to Service Manager as a system administrator.
2. Click **System Administration** > **Base System Configuration** > **Miscellaneous** > **System Information Record**.
3. On the **General** tab, select the **Enable Calendar and Time Period Management** option.
4. Click **Save**.

Launch Service Manager Calendar (web client only)

Calendar is not accessible from the Windows client. If you click **Calendar** from the System Navigator in the Windows client, a message displays instead, indicating this feature is available only from the web client.

To launch Calendar from the web client, click **Miscellaneous** > **Calendar** from the System Navigator. Calendar opens. See the following figure.

Note: When the **Enable Calendar and Time Period Management** option is not selected, the Release Control Calendar is used. If the Release Control Calendar is not set up, an error message occurs when you click **Miscellaneous** > **Calendar**.



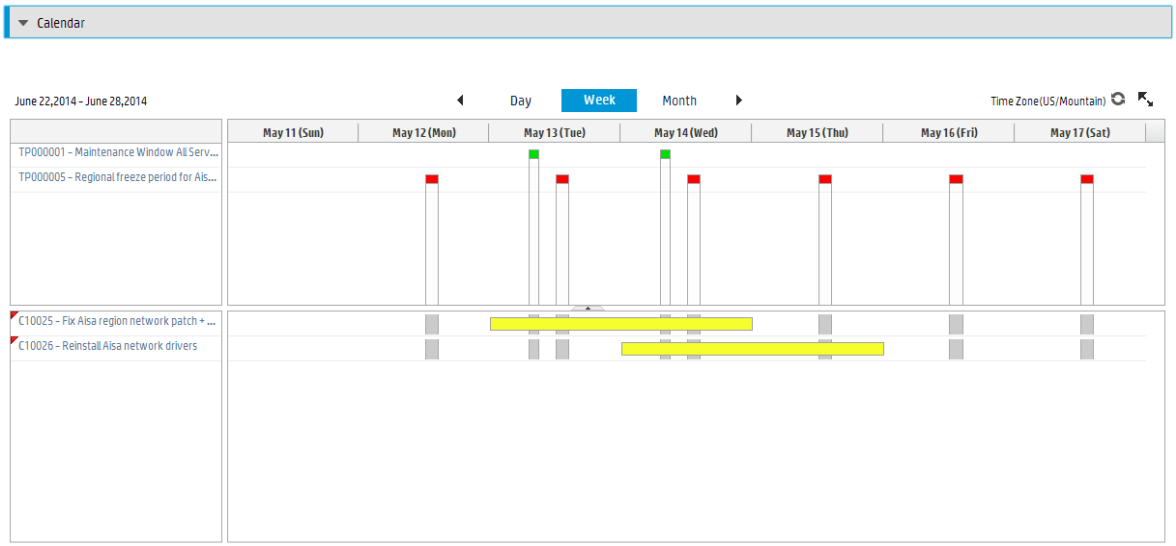
Callout	Description
1	The date picker panel. You can use the arrow buttons on this panel to quickly jump to a specific year/month/date.
2	The Time Period record list panel, which is the upper part of the record list area. Note that the record list area is also referred to as the "Title area" of the calendar. This panel lists the time period records being displayed in the current calendar view, based on the settings in the **Title Configuration** section in **System Administration** > **Ongoing Maintenance** > **Calendar Administration** > **Calendar Mappings**.

Callout	Description
3	The Time Period graphic view panel, which is the upper part of the right-side area of the calendar ("calendar entry area"). This panel displays time period occurrences as a single-color bar, and the length of each bar represents an occurrence duration. **Note:** This panel displays only active time period occurrences.
4	The time zone area, which displays the time zone that is defined in the current user's operator record, or the one defined in the System Information Record if the former does not exist. **Note:** If neither exists, this area displays `Time Zone (undefined)`.
5	The Refresh button, used to fresh the calendar display.
6	The filter panel, used to manage filtered views of the calendar. This filtering feature helps users locate data of their interest. On the filter panel, users can add individual filter fields and field groups.
7	Conflict icons. Each of these icons indicates that the current record has conflicts with one or more time periods of the Freeze Period or Maintenance Window type, or has one or more custom messages configured, or both. These icons have tooltips that show specific conflict information and custom messages. A record that has conflicts is one that exceeds, or misses, or overlaps with a Freeze Period or Maintenance Window time period. When it has conflicts only with maintenance windows, a yellow icon is displayed; as long as it has conflicts with freeze periods, a red icon is displayed; if it has no conflicts but has only custom messages configured, a blue icon is displayed. Conflicts and overlaps are also indicated by gray background bars ("shadow bars") behind the records bars. The more time periods a record has conflicts with, the darker the shadow bar becomes.
8	This button collapses the entire left-side panel (which consists of the date picker panel and the filter panel).
9	The object record list panel, which is the lower part of the record list panel ("Title area"). This panel lists object records that are associated with the current time range. For example, this panel may list a Change record whose Planned Start or Planned End time falls into the currently displayed time range. The Calendar Settings and Calendar Mapping configurations determine which records are displayed in this area.
10	This button collapses the entire time period panel.

Callout	Description
11	The graphic view panel of object records, which is the lower part of the "calendar entry area". This panel displays relevant object records as a single-color bar to provide an intuitive view of the start and end times of these records. Administrators can use different colors to identify different records.

View Embedded Calendar from Change Management

The embedded calendar is a simplified view of the Calendar. Out of box, it is accessible only from Change Management (the Calendar section in a Change or a Change Task record). The embedded calendar displays information about time periods and object records in a way that is more relevant to the current record.



Load Calendar demo data

You can download demo data for Calendar from the HP Live Network website:
https://hpln.hp.com/node/6/otherfiles/?dir=20274

You can load the demo data to your testing system to see examples of how to set up Calendar.

More information

For information on how to configure and work with Service Manager Calendar, see the following section in the online help:

System Administration > Calendar Administration

Time Period Management

A time period definition is a set of settings that defines a type of time windows based on a set of recurrence rules, including its category, current phase (based on a pre-configured workflow), approval

status, scope, assignment group, owner, affected services, affected departments, and affected locations. Time Period Management enables you to perform the following tasks:

- Define Local, Regional, or Global time periods that apply to a specific set of or all locations (countries or regions) in your organization.
- Define which departments, business services, environment type (for example, production or test) the time periods apply to.
- Define the scope of each time period to indicate whether it will cause performance degradation or service outage to end users or it will have no impact on end user's activities.

You can use Time Period Management to manage time period definitions for your organization so that end users can see how their activities will be affected during different time periods. If integrated with another module in HP Service Manager, Time Period Management will enable you to directly view time periods from that module. For example, if integrated with Change Management, time period definitions will enable users to view time periods and changes in a Calendar widget and view time periods and changes in the context of a selected change. This is helpful for change planning.

Delta migration tool

As of version 9.34, Service Manager provides a delta migration tool to transfer the “delta data” from one Service Manager system (original system) to another (new system).

For more information, see the following topic in the Service Manager online help:

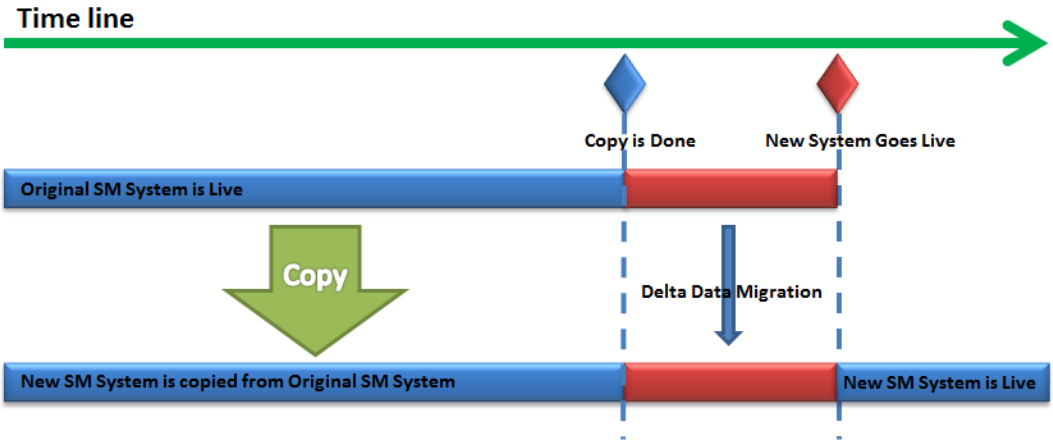
System Administration > Delta migration tool

Typical scenario

There are times when you need to migrate data from one Service Manager server to another. Take the following scenario:

- The original system is running live
- You make a copy of it
- You make changes to the workflow in the copy
- You replace the original live system with the copy that has the new workflow

Of course from the time you made a copy until the time the new system goes live, end users are making changes. The following figure depicts this scenario.



Tip: You can also use this tool to keep the data in a “test” system in sync with a “production” system or a “development” system in sync with a “test” system.

Data migration methods

The delta migration tool enables you to keep the original system and the copy in sync in either of the ways:

- Allowing manual export or import of changed records
- Scheduling an automated export or import

Caution: For a table without the “sysmodtime” field, the tool cannot migrate “delta data” from the original system.

Prerequisites

There are some prerequisites for using this tool. For details, see the online help.

Supported applications versions

This tool is already available in Service Manager 9.34 applications; to use this tool on earlier applications versions, you need to load **DeltaMigrationTool.unl**, which you can find in the root folder of the Service Manager 9.34 Upgrade package.

Text Import Wizard enhancements

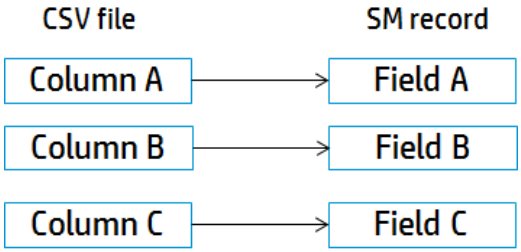
The Text Import Wizard is enhanced to better support importing of data in CSV (Comma Separated Values) format into Service Manager. For example, the wizard now can import master data (such as Roles, Categories) and business data (such as Contacts, Departments, Assignment Groups, Service Catalog Items, and Configuration Items).

The enhancements are described in the following. For more information, see the following topics in the online help:

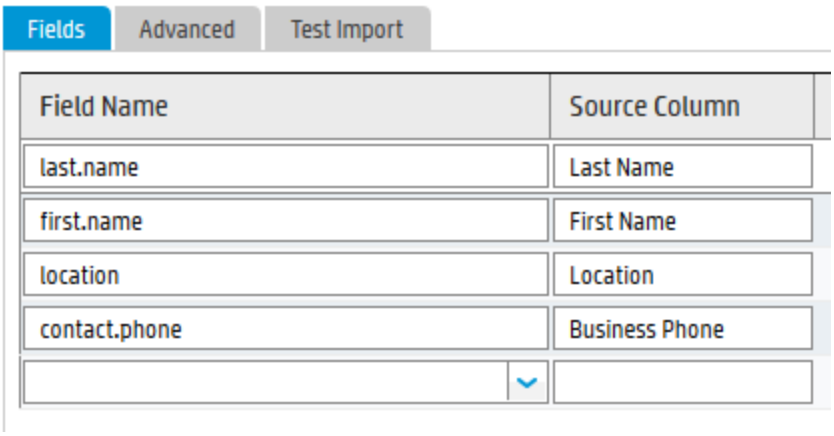
- *System Administration > Database Administration > Data persistence > Importing records > Add an import descriptor record*
- *System Administration > Database Administration > Data persistence > Importing records > Import a character-delimited text file*

Support of mapping between source columns and target fields

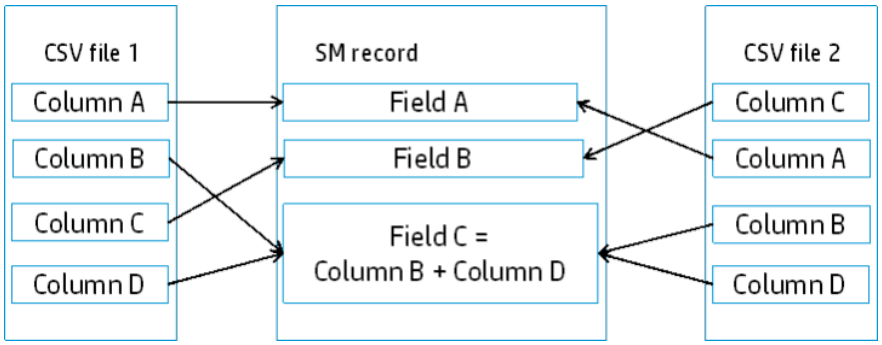
Previously, the order of columns in the source CSV file had to match the exact order of the fields in the destination file (table) in Service Manager, as shown in the following figure. However, the order of columns in the CSV file and/or the data structure in Service Manager may change over time, making imports fail.



In Service Manager 9.34, this matching is no longer required. You can specify a mapping between the source columns and the destination table fields. The following figure shows an example mapping for the **contacts** table.

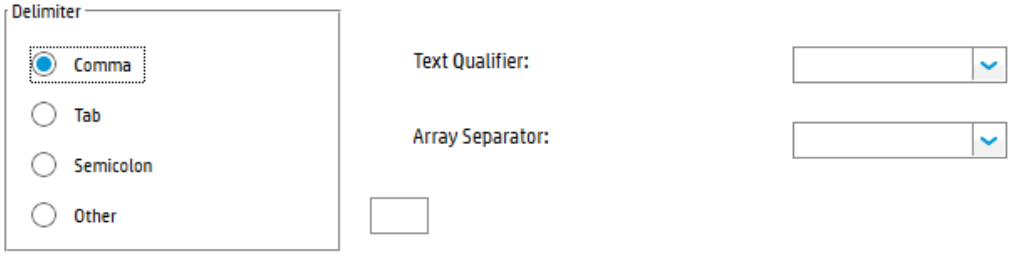


This mapping capability saves time on preparing source data. As long as the column headers remain the same, the Text Import Wizard can recognize the columns by column header, regardless of the order of columns in the source file. See the following figure for an example.



Support of complex data structure

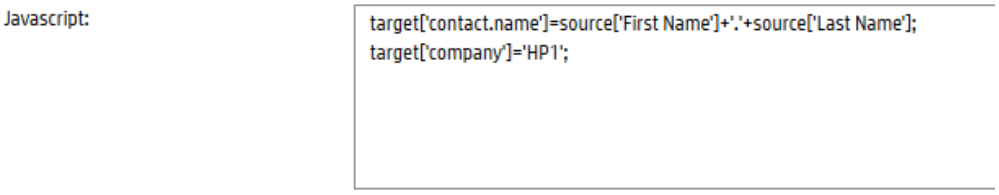
The Text Import Wizard now can handle CSV files with a complex data structure, such as XML segment fields (for example, Service Catalog user options and connector information), array structure fields, and array type fields.



To achieve this, a new field, **Array Separator**, is added, which enables you to specify the separator of the array data in your source file so that the wizard can handle the data correctly. Two separators are supported: **semicolon**, and **line break**.

Support of data manipulation

The Text Import Wizard now enables you to manipulate the source data during import by specifying JavaScript expressions. This is implemented though the addition of the **Javascript** field on the **Advanced** tab.



For example, when importing your Outlook contacts information into the **contacts** table in Service Manager, you can specify the following JavaScript expressions:

```
target['contact.name']=source['First Name']+'.'+source['Last Name'];
target['company']='HP1';
```

The first expression combines the First Name and Last Name columns in the source file and import the combined value into the Contact Name field in the destination table, and the second one sets all of the Company Names in the destination table to "HP1".

External CSV source file requirements

To use the Text Import Wizard , external CSV source files should meet the requirements described in the following table.

Requirement	Note
Only plaint text files are supported.	Be sure to not load binary files, such as .JPG and .XLS files.
If the source data contains non-ASCII characters, the external text file must use UTF-8 or Unicode encoding.	
Column headers in the external file are mandatory and must be unique.	CSV files with duplicate column headers cannot be imported. The wizard displays a warning on the duplicate columns and is not able to proceed. Make sure your source file contains column headers on the first line, and remove or rename duplicate columns as needed.
Column headers in source files should follow the JavaScript Identifier Naming conventions.	Column headers in source files are used as JavaScript identifiers in this feature.
The number of values in a row must match the number of column headers.	If the number of values in a row does not match the number of column headers, the row is skipped. For example, if your source file contains 6 column headers, a row with more or less than 6 values is skipped. Make sure your source file does not contain invalid rows.
Source files cannot be huge.	When a source file is huge (more than 15, 000 lines or 10 MB in size), it may take a long time to load the file. You are recommended to split a huge file to smaller ones before loading.
Numbers in the source files must be in raw format (without digit grouping).	Digit grouping is not supported and only numbers in raw format can be imported. For example, "1, 000.000, 3" cannot be correctly recognized. You must change it to "1000.0003".
Source data must match the data constraints that are defined in the target dbdict.	Unique keys are not automatically generated during the import operation. Make sure that the records to import match the data constraints that are defined in their dbdict.

Requirement	Note
Delimiters in external CSV files can be one of the following: • a comma • a tab • a semicolon • a user-defined character other than listed above	When a field value contains the delimiter character, enclose the value in double quotes. For example: **"abc,def"**
The following date formats are supported for external source files: • mm/dd/yy [hh:ii:ss] • yy/mm/dd [hh:ii:ss] • dd/mm/yy [hh:ii:ss] **Note:** [hh:ii:ss] is optional.	Make sure your source data uses the correct date format. You will need to specify the correct date format later when adding an import descriptor for the source file. **Note:** After importing, the imported data is converted to use the login user's date format.

Other requirements for importing

Requirement	Description
Solving validations or dependencies before the import	Triggers are enabled during importing. For this reason, you may need to resolve some validations or dependencies first. For example, before loading a contact record, an operator record must be loaded first. Otherwise, a message, for example, “No operator record to sync”, pops up.
Importing data to required join tables	Some joinfiles need to be loaded completely to achieve desired data import results. For example, when importing service catalog items, you also need to load the service catalog display records concurrently. Otherwise, the imported records are not displayed correctly in the catalog.

Limitations

- Scheduled import is not supported for character-delimited files.
- For the optional Format Control record, only the following sections are supported: **Calculations**, **JavaScript**, and **Validations**.

Survey Integration enhancement

HP Service Manager introduces a new API-based survey connector that enables you to integrate Service Manager with the third-party Medallia survey tool.

Out-of-box deployments of Service Manager 9.34 now include the following types of survey connector.

ID	Name	Description
001	API Connector - Market Tools	An API-based connector that uploads data directly to the Market Tools survey solution
002	URL Connector	An URL-based connector. When you use this connector to manage a survey, survey recipients are emailed a URL that points to the survey
003	API Connector - Medallia	An API-based connector that uploads data directly to the Medallia survey solution

Note: If you are running on applications version 9.32 or 9.33, you can still use this feature by applying the following content pack from the HP Live Network:**https://hpln.hp.com/group/survey-integration-content-service-manager**

For more information about Medallia, visit the following website: **http://www.medallia.com/**

For more information, see the following section in the online help:

System Administration > *Integrations* > *Survey Integration*

Support of multiple OMi servers

The Incident Exchange (OMi - SM) integration is enhanced to support more than one OMi server.

Backward compatibility

If you have a previous version of the Incident Exchange (OMi - SM) integration already set up in your system and do not need multiple OMi servers, you do not need to make any changes to your existing integration configuration.

Additional configurations required for this support

If you need multiple OMi servers, in addition to those steps required in previous releases, you need to complete the following additional configurations:

1. Configure the **Instance Count** setting in the SMOMi integration template.
   a. Log on to Service Manager as a system administrator.
   b. Type **db** in the command line, and press Enter.
   c. In the **Table** field, type **SMISRegistry**, and click **Search**. The SMIS integration template form opens.
   d. Click **Search**. A list of SMIS integration templates opens.
   e. Select **SMOMi** from the list.
   f. In the **Instance Count** field, change the value of 1 to the number of OMi servers that you want to integrate with Service Manager. For example, if you need two OMi servers, change the value to **2**.
   g. Click **Save**.
2. In Integration Manager, create and enable an integration instance for each OMi server, and additionally specify a new parameter, **omi.mgr.id**, for each instance.

Field	Sample value	Description
omi.mgr.id	f3832ff4-a6b9-4228-9fed-b79105afa3e4	The Universally Unique Identifier (UUID) automatically generated in OMi for the target Service Manager server. It is the **ID** string you can find by right-clicking the Service Manager server configuration entry pane in the **Connected Servers** section in OMi. **Note:** This parameter was introduced to support multiple OMi servers. Service Manager uses the UUID to identify from which OMi server an incident was opened. Be aware that if you delete the connected server configuration for the Service Manager server in OMi and then recreate the same configuration, OMi generates a new UUID. You need to reconfigure the integration instance by changing the old UUID to the new one. **Tip:** If you have only one OMi server, you can simply remove this parameter (remove both the parameter name and value) from the integration instance.

Caution: Starting with the Service Manager 9.34 release, the **View OMi Event** option is not available from the **More** options menu in an OMi created Incident record, unless the

omi.mgr.id parameter in the corresponding integration instance is set correctly.

For more information, see the following section in the online help:

System Administration > Integrations > HP Business Service Management (BSM) > BSM Operations Manager i (OMi)

JavaScript engine performance improvements

Prior to the Service Manager 9.34 release, when creating a JavaScript host object, Service Manager initialized the object from scratch. This process was time-consuming and memory-consuming.

