

Migration Cookbook

IBM License Metric Tool
Migration from version 7.5 to version 9.0
Cookbook

ILMT Central Team

Version 1.0.0

Table of Contents

Introduction	6
One goal two approaches	6
Part 1: Preparation of the environment and data for migration	7
Choosing ILMT 7.5 agents to be migrated	7
all-agents.csv.....	8
selected-agents.csv.....	9
hostsToMigration.txt	9
all-agents-bundles.csv.....	10
all-agents-excluded-software.csv	12
vm-managers.txt.....	12
all-agents-excluded-directories.txt.....	14
Installing IEM clients	16
Mapping the agents	23
Activate the LMT/TAD4D 7.x Agent Mapping analysis	23
Run the fixlet.....	24
Scanning your environment.....	27
Activate necessary analyses.....	27
Install scanners on IEM clients.....	28
Run the VM Manager Tool fixlet.....	30
Initiate VM Managers	31
Synchronize information between IEM database and ILMT database.....	32
Part 2: Migration of the required data	34
Configure the migration properties	34
Export to CSV files	35
Generated CSV files	35
Content of the CSV files	36
agents.csv.....	36
agentsmap.csv	36
bundles.csv.....	36

excludeddirectories.csv	37
excludedsoftware.csv	38
vmmanagers.csv	38
Verification.....	38
Agents	38
Migrated agents.....	39
Bundles	39
Excluded directories.....	39
Excluded software.....	39
VM managers.....	39
Simulation of migration	39
Generated CSV files	40
Content of the CSV files	41
excluded_directories_report.csv	41
software_report.csv.....	41
vmmanagers_report.csv	43
Verification.....	43
Excluded directories report	43
Software report.....	44
VM managers report.....	44
Migration.....	44
Generated CSV files	45
Content of the CSV files	46
software_report.csv.....	46
Verification.....	46
Excluded directories.....	47
Software.....	48
VM managers.....	50
Part 3: Validation of migration.....	52
Sanity check on 9.0	52
Verification of software components	53
7.5	53

9.0	55
Software components - host by host verification.....	57
7.5	58
9.0	61
Verification of software products.....	64
7.5	65
9.0	66
Software Products – host by host verification.....	68
7.5	69
9.0	72
Verification of the audit report.....	74
7.5	75
9.0	78
Part 4: Final steps and removal of LMT 7.5	80
Appendix.....	83
Response file parameters	83
LMT_TAD4D_DB_TIMEOUT.....	83
IEM_HOST.....	83
IEM_PORT	83
IEM_PROTOCOL	83
IEM_USER.....	83
IEM_USER_PASSWORD.....	83
IEM_PROTOCOL_TIMEOUT.....	83
LMT_SUA_TOKEN.....	83
LMT_SUA_PORT.....	84
LMT_SUA_PROTOCOL.....	84
LMT_SUA_SITE	84
LMT_SUA_PROTOCOL_TIMEOUT	84
Migration statuses	84
Excluded directories.....	84
UPDATED.....	84
SKIPPED.....	84

Software - bundlings and exclusions.....	85
SUCCEEDED	85
SKIPPED.....	85
FAILED	86
VM managers.....	86
SUCCEEDED	86
SKIPPED.....	86
FAILED	86
Frequently asked questions (FAQ).....	87
How to download IBM Endpoint Manager Agent Deployment Wizard?.....	87
How to download IBM Endpoint Manager masthead file?.....	87
Where to find the tema.log?.....	87
How to open the IBM Endpoint Manager console?.....	88
How to open IBM License Metric Tool 7.5 Command Line Interface (CLI)?	88
How to open the IBM License Metric Tool 7.5 web user interface	89
How to open IBM License Metric Tool 9.0 web user interface.....	90
Where to find the migration tool?.....	91
How to run migration?	91
How to display the options available for migration?.....	92
Where to find logs from migration?	92
Where to change the logging properties?	93
How to find ILMT authentication token?.....	93
How to find to which sites you are subscribed?	93
Migration response file template	94
Troubleshooting.....	96
Migration failed with CTJSM0037E error code	96
Migration failed with CTJSM0039E error code	96

Introduction

The migration process moves key data from IBM License Metric Tool version 7.5 (*also referred to as License Metric Tool, LMT or ILMT*) to a completely new infrastructure that is based on IBM Endpoint Manager (*also referred to as IEM*) and License Metric Tool version 9.0.1.2. As opposed to an upgrade which automatically changes the version of the application, migration requires you to separately install a new environment, mostly due to differences between the source and target infrastructures.

Although the environment to which you are migrating uses similar concepts and follows similar patterns as License Metric Tool 7.5, it differs in some aspects. The new environment should be seen as a combination of License Metric Tool and the IBM Endpoint Manager platform. The platform provides infrastructure elements, for example clients and is responsible for the flow of data between endpoints and License Metric Tool. It is also a terminal that is used for configuration. A number of tasks included in the following scenarios depend on IBM Endpoint Manager and are completed by using the platform console.

You can migrate from License Metric Tool or Tivoli Asset Discovery for Distributed¹ 7.5 (*also referred to as TAD4D*) and all subsequent fix packs and interim fixes to License Metric Tool 9.0.1.2. Migrated items include:

- software bundlings
- software exclusions
- directories excluded from scanning
- VM Managers.

One goal two approaches

The goal of migration is to be able to produce PVU audit reports in LMT 9.0 as it was done in LMT 7.5. You can achieve this goal by using one of two possible approaches:

- Migration of all agents at once – this approach is appropriate only for small environments with up to 500 agents.
- Migration in parts – this approach is appropriate for all other environments.

In the first approach, you migrate all LMT 7.5 agents at once and then validate all of them in the same manner – all together.

In the second approach, migration is gradual. You take a group of agents, migrate them, and then validate the portion of migrated data. The final validation, especially validation of the values in the PVU reports, cannot be done immediately as in the first approach. All components that contribute to different calculations, for example PVUs, are yet to be discovered. Still, this approach is recommended to probe your environment first. You can choose a small group of computers that are monitored by LMT 7.5 agents and migrate them to LMT 9.0. When this task is completed, you can continue with the rest of your environment.

¹ From the functional perspective, License Metric Tool is a subset of Tivoli Asset Discovery for Distributed functionalities. Information related to LMT 7.5.x that is provided in this document is also relevant for TAD4D 7.5.x.

Part 1: Preparation of the environment and data for migration

This part explains how to prepare for the side-by-side migration.

Decisions regarding software classifications link software instances to agents on which the instances are installed. License Metric Tool 7.5 saves the ID and version of the agent to be able to recognize software instances. Before you start the migration, activate the analysis that recognizes those IDs and versions. It is the key for recreating your software inventory in the migrated environment. Activating the analysis is enough to complete the migration, however if you plan to remove the 7.5 agents, you must also run a task that maps the agents and copies their IDs and versions to IBM Endpoint Manager clients. You can map the agents right after you activate the analysis, or at any time before you remove them.

[For more information about mapping, see: Activate the LMT/TAD4D 7.x Agent Mapping analysis]

Additionally, it is worth mentioning that agents on i5 systems are not supported in version 9.0. They should not be taken into consideration for migration.

Choosing ILMT 7.5 agents to be migrated

This part shows how to choose agents for migration and what data should be saved for validation purposes.

1. Log in to LMT 7.5 and open the **Agents** panel.

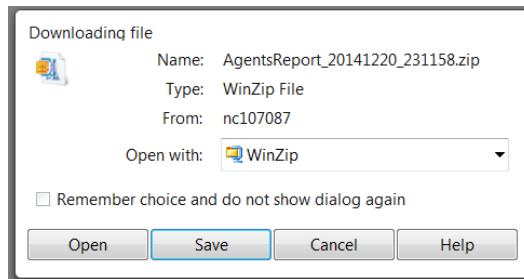
The screenshot shows the 'Agents' panel in LMT 7.5. The title bar says 'Agents'. Below it is a section titled 'Agents in your Infrastructure' with a note: 'The table shows agent status information based on the software and capacity scans. The dates and times of the Last Successful Software Scan and Last Agent Activity are in the server time.' A sub-note says 'All agents: 6' and 'Not connecting agents: 0'. There is a toolbar with icons for search, filter, and actions, followed by a dropdown menu 'Select Action'. The main area is a table with columns: Select, Status, Version, Network Address, IP Address, Server ID, Operating System, Last Expected Software Scan, Last Successful Software Scan, Last Agent Activity, and Scan Group. The table lists 6 agents, each with a checkbox in the 'Select' column and a status icon. The last row shows an 'Incomplete' status with a warning icon. At the bottom of the table are buttons for 'Page 1 of 1', '1', 'Go', 'Rows 6', and 'Total: 6 Filtered: 6'. Below the table are links for 'Download as PDF' and 'Download as CSV'. A 'Related task' section has a link 'Scan groups'.

2. Export agents from LMT 7.5 to a CSV file.

- a. Click **Download as CSV**.

[Download as PDF](#) [Download as CSV](#)

b. Save the file.



[all-agents.csv](#)

The saved file contains a complete list of agents in your environment. Change the name of the file, for example to *all-agents.csv*. You will use the file for verification purposes later on.

A	B	C	D	E	F	G	H	I	J	K	L
1	Status	Version	Agent Sug	Network Address	IP Address	Server ID	Operating System	Last Expected Softw	Last Successful Sof	Last Agent Activity	Scan Group
2	OK	7.5.0.121	Yes	NC107087		IBM 8233 06A855P	AIX 7.1	1/17/2014 15:05	12/20/2014 15:41	12/20/2014 21:42	DEFAULT
3	OK	7.5.0.121	Yes	NC107072		IBM 8233 06A84CP	AIX 6.1	9/9/2014 15:06	12/20/2014 20:07	12/20/2014 21:05	DEFAULT
4	OK	7.5.0.10	Yes	NC040212		IBM NC142253.KRAKLAB.PL.IBM.COM	LINUX SUSE Linux Enterpris	12/20/2014 15:24	12/20/2014 14:42	12/20/2014 19:54	Linux
5	OK	7.2.2.2	Yes	NC142155		IBM NC142252.KRAKLAB.PL.IBM.COM	LINUX SUSE Linux Enterpris	12/20/2014 15:24	12/20/2014 16:17	12/20/2014 18:56	Linux
6	OK	7.5.0.121	Yes	NC043026		IBM NC043011.KRAKLAB.PL.IBM.COM	LINUX Red Hat Enterprise Li	12/20/2014 15:24	12/20/2014 15:23	12/20/2014 21:05	Linux
7	Incomplete	7.5.0.121	Yes	NC142183		TLM_VM_KVM-3550d94f-593d-4b75-9fb1-d615d1583156	LINUX Red Hat Enterprise Li	12/20/2014 15:24	12/20/2014 15:23	12/20/2014 20:59	Linux
8											
a											

You can use a filter to export only selected agents. The following example shows how to export only agents that have the OK status. The status of agents does not imply which of them should be migrated. It is used as an example only.

1. Trigger the filtering mechanism.



2. In the **Status** column, click **Filter**.

Select	Status	Version	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
	Filter...	Filter...	Filter...	Filter...						

3. Choose **Contains** as Condition and **OK** as Text and then click **OK**.

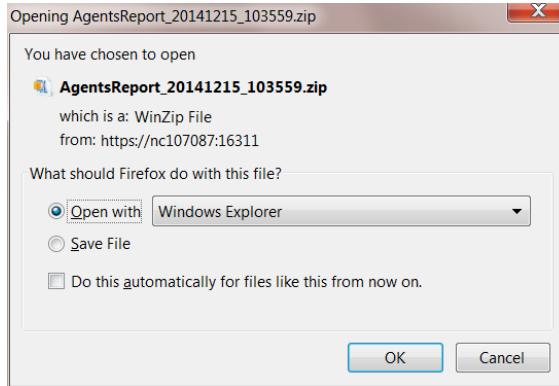
The filtered agents are displayed on the screen.

The screenshot shows the 'Agents' interface with the title 'Agents'. Below it is a section titled 'Agents in your Infrastructure' with a note: 'The table shows agent status information based on the software and capacity scans. The dates and times of the Last Successful Software Scan and Last Agent Activity are in the server time.' It displays a table of agents with columns: Select, Status, Version, Network Address, IP Address, Server ID, Operating System, Last Expected Software Scan, Last Successful Software Scan, Last Agent Activity, and Scan Group. There are 6 agents listed, all marked as 'OK'. The table includes pagination and filtering options at the bottom.

4. Click Download as CSV.

[Download as PDF](#) [Download as CSV](#)

5. Save the file.



[selected-agents.csv](#)

Change the name of the file, for example to *selected-agents.csv*. You will use this file for verification purposes later on.

	A	B	C	D	E	F	G	H	I	J	K
1	Status	Version	Agent Supports Subcapacity	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
2	OK	7.5.0.121	Yes	NC107087		IBM 8233 06A855P	AIX 7.1	1/17/2014 2:05:00 PM	Dec 15, 2014 3:41:00 AM	Dec 15, 2014 9:42:23 AM	DEFAULT
3	OK	7.5.0.121	Yes	NC107072		IBM 8233 06A84CP	AIX 6.1	Sep 9, 2014 1:06:00 PM	Dec 15, 2014 8:07:00 AM	Dec 15, 2014 9:05:44 AM	DEFAULT
4	OK	7.5.0.10	Yes	NC040212		IBM NC142253.KRAKLAB.PL.IBM.COM	LINUX SUSE Linux Enterprise Server 10 (x86)	Dec 13, 2014 3:24:00 PM	Dec 13, 2014 2:42:00 PM	Dec 15, 2014 7:54:33 AM	Linux
5	OK	7.5.0.121	Yes	NC043026		IBM NC043011.KRAKLAB.PL.IBM.COM	LINUX Red Hat Enterprise Linux Server release 6 (Santiago)	Dec 13, 2014 3:24:00 PM	Dec 13, 2014 3:23:00 PM	Dec 15, 2014 7:50:27 AM	Linux
6	OK	7.2.2.2	Yes	NC142155		IBM NC142252.KRAKLAB.PL.IBM.COM	LINUX SUSE Linux Enterprise Server 11 (x86)	Dec 13, 2014 3:24:00 PM	Dec 13, 2014 4:17:00 PM	Dec 15, 2014 6:55:51 AM	Linux
7											

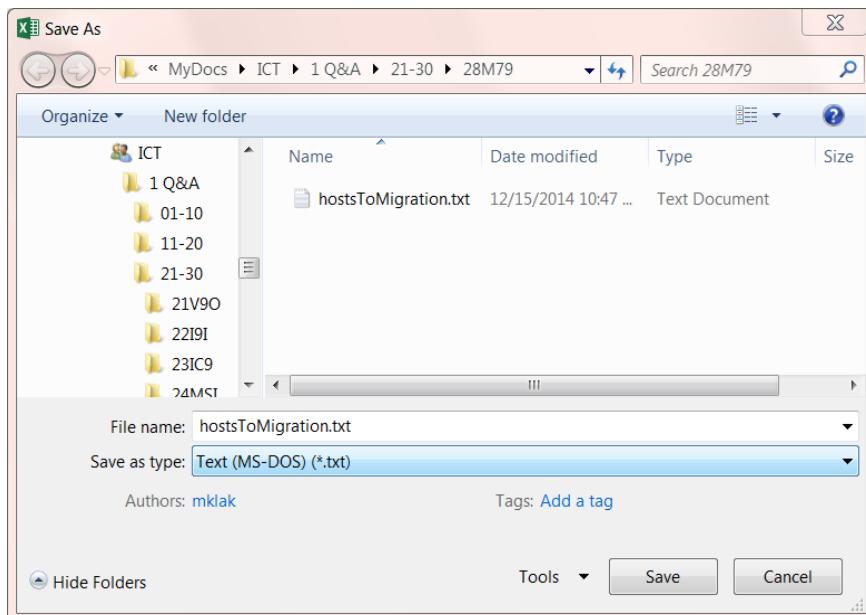
[hostsToMigration.txt](#)

Create a file that lists hosts which you want to migrate. You will use the file later on during installation of IEM clients.

