HP Service Manager Upgrade Assessment Toolkit

for supported $\mathsf{Windows}^{\texttt{R}}$ operating system

Software Version: 1.0.3

User Guide

Document Release Date: August 2013 Software Release Date: August 2013



Legal Notices

Warranty

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

The information contained herein is subject to change without notice.

Restricted Rights Legend

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

Copyright Notice

© Copyright 2012-2013 Hewlett-Packard Development Company, L.P.

Trademark Notices

Adobe® is a trademark of Adobe Systems Incorporated.

Java is a registered trademark of Oracle and/or its affiliates.

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

Oracle® is a registered US trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of The Open Group.

Pentaho® and the Pentaho logo are registered trademarks of Pentaho Corporation.

Documentation Updates

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

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

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

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

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

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

Or click the New users - please register link on the HP Passport login page.

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

Support

Visit the HP Software Support Online web site at:

www.hp.com/go/hpsoftwaresupport

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

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

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

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

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

To find more information about access levels, go to:

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

Contents

1	Introducing the Service Manager Upgrade Assessment Toolkit	3
	Assessment Toolkit	3
	Assessment Report.	3
2	Catting Started with the Assessment Teellit	~
Ζ	Getting Started with the Assessment Toolkit	
	Software Compatibility	
	Building Signatures for ServiceCenter and Service Manager Tables	
	Setting Up the Assessment Toolkit	1
3	Working with the Assessment Toolkit	1
	Generating Assessment Reports	1
	(Optional) Regenerating Failed Reports 1	6
4	Customizing the Assessment Reports	7
-	Customizing Report Template	
	Aspects Need Attention When Creating New Template	
	Customizing Master Report Template	
	Creating Individual Report Template	
	Configuring Common Parameter	
	Customizing Modular Report Configuration	
	Customizing High Level Report Configuration	0
	Configuring General Information High Level Report	0
	Configuring Summary Assessment High Level Report 2	1
	Configuring Overall Assessment High Level Report	
	Configuring Detailed Assessment High Level Report	
	Configuring ServiceCenter/Service Manager Assessment High Level Report	
	Configuring RDBMS Assessment High Level Report	2
5	Assessment Report Suites	3
	System Setting and Configuration Reports	4
	Customized Reports	5
	Advanced Reports	6
	Large Data Reports	8
	Modular Reports	2
	High Level Report	3

1 Introducing the Service Manager Upgrade Assessment Toolkit

This chapter provides introduction of the Service Manager Upgrade Assessment Toolkit (hereinafter referred to as Assessment Toolkit) and the reports generated by the toolkit.

Topics in this section include:

- Assessment Toolkit on page 3
- Assessment Report on page 3

Assessment Toolkit

The Assessment Toolkit is critical for both the successful migration from ServiceCenter to Service Manger and the system upgrade from Service Manger lower version to higher ones. Before system migration or upgrade, HP partners can use the Assessment Toolkit to generate Assessment Report and get an overview of the differences between the related ServiceCenter data, the Service Manager out-of-box (OOB) data and the customized data from a real production environment that needs to be migrated as well. Consequently, HP partners are able to decide what data can or cannot be migrated and how it will be migrated.

Currently, the Assessment Toolkit only supports HP ServiceCenter 6.28, HP Service Manager 7.02 and HP Service Manager 7.11. The Assessment Toolkit only provides language support for English, French, German, Chinese and Spanish.

Assessment Report

Generated by the Assessment Toolkit, the Assessment Reports mainly cover the following areas:

- ServiceCenter and Service Manger server system settings
- ServiceCenter and Service Manger business module
- Backend database settings covering p4, RDBMS and partially
- Critical data information of ServiceCenter and Service Manger server which is closely related with the migration
- Customized data detection against OOB data

See Chapter 3, Working with the Assessment Toolkit for detailed instruction about how to generate and export Assessment Reports.

2 Getting Started with the Assessment Toolkit

This chapter contains information about software compatibility of the Assessment Toolkit and provides preliminary instruction for running the Toolkit on Windows.

Topics in this section include:

- Software Compatibility on page 5
- Building Signatures for ServiceCenter and Service Manager Tables on page 6
- Setting Up the Assessment Toolkit on page 7

Software Compatibility

The Assessment Toolkit is developed using the following software applications and is considered compatible with these versions only.

- JRE 1.5
- HP ServiceCenter 6.28
- HP Service Manager 7.02, 7.11

The Assessment Toolkit supports the following platforms and databases:

- Windows operating system
- SQL Server 2000, 2005 and 2008
- Oracle 9, 10 and 11
- DB2 Universal Database (UDP) 8.1, 9.1, 9.5 and 9.7

The Assessment Report can be viewed using the following applications:

- Microsoft Internet Explorer 7 (HTML)
- Mozilla Firefox 3.6 (HTML)
- Opera 11 (HTML)
- Adobe Reader 9 (PDF)
- Microsoft Word 2003 or higher (Doc)

Building Signatures for ServiceCenter and Service Manager Tables

Before running the Assessment Toolkit to compare related tables in ServiceCenter and Service Manager and generate reports, you need to build signatures for these tables using the Differential Upgrade Wizard utility. The following instruction describes how to build signatures for the tables:

- 1 Back up records from the *signaturemake* table and *patches* table on the ServiceCenter or Service Manager servers. You can unload them to local .unl files such as patches_orig.unl and signaturemake_orig.unl, which can be used to recover the original records after signatures building.
- 2 Unzip the Service Manager Upgrade Assessment Toolkit release package with Winzip or Winrar. Or you can unzip the release package with the following command:

jar xf sc2sm.assesstool.standalone.jar

- 3 Load the unload file:
 - If you are working with HP ServiceCenter 6.28:
 - Start a client session and log in to the ServiceCenter system with a system administrator account. From the System Navigator, click Toolkit > Database Manager. Right-click the form and select Import/Load.
 - b In the Import/Load panel, type <unzipped Assessment Toolkit home directory>\pre_signature\SC628\pre_unloadscript_sc628.unl in the File Name field.
 - c Select winnt from the File Type drop-down list, and then click Load FG.
 - If you are working with HP Service Manager 7.02 or 7.11:
 - Start a Windows client session and log in to the Service Manager system with a system administrator account. From the System Navigator, click Tailoring > Database Manager. Click More or the More Actions menu, and select Import/Load.
 - b In the Import/Load panel, type <unzipped Assessment Toolkit home directory>\pre_signature\SM711\pre_unloadscript_sm711.unl in the File Name field.
 - c Select winnt from the File Type drop-down list, and then click Load FG.