Service Manager 9.34 improves the JavaScript engine performance through the following implementations (see also enhancement "QCCR1E101012" on page 58):

- Setting the prototype of a newly created JavaScript object instead of initializing the object from scratch
- For a JavaScript class instance that should be a singleton, caching the instance object instead of creating a new object every time

These improvements significantly reduce JavaScript engine memory usage, so that JavaScript engine garbage collection occurs less frequently than before.

Also, server parameter “gcthreshold” is introduced to monitor Service Manager server memory usage increase and trigger JavaScript engine garbage collection when a memory increase reaches a specified threshold. This way, the Service Manager server native heap memory is freed in a timely manner.

Note: If you have set memory allocation mode to “malloc” through parameter “memmanager”, you need to remove it. This is because “gcthreshold” cannot detect increases of memory allocated by the Service Manager server unless in the default memory allocation mode. Failure to do so may cause you to run into out-of-memory issues.

Accessibility improvements

HP Service Manager 9.34 includes the following accessibility improvements.

Support of JAWS 13 and JAWS 15

Only these versions of JAWS are supported. Be aware that JAWS 13 must be used with Internet Explorer 8 or 9, and JAWS 15 must be used with Internet Explorer 10 or 11.

Accessibility support for the Table control

In Service Manager versions earlier than 9.34, the following issues exist:

- Record lists are not recognizable by JAWS as a table. As a result, you cannot use many table control features in JAWS.
- Table controls in a record details form are not read correctly by JAWS and are not accessible by using the **Tab** key.

In Service Manager 9.34, a new property **Accessible Description** has been added for the **Table** control.

Property	Description
Accessible Description	Specify a component description for use with accessibility software (JAWS). (Optional) **Note:** This function is supported only by the Web client. If no description is present, the Web client uses the default table summary as described below: • For a record list on a list page or on the list panel of a list-detail page: **Record List** + **[grouped by]** + **[sorted by]** + **[ascending/descending]** For example: **Record List Sorted by Update Time Ascending 11x51** • For a Table widget on a detail form: **Table** For example: **Table 4x3**

The following behavior now applies:

- JAWS recognizes a record list as a table and recognizes the pagination bar as a region. You can navigate through the record list by using JAWS table keystrokes and move the focus to the record list pagination bar using the JAWS Region List keystroke (**Insert**+ **Ctrl** + **;** in JAWS 13 or **Insert** + **Ctrl** + **R** in JAWS 15). JAWS can also report the current sort state of the record list in Internet Explorer 10 or 11.
- JAWS recognizes a table control on a record details form as a table, and you can tab through the column headers by using JAWS keystrokes. You can use **Insert**+ **Ctrl**+ **T** to list all tables, or press and then release **Insert** + **Space**, followed by **T** to get to the table layer.

Keyboard shortcuts for record list tables

The following table lists the keyboard shortcuts that can be used on a record list.

Note: These shortcuts are not working when the JAWS virtual PC cursor mode is enabled.

Shortcut	Description	Notes
Ctrl + **Home**	• Non-grouped record list: Move the focus to the first cell of the first row. • Grouped record list: Move the focus to the first group node.	
Ctrl + **End**	• Non-grouped record list: Move the focus to the last cell of the last row. • Grouped record list: Move the focus to the last group node or to the last cell of the last row if the last group is expanded.	
Ctrl + **Page Up/Down**	Navigate to the previous/next page of a non-grouped record list.	In Chrome, use **Alt** + **Page Up/Down** instead.
Home /**End**	When focusing on a cell in a row of a record list, move the focus to the first/last cell of the row.	

Limitations

The following table accessibility limitations exist:

- Table accessibility support is not implemented for the following modules: Process Designer, and Calendar.
- JAWS 13 cannot read the **Open Calendar** icon in a table if you use Internet Explorer (IE) 8 or 9.
- JAWS cannot read out the sort state of a sorted column in IE8/IE9, because IE8 and IE9 do not support the aria-sort property.
- In ToDo queue, if the focus is outside the record list, the virtual cursor cannot move to the record list when using JAWS 15 keystrokes (**T**, or **Insert** + **Ctrl** + **T**). You can move the focus to the record list first by using the **Tab** key, and then navigate through the record list by using JAWS table keystrokes.

Requesting non-cart/support items from the ESS portal

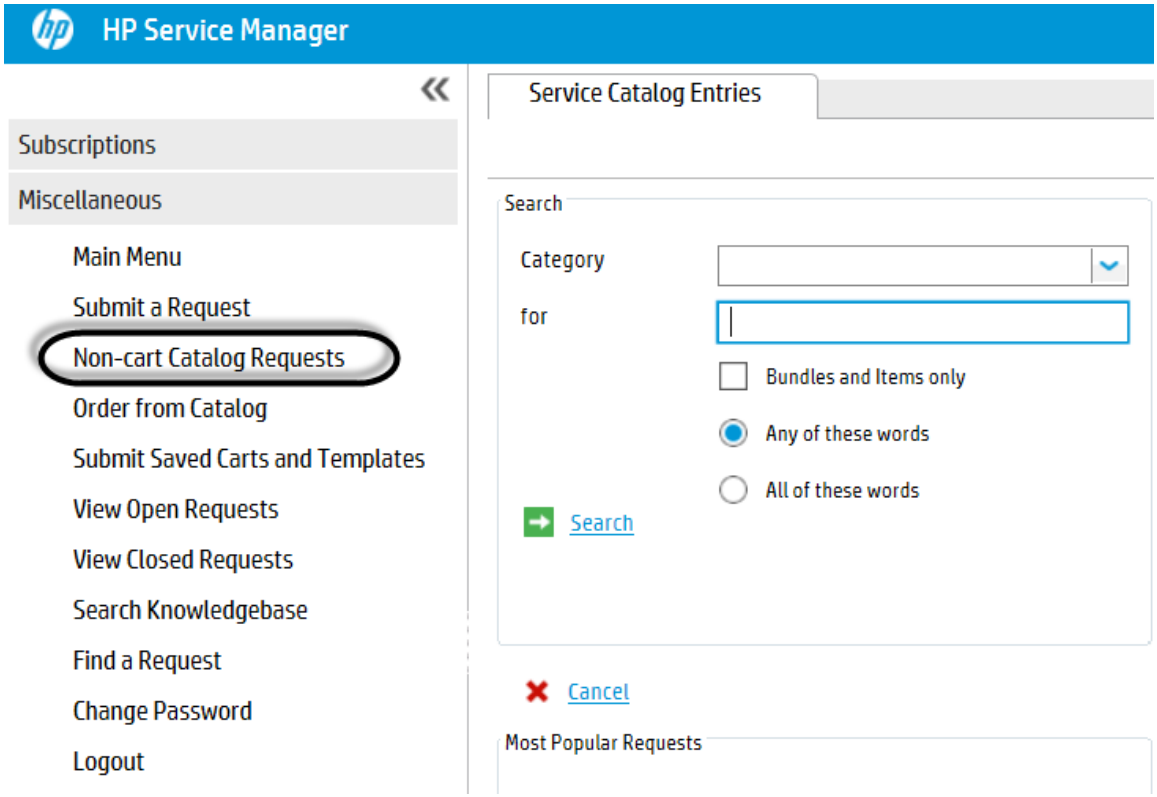
Prior to the Service Manager 9.34 release, Support type categories and items were accessible through Service Request Catalog (SRC), but not through the Employee Self-Service (ESS) portal.

Service Manager 9.34 provides a new option, **Non-cart Catalog Requests**, which allows ESS users to submit requests for non-cart (including Support type) items. To submit a request for a non-cart/support item, perform the following steps:

1. Log on to the Service Manager ess.do client.
2. Click **Miscellaneous** > **Non-cart Catalog Requests**.
3. Locate the item you want through a search.

   Note: Only non-cart items are returned in the search results.

4. Open the item, provide necessary information, and submit the request.



New enhancements for Service Request Catalog

Service Request Catalog 9.34 introduces the following new enhancements.

User experience improvements to the request submission process

All panels are expanded by default, you do not need to click the **Next** button to complete a request. Therefore, you are not blocked by mandatory fields, and can view and edit any section directly.

Additionally, all sections can be expanded or collapsed. You can click the **Expand All** and **Collapse All** buttons for all sections or to click the **Expand** and **Collapse** arrow buttons for a single section to improve the readability for the long scrolling screen.

Ability to change your password

You can now change your expired password during your login to Service Request Catalog. If your password has expired during your login, you are required to change your password.

To change your expired password, follow these steps:

1. Log on to Service Request Catalog. The change password form opens if your password has expired.
2. Type your new password in the **New password** and **Confirm new password** text boxes, and then click **OK** to save your change. The login page opens.
3. Enter your new password to log on to Service Request Catalog.

KBI knowledge content

The **KBI-Content-Shipment.zip** file in the Knowledge Management package includes knowledge articles provided by KnowledgeBroker, Inc. (KBI) for HP Service Manager. It contains thousands of immediate, out-of-the-box answers to questions for more than 190 Desktop and Internet applications. This powerful database is fully integrated with HP Service Manager. Used by Help Desk Analysts and end users for self-service, the KBI KnowledgeBase saves time, cuts costs, streamlines the support process and supports KCS and ITIL compliance. KnowledgeBase content is a key Help Desk component for resolving problems with computer software efficiently and effectively.

Import the KBI demo data

To import the KBI knowledge articles, you must have the following software installed in your system:

- HP Service Manager 9.3x server and applications
- HP Service Manager 9.3x Search Engine
- Java SDK
- HP Service Manager 9.3x KM Import Utility

The KBI KnowledgeBase imports into Service Manager through the Service Manager KM Import Utility. The import has been optimized to utilize the capabilities, features and function sets of Service Manager. The total size of the demo data is approximately 400 Megabytes.

For instructions on how to import the KBI demo data into Service Manager, see the README file packaged in the KM Import Utility (**km-import-9.34.zip**).

Verify the import

When the content starts importing you will see 'success' as each article is added. When the import is complete, you will see a summary that shows the total number of articles imported. Play close

attention to skipped documents, rejected documents, and skipped attachments. If, for any reason, there is an error or a document is rejected or skipped, it will be listed.

Verify the integration

When you import KBI's demo data into HP Service Manager, the import automatically creates a three-tiered category structure.

To see the category structure, perform the following steps:

1. Go to **Knowledge Management**> **Configuration**> **KM Document Categories**.
2. On the **Browse Categories** tab, the **KnowledgeBroker** category is an easy way to identify all of the content from KnowedgeBroker. To see the category details, highlight **KnowledgeBroker**, and click **More** > **Details**. The two subcategories display.

To view all of the KBI knowledge articles imported, perform the following steps:

1. Click **Knowledge Management** > **Search Knowledgebase**.
2. In the search box, enter **KBI**.
3. Click **Search**. A list of KBI knowledge articles displays. You can change the page size at the bottom of the screen and click the Next Page button to navigate through the knowledge articles.

New parameters

This release introduces the following new parameters.

Parameter: maxattachmentcount

Startup parameters change the behavior of the HP Service Manager server. You can always set a startup parameter from the server's operating system command prompt.

Parameter

maxattachmentcount

Description

This parameter specifies the maximum number of files that can be attached to an individual record. If this limit is being exceeded, attachment uploading fails with the following error displayed on the user interface:

"The total number of attachments in this record exceeds the maximum allowed number for a single record."

The same error message is returned in the response if you attempt to add attachments through a SOAP or RESTful call and the number of attachments exceeds this limit.

Note: If an existing record has already more attachments than allowed by *maxattachmentcount*, the existing attachments are retained, but uploading of new attachments will fail.

Valid if set from

Server's operating system command prompt

Initialization file (sm.ini)

Requires restart of the Service Manager server?

Yes

Default value

100

Possible values

0 to unlimited

Example usage

Command line: **sm -httpPort:13080 -maxattachmentcount:100**

Initialization file: `maxattachmentcount:100`

Startup parameter: restaccessviabrowser

Startup parameters change the behavior of the HP Service Manager server. You can always set a startup parameter from the server's operating system command prompt.

Parameter

restaccessviabrowser

Description

This parameter determines if RESTful access to the Service Manager server through a web browser is allowed. You can specify 0 or 1 for this parameter:

- 0: Access to Service Manager through REST from a web browser is not allowed
- 1: Access to Service Manager through REST from a web browser is allowed

Valid if set from

Server's operating system command prompt

Initialization file (sm.ini)

Requires restart of the Service Manager server?

Yes

Default value

0

Possible values

0, 1

Example usage

Command line: **sm -httpPort:13080 -restaccessviabrowser:1**

Initialization file: `restaccessviabrowser:1`

Parameter: gcthreshold

Startup parameters change the behavior of the HP Service Manager server. You can always set a startup parameter from the server's operating system command prompt.

Parameter

gcthreshold

Description

This parameter is used to prevent the native heap from running out of memory. It specifies the threshold (in megabytes) at which an increase in native heap usage in HP Service Manager triggers JavaScript garbage collection. If the Service Manager native heap usage has increased by the specified number of megabytes since the last JavaScript garbage collection, JavaScript garbage collection is triggered, and the native heap memory referenced by the recycled JavaScript objects is therefore freed. The minimum value for this parameter is 2 megabytes.

Caution: Be cautious when changing this parameter from the default value. Setting this parameter to a large value may result in "out of memory" errors.

Valid if set from

Initialization file (sm.ini)

Requires restart of the Service Manager server?

Yes

Default value

10 megabytes

Possible values

No less than 2 megabytes

Example usage

Initialization file: `gcthreshold:5`

Web parameter: customize-folder

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

customize-folder

Description

This parameter specifies the absolute path to a folder on the web tier host in which your web client branding files are stored. You must have write access to this directory to rebrand the web client. You need to place your branding image files in this folder; when you perform branding in the branding interface, Service Manager saves your branding settings in a branding.xml file and a branding-images subfolder under this folder.

Caution: This parameter is required to enable the branding interface. If it is not specified, when you click **Tailoring** > **Branding**, the branding interface is not launched and an error displays instead.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web applications server?

Yes

Default value

Empty

Possible values

An absolute directory location

Example usage

```
<context-param>
 <param-name>customize-folder</param-name>
 <param-value>C:/customize</param-value>
 </context-param>
```

Web parameter: enableRecordlistOddEvenRowStyle

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

enableRecordlistOddEvenRowStyle

Description

This parameter indicates if the odd and even rows in the record list have different background color.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web applications server?

Yes

Default value

false

Note: The default value means that the odd and even rows in the record list have the same background color.

Possible values

true or false

Example usage

```
<context-param>
 <param-name>enableRecordlistOddEvenRowStyle</param-name>
 <param-value>false</param-value>
</context-param>
```

Web parameter: autoCompleteDelayTime

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

autoCompleteDelayTime

Description

This parameter defines the delay time in milliseconds to trigger the auto complete feature after you stop typing characters in a Comfill field.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web application server?

Yes

Default value

200

Possible values

0 to unlimited

Note: If you specify an invalid value, the default value is used.

Example usage

```
<context-param>
 <param-name>autoCompleteDelayTime</param-name>
 <param-value>200</param-value>
 </context-param>
```

Web parameter: autoCompleteListSize

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

autoCompleteListSize

Description

This parameter defines the maximum number of records that are fetched from the server side at one time and returned to an auto complete selection list. If the total number of matching records is larger than this specified list size, a **More** icon displays at the bottom of the list. Clicking this icon will load more records to the list.

For example, if this parameter is set to 10 (default) and the total number of matching records is 100, the auto complete selection list displays 10 matching records initially with a **More** icon the bottom. If you click the **More** icon, another 10 records are loaded to the list. Clicking **More** repeatedly will load the rest of the records.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web application server?

Yes

Default value

10

Possible values

1 to 100

Note: If you specify an invalid value, the default value is used.

Example usage

```
<context-param>
 <param-name>autoCompleteListSize</param-name>
 <param-value>10</param-value>
 </context-param>
```

Web parameter: autoCompleteMinChars

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

autoCompleteMinChars

Description

This parameter defines the minimum number of characters you must type in a Comfill widget to trigger the auto complete feature.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web application server?

Yes

Default value

3

Possible values

1 or greater

Note: If you specify a value of zero or a negative number, the default value is used.

Example usage

```
<context-param>
 <param-name>autoCompleteMinChars</param-name>
 <param-value>3</param-value>
 </context-param>
```

Web parameter: autoCompleteSkipCachingChar

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

autoCompleteSkipCachingChar

Description

A Comfill field's link record may define query expressions that split the Comfill field's values to multiple levels, using a special character (such as a "/") as the separator. In this case, you must specify the separator in this parameter, so that the Auto Complete feature returns the same query results as the **Fill** operation when the user input contains this separator character.

The following table shows an example of such Comfill fields.

Comfill field	Field value	Level 0 value (Company)	Level 1 value (Location)	Separator
Location	advantage/Africa	advantage	Africa	/
	advantage/Asia	advantage	Asia	/

In this example, the Link record of the Location field uses the following expressions, where "/" is used as a separator:

```
$find.skip=true
```

```
if (index("/", location.full.name in $File)=0) then
($ln.query="location.full.name#\""+location.full.name in
$File+"\"";$ln.query=nullsub($ln.query, "true")+" and level=0")
```

```
if (index("/", location.full.name in $File)>0) then ($L.tempx=0;for $L.ix = 1 to
lng(location.full.name in $File) do (if (substr(location.full.name in $File, $L.ix,
1)="/") then $L.tempx+=1);$ln.query="location.full.name#location.full.name in $File
and level="+$L.tempx)
```

Note: If the Link records of your Comfill fields use a different character as the separator, set this parameter to that character (for example, "|"). This is a global setting, which means all Comfill fields that have Auto Complete enabled have to use the same separator.

If a Comfill field allows values that contain the specified character (for example, "E-mail / Webmail (Africa)"), but its Link record does not use the specified character in its query expressions, Auto Complete will retrieve the correct query results no matter whether the user input contains the specified character or not.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web applications server?

Yes

Default value

/ (forward slash)

Possible values

Any ASCII character

Example usage

```
<context-param>
 <param-name>autoCompleteSkipCachingChar</param-name>
 <param-value>/</param-value>
 </context-param>
```

Web parameter: comfillAutoComplete

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

comfillAutoComplete

Description

This parameter enables auto complete for the Comfill control. If you want to disable auto complete globally in Service Manager, set it to **false**.

To enable auto complete for a specific Comfill field, you must further enable the **Auto Complete** property of this Comfill control in Forms Designer. If this property is disabled, auto complete is disabled for this Comfill field regardless of the global *comfillAutoComplete* setting.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web application server?

Yes

Default value

true

Possible values

true (enabled)

false (disabled)

Example usage

```
<context-param>
 <param-name>comfillAutoComplete</param-name>
 <param-value>true</param-value>
 </context-param>
```

Web parameter: message display properties

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameters

messageBarError

messageBarInfo

messageBarWarning

Description

These parameters indicate how different types of messages are displayed. The parameter value consists of three parts: the first part defines if this type of message is displayed in the message bar, the second part defines if the message automatically disappears, and the third part defines the duration in seconds before the message disappears.

The latter part of the parameter value is dependent on the previous part. For example, if the first part of value is set as **false**, which means that this type of message is not displayed on the top of the detail window, then the following two parts of parameter values are meaningless and thus ignored. If the second part is set as false, which means that this type of message does not automatically disappear, then the last value defining the duration before the message disappears is ignored.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web applications server?

Yes

Default value

messageBarError	true:false
messageBarInfo	true:true:4
messageBarWarning	true:true:6

Possible values

true (displayed)/false (not displayed): true (disappear automatically)/false (not disappear): 0 to unlimited

Note: If you specify an invalid number for the third part of the value, a default value of 6 seconds is

used.

Example usage

- ```
  <context-param>
   <param-name>messageBarError</param-name>
   <param-value>true:false</param-value>
   </context-param>
  ```

  The default value means that the error type of message is displayed on the top of the detail window, and does not automatically disappear.

  Note: If the user changes the second value to `true` to make the error message bar automatically disappear, then the user has to set the last value to decide the duration before it disappears.

- ```
  <context-param>
   <param-name>messageBarInfo</param-name>
   <param-value>true:true:4</param-value>
   </context-param>
  ```

  The default value means that the information type of message is displayed on the top of the detail window, and it automatically disappears after four seconds.

- ```
  <context-param>
   <param-name>messageBarWarning</param-name>
   <param-value>true:true:6</param-value>
   </context-param>
  ```

  The default value means that the warning type of message is displayed on the top of the detail window, and it automatically disappears after six seconds.

Web parameter: startDayOfWeek

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

startDayOfWeek

Description

This parameter defines the first day of the week in the date picker. However, if you configure the **First Day of Week** field in the **Login Profiles** for an operator, then this parameter is not used for that user. For more information, see "Set the first day of week for an operator" on page 1.