1. Remove all columns except for IP Address or Network Address. Then, remove the header. In the following example, the Network Address column is used for further work.

	A	B
1	NC107087	
2	NC107072	
3	NC040212	
4	NC043026	
5	NC142155	
6		

2. Save the file in the TXT format, for example as *hostsToMigration.txt*. You will need the file for installing IEM clients.



all-agents-bundles.csv

1. Open the **Manage Software Inventory** panel.

2. To show all products, specify the current date and click **Update**.

3. Manage Software Inventory panel updates

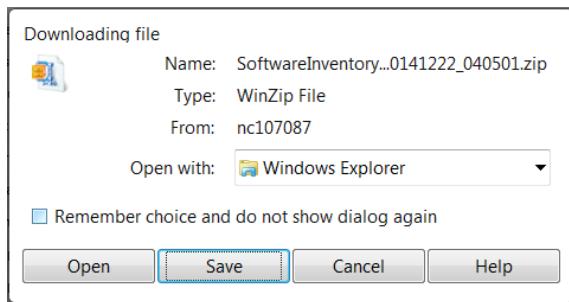
Product/Release/Component	Confidence	Part Numbers	PVU Full Capacity	PVU Subcapacity
DB2 UDB Query Patroller	100%		1,200	400
IBM DB2 Workgroup Server Edition PVU Option	100%		1,200	400
IBM Domino Enterprise Server	0%	E020KLL		
IBM InfoSphere Information Services Director for NonProduction Environments	57%		0	0
IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	100%		3,200	200
IBM InfoSphere Optim Test Data Management Solution	100%	D08E9LL	1,200	400
IBM InfoSphere Optim Test Data Management Solution NonRelational Connectors	100%		1,200	400
IBM InfoSphere Warehouse Enterprise Base Edition	55%		1,200	400
IBM Informix Extended Parallel Server (XPS)	100%		1,200	400
IBM Integration Bus	33%		1,200	400
IBM Lotus Domino	100%		1,200	400
IBM Mobile Connect	28%		1,200	400
IBM Optim Database Relationship Analyzer for Linux, UNIX, and Windows	49%		1,200	400
IBM Optim Test Data Management Solution for Siebel CRM-Call Center Family	29%		1,200	400
IBM Tivoli Asset Discovery for Distributed	100%			
IBM Tivoli Asset Discovery for Distributed FCT	55%			
IBM Tivoli Asset Management for IT	0%	E041VLL, E0423LL, E0AW8LL, E0AW8LL		
IBM Tivoli Netview	100%		1,200	400
IBM Tivoli Storage Manager	100%	E029KLL	1,200	400
IBM Tivoli Storage Manager Extended Edition	58%	E029ELL	4,400	600
IBM Tivoli Workload Scheduler	83%	E02AFLL	4,400	600
IBM Web Content Manager	55%	E026GLL	3,200	200
IBM WebSphere Application Server Network Deployment	55%	E025SLL, E025TLL	4,400	600

[Download as CSV](#)

4. To save the configuration, click **Download as CSV**.

[Download as CSV](#)

5. Save the file.



6. Extract the *SoftwareInventoryReport_YYYYMMDD_hhmmss.csv* file.

7. Open the CSV file in an editor. Use the following filters:

- Confidence: 100
- Explanation of confidence: Other than 'No other bundling options available'.

C	D	E	F	G	H	I	J	K	L	M	N	O
Release	Component	Host Name	Confidence	Explanation of Confidence	Exclusion St	Operating S	Scan Group	Part Number	Free of char	Subcapacity	Installed on	Agent delete
AIW Express	IBM solidDB 6. NC107087		100 User-handled			AIS	DEPMULT				No	No

8. Save the filtered results to a separate file, for example *all-agents-bundles.csv*.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1 Product		Current Release	Componi	Host Name	Confiden	Explanati	Exclusio	Operatin	Scan Gr	Part Nu	Free o	Subcapa	Installed	Agent	deleted
2 AIX Express Edition	IBM 823;AIX Expr	IBM solic	NC10708	100 User-bur	Includ	AIX 7.1	DEFAL	Yes	No	No	No	No	No	No	No
3 IBM DB2 Workgroup Server Edition PVU Option	TLM_VM IBM DB2	IBM DB2 NC1421E	100 User-bur	Includ	LINUX R	Linux	No	Yes	No	No	No	No	No	No	No
4 IBM DB2 Workgroup Server Edition PVU Option	TLM_VM IBM DB2	IBM DB2 NC1421E	100 User-cor	Includ	LINUX R	Linux	No	Yes	No	No	No	No	No	No	No
5 IBM InfoSphere Information Services Director for NonProduction Environments	IBM NC IBM Info	IBM Info: NC04021	100 User-cor	Excluded	LINUX S	Linux	No	Yes	No	No	No	No	No	No	No
6 IBM InfoSphere Optim Test Data Management Solution NonRelational Connectors	IBM NC IBM Info	IBM Opti NC04021	100 User-bur	Includ	LINUX S	Linux	No	Yes	No	No	No	No	No	No	No
7 IBM License Metric Tool	IBM NC IBM Lice	IBM DB2 NC1421S	100 User-bur	Excluded	LINUX S	Linux	D561HLL	Yes	No	No	No	No	No	No	No
8 IBM License Metric Tool	IBM NC IBM Lice	IBM Tivo NC1421S	100 User-bur	Excluded	LINUX S	Linux	D561HLL	Yes	No	No	No	No	No	No	No
9 IBM License Metric Tool	IBM NC IBM Lice	IBM Web NC1421S	100 User-bur	Excluded	LINUX S	Linux	D561HLL	Yes	No	No	No	No	No	No	No
10 IBM Tivoli Asset Discovery for Distributed	IBM 823;IBM Tivo	IBM Tivo NC10708	100 User-bur	Includ	AIX 7.1	DEFAL	Yes	Yes	No	No	No	No	No	No	No
11 IBM Tivoli Asset Management for IT for Internal Service Providers FCT	IBM 823;IBM Tivo	IBM Tivo NC10708	100 User-bur	Includ	AIX 7.1	DEFAL	No	No	No	No	No	No	No	No	No
12 IBM Tivoli Workload Scheduler	IBM 823;IBM Tivo	IBM Web NC10708	100 User-bur	Includ	AIX 7.1	DEFAL	E02AFLL	Yes	No	No	No	No	No	No	No
13 IBM WebSphere Portal Extend	IBM NC IBM Web	IBM Dom NC1421S	100 User-bur	Includ	LINUX S	Linux	E023RLL	Yes	Yes	No	No	No	No	No	No
14															
15															

all-agents-excluded-software.csv

Open the *SoftwareInventoryReport_YYYYMMDD_hhmmss.csv* file again in an editor. Remove all previous filters if they still exist and use one filter regarding exclusions:

- Exclusion Status: Contains ‘Excluded’

You will get a list of components that are excluded from software calculations. Exclusion is done on the release level. Therefore, you must use advanced filtering to filter out repeated entries. Each combination of values in the **Release** and **Host Name** columns must be unique.

Save this information to a separate file, for example *all-agents-excluded-software.csv*.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1 Product	Current Release		Component	Host Name	Confide	Explana	Exclusio	Operatin	Syst	Scan Gr	Part Nu	Free o	Subcapa	Installed
2 IBM Info IBM N	IBM InfoSphere Information Services Director for NonProduction Environments	8.7	IBM InfoSp	NC04021	100 User-c	Excluded: Backup, disaster recovery...		LINUX S	SUSE	Linux	No	Yes	No	No
3 IBM Lice IBM	N IBM License Metric Tool 7.5		IBM DB2 Er	NC142155	100 User-b	Excluded: Other: (Migration)		LINUX S	SUSE	Linux	D561H	Yes	No	No
4 IBM Lice IBM 8;IBM	License Metric Tool 7.5		IBM License	NC107087	100 No oth	Excluded: Other: (Migration)	AIX 7.1	DEFAL	D561H	Yes	No	No	No	No
5 IBM Lice IBM 8;IBM	License Metric Tool 7.5		IBM License	NC107072	100 No oth	Excluded: Other: (Migration)	AIX 6.1	DEFAL	D561H	Yes	No	No	No	No
6														
7														

vm-managers.txt

Open the **VM Managers** panel.



The panel looks as follows.

The screenshot shows the Tivoli View interface for the IBM License Metric Tool. The left sidebar has a tree view with nodes like Welcome, My Startup Pages, Users and Groups, Settings, IBM License Metric Tool (which is expanded to show Home, IBM Audit Reports, Software, Hardware, Infrastructure, Agents, Scan Groups, Systems without Agents, Shared File Systems, Software Catalog Versions, VM Managers), and Administration. The main panel is titled 'VM Managers' and contains a table with the following data:

Select	Operation Status	Manager Type	Web Address	User Name	Last Successful Operation	Comments
	Invalid credentials - suspended	VMware ESX, ESXi or vCenter	https://NC0441088/sdk	administrator	Oct 14, 2014 11:01:09 AM	After 3 attempts, the server suspended contacting t
	Connection failed	KVM - RHEV-M	https://NC044146.8443/apiK	admin@internal	Dec 22, 2014 6:31:10 AM	The server was unable to connect to https://NC0441
	OK	VMware ESX, ESXi or vCenter	https://NC042194/sdk	administrator	Dec 2, 2014 11:31:08 PM	There are no problems with the VM manager.
	Connection failed	Microsoft Hyper-V	http://NC142102-5985/wsman	administrator@cluster.com	Oct 2, 2014 11:31:08 PM	The server was unable to connect to http://NC14210
	OK	Microsoft Hyper-V	http://NC042203/wsman	administrator@cluster.com	Dec 22, 2014 6:31:09 AM	There are no problems with the VM manager.
	OK	KVM - RHEV-M	https://NC142232.443/api	admin@internal	Dec 22, 2014 6:31:08 AM	There are no problems with the VM manager.
	OK	VMware ESX, ESXi or vCenter	https://NC042251/sdk	administrator	Dec 22, 2014 6:31:09 AM	There are no problems with the VM manager.

Because this panel does not have the option to export to CSV, you must perform a few steps to be able to create a file that will be used for further verification after the migration.

1. Click **Configure Columns**.



2. Select **Web Address**. The table on the panel should have only one column apart from the first column used for selection.

The screenshot shows the 'Configure Columns' dialog box. It has a list of columns on the left: Operation Status, Manager Type, Web Address, User Name. The 'Web Address' checkbox is checked. At the bottom are 'OK' and 'Cancel' buttons.

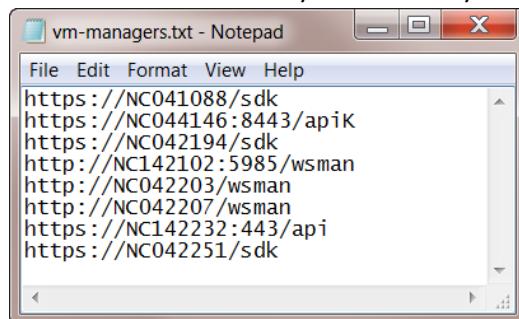
3. Highlight all web addresses and copy them.

The screenshot shows a software interface titled "VM Managers". At the top, there is a toolbar with various icons and a dropdown menu labeled "... Select Action ...". Below the toolbar is a table with two columns: "Select" and "Web Address". The "Web Address" column contains several URLs, some of which are highlighted in blue. The highlighted URLs are:

- <https://NC041088/sdk>
- <https://NC044146:8443/apiK>
- <https://NC042194/sdk>
- <http://NC142102:5985/wsman>
- <http://NC042203/wsman>
- <http://NC042207/wsman>
- <https://NC142232:443/api>
- <https://NC042251/sdk>

At the bottom of the table, there are navigation buttons for "Page 1 of 1", "1", "Go", "Rows 8", and "Total: 8 Filtered: 8".

4. Paste the web addresses to a TXT file and save it, for example as *vm-managers.txt*. You will have to clean the content before you obtain only addresses as shown below.



all-agents-excluded-directories.txt

The last step before you install IEM clients is to create a file with excluded directories. To do this, use the `listexclusions` command.