The following related records will be added to ServiceCenter or Service Manager *signaturemake* table and *patches* table:

- For ServiceCenter server:
 - *signaturemake* record with table.name *scmandant*
 - *signaturemake* record with table.name *eventin*
 - *signaturemake* record with table.name *eventout*
 - *signaturemake* record with table.name *eventfilter*
 - *signaturemake* record with table.name *ocmprofile*
- For Service Manager server:
 - *signaturemake* record with table.name *scmandant*

- signaturemake record with table.name eventin
- signaturemake record with table.name eventout
- signaturemake record with table.name eventfilter
- signaturemake record with table.name ocmprofile
- signaturemake record with table.name FolderDef
- signaturemake record with table.name FolderRights
- signaturemake record with table.name Todo

You can select a language when you start the ServiceCenter or Service Manager client session. Only signatures for the selected language will be created.

- 4 Run the Differential Upgrade Wizard to build signatures.
 - If you are working with HP ServiceCenter 6.28:

From the System Navigator, click **Utilities > Tools > Differential Upgrade > Differential Upgrade Wizard**.

– If you are working with HP Service Manager 7.02 or 7.11:

From the System Navigator, click **Tailoring > Differential Upgrade > Differential Upgrade Wizard**.

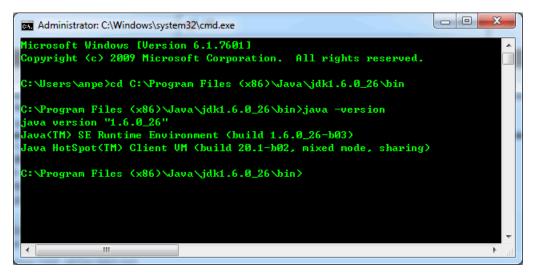
- 5 Select Build Signatures and click Next.
- 6 Type the name of the system in the **System Name** text box.
- 7 Select **SC2SM** from the **Patch Record** drop-down list. This option is created in step 3.
- 8 Browse to locate or define the **Export Filename**. This is an external file that will store the signature records.
- 9 (Optional) Select **Signature RAD components for delete processing** to delete all related RAD panel components.
- 10 (Optional) Select **Run in background** if you want background processing. If you run in background, ServiceCenter or Service Manager creates a schedule record and creates the unload when the schedule record runs. If you choose Run in background, do the following:
 - Select Repeat Daily to create signature records daily. This step is optional.
 - Click the drop-down list to choose the **Date/Time to Run** schedule for background processing.
- 11 Click **Next** to build signatures.
- 12 Check the records in *signatures* table to verify the related tables are properly signed.
- 13 (Optional) To remove the table records added by previous steps and recover the original data after building the signatures, remove all records in *patches* and *signaguremake* tables first. Then you can import the original records from patches_orig.unl and signaturemake orig.unl which are backed up.

Setting Up the Assessment Toolkit

The Assessment Toolkit is standalone. You do not need to install it. However, before generating reports, you must set up connections for the Assessment Toolkit to connect with ServiceCenter and Service Manager servers and get related data. To generate database information related reports, you also need to configure the database server connetion for the Assessment Toolkit.

To set up server and database connections for the Assessment Toolkit, follow these steps:

- 1 Install Java SDK1.5.
 - a Download J2SE 5.0 from http://www.oracle.com/technetwork/java/javase/downloads/ previous-jsp-138793.html.
 - b Install Java SDK1.5.
 - c Verify the installation by using the java -version command.





Currently, Service Manager Upgrade Assessment Toolkit supports Java SDK1.5 only. If you have other higher version installed already, you do not need to uninstall it. But JDK1.5 must be set as JAVA_HOME by verification in step c.

2 Browse to the unzipped Assessment Toolkit home directory and double-click SCAssessTool.exe to launch the Assessment Toolkit.

3 In the menu, click **Connect** > **Connect** SC. The SC/SM connection dialog box opens.

😻 SC/SM	×
SC/SM	
Input following fie	lds
Server	16.157.130.106
Port	13080
Endpoint	SC 🖵
Username	SC SM
Password	
Test Connection]
	OK Cancel

4 Type or select the connection parameters.

Parameter	Description
Server	The IP address of the server that hosts the Service Manager or ServiceCenter service.
Port	The port number that your computer uses to connect with the server. Tip: You can refer to sc.ini or sm.ini in the server for identifying the correct port number.
Endpoint	The type of the server that your computer connects with. Select SC for ServiceCenter server connection, or select SM for Service Manager server connection.
Username	The name that you use to log in to the server. This username should be privileged as the system administrator, which is falcon by default.
Password	The password that you use to log in to the server.

 Table 1
 SC/SM connetion parameters

You can click **Test Connection** to test the connection.

5 Click **OK** to close the SC/SM connection dialog box.

6 In the menu, click **Connect > Connect DB**. The DB connection dialog box opens.

😻 DB	×
DB	
Input following fiel	lds
Databasetype	DB2 👻
Server	16.178.106.92
Port	1433
Sid/DB Name	qasm702
Username	qasm702
Password	
Test Connection	
	OK Cancel

7 Type the connection parameters.

Parameter	Description
Database Type The type of database is identified automatically when the DB connection dialog opens.	
Server	The IP address of the computer that hosts the database.
Port	The port number that your computer uses to connect with the database.
	Tip:
	• The port number of Oracle by default is 1521.
	• The port number of MSSQL by default is 1433. Note that there is no default value in MSSQL Server 2008, this value must be manually configured.
	• The port number of DB2 by default is 50000.
Sid/DB Name	The servide name of the database that your computer connects with.
Username The name that you use to log in to the database.	
Password The password that you use to log in to the database.	