Valid if set from
  ```

Web tier configuration file (web.xml)

Requires restart of the web applications server?

Yes

Default value

0

Possible values

0 (Sunday)
1 (Monday)
2 (Tuesday)
3 (Wednesday)
4 (Thursday)
5 (Friday)
6 (Saturday)

Example usage

```
<context-param>
 <param-name>startDayOfWeek</param-name>
 <param-value>0</param-value>
</context-param>
```

Web parameter: compactLayout

Web parameters change the behavior of the web clients that connect to the web tier. You can set some of these parameters from the web client login URL, some from the web tier configuration file (web.xml), and some from both.

Parameter

compactLayout

Description

This parameter enables the compact layout of the web client.

Service Manager 9.34 introduces the new user interface (UI) style, and the sizes of some UI elements are bigger than those of prior versions of Service Manager, for example, the height of the text widget, the vertical space between two adjacent widgets, and so on. The out-of-box forms have been adjusted to match the new size. However, there is a possibility that the new size may cause some display issues in your tailored forms, for example, truncated text or overlapped UI elements.

You can use the compact layout of the web client to fix these display issues. When you enable the compact layout, the web client uses the same sizes as that of Service Manager 9.33, so the display issues caused by new sizes will disappear.

Note: HP recommends that you use the compact layout of the web client in the following scenarios:

- Your forms have display issues caused by new sizes.
- You cannot easily change the impacted forms to solve the display issues.

Valid if set from

Web tier configuration file (web.xml)

Requires restart of the web applications server?

Yes

Default value

false

Possible values

true (Enabled)

false (Disabled)

Example usage