Below is a set of commands that you can use to create a file with directories excluded per platform. Remember to change the `tipadmin/Abcd1234` credentials to your credentials.

```
/opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p Abcd1234 -c listexclusions -p AIX > /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p Abcd1234 -c listexclusions -p Linux >> /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p Abcd1234 -c listexclusions -p Solaris >> /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p Abcd1234 -c listexclusions -p HPUX >> /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p Abcd1234 -c listexclusions -p Windows >> /tmp/all-agents-excluded-directories-platforms.txt
cat /tmp/all-agents-excluded-directories-platforms.txt
```

Below is an example of the result of running the commands.

```
AIX 7.1.0.0 NC107087 [05:34] root /opt/IBM/LMT/cli # cat /tmp/all-agents-excluded-directories-platforms.txt
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
x Licensed Materials - Property of IBM
x 5724-T40 IBM License Metric Tool
x 5725-C68 IBM Tivoli Asset Discovery for Distributed
x Command line version 7.5.0.10 for AIX .
x (C) Copyright IBM Corp. 2002, 2012.
x All Rights Reserved. US Government Users Restricted Rights - Use,
x duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
x For more detailed help, refer to product manual.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Platform: AIX
Path /proc/*

Platform: AIX
Path */tmp/*

Platform: AIX
Path */eznim/*

CODCL0033I: The command has been successfully performed.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
x Licensed Materials - Property of IBM
x 5724-T40 IBM License Metric Tool
x 5725-C68 IBM Tivoli Asset Discovery for Distributed
x Command line version 7.5.0.10 for AIX .
x (C) Copyright IBM Corp. 2002, 2012.
x All Rights Reserved. US Government Users Restricted Rights - Use,
x duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
x For more detailed help, refer to product manual.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Platform: Linux
Path */tmp/*

Platform: Linux
Path /proc/*

Platform: Linux
Path */cache/out-of-date/*

CODCL0033I: The command has been successfully performed.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
x Licensed Materials - Property of IBM
x 5724-T40 IBM License Metric Tool
```

If you have exclusions defined on the computer level (by using agent ID or host name), you should also create the *all-agents-excluded-directories-agentID.txt* and *all-agents-excluded-directories-hostname.txt* files with appropriate content. To check what parameter should be used, run the following command:

```
/opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p Abcd1234 -c help listexclusions
```

```
AIX 7.1.0.0 NC107087 [06:09] root / # /opt/IBM/LMT/cli/lmtcli.sh -u tipadmin -p tippass -c help listexclusions
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
x Licensed Materials - Property of IBM
x 5724-T40 IBM License Metric Tool
x 5725-C68 IBM Tivoli Asset Discovery for Distributed
x Command line version 7.5.0.10 for AIX .
x (C) Copyright IBM Corp. 2002, 2012.
x All Rights Reserved. US Government Users Restricted Rights - Use,
x duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
x For more detailed help, refer to product manual.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Returns the list of excluded directories from the scan.
Usage:
listexclusions [ -d agentId | -h hostname | -p platform ]
where:
-d id of the agent
-h host name of the agent
-p platform to exclude

CODCL0033I: The command has been successfully performed.

AIX 7.1.0.0 NC107087 [06:09] root / #
```

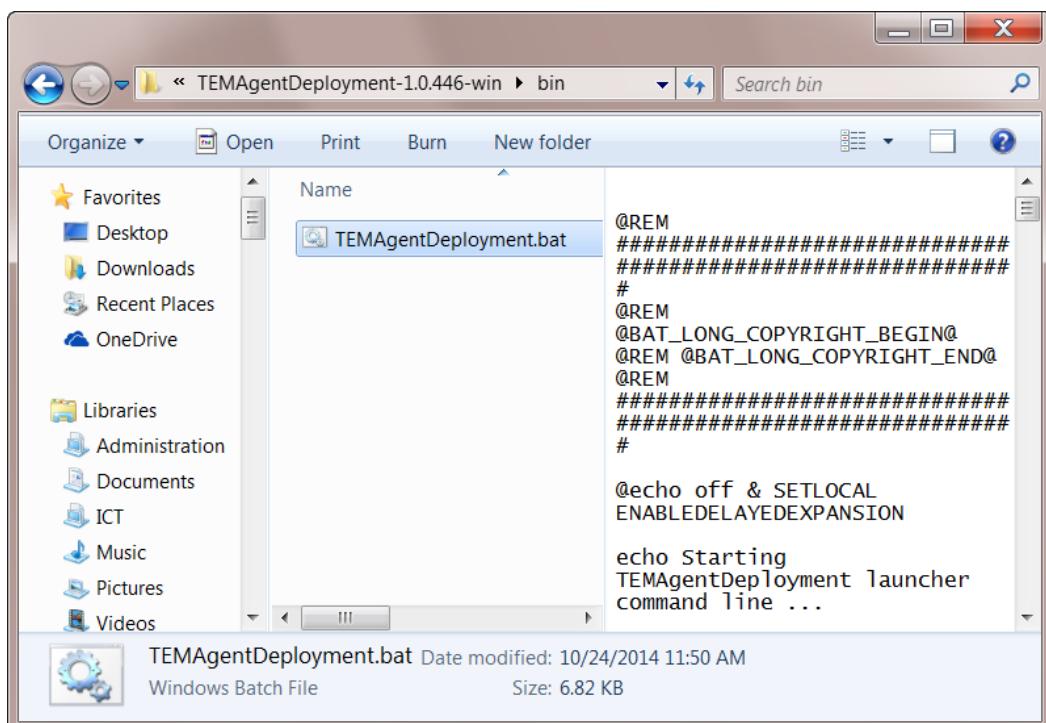
Installing IEM clients

Install IEM clients side-by-side with LM 7.5 agents on every endpoint that you want to include in the migrated environment. The following procedure shows how to install IEM clients by using IBM Endpoint Manager Deployment Wizard.

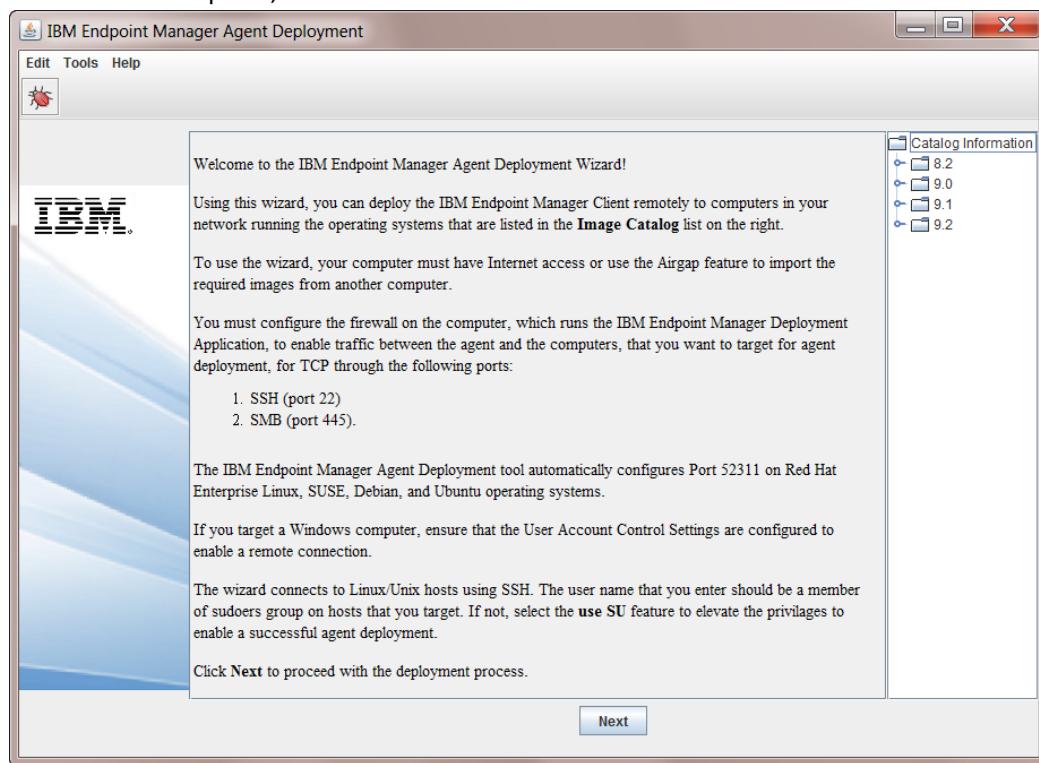
[See: This part provides answers to frequently asked questions.

How to download IBM Endpoint Manager Agent Deployment Wizard?]

1. To open the deployment tool, run the *TEMAgentDeployment.bat* script from the bin directory.

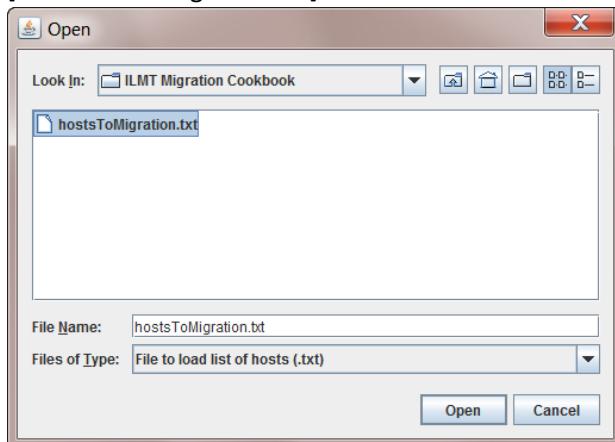


2. On the **Welcome** panel, click **Next**.



3. To load hosts on which you want to install IEM clients, click **Load Hosts**.
4. Open the file with hosts that you prepared earlier (*hostsToMigration.txt*).

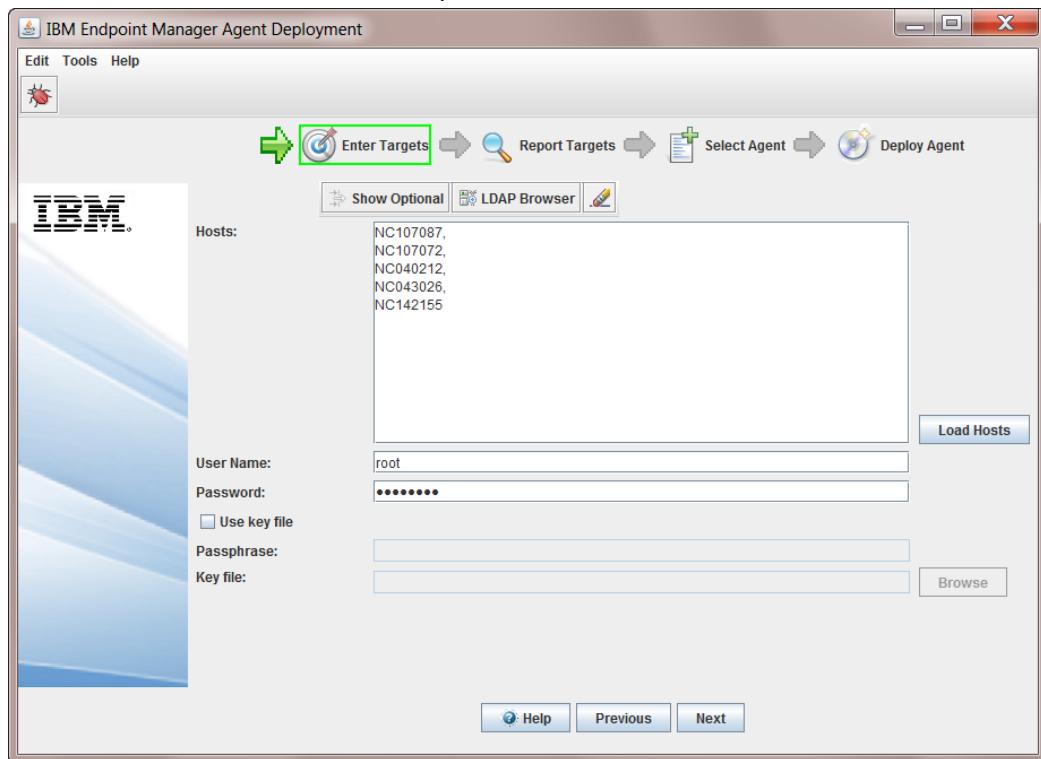
[See: *hostsToMigration.txt*]



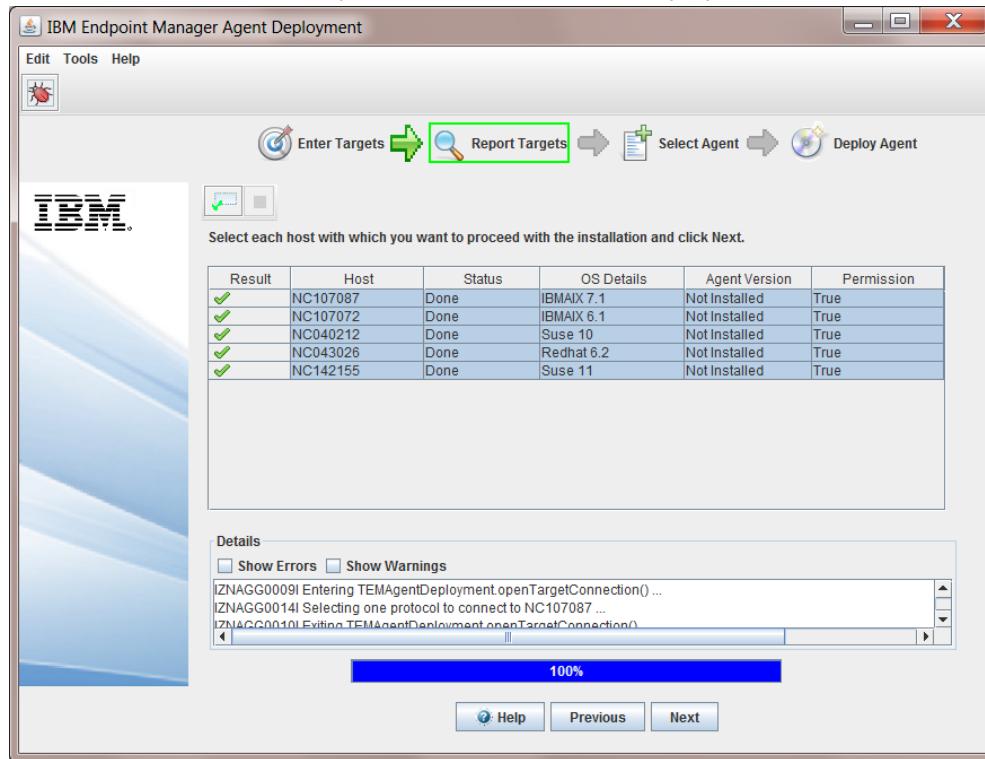
The results are displayed on the screen.

```
NC107087,  
NC107072,  
NC040212,  
NC043026,  
NC142155
```

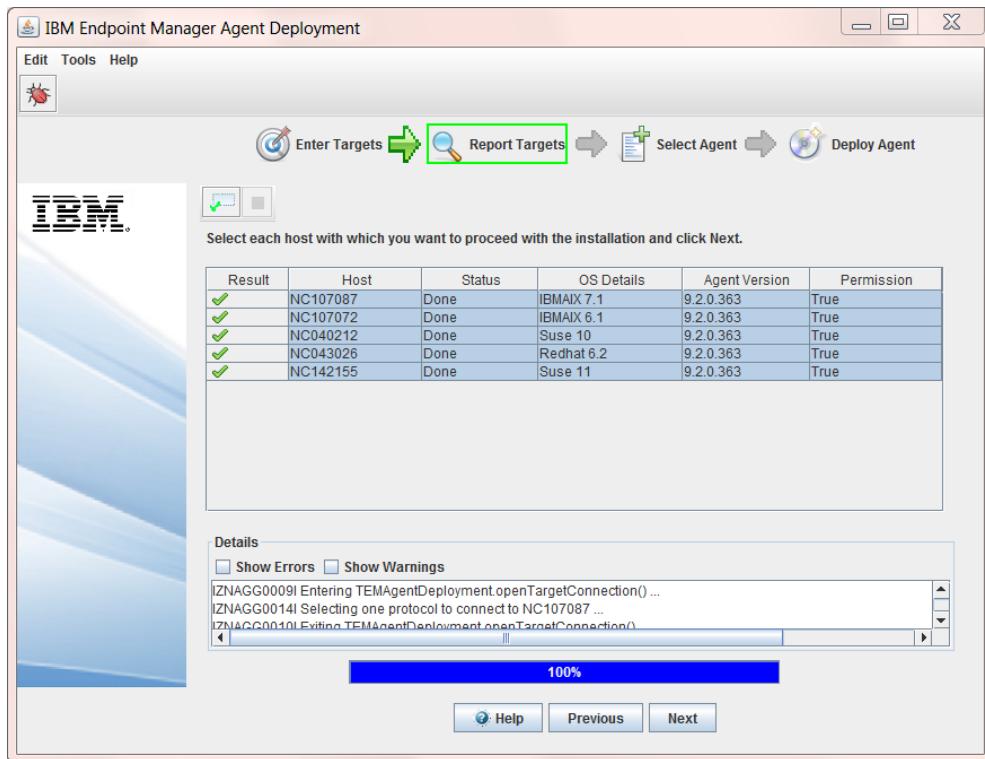
5. Provide the **User Name** and **Password**, and click **Next**.



