Identifying and updating mismatched SQL Server/Client versions running with HP Service Manager

In general, it is suggested to use same version of SQL Server and SQL Client for HP Service Manager, however, some of customers would use old version of SQL Client because Windows system has it by default. Most SM functionality works well even lower version of SQL Client but it has a potential risk and it could make some issue if Service Manager would run SQL version-specific task like dbdict remapping.

Proactively, customer needs to check its version matching and eliminate potential risk if existing.

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1. How to identify Service Manager binary(RTE) version from Service Manager's log

HP Service Manager's log show Service Manager binary(RTE) version and it is required to use right version of SQL Server according to HP Service Manager Support matrix.

example > C:\Program Files (x86)\HP\Service Manager 9.30\Server\logs\sm.log 4448(4704) 04/26/2015 13:50:36 RTE I Process sm 9.34.2003 (P2) System: 13100 (0x784DFB00) on PC (x64 64-bit) running Windows Server 2008 R2 Enterprise SP1 (6.1 Build 7601) Timezone GMT+09:00 from prod002

- → Service Manager binary(RTE) version is 9.34.2003
- Search keyword, "Process sm", then, we can recognize service manager binary(RTE) version exactly
- Check supported Microsoft SQL Server version according to Service Manager Support matrix, https://softwaresupport.hp.com/group/softwaresupport/support-matrices

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ile Edit View Favorites Tools Help	
Google	🕶 🚰 Search 🕶 🔟 🝷 🌩 ד 🧭 🎇 🚰 Share ד 🏠 More » 🗘 🙎
+ HP Connect-It	+ HP Server Automation
HP Continuous Delivery Automation	+ HP Service Desk
+ HP Dashboard	+ HP Service Desk Process Insight
+ HP Data Protector	+ HP Service Health Optimizer
+ HP Database and Middleware Automation Solution Packs	+ HP Service Health Reporter
+ HP DataBase Archiving	+ HP Service Information Portal
+ HP DecisionCenter	HP Service Manager
+ HB Deckton Inventory	Compatibility matrix for Service Manager 7 00
	Compatibility matrix for Service Manager 7.10
	Compatibility matrix for Service Manager 7.11
HP Email Archiving software	Compatibility matrix for Service Manager 9.20
HP Enterprise Collaboration	Compatibility matrix for Service Manager 9.30
+ HP Enterprise Discovery	Compatibility matrix for Service Manager 9.31 Compatibility matrix for Service Manager 9.32
+ HP Executive Scorecard	Compatibility matrix for Service Manager 9.33
+ HP File Archiving software	Compatibility matrix for Service Manager 9.34
+ HD Einangial Dianning & Analyzic	Compatibility matrix for Service Manager 9.35
	Compatibility matrix for Service Manager 9.41
+ HP Get-Answers	Compatibility matrix for Service Manager Applications Content
+ HP Get-Resources	HP Service Manager Exchange with SAP Solution Manager
+ HP Get-Services	+ HP Service Manager Open Localization Toolkit
+ HP Identity Management	HP Service Quality Manager

Support matrix has been updating continuously, so customer needs to check actual information by access online.

2. How to identify Microsoft SQL Server and Client version from Service Manager's log

Service Manager's log shows SQL Server and Client version in service manager log.

example 1 > C:\Program Files (x86)\HP\Service Manager 9.30\Server\logs\sm.log

1904(2704) 04/26/2015 12:18:49 RTE I Connected to Data source 'sm934' <u>SQL server</u> <u>'SMPROD01' version: **11.0.2100**</u> through <u>SQL driver version: **6.1.7601**</u> using database 'sm934' as user 'dbo'

MS SQL Server version is 11.0.2100 from "SQL server 'SMPROD01' version: 11.0.2100"

MS SQL Client version is 6.1.7601 from "SQL driver version: 6.1.7601"

SQL client version is lower than SQL Server, so need to install MS SQL Client, "11.0.2100"

example 2> C:\Program Files (x86)\HP\Service Manager 9.30\Server\logs\sm.log

3744(4124) 04/24/2015 14:53:22 RTE I Connected to Data source 'smcust' SQL server 'SMPROD02' version: **11.0.2100** through <u>SQL driver version</u>: **11.0.2100** using database 'SMDB' as user 'dbo'

> SQL Server and client are same version, 11.0.21.00, so no action is required.

3. How to clarify Microsoft SQL version exactly

As below image, Microsoft SQL Server has many kinds of version according to its service pack.