```
<context-param>
 <param-name>compactLayout</param-name>
 <param-value>false</param-value>
</context-param>
```

New text strings to be localized

This release has introduced a number of new text strings, all of which have been localized except for a few as listed in the following table. You can easily localize them using the native2ascii tool. For detailed localization instructions, see knowledge article KM00779834.

The following table lists the text string added in this release, as well as the corresponding properties file in the Windows client.

New text strings	Description
cpee_format.properties: **Props.UseStandardsMode=Standards Mode**	The **Standards Mode** property of the HTML Viewer control

Certifications

HP Service Manager (SM) 9.34 includes the following certification changes.

Added support

Support has been added for the following items.

Service Manager server

- Solaris 11.1
- Red Hat Enterprise Linux 6.5 (x86-64)
- Oracle Enterprise Linux 6.5 (x86-64)
- VMWare ESXi 5.5

Windows client

- Windows 8.1

Web client

- Internet Explorer (IE) 11 (rendering in IE 10 standards mode)

Service Request Catalog

- Internet Explorer (IE) 11
- IIS 7.5, 7.0

Discontinued support

Support for the following item has been discontinued.

- Oracle 11.1

  HP strongly recommends the use of the Oracle 11R2 (Oracle 11.2.0.3 or later) and avoiding the use of Oracle 11R1. Our experience has shown numerous problems with the Oracle 11.1 release including both stability and performance that are improved in the Oracle 11.2 release and cannot be mitigated by changes in the Service Manager code base.

Upgrade Documentation Center

The Service Manager 9.34 Upgrade Documentation Center provides guidelines on upgrading the Service Manager binaries, applications, and other components (KM Search Engine, language packs, content packs, Service Request Catalog, Mobility, etc) to version 9.34. Available as a ZIP file on the HP Software Manuals Site.

To use this documentation center, extract the ZIP file to a local or shared drive, and then open `default.htm` in a web browser (Firefox or Chrome is recommended because certain links do not work in Internet Explorer unless you deploy the documentation center on a web server).

This documentation center provides a central place for quick access to the following documents (which are also available on the HP Software Manuals Site to download as separate documents):

- Interactive Installation Guide (Interactive HTML)
- Applications Upgrade Guide (PDF)
- Applications Upgrade Guide (Interactive HTML)
- Upgrade Assessment Toolkit User Guide (PDF)
- Applications Patch Manager Guide (PDF)
- Language Pack Installation Guide (PDF)
- Knowledge Management Search Engine Guide (PDF)
- Mobile Applications User Guide (PDF)
- Service Request Catalog Interactive Installation Guide (Interactive HTML)
- Service Request Catalog Customization Guide (PDF)

Open source and third-party redistributables package

In this release, the Applications, Web tier, and Applications Upgrade packages contain a compressed file, sm9.34.0032_Redistributables.zip. This zip file contains all open-source and third-party source code used in this release, as well as their 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 acknowledgments, see the Open Source and Third-Party Software License Agreements manual (in PDF format) for Service Manager 9.34, which is available from the following HP Software Manuals website:

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

Enhancements

This release includes the following enhancement type fixes.

Applications

CR	Problem	Solution
QCCR1E59191	The benchmark utility is no longer maintained and does not function correctly.	The benchmark utility is removed.
QCCR1E74070	The Affected Service field in an Interaction is not filled after you add it in SRC. However, the Affected Service field is filled in the corresponding Incident.	The affected service is added to the interaction when you create an incident or change for a support item.
QCCR1E99765	Support-type categories and items can be accessed through SRC only. However, in prior releases, these items could be accessed through the Employee Self-Service (ESS) portal, which is no longer possible.	Non-cart/support items are supported in the ESS portal.
QCCR1E101036	Service Catalog does not provide a utility to bulk load data in the same manner as other modules in Service Manager. As a result, catalog data must be loaded manually through the Service Catalog UI, which can take anywhere between 5 to 10 minutes per catalog item, or by leveraging proprietary utilities.	The enhanced Text Import Wizard provides you with a data mapping function that helps you to prepare data for migration to Service Manager. It includes a data manipulation function to help you change data and make logical calculations within Service Manager.

CR	Problem	Solution
QCCR1E102502	After you import Knowledge Management demonstration data by using the Knowledge Management import tool, Knowledge Management attachments are added unexpectedly.	After you import Knowledge Management demonstration data by using the Knowledge Management import tool, no Knowledge Management attachments are added unexpectedly.
QCCR1E103581	The auto complete feature is not supported by the web client.	The auto complete feature is now supported by the web client.
QCCR1E104896	When you upgrade Service Manager from earlier 9.3x versions, Renamed RAD applications are not automatically merged and you cannot manually merge them easily.	A Merge option is available for Renamed RAD applications. This option enables you to automatically replace your tailored RAD application with the new one.To use this option, perform the following steps: 1. Navigate to **System Administration** > **Ongoing Maintenance** > **Patch Release** > **View/Merge Results**. 2. Locate a Renamed RAD application through a search. 3. Click **More** or the **More Actions** icon and select **Merge**. Service Manager will automatically create a backup of the old object by renaming it "OLD9.3x.xxxx" and then rename the new object by removing the prefix "NEW9.3x.xxxx" from the object name. The result is then marked as "Reconciled." **Note:** The option does not work if the Process Designer content pack is installed.
QCCR1E106292	Currently, the globallist and locallist files are not cached. This causes heavy database traffic during the login process, especially when the globalist or locallist file is large.	The globallist and locallist files are added to the Service Manager cache.

Documentation

CR	Problem	Solution
QCCR1E62332	The increasing complexity of rebranding the webtier is not reflected in the Service Manager support documentation.	Documentation about the rebranding process has been added to the Service Manager online help; and a white paper (KM01029433) has also been created to provide more detailed step-by-step instructions.

Integrations

CR	Problem	Solution
QCCR1E64751	The SMOMi integration template only allows a single OMi server instance.	The SMOMi integration template is enhanced to support more than one OMi server instances. A new parameter (omi.mgr.id) is introduced for this purpose. **Note:** If you have only one OMi server instance, this parameter is not required, You can either configure it or simply remove the parameter and its value from your integration instance configuration.
QCCR1E101995	The survey API connector is only able to integrate with Market Tools.	A new API connector is added that enables support for survey solutions from Medallia, a new HP partner.

Mobility

CR	Problem	Solution
QCCR1E104858	Android 4.x is not certified for the Service Manager Mobility client.	Android 4.x is certified for the Service Manager Mobility client.

Service Request Catalog (SRC)

CR	Problem	Solution
QCCR1E84503	Service Request Catalog does not support Internet Information Services 7 as a web server.	Service Request Catalog 9.34 now supports Internet Information Services 7 as a web server.
QCCR1E90210	The SRC client does not require the user to click Details to see item options when a Service Catalog item does not have required fields.	The Next button for each section of the request form is removed. All of the sections are simply expanded so that item options will always be displayed, whether they are required fields or not.
QCCR1E90959	When you request an item in SRC1.40, all of the sections that contain mandatory fields must be completed before you can edit any section that is already completed. For example, you have a request that has 7 sections, some of which contain mandatory fields. If you complete section 1 and then section 2 and then decide to change a response in section 2, you cannot do so until you have completed all mandatory fields in all sections.	The Next button for each section of the request form is removed. All of the sections are now simply expanded. You can edit any section instead of being limited to editing them one by one.

CR	Problem	Solution
QCCR1E91531	Users may not notice that a bundle in SRC 1.4 contains optional components. The optional components appear green (ready to go), and the user must click **Edit** to see that a checkbox is available to select the component.	The **Next** button for each section of the request form is removed. All the sections are simply expanded so that users do not miss optional sections easily.
QCCR1E94696	When an operator record is set to “Expire Password”, the operator should change their password when they next log in to Service Manager or SRC. However, in SRC there is no password reset screen, and the operator can still log into SRC successfully without changing their password.	Users can now reset their password directly from SRC.
QCCR1E97224	To update a single field in a request form (for example, a request description), you must move through all sections of the form by clicking the Next button.	The **Next** button for each section of the request form is removed. Now, you can expand each section of the form, which enables you to update any field without moving through all of the sections.
QCCR1E103717	When you update a ticket in SRC, you must fill or scroll through all of the fields, whether you want to update that field or not. For example, if you need to add an attachment to an existing ticket from SRC, after you click the update button, you must navigate through all of the fields to add the attachment. You cannot go directly to the Attachments section.	The **Next** button for each section of the request form is removed. All of the sections are now simply expanded. Now, you can update any field without browsing through all of them.
QCCR1E104854	Internet Explorer 11 is not certified for SRC.	Internet Explorer 11 is certified for SRC.
QCCR1E104855	The latest version of Firefox is not certified for SRC.	The latest version of Firefox is certified for SRC.
QCCR1E104856	The latest version of Chrome is not certified for SRC.	The latest version of Chrome is certified for SRC.

CR	Problem	Solution
QCCR1E106554	SRC 9.32 uses different fonts (HPSimplified TTF) to SRC 1.4 (Collator and Gotham OTF). There is no way to opt-out of this change or to customize it (excluding customizing the header and footer region by using the style.swf style).	Fonts in SRC are now customizable.
QCCR1E107635	When a section in SRC contains only read-only fields, the **Edit** button is still visible.	The **Edit** button is removed from the new UI of the request form in SRC.
QCCR1E107793	Service Request Catalog does not support Internet Information Services 7.5 (IIS7.5) as a web server.	Service Request Catalog 9.34 now supports IIS7.5.
QCCR1E109767	Android 4.x is not certified for SRC Tablet.	Android 4.x is certified for SRC Tablet 9.34.

Server

CR	Problem	Solution
QCCR1E94696	When an operator record is set to “Expire Password”, the operator should change their password when they next log in to Service Manager or SRC. However, in SRC there is no password reset screen, and the operator can still log into SRC successfully without changing their password.	Users can now reset their password directly from SRC.

CR	Problem	Solution
QCCR1E96888	Service Manager should log the hostname or IP address of the web service requester host in the sm.log file when a SOAP request is received.	When there is no hardware load balancer or proxy between the web service client tool (for example, SOAPUI) and Service Manager, the IP address of the web service requester host is now written to the Service Manager server log (sm.log). If there a hardware load balancer or proxy is present, you must include http header "CLIENT_IP" and the web service client IP address as its value in the web service request before the host IP address can be written to the server log. However, if the Forwarded-For header setting is enabled on your hardware load balancer, there is no need to include this header.
QCCR1E98995	Oracle Solaris Server 11.1 is not certified for Service Manager.	Oracle Solaris Server 11.1 is certified for Service Manager.
QCCR1E100478	Windows Server 2012 R2 is not certified for the Service Manager server.	Windows Server 2012 R2 and Windows Server 2012 R2 Hyper-V are certified for the Service Manager server.
QCCR1E101012	When Service Manager creates a JavaScript host object, Service Manager initializes the object from the beginning. This process takes a lot of time.	The performance of the JavaScript engine is improved.
QCCR1E102306	Service Manager does not support cookie authentication.	The 8th parameter (<Response headers>) of "doHTTPRequest" is created to enable cookie authentication in Service Manager.
QCCR1E104619	Service Manager does not support Oracle Solaris Server 11.1 for the Knowledge Management search engine.	Service Manager supports Oracle Solaris Server 11.1 for the Knowledge Management search engine.
QCCR1E105727	Service Manager does not support VMWare ESXi 5.5.	VMWare ESXi 5.5 is certified for Service Manager.

CR	Problem	Solution
QCCR1E106292	Currently, the globallist and locallist files are not cached. This causes heavy database traffic during the login process, especially when the globalist or locallist file is large.	The globallist and locallist files are added to the Service Manager cache.
QCCR1E106302	The *shared_memory* parameter can be configured to a very small value, which causes problems.	If you configure the shared memory to less than 128 MB, a warning message is logged in the Service Manager server log (sm.log). To remove this warning, set the "shared_memory" parameter to be 128MB or greater. **Note:** On Linux/UNIX, after you increase this value, the Service Manager server may fail to start with the following messages: **522(2522) 03/26/2014 15:33:45 RTE W Shared memory size of 32000000 too small, adjusted to 134217728 2522(2522) 03/26/2014 15:33:45 RTE E sm_init: shmget(0x784DFB00, 134217728) failed, errno=22 (Invalid argument) 2522(2522) 03/26/2014 15:33:45 RTE E sm_init: shared memory kernel parameters may not be sufficient 2522(2522) 03/26/2014 15:33:45 RTE E HP Service Manager is unable to start. Failed to initialize or attach to shared memory environment 2522(2522) 03/26/2014 15:33:45 RTE E Could not create shared memory** In this case, you should adjust the kernel parameter for shared memory size limit as root.
QCCR1E107392	Service Manager does not support RHEL 6.5.	Service Manager supports RHEL 6.5.
QCCR1E107393	Service Manager 9.3x does not support Oracle Linux 6.5 (64-bit).	Service Manager 9.3x supports Oracle Linux 6.5 (64-bit).

Upgrade

CR	Problem	Solution
QCCR1E77941	The Service Manager Upgrade Assessment Toolkit is not certified to support 32-bit versions of JRE7.	The Service Manager Upgrade Assessment Toolkit is certified to support 32-bit versions of JRE7.
QCCR1E103653	After you upgrade Service Manager, you receive an "Upgrade is complete" message. However, this is not enough information for first-time users, who may forget to perform conflict resolution or to create a custom upgrade.	The dialogs that appear after you upgrade Service manager are updated. Different messages are displayed for out-of-box upgrades and custom upgrades have been updated, both containing detailed steps to follow.
QCCR1E103704	The Service Manager Upgrade Assessment Toolkit is not certified to support 64-bit versions of Windows.	The Service Manager Upgrade Assessment Toolkit is certified to support 64-bit versions of Windows.

CR	Problem	Solution
QCCR1E103901	When you upgrade Service Manager, it is not easy to merge existing RAD applications if they conflict with the upgraded version. You may not have a license to modify RAD applications, or you may not want to modify RAD applications again and may prefer to retain your modified versions. There is no way to directly replace RAD applications when you apply the out-of-box upgrade in Replace mode. When you use Replace mode, all old records are replaced.	A form that allows the user to select whether or not to replace RAD applications when they have a conflict with the upgrade version is added to the Upgrade wizard. When you select the **Replace RAD** option in the wizard, each renamed RAD application is replaced with the upgraded version, and a copy of the old RAD application is renamed to "PRE<version_number+RAD name>". The upgrade result for this RAD application is "Replaced." When you do not select the **Replace RAD** option in the wizard, renamed RAD applications are not replaced, but still remain in the Renamed list. The upgraded version of the RAD application is renamed to "NEW934<RAD name>". The upgrade result for this RAD application is "Renamed."
QCCR1E103904	High Level reports only display a tailoring status icon (normal/warning/error) for each table. Therefore, you do not know how many added, modified, or deleted objects are in the current system, compared to the selected out-of-box base version system.	The *showdetail* parameter is added to the reports.xml file. When the value of the parameter is "true," the High Level report displays how many added, modified, or deleted objects are in the current system compared to selected out-of-box base version system.
QCCR1E103905	You cannot create a Customized Records report that displays the unique key value of each added, deleted, or modified record only. Therefore, the content of reports may contain too much detail, and the report may take a long time to generate.	You can now configure the default Customized Records report to display the unique key value of each added, deleted, or modified record only.

CR	Problem	Solution
QCCR1E104225	There is no tool to transfer delta data from one Service Manager system to another.	The Delta Migration Tool is now available to transfer delta data from one Service Manager system to another.
QCCR1E104494	There is no option to merge or revert "Application Cluster" objects.	The following options are added to enable you to merge or revert Renamed/Kept Customer "Application Cluster" objects: • (Mass) Choose Upgrade • (Mass) Revert
QCCR1E104625	The upgrade log needs to be improved.	The Upgrade log is enhanced as follows: • There is phase information in both the "upgrade.log" and "detail.log" files. • All content in the "upgrade.log" file is now included in the "detail.log" file. • The Client Process ID in the log file is removed. • The unique ID and signature numbers (the current, OOB and upgrade) of the upgraded object are recorded in the "detail.log" file. • The timestamp in each log message now uses the ISO standard format (for example, 2014-10-10 00:00:00). • When you create a customer upgrade, all content in the "transfer.log" file is now included in the "detail.log" file.

CR	Problem	Solution
QCCR1E105351	You cannot delete OLDSM objects (for example RAD applications) after you run an applications custom upgrade.	Once the applications custom upgrade is complete, OLD objects are moved to their corresponding revision tables. You can view an old object from the **More** or More Actions menu of the new object (**More** > **Revison** > **View Revisions**). You no longer need to delete them.
QCCR1E105484	There is no **Choose Upgrade** option for individual Renamed upgrade result objects.	A **Choose Upgrade** option is added for each Renamed upgrade result object.
QCCR1E105539	When you merge RAD applications after you upgrade Service Manager, the operation fails with an error. However, after you log in again, the RAD applications merge with no error.	After the upgrade, you are automatically logged out when you click the **OK** button on the "UPGRADE IS COMPLETE" dialog box.
QCCR1E106423	Only the following two messages are recorded in the upgrade log files when **transfer.bin** is loaded: **Checking sqlsystemtables records and remapping tables…** **Finished checking sqlsystemtables records and remapping tables.**	More meaningful logs, including phase information, are added to the **upgrade.log** and **detail.log** files when **transfer.bin** is loaded.
QCCR1E106764	Some tailored objects and normal "Kept Customer" objects are mixed up during an applications upgrade.	The applications upgrade process now marks tailored records that are added by customers as "Kept Customer Non-OOB."
QCCR1E107694	High Level reports only display Yes/No flags for Overall Assessment and RDBMS Detailed Assessment.	High Level reports now display more detailed information about for Overall Assessment and RDBMS Detailed Assessment.

Web client

CR	Problem	Solution
QCCR1E30474	The first day of the week in the date picker is set to Sunday, and cannot be configured.	The first day of the week can now be configured in the operator's Login Profiles (Start Day of Week) or in the *startDayOfWeek* parameter in the web tier configuration file (**web.xml**). **Note:** The operator's **Start Day of Week** setting if present takes precedence over the global *startDayOfWeek* setting in the web tier configuration file (default: 0, which represents Sunday). For more information, see "Web parameter: startDayOfWeek" on page 47.
QCCR1E101320	Internet Explorer 11 is not certified for the web client.	Internet Explorer 11 is certified for the web client.
QCCR1E103581	The auto complete feature is not supported by the web client.	The auto complete feature is now supported by the web client.
QCCR1E104847	The latest version of Chrome is not certified for the Service Manager web client.	The latest version of Chrome is certified for the Service Manager web client.
QCCR1E104849	The latest version of Firefox is not certified for the Service Manager web client.	The latest version of Firefox is certified for the Service Manager web client.
QCCR1E110037	When you type any characters into a Comfill widget, the suggested values do not automatically appear below the widget. Instead, you must click the Fill button or make the Comfill a Combo in order to show all the suggested values.	Now when you type any characters into a Comfill widget, the suggested values automatically appear below it as a drop-down list. You can still click the Fill button or make the Comfill a Combo to show all suggested values.

Windows client

CR	Problem	Solution
QCCR1E100477	Windows 8.1 is not certified for the Service Manager Windows client.	Windows 8.1 is now certified for the Service Manager Windows client.

Fixed defects

This release fixes the following defects.

Applications

CR	Problem	Solution
QCCR1E78488	When you manually close an incident that is open-linked to an interaction, a linker class schedule record is generated to auto-close the related interaction in the background. However, the interaction that is closed by the linker background process only intermittently invokes the SD.update.interaction formatctrl validation.	Now, an interaction that is closed by the linker background process invokes the master formatctrl validation that is specified in the incidents objects definition.
QCCR1E99009	In Service Manager 9.31, locking mechanisms were moved from JavaGroups and into the RDBMS. This causes high I/O and CPU loads.	The locking mechanism is improved for background processes.
QCCR1E99749	The performance of the RESTful API does not improve as expected in a vertically scaled environment.	The performance of the RESTful API improves as expected in a vertically scaled environment.
QCCR1E100497	The Change ID number increases when you withdraw a change.	The Change ID number does not increase when you withdraw a change.
QCCR1E100525	The Expiration time and Breached fields are not displayed in the catalog item section of an interaction when you select **Order from catalog**.	The Expiration time and Breached fields are displayed as expected.

CR	Problem	Solution
QCCR1E100626	Errors occur when you load the **SMReportsDependency_1.00.unl** file two times.	Errors do not occur when you load the **SMReportsDependency_1.00.unl** file two times.
QCCR1E100873	When you add a new line item to a pending quote, the Sequence number (instead of the part number) is displayed in the "#" column.	When you add a new line item to a pending quote, the part number is displayed in the "#" column as expected.
QCCR1E101187	Service Desk approvals are not processed consistently when you submit and resubmit the approvals.	The behavior when you submit and resubmit Service Desk approvals is now consistent.
QCCR1E101174	The **RuleWizardHelpers.getRecipientList** ScriptLibrary causes too many database calls.	The performance of the **RuleWizardHelpers.getRecipientList** ScriptLibrary is improved.
QCCR1E101184	The login process takes an excessive amount of time.	The performance of **KMSecurity.getCatsAtLogin** is improved to speed up the login process.
QCCR1E101237	When you click **Tailoring** > **Differential Upgrade** > **Patch Records**, an error occurs and no record is displayed.	When you click **Tailoring** > **Differential Upgrade** > **Patch Records**, the patch records are displayed as expected.
QCCR1E101238	When you create a cart item by using webservices, you experience a high response time.	The response time when you create a cart item by using webservices is improved.

CR	Problem	Solution
QCCR1E101304	When you use the keyboard to select a row in the Categories table in a Knowledge Document, and then invoke the **Remove** button, the selected category is not removed. However, you can remove a category item by using the mouse.	Now you can use the keyboard as well as the mouse to remove an item from the Categories table in a Knowledge Document. **Prerequisite**: You must move the "Add" and "Remove" buttons to the right of the table in the form in Forms Designer. Therefore, when you tab out of the table, the related buttons receive the focus first.
QCCR1E102366	When you order a catalog item that is configured to use the "Open New Request" connector, the interaction is created with a related quote. When the quote is closed, users receive a message that says the quote has a related interaction and asks whether the user wants to force the closure. If the users choose "No," the quote is closed but the interaction is also closed unexpectedly.	If the users choose "No," the quote is closed but the interaction remains open.
QCCR1E102867	When you review a change in the ToDo list, and then click **Back**, you receive an error message.	When you review a change in the ToDo list, and then click **Back**, you do not receive an error message.
QCCR1E103456	When you use the "Any of these words" text search option to export records to Excel or to a text file, some records are not exported.	All records are exported as expected when you use the "Any of these words" text search option to export records to Excel or to a text file.
QCCR1E103492	Sometimes several globalists are processed as renamed although there is no conflict.	Globalists that build a list on startup are not processed as renamed if there is no conflict.

CR	Problem	Solution
QCCR1E104118	Outage events do not apply to the Affected Service (affected.item) and to the Affected CI (logical.name) in the same way.	Outage events now apply to the Affected Service (affected.item) and to the Affected CI (logical.name) in the same way.
QCCR1E104131	When you view the relationship graph for an application that has more than 1500 downstream CIs, the web client freezes for about 90 seconds, and you receive the following error message: **Error: You have been logged out due to session timeout.** In the Windows client, you receive the following error message as soon as you enter the CI name: **Your server session may have been terminated or timed out.** Additionally, a "Signal 11" error is generated.	You can now view a CI relationship graph that contains 2000 downstream CIs as expected.
QCCR1E104189	The Mass Approval functionality does not work if the corresponding ApprovalDef record refers to an Approval Group.	The Mass Approval functionality works as expected if the corresponding ApprovalDef record refers to an Approval Group.
QCCR1E104210	There is no KnowledgeBroker's demo data in Service Manager.	KnowledgeBroker's demo data is now included in Service Manager.
QCCR1E104263	Every time that a Change template is modified, the system adds a closing quote and a squiggly bracket to the final array element in Affected CI in the template.	Changes to templates do not add closing squiggly brackets to the final array element.
QCCR1E104358	The web client times out when you try to display the CI Relation Graph for a CI that has more than 1500 downstream CIs.	The CI Relation Graph is displayed as expected when an CI has more than 1500 downstream CIs.
QCCR1E104753	The Linker process locks interaction records when an update fails due to a policycheck call.	The lock is now released if a background update fails due to a policycheck call.

CR	Problem	Solution
QCCR1E104737	The "Export to Excel" functionality is not working as intended in the web client.	The "Export to Excel" functionality now works as expected.
QCCR1E104768	When you pull or push data, the HTTP client automatically follows the HTTP redirects by default. Therefore, a "Server returned HTTP response code: 401" exception is recorded in the sm.log file.	Now you can set the 11th parameter (<Follow redirects>) of "doHTTPRequest" to "false" so that the HTTP client does not automatically follow the HTTP redirects.
QCCR1E105049	You cannot add affected services during certain phases (such as "Build and Test") in an environment that has PDCP applied.	Affected services are added according the CI relationship definition in an environment that has PDCP applied.
QCCR1E105136	A new USER_SID column was added to the **SYSLOGM1** table, but the column is not indexed. This leads to poor performance when the column is queried.	The USER_SID column is assigned a "Nulls & Duplicates" key now.
QCCR1E105310	When you open a new incident, you receive the following error message: **Error: SQL code=1722 message=ORA-01722: invalid number**	You receive no error message when you open a new incident.
QCCR1E105668	When a Fill action is performed, the value that is returned has the character datatype (2) instead of the expected array datatype (8).	Fill actions that are performed on array fields now populate the field with an array datatype value.
QCCR1E106148	When you export Change records that contain multiple CI's, the CI's are added to the text file in separate rows.	When you export Change records that contain multiple CI's, the CI's are added to the text file in a single row.
QCCR1E106672	When you view the Affected CI list, you receive the following error message: **Error: The WHERE clause string exceeded 64k (use.link)**	You are now informed to use a filter if the Affected CI list exceeds the limit.

CR	Problem	Solution
QCCR1E107454	When you send a "Create new interaction" request that does not contain a contact by using the SOAP UI, Format Control validation is bypassed, and the interaction is created.	If the formatctrl validation fails, attempts to create a new interaction by using the SOAP UI return error code "71," and the interaction is not created.
QCCR1E107689	The Elapsed Time field (total.time) in the sloresponse table is empty when the sloresponse status is suspended.	Now the total.time of the sloresponse table is calculated when the sloresponse status is suspended.
QCCR1E108371	After you cancel the creation of a new line item, the item is incorrectly added to the **Bundle** tab.	Cancelled items are not added to the **Bundle** tab.
QCCR1E108730	SLA does not add the initial state (as defined in the slamodulecontrol table) to the state.change array of the slaactive record. Therefore, the elapsed time in the sloresponse record is incorrectly displayed as "00:00:00."	SLA adds the initial state (as defined in the slamodulecontrol table) to the slaactive record and calculates the correct total elapsed time for the SLO.
QCCR1E109187	When you edit or add a color in calendar mapping, the color selection table unexpectedly displays a horizontal scroll bar.	When you edit or add a color in calendar mapping, the color selection table does not display a horizontal scroll bar.
QCCR1E109313	The **Survey Administration** menu is located directly under the System Administration menu.	The Survey Administration menu is moved to the **System Administration** > **Ongoing Maintenance** submenu.

CR	Problem	Solution
QCCR1E111692	An error that resembles the following occurs when applying a Service Manager 9.3x Application patch: 3156(1648) 06/29/2014 20:53:38 RAD E Unable to open file /sm7test/ServiceManager9.3/CustomUpgrade/detail.log for writing 3156(1648) 06/29/2014 20:53:38 RTE I Dbdict of file (cirelationship --> cirelationship) was updated by user falcon 3156(1648) 06/29/2014 20:53:39 RTE I Dbdict of file (datadict --> datadict) was updated by user falcon 3156(1648) 06/29/2014 20:53:39 RAD E Unable to open file /sm7test/ServiceManager9.3/CustomUpgrade/detail.log for writing 3156(1648) 06/29/2014 20:53:39 RTE I Dbdict of file (irqueue --> irqueue) was updated by user falcon 3156(1648) 06/29/2014 20:53:39 RTE I Dbdict of file (datadict --> datadict) was updated by user falcon 3156(1648) 06/29/2014 20:53:40 RTE I Dbdict of file (svcCatInterface --> svcCatInterface) was updated by user falcon 3156(1648) 06/29/2014 20:53:40 RTE I Dbdict of file (datadict --> datadict) was updated by user falcon 3156(1648) 06/29/2014 20:53:40 RTE I Dbdict of file (svcItemCount --> svcItemCount) was updated by user falcon 3156(1648) 06/29/2014 20:53:40 RTE I Dbdict of file (datadict --> datadict) was	The error no longer occurs when applying a Service Manager 9.3x Applications patch.

CR	Problem	Solution
	updated by user falcon 3156(1648) 06/29/2014 20:53:41 RAD E Unable to open file /sm7test/ServiceManager9.3/CustomUpgrade/detail.log for writing	
QCCR1E111831	A newly added dbdict and its records may fail to be loaded using Unload Manager.	A newly added dbdict and its records are successfully loaded using Unload Manager.

Documentation

CR	Problem	Solution
QCCR1E103694	You cannot input decimal numbers with a fractional part in Service Manager that is installed on a Linux system with a locale such as de_DE.utf8, or fr_ FR.utf8.	The following note is added to the "Parameter: localizedecimalpoint" topic in the online help: Caution: When the Service Manager server is running on a Linux host, set the locale to en_US.utf8. If you use other locale settings such as de_DE.utf8 or fr_FR.utf8, it is not possible to assign a number with decimal places to a variable in RAD expressions or JavaScript. If you try to assign something like "x $fag.number=1.456" in RAD Debugger, the result is 1.
QCCR1E104308	The Service Manager Language Pack Installation Guide is unclear about how to upgrade the French Language pack.	The Service Manager Language Pack Installation Guide is updated to include more specific information about how to upgrade the French Language pack.

CR	Problem	Solution
QCCR1E105162	Duplicate key errors occur when you upgrade the applications from SC 6.2.8 to Service Manager 9.31.	Additional steps are added to the "Remove indexes and constraints in the RDBMS" section of the Applications Upgrade Guide (in both interactive HTML and PDF formats) to prevent this issue.
QCCR1E105928	In the "Remove indexes and constraints in the RDBMS" section of the Applications Upgrade Guide, there is no detailed information about how to remove a unique key.	Detailed steps are added to the "Remove indexes and constraints in the RDBMS" section of the Applications Upgrade Guide (in both interactive HTML and PDF formats).
QCCR1E106163	The Programming document that describes the compilation of javascript code in triggers contains mistakes.	The "Trigger scripts" topic is updated.
QCCR1E106668	You cannot disable the Remember Login feature.	The *src.enableRememberLoginUserName* parameter is added to enable or disable the Remember Login feature. The default value of this parameter is "false" (*src.enableRememberLoginUserName=false*), which disables the feature in the user login panel.
QCCR1E107618	When you build a custom upgrade, assignment group records are included in the upgrade, under control of the configuration information in the patches record. However, assignment group records (especially memberships) are most likely changed a lot during the preparation phase of the upgrade process. All changes to groups and memberships made during the preparation phase will be cancelled out when the Custom Upgrade is applied to the production system.	The "Troubleshooting" section of the Upgrade Guide (in both PDF and interactive html) is updated to include a workaround to avoid assignment objects from being included in the patch.

CR	Problem	Solution
QCCR1E109127	There is no information in the online help about whether or not Array type fields are allowed by KM Import Utility.	The following note is added to the following documents: • Online help topic: XML source document considerations for importing • README.txt shipped with the KM Import Utility package "If you have tailored the kmdocument dbdict, be sure to not include your tailored Array fields, Structure fields, and Arrayed Structures fields in the source XML documents; otherwise the import will fail."
QCCR1E110319	The *utallocmode* parameter is documented incorrectly. It does require a server restart.	The *utallocmode* parameter is documented correctly.

Upgrade

CR	Problem	Solution

QCCR1E103641	When you compare a renamed "Application Cluster" in the upgrade results after you perform an upgrade, you receive the following error messages: **Process panel get.xml.data in RAD run.merge.tool encountered error in line 1 (run.merge.tool,get.xml.data)** **Cannot evaluate expression (run.merge.tool,get.xml.data) Bad arg(2) oper = (run.merge.tool,get.xml.data)** **Cannot evaluate expression (run.merge.tool,get.xml.data) Script 'upgradeHelper' line 354: ERROR TypeError: strAncestorXml.replace is not a function at char 1** **Unable to open file F:\9.32-Release-Build-0016_GA_ sh\sm9.32.0016_Application_ Upgrade\AppUpgrade\application-9.32.0016-UP\localized_ app_upgrade\SC6.2-9.32.0016_ L10N\3waymerge\oob\SC6.2\enclapplrev\km.environment.xml for reading** **Unrecoverable error in application: se.call.process on panel call.rad.1** **Unrecoverable error in application: run.merge.tool on panel get.xml.data**	No errors occur when you compare "Application Cluster."