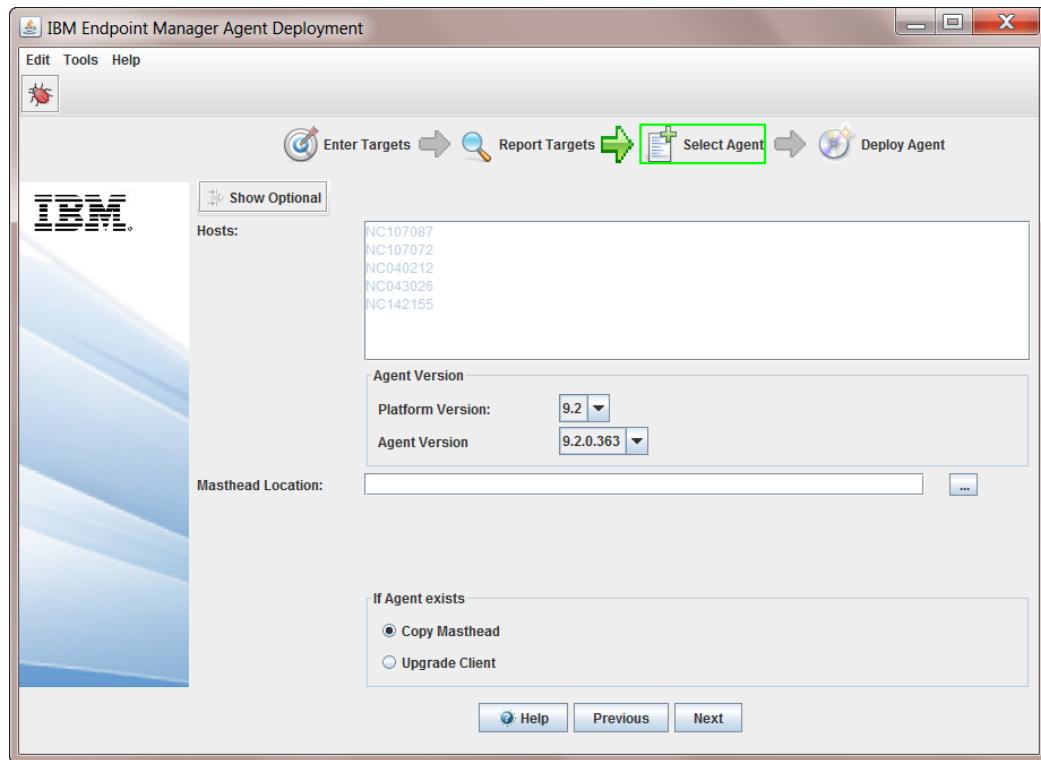
After a while, the task is completed and the results are displayed on the screen.



If the IEM client is already installed on a particular computer, appropriate information is displayed. Similarly, if you rerun the tool, information about clients that are already installed is displayed as shown below.



6. Click **Next**. A new panel opens.



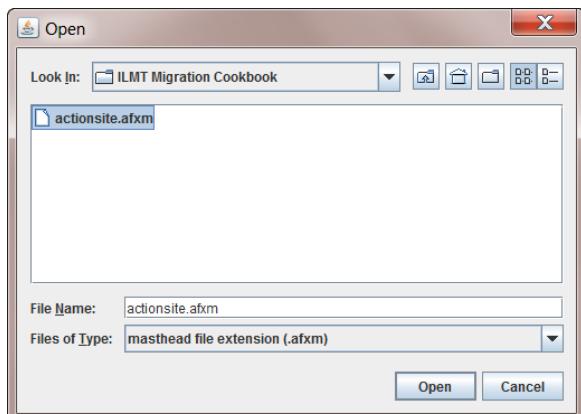
7. Optional: You can change the version of clients to be installed to the newest one, for example, 9.2.0.375. It is recommended to use clients with the same version as the IEM server. However, unlike in LMT 7.5, newer clients can work with an older server.



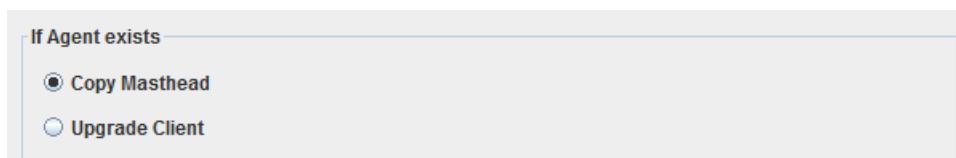
8. Provide the location of the masthead file. Browse for the *actionsitefile.afxm* file from your IEM server, for example, `/var/opt/BESInstallers/Client` and click **Open**.



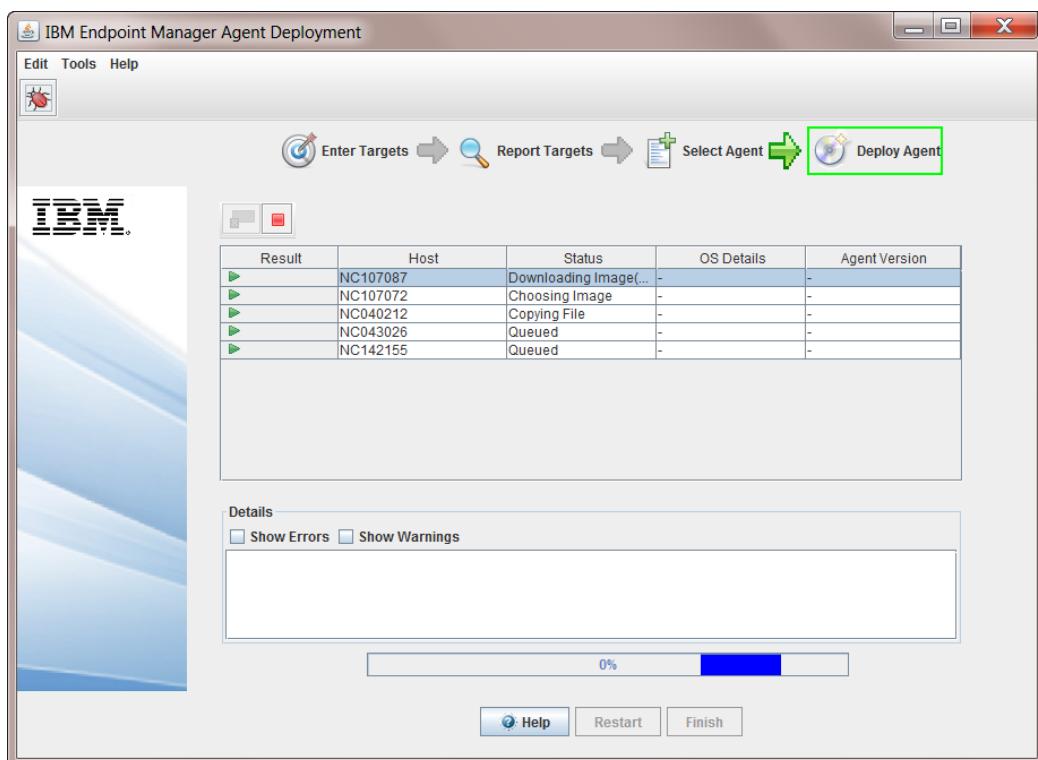
[See: How to download IBM Endpoint Manager masthead file?]



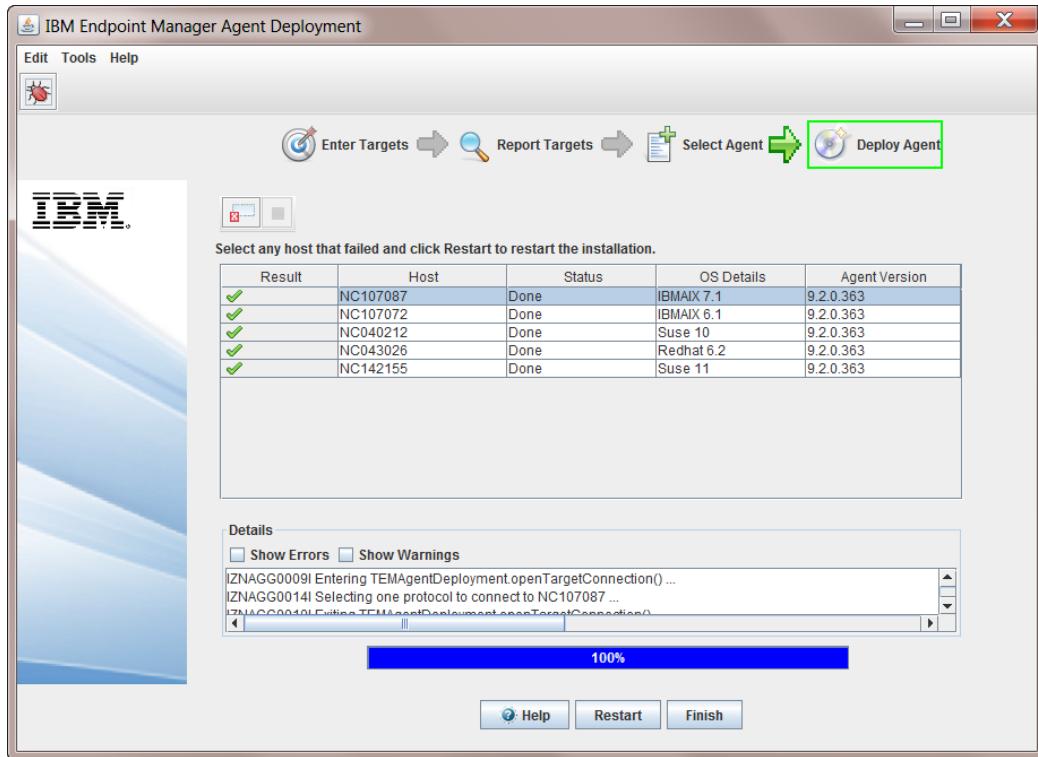
9. If you are installing a fresh environment, do not change anything in the **If Agent exists** section.



10. Click **Next**. The installation starts.



After some time (it depends on the number of clients to be deployed and the bandwidth of your intranet) the task should be finished.



Hint: It might happen that after the installation version of the agent is lower than the version that you chose. It happens when the chosen version is a refresh for specific platforms and the refresh was not applicable for the selected operating systems.

11. Click **Finish**.

Mapping the agents

Map the LMT 7.5 agents to recognize their IDs and versions. It is necessary to migrate your specific software inventory.

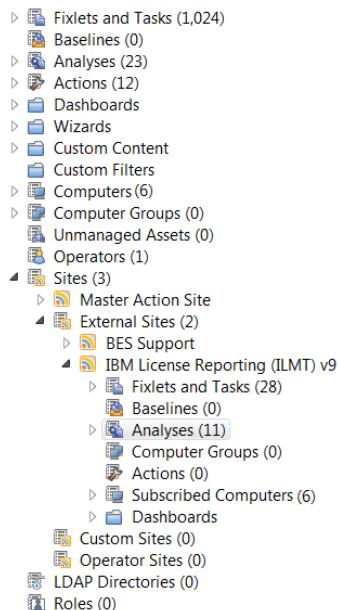
Activate the LMT/TAD4D 7.x Agent Mapping analysis

1. Open the IEM console.

[See: How to open the IBM Endpoint Manager console

How to open the IBM Endpoint Manager console]

2. In the navigation tree, go to **Sites > External Sites > IBM License Reporting (ILMT) v9 > Analyses**.



3. Select the LMT/TAD4D 7.x Agent Mapping analysis.

Status	Name	Site	Applicable Comput...	Activated By	Time Activated
Activated Globally	Installed Windows Applications	ILMT Development...	0	IEMAdmin	12/12/2014 2:10:01...
Not Activated	Scanner Trace Settings	ILMT Development...	5		
Not Activated	Environment Information	ILMT Development...	1		
Activated Globally	Scanner Information	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:02...
Activated Globally	Shared Disk Information	ILMT Development...	1	IEMAdmin	12/15/2014 1:30:03...
Activated Globally	Installed UNIX Packages	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:00...
Activated Globally	Software Scan Status	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:03...
Activated Globally	LMT/TAD4D 7.x Agent Mapping	ILMT Development...	6		
Not Activated	Excluded Directories	ILMT Development...	6		
Activated Globally	VM Manager Information	ILMT Development...	1	IEMAdmin	12/12/2014 2:09:59...
Activated Globally	Capacity Configuration for Linux on z/VM	ILMT Development...	0	IEMAdmin	12/12/2014 2:10:04...

4. Click **Activate**.



The analysis is activated globally.

Status	Name	Site	Applicable Comput...	Activated By	Time Activated
Activated Globally	Installed Windows Applications	ILMT Development...	0	IEMAdmin	12/12/2014 2:10:01...
Not Activated	Scanner Trace Settings	ILMT Development...	5		
Not Activated	Environment Information	ILMT Development...	1		
Activated Globally	Scanner Information	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:02...
Activated Globally	Shared Disk Information	ILMT Development...	1	IEMAdmin	12/15/2014 1:30:03...
Activated Globally	Installed UNIX Packages	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:00...
Activated Globally	Software Scan Status	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:03...
Activated Globally	LMT/TAD4D 7.x Agent Mapping	ILMT Development...	6	IEMAdmin	12/17/2014 5:41:28...
Not Activated	Excluded Directories	ILMT Development...	6		
Activated Globally	VM Manager Information	ILMT Development...	1	IEMAdmin	12/12/2014 2:09:59...
Activated Globally	Capacity Configuration for Linux on z/VM	ILMT Development...	0	IEMAdmin	12/12/2014 2:10:04...

The **Results** tab contains important data.

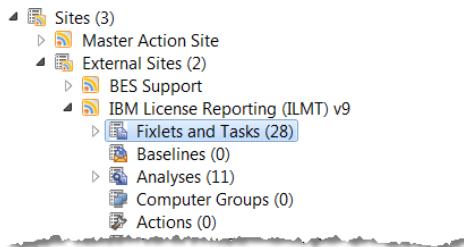
The screenshot shows a user interface for managing applicable computers. At the top, there are tabs: Description, Details, Results, and Applicable Computers (6). The 'Results' tab is active. Below the tabs is a 'View as list' dropdown. The main area displays a table titled 'Applicable Computers (6)' with the following columns: Computer Name, Computer ID, LMT/TAD4D 7.x Agent ID, LMT/TAD4D 7.x Agent V..., Operating System, Mapped LMT/T..., and Mapped LMT/T... (partially visible). The table lists seven entries, each with a small icon and some numerical values.