	RTM (no SP)	SP1	SP2	SP3	SP4
SQL Server 2016 codename ?	CTP3.2				
SQL Server 2014 codename Hekaton SQL14	12.0.2000.8	12.0.4100.1 or 12.1.4100.1			
SQL Server 2012 codename Denali	11.0.2100.60	11.0.3000.0 or 11.1.3000.0	11.0.5058.0 or 11.2.5058.0	11.0.6020.0 or 11.3.6020.0	
SQL Server 2008 R2 codename Kilimanjaro	S 10.50.1600.1	10.50.2500.0 or 10.51.2500.0	10.50.4000.0 or 10.52.4000.0	10.50.6000.34 or 10.53.6000.34	
SQL Server 2008 codename Katmai	10.0.1600.22	10.0.2531.0 or 10.1.2531.0	10.0.4000.0 or 10.2.4000.0	10.0.5500.0 or 10.3.5500.0	10.0.6000.29 or 10.4.6000.29
SQL Server 2005 codename Yukon	9.0.1399.06	<u>9.0.2047</u>	<u>9.0.3042</u>	<u>9.0.4035</u>	<u>9.0.5000</u>
SQL Server 2000 codename Shiloh	8.0.194	<u>8.0.384</u>	<u>8.0.532</u>	<u>8.0.760</u>	<u>8.0.2039</u>
SQL Server 7.0 codename Sphinx	7.0.623	<u>7.0.699</u>	<u>7.0.842</u>	<u>7.0.961</u>	<u>7.0.1063</u>

Reference: Microsoft SQL Server Version List, http://sqlserverbuilds.blogspot.com

Example>

1904(2704) 04/26/2015 12:18:49 RTE I Connected to Data source 'sm934' <u>SQL server</u> <u>'SMPROD01' version:</u> **11.0.2100** through <u>SQL driver version:</u> **6.1.7601** using database 'sm934' as user 'dbo'

> 11.0.2100 is SQL Server 2012 (no Service Pack)

6.1.7601 is quite old version which is included in Windows OS by default.

4. Where to download Microsoft SQL Native Client for HP Service Manager

HP Service Manager is 32 bit application and it needs 32bit SQL Native client.

• Microsoft SQL Server 2012 native client 32bit,

http://go.microsoft.com/fwlink/?LinkID=239647&clcid=0x409

• Microsoft SQL Server 2008 R2 SP2 native client 32bit,

https://www.microsoft.com/en-US/download/details.aspx?id=30440

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Microsoft® SQL Server® 2008 R2 SP2 Featu	ire Pack
Select Language: English	Download
The Microsoft SQL Server 2008 R2 Feature Pack is a collection of packages which provide additional value for SQL Server 2008 R	of stand-alone 2 SP2.
Details	
System Requirements	
Install Instructions	
Related Resources	

click "<u>Download</u>" button

File Name	Size	Download Summany:
SqlCmdLnUtils_x86.msi	7.1 MB	1. sqlncli_x86.msi
sqlncli_amd64.msi	7.8 MB	
sqlncli_ia64.msi	10.8 MB	
✓ sqlncli_x86.msi	4.5 MB	
SQLSERVER2008_ASADOMD10_amd64.msi	7.0 MB	Total Size: 4.5 MB
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choose 'sqlncli_x86.msi'

• Microsoft SQL Server 2008 R2 SP1 native client 32bit,

https://www.microsoft.com/en-us/download/details.aspx?id=26728

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Microsoft® SQL Server® 2008 R2 SP1 Feature Pack
Select Language: English V Download
The Microsoft SQL Server 2008 R2 Feature Pack is a collection of stand-alone packages which provide additional value for SQL Server 2008 R2 SP1.
(+) Install Instructions
Related Resources

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1033\x86\SharedManagementObjects.msi	10.5 MB		
] 1033\x86\SqlCmdLnUtils.msi	7.0 MB		
1033\x86\sqIncli.msi	4.5 MB		
1033\x86\SQLSERVER2008_ASADOMD10.msi	4.4 MB	~	Total Size: 4.5 MB

choose '1033\x86\sqlncli.msi'

• Microsoft SQL Server 2008 R2 native client 32bit,

http://go.microsoft.com/fwlink/?LinkID=188400&clcid=0x409

reference, Download SQL Server Native Client <u>https://www.connectionstrings.com/download-sql-</u> server-native-client/

5. How to setup 32bit ODBC for Service Manager

HP Service Manager is 32 bit application and it uses 32bit ODBC library.

• launch 32bit ODBC tool

In order to configure 32bit ODBC for Service Manager, execute this command in command prompt **%WINDIR%\SysWOW64\odbcad32.exe**

Administrator: Command Prompt	<u></u>
icrosoft Windows [Version	6.1.7601]
pyright (c/ 2007 hicrosof	t Sorporation. All Fights reserved.
₩Users₩Administrator>%\IN	IDI R2₩S ysWOW64₩odbcad32.exe
₩Users₩Administrator>	
	🐺 ODBC Data Source Administrator 🛛 🔀
	User DSN System DSN File DSN Drivers Tracing Connection Pooling About
	User Data Sources:
	Name Driver Add
	<u>H</u> emove
	Configure
	An ODBC User data source stores information about how to connect to the indicated data provider. A User data source is only visible to you, and can only be used on the current machine.
	OK Cancel Apply Help

Click 'Add...' button

• Choose right driver and then click 'Finish' button.