QCCR1E103687	Customized fields and datatype mapping reports do not ignore the case sensitivity of the SQL data type.	Customized fields and datatype mapping reports now ignore the case sensitivity of the SQL data type.
QCCR1E103710	An internal "Java Heap Space" error occurs when you generate the Customized Records report.	The *compareDetail* and *showModifyDetail* parameters are added to report.xml to control the Customized Records report. Additionally, the maximum JVM heap size is increased. The toolkit now compares only the signature number of each record and displays the Added/Modified/Deleted amounts by default.

QCCR1E104094	The SQL type of the operators field in the **kmgroup** table is not up-to-date in the **upgradeTableAliasChange** ScriptLibrary.	The SQL type is updated to VARCHAR(80) in the ScriptLibrary record.
QCCR1E104095	There is an inconsistency between Upgrade Patch Utility (UP) and Applications Patch Manager (APM) in the patch definition.	There is no longer an inconsistency between Upgrade Patch Utility (UP) and Applications Patch Manager (APM) in the patch definition.
QCCR1E104215	Error messages that resemble the following are recorded in the except.log file when you upgrade the applications from version 9.20 to version 9.32: **7 07/01/16 08:50:07 The alias of the array field current.pending.groups in the table Approval cannot be updated to upgraded version.** **7 07/01/16 08:50:07 The alias of the array field related.cis in the table cirelationship cannot be updated to upgraded version.** **7 07/01/16 08:50:07 The alias of the array field approvers in the table cm3groups cannot be updated to upgraded version.** **7 07/01/16 08:50:07 The alias of the array field members in the table cm3groups cannot be updated to upgraded version.** **7 07/01/16 08:50:07 The alias of the array field permission in the table kmcategory cannot be updated to upgraded version.** **7 07/01/16 08:50:07 The alias of the array field operators in the table kmgroup cannot be updated to upgraded version.**	If the correct aliases are used before the upgrade, no error messages about aliases are recorded in the **except.log**. Messages about aliases are recorded in the **detail.log** instead.
QCCR1E105116	Timestamps in the upgrade logs are inconsistent.	Timestamps in the upgrade logs are now consistent, and are formatted as follows: yyyy-mm-dd HH:mm:ss.

Integrations

CR	Problem	Solution
QCCR1E104528	When you close an unplanned change, a RAD error occurs.	RAD errors do not occur when you close an unplanned change.
QCCR1E105553	When you search the SMISRegistry table by using the out-of-box default settings, only the SMOO record is returned.	All records are returned when you search the SMISRegistry table by using the out-of-box default settings.
QCCR1E108492	The value of the “processedDate” field is set inconsistently during the unplanned change processes for CI attribute changes and for CI relationships.	The “processedDate” field is left empty when you deny an unplanned change for a CI attribute change.

Localization

CR	Problem	Solution
QCCR1E105667	Custom language builders do not work when you use Language Builder to build custom language packs.	You can now use Language Builder to build custom language packs as expected.
QCCR1E106290	After you apply the pt-Br language pack, Wizard buttons are not translated.	Wizard buttons are translated when you apply the pt-Br language pack.

Service Request Catalog (SRC)

CR	Problem	Solution
QCCR1E102665	Only the first line in a multi-line field is displayed on the page. Other lines are displayed in the tooltip.	Text in multi-line fields is displayed in a readable format, with a scroll bar to enable you to view all the data.
QCCR1E103134	The validation tool to check the manifest.xml file is not working on the Windows shell because wildcard character "*" (asterisk) in the command script is not supported.	The wildcard character in the command script has been replaced with the specific version value.
QCCR1E103274	When **src.service.enablePrice** is set to false in the **applicationContext.properties** file, the cost column is removed as expected. However, the **Approve** and **Deny** buttons are also removed from the approval list in the SRC 9.32 dashboard.	The **Approve** and **Deny** buttons are correctly displayed in the approval list.
QCCR1E103491	SRC fails to start in FIPS mode, because JCE cannot authenticate the provider JsafeJCE.	SRC is able to start in FIPS mode now.
QCCR1E104127	Users can submit new service requests in SRC even when you disable the "New" option for their user profile in the Service Manager server.	Users cannot submit new service requests in SRC when you disable the "New" option for their user profile in the Service Manager server.
QCCR1E104335	When you create a general SRC support request for another user, the Affected Service list under the Additional Info panel is not refreshed to display the subscription items that are available to that user. If you select a service item that is unavailable to the "Request For" user from the list, you receive an "Invalid Service" error after you submit the request.	When you create a general SRC Support Request for another user, the Affected Service list under the Additional Info panel is automatically refreshed to only display the subscription items that are available to that user. Therefore, you can submit the request successfully.

CR	Problem	Solution
QCCR1E104633	The Service Recipient is not set correctly in Service Manager when you order a Support Catalog item from Service Request Catalog on behalf of another user.	The Service Recipient is now set correctly in Service Manager when you order a Support Catalog item from Service Request Catalog on behalf of another user.
QCCR1E104867	When you select a category that does not contain any items that are visible to end users, an error occurs.	When you select a category that does not contain any items that are visible to end users, a "No items found" message is displayed.
QCCR1E105308	The Service Recipient is not set correctly in Service Manager when you order a service item in SRC Request On Behalf (ROB) mode.	The Service Recipient is set correctly in Service Manager when you order a service item in SRC Request On Behalf (ROB) mode.
QCCR1E106099	SRC does not support the ART tool to record objects.	The request form is correctly recognized by the ART tool.
QCCR1E106278	New attachments that are added to SRC 1.26 are not displayed even after the multiple Catalog Refresh cycles.	New attachments that are added to SRC are displayed as expected.
QCCR1E106967	You cannot select or copy read-only text fields and text areas in Service Request Catalog 9.33.	You can select or copy read-only text fields and text areas as expected.
QCCR1E110952	The SRC Tablet app does not support Korean on Android 4.2.2.	Korean is displayed correctly in the SRC Tablet app on Android 4.2.2 and above.
QCCR1E111065	The cross image displayed in the Support dashboard is not a neutral symbol to all users.	The cross image displayed in the Support dashboard is replaced with a neutral one.

Mobility

CR	Problem	Solution
QCCR1E110280	The Email address of a contact record is not recognized as a valid one in Service Manager Mobility if it contains a dash "-" character in the domain name. For this reason, you cannot tap on it to send an Email.	The Email address of a contact record is now recognized as a valid one in Service Manager Mobility if it contains a dash "-" character in the domain name. You can tap on it to send an Email.

Server

CR	Problem	Solution
QCCR1E70834	The Load Balancer and background processes unexpectedly terminate in a horizontally scaled Service Manager 7.11 Patch 17 environment.	This "jgroups node got shunned" issue is solved by changing the JGROUP configuration.
QCCR1E71700	Service Manager performs poorly and hangs when Incidents are created or accessed. After a recycle, the indexes on the probsummary table are marked as not usable.	This issue no longer occurs.

CR	Problem	Solution
QCCR1E95118	After you refresh the web client, the first group in a record list is always expanded, and the selected record is not selected anymore.	Now, when you open a view from the To-Do queue, all groups in the view are collapsed by default. When you switch to a new view in the To-Do queue, all groups in the new view are collapsed. If you have not manually expanded any group in a view, or if you have expanded a group without selecting a record, when you click the **Refresh** button, all groups in the view are collapsed. If you have expanded one group and selected one record in the group, when you click the **Refresh** button, the previously selected record is still selected and the corresponding group is expanded, no matter whether the group of the record is changed or not.
QCCR1E98066	A RAD compilation failure causes a memory leak.	There is no memory leak when a RAD compilation fails.

CR	Problem	Solution
QCCR1E99284	When you apply changes to the dbdict in various environments, they do not consistently map across the environments. For example, when you add a field to the incidents dbdict in your development environment and allow Service Manager to make the changes to the database, the development environment maps the field to a field in the INCIDENTSM1 table in the database; however, when you make the same modification in your acceptance environment and allow Service Manager to make the changes to the database, the acceptance environment maps the field to a field in the INCIDENTSM2 table in the database, and moves a field that had been on the INCIDENTSM2 table onto the INCIDENTSM1 table. The Service Manager dbdict splits the main table into M2 and M3 across the environments. As a result, it is difficult to run reports against the system because this results in no row being selected or incorrect rows being displayed. There needs to be the ability to control table splitting in Service Manager, or remove table splitting altogether.	Now the Service Manager server reads the row size limitation and column number limitation from file "sqldbinfo" and use the information when making a decision about splitting SQL tables. **Note:** • This fix affects SQL Server database servers only. • For MS SQL Server, if you want to disable table splitting, you need to manually set the row size limitation in the “sqldbinfo" table to a very large number, which is supported by SQLSERVER 2008 and later with ROW_OVERFLOW_ DATA. • Modifications to the "sqldbinfo" table require a restart of the Service Manager server. The following constraints still exist, which you need to consider if you want to disable the row size limitation: • The feature of Row-Overflow Data Exceeding 8 KB is not

CR	Problem	Solution
		supported by SQL Server 2005. For this reason, if you are using SQL Server 2005, do not change the default MAX ROW SIZE value in the “sqldbinfo" table. • The length of individual columns must still fall within the limit of 8,000 bytes for varchar, nvarchar, varbinary, sql_variant, and CLR user-defined type columns. Only their combined lengths can exceed the 8,060-byte row limit of a table. • The sum of other data type columns, including char and nchar data, must fall within the 8,060-byte row limit. Large object data is also exempt from the 8,060-byte row limit. • After removing the size limitation, if a file does have an M2 table, before you manually move all of the fields in M2 into M1, newly added fields will still be put into M2. • The Row-Overflow feature is

CR	Problem	Solution
		great for allowing occasionally rows longer than 8,060 bytes, but it is not well suited for the majority of rows being over-sized which can lead to a drop in query performance.
QCCR1E99835	If you modify **popup.ci.info** pop-up subforms that use the **SD.open.interactio**n format and are associated with the Affected CI field, you find that display values are not displayed in Comfill fields or in arrays.	The values in Comfill fields and in arrays are now displayed correctly in modified **popup.ci.info** pop-up subforms.
QCCR1E100151	The load balancer does not correctly identify the quiesce-mode in the Service Manager client.	The load balancer correctly identifies the quiesce-mode in the Service Manager client.
QCCR1E100406	When you run equivalent queries on the **dataModEvent** table, different results are returned.	The issue is fixed by dispatching the "not" operator recursively until there is no "AND"/"OR" underneath.
QCCR1E101528	When you try to retrieve the probsummary records by using a simple query, the legacy connection closes and a "Signal 11" error is generated.	You can now retrieve the probsummary records by using a simple query as expected.
QCCR1E102329	There are memory leaks in Service Manager source control.	The memory leaks are now fixed.
QCCR1E102701	The focus is lost after you click **Cancel** from a confirmation page.	The focus is retained after you click **Cancel** from a confirmation page.
QCCR1E102763	The focus is lost when you select a record in System Status, and then refresh the display.	The focus remains in the record when you refresh the display in System Status.

CR	Problem	Solution
QCCR1E102775	The focus is lost when you click **Back** from a record selection page. For example, when you clear the Category field of an incident record, click Fill and then click **Back** in the category selection page, the focus moves to the **Incident ID** field.	The focus is retained when you click Back from a record selection page. In the given example, the focus remains in the Category field.
QCCR1E103106	When you apply the Service Manager 9.32 applications patch to your environment, the process fails and a "Signal 11" error is generated.	The "Signal 11" error was caused by a NULL pointer. Service Manager now checks the pointer whether it is NULL before using it. Therefore, the process does not fail and no "Signal 11" error occurs.
QCCR1E103235	Auto-refresh does not work when the *viewrecordlist* parameter is disabled in the web client URL.	When the *viewrecordlist* parameter is disabled, views are automatically refreshed as expected.
QCCR1E103300	Word (.docx) files cannot be pushed to Service Anywhere because sending and receiving binary data is not supported.	You can now send and receive binary data by setting the 9th (<Binary request data>) and 10th (<Binary response data>) parameters of "doHTTPRequest" to "true".
QCCR1E103456	When you use the "Any of these words" text search option to export records to Excel or to a text file, some records are not exported.	All records are exported as expected when you use the "Any of these words" text search option to export records to Excel or to a text file.
QCCR1E103870	The sort order of a view is lost when you refresh the view.	The sort order of a view is retained when you refresh the view.
QCCR1E104185	The following error is recorded in the server log file: **JRTE E sendResponse() execute failed - Invalid byte 2 of 3-byte UTF-8 sequence**	This error is not recorded in the serer log file.

CR	Problem	Solution
QCCR1E104187	The coredump is not generated immediately when an exception is thrown from a JAVA part.	The Java Virtual Machine Tool Interface (JVMTI) is now used to monitor the JVM events. The JVMTI is loaded during the initialization of the JVM. When a JAVA exception is thrown, a callback function that is registered for the exception event is called to generate a coredump.
QCCR1E104624	When you save a record, the Service Manager client is terminated unexpectedly.	The Service Manager client is not terminated unexpectedly when you save a record.
QCCR1E104704	Assume that you search for a record by clicking the **Search Specific Type** field, and then delete that record. When you select any record that is positioned after the deleted record in the QBE list, the item details that are displayed do not correspond to the selected record.	When you select any record that is positioned after a deleted record in the QBE list, the item details that are displayed correspond to the selected record.
QCCR1E105614	When you update an attachment by using a web service call, a memory leak occurs.	No memory leak occurs when you update an attachment by using a web service call.
QCCR1E105949	The web client does not automatically refresh published messages.	Now, published messages are automatically refreshed even if the marquee widget is not on the last opened tab window.
QCCR1E106604	The Sequence Number thread terminates with a "Signal 11" error, and you receive the following error message: **Warning: semaphore 10 held by pid xxxx**	The special error code from the Oracle database is now handled correctly.

CR	Problem	Solution
QCCR1E106783	Assume that a dataModEvent table is created or updated in an Oracle environment. The "oldValue" field in the table is a one-digit value (such as "8") and the "newValue" field in the table is a two-digit value (such as 16). In this situation, the "newValue" field disappears, and the record is corrupted.	This issue was caused by an optimization of the LOB read/write operation (QCCR1E72505). The change to the LOB read operation is now reverted.
QCCR1E107296	The Deny Quote transaction in SRC is slow because JGroups communication times out.	Currently, the network protocol for JGroups communication is UDP. However, UDP is not reliable; occasionally the packet may be lost, causing the JGroups operation to time out. A re-send mechanism, called RSVP, is added to relieve this problem. However, this does not resolve the packet loss problem completely.
QCCR1E108270	After you delete a record from the CI list, item selection does not work as expected in the QBE list.	You can now select items in the QBE list as expected after you delete a record from the CI list.

CR	Problem	Solution
QCCR1E109363	When you create an operator record by using a template that has security groups defined, subsequent changes to the template can result in the security group array becoming corrupt or not reflecting the correct values.	The operator's security groups array now matches the template that is assigned to the operator. **Note:** The following limitation still exists when an operator record's template is switched from one template to another: If an operator record has group1 in its security groups array when its template is NULL, and if group1 is in the security groups array of template_1 but not in that of template_2, the following behavior occurs: When you assign template_1 to the operator record , the operator record has group1 in its security groups array; however, when the record then switches to template_2, group1 is lost in its security group array. To work around this issue, first switch the template from template_1 to NULL, save it, and then switch the template from NULL to template_2.

CR	Problem	Solution
QCCR1E110146	The following message appears randomly: **API=OCIStmtExecute [in sqociSelectSome], Statement=SELECT m1."TYPE",m1."KEY_CHAR",m1."KEY_NUMERIC",m1."NAME" FROM CLOCKSM1 m1 WHERE ((m1."TYPE"=:Y and m1."KEY_CHAR"=:Y and m1."NAME"=:Y)) ORDER BY m1."TYPE" ASC,m1."KEY_CHAR" ASC,m1."KEY_NUMERIC" ASC,m1."NAME" ASC (apm.start.clock,select) SQL code=1008 message=ORA-01008: not all variables bound (apm.start.clock,select)**	The error message no longer appears.
QCCR1E110162	Several memory leaks were found in the RTE source code.	These memory leaks are now fixed.
QCCR1E111038	Users cannot log on to the Service Manager server on a Windows platform when FIPS with LDAP is enabled.	Rebuilt the FIPS module to enable users to log on to the Service Manager server on a Windows platform when FIPS with LDAP is enabled.

Web client

CR	Problem	Solution
QCCR1E31509	The Web client cannot use a specific element from an array to display in a QBE list. For example, if a QBE column is set up to display ',n', the entire array content is displayed instead of the nth element.	Now the Web client can use a specific element from an array to display in a QBE list. For example, if a QBE column is set up to display ',n', the nth element is displayed.

CR	Problem	Solution
QCCR1E57288	The Message box of the "mb.ok" RAD application displays the Information icon in the Windows client but the Warning icon in the web client.	The Message box of the "mb.ok" RAD application displays the Information icon in both the Windows client and the web client. **Note:** After this fix, the correct message level and its corresponding icon (such as Information, Warning, or Error) are displayed in a pop-up message box according to the message type or style. Before this fix, the "Warning" icon is always displayed in a pop-up message box in the web client. You may find some previous "Warning" messages are now displayed as "Error" or "Information" messages in the web client. This is true for both out-of-box messages and your tailored messages (if any). If a previous “Warning” message from your tailored system is now displayed as an “Error” message, you might previously have set the message as an error. In this case, if it is more appropriate to display the message as a warning, set the message as a warning.

CR	Problem	Solution
QCCR1E57782	The **Foreground Color** condition in a Table control of a record detail form does not work in the web client.	The **Foreground Color** condition works as expected in tables in the web client. **Note:** Condition values that contain special characters should be enclosed in double-quotes (for example, "HR > Policy"), or the condition will be ineffective. **Limitations**: • If you edit the value of a cell to make it satisfy a color condition after the page is loaded, the new color is not applied immediately. The new color takes effect only after the page is saved and refreshed. • If a default color is specified for a table, it takes no effect for new rows inserted into the table after it is loaded. The default color takes effect on the new rows only after the page is saved and refreshed.
QCCR1E58402	URLs that are included in the description of a Catalog item do not work as expected in the web client.	URLs that are included in the description of a Catalog item work as expected in both the Windows client and the web client. **Note:** For correct label wrapping in the web client, the URLs should be formatted as follows: • URLs should start with a specific protocol (such as http(s), ftp(s), www, or file) and end with a space. • Mail addresses should contain "@" and be separated from other words by a space.

CR	Problem	Solution
QCCR1E63006	The Data Changed Event for a Comfill is not triggered when the value is changed by the Fill operation in either the web or the Windows client.	The Data Changed Event for a Comfill is triggered on the web client when the value is changed by the Fill operation. • Now the input box and all the possible buttons (**Fill** button, **Find** button or **Combo** button) that consist of a Comfill are considered an integral part for the Data Changed Event. For example, if you directly change the value in the input box and press **Tab** to set focus to the **Fill** button, the Data Changed Event is not triggered immediately. In this case, the Data Changed Event is triggered only if you press **Tab** to set the focus to another control on the page. • For Comfills without the **Find** button, you will be unable to perform the **Find** operation using **Alt**+**F8**. However, if there is a **Find** button on the toolbar, you can perform the **Find** operation by clicking the **Find** button.
QCCR1E67098	Suppose a specific language pack is installed in Service Manager. After you set the language preference in Internet Explorer to this language, the default language for the Login page in the web client is still English.	The language used in the web client is now determined by the following settings, in order of descending priority: 1. Language specified in the URL 2. Language retrieved from the browser cookie 3. Browser language preference 4. Operating system default system locale Now, after you set the language preference in Internet Explorer to a specific language, clear the browser cookies and access Service Manager without setting the language in the URL, the default language for the Login page is the one that you specified.

CR	Problem	Solution
QCCR1E70740	In the Employee Self-Service client, the Mandatory indicator does not appear for fields that are newly defined for a Service Catalog Item.	Now, using any mode In the web client, the Mandatory indicator appears for all newly defined fields for a Service Catalog Item.
QCCR1E74669	Some tables in the detail form are not generated in table-related tags and are not recognized by JAWS as tables.	Now all tables in the detail form are recognized by JAWS as tables despite the details of the HTML tags.
QCCR1E75661	If you set the operating system locale, Internet Explorer language preference, and JAWS voice profile to German, JAWS reads text in the Service Manager web client in what seems to be a German accent.	The language attribute is added to the HTML tag. Now, when you set the operating system locale, Internet Explorer language preference, and JAWS voice profile to German, JAWS reads text in the Service Manager web client correctly in German.
QCCR1E79466	JAWS does not recognize the Record list as a table.	JAWS now recognizes the Record list as a table.

CR	Problem	Solution
QCCR1E89373	The hover form is not displayed for the **Contact** field in an interaction record. This issue occurs in the following scenario: 1. You open an interaction record. 2. You click **Knowledge Management** > **Retired Documents**. Service Manager creates a duplicate tab, attempting to load the retired documents form. Prerequisite: Your system has no retired documents. Service Manager displays a "No records found" information dialog and closes the new tab. 3. You click **OK** in the dialog, return to the interaction record, and hover over the **Contact** record. The hover form is not displayed.	The hover form is always displayed without errors.
QCCR1E91140	Many links and images in the web client are dragable, which can easily cause misoperation. For example, If you click the the Fill button and then drag it inside the input box, the javascript statement of the link of the Fill button is copied to the input box of the Comfill.	Now, almost all links and images in the web client are non-dragable so that they will not cause misoperation.

CR	Problem	Solution
QCCR1E92536	The accessibility of tables in the detail form is not supported very well in the Web client. The major issues are: • JAWS does not read off a meaningful table summary. • The column headers are not recognizable by JAWS. • The column headers and cells with a link in some tables are not accessible using the **Tab** key.	The accessibility of tables in the detail form is now well supported in the Web client. You can use JAWS table related commands to navigate through the column headers and cells in a table. • JAWS reads off a meaningful table summary. • The column headers are recognizable by JAWS. • The column headers and cells are accessible using the **Tab** key. **Known issue**: JAWS 13 cannot read the **Open Calendar** icon in a table if you use Internet Explorer 8 or 9.
QCCR1E97577	When you use the **Up** and **Down** arrow keys to navigate drop-down lists for Combo boxes and Comfills in Accessible mode, JAWS does not read the content of items in the list.	When you use the **Up** and **Down** arrow keys to navigate drop-down lists for Combo boxes and Comfills in Accessible mode, JAWS reads the content of items in the list.
QCCR1E97678	The Calendar for the **Date** control date picker is not correctly displayed in Firefox if the date value is invalid.	The Calendar for the Date control date picker is always correctly displayed in Firefox even if the date value is invalid.
QCCR1E98242	In the form for searching for Known Errors, you can see items with a "Known Errors" prefix in the value list for the Phase combo box. However, if you change the value of the "Look For" field in the search form to "Problem," the value list for the Phase combo box remains unchanged.	After you change the value of the "Look For" field in the search form to "Problem," the value list for the Phase combo box is updated accordingly and you can see items with a "Problem" prefix in the combo box.

CR	Problem	Solution
QCCR1E99401	If you register a new Interaction in the web client and immediately close it, the message "Interaction SD*** has been closed" is not displayed immediately.	If you register a new Interaction in the web client and immediately close it, the message "Interaction SD*** has been closed" is displayed immediately.
QCCR1E99739	When you view the Configuration Item form Relationship subform for CIs in the web client, you receive an error message if you click a related item that has a backslash (\) in the item name.	When you view the Configuration Item form Relationship subform for CIs in the web client, the related item opens without errors.
QCCR1E100789	In Forms Designer, if you set the Visible property of one field to "false" and then use this field in one DVD (Dynamic View Dependencies) property (such as Visible Condition), a JavaScript error occurs and the evaluation of Visible Condition fails when the form is displayed in the web client.	In Forms Designer, if you set the Visible property of one field to "false" and then use this field in one DVD (Dynamic View Dependencies) property (such as Visible Condition), the Visible Condition is evaluated as expected when the form is displayed in the web client.
QCCR1E101309	You cannot set the focus to the "Description" column in the table in the "Service Catalog Approval Activities" section when you use the accessibility client.	You can set the focus to the "Description" column in the table in the "Service Catalog Approval Activities" section when you use the accessibility client.
QCCR1E101305	Read-only fields and editable fields have the same appearance on the accessible client.	Read-only fields and editable fields have different appearances on the accessible client.
QCCR1E101304	When you use the keyboard to select a row in the Categories table in a Knowledge Document, and then to invoke the **Remove** button, the selected category is not removed. However, you can remove a category item by using the mouse.	Now you can use the keyboard as well as the mouse to remove an item from the Categories table in a Knowledge Document. **Prerequisite**: You must move the **Add** and **Remove** buttons to the right of the table in the form in Forms Designer. Therefore, when you tab out of the table, the related buttons receive the focus first.

CR	Problem	Solution
QCCR1E101302	When you set the cursor to a required field, the screen reader will name the field. However, the screen reader does not state that the field is a required field.	When you set the cursor to a required field, the screen reader will name the field as well as state that the field is a required field.
QCCR1E101441	When you open a new change in a system that has Process Designer Content Package 4 (PDCP4) installed, the new Change page is not displayed for several seconds if there are a large number of Task Template records in the system.	When you open a new change in a system that has Process Designer Content Package 4 (PDCP4) installed, the new Change page is displayed quickly even if there are a large number of Task Template records in the system.
QCCR1E101728	The color contrast of text on inactive tabs does not conform to the Web Content Accessibility Guidelines version 2 (WCAG 2.0) requirement.	The color contrast of text on inactive tabs now conforms to the Web Content Accessibility Guidelines version 2 (WCAG 2.0) requirement.
QCCR1E101861	JAWS does not read information in new Calendar and Attachment windows.	JAWS reads the information in new Calendar and Attachment windows.
QCCR1E101916	When the "New kmfeedback" page is loaded, the Frame name in the page is not read by JAWS, even if the frame name receives focus by default.	When the "New kmfeedback" page is loaded, the first editable control now receives focus by default. You can use the following JAWS keystrokes to move through all the frame names in the current page: • **M**: go to the next frame • **Shift**+**M**: go to the previous frame • **Insert**+**F9**: list the frames
QCCR1E102043	All Popup windows share the same general title ("HP Service Manager").	Popup window titles are now appended with window-specific information.

CR	Problem	Solution
QCCR1E102364	When you are prompted by a message box, JAWS does not read the content of message box.	When you are prompted by a message box, JAWS reads the content of message box. **Known issue**: JAWS always reads "ok, yes, no, cancel," irrespective of the buttons that are present in the message box.
QCCR1E103206	You cannot use the **Alt**+**F1** keyboard shortcut in the web client to access a display option whose GUI option value is set to "1."	You can now use the **Alt**+**F1** keyboard shortcut in the web client to access a display option whose GUI option value is set to "1."
QCCR1E103494	If you add a Marquee to a form and set the Input property of the Marquee to a variable, the Marquee is not automatically refreshed on the web client after the value of the variable is changed.	If you add a Marquee to a form and set the Input property of the Marquee to a variable, the Marquee is automatically refreshed on the web client after the value of the variable is changed.

CR	Problem	Solution
QCCR1E103797	If you have an existing Service Manager open in the web client, and then you use the Hash URL to access a record directly, the existing session expires, and you receive the following message: **This page has expired. Please close it.** You must then log in to the new session to view the record. However, you receive the following message: **You are trying to connect to a different server while the Service Manager main application is already open in another browser tab. If needed, save your work in the other tab first, and then continue.** As the previous session is already expired, you are unable to do this.	If you have a session open in the Service Manager web client, this session does not expire when you use the Hash URL to access a record directly. Instead, the record opens in a new browser tab.
QCCR1E104466	The DVD select statement does not work for any Combo box on the ToDo page.	The DVD select statement now works for any Combo box on the ToDo page.
QCCR1E104627	If two Text Area controls in two different notebook tabs share the same input value, and one of the tabs has a DVD visible condition that is evaluated to false, one additional new line is inserted after each paragraph in the Text Area after the page is refreshed due to a form submit action.	If two Text Area controls in two different notebook tabs share the same input value, and one of the Tabs has a DVD visible condition evaluated to false, the content in the Text Area remains unchanged after the page is refreshed due to a form submit action.

CR	Problem	Solution
QCCR1E104793	If you set focus to the column header of a table in the detail form, there is no focus style to highlight it. As a result, it is very hard for you to know which column header is in focus.	If you set focus to the column header of a table in the detail form, now there is a focus style to highlight it so that you can easily know which column header is in focus.
QCCR1E105562	The web page is refreshed after you press Enter on a notebook tab in Firefox or Chrome.	The web page is no longer refreshed after you press Enter on a notebook tab in Firefox or Chrome. **Known issue**: The focus sequence is different in Chrome. If you press Enter on a notebook tab and then press Tab, the focus does not move to the content of the current notebook. Instead, it moves to the next notebook. The focus moves to the content of the current notebook only after it finishes moving through all the notebooks.
QCCR1E105784	The page hangs when you perform a Validate Format operation in the web client.	The Validate Format operation now works as expected in the web client.
QCCR1E105915	If you set focus to a cell that does not contain a link in a table and press Enter to select the row, the page is refreshed and the focus is reset.	If you set the focus to a cell that does not contain a link in a table and press Enter, the current row is selected. If the first column contains a link, the focus moves to that cell.
QCCR1E106343	The web client hangs if you search for the string "sub" in the Forms Designer page. Additionally, the following Javascript error is displayed in the browser console: **<Uncaught Ext.JSON.decode(): You're trying to decode an invalid JSON String>**	Now, if you search for the string "sub" in the Forms Designer page, the search result page is displayed correctly without any error.

CR	Problem	Solution
QCCR1E106773	Assume that you deploy the webtier directly under the Tomcat root directory. When you access the webtier and click any **Cancel**, **Back**, or **OK** button, or perform any other operation that closes the current tab, you receive the following network error: **Network Error (dns_unresolved_ hostname)** **Your requested host "processmessages.jsp" could not be resolved by DNS**	Assume that you deploy the web tier directly under the Tomcat root directory. When you access the web tier and click any **Cancel**, **Back**, or **OK** button, or perform any other operation that closes the current tab, you can close the current tab as expected.
QCCR1E107280	When you press and hold the mouse wheel on a record list, the Chrome browser tab crashes after some operations, such as moving or clicking.	The mouse wheel event is now disabled so that this issue will no longer occur.
QCCR1E107505	If you have the Arabic language pack installed in Service Manager, you find the Mandatory indicator of any Comfill is displayed overlapping the input box of the Comfill when you access the web tier by using Internet Explorer.	If you have the Arabic language pack installed in Service Manager, you find the Mandatory indicator of any Comfill is displayed on the left of the input box of the Comfill when you access the web tier by using Internet Explorer.
QCCR1E107531	Cell content that does not contain a link is read as "link" + "cell content" in the JAWS Table Layer Mode.	Cell content that does not contain a link is read as simply "cell content" in the JAWS Table Layer Mode.
QCCR1E107535	In JAWS Table Layer mode, JAWS reads redundant content when the cell has no content.	In JAWS Table Layer mode, JAWS does not read redundant content when the cell has no content.

CR	Problem	Solution
QCCR1E107710	If a Comfill field is used to display an array of values, an array of controls is displayed for this field. However, the label of the Comfill field is not read by JAWS.	If a Comfill field is used to display an array of values, an array of controls is displayed for this field. Now, the label of the Comfill field is read by JAWS when the focus is on the first field.
QCCR1E107773	Some buttons overlap with the color selection table.	The height of the "wizard.subformat" subformat is updated to remove the overlaps.