Computer Name	Computer ID	LMT/TAD4D 7.x Agent ID	LMT/TAD4D 7.x Agent V...	Operating System	Mapped LMT/T...	Mapped LMT/T...
NC040212	3699551	6437935815092250377	7.5.0.10	Linux SUSE Enterprise Server 10		
NC043026	16406514	6517468996944047313	7.5.0.121	Linux Red Hat Enterprise Server 6.2		
NC107072	4305947	6522628736889225225	7.5.0.121	AIX 6.1		
NC107087	10529700	5214932094795153417	7.5.0.121	AIX 7.1		
NC142155	13360905	6438530029416521225	7.2.2.2	Linux SUSE Enterprise Server 11		
NC9128110048	2064629	The agent is not installed.	The agent is not installed.	Linux Red Hat Enterprise Server 6.4		

Run the fixlet

After you activate the analysis, map LMT 7.5 agents to IEM 9.0 clients.

1. In the navigation tree, go to **Sites > External Sites > IBM License Reporting (ILMT) v9 > Fixlets and Tasks**.



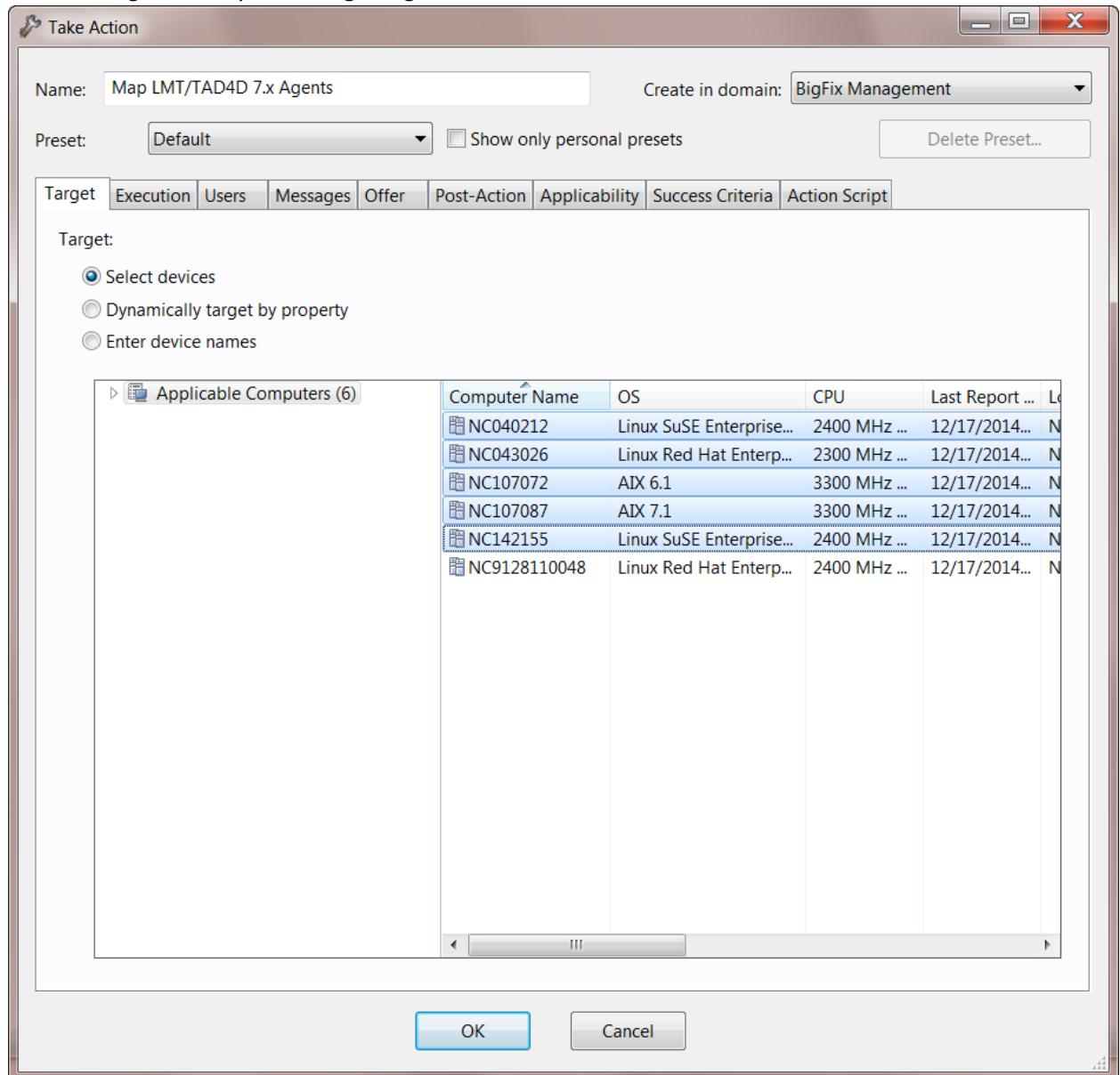
2. Select Map LMT/TAD4D 7.x Agents.

Name	Source Sev...	Site	Applicable ...	Ope...	Category	Download ...	Source	Sou...	So...
Remove Excluded Directories	Low	ILMT Development - for installer	6 / 6	0	Migration		IBM		
Map LMT/TAD4D 7.x Agents	Low	ILMT Development - for installer	6 / 6	0	Migration		IBM		
Uninstall Scanner	Low	ILMT Development - for installer	6 / 6	0	Scanner	<no downl...	IBM		
Add Excluded Directories	Low	ILMT Development - for installer	6 / 6	0	Migration		IBM		
Add Targeting Exception	Low	ILMT Development - for installer	5 / 6	0	Configurati...	<no downl...	IBM		
Edit Scanner Trace Settings	Low	ILMT Development - for installer	5 / 6	0	Troubleshoo...	<no downl...	IBM		
Configure Scan Timeout	Low	ILMT Development - for installer	5 / 6	0	Scanner	<no downl...	IBM		
Initiate Scanner Diagnostic Tool	Low	ILMT Development - for installer	5 / 6	0	Troubleshoo...	14.37 MB	IBM		
Configure Scan Cache	Low	ILMT Development - for installer	5 / 6	0	Scanner	<no downl...	IBM		

3. Click Take Action.



4. Choose all agents that you are migrating and click OK.



The dialog box shows the following configuration:

- Name:** Map LMT/TAD4D 7.x Agents
- Create in domain:** BigFix Management
- Preset:** Default
- Target:** Select devices (radio button selected)
- Execution, Users, Messages, Offer, Post-Action, Applicability, Success Criteria, Action Script** tabs are visible but not selected.
- Applicable Computers (6):**

Computer Name	OS	CPU	Last Report ...	Le...
NC040212	Linux SuSE Enterprise...	2400 MHz ...	12/17/2014...	N
NC043026	Linux Red Hat Enterp...	2300 MHz ...	12/17/2014...	N
NC107072	AIX 6.1	3300 MHz ...	12/17/2014...	N
NC107087	AIX 7.1	3300 MHz ...	12/17/2014...	N
NC142155	Linux SuSE Enterprise...	2400 MHz ...	12/17/2014...	N
NC9128110048	Linux Red Hat Enterp...	2400 MHz ...	12/17/2014...	N
- OK** and **Cancel** buttons at the bottom.

Wait until the action completes.

Action: Map LMT/TAD4D 7.x Agents

Stop | Copy | Export | Remove

Summary | Computers (5) | Target

Status

100.00% Completed (5 of 5 applicable computers)

Status	Count	Percentage
Completed	5	100.00%

Source

This action's source is the Task "[Map LMT/TAD4D 7.x Agents](#)" in the "ILMT Development - for installer" site.

Behavior

Messages
No user interface will be shown before running this action.
No message will be shown while running this action.

Users
This action will run independently of user presence.

- To check whether the results are available, go to **Sites > External Sites > IBM Licensing Reporting (ILMT) v9 > Analyses** and choose **Analysis LMT/TAD4D Agent Mapping**. The following two columns should be filled in:
 - Mapped LMT/TAD4D 7.x Agent ID
 - Mapped LMT/TAD4D 7.x Agent Version

Analyses

Search Analyses

Status	Name	Site	Applicable Comput...	Activated By	Time Activated
Activated Globally	Software Scan Status	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:03...
Activated Globally	LMT/TAD4D 7.x Agent Mapping	ILMT Development...	6	IEMAdmin	12/17/2014 5:41:28...
Not Activated	Excluded Directories	ILMT Development...	6		

Analysis: LMT/TAD4D 7.x Agent Mapping

Activate | Deactivate | Edit | Export | Hide Locally | Hide Globally | Remove

Description | Details | Results | Applicable Computers (6)

Computer Name	Computer ID	LMT/TAD4D 7.x Agent ID	LMT/TAD4D 7.x Agent V...	Operating System	Mapped LMT/T...	Mapped LMT/T...
NC040212	3699551	6437935815092250377	7.5.0.10	Linux SuSE Enterprise Server 10	643793581509...	7.5.0.10
NC043026	16406514	651746899694407313	7.5.0.121	Linux Red Hat Enterprise Server 6.2	651746899694...	7.5.0.121
NC107072	4305947	652262873688922525	7.5.0.121	AIX 6.1	652262873688...	7.5.0.121
NC107087	10529700	5214932094795153417	7.5.0.121	AIX 7.1	521493209479...	7.5.0.121
NC142155	13360905	6438530029416521225	7.2.2	Linux SuSE Enterprise Server 11	643853002941...	
NC9128110048	2064629	The agent is not installed.	The agent is not installed.	Linux Red Hat Enterprise Server 6.4		

Remember: You can remove 7.5 agents now, however we recommend keeping them working until you verify the migration. To avoid unnecessary workload, you may consider changing their software scanning schedule so that scans are not performed until the migration is over.

Scanning your environment

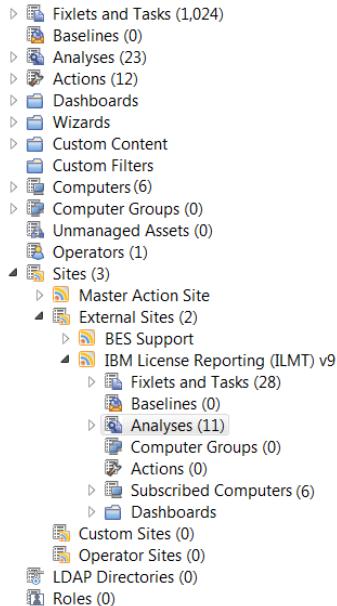
Scan your environment to discover hardware and software inventory by using the new infrastructure.

Activate necessary analyses

1. Open the IEM console.

[See: How to open the IBM Endpoint Manager console]

2. In the navigation tree, go to **Sites > External Sites > IBM License Reporting (ILMT) v9 > Analyses**.



3. Unless you have expert knowledge and know exactly whether a particular analysis is applicable for your environment, find all analyses that are not activated and activate them one by one.

Analyses					
Status	Name	Site	Applicable Comput...	Activated By	Time Activated
Activated Globally	Installed Windows Applications	ILMT Development...	0	IEMAdmin	12/12/2014 2:10:01...
Not Activated	Scanner Trace Settings	ILMT Development...	5		
Not Activated	Environment Information	ILMT Development...	1		
Activated Globally	Scanner Information	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:02...
Activated Globally	Shared Disk Information	ILMT Development...	1	IEMAdmin	12/15/2014 1:30:03...
Activated Globally	Installed UNIX Packages	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:00...
Activated Globally	Software Scan Status	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:03...
Activated Globally	LMT/TAD4D 7.x Agent Mapping	ILMT Development...	6	IEMAdmin	12/17/2014 5:41:28...
Not Activated	Excluded Directories	ILMT Development...	6		
Activated Globally	VM Manager Information	ILMT Development...	1	IEMAdmin	12/12/2014 2:09:59...
Activated Globally	Capacity Configuration for Linux on z/VM	ILMT Development...	0	IEMAdmin	12/12/2014 2:10:04...

Analysis: Excluded Directories

Activate Deactivate Edit Export | Hide Locally Hide Globally Remove

The screen should look like this.

The screenshot shows the ILMT Central Team interface. At the top, there's a search bar labeled 'Search Analyses'. Below it is a table titled 'Analyses' with columns: Status, Name, Site, Applicable Computer, Activated By, and Time Activated. The table lists various analyses such as 'Installed Windows Applications', 'Scanner Trace Settings', etc., all activated globally by the ILMT Development team on December 12, 2014.

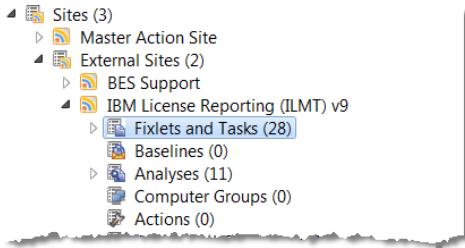
Below the table, a specific analysis is selected: 'Analysis: Installed Windows Applications'. The interface includes buttons for Activate, Deactivate, Edit, Export, Hide Locally, Hide Globally, and Remove. A tab bar at the bottom of this panel shows 'Description' (which is selected), Details, Results, and Applicable Computers (0).

The 'Description' tab contains the following text:

This analysis collects information about Windows applications that are installed on the endpoints in your infrastructure. The information is used for software identification purposes.

Install scanners on IEM clients

1. In the navigation tree, go to **Sites > External Sites > IBM License Reporting (ILMT) v9 > Fixlets and Tasks**.



2. Run the following fixlets:

- Install Scanner
- Initiate Software Scan
- Upload Software Scan Results
- Run Capacity Scan and Upload Results

For each fixlet perform the following steps:

a. Choose the right fixlet, for example, Initiate Software Scan.

The screenshot shows the 'Fixlets and Tasks' interface. A search bar at the top right says 'Search Fixlets and Tasks'. Below it is a table with columns: Name, Source Sev..., Site, Applicable ..., Ope..., Category, Download ..., Source, Sou..., So... . The 'Initiate Software Scan' fixlet is highlighted in grey. The table contains 21 rows of fixlets, mostly from 'ILMT Development - for installer'.

Below the table is a 'Task: Initiate Software Scan' window. It has tabs: Description, Details, Applicable Computers (5), Action History (1). The 'Applicable Computers (5)' tab is selected, showing a list of five computers:

Computer Name	OS	CPU	Last Report ...	Locked	BES Relay S...	Relay	User Name	RAM	Free Space ...	Total
NC043026	Linux Red Hat Enterp...	2300 MHz ...	12/17/2014...	No	Manual	NC9128110048.kr...	<none>	5856 MB	23693 MB	33355
NC107072	AIX 6.1	3300 MHz ...	12/17/2014...	No	Manual	NC9128110048.kr...	<none>	5120 MB	9345 MB	10496
NC107087	AIX 7.1	3300 MHz ...	12/17/2014...	No	Manual	NC9128110048.kr...	<none>	5120 MB	127 MB	11008
NC142155	Linux SuSE Enterprise...	2400 MHz ...	12/17/2014...	No	Manual	NC9128110048.kr...	<none>	3968 MB	28406 MB	33247
NC9128110048	Linux Red Hat Enterp...	2400 MHz ...	12/17/2014...	No	Manual	BES Root Server	<none>	8000 MB	49769 MB	80438

b. Click Take Action.



c. Select all computers and click OK.