Table 2 DB connetion parameters

You can click **Test Connection** to test the connection.

8 Click **OK** to close the DB connection dialog box.

The connection parameters are stored locally after each successful connection. These parameters will be retrieved and displayed at the next connection event.

3 Working with the Assessment Toolkit

This chapter provides detailed instruction about how to generate and export the Assessment Reports.

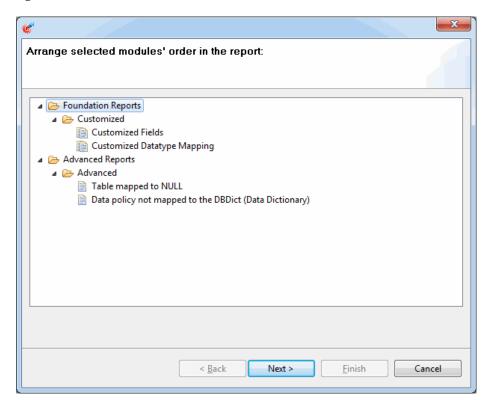
Topics in this section include:

- Generating Assessment Reports on page 11
- (Optional) Regenerating Failed Reports on page 16

Generating Assessment Reports

To generate the Service Manager and ServiceCenter data assessment reports, follow these steps:

- 1 Launch the Assessment Toolkit and set up connection as described in Setting Up the Assessment Toolkit.
- 2 From the Report Explorer, select one report or multiple reports in the hierarchy.
- 3 Right-click on any of the selected reports and select **Run Report** in the menu opened. The report generation wizard opens. Or you can click **Report** > **Run** in the menu to open the report generation wizard.



You can rearrange the selected reports by dragging and dropping. Note that the reports can be moved in the same module only. Click **Next** to proceed.

4 (Optional) The Select baseline page opens only when the target baseline folder of specific Service Manager version or ServiceCenter version does not exist. In this page, you can select another baseline from the drop-down list.

×				
Select baseli	ne			
	Current version of assessment tool supports Service Center 6.28, Service Manager 7.11 an Service Manager 7.02.			
Warning!	You can compare your system with the supported versions, but some reports may not be available and results may not be accurate. Would you like to compare your system with the supported version anyway?			
	Cancel to quit. Next to proceed.			
Select Baseline:				
	Service Center 6.28			
	Service Manager 7.11			
	Service Manager 7.02			

5 Select the default master report template (default.prpt) or your customized template from the Report Template drop-down list:

*					×
Please select template and export format for the report:					
Report Template:	default.prpt				•
Export to:	🗖 Pdf 📄 Rtf				
		< <u>B</u> ack	<u>N</u> ext >	<u>F</u> inish	Cancel

For more information about the master report template customization, see Customizing Report Template on page 17.

6 In the wizard window, select **Pdf**, **Doc** or both options to export the master report. The Assessment Toolkit will convert the generated report to your selected format and save it to your computer. Click **Next**.

7 The Assessment Toolkit begins to generate the selected reports, and the overall status is displayed in the progress bar. You can click **Cancel** to terminate and exit the generation process of all reports.

	X			
Summary	8			
Assessment				
Foundation Reports				
Customized				
Customized Fields (Running)				
Customized Datatype Mapping (Running)				
Advanced Reports				
Advanced				
Table mapped to NULL (Running)				
Data policy not mapped to the DBDict (Data Dictionary) (Running)				
Create Report (4 sub-reports included)				
	-			
< <u>B</u> ack <u>N</u> ext > <u>F</u> inish C	Cancel			

Seperate progress bar for each report is displayed in Progress View panel of the Assessment Toolkit. You can click the corresponding red icon to terminate the generation process of any single report.

E Console C Progress View 🛛	*		' 🗆
SC2SM-09			
Running		-	
Kunning			

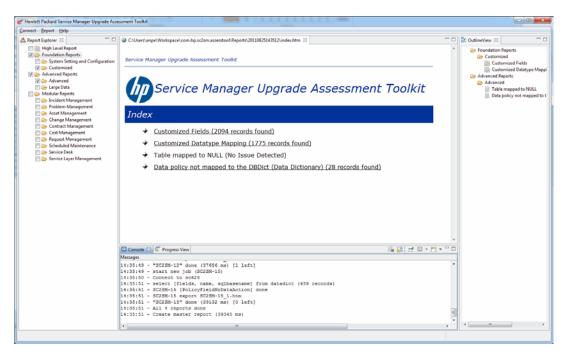
The reports processing is also indicated by the console messages. All errors and key information are logged in Console panel as illustrated in the following example:

😑 Console 🛛 🙋 Progress View 🗎 🖹 🖃 🖛 🗂 🐨	
Messages	
14:35:49 - "SC2SM-12" done (37686 ms) [1 left]	*
14:35:49 - start new job (SC2SM-15)	
14:35:50 - Connect to sc628	
14:35:51 - select [fields, name, sqlbasename] from datadict (459 records)	
14:35:51 - SC2SM-15 [PolicyFieldNoDataAction] done	
14:35:51 - SC2SM-15 export SC2SM-15_1.htm	
14:35:51 - "SC2SM-15" done (39132 ms) [0 left]	
14:35:51 - All 4 reports done	
14:35:51 - Create master report (39345 ms)	=
	-
4 b	

8 When the process is completed, the reports generation results are summarized and displayed:

📽	×
Summary	
You can find report under C:\Users\anpe\Workspace\com.hp.sc2sm.assesstool\Reports \20110825151934	
Assessment	
Foundation Reports	
▲ Customized	
Customized Fields (Finished)	
Customized Datatype Mapping (Finished)	
Advanced Reports Advanced	
Datatype Mapping (Finished)	
Records in extaccess table with empty object.name field (Finished)	
< Back Next > Finish	Cancel

9 Review your report generation results. If any reports failed to generate, click **Back** and refer to (Optional) Regenerating Failed Reports for the required steps once the problem get fixed. Otherwise click **Finish** to display the reports index page:



You can click the links to view the reports in HTML format. All exported reports are stored locally in the <Service Manager Upgrade Assessment Toolkit home directory>\reportHtml\timestamp folder.