QCCR1E107943	If you set both the Value List and Display List for a Comfill control, the tooltip for the Comfill is displayed as "Fill Field" and the label for the Comfill is missing in the web client.	If you set both the Value List and Display List for a Comfill control, the tooltip for the Comfill is displayed as "Fill Field %Label%." in the web client. For example, if the label for this Comfill is "Category," then the tooltip is displayed as "Fill Field Category."
QCCR1E107955	JAWS does not recognize the Attachment table in a detail form as a table.	JAWS now recognizes the Attachment table in a detail form as a table, with the following features: • The header of the Attachment table is read as "[header text] column header." • With JAWS running, when you press **Ctrl** + **Insert** + **T**, the attachment is listed in the table list dialog, named as "Attachments." • With JAWS running, you can press **T** to iterate all tables, including the Attachment table. • With JAWS running, all checkbox states are read correctly, and you can use the **Space** key to toggle states.

CR	Problem	Solution
QCCR1E108842	If you resize the browser so that part of the "More" button in the toolbar is invisible, a button with label ">>" is displayed on the right of the toolbar for calling out the "More" button. If you click the ">>" button, nothing happens.	If you resize the browser so that part of the "More" button in the toolbar is invisible, a button with label ">>" is displayed on the right of the toolbar for calling out the "More" button. If you click the ">>" button, the "More" button is displayed.
QCCR1E108932	A Javascript error occurs when you select a Task in the Task Planner in Internet Explorer 8.	No Javascript error occurs when you select a Task in the Task Planner in Internet Explorer 8.
QCCR1E109024	The date control does not work in Firefox if you specify a mask and output conversion. "undefined NaN" is displayed instead of the year and month, and the date is not displayed.	The date control now works as expected in Firefox if you specify a mask and output conversion.
QCCR1E109058	When load balancing is configured and the *honorUrlPort* parameter is enabled in the Service Manager system, if you refresh a page, the web client displays a new page with the following incorrect message: **You are trying to connect to a different server while the Service Manager main application is already open in another browser tab. If needed, save your work in the other tab first, and then continue.** After you click the "OK" button in the message, you are logged off the web client.	When load balancing is configured and the *honorUrlPort* parameter is enabled in the Service Manager system, if you refresh a page, the page is refreshed without any message.

CR	Problem	Solution
QCCR1E110651	The focus indicator for focusable elements is not highly visible.	The focus indicator has been enhanced as described below: • In index mode, the button focus border color has been changed to black. • In accessible mode, the focus border width has been changed to 2px.
QCCR1E110799	When you use a JAWS command to open the Region List, JAWS reads out the System Navigator region as "Navigation", which is not meaningful.	When you use a JAWS command to open the Region List, JAWS reads out the System Navigator region as "System Navigator Navigation."
QCCR1E110780	The check box state for an attachment table is always read off by JAWS as Not Checked.	The check box state (Checked/Not Checked) of an the attachment table is read off correctly by JAWS.
QCCR1E110969	After the web page is loaded, JAWS reads something that is not related to the focused readonly element on the screen.	After the web page is loaded, JAWS now reads the correct content of the focused readonly element on the screen.
QCCR1E111063	There is no way to skip records in a record list. You need to tab through all records before exiting the record list.	You can use the following keyboard shortcuts on tables: • **Ctrl** + **Home**/**End**: Move the focus to first/last cell of a table. **Note**: In Chrome, you must use **Alt** + **Home**/**End** instead. • **Home**/**End**: When focusing on a cell in a row, move the focus to the first/last cell in the current row. • **Ctrl** + **Page Up**/**Down**: Navigate to the previous / next page.
QCCR1E112010	Keyboard shortcut "Alt+F8" is still working when the "Find" icon for the Comfill widget is set as invisible.	Keyboard shortcut "Alt+F8" is disabled for the Comfill widget when the "Find" icon is set as invisible.

Windows client

None.

Known problems, limitations, and workarounds

This software release has the following known issues and limitations. This is a cumulative list of known issues and limitations in Service Manager, including those that are already documented in previous release notes (Service Manager 9.33 and patches, Service Manager 9.32 and patches, and Service Manager 9.31 and patches).

Issues in Service Manager 9.31 and patches

Global ID	Problem	Workaround
QCCR1E63663	The Service Manager client loses connectivity during JavaScript execution of the file.list RAD application.	No workaround available. Created a knowledge article (KM1166532), which states that Service Manager does not currently support calls from JavaScript on RAD applications that use the rio/fdisp panels.

Global ID	Problem	Workaround
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 one of the following solutions to solve this issue on Unix. **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: 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: **# sysctl -w kernel.exec-shield=0** **# sysctl -w kernel.randomize_va_space=0** 2. Start the legacy listener.

Global ID	Problem	Workaround
QCCR1E67491	When the collation of the db instance is Chinese_PRC_BIN, Web service clients fail to connect to Service Manager. Only ASCII operator names are supported, so only ASCII operator names can be used.	**Note:** This issue only exists in Web service integrations. Therefore, the Service Manager clients do not have this problem. When Service Manager is handling an incoming SOAP request, the authorization string is decoded by BASE64Decoder. Service Manager uses the decoded string value to construct a UTF-8 string that is used in the RTE. However, the authorization string is in the header and Service Manager does not know the charset or encoding of the underling string value, which is BASE64 encoded. Therefore, if the underlying string value is not UTF-8, this problem will occur. In Service Manager, when fetching an operator record from the database, no matter what collation the database uses, the operator record finally will get a UTF-8 operator value. However, even if users put the same value in the authorization header, the operator name may differ because of the charset/encoding issue. Because of this, the operator will fail to log on. This is a limitation of Service Manager. Do not use non-ASCII characters in operator names. Created a knowledge article (KM1442479) to document this limitation.

Global ID	Problem	Workaround
QCCR1E75182	HTML email truncates the body of the message and sends the HTML code without translating it.	When the content of an HTML email template exceeds 8192 bytes in size, the content will be truncated and displayed as HTML code. Make sure your HTML email templates do not exceed this size limit.
QCCR1E77563	Signal 11 error is received when calling the toXMLString() routine of the Users object.	No workaround is currently available.
QCCR1E88222	An unload file that is exported from an Oracle to an SQL Server database fails to import when the unload file already contains a RECORD_KEY field and the length of first unique key exceeds the db limitation.	This request is caused by the product running in an unsupported configuration. Change to a documented and supported configuration. If the problem still exists in a supported environment, contact HP Support. To work around this issue, do not use "RECORD_KEY" as a SQL Name for a field in dbdict. This field name is reserved by Service Manager. To do this, follow these steps: 1. Enter `dbdict` in the Service Manager command line box. 2. Enter "esdquestions" in to the search field, and then click the Search button. 3. Select the "record.key" field, and then change the SQL Name from "RECORD_KEY" to anything else.

Global ID	Problem	Workaround
QCCR1E74808	After clicking the **Cancel** button in the Condition Editor from the Workflow Editor, the current tab sometimes becomes a blank screen and the tab cannot be closed.	No workaround is currently available.
QCCR1E105052	In Task Planner, the tooltip of a task displays the change phases with their names instead of their display names.	No workaround is currently available.

Issues in Service Manager 9.32 and patches

Service Manager Issues

Global ID	Problem	Workaround
QCCR1E64377	In the web client, when a Configuration Item (CI) record is opened, the CI label does not show (or only shows for the first time) in the CI Visualization (Relationship Graph). This issue occurs only when JRE 6 is used.	As Oracle has fixed this Applet issue, JRE 6 customers need to upgrade their JRE to the latest JRE6 or JRE7 on the machine that runs Internet Explorer or Firefox in order for CI Visualization to display CI labels correctly.

Global ID	Problem	Workaround
QCCR1E95725	Due to a known issue in JDK (bug id:7196513), CI icons are not displayed correctly in Firefox when Httponly cookies are enabled in the web application server.	When Httponly cookies are enabled, users can only use Internet Explorer 7 or higher for CI icons to display correctly. As Oracle has fixed the Httponly cookie issue as of JDK 7u6, users need to install the latest 32-bit JRE (7u6 or above) on the machine that runs Internet Explorer 7 or higher. **Note:** In Service Manager 9.33 or later, users can only use Internet Explorer 8 or higher for CI icons to display correctly.
QCCR1E95963	An error occurs when loading a dbdict twice in an unload file. The two dbdict records have the same name, but different key types: the first one has unique key, while the second's key type is primary key.	Do not export to an unload file a dbdict record whose key type has changed.

Global ID	Problem	Workaround
QCCR1E97260	When SSL is enabled between the web application server and Firefox, a ClassNot found Exception error displays in the workflow section of the Change form. This issue does not occur in IE or in Firefox without SSL enabled.	There are two workarounds: • Use Internet Explorer instead of Firefox. • If using Firefox, import the client certificate into the Java console on the end user's machine. Here are the steps for Windows 7: a. Open Control Panel, and i n the Control Panel Search box enter "`Java Control Panel`". b. Double-click the Java console icon to open the Java console. c. On the **Security** tab, click **Manage Certificates ...**. d. On the Certificates window, select certificate type: **Client Authentication**, and click **Import**. e. Follow the wizard and import the client user's certificate.
QCCR1E97492	Clicking the **Back** button on the CI Visualization page (which opens when you click **More** > **Expand CI Visualization** in a CI record) causes a Firefox crash.	No workaround is currently available.

Global ID	Problem	Workaround
QCCR1E97603	If a format that contains a button with Enable condition is created or modified by using a Service Manager 9.31 patch 1 server, when using it in Service Manager 9.31 GA or earlier, the client crashes. However, formats created by using the Service Manager 9.31 GA or earlier server work fine.	Upgrade both of the Service Manager server and client to the same patch level: Service Manager 9.31 patch 1 or later.
QCCR1E94657	When PDCP4 is applied, the first group on the form is not shown in the Jump Address drop down list.	Move the scroll bar to the top-most position and then you will see the first group.
QCCR1E97856	In a single-line text field, some special characters whose HTML code is `&#x...;` (where ... stands for a hex number) are not represented as their original format. Instead, they display as `&#x...;`. However, such characters are represented as the original format in other widgets (textarea, label, message panel, and so on).	No workaround is currently available.
QCCR1E93604	The HTTP Response Code is 200 instead of 400 when a RESTful request uses an invalid sort field separator (for example, a plus symbol).	Use a valid sort field separator.
QCCR1E94204	Because of the incorrect status, the operation could not proceed after merging a record.	Reset the status of this record (for example, reopen the closed record) and perform the last operation again.
QCCR1E94206	The last operation could not be repeated after merging a record because the button for the last operation disappears.	Reset the condition for the button in this record, for example, Reopen the closed record, and perform the last operation again.

Global ID	Problem	Workaround
QCCR1E96353	RESTful API: An incident record is successfully resolved when posting an incident resolve action with a blank "ClosureCode" and "Solution".	Validation is not performed for the fields. To work around this issue, validate them at the RESTful client side, or manually add validation for the fields to the format control.
QCCR1E96391	Restful API: Results are in the wrong order when sorted by an array field. This issue occurs because the Service Manager RTE does not support sorting by array fields. A list is returned without any error message.	No workaround is currently available.
QCCR1E97898	Restful API: A 400 Bad Request error occurs when a RESTful API request is a cross-table join query.	The RESTful API framework supports simple queries and Service Manager native queries. Currently RESTful API framework does not support cross-table SQL queries.
QCCR1E98320	When a record is removed after being read, the Merge function still allows the user to merge the record and the user's input is lost.	No workaround is currently available.
QCCR1E98227	In Approval Delegation wizard, go to another page (do not change the delegation module) after choose the operator to delegate in "Select Approval Groups" page, then back to "Select Approval Groups" page again. You will find a blank line is displayed in the right table, instead of the operator record.	This is only a display issue, and will not impact the functionality. If you need to remove the operator from the delegation list, choose the blank line, and then click the remove icon; otherwise the operator will be successfully delegated once you save the update.

Global ID	Problem	Workaround
QCCR1E98576	When there are conflicted updates on system fields, the system displays the message "The conflicted fields cannot be merged. Reload the record.", whereas the Merge button is available. Actually, the merge function should not be available in such case.	Ignore the Merge button. Reload the latest record to edit this record again.
QCCR1E98398	When you are updating a record and adding attachments to this record, if your updates conflict with another users' updates or the updates of a background process, the attachments will be lost after either automatic or manual merge.	After automatic or manual merge, add the attachments again before saving the merged result of the record.
QCCR1E98411	SRC failed to retrieve service catalog items from Service Manager on upgrade from Service Manager 7.11 to Service Manager 9.32.	In the svcCatalog dbdict, the id.attach field is character type, which should be number type. The id.attach field is an alias of the id field in the svcCatalog table. To fix the issue, change the field type using the Dbdict Utility.

Global ID	Problem	Workaround
QCCR1E98618	Subcategory data on the Incident form is not available after upgrading from ServiceCenter 6.2 to Service Manager 9.32. Subcategory data is not upgraded.	If necessary, manually add the subcategory data. 1. Enter `db` in the Service Manager command line box. 2. In the Table field, enter `subcategory`, and click **Search**. 3. For each Catagory in the dropdown list, add the following Areas (enter a value in the Area field and click **Add**): `access`, `data`, `failure`, `hardware`, `performance`, and `security`.
QCCR1E98475	With Process Designer Content Pack 9.30.3 applied, the Merge functionality does not work when a user clicks **Save & New** in an interaction record opened through a search. 1. Open an interaction through a search. 2. Update the Title. 3. Another back-end process has updated the Title to another value. 4. Click **Save & New**. An error occurs: `This record has changed since you selected it`. You cannot perform Merge for the conflicted updates as expected.	If you encounter the error "This record has changed since you selected it." when clicking the **Save & New** button on an interaction opened through a search, to avoid abandoning your updates, do not use the **Save & New** button to save your updates; instead, first click the **Save** button to save your updates with the merged result, and then register a new interaction from the navigation menu.

Service Request Catalog Issues

Global ID	Problem	Workaround
QCCR1E90074	When entering a search string in Service Request Catalog, auto-complete does not work if the browser's preferred language is set to an East Asian language (for example, Simplified Chinese).	No workaround is currently available.
QCCR1E98339	Custom fields do not load the DEFAULT company value when the checkout panel is empty for one of the three checkout panels of your company.	After upgrade, you should manually add the same structure configuration of the DEFAULT company for the empty checkout panel of your company. For example, before upgrade, you, as an SRC administrator, only defined custom fields for the Service Catalog checkout panel for your company. After upgrade to Service Manager 9.32, if you want to use the support checkout panel and generic support checkout panel in SRC correctly, you need to manually add OOB configurations for the Support Catalog and Generic Support checkout panels, which you can copy from those panels of the DEFAULT company.

Issues in Service Manager 9.33 and patches

Global ID	Problem	Workaround
QCCR1E100136	After the installation of a language pack, the Windows client, if running on an Arabic Windows 2008, displays the tooltips of the 'Added' and 'Forced'/'Updated' columns in the content pack results as reversed.	No workaround is currently available.
QCCR1E101782	In Trusted Sign-On (TSO) mode, if users log in to the web client with Simplified Chinese in Internet Explorer 10 running on Windows 8 or Windows 2012, the web client still displays in English instead of in Simplified Chinese.	No workaround is currently available.
QCCR1E103847	An arrow connector in a Process Designer workflow might be misaligned when the destination phase is vertically too close to another phase (this problem was introduced in Service Manager 9.33 patch 1 revision 1).	To resolve the issue, move the destination phase away enough from the adjacent phase.
QCCR1E103858	It displays auto-open tasks in the task planner window (this problem was introduced in Service Manager 9.33 patch 1 revision 1).	No workaround is currently available.

Issues in Service Manager 9.34

Global ID	Problem	Workaround
QCCR1E105370	The "Select a section" quick jump text box is not displayed.	Click the resize icon.
QCCR1E105375	Service Request Catalog does not allow approval delegation for the Time Period module.	No workaround is currently available.
QCCR1E106074	When you add custom multi-text fields to the Service Checkout page, the fields are not displayed correctly on the Resubmit page on an iPad.	No workaround is currently available.
QCCR1E107572	When you use the arrow keys to move up, down, left, and right through cells, JAWS reads "Not in the table" incorrectly.	No workaround is currently available.
QCCR1E107573	When you put the focus on a column header after you switch the mode to table layer, JAWS reads the names of the first column header to the column header currently in focus incorrectly.	No workaround is currently available.

Global ID	Problem	Workaround
QCCR1E107712	In Internet Explorer 11, pressing F1 does not bring up the Service Manager help information.	To work around this issue,follow these steps: 1. Start Internet Explorer 11 from a desktop computer, and then log in to Service Manager. 2. Press **Alt** to access the menu bar in Internet Explorer. 3. In the **Tools** menu, select **Compatibility View settings**. 4. A dialog box appears, in which the "Add this website:" field is prepopulated with the host name or IP address of your webtier host. Click **Add** to add the website to the compatibility view list. 5. Click **Close**. The Service Manager web page refreshes and opens in compatibility mode.
QCCR1E107983	In Google Chrome, you are unable to use the **Tab** key to move the focus to or off the HTML Editor.	No workaround is currently available.
QCCR1E108558	When "Virtual PC cursor" is enabled, JAWS reads a group name three times when you expand the group.	No workaround is currently available.
QCCR1E109151	The grouping grid changes to a paging grid when you sort a table in the "Select a Time Period category" page.	No workaround is currently available.

Global ID	Problem	Workaround
QCCR1E109390	Revisions cannot be added when you apply PDCP4 production data to Service Manager 9.34 applications that were upgraded from Service Manager 9.32 applications.	No workaround is currently available.
QCCR1E109577	When you log in to the web client by using Internet Explorer 8 for the first time, all the characters are displayed in an italic font.	Refresh the page in Internet Explorer.
QCCR1E110285	When JAWS 15 runs in Internet Explorer 10 or 11, the focus does not return to the correct radio button when you press **Shift**+**Tab**.	No workaround is currently available.
QCCR1E105370	The Quick Jump component is not displayed in certain screen resolutions.	No workaround is currently available.
QCCR1E110695	The MySM details page is not displayed in Hebrew or Arabic.	No workaround is currently available.
QCCR1E110784	Sortable column headers for editable tables do not have a sort icon.	No workaround is currently available.
QCCR1E110085	JAWS reads the words "read only" when the focus is on a language combo box.	No workaround is currently available.
QCCR1E110285	When JAWS 15 runs in Internet Explorer 10 or 11, the focus does not return to the correct radio button when you press **Shift**+**Tab**.	No workaround is currently available.
QCCR1E110343	The Auto Complete function does not work for some fields of the **timeperioddefine** format.	No workaround is currently available.
QCCR1E111031	The customized Accessible Description for the recordlist table in a wizard cannot be read by JAWS.	No workaround is currently available.

Global ID	Problem	Workaround
QCCR1E111202	When JAWS13 is working with Asian languages such as Chinese, Japanese or with the Arabic language, the "System Navigator" and "Pagination" navigations cannot be listed in "Landmarks."	No workaround is currently available.
QCCR1E111084	You cannot use the keyboard to operate on a List Builder control when JAWS is running.	No workaround is currently available.
QCCR1E109267	The Label of the Parent Record field cannot be displayed correctly when saving an incident record.	No workaround is currently available.
QCCR1E111340	When using the **Tab** key to navigate the attachment table, the screen reader cannot recognize the input for the last two columns in the attachment table.	No workaround is currently available.
QCCR1E110722	Accessibility to the Time period rules table and the Time period occurrences table is not good on a time period record detail form.	No workaround is currently available.
QCCR1E112188	If a Comfill field has Auto Complete enabled and a data change event (not 0) defined, and a post expression/post JavaScript is defined for the link for this field, the data change event may not work.	Do not enable **Auto Complete** for the Comfill field.
QCCR1E110332	Calendar and Timeperiod in the Module drop-down list item on the SecArea Search page are not translated.	Search for "securityModules" in the global list, and then manually add translated strings for the target language.
QCCR1E111326	Cannot open timeperiod and entry records in Embedded Calendar in Internet Explorer 11.	Use an older version of Internet Explorer or use a different browser such as Firefox or Chrome.

Global ID	Problem	Workaround
QCCR1E111994	The Timeperiod Manager cannot see the **Approval Definition** menu when the system has no Process Designer content pack applied.	To work around this issue,follow these steps: 1. Log in to Service Manager Windows client as a system administrator. 2. Type `menu` in Service Manager Command line, and then press **Enter**. 3. Type `timeperiod` in the **Menu Name** field, and then click **Search**. 4. Locate the row with the description of Approval Definitions. 5. Remove `and jscall ("security.hasRight", "Common Configuration","view")=true"` from the Condition field.
QCCR1E112097	The Option menu is overlapped by full calendar in the Service Manager accessible web client.	No workaround is currently available.
QCCR1E112282	The data is incorrect for "Close in Phase" when viewing a task in Task Planner.	No workaround is currently available.

Global ID	Problem	Workaround
QCCR1E111131	Calendar and Timeperiod in the Module drop-down list are not translated in the Security Area Search page. To see this issue, follow these steps: 1. Log in to the web client with a non-English language. 2. Go to **System Administration** > **Security** > **Security Area**. 3. Click the "Module" drop-down list.	No workaround is currently available.

Global ID	Problem	Workaround
QCCR1E112815	The Time Period Management menu and sub-menus are not displayed after upgrading to Service Manager 9.34.	Update the following four out-of-box menu items by removing the **lioption("Time Period Management") and** condition: • APPROVER GEN • CM GEN • HOME • timeperiod main To update the menu items, follow these steps: 1. Log on to the Service Manager client as a System Administrator. 2. Type **menu** in the Service Manager command line field, and then press Enter. 3. Type the menu item name, for example, **APPROVER GEN**, in the menu name field, and then press Enter. 4. Locate the option whose **Description** is “Time Period Management”. 5. Remove **lioption("Time Period Management") and** from the corresponding Condition column. 6. Click **Save** and **OK**. 7. Repeat the steps above for the rest of

Global ID	Problem	Workaround
		menu items: CM GEN, HOME, and timeperiod main. 8. Log out and log in back. The Time Period Management menu and sub-menus are displayed.

Backup and backout instructions

In case you need to restore your Service Manager system to its original state after installing the component patches in this release, make necessary backups before each patch installation. If a rollback is needed, follow the backout instructions.

Server

Backup

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

Note: If you have a horizontally scaled system, be sure to back up the server installation folder for each server instance.

Backout

Service Manager has supported FIPS mode since version 9.32. To run Service Manager in FIPS mode, you must upgrade your database to the 256-bit AES encryption algorithm. Once you change all of the encrypted fields to use the new 32 character encryption you cannot roll back the RTE and still read the encrypted data.

After installing the patch, do the following to backout:

1. Stop the Service Manager server.
2. Remove the existing server installation folder.
3. Copy the backup folder back.

Note: Make sure that the embedded Tomcat is also replaced with the backup, because the version of the embedded Tomcat may have dependency on a specific server version.

Note: If you have a horizontally scaled system, make sure that every server instance is replaced with its backup.

4. If you have also loaded platform unload files required for your server changes, you must also roll back the application changes made by the unload files. See "LocaApplications" on the next page.
5. For Unix-based platforms other than Linux, make a backup of your JRE if you have not yet upgraded to JRE 1.7.
6. Restart the Service Manager server.

Web tier

Backup

Before deploying the new web tier, make a backup of the following items:

- web.xml file
- application-context.xml
- log4j.properties
- splash screen
- style sheets
- any other customizations you made, including your webtier-<version>.war (webtier-ear-<version>.ear) file.

Backout

To roll back to the old web tier:

1. Delete or uninstall the existing web tier.
2. Clear the cache of your web application server (for example, Tomcat).
3. Redeploy the old web tier.
4. Restore your old customizations.

Windows client

Backup

1. Make a backup of your Windows client home folder, for example, `C:\Users\<username>\ServiceManager`. Your connections and personalized settings are stored in this folder.

   Note: This is the out-of-the-box home directory, and could differ from yours if you made changes to `<Client>\configuration\config.ini` file. If so, back up the files from the location specified in that file.

2. Make a backup of your certificate configuration files if any (**Window** > **Preferences** > **HP Service Manager** > **Security**). For example, your CA certificates file and client keystore file.

Backout

1. Uninstall the new Windows client.
2. Reinstall the previous Windows client.
3. Restore your old Windows connections and configurations.

LocaApplications

If you plan to upgrade your applications to this release level, make a backup of your database before the upgrade, in case you need to restore your database after the upgrade. Creating a backup of the entire database and restoring the database if needed is a better approach for a full applications upgrade.

If you plan to load individual unload files in this release, follow the backup and backout instructions below.

Backup

Tip: If your application version is 7.11 ap3, 9.21 ap3, 9.30 ap3, 9.31 or later, you are recommended to use Unload Manager to make a backup of the files to be modified by an unload file, because Unload Manager can create a backup of your old data during the installation of the unload; if your

application version is other than any of these, Unload Manager is not available and you can use Database Manager instead.

To use Unload Manager to make a backup:

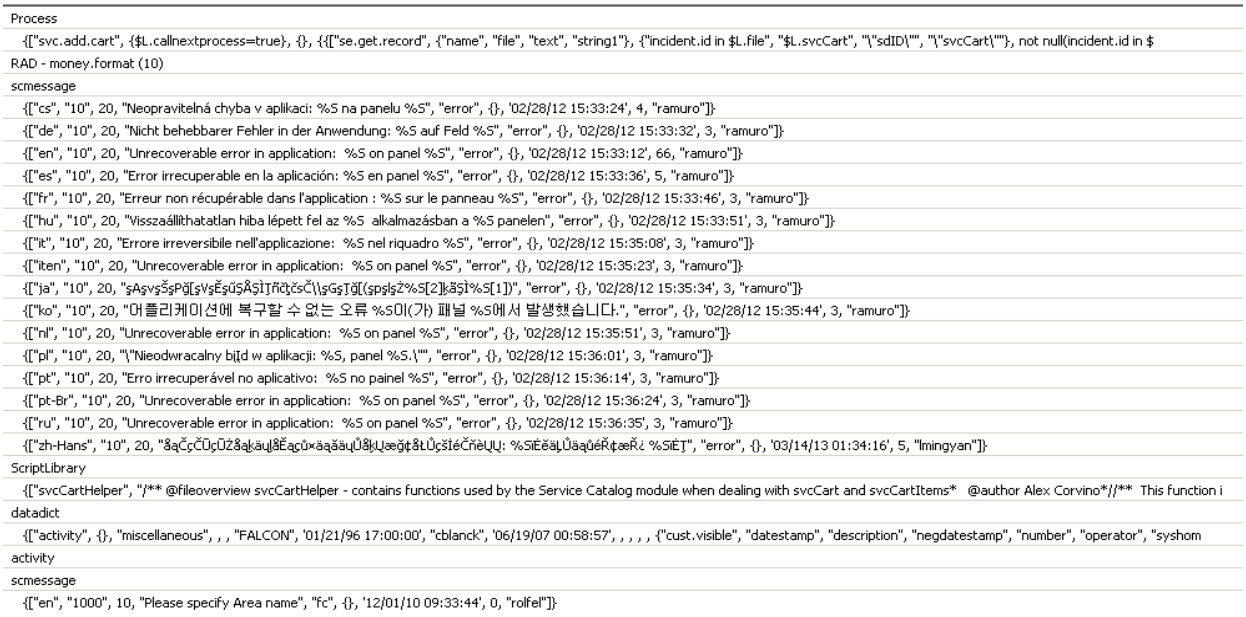
1. Go to **System Administration** > **Ongoing Maintenance** > **Unload Manager**.
2. Double-click **Apply Unload**. A wizard opens.
3. Select the unload file you want to apply, also specify a backup file, and then click **Next**. Details of the unload file appear.
4. Double-click a conflicting object in the table to open the merge tool:
   a. Merge the object, and then select the **Reconciled** check box.
   b. Click **Save** to go back to the wizard.
5. Click **Next** after all the conflicting objects are reconciled.
6. Click **Yes** on the confirmation window to apply the unload.
7. Click **Finish**.

   Now, the unload has been applied and at the same time your old data backed up.

To use Database Manager to make a backup:

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.

   See the following figure for an example.



This figure shows the contents of an unload file that contains changes to the following files:

File	Record
Process	svc.add.cart
application	money.format **Note**: The `scmessage` records listed under each RAD application are messages used in this RAD application; no backup is needed for them.
ScriptLibrary	svcCartHelper
datadict	activity
dbdict	activity **Note:** The “activity” file with no records actually represents the dbdict record of the activity file.
scmessage	The record whose message class is “fc” and message number is 1000.

3. Go to Database Manager, in the Table field enter a file name you got in step 2, and click the Search button.

4. If the format selection page shows, select the proper format by double-clicking it (for example, select the `device` format for the `device` file), and then search for the file record.

5. Click **More** (or the More Actions menu) > **Export/Unload** after the file record displays.

   Note: If **Export/Unload** is not available, check the **Administration Mode** check box in Database Manager and try again.

6. In the pop-up window, specify your backup upload file path/name, and click **Unload Appl**.

   Caution: Make sure that **Append to file** is selected.

7. Repeat steps 3 through 6 to back up the rest of the files you got in step 2.

Backout

Tip: You can use Unload Manager (recommended) or Database Manager (if Unload Manager is not available in your application version) to roll back to your old data, as described in the following.

To roll back to your old data using Unload Manager:

1. Go to **System Administration** > **Ongoing Maintenance** > **Unload Manager**.
2. Double-click **Apply Unload**. A wizard opens.
3. Select the unload file generated in the backup process, specify a backup file, and then click **Next**. Details of the unload file display.
4. Double-click a conflicting object in the table to open the merge tool:
   a. Merge the object, and then select the **Reconciled** check box.
   b. Click **Save** to return to the wizard.
5. Click **Next** after all the conflicting objects are reconciled.
6. Click **Yes** on the confirmation window to apply the backup unload.
7. Click **Finish**.

To roll back to your old data using Database Manager:

1. Go to Database Manager, click **More** > **Import/Load**.
2. Browse to the backup unload file you created.
3. Click **Load FG**.

Knowledge Management search engine

To back out your Knowledge Management (KM) search engine changes, make a backup before your KM patch installation.

Note: Keep in mind that you also need to roll back KM-related server side and application side changes. For details, see the Server and Application backup and backout Instructions.

Backup

Before applying the KM patch and upgrading the JDK and KM embedded Tomcat, do the following:

1. Make a backup of the search engine installation folder. For example, `C:\Program Files\HP\Service Manager 9.30\Search Engine Backup`
2. Make a backup of the files to be modified by the unload files in the KM patch.
3. Make a backup of your schemastub.xml file under directory `<SM server>/RUN/km/styles/`.

Backout

After installing the patch, do the following to backout:

1. Stop your KM search engine.
2. Remove the existing search engine installation folder.
3. Copy the backup folder back.
4. Rollback the previous JDK installation and change the `JAVA_HOME` environment variable back.
5. Be sure to roll back KM related changes on the Service Manager server and application sides, including the `kmsolr unloads` files and the server's `schemastub` file.
6. Restart your KM search engine.
7. Perform a full re-indexing on all of your knowledgebases.

Installation notes

This section provides instructions on installing each component in this patch release. You can also refer to the *Service Manager 9.34 Upgrade Documentation Center*, which is available to download from the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

Before you proceed, HP recommends that you consult the latest *Service Manager 9.34 Support Matrix* and the *Compatibility Matrix for Service Manager Applications Content*. These are available at the following website:

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

About HP ITSM Deployment Manager

Service Manager 9.34 release is supported by HP ITSM Deployment Manager (referred to as Deployment Manager). Deployment Manager is a free administration tool provided by HP that can help you deploy and maintain your Service Manager environments as well as ease the setup and maintenance of Service Manager integrations with other HP products. HP highly recommends you to download Deployment Manager and use it to re-deploy your environment when upgrading to Service Manager 9.34.

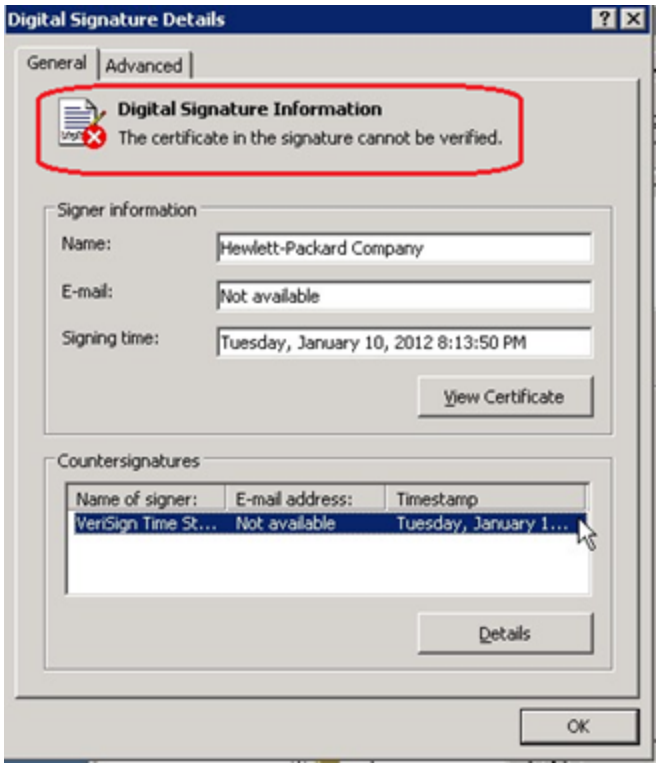
You can download Deployment Manager from the following HP Live Network web site for free and access all information on its compatibility matrix and features:

https://hpln.hp.com/group/itsm-deployment-manager

Digital signature notice

HP signs Windows executable files with a digital signature. Since January 2012, 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**, the following verification error is displayed:

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**

Server update installation

The server update for your operating system consists of a compressed file, sm9.34.0032_<OS>.zip (or .tar), which contains updated files of the Service Manager server. These files add to or replace the files in the [SM Server Root]\([SM Server Root]/)RUN, irlang, bin, legacyintegration, and platform_unloads directories.

Note: If you use an Oracle RDBMS, be aware that Oracle Call Interface (OCI) 11.2.0.3 is required for Service Manager 9.30p5, Service Manager 9.31, Service Manager 9.32 and later. For more information, see the latest *Service Manager 9.34 Support Matrix* at http://support.openview.hp.com/sc/support_matrices.jsp.

Built-in troubleshooting tool (SM Doctor)

Additionally, as of Service Manager 9.32, the server patch includes an installation of the HP Service Manager Doctor (SM Doctor) tool. The server patch will install the tool in the <*SM server root*>\(<*SM server root*>/)smdoctor directory. For information on how to use this tool, see the *Guides and reference > Troubleshooting > HP Service Manager Doctor* section in the online help.

Upgrade paths

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

- 9.30 GA, or 9.30 Patch/Hotfix
- 9.31, or 9.31 Patch/Hotfix
- 9.32, or 9.32 Patch/Hotfix
- 9.33, or 9.33 Patch/Hotfix

The following server upgrade paths are recommended:

- **New customers:** Install the Service Manager 9.30 GA server, and then directly apply this server patch.

  - If you are using Solaris 11.1, be sure to enable non-UTF-8 locales. See "Enabling non-UTF-8 locales in Oracle Solaris 11.1" below.
  - If you are using Windows Server 2012, be sure to install the Service Manager server in compatibility mode. See "Compatibility mode for installation on Windows Server 2012" on the next page.

- **Existing SC6.2, Service Manager 7.11, and Service Manager 9.21 customers:** Uninstall the old server, install the Service Manager 9.30 GA server, and then apply this server patch.
- **Existing Service Manager 9.30, 9.31, 9.32 and 9.33 customers:** Apply this server patch.

For installation instructions of the Service Manager 9.34 server, see the *Service Manager 9.34 Upgrade Documentation Center*, which is available to download from the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

For installation instructions of the server patch, see "Server patch installation steps" on the next page.

Enabling non-UTF-8 locales in Oracle Solaris 11.1

Oracle Solaris 11.1 is supported as of Service Manager 9.34. However, because non-UTF-8 locales are packaged separately in Oracle Solaris 11.1, you must enable charset ISO88591 on Oracle Solaris 11.1 by executing the following command before you install Service Manager:

```
pkg install pkg:/system/locale/extra
```

For more information, see the following link:
http://docs.oracle.com/cd/E23824_01/html/E24456/glmwl.html

Compatibility mode for installation on Windows Server 2012

As of Service Manager 9.32, Windows Server 2012 is supported. Be aware that compatibility mode is required for installing the SM9.30 GA server on Windows Server 2012 (not required for Windows Server 2008). To run your server installation in compatibility mode, do the following:

1. Right–click the server's setupwin32.exe file icon.
2. Click **Properties** > **Compatibility**.
3. Click **Run this program in compatibility mode for**, and then select **Windows Vista (Service Pack 2)**.
4. Click **Apply**, and then click **OK**.
5. Run the setupwin32.exe file to complete the installation.

When you uninstall your server on Windows Server 2012, you should also use compatibility mode. To do this, set your Windows server uninstaller file (_uninst\uninstaller.exe) to compatibility mode as described above, and then uninstall the server using the uninstaller or Control Panel.

Server patch installation steps

Caution:

- The server patch will upgrade your embedded Tomcat to version 6.0.37, and therefore requires additional steps.
- The server patch will upgrade your JGroups (in the RUN/lib directory) to version 3.2.
- Starting with Service Manager 9.31p2, the Service Manager server requires JRE 1.7. For Windows and Linux, the embedded JRE has already upgraded to version 1.7; for other Unix-based platforms, you need to manually perform this JRE upgrade.

  The JRE upgrade will cause external web service calls over SSL to fail if the remote endpoint does not support Server Name Indication (SNI), which is by default activated in JRE 1.7. Once Service Manager is upgraded to use JRE 1.7, it starts to use SNI extensions during the SSL handshake. If the remote endpoint does not support SNI, the web service call will fail with an error message. To solve this issue, do either of the following:

  - Activate SNI at the remote end point (recommended)
  - If the remote endpoint does not support SNI extensions, and SNI cannot be activated, add

the following JVMOption<*n*> parameter either to the sm.ini file, or to the start command of the servlet(s) in the sm.cfg file:

JVMOption2:-Djsse.enableSNIExtension=false

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

1. Stop all Service Manager clients.
2. Stop the Service Manager server.
3. Make a backup of the Server installation directory. See also "Backup and backout instructions" on page 128.
4. Delete the RUN/tomcat directory. Tomcat in this directory will be upgraded to version 6.0.37 when you extract the server files later.
5. Delete the RUN/lib directory.
6. For Windows and Linux platforms, delete the RUN/jre directory.
7. Extract the compressed files for your operating system into the main Service Manager directory on the server. By default, the file is saved in the following location:

   C:\ProgramFiles\HP\Service Manager 9.30\Server
8. For UNIX servers, set the file permissions for all Service Manager files to "755."
9. For the following Unix servers, manually upgrade to one of the following JRE versions, if you have not already done so.

   a. Install either JRE1.6, or JRE1.7, as appropriate for your platform.

Solaris 9	JRE1.6 (update 20 or greater)
Solaris 10, 11.1	JRE1.7 (update 60 or greater)
HP-UX	JRE1.7 (JRE_7.0.09 or greater)
AIX	JRE1.7 (SR6 FP1)

Caution: Service Manager can run on Solaris 9 with JRE 6. However, HP recommends that you upgrade to Solaris 10 or 11.1 to take advantage of JRE 7. If you still want to run the server on Solaris 9, an extra configuration is required. Without this configuration, when you start the Service Manager server, the following error will occur:

" fatal: libm.so.2: open failed: No such file or directory. "

This is a fundamental problem of Solaris 9, because there is no " libm.so.2 " on Solaris 9, while the Service Manager server requires this " libm.so.2 " to work. Use the following configuration to avoid this issue:

i. Log in to server host as a root user.

ii. Run the following commands to create a link between **limb.so.1** and **limb.so.2**:

```
n cd /usr/lib n ln - s libm.so.1 libm.so.2
```

iii. Run the export LD_ NOVERSION=1 command to set the environment variable LD_ NOVERSION.

b. Set your JAVA_HOME environment variable to point to JDK (if you have JDK installed) or JRE (if you have only JRE installed).

c. Execute **\RUN\removeLinks.sh** to remove the old symbolic links and then execute **\RUN\setupLinks.sh** to create new symbolic links.

d. Run the following command to check that the JRE version is correct:

RUN\jre\bin\java –version

10. If you have made any customizations/changes to the original RUN/tomcat folder, restore them in the new RUN/tomcat folder.

11. Your old schemastub.xml file (in the <*SM_Server_Home*>\RUN\km\styles\ directory) has been updated to a newer version. Either keep your old file by copying it back or keep the updated version (a KM knowledgebase full reindexing is then required).

12. Run the **sm -unlockdatabase** command.

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. 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.

13. Restart the Service Manager server.

14. Restart the Service Manager clients.

15. Check the version in **Help** > **About Service Manager Server**.

The server should be Release: **9.34.0032**.

Web tier installation

The web tier update consists of a compressed file, sm9.34.0032_Web_Tier.zip, which contains the installation files (both the .war and .ear files) that are required to install the HP Service Manager 9.34 web tier. Installing the new web tier will upgrade your web client to this release level.

For installation instructions, see the *Service Manager 9.34 Upgrade Documentation Center*, which is available to download from the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

New customers

You only need to install the new web tier using the .war or .ear file from the sm9.34.0032_Web_Tier.zip file in this release.

Existing customers

To upgrade your web tier to this patch level, you must back up and uninstall your old web tier, and then install the new web tier. The upgrade does not automatically save your web tier customizations. To keep your changes, you must back up your customized files and restore your customizations in the new deployment.

Note: If you plan to deploy the web tier on Tomcat 7.0 by using the Tomcat Manager, you must set the *max-file-size* and *max-request-size* parameters (default: 52428800) in the <*Tomcat 7.0_Home*>webapps\manager\WEB-INF\web.xml file to a value greater than the size of the web tier .war file, 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.

To install the new web tier, follow these steps:

1. Make the necessary backups. For more information about how to do this, see "Backup and backout instructions" on page 128.
2. Delete or uninstall the existing web tier .war (or the .ear) file.
3. Clear the cache of your web application server.
4. Deploy the new webtier-9.34.war (or .ear) file by following the instructions in the *Service Manager 9.34 Upgrade Documentation Center*.

   Note: It is best practice to deploy with a unique context root. For example, /webtier-9.34.0032

5. 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).
6. Make any new customizations that are necessary for your deployment.
7. Restart the web application server.
8. Check the version by clicking the HP logo (About HP Service Manager) icon.

   The web tier version should be: **9.34.0032**.

Windows Client Installation

Note: No features are being added to the Service Manager Windows (Eclipse) client. HP recommends that Service Manager administrators deploy one of the other three clients (web client, SRC client or Mobility client) to end users. You still need the Windows client to perform administrative tasks.

The Windows client update consists of a compressed file, sm9.34.0032_Windows_Client.zip, which contains the executable installation files of the new Windows client. Installing the new Windows client will upgrade your Windows client to this patch level.

For installation instructions, see the *Service Manager 9.34 Upgrade Documentation Center*, which is available to download from the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

New Customers

You only need to install the new Windows client.

Existing Customers

You need to back up and uninstall the old Windows client, and then install the new Windows client.

To install the new Windows client:

1. Stop the Service Manager Windows client.
2. Make necessary backups. For details, see "Backup and backout instructions" on page 128.

3. Uninstall the Service Manager Windows client. (Your connection and personalized settings are retained.)
4. Run **setup.exe** from this Windows client patch to install the new client.
5. Check the version in **Help** > **About Service Manager Client**.

   The client should be Release: **9.34.0032**.

Windows Client Configuration Utility installation

Service Manager 9.34 includes an updated version of the Windows Client Configuration Utility (sm9.34.0032_Windows_Client_Configuration.zip).

For installation instructions, see the *Service Manager 9.34 Upgrade Documentation Center*, which is available to download from the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

Applications update installation

Note: Upgrading your applications to version 9.34 is optional. Before upgrading your applications, you must first upgrade your server and Windows or web client.

You apply the 9.34 applications using either the Service Manager 9.34 Applications Patch Manager (`sm9.34.0032_Application.zip`) or Upgrade Utility (`sm9.34.0032_Application_Upgrade.zip`) depending on your current application version. You must also be aware of the dependencies if you have already installed or plan to install Service Manager 9.3x content patches.

Upgrading to the 9.34 applications

Note: For upgrades from Service Manager 7.1x, .9.2x, 9.30, or 9.31, make sure that primary key mode is disabled before upgrading from the Service Manager 7.1x, 9.2x, 9.30, or 9.31 applications; for new installations of Service Manager, make sure that primary key mode is disabled before loading the OOB applications data.

Existing customers and new customers can upgrade to the 9.34 applications using different approaches. For installation instructions, see the *SM9.34 Upgrade Documentation Center*, which is available to download from the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

For existing customers:

1. Upgrade the Service Manager server and clients to version 9.34.
2. To upgrade from a 9.3x version of the applications, use the Service Manager 9.34 Applications Patch Manager.
3. To upgrade from the 6.2, 7.11, or 9.21 applications, use the Service Manager 9.34 Upgrade Utility.

For new customers:

1. Install the Service Manager 9.30 GA server and load Service Manager 9.30 GA demo data.
2. Install the Service Manager 9.34 server patch.
3. Install the Service Manager 9.34 Windows or web client.
4. Upgrade to the Service Manager 9.34 applications using the Service Manager 9.34 Applications Patch Manager.

Prerequisites

- Service Manager applications release level
  - If using Applications Patch Manager: 9.3x (9.30, 9.30 Applications Patch, 9.31, 9.32, or 9.33)
  - If using Upgrade Utility: 6.2, 7.11, or 9.2x
- Service Manager applications release language: Any languages supported by Service Manager 9.34
- Service Manager client and server release level: 9.34 or greater
- The Service Manager server process must have read-write access to the database

Content patch dependencies

Refer to the *Compatibility Matrix for Service Manager Applications Content* document, which is available from the HP Support Matrices portal:

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

Application Unload installation

Note: All unload files in the server's platform_unloads directory in this release have been already merged into the Service Manager 9.34 applications. These files are provided just in case you do not plan to upgrade to applications 9.34 while still want to take advantage of the relevant new features/fixes.

If a platform fix (in most cases, a server fix) also requires an applications change to resolve the relevant issue, an unload file is provided. Unload files introduced in earlier patches are also included in this cumulative release. If you have not already applied them for a previous patch, you should also apply the

unload files that are intended for your applications version. For more details about these applications updates, see the Release Notes for those patches.

This patch release includes the unload files that come with the server update. When you extract sm9.34.0032_<OS>.zip (or .tar), it will add the files to the following directory:

`[SM Server Root]\platform_unloads ([SM Server Root]/platform_unloads)`

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 can be installed in a random order, unless otherwise specified.

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.
- 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 higher.

  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 higher.
- 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 normally 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 9.3x patch	Used for apps version(s)	Description
QCCR1E103581_ SM934_SM932.unl	9.34	9.32, 9.33	Adds support for the auto-complete feature in the web client. **Associated web client fix**: QCCR1E103581

Unload file	Introduced in 9.3x patch	Used for apps version(s)	Description
QCCR1E103456_ SM934_SM932.unl	9.34	9.32, 9.33	Enables the "Any of these words" text search option when you export records to Excel or to a text file. **Associated server fix**: QCCR1E103456
QCCR1E106292_ SM934.unl	9.34	7.11, 9.21, 9.30, 9.31, 9.32, 9.33	Enables caching of the globallist and locallist files. **Associated server fix**: QCCR1E106292
QCCR1E99147_ SM933_SM930.unl	9.33	9.30, 9.31, and 9.32	Fixes an issue in which the first tab of a Notebook is reset to be the active tab when a new interaction is opened through the "Return to blank interaction" environment settings. **Associated server fix**: QCCR1E99147
QCCR1E99398_ SM932P2.unl	9.32p2	7.11, 9.21, 9.30, and 9.31	Enables the inactivity timer function to work correctly when the version of applications is lower than the version of the server. **Associated server fix**: QCCR1E99398
QCCR1E19946_ SM933.unl	9.33	7.11, 9.21, 9.30, 9.31, and 9.32	Enables extra columns in the "Attachments" section of records. **Associated server fix**: QCCR1E19946
QCCR1E31324_ SM932.unl	9.32	7.11, 9.21, 9.30 and 9.31	Fixes this issue : With Syslog audit turned on, only a syslog record showing login is created; no record for logoff is recorded if the user does not log out "normally." **Associated server fix**: QCCR1E31324
QCCR1E96802_ SM931P3.unl	9.31p3	7.11, 9.21, 9.30 and 9.31	Changes the behavior when handling web service request user passwords. See the SM9.31p3 Release Notes. **Associated server fix**: QCCR1E96802
QCCR1E52767_ SM931P3_ SM930.unl	9.31p3	9.30	Fixes the issue that users cannot add data policy definitions on joined tables. **Note**: You do not need to load this unload if you are running on SM9.31, 9.21, or 7.11 applications. **Associated server fix**: QCCR1E52767

Unload file	Introduced in 9.3x patch	Used for apps version(s)	Description
QCCR1E76724_ SM931P2_ SM930.unl	9.31p2	9.30 and 9.31	Fixes the issue that after deleting the unique key of cm3r, a signal 11 happened while doing an IR regeneration. **Associated server fix**: QCCR1E76724
QCCR1E76227_ SM930P6_ SM930.unl	9.31	9.30	Contains the code changes to support localization of incident/change priority and urgency strings for the 9.31 Mobility Client. **Note:** Not needed for the SM9.32 or later Mobility client.
QCCR1E78794_ SM930P6_ SM930.unl	9.31	9.30	Removes incident.assignee when a Web Service call specifies the assignee as 'NULL' through the SM9.31 Mobility Client. **Note:** Not needed for the SM9.32 or later Mobility client.
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_ SM711.unl	9.30p5	7.11	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
QCCR1E71099_ SM930P5_ SM920.unl	9.30p5	9.20	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
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

Unload file	Introduced in 9.3x patch	Used for apps version(s)	Description
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. **Note:** 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_ SM930.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
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

Unload file	Introduced in 9.3x patch	Used for apps version(s)	Description
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

Tip: If your application version is 7.11 ap3, 9.21 ap3, 9.30 ap3, 9.31 or later, you are recommended to use Unload Manager to load an unload file, because Unload Manager can help you create a backup of your old data and reconcile conflicts during the installation of the unload; if your application version is other than any of these, Unload Manager is not available and you can use Database Manager instead.

To load an unload file using Unload Manager:

1. Go to **System Administration** > **Ongoing Maintenance** > **Unload Manager**.
2. Double-click **Apply Unload**. A wizard opens.
3. Select the unload file you want to apply, also specify a backup file, and then click **Next**. Details of the unload file appear.
4. Double-click a conflicting object in the table to open the merge tool:
   a. Merge the object, and then select the **Reconciled** check box.
   b. Click **Save** to go back to the wizard.
5. Click **Next** after all the conflicting objects are reconciled.
6. Click **Yes** on the confirmation window to apply the unload.
7. Click **Finish**.

   Now, the unload has been applied and at the same time your old data backed up.

To load an unload file using Database Manager:

1. Make sure the Windows client is configured for server-side load/unload.
   a. From the Windows client, go to **Window** > **Preferences** > **HP Service Manager**.

   b. Unselect **Client Side Load/Unload** if is flagged.

   c. Restart the Windows client.

2. Open **Tailoring** > **Database Manager**.

3. Right-click the form or open the More Actions menu and select **Import/Load**.

4. Browse to the unload file, and view the contents of an unload file before importing it by clicking **List Contents**.

5. Make a backup copy of all files to be modified by this unload. For detailed steps, see "Backup and backout instructions" on page 128.

6. 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.

7. Click **Load FG**.

Service Request Catalog (SRC) installation

Service Manager 9.34 includes the SRC package (`sm9.34.0026_SRC.zip`), which contains the following files:

- a .war file for SRC 9.34 (`src-9.34.war`)
- a migration tool for upgrading customizations from an SRC 1.4, SRC 9.32, or SRC 9.33 deployment to SRC 9.34 (`src-migration-9.34.zip`)
- an encryption tool for generating an encrypted password (`encryptor-9.34.zip`)
- a validation tool that you can use to help ensure that your manifest.xml file is valid and usable (validator-9.34.zip)
- documents including the new Help document for SRC 9.34 (SRC9.34_Help_Center.zip)

> **Note:** The Service Request Catalog online help was not translated in the 9.34 release and in previous 9.33 release. Because of this, the default online help remains the 9.32 version for all non-English languages. However, the English language 9.34 version of the online help is accessible from both the product user interface and the /docs directory in the SRC 9.34 package.

Before you proceed, download the *Service Request Catalog 9.34 Interactive Installation Guide* and *Service Request Catalog 9.34 Customization Guide* from the HP Software Manuals Site:

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

These guides provide details about deploying the .war file and the usage of the three tools.

> **Note:** Users who want to use Service Request Catalog on their tablet devices can download the HP Service Request Catalog app to their device from Google Play or the Apple Appstore. To locate these apps, search for "HP SRC" in the appropriate store.
>
> The HP Service Request Catalog 9.34 tablet app supports Service Request Catalog versions 9.34 and 9.33 (the SRC .war file).

New Customers

1. Install SRC 9.34, deploy the `src-9.34.war` file by following the instructions in the *Service Request Catalog 9.34 Interactive Installation Guide*.
2. Configure SRC 9.34 by following the instructions in the *Service Request Catalog 9.34 Customization Guide*.

Existing Customers

1. Install SRC 9.34, as described above.

2. Migrate your customizations from the old deployment to SRC 9.34.
   - SRC 1.4, SRC 9.32, and SRC 9.33 customers: Run the SRC migration tool to migrate your specific customizations from your old SRC deployment to SRC 9.34. For details, see the *Service Request Catalog 9.34 Customization Guide*.

   - SRC 1.2x or 1.3 customers: Manually restore your customizations.

Mobile Applications installation

Service Manager 9.34 includes a new version of the Mobility client (sm9.34.0021_Mobility.zip). New customers can directly install the new Mobility client by deploying the webapp-9.34.0021.war file, while existing customers can only uninstall their old Mobility client and then install the new one.

Installation Steps

Note: The Service Manager 9.34 Mobility client supports Apache Tomcat 7.0 (7.0.54 or greater) and and IBM WebSphere 8.5 (8.5.5 or greater) web application servers.

For more information about how install the Service Manager 9.34 Mobility client, refer to the *Service Manager 9.34 Mobile Applications User Guide*.

Application changes required for SM9.31 and for SM9.30

The Service Manager 9.34 Mobility client can work with the SM9.34, SM9.33, SM9.32, SM9.31, or SM9.30 applications; however, if using the SM9.31 or SM9.30 applications, before users can use the Mobility client, you need to make additional application changes by either importing or manually implementing the unload files shipped with the Mobility client package (be sure to import or implement them in listed order):

- mobile2-update-9.30-9.31.unl
- mobile2-new-9.30-9.31.unl (If using the SM9.31 or SM9.30 applications with PDCP4 applied, load mobile2-new-9.31-pd4.unl instead)

For details, see the *Service Manager 9.34 Mobile Applications User Guide*.

Knowledge Management (KM) Update Installation

The KM package (sm9.34.0032_KM.zip) in this release includes updated files for the KM Solr Search Engine and the KM Import Utility. It also includes a zip file for knowledge content provided by KnowledgeBroker, Inc. (KBI).

KM Search Engine Update Installation

The KM Search Engine update contains the following files:

Folder	Files
kmsolr_unloads	• QCCR1E67750_SM930P4_SM930.unl • QCCR1E75104_SM930P5_SM930.unl • QCCR1E77409_SM930P5_SM930.unl • QCCR1E91035_SM932_SM930.unl
knowledgemanagement	• installasservice.cmd and startup.cmd (updated for JDK7 support added in 9.31p2) • kmsearchengine subfolder (which contains several search engine fixes) • tomcat folder (which contains an updated web.xml of the embedded Tomcat)

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

- Support of Knowledge Management search for Service Request Catalog (SRC) 1.4 or greater. For more information, see the SM9.31 Release Notes.
- 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.

- JDK 7 support (QCCR1E90386): To use JDK7 on a Windows platform, you need to update your `installasservice.cmd` and `startup.cmd` files with those shipped with this KM patch; for UNIX platforms, no file changes are needed to use JDK7.
- Fix QCCR1E91035 (which fixes the issue that search results using the **None of these words** option display incorrect total number of documents searched, and also provides the option to make search results highlight search words in attachments)

Prerequisites:

This KM Search Engine patch can be applied on top of any of the following versions of the KM Solr Search Engine:

- SM9.30, or SM9.30 Patch/Hotfix
- SM9.31 or SM 9.31 Patch/Hotfix
- SM9.32 or SM9.32 Patch/Hotfix
- SM9.33 or SM9.33 Patch/Hotfix

Compatibility Mode for Installation on Windows Server 2012

As of the SM9.32 release, Windows Server 2012 is supported. Be aware that compatibility mode is required for installing the SM9.30 KM search engine on Windows Server 2012.

1. Right–click the search engine's `setup.exe` file icon.
2. Click **Properties** > **Compatibility**.
3. Click **Run this program in compatibility mode for** and select **Windows Vista (Service Pack 2)**.
4. Click **Apply** and **OK**.
5. Run the `setup.exe` file to complete the installation.

When uninstalling your KM search engine on Windows Server 2012, you should also use compatibility mode. To do so, set your search engine uninstaller file (`Search_Engine_Uninstall\change_or_uninstall.exe`) to compatibility mode as described above and then uninstall the search engine using the uninstaller or from your Control Panel.

KM Search Engine patch installation steps

To install the KM Search Engine update:

> **Note:** JDK 7 Update 17 and Tomcat 6.0.36 have been certified on this release of the KM Search Engine. Upgrading to JDK 7 or Tomcat 6.0.36 is optional but recommended.

1. Stop your KM Search Engine.
2. Make a backup of your Search Engine installation folder and other necessary backups. See the instructions in "Knowledge Management search engine" on page 134.
3. Optionally, update the JDK installed on your search engine server host to JDK7 Update 17, if you have not already done so.

   Note: If you are using a Windows platform, be aware that if you do not update your JDK, later you will need to copy your old `installasservice.cmd` and `startup.cmd` files back (located directly under your search engine backup folder).

4. Optionally, update the KM embedded Tomcat to version 6.0.36.
   a. Download the Tomcat 6.0.36 zip file specific for your operating system.

      Caution: The KM search engine requires a 32-bit Tomcat if running on a 32-bit operating system, and a 64-bit Tomcat on a 64-bit operating system.

   b. Extract the zip file to overwrite your existing Tomcat folder.

      Caution: Before this step, be sure not to remove the embedded Tomcat folder, which contains certain files that do not exist in the Tomcat 6.0.36 zip file that you downloaded. This way these files will remain after you overwrite the old Tomcat folder.

   c. Copy your old Tomcat configuration file (`server.xml` in the `conf` folder) back to the updated Tomcat folder.
5. Make sure you have already installed the SM9.34 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.

6. Copy all files and folders in the `knowledgemanagement` folder to your existing search engine installation folder (for example: `C:\Program Files (x86)\HP\Service Manager 9.30\Search_Engine`).
7. Load the unload files in the `kmsolr_unloads` directory into Service Manager in the following order:
   - `QCCR1E67750_SM930P4_SM930.unl`
   - `QCCR1E75104_SM930P5_SM930.unl`

- QCCR1E77409_SM930P5_SM930.unl
- QCCR1E91035_SM932_SM930.unl

Note: This step is required only when you are using an applications version earlier than 9.32. These unload files have been already merged into the SM9.32 applications.

8. (Windows platforms only) If you selected to not update your JDK, copy your old `installasservice.cmd` and `startup.cmd` files back.
9. Restart your KM search engine.
10. Log off Service Manager and log back in for your changes to take effect.
11. Perform a full re-indexing for all of your knowledgebases.

KM Import Utility Installation

Note: The **km-import-9.34**.zip file included in this release is same with the one shipped with previous releases.

Extract **km-import-9.34.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.

KBI Demo Data

The **KBI-Content-Shipment.zip** file includes knowledge articles provided by KnowledgeBroker, Inc. (KBI) for HP Service Manager. You can import the knowledge articles into your production system using the KM Import Utility. For more information, see "KBI knowledge content" on page 36.

ODBC Driver update installation

This release does not contain any ODBC Driver update. The latest ODBC Driver package has been shipped with the Service Manager 9.30p4, Service Manager 9.30p5, and Service Manager 9.31 releases.

You can download the latest package from the following website:

http://support.openview.hp.com/selfsolve/document/KM00207925

The ODBC Driver package contains the following updated files:

- Scodbc32.dll
- sci18n.dll
- sccl32.dll

To install the ODBC Driver update, follow these steps:

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.

Language Pack installation

Service Manager 9.34 includes language packs for the Service Manager server in 15 supported languages other than English. For a list of supported languages, see "Local language support" on page 160.

For detailed installation instructions, see the *Service Manager 9.34 Language Pack Installation Guide*, which is available from the HP Software Manuals website:

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

Online Help installation

Service Manager 9.34 includes only an English version of the online help. For installation instructions, see the *Service Manager 9.34 Interactive Installation Guide* that is included in the *Service Manager 9.34 Upgrade Documentation Center*.

To download the Upgrade Documentation Center and the online help, visit the following HP Software Manuals website:

http://support.openview.hp.com/selfsolve/manuals

Service Manager support matrix and applications content compatibility matrix

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

The Applications Content Compatibility Matrix (named *Compatibility Matrix for Service Manager Applications Content*) provides compatibility information for Service Manager applications content packs (for example, Process Designer Content Packs).

Note: 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 Access levels.

To register for an HP Passport ID, go to HP Passport Registration.

To access the Support Matrix and Applications Content Compatibility 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.

Supportability

The scope of support is limited to the behavior of APIs and product features documented. HP is responsible for the correct operation of those features and APIs. HP is not responsible for debugging scripts or code created to utilize these features to implement a solution. In order to receive the best possible support, HP asks customers to provide a reproducible unit test scenario that demonstrates the error or unexpected behavior of the API or documented feature.

Local language support

This section includes the localization information for this release.

User interface localization

The following table lists the supported languages for the Service Manager clients. All languages listed are supported, except the two right-to-left display languages (Arabic and Hebrew), which are not supported for the Mobility client.

Language	Windows Client	Web Client	Mobility Client	SRC Client
Arabic	√	√	×	√
Brazilian Portuguese	√	√	√	√
Chinese Simplified	√	√	√	√
Czech	√	√	√	√
Dutch	√	√	√	√
English	√	√	√	√
French	√	√	√	√
German	√	√	√	√
Hebrew	√	√	×	√
Hungarian	√	√	√	√
Italian	√	√	√	√
Japanese	√	√	√	√
Korean	√	√	√	√
Polish	√	√	√	√
Russian	√	√	√	√
Spanish	√	√	√	√

Service Manager applications language packs

A language pack is available for each of the languages listed in the table above.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