The screenshot shows the 'Take Action' dialog box. At the top, there are fields: Name (Initiate Software Scan), Create in domain (BigFix Management), Preset (Fixlet Action Defaults), Show only personal presets (checkbox), Delete Preset... button. Below is a tab bar with Target, Execution, Users, Messages, Offer, Post-Action, Applicability, Success Criteria, Action Script. The Target tab is selected. Under Target, there are three radio buttons: Select devices (selected), Dynamically target by property, Enter device names. Below is a list of applicable computers:

Computer Name	OS	CPU	Last Report ...	Locked
NC043026	Linux Red Hat Enterp...	2300 MHz ...	12/17/2014...	N
NC107072	AIX 6.1	3300 MHz ...	12/17/2014...	N
NC107087	AIX 7.1	3300 MHz ...	12/17/2014...	N
NC142155	Linux SuSE Enterprise...	2400 MHz ...	12/17/2014...	N
NC9128110048	Linux Red Hat Enterp...	2400 MHz ...	12/17/2014...	N

Wait until the action is completed.

The screenshot shows the 'Action: Initiate Software Scan' interface. At the top, there are buttons for Stop, Copy, Export, and Remove. Below that, tabs for Summary, Computers (5), and Target are visible. The main area is divided into sections: Status, Source, Behavior, and Details. The Status section shows '100.00% Completed (5 of 5 applicable computers)' with a table:

Status	Count	Percentage
Completed	5	100.00%

The Source section indicates the action's source is the Task "Initiate Software Scan" in the "ILMT Development - for installer" site. The Behavior section contains sections for Messages, Users, Execution, and Post-Action. The Details section provides technical details:

ID	00-56
Domain	BigFix Management
Type	Single Action
State	Open
Issued	12/17/2014 4:20:08 PM by IEMAdmin
Parameters	cpuThresholdEnabled false

Run the VM Manager Tool fixlet

VM Manager Tool should be automatically installed on the computer where the Endpoint Manager is installed. If it was not installed for some reason, use the following procedure.

1. Check if the VM Manger Tool is installed. If not, install it.

The screenshot shows the 'Fixlets and Tasks' interface. A specific fixlet, 'Install VM Manager Tool', is highlighted. Below the main table, a task window titled 'Task: Install VM Manager Tool' is open, showing a single action entry in the 'Action History' tab.

Name	Source Sev...	Site	Applicable ...	Ope...	Category	Download ...	Sour...
Add Excluded Directories	Low	ILMT Development - for installer	6 / 6	0	Migration	<no downl...	IBM
Add Targeting Exception	Low	ILMT Development - for installer	6 / 6	0	Configurati...	<no downl...	IBM
Configure Scan Cache	Low	ILMT Development - for installer	6 / 6	0	Scanner	<no downl...	IBM
Configure Scan Timeout	Low	ILMT Development - for installer	6 / 6	0	Scanner	<no downl...	IBM
Discover Remote Shared Disks	High	ILMT Development - for installer	6 / 6	1	Scan Mana...	<no downl...	IBM
Download IBM License Metric Tool	High	ILMT Development - for installer	1 / 6	0	Deployment	313 MB	IBM
Edit Scanner Trace Settings	Low	ILMT Development - for installer	5 / 6	0	Troublesh...	<no downl...	IBM
Gather Environment Information	Low	ILMT Development - for installer	1 / 6	0	Troublesh...	<no downl...	IBM
Initiate Scanner Diagnostic Tool	Low	ILMT Development - for installer	5 / 6	0	Troublesh...	14.37 MB	IBM
Initiate Software Scan	High	ILMT Development - for installer	6 / 6	2	Scanner	<no downl...	IBM
Install VM Manager Tool	Low	ILMT Development - for installer	3 / 6	0	VM Manag...	419 MB	IBM
Map LMT/TAD4D 7.x Agents	Low	ILMT Development - for installer	6 / 6	0	Migration		IBM

Task: Install VM Manager Tool

Task: Install VM Manager Tool																	
<input type="button" value="Take Action"/> <input type="button" value="Edit"/> <input type="button" value="Copy"/> <input type="button" value="Export"/> Hide Locally Hide Globally <input type="button" value="Remove"/>																	
<input type="button" value="Description"/> <input type="button" value="Details"/> <input type="button" value="Applicable Computers (3)"/> <input type="button" value="Action History (1)"/>																	
<table border="1"> <thead> <tr> <th>Action History (1)</th> <th>Time Issued</th> <th>State</th> <th>% Complete</th> <th>Name</th> <th>Site</th> </tr> </thead> <tbody> <tr> <td></td> <td>12/12/2014 2:09:54 ...</td> <td>Stopped</td> <td>100.00% (1/1)</td> <td>Install VM Manager Tool</td> <td>ILMT Development...</td> </tr> </tbody> </table>						Action History (1)	Time Issued	State	% Complete	Name	Site		12/12/2014 2:09:54 ...	Stopped	100.00% (1/1)	Install VM Manager Tool	ILMT Development...
Action History (1)	Time Issued	State	% Complete	Name	Site												
	12/12/2014 2:09:54 ...	Stopped	100.00% (1/1)	Install VM Manager Tool	ILMT Development...												

Connected to 'ilmt9Migration' as user 'IEMAdmin'

2. Run the **Upload VM Manager Tool Scan Results** fixlet if it is applicable.

The screenshot shows the 'Fixlets and Tasks' interface. A specific fixlet, 'Upload VM Manager Tool Scan Results', is highlighted. Below the main table, a task window titled 'Task: Upload VM Manager Tool Scan Results' is open, showing a single action entry in the 'Action History' tab.

Name	Source Sev...	Site	Applicable ...	Ope...	Category	Download ...	Sour...
Initiate Scanner Diagnostic Tool	Low	ILMT Development - for installer	5 / 6	0	Troublesh...	14.37 MB	IBM
Initiate Software Scan	High	ILMT Development - for installer	5 / 6	2	Scanner	<no downl...	IBM
Install VM Manager Tool	Low	ILMT Development - for installer	3 / 6	0	VM Manag...	419 MB	IBM
Map LMT/TAD4D 7.x Agents	Low	ILMT Development - for installer	6 / 6	0	Migration		IBM
Remove Excluded Directories	Low	ILMT Development - for installer	6 / 6	0	Migration		IBM
Software Catalog Update	High	ILMT Development - for installer	1 / 6	0	Deployment	15.33 MB	IBM
Uninstall Scanner	Low	ILMT Development - for installer	6 / 6	0	Scanner	<no downl...	IBM
Uninstall VM Manager Tool	Low	ILMT Development - for installer	1 / 6	0	VM Manag...	<no downl...	IBM
Upgrade to the newest version of IBM License Metric Tool 9.x	High	ILMT Development - for installer	1 / 6	0	Deployment	313 MB	IBM
Upload Software Scan Results	High	ILMT Development - for installer	3 / 6	1	Scanner	<no downl...	IBM
Upload VM Manager Tool Scan Results	Low	ILMT Development - for installer	1 / 6	1	VM Manag...	284 KB	IBM

Task: Upload VM Manager Tool Scan Results

Task: Upload VM Manager Tool Scan Results																	
<input type="button" value="Take Action"/> <input type="button" value="Edit"/> <input type="button" value="Copy"/> <input type="button" value="Export"/> Hide Locally Hide Globally <input type="button" value="Remove"/>																	
<input type="button" value="Description"/> <input type="button" value="Details"/> <input type="button" value="Applicable Computers (1)"/> <input type="button" value="Action History (1)"/>																	
<table border="1"> <thead> <tr> <th>Action History (1)</th> <th>Time Issued</th> <th>State</th> <th>% Complete</th> <th>Name</th> <th>Site</th> </tr> </thead> <tbody> <tr> <td></td> <td>12/12/2014 2:09:55 ...</td> <td>Open</td> <td>100.00% (1/1)</td> <td>Upload VM Manager Tool Scan Results</td> <td>ILMT Development...</td> </tr> </tbody> </table>						Action History (1)	Time Issued	State	% Complete	Name	Site		12/12/2014 2:09:55 ...	Open	100.00% (1/1)	Upload VM Manager Tool Scan Results	ILMT Development...
Action History (1)	Time Issued	State	% Complete	Name	Site												
	12/12/2014 2:09:55 ...	Open	100.00% (1/1)	Upload VM Manager Tool Scan Results	ILMT Development...												

Connected to 'ilmt9Migration' as user 'IEMAdmin'

Initiate VM Managers

1. Open LMT 9.0 interface.

[See also: How to open IBM License Metric Tool 9.0 web user interface]

2. To initiate the VM Manager Tool, go to **Management > VM Managers**. After you open the panel, the code that initiates VM Managers is run automatically.

Operation Status	VM Manager Type	VM Manager URL	User Name	Last Successful Operation

Synchronize information between IEM database and ILMT database

1. To synchronize data between the IEM database and LMT database, go to **Management > Data Imports**.

Start Time	User Name	Duration
12/17/2014 12:00 AM	Scheduled	0:01:32
12/16/2014 12:00 AM	Scheduled	0:01:29
12/15/2014 12:00 AM	Scheduled	0:01:11
12/14/2014 12:00 AM	Scheduled	0:01:17
12/13/2014 12:00 AM	Scheduled	0:01:18
12/12/2014 02:12 PM	admin	0:24:10

```

2014-12-16 23:01:43 (+0:00:00:000) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Starting execution of step: VUTImport
2014-12-16 23:01:43 (+0:00:00:045) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Finished execution of step: VUTImport, with total time: 45 ms.
2014-12-16 23:01:43 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Starting execution of step: PartNumbersImport
2014-12-16 23:01:43 (+0:00:00:014) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Finished execution of step: PartNumbersImport, with total time: 14 ms.
2014-12-16 23:01:43 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractNoTransactionElAction:process): Starting execution of step: ImportCapacity
2014-12-16 23:01:47 (+0:00:04:705) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.CriScanImportStep:processCapacitySana): STATISTICS: 0 file packages were uncompressed. 0 files with capacity scan data were successfully imported. For 0 files the import failed.
2014-12-16 23:01:47 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractNoTransactionElAction:process): Finished execution of step: ImportCapacity, with total time: 4700 ms.
2014-12-16 23:01:47 (+0:00:00:000) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractNoTransactionElAction:process): Starting execution of step: ImportVmManScans
2014-12-16 23:01:48 (+0:00:00:044) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.VmManagersScanImportStep:execute): STATISTICS: 0 files from 0 VM Managers were processed. Processed clusters: 0, skipped clusters: 0, processed hosts: 0, skipped hosts: 0, processed guests: 0 (includes 0 guests without VM hierarchy changes), skipped guests: 0
2014-12-16 23:01:48 (+0:00:00:047) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Starting execution of step: ImportVmManScans, with total time: 445 ms.
2014-12-16 23:01:49 (+0:00:00:009) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Starting execution of step: RefreshHardwareTable
2014-12-16 23:01:49 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.RefreshHardwareTable:process): Starting execution of step: RefreshHardwareTable, with total time: 867 ms.
2014-12-16 23:01:49 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Starting execution of step: RunInventoryBuilder
2014-12-16 23:01:52 (+0:00:03:845) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.RunInventoryBuilderAction:doAction): STATISTICS: 0 product instances were processed.
2014-12-16 23:01:52 (+0:00:00:003) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractElAction:process): Finished execution of step: RunInventoryBuilder, with total time: 3648 ms.
2014-12-16 23:01:52 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractNoTransactionElAction:process): Starting execution of step: RunReaggregation
2014-12-16 23:01:52 (+0:00:00:077) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractNoTransactionElAction:process): Finished execution of step: RunReaggregation, with total time: 77 ms.
2014-12-16 23:01:52 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.RunAggregationAction:execute): STATISTICS: 2 days were aggregated. Average number of aggregated PVU products: 0, average number of PVU products per server: 0, average number of PVU events: 0. Average number of aggregated RVU products: 1, average number of RVU products per server: 1, average number of RVU events: 1
2014-12-16 23:02:01 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.AbstractNoTransactionElAction:process): Finished execution of step: RunAggregation, with total time: 8673 ms.
2014-12-16 23:02:02 (+0:00:00:001) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.UpdateComputerSystems:process): Starting execution of step: UpdateComputerSystems
2014-12-16 23:02:02 (+0:00:00:004) [INFO] ((ImportThread) com.ibm.license.mgmt.elt.core.actions.UpdateComputerSystems:process): Finished execution of step: UpdateComputerSystems, with total time: 964 ms.
2014-12-16 23:02:12 (+0:00:10:208) [INFO] ILMT import registered tasks: ["MergeComputersAction", "VUTImport", "PartNumbersImport", "ImportCapacity", "RefreshHardwareTable", "RunInventoryBuilder", "RunReaggregation", "RunAggregation", "UpdateComputerSystems"]
2014-12-16 23:02:12 (+0:00:00:001) [INFO] Running LMT ETL: Success
2014-12-16 23:02:12 (+0:00:00:111) [INFO] Import succeeded in 0:01:32

```

2. Click **Import Now**.

Import Now

After some time, the import is completed.