When generating the Assessment Report, logged data which records processing failures, errors messages and processing duration of the assessment utility by utility module is stored in the <Service Manager Upgrade Assessment Toolkit home directory>\log folder.

(Optional) Regenerating Failed Reports

To regenerate the failed reports when regenerating the master report, follow these steps:

1 In the menu, click **Report** > **Run last** to open the following dialog. IDs of the failed reports are displayed in the Error Report List:

👹 Run Last report	X
Use Saved Data	
Customized Fields	
Customized Datatype Mapping	
Table mapped to NULL	
Data policy not mapped to the DBDict (Data Dictionary)	
	OK Cancel

2 Select **Use Saved Data** and click **OK**, the Assessment Toolkit will regenerate the failed reports only. The reports which are successfully generated in step 7 will be retrieved from the local storage and appended to the new master report. By selecting this option, the report generating time can be significantly reduced, particularly for those reports containing big data volume.

Note that the **Use Saved Data** option is unselected by default. Without this option, the Assessment Toolkit will retrieve report data from the current connected ServiceCenter server or Service Manager server regardless of the server environment alternation since last report generation, and regenerate all the selected reports from the beginning. This can be time consuming especially when the reports contain a lot of data in actual production environment.

The local data storage will not be purged automatically. If you encountered the error messages such as the disk space is full, you need to manually clean up the disk space.

4 Customizing the Assessment Reports

This chapter describes how to customize the default Assessment Report settings such as the report templates and parameter configuration. A brief introduction about new report creation is also included in this chapter.

Topics in this section include:

- Customizing Report Template on page 17
- Configuring Common Parameter on page 18
- Customizing Modular Report Configuration on page 20
- Customizing High Level Report Configuration on page 20

Customizing Report Template

You can create new Assessment Report templates or make further changes to the default templates for the master report and the individual reports.

Aspects Need Attention When Creating New Template

Pentaho Report Designer is a report designer tool bundled in the Pentaho Open Source Business Intelligence suites with a graphical user interface for creating and editing report definitions. The resulting .prpt files can be executed by the Assessment Toolkit as report remplates.

The following steps only describe the aspects you need to pay attention to when creating custom report templates for the Assessment Reports. For more information about how to create a report, refer to the Pentaho Report Designer help.

- 1 Launch the Pentaho Report Designer.
- 2 Create a new report and save it to your computer. This is the new report template.
- 3 Do the following in the new report template:
 - a Click **Report Header**, type a report title.
 - **b** (Optional) Type a description for this report.
 - c Click **No Data** and then add individual reports as necessary. The individual reports should be listed with sequence numbers.
- 4 Save and close the report.

Customizing Master Report Template

The out-of-box master report template is default.prpt, which is stored in <Service Manager Upgrade Assessment Toolkit home directory>\config\template.

To customize the master report template, follow these steps:

- 1 Create a new template or modify the default.prpt file using Pentaho Report Designer.
- 2 Copy your customized master report template to the <Service Manager Upgrade Assessment Toolkit home directory>\config\template folder.
- 3 When generating the master report with the Assessement Toolkit later, you can select the newly created or customized master template from the **Report Template** drop-down list as described in step 5 of Generating Assessment Reports.

Creating Individual Report Template

To create the template for an individual report, follow these steps:

1 Create a new template using Pentaho Report Designer. The name of this template must be in the following format:

```
<report id>.prpt
```

For example, SC2SM-08.prpt. You can refer to the configuration file (reports.xml) for the ID of an individual report.

- 2 Copy your customized individual report template to the <Service Manager Upgrade Assessment Toolkit home directory>\config\template\subreport folder.
- 3 Modify the report configuration file (reports.xml) and add a template parameter for the target report. When generating the master report with the Assessement Toolkit later, the customized individual report template will be used for the target report.

See the following code example for individual report template parameter configuration. The bold line indicates that your customized template is applied to the Customized

Records report:

```
<report id="SC2SM-08">
<!-- Template file names for this report. This template file must be
saved under config\template\subreport. -->
```

```
<param key="template" value="SC2SM-08.prpt"/>
```

Configuring Common Parameter

The out-of-box report configuration file is reports.xml, which is stored in <Service Manager Upgrade Assessment Toolkit home directory>\config. This configuration file can be used as a starting point for the development of more detailed, customer-specific reports. You can customize the configuration for each report in reports.xml before report generations. See the following code example for some common report parameters used in report generation:

```
<report id="SC2SM-28" name="Check for records that are truncated due to
RDBMS mapping" desc="Examines the ServiceCenter database to identify all
records (by table) which exceed the maximum records length. This report
is not required for Service Manager.">
      <action
class="com.hp.sc2sm.assesstool.report.action.advance.RecordExceedMaxLen
gthAction">
              <params key="sqldatatype">
                    <value>varchar</value>
                     <value>varchar2</value>
                     <value>char</value>
                     <value>nchar</value>
                     <value>nvarchar</value>
                     <value>nvarchar2</value>
                    <value>raw</value>
              </params>
              <params key="tables">
                    <value>Alertlog</value>
                    <value>ApprovalLog</value>
                    <value>menu</value>
              </params>
              <column id="tablename" title="Table" />
                    <column id="fieldname" title="Field" />
                    <column id="record" title="Record" />
                     <column id="recordlength" title="Record Length" />
                     <column id="maxfieldlength" title="Max Field Length" />
              </action>
```

```
</report>
```

In this example, the following common parameters can be configured:

- report id: ID of this report.
- name: Name of this report.
- description: Description of this report.

The other parameters may differ between various reports. For the reports which need mandatory configuration, detailed parameter information is provided in Assessment Report Suites.