	Name	Version	•
ang	Microsoft Text Driver (*.txt; *.csv) Microsoft Text-Treiber (*.txt; *.c	6.01.7601.17632 6.01.7601.17632	
	Microsoft Visual FoxPro Driver Microsoft Visual FoxPro-Treiber	1.00.02.00	
	Oracle in OraDb11g_home1	11.02.00.01	
	SQL Server	6.01.7601.17514	
	SQL Server Native Client 11.0	2011.110.2100.60	-
	•	•	٦
	•	<u>,</u>	Ľ

As example, 'SQL Server Native Client 11.0 2011.110.2100.60' is selected.

SQL Server Native Client **11.0 2011**. **110.2100.60** \rightarrow **110.2100** is SQL Server 2012(no SP) according to chart.

c.f) SQL Server **6.0.1.7601.17514** : Windows OS default version. We don't use it for Service Manager

	RTM (no SP)	SP1	SP2	SP3	SP4
SQL Server 2016 codename ?	CTP3.2				
SQL Server 2014 codename Hekaton SQL14	12.0.2000.8	12.0.4100.1 or 12.1.4100.1			
↓ SQL Server 2012 codename Denali	11.0.2100.60	11.0.3000.0 or 11.1.3000.0	11.0.5058.0 or 11.2.5058.0	11.0.6020.0 or 11.3.6020.0	
SQL Server 2008 R2 codename Kilimanjaro	3 10:50.1600.1	10.50.2500.0 or 10.51.2500.0	10.50.4000.0 or 10.52.4000.0	10.50.6000.34 or 10.53.6000.34	
SQL Server 2008 codename Katmai	10.0.1600.22	10.0.2531.0 or 10.1.2531.0	10.0.4000.0 or 10.2.4000.0	10.0.5500.0 or 10.3.5500.0	10.0.6000.29 or 10.4.6000.29
SQL Server 2005 codename Yukon	9.0.1399.06	<u>9.0.2047</u>	<u>9.0.3042</u>	<u>9.0.4035</u>	<u>9.0.5000</u>
	8.0.194	<u>8.0.384</u>	<u>8.0.532</u>	<u>8.0.760</u>	<u>8.0.2039</u>
SQL Server 7.0 codename Sphinx	7.0.623	<u>7.0.699</u>	7.0.842	<u>7.0.961</u>	7.0.1063

Reference: Microsoft SQL Server Version List, <u>http://sqlserverbuilds.blogspot.com</u>

• Input ODBC name and its SQL database, and then click 'Finish' button

👼 ODBC Data Source Admin	istrator X
User DSN System DSN File	DSN Drivers Tracing Connection Pooling About
Create a New Data Sour	rce to SQL Server
	This wizard will help you create an ODBC data source that you can use to connect to SQL Server.
SQL Server 2012	What name do you want to use to refer to the data source?
	How do you want to describe the data source?
	Description:
	Which SQL Server do you want to connect to? Server: localhost
	
	Finish Next > Cancel Help

As example, localhost is selected.

• Verify its connection by clicking 'Test Data Source ...'

DDB	C Microsoft SQL Server Setup 🛛 🔀
,	A new ODBC data source will be created with the following configuration:
Mi	crosoft SQL Server Native Client Version 11.00.2100
Da	ata Source Name: smcust
Da	ata Source Description:
Us Us	se Integrated Security: Yes
Da	atabase: (Default)
La	inguage: (Default)
	ata Encryption: No ust Server Certificate: No
M	ultiple Active Result Sets(MARS): No
	anslate Character Data: Yes
Lo	a Driver Statistics: No
Us	e Regional Settings: No
Us	se ANSI Quoted Identifiers: Yes
ISe	erver Service Principle Name(SPN):
Mi	rror Server Service Principle Name(SPN):
	▼ ▼
	Test Deta Causar OK Causar
	Test Data Source UN Lancel

901	SQL Server ODBC Data Source Test	×	
	Test Results		tc
`	Microsoft SQL Server Native Client Version 11.00.2100		ш
۶r	Running connectivity tests		н
	Attempting connection		ш
	Verifying option settings Disconnecting from server		н
	TESTS COMPLETED SUCCESSFULLY!		н
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• Finally, "smcust" is created as 32bit ODBC connection.

👼 ODBC D	ata Source Administrator	×		
User DSN System DSN File DSN Drivers Tracing Connection Pooling About				
User Data Sources:				
Name	Driver Add			
smoust	SQL Server Native Client 11.0 <u>R</u> emove			
	 Configure	i II		
		1		
	An ODBC User data source stores information about how to connect to			
	and can only be used on the current machine.			
	OK Cancel Apply Help			