Import Settings

Enabled
Imports per day: 1 (times specified in UTC +01:00)
12:00AM

Import History

Start Time	User Name	Duration
12/17/2014 04:59 PM	admin	0:05:04
12/17/2014 12:00 AM	Scheduled	0:01:32
12/16/2014 12:00 AM	Scheduled	0:01:29
12/15/2014 12:00 AM	Scheduled	0:01:11
12/14/2014 12:00 AM	Scheduled	0:01:17
12/13/2014 12:00 AM	Scheduled	0:01:18
12/12/2014 02:12 PM	admin	0:24:10

Start Time: 12/17/2014 03:59 PM
Status: Successful
Duration: 0:05:04

Import Log:

```
# Logfile created on 2014-12-17 15:59:31 +0000 by logger rb/v1.2.7
2014-12-17 15:59:31 (+0:00:00.000) INFO: TEMA version: 8.0.1.2-201412-0244
2014-12-17 15:59:32 (+0:00:00.469) INFO: Calling Model_before_snapshot: Start
2014-12-17 15:59:42 (+0:00:10.172) INFO: Calling Model_before_snapshot: Success
2014-12-17 15:59:42 (+0:00:00.001) INFO: Install software catalog to staging tables: Start
2014-12-17 15:59:42 (+0:00:00.001) INFO: Install software catalog to staging tables: Success
2014-12-17 15:59:42 (+0:00:00.001) INFO: Calling SAM_Catalog_before_snapshot: Start
2014-12-17 15:59:42 (+0:00:00.001) INFO: Calling SAM_Catalog_before_snapshot: Success
2014-12-17 15:59:42 (+0:00:00.001) INFO: Calling SAM_PartNumber_before_snapshot: Start
2014-12-17 15:59:42 (+0:00:00.003) INFO: Calling SAM_PartNumber_before_snapshot: Success
2014-12-17 15:59:42 (+0:00:00.003) INFO: Calling SAM_CISwConfigFile_before_snapshot: Start
2014-12-17 15:59:42 (+0:00:00.052) INFO: Calling SAM_CISwConfigFile_before_snapshot: Success
2014-12-17 15:59:42 (+0:00:00.003) INFO: Calling SAM_ContractFact_before_snapshot: Start
2014-12-17 15:59:42 (+0:00:00.164) INFO: Calling SAM_ContractFact_before_snapshot: Success
2014-12-17 15:59:42 (+0:00:00.000) INFO: Check for computer_health_property_mappings: Start
2014-12-17 15:59:42 (+0:00:00.071) INFO: Check for computer_health_property_mappings: Success
2014-12-17 15:59:42 (+0:00:00.005) INFO: Determine models which need catalog update: Start
2014-12-17 15:59:42 (+0:00:00.001) INFO: Determine models which need catalog update: Success
2014-12-17 15:59:42 (+0:00:00.001) INFO: Importing charge units as needed: Start
2014-12-17 15:59:42 (+0:00:00.003) INFO: Importing charge units as needed: Success
2014-12-17 15:59:42 (+0:00:00.000) INFO: Initialize datasource Data Source: Start
2014-12-17 15:59:43 (+0:00:00.523) INFO: Initialize datasource Data Source: Success
```

Scanning your environment is finished.

Part 2: Migration of the required data

This part explains how to run the migration.

Migration is performed by the migration tool that can export information to CSV files, run a simulation that allows you to see the expected results without saving the information in the target infrastructure, and migrate the information directly to LMT version 9.0.1.2.

After you install LMT 9.0.1.2 or upgrade from a previous version of LMT 9.x, migration binaries can be found in the migration/product folder, for example:

```
/opt/IBM/LMT/migration/product
```

Configure the migration properties

Before you run any of the migration stages, appropriately prepare the configuration file. To do this, edit the *migration.properties* file and fill it with correct values. It is a very important and mandatory step. The migration starts only after you properly fill in the response file. The meaning of each parameter and hints regarding the expected values are explained separately.

[See: Response file parameters]

This is an example of the response file. The password and token are provided in plain text. They are encrypted after the first run.

```
LMT_TAD4D_DB_HOST=nc107087
LMT_TAD4D_DB_PORT=50001
LMT_TAD4D_DB_USER=db2inst1
LMT_TAD4D_DB_PASSWORD={encrypted}mMlepaefaae++jjpoi4874e==
LMT_TAD4D_DB_TIMEOUT=15000
IEM_HOST=localhost
IEM_PORT=52311
IEM_PROTOCOL=https
IEM_USER=IEMAdmin
IEM_USER_PASSWORD={encrypted}keWW984o1l++2kwp82ssu1==
IEM_PROTOCOL_TIMEOUT=120000
LMT_SUA_TOKEN={encrypted}kmada3ji46op047IY75Gy58g8F8Ttrfhu9j709mmOOI3hygT2fRDyr6ed9F8ghJP2
LMT_SUA_PORT=9081
LMT_SUA_PROTOCOL=https
LMT_SUA_SITE=IBM License Reporting
LMT_SUA_PROTOCOL_TIMEOUT=120000
```

Export to CSV files

The first stage of migration is export to CSV files. It is a pre-validation task. To run the export, use the following command:

```
./migration.sh -export
```

```
Linux RH root /opt/ibm/LMT/migration/product # ./migration.sh -export

#####
# Licensed Materials - Property of IBM
# IBM License Metric Tool
# 5725-F57 IBM Endpoint Manager for Software Use Analysis
# (C) Copyright IBM Corp. 2014.
# All Rights Reserved. US Government Users Restricted Rights - Use,
# duplication or disclosure restricted by GSA ADP Schedule Contract with
# IBM Corp.
# For more detailed help, refer to product manual.
#####

Start of migration.
Exporting agents.
Exporting agent mappings.
Exporting software exclusions.
Exporting software bundlings.
Exporting VM managers.
Exporting excluded directories.

Migration summary:
Agents exported: 6
Agent mappings exported: 0
Software bundlings exported: 12
Software exclusions exported: 10
VM Managers exported: 8
Excluded directories exported: 6

Migration completed successfully.
Linux RH root /opt/ibm/LMT/migration/product #
```

Generated CSV files

As a result, six files are generated:

- agents.csv
- bundles.csv
- excludedsoftware.csv
- agentsmap.csv
- excludeddirectories.csv
- vmmangers.csv

```
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product # ls -la *.csv
-rw-r--r-- 1 root root 739 Dec 19 11:44 agents.csv
-rw-r--r-- 1 root root 93 Dec 19 11:44 agentsmap.csv
-rw-r--r-- 1 root root 3386 Dec 19 11:44 bundles.csv
-rw-r--r-- 1 root root 561 Dec 19 11:44 excludeddirectories.csv
-rw-r--r-- 1 root root 1359 Dec 19 11:44 excludedsoftware.csv
-rw-r--r-- 1 root root 860 Dec 19 11:44 vmmanagers.csv
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product #
```

Content of the CSV files

agents.csv

The list of all LMT/TAD4D 7.5 agents.

	A	B	C	D	E	F
1	ID	Version	Host Name	IP Address	Operating System	
2	5214932094795150000	7.5.0.121	NC107087		AIX 7.1	
3	6437935815092250000	7.5.0.10	NC040212		LINUX SUSE Linux Enterprise Server 10 (i586) VERSION = 10 PATCHLEVEL = 2 (2.6.16.60-0.21-bigsm)	
4	6438530029416520000	7.2.2.2	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)	
5	6517468996944040000	7.5.0.121	NC043026		LINUX Red Hat Enterprise Linux Server release 6.2 (Santiago) (2.6.32-220.el6.x86_64)	
6	6522628736889220000	7.5.0.121	NC107072		AIX 6.1	
7	6535577450540170000	7.5.0.121	NC142183		LINUX Red Hat Enterprise Linux Server release 6.0 (Santiago) (2.6.32-71.el6.x86_64)	
8						

agentsmap.csv

Mappings of agents that were created after running the LMT/TAD4D 7.x Agents Mapping analysis.

	A	B	C	D	E	F
1	IEM Client ID	LMT/TAD4D 7.x Agent ID	LMT/TAD4D 7.x Agent Version	Host Name	Operating System	
2	13360905	6438530029416521225	7.2.2.2		NC142155	Linux SuSE Enterprise Server 11
3	4305947	6522628736889225225	7.5.0.121		NC107072	AIX 6.1
4	3699551	6437935815092250377	7.5.0.10		NC040212	Linux SuSE Enterprise Server 10
5	16406514	6517468996944047313	7.5.0.121		NC043026	Linux Red Hat Enterprise Server 6.2
6	10529700	5214932094795153417	7.5.0.121		NC107087	AIX 7.1
7						
8						

bundles.csv

Software bundlings.

	A	B	C	D
1	LMT/TAD4D 7.x Agent ID	Component GUID	Product GUID	Compon
2	5214932094795150000	75f42b915f984c12a056b392b5ed75a4	2dd66c8c0ff74660aaaf2d34eb9ab2b21	
3	6437935815092250000	f06cb9fac7a147ee8105c87b088fa73c	e76d62bfe1884d9da3a0dfc26812d940	
4	6438530029416520000	694e4b2c7b2145fea1c64ea36527722	a0fc6efee6124ac58c637ff5639481da	
5	6535577450540170000	2f677168c3774e60876b06409e2ed37	bb4dd20b23a34136a046a94c26a7c4ae	
6	6438530029416520000	2e20f76ba7a34dd9bdca342ccf567cd8	a0fc6efee6124ac58c637ff5639481da	
7	6535577450540170000	25f5f73439e9476c99068f9570fb7a1	d188c099d0684fbdaada0752bfa1ae47	
8	6438530029416520000	94a5697450f445969b04a2708cd08738	a0fc6efee6124ac58c637ff5639481da	
9	6438530029416520000	deb1ba8a5e2a4e5697fad28c9b9e8e45	64460404e7bc4d22946a3f021576310b	
10	6437935815092250000	165ec2b3f3ac43fb8f843c54c0f35ed1	7c936dc3400d49c89c5c933d1327bdab	
11	5214932094795150000	3289337fe15f424faede756e54e34d8b	b5f3bdfa9be942e89ae6698d94f396bf	
12	5214932094795150000	9d9fd1ee4a204e3184de2c97d26f3c3c	3c0b9caa41342cdb1aecc24f8ffc261	
13	5214932094795150000	9ac990b10a0f4dc683bcd1038a8195a	10d6dce89c044d4e903f03c3dfc3378c	
14				
15				

A	B	C	D	E	F
Component Path	Component Name		Component Version	Product Name	
1 LM\CD\Pr\# 752d	IBM solidDB		6.5	AIX Express	
2 # f0fe7	IBM Optim Test Data Management Solution		7.2	IBM InfoSphere	
3 # 69a0	IBM Tivoli System Automation - Base		2.2	IBM License Metric	
5 # 2f6bb	IBM DB2 Workgroup Server Edition - CPU		9.7	IBM DB2	
6 # 2ea0	IBM WebSphere Application Server		7	IBM License Metric	
7 # 25d1	IBM DB2 Workgroup Server Edition PVU Option		9.1	IBM DB2	
8 # 94a0	IBM DB2 Enterprise Server Edition - CPU Option		9.1	IBM License Metric	
9 # de64	IBM Domino Enterprise Server		8.5	IBM WebSphere Portal Extend	
10 # 167c	IBM InfoSphere Information Services Director		8.7	IBM InfoSphere	
11 # 32b5	IBM WebSphere MQ Server		7.5	IBM Tivoli Asset Discovery	
12 # 9d3c	IBM Tivoli Software Knowledge Base Toolkit - Content Management Server		1.2	IBM Tivoli Asset Management	
13 # 9a10	IBM Tivoli Asset Management for IT - Runtime Server		7.2	IBM Tivoli Asset Management for IT	
14					
15					

A	B	C	D	E	F	G	H	I
LM	Cd	Pr	Cd	Cd	Cd	Product Name	Release Version	Host Name
1	# 752d	IBI	7	AI	7	AIX Express Edition	7.1	NC107087
2	# f0fe7	IBI	7	AI	7	IBM InfoSphere Optim Test Data Management Solution NonRelational Connectors	7.2	NC040212
3	# 69a0	IBI	2	IBI	2	IBM License Metric Tool	7.5	NC142155
5	# 2f6bb	IBI	#	IBI	7	IBM DB2 Workgroup Server Edition PVU Option	9.7	NC142183
6	# 2ea0	IBI	7	IBI	7	IBM License Metric Tool	7.5	NC142183
7	# 25d1	IBI	9	IBI	9	IBM DB2 Workgroup Server Edition PVU Option	9.1	NC142155
8	# 94a0	IBI	9	IBI	9	IBM License Metric Tool	7.5	NC142155
9	# de64	IBI	9	IBI	9	IBM WebSphere Portal Extend	7	NC142155
10	# 167c	IBI	9	IBI	9	IBM InfoSphere Information Services Director for NonProduction Environments	8.7	NC107087
11	# 32b5	IBI	8	IBI	8	IBM Tivoli Workload Scheduler	9.1	NC107087
12	# 9d3c	IBI	1	IBI	1	IBM Tivoli Asset Discovery for Distributed	7.5	NC107087
13	# 9a10	IBI	7	IBI	7	IBM Tivoli Asset Management for IT for Internal Service Providers FCT	7.2	NC107087
14								
15								

A	B	C	D	E	F	G	H	I	J	K	L	M
LM	Cd	Pr	Cd	Cd	Cd	Cd	Pri	Re	Host Name	LMT/TAD4D 7.x Agent IP Address	Operating System	Report Group ID
1	# 752d	IBI	7	AI	7	NC107087			AIX 7.1			1
2	# f0fe7	IBI	7	AI	7	NC040212			LINUX SUSE Linux Enterprise Server 10 (i586) VERSION = 10 PATCHLEVEL = 2 (2.6.16.60-0.21-bigsmp)			1
3	# 69a0	IBI	2	IBI	2	NC142155			LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)			1
5	# 2f6bb	IBI	#	IBI	7	NC142183			LINUX Red Hat Enterprise Linux Server release 6.0 (Santiago) (2.6.32-71.el6.x86_64)			1
6	# 2ea0	IBI	7	IBI	7	NC142155			LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)			1
7	# 25d1	IBI	9	IBI	9	NC142183			LINUX Red Hat Enterprise Linux Server release 6.0 (Santiago) (2.6.32-71.el6.x86_64)			1
8	# 94a0	IBI	9	IBI	9	NC142155			LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)			1
9	# de64	IBI	9	IBI	9	NC142155			LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)			1
10	# 167c	IBI	9	IBI	9	NC040212			LINUX SUSE Linux Enterprise Server 10 (i586) VERSION = 10 PATCHLEVEL = 2 (2.6.16.60-0.21-bigsmp)			1
11	# 32b5	IBI	8	IBI	8	NC107087			AIX 7.1			1
12	# 9d3c	IBI	1	IBI	8	NC107087			AIX 7.1			1
13	# 9a10	IBI	7	IBI	7	NC107087			AIX 7.1			1
14												

excludeddirectories.csv

Excluded directories.

A	B	C	D	E	F	G
Excluded Directory	Platform	LMT/TAD4D 7.x Agent ID	IP Address	Host Name	Operating System	
1 *:\$Recycle.Bin*.*:\RECYCLER*.*:\recycler*.*:\\$NTServicePackUninstall*\$	WINDOWS					
3 */cache/out-of-date/*.*:/tmp/*;/proc/*	HP_UX					
4 */cache/out-of-date/*.*:/tmp/*;/proc/*	SOLARIS					
5 */eznrm/*.*:/tmp/*;/proc/*	AIX					
6 */cache/out-of-date/*.*:/tmp/*;/QNTC/*;/QSYS.LIB/QRCL.LIB/*;/proc/*	I5					
7 */cache/out-of-date/*.*:/tmp/*;/proc/*	LINUX					
8 a						

excludedsoftware.csv

Excluded software.