Customizing Modular Report Configuration

The out-of-box Modular Report configuration file is module_tables.xml, which is stored in <Service Manager Upgrade Assessment Toolkit home directory>\config. You can add module-related table parameters for each module in module_tables.xml before generating modular reports. For example, you can add the following table parameters for Incident Management:

```
<module name="incident">

menu

format

probsummary

rootcause

</module>
```

The Incident Management report will be generated with records of all the specified tables.

Customizing High Level Report Configuration

The out-of-box High Level Report configuration file is report.xml as well. You can customize the configuration for each section before report generations.

Configuring General Information High Level Report

See the following code example for General Information High Level Report configuration. The parameters that can be customized are displayed as bold lines:

Configuring Summary Assessment High Level Report

See the following code example for Summary Assessment High Level Report configuration. The parameters that can be customized are displayed as bold lines

```
<!-- The threshold parameters define the Summary assessment related
threshold values, based on which the status icons(normal, warning or
error) are displayed in the high level report. -->
<param key="error" value="10" />
<param key="warn" value="4" />
```

Configuring Overall Assessment High Level Report

See the following code example for Overall Assessment High Level Report configuration. The parameters that can be customized are displayed as bold lines:

```
<!-- The threshold parameters define the Service Manager assessment and
the RDBMS assessment related threshold values, based on which the status
icons (normal, warning or error) are displayed in the high level report.
-->
<param key="error" value="10" />
<param key="warn" value="4" />
<!-- The transactiontables parameter defines the table list which will
be compared against ServiceCenter and Service Manager out-of-box tables
to get the count of tables which have customized fields. You can
customize this parameter to add more tables to the list or remove tables
from the list. -->
<params key="tables">
<value>Alert</value>
<value>Alert</value>
```

<value>Approval</value>

Configuring Detailed Assessment High Level Report

Configuring ServiceCenter/Service Manager Assessment High Level Report

See the following code example for ServiceCenter/Service Manager Assessment High Level Report configuration. The parameters that can be customized are displayed as bold lines:

```
<!-- The threshold parameters define the ServiceCenter/Service Manager
assessment related threshold values, based on which the status icons
(normal, warning or error) are displayed in the high level report. -->
        <param key="error" value="10" />
        <param key="warn" value="2" />
<!-- The tables parameter defines the table list which will be scanned
for customized records. You can customize this parameter to add more
tables to the list or remove tables from the list. -->
        <params key="tables">
                <value>displayoption,screen.id</value>
                <value>validity</value>
                <value>link,name</value>
                <value>environment,name</value>
        </params>
<!-- The modules parameter defines the rules of searching the mapping
details between customized records, customers tailoring, and the modules
in ServiceCenter and Service Manager. Rules are designed by checking the
starting word in each record, that is what "starts" means. -->
        <params key="module,Change Management">
                <value>starts,cm</value>
                <value>starts,screlate.cm</value>
                <value>starts,user.cm</value>
        </params>
```

Configuring RDBMS Assessment High Level Report

Configuration of the RDBMS Assessment High Level Report includes the table parameter and the threshold parameter, both of which are described in the previous sections. You can refer to Configuring General Information High Level Report for detailed information about how to configure the table parameter, and then refer to Configuring Overall Assessment High Level Report for how to configure the threshold parameter.

5 Assessment Report Suites

The Assessment Toolkit provides HP partners with a suite of Assessment Reports. Each report is designed to meet the analytical needs of a generic Service Manager or ServiceCenter business user. With Assessment Reports, you can easily estimate migration effort and identify potential data migration problems. This chapter describes each Assessment Report with brief description.

Topics in this section include:

- System Setting and Configuration Reports on page 24
- Customized Reports on page 25
- Advanced Reports on page 26
- Large Data Reports on page 28
- Modular Reports on page 32
- High Level Report on page 33

For some reports which need mandatory configuration, detailed parameter information is also provided in this chapter. Make sure to customize the configuration for these reports accordingly in reports.xml before report generations. Refer to the following list for the reports which need mandatory configuration:

- Database Size
- Customized records
- Table with null/duplicate key
- Records with the prefix if within their ID
- Checking Field lengths for tables mapped from P4 to RDBMS
- Not licensed OOB schedule records
- Check the schedule/eventout/eventin cleanup
- List any request line items or task records, SYSBLOB, SYSATTACHMENT which are orphaned
- Check for records that are truncated due to RDBMS mapping

System Setting and Configuration Reports

System Setting and Configuration Reports provide detailed information about several types of ServiceCenter and Service Manager system setting-related and configuration-related data reports.

Report name	Description
Source version of Applications / RTE	Displays the current ServiceCenter or Service Manager RAD Application version as well as the RTE (Run Time Environment) version.
Table Size	Lists the top 10 tables with the biggest size and displays the size of each table to assit with the assessment as this will impact the upgrade utility's time when executed.
RDBMS information	Lists the actual RDBMS details in order to provide sufficient information of how the ServiceCenter / Service Manager RDBMS is currently configured as well as the actual state. For example, the Assessment Toolkit will check and return the database type and version, codepage, character set, etc.
List tables whose case-sensitive is not set	The Assessment Toolkit examines the RDBMS against the ServiceCenter 6.2.x application data mapping table to verify whether all fields have been mapped using upper, lower and mixed-case. This report lists the tables which are not set to be case-sensitive. This is required when the ServiceCenter instance is set to case-sensitive.
Database Size	Lists the phyisical size of the database in KB/MB/GB. This is required to judge whether a data archive is required prior to an upgrade or as part of a system health check.
	You can add template parameters for this report as below:
	<report id="SC2SM-03"></report>
	Template file names for this report. There<br should be several template files configured for this report if the customer want to customize the template file for this report. For each DB type, there should be one template file. All report template files must be saved under config\template\subreport, and the template file name must contain the DB type. For example, the SC2SM-03_DB2.prpt template file is dedicated for DB2 database>
	<pre><params key="template"></params></pre>
	<value>SC2SM-03_DB2.prpt</value>
	<pre><value>SC2SM-03_SQLSERVER.prpt</value></pre>
	<pre><value>SC2SM-03_ORACLE.prpt</value></pre>

Customized Reports

Report name	Description
Customized Tables	The Assessment Toolkit searches the ServiceCenter / Service Manager database for customized tables which have been added / deleted / modified that would be different from an OOB (Out-of-the-box) version. This report lists all customized tables.
Customized Fields	The Assessment Toolkit searches the ServiceCenter / Service Manager database for customized columns / fields have been added / deleted / modified that would different from an OOB version. This report lists all customized fields.
Customized Records	Lists all customized records for the following tables to find where these tailoring objects have changed from the OOB version, inbox, macro, wizard, menu, format, formatctrl, link, Object, Process, States, displayscreen, displayoption, scripts, code. This will assist in both estimating the time required with conflict resolution as well as identifying changes objects during a health check to guage the complexity of a potential upgrade.
	You can add template and other parameters for this report as below:
	<pre><report id="SC2SM-08"> <!-- Template file names for this report. This template file must be saved under config\customized records--></report></pre>
	<pre><pre><pre><pre>cases</pre> <pre><pre>set</pre> <pre>/></pre> <pre>value="SC2SM-08.prpt"/></pre></pre></pre></pre></pre>
	<action id="customizedRecord"></action>
	Flag to control whether to display field names<br and value of the added and removed records>
	<pre><param key="detail" value="true"/></pre>
	If the Group option is used in the Pentaho<br template for this report, this flag must be true. Otherwise, set this flag to false by default>
	<param key="group" value="true"/>
	List all tables which should be included in this report
	<pre><params key="tables"></params></pre>
	<value>inbox</value>
Customized datatype mapping	Lists all datatype mapping which does not match the OOB datatype mapping for all the standard OOB tables.

Customized Reports provide customized data related reports.

Advanced Reports

Advanced Reports provide reports for detail SC/SM key data which relates closely to future migration.

Report name	Description
Datatype mapping	Lists all database types used to map tables to the RDBMS from P4. For each database type, this report provides the mapping detail (taken from the sqldbinfo record) and the table / field using a particular data type to assist in diagnosing any data problems that may be incountered during the upgrade.
Table mapped to 'n' data types for MSSQL	Lists all tables that are mapped using n , <i>nchar</i> and <i>nvarchar</i> data types on SQL Server. This report is targeted for ServiceCenter / Service Manager instances searching.
Table mapped to NULL	Lists all tables that are mapped using NULL tables, which need to be identified prior to running the upgrade.
Records in extaccess table with empty object.name field	The Assessment toolkit searches the extaccess definition and return the list of records where the object.name field has no value. These records need to be fixed prior to running the upgrade utility in order to avoid failures.
Table/field/record mapped as binary Objects	Lists all tables and specific fields/records, where that have been mapped as binary objects within a table. This information is useful for both upgrading ServiceCenter to Service Manager or as a general system health check of either ServiceCenter or Service Manager.
Data policy not mapped to the DBDict (Data Dictionary)	Lists all data policy records with no corresponding dbdict record. This information is useful when upgrading ServiceCenter to Service Manager but not required for general Service Manager health check.
Table mapping check against the RDBMS System tables	 Validates the following tables are mapped as system tables: cascadeupd, code, coderevision, displaycache, displayoption, displayscreen, formatctrl, ioaction, ioactionrevision, link, linkline, notification, notificationrevision, Process, rcenv, schedule, scripts, ScriptLibrary, ScriptLibraryrevision, slaprofile, triggers, upgraderesults, wizard. Note: This is a ServiceCenter 6.2.x report and is not required for Service Manager. The table mapping check is to ensure these tables have been mapped from P4 to the RDBMS correctly.
Checking the lengths of the datapolicy sqlbasename field	For all data policy records, the Assessment toolkit verifies that the sqlbasename field is populated and its length is less than/equal to 13 characters. This report lists all records that do not meet this criteria.
value	This validation is required to ensure that any corrections may required prior to running the upgrade from SericeCenter to Service Manager.

Report name	Description
Checking Field lengths for tables mapped from P4 to RDBMS	The Assessment Toolkit checks the field lengths in the RDBMS against the mapping table. This report lists the fields lengths for systems which are mapped out to RDBMS. You can configure parameters for this report as below:
	<report id="SC2SM-18"></report>
	<pre><!-- List table name, field name and field type(depends on database) which need to be checked. For the field length, it can be configurable in parameter value for each below--></pre>
	<pre><param key="notification str.condition" value="varchar2(255)"/></pre>
	<pre><param key="inbox query" value="varchar2(256)"/></pre>
	<pre><param key="inbox normalized.query" value="varchar2(255)"/></pre>
	<pre><param key="inbox short.query" value="varchar2(256)"/></pre>
	<pre><param key="inbox short.normalized.query" value="varchar2(256)"/></pre>
	<pre><param key="inbox inbox.name" value="varchar2(256)"/></pre>
	<pre><param key="operator password" value="varchar2(137)"/></pre>
	<pre><param key="signatures object.name" value="varchar2(255)"/></pre>
	<param <br="" key="upgradepseudolog message"/> value="varchar2(255)" />
	<param <br="" key="upgradeobjects object.name"/> value="varchar2(255)" />
	<pre><param key="SYSATTACHMENTS topic" value="varchar2(40)"/></pre>
Validation check on the weekly.duration field in the caldutyhours table	Lists all conditions in the weekly.duration field that will bring failure to the ServiceCenter to Service Manager upgrade process when you choose to upgrade SLA records (make sure the weekly.duration field is populated in the caldutyhours table correctly).
List the count of all records within the M (Main) and A (Array) tables	The Assessment toolkit checks how the tables are mapped. If all the tables are mapped using array tables, this may not be the most efficient method and could be tuned. Data returned from the report provides a count of the records within the M and A tables as well as table identification.
Search queries in SC/ SM that are NOT fully indexed	Lists all queries that are not fully indexed in either format control or inboxes.

Report name	Description
List P4 shadowed tables to RDBMS	Lists any P4 files that have been shadowed to an RDBMS database table.
Record count for all tables	Lists record counts for all SC/SM tables.
List all the arrays used as keys	Lists all the fields mapped as array type and used as keys prior to upgrade.

Large Data Reports

Large Data Reports consist of six individual reports, which cover huge volume data processing. When generating these reports, the ServiceCenter or Service Manager server performance will be significantly degraded even with server Out of Memory exception. It is recommended that only one report is selected to run under this category.

Report name	Description
Table with null/ duplicate key	The Assessment toolkit examines data and validates the presence of null/duplicate keys. This report lists the tables with null/duplicate keys. This information is required prior to an upgrade as the results need to be examined prior to running and upgrade or during a system health check for database tuning. You can add parameters for this report as below:
	In the actions section, you need to config which<br tables to be scanned. Otherwise, the Assessment toolkit will scan the data in all tables> <params key="tables"></params>
	<value>activity</value>
	<value>inbox</value>

Report name	Description
Records with the prefix if within their ID	Lists all records with a given prefix, which is identified within their identification number (ID). This prefix should be a sign that they have migrated from another system previously.
	You can add parameters for this report as below:
	<report id="SC2SM-20"></report>
	<action id="prefixId"></action>
	Lists all tables which should be included in this report
	<pre><params key="tables"></params></pre>
	<value>displayscreen</value>
	<value>displayoption</value>
	Lists all prefix need to be matched against the IDs of the tables' records
	<pre><params key="prefix"></params></pre>
	<value>im</value>
	<value>listpages</value>
Check the schedule/ eventout/eventin cleanup	The Assessment toolkit checks the status of the tables - Schedule/ Eventin/Eventout to determine whether they are being properly cleaned up and will show records with the failed processing status.
	You can configure parameters for this report as below:
	<report id="SC2SM-23"></report>
	Configure the exact value of the failed status for server activities
	<pre><param key="message" value="failed</pre></td></tr><tr><td>processing"/></pre>
	Lists all tables which should be included in<br this report. Key is table name, value is the field to be checked>
	<action id="StatusCheckAction"></action>
	<pre><param key="schedule" value="status"/></pre>
	<pre><pre>contin value="evstatus" /></pre></pre>

Report name	Description
Not licensed OOB schedule records	Lists all the records within the OOB schedule table that may be active but not within licensed modules and therefore be disabled. You can configure parameters for this report as below:
	<report id="SC2SM-21"></report>
	List all mapping details between licensed module<br and the class of schedule table>
	<param key="sla" value="SLA"/>
	<pre><param key="problem" value="Problem Management"/></pre>
	<pre><param key="change" value="Change Management"/></pre>
	<pre><param key="contract" value="Contract Management"/></pre>
	<pre><param key="ocm" value="Request Management"/></pre>
	<pre><param key="KMUpdate" value="Knowledge Management"/></pre>
	List the values of the class in schedule table<br that are included in Foundation module. All of them are considered to be licensed, although they are not list in the "Licensed Product" of "Version Information">
	<pre><params key="Foundation"></params></pre>
	<value>agent</value>
	<value>report</value>
	<value>gie</value>
	<value>event</value>
	<value>lister</value>
	<pre><value>marquee</value></pre>

Report name	Description
Check for records that are truncated due to RDBMS	The Assessment toolkit checks the ServiceCenter database to identify all records (by table) which exceed the maximum records length. This report is not required for Service Manager.
mapping	You can configure parameters for this report as below:
	<report id="SC2SM-28"></report>
	<action id="tableCount"></action>
	Lists all RDBMS datatypes that contain the field<br length constraint, such as VARCHAR(60), VARCHAR2(60), CHAR(1), etc. The Assessment Toolkit only compares the field length based on the datatype defined as following. Otherwise, the comparison will be ignored. >
	<pre><params key="sqldatatype"></params></pre>
	<value>varchar</value>
	<value>varchar2</value>
	<value>char</value>
	<value>nchar</value>
	<value>nvarchar</value>
	<value>nvarchar2</value>
	<value>raw</value>
	The "tables" key indicates the tables list where<br the Assessment Toolkit reads the records for comparison. To read all tables in SC/SM server, use <value>all</value> . However, this is not recommended because when the records of all tables are queried, the system performance will be significantly degraded>
	<pre><params key="tables"></params></pre>
	<value>Alertlog</value>
	<value>ApprovalLog</value>
	<value>menu</value>

Report name	Description
List any request line items or task records, SYSBLOB, SYSATTACHMENT which are orphaned	The Assessment toolkit checks all the request line items/change tasks, searches and lists all line items with null parent request (orphaned). For SYSATTACHMENTS/SYSBLOB, the Toolkit searches and lists all where the parent interaction, incident, change, request, etc. does not exist (orphan attachment/blob). You can configure parameters for this report as below:
	List module and talbe relationship in sysblob<br and sysattachment tables as below. Rule key="modulename in sysattachment table-table name in sc/sm field name">
	<pre><params key="moduleRelation"></params></pre>
	<value>incidents-incidents incident.id</value>
	<value>problem-probsummary id</value>
	<value>rootcause-rootcause id</value>
	<value>knownerror-knownerror id</value>
	<value>kmattachments-kmattachments id</value>
	<value>kmdocument-kmdocument id</value>
	<value>svcCatalog-svcCatalog name</value>
	<value>civisualizationdecorator-civisualizationdecor ator name</value>
	<pre><value>civisualizationdevice-civisualizationdevice d evice.type&device.subtype</value></pre>

Modular Reports

Modular Reports provide reports based on ServiceCenter and Service Manager business modules. The following reports are included in Modular Reports:

- Incident Management
- Problem Management
- Asset Management
- Contract Management
- Cost Management
- Service Desk
- Change Management
- Request Management
- Scheduled Maintenance
- Service Level Management

High Level Report

High Level Report consists of summary information that covers almost all the report areas. This report does not provide any detailed report data as generated in other Assessment Reports. Instead, only general information such as the result count, the level value and the status icon (normal, warning or error) are displayed in this report. To configure the thresholds for each report where warning or error levels are reached, see Configuring Overall Assessment High Level Report.

The following reports are included in High Level Report:

Report name	Description
General Information high level report	Provides general ServiceCenter or Service Manager server migration or upgrade related information as listed below:
	• Customer: The ServiceCenter or Service Manager customer name, which is retrieved from the table on the servers.
	• Date: The report generation date.
	• Base Version: The current ServiceCenter or Service Manager server version.
	• Target Version: The target Service Manager version which will be migrated to. This value should be configured in high level report configuration file as described in Configuring General Information High Level Report.
	You can refer to the following screenshot as an example:
	General Information
	Customer: Peregrine Systems Inc.
	Date: 2011-07-18
	BaseVersion: SC6.2
	Target Version: Service Manager 9.30

Report name	Description
Summary Assessment high level report	Provides the overall status of Server and RDBMS and identifies the potential impact to upgrade process as listed below:
	• Service Manager Assessment: The overall percentage of customized records of all tables defined under "SM/SC assessment" of "Detailed assessment".
	RDBMS Assessment:
	Summary RDBMS percentage = The percentage of (Out Of Box Tables have been modified + Out Of Box Tables have been deleted + Out Of Box Indexes exist + SC/SM Server Out Of Box Indexes exist) / 4
	The Assessment toolkit compares the Summary RDBMS percentage with RDBMS summary, and displays normal, warning or error icon in this report.
	You can refer to the following screenshot as an example:
	🯮 Summary
	Service Manager Assessment 🔶 🗸 🗸
	🚯 RDBMS Assessment 🕴 🔇

Report name	Description		
Overall Assessment high level report	Provides overall ServiceCenter or Service Manager server table customized fields and RDBMS convertion related information as listed below:		
	• Service Manager Assessment: The count of changes in ServiceCenter or Service Manager tables' fields. The table list can be configured in high level report configuration file as described in Configuring Overall Assessment High Level Report.		
	Value of Service Manager Assesmment = (customizedFieldCount / fieldCount) x 100		
	fieldCount = Sum of all tables' fields count		
	customizedFieldCount = Sum of $customized$ tables' fields $count$		
	• RDBMS Assessment: The count of the tables in current ServiceCenter or Service Manager servers that have been converted from P4 to RDBMS.		
	Value of RDBMS Assessment = (dbTableCount / tableCount) x 100		
	tableCount = all tables count		
	dbTableCount = count of tables have been converted to database from p4		
	You can refer to the following screenshot as an example:		
	😺 Overall Assessment		
	Service Manager Assessment 🛛 🗸 🗸		
	RDBMS Assessment 3		

Report name	Description		
Detailed Assessment high level report	ServiceCenter/Service Manager Assessment high level report:		
	Manage betweer modules configur	rs the customized records which are significant t er upgrade for some tables, and builds up the link in those particular customized records and every s is in ServiceCenter/Service Manager. The table list red in report.xml as described in Configuring (ment High Level Report.	tages single st can be
	You can	refer to the following screenshot as an example:	
	🧯 De	tailed Assessment	
		Service Center / Service Manager Assessment	
		States	8
	0	Configuration Management	8
	0	Foundation	0
		formatctrl	8
	0	Configuration Management	0
		Foundation	*
	0	Incident Management	0
		Process	8
	0	Change Management	0
		Foundation	*
	0	Service Desk	0
		eventregister	8
	0	Change Management	8
		scripts	8
	0	Foundation	8
	0	Incident Management	0
	-	Request Management	0

Report name	Description			
	RDBMS Assessment high level report:			
	Provides detailed backend RDBMS related information as listed below:			
	• Out Of Box Tables have been modified: The value of percentage indicates all OOB RDBMS tables which have been modified in DDL.			
	Value of percentage = (Tablemodifiedcount / Tablecount) x 100			
	Tablemodifiedcount = The count of all OOB RDBMS tables which have been modified in DDL			
	Tablecount = The count of all OOB RDBMS tables in DDL			
	• Out Of Box Tables have been deleted: The value of percentage indicates all OOB RDBMS tables which have been deleted.			
	Value of percentage = (Tabledeletedcount / Tablecount) * 100			
	Tabledeletedcount = The count of all OOB RDBMS tables which have been deleted in DDL			
	Tablecount = The count of all OOB RDBMS tables in DDL			
	• Out Of Box Indexes exist: The value of percentage indicates all indexes within OOB RDBMS tables which have been deleted from current RDBMS.			
	Value of percentage = (Indexednotexistedcount / OOBindexcount) x 100			
	Indexednotexistedcount = The count of indicate all indexes within OOB RDBMS tables which have been deleted from current RDBMS			
	OOBindexcount = The count of all OOB RDBMS indexes in DDI			
	• SC/SM Server Indexes exist: The value of percentage indicates all indexed within OOB ServiceCenter or Service Manager tables which have been defined in ServiceCenter or Service Manager servers but not exist in current RDBMS.			
	Value of percentage = (Indexesnotexistedcount / ServerIndexescount) x 100			
	Tablemodifiedcount = The count of all indexed within OOB ServiceCenter or Service Manager tables which have been defined in ServiceCenter or Service Manager servers but not exist in current RDBMS.			
	ServerIndexescount = The count of all indexes in current server			
	To generate related information in this report, make sure to log in to the database first as stated in Setting Up the Assessment Toolkit on page 7.			

Report name	Description		
	You can refer to the following screenshot as an example:		
	RDBMS Assessment high level report:		
	RDBMS Assessment		
	🚰 😭 Tables		
	Out of Box Tables have been modified	*	
	Out of Box Tables have been deleted	*	
	🚰 🔯 Indexes		
	Out of Box Indexes exist	8	
	SC/SM Server Indexes exist	0	

To generate individual reports included in High Level Report, it is a mandatory step to configure the template parameters for them. The default template file is SC2SM-00-[report name].prpt, which is stored in <Service Manager Upgrade Assessment Toolkit home directory>\config\template\subreport. See the following code example for High Level Report template parameter configuration:.