A	B	C	D		
1	LMT/TAD4D 7.x Agent ID	Product GUID	Reason for Exclusion	Comment	Product Na
2	5214932094795150000	a0fc6efee6124ac58c637ff5639481da	6	Migration	IBM License
3	6438530029416520000	a0fc6efee6124ac58c637ff5639481da	6	Migration	IBM License
4	6046711726960450000	fa04bf63ae6641258c3a66f35fb52aa	1	backup	IBM Tivoli
5	5033764553243920000	132aac4dda1645c59eba22f73b9f91c1	1		IBM Domi
6	7340643651670410000	3c0b9caaa41342cdb1aecc24f8ffc261	2		IBM Tivoli A
7	6522628736889220000	a0fc6efee6124ac58c637ff5639481da	6	Migration	IBM Licens
8	6046711726960450000	2d9df440600f49a1b997fb44b70a1d52	1	Wrong discovery PMR 123.425.525	IBM DB2 E
9	8661434279433960000	e1524f48a3f0446f856762a698c83a23	1	My comment to such exclusion.	IBM Tivoli
10	6437935815092250000	7c936dc3400d49c89c5c933d1327bdab	1		IBM InfoSp
11	7345651151369840000	7c936dc3400d49c89c5c933d1327bdab	1		IBM InfoSp
12					
13					

A	B	C	D	E	F	G	H	I	J
1	LM Pr	Re	Co	Product Name	Release Version	Report Group ID	Host Name	IP Address	
2	# a0	6	Mi	IBM License Metric Tool	7.5	1	NC107087		
3	# a0	6	Mi	IBM License Metric Tool	7.5	1	NC142155		
4	# fa0	1	ba	IBM Tivoli Performance Analyzer	6.1	1			
5	# 13	1		IBM Domino Enterprise Server	8.5	1			
6	# 3c	2		IBM Tivoli Asset Discovery for Distributed	7.5	1			
7	# a0	6	Mi	IBM License Metric Tool	7.5	1	NC107072		
8	# 2d	1	W	IBM DB2 Enterprise Server Edition	8.1	1			
9	# e1	1	My	IBM Tivoli Asset Discovery for Distributed FCT	7.5	1			
10	# 7c	1		IBM InfoSphere Information Services Director for NonProduction Environments	8.7	1	NC040212		
11	# 7c	1		IBM InfoSphere Information Services Director for NonProduction Environments	8.7	1			
12									
13									

vmmanagers.csv

Virtual machine managers.

A	B	C	D	E	F	G
1	IP Address	User Name	Password	URL	Type	Shared Credentials
2		administrator	{encrypted}jlsjio34w0tsjjalfJLDF3m==	https://NC041088/sdk	2	FALSE
3		admin@internal	{encrypted}jlsjio34w0tsjjalfJLDF3m==	https://NC044146:8443/apiK	3	FALSE
4		administrator	{encrypted}jlsjio34w0tsjjalfJLDF3m==	https://NC042194/sdk	2	FALSE
5		administrator@cluster.com	{encrypted}jlsjio34w0tsjjalfJLDF3m==	http://NC142102:5985/wsman	1	FALSE
6		administrator@cluster.com	{encrypted}jlsjio34w0tsjjalfJLDF3m==	http://NC042203/wsman	1	FALSE
7		administrator@cluster.com	{encrypted}jlsjio34w0tsjjalfJLDF3m==	http://NC042207/wsman	1	FALSE
8		admin@internal	{encrypted}jlsjio34w0tsjjalfJLDF3m==	https://NC142232:443/api	3	FALSE
9		administrator	{encrypted}jlsjio34w0tsjjalfJLDF3m==	https://NC042251/sdk	2	FALSE
10						
11						

Verification

This stage of migration is migration probing as it does not save anything in the target infrastructure. To verify it, you must check each CSV file separately. Unless your environment changed in the meantime, each pair of files should contain the same data.

Agents

Compare the *agents.csv* file with the *all-agents.csv* file that you created during the preparation phase.[See: *all-agents.csv*]

Migrated agents

Compare the *agentsmap.csv* file with the *selected-agents.csv* file that you created during the preparation phase.

[See: *selected-agents.csv*]

Bundles

Compare the *bundles.csv* file with the *all-agents-bundles.csv* file that you created during the preparation phase.

[See: *all-agents-bundles.csv*]

Excluded directories

Compare the *excludeddirectories.csv* file with the *all-agents-excluded-directories-*.txt* file or files depending on the settings on your environment.

[See: *all-agents-excluded-directories.txt*]

Excluded software

Compare the *excludedsoftware.csv* file with the *all-agents-excluded-software.csv* file that you created during the preparation phase.

[See: *all-agents-excluded-software.csv*]

VM managers

Compare the *vmmanagers.csv* file with the *vm-managers.txt* file that you created during the preparation phase.

[See: *vm-managers.txt*]

Simulation of migration

The second stage of migration is simulation. It is similar to migration task itself, however no results are written in the LMT 9.0 database. To run the simulation, use the following command:

`./migration.sh -migrate -simulate`

```
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product # ./migration.sh -migrate -simulate
#####
# Licensed Materials - Property of IBM
#           IBM License Metric Tool
# 5725-F57 IBM Endpoint Manager for Software Use Analysis
# (C) Copyright IBM Corp. 2014.
# All Rights Reserved. US Government Users Restricted Rights - Use,
# duplication or disclosure restricted by GSA ADP Schedule Contract with
# IBM Corp.
# For more detailed help, refer to product manual.
#####

Start of migration.
Simulation mode enabled.
Exporting agent mappings.
Exporting software exclusions.
Exporting software bundlings.
Retrieving software from LMT/SUA.
Reconciling software exclusions.
Reconciling software bundlings.
Importing software bundlings and exclusions.
Verifying if the import succeeded.
Exporting excluded directories.
Retrieving excluded directories from the IEM server.
Reconciling excluded directories and sending them to the IEM server.
Exporting VM managers.
Retrieving VM Managers from LMT/SUA.
Reconciling VM Managers.
Importing VM Managers.

Migration summary:
Agent mappings exported: 5
Software bundlings exported: 12
Software bundlings imported: 8
Software bundlings skipped: 4
Software bundlings failed: 0
Software exclusions exported: 10
Software exclusions imported: 2
Software exclusions skipped: 8
Software exclusions failed: 0
VM Managers exported: 8
VM Managers imported: 8
VM Managers skipped: 0
VM Managers failed: 0
Excluded directories exported: 6
Excluded directories skipped: 1
Excluded directories failed: 0
Excluded directories updated: 5

Migration completed successfully.
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product #
```

Generated CSV files

As a result, three files are generated:

- excluded_directories_report.csv
- software_report.csv
- vmmangers_report.csv

```
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product # ls -la *report*.csv
-rw-r--r-- 1 root root 1285 Dec 19 16:42 excluded_directories_report.csv
-rw-r--r-- 1 root root 7523 Dec 19 16:42 software_report.csv
-rw-r--r-- 1 root root 740 Dec 19 16:42 vmmangers_report.csv
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product #
```

Content of the CSV files

excluded_directories_report.csv

Report of excluded directories.

A	B	C	D	E	F						
1	Status	Description	Platform	IEM Client ID	LMT/TAD4D 7.x Agent ID	LMT/SUA Directories	LMT/TAD4D 7.x Agent ID				
A	B	C	D	E	F	G	H	I	J	K	L
1	UPDATED	New directories were sent to the IEM server.	WINDOWS			LMT/TAD4D 7.x Agent ID	Migrated Directories	Operating System	Host Name	IP Address	
2	UPDATED	New directories were sent to the IEM server.	HP_UX				*\\$Recycle.Bin**\RECYCLER**\recycler**\\$NTServicePackUninst**\\$Recycle.Bin**\RECYCLER**\recycl				
3	SKIPPED	Unsupported platform.	I5				*/cache/out-of-date**\tmp**\proc*				
4	UPDATED	New directories were sent to the IEM server.	LINUX				*/cache/out-of-date**\tmp**\QNTC**QSYS.LIB\QRCL.LIB**\proc*				
5	UPDATED	New directories were sent to the IEM server.	SOLARIS				*/cache/out-of-date**\tmp**\proc*				
6	UPDATED	New directories were sent to the IEM server.	AIX				*/cache/out-of-date**\tmp**\proc*				
7							*/eznim**\tmp**\proc*				
8											
9											

software_report.csv

Report of installed software.

A	B	C	D	E
1	Item	Status	Description	IEM Client ID LMT/TAD4D 7.x Agent ID Product
2	BUNDLING	SKIPPED	The IEM client is not installed.	6535577450540171264 IBM P
3	BUNDLING	SKIPPED	The IEM client is not installed.	6535577450540171264 IBM DP
4	BUNDLING	SKIPPED	The software was not discovered in the target instance.	6437935815092250377 IBM I
5	BUNDLING	SKIPPED	The software was not discovered in the target instance.	6437935815092250377 IBM IR
6	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	13360905 6438530029416521225 IBM LI
7	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	13360905 6438530029416521225 IBM WL
8	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	13360905 6438530029416521225 IBM LR
9	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	13360905 6438530029416521225 IBM LS
10	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	13360905 6438530029416521225 IBM LT
11	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	10529700 5214932094795153417 IBM TR
12	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	10529700 5214932094795153417 AIX E
13	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	10529700 5214932094795153417 IBM TR
14	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	10529700 5214932094795153417 IBM TR
15	EXCLUSION	SKIPPED	The IEM client is not installed.	8661434279433961481 IBM TE
16	EXCLUSION	SKIPPED	The IEM client is not installed.	7340643651670416393 IBM TR
17	EXCLUSION	SKIPPED	The IEM client is not installed.	604671172696045385 IBM TR
18	EXCLUSION	SKIPPED	The IEM client is not installed.	5033764553243926666 IBM DR
19	EXCLUSION	SKIPPED	The IEM client is not installed.	7345651151369840393 IBM ID
20	EXCLUSION	SKIPPED	The IEM client is not installed.	604671172696045385 IBM DR
21	EXCLUSION	SKIPPED	The software exclusion could not be migrated because the related software does not exist in the target instance.	6437935815092250377 IBM ID
22	EXCLUSION	SKIPPED	The software exclusion could not be migrated because the related software does not exist in the target instance.	13360905 6438530029416521225 IBM LI
23	EXCLUSION	SUCCEEDED	The software exclusion was migrated successfully.	4305947 652262873688925225 IBM LI
24	EXCLUSION	SUCCEEDED	The software exclusion was migrated successfully.	10529700 5214932094795153417 IBM LI
25				
26				

B	C	D	E	F	G	H	I
1	S	T	D	4	LM	Product Name	Release Version
2	S	T	The	I	#	IBM DB2 Workgroup Server Edition PVU Option	9.7 bb4dd20b-23a3-4136-a046-a94c26a7c4aa
3	S	T	The	I	#	IBM DB2 Workgroup Server Edition PVU Option	9.1 d188c099-d068-4fb0-aada-0752bfa1ae47
4	S	T	The	s	#	IBM InfoSphere Information Services Director for NonProduction Environments	8.7 7c936dc3-400d-49c8-9c5c-933d1327bdab
5	S	T	The	s	#	IBM InfoSphere Optim Test Data Management Solution NonRelational Connectors	7.2 e76d62bf-e188-4d9d-a3a0-dfc26812d940
6	S	L	T	h	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
7	S	L	T	h	#	IBM WebSphere Portal Extend	7.6 64460404-e7bc-4d22-946a-3f021576310b
8	S	L	T	h	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
9	S	L	T	h	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
10	S	L	T	h	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
11	S	L	T	h	#	IBM Tivoli Asset Discovery for Distributed	7.5 3c0b9caa-a113-42cd-b1ae-cc24f8ffc261
12	S	L	T	h	#	AIX Express Edition	7.1 2dd66c8c-0f7-4660-aaf2-d34eb9ab2b21
13	S	L	T	h	#	IBM Tivoli Workload Scheduler	9.1 b5f3bfda-9be9-42e8-9ae6-698d94f396bf
14	S	L	T	h	#	IBM Tivoli Asset Management for IT for Internal Service Providers FCT	7.2 10d6dce8-9c04-4d4e-903f-03c3dfc3378c
15	S	K	T	I	#	IBM Tivoli Asset Discovery for Distributed FCT	7.5 e1524f48-a3f0-446f-8567-62a698c83a23
16	S	K	T	I	#	IBM Tivoli Asset Discovery for Distributed	7.5 3c0b9caa-a113-42cd-b1ae-cc24f8ffc261
17	S	K	T	I	#	IBM Tivoli Performance Analyzer	6.1 fa04bf63-aee6-4125-8c3a-66f35fb52aa
18	S	K	T	I	#	IBM Domino Enterprise Server	8.5 132aac4d-d116-45c5-9eba-22f73b9f91ca
19	S	K	T	I	#	IBM InfoSphere Information Services Director for NonProduction Environments	8.7 7c936dc3-400d-49c8-9c5c-933d1327bdab
20	S	K	T	I	#	IBM DB2 Enterprise Server Edition	8.1 2d9df440-600f-49a1-b997-fb44b70a1d52
21	S	K	T	I	#	IBM InfoSphere Information Services Director for NonProduction Environments	8.7 7c936dc3-400d-49c8-9c5c-933d1327bdab
22	S	K	T	I	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
23	S	K	T	I	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
24	S	K	T	I	#	IBM License Metric Tool	7.5 a0fc6efe-e612-4ac5-8c63-7ff5639481da
25							
26							

A	B	C	D	E	F	G	H	I	J	K	L
1	I	t	s	D	E	L	M	LMT/SUA Component Name	LMT/SUA Component Version	LMT/SUA Component GUID	LMT/SUA
2	B	S	T	K	I	E	1	IBM DB2 Workgroup Server Edition - CPU	9.7 2f677168-c377-4e60-8760-06409e2ed37		
3	B	S	T	K	I	E	9	IBM DB2 Workgroup Server Edition PVU Option	9.1 25f5f734-39e9-476c-9906-8f9570fb7a1		
4	B	S	T	K	I	E	9	IBM InfoSphere Information Services Director	8.7 165ec2b3-13ac-43fb-8f84-3c54c035ed1		
5	B	S	T	K	I	E	7	IBM Optim Test Data Management Solution	7.2 f06cb9fa-c7a1-47ee-8105-c87b088fa73c		
6	B	S	U	h	I	E	8	IBM Tivoli System Automation - Base	2.2 694e4b2c-7b21-45fe-a1c6-4ea36527722		
7	B	S	U	h	I	E	7	IBM Domino Enterprise Server	8.5 deb1ba8a-5e2a-4e56-97fa-d28c9b9e8e45		
8	B	S	U	h	I	E	8	IBM DB2 Enterprise Server Edition - CPU Option	9.1 94a56974-50f4-4596-9b04-a2708cd08738		
9	B	S	U	h	I	E	8	IBM WebSphere Application Server	7 2e20f76b-a7a3-4d99-bdca-342ccf567cd8		
10	B	S	U	h	I	E	8	IBM Tivoli System Automation - Base	2.2 694e4b2c-7b21-45fe-a1c6-4ea36527722		
11	B	S	U	h	I	E	8	IBM Tivoli Software Knowledge Base Toolkit - Content Management Server	1.2 9d9f1ee-4a20-4e31-84de-2c97d26f3c3c		
12	B	S	U	h	I	E	7	IBM solidDB	6.5 75f42b91-5198-4c12-a056-b392b5ed75a4		
13	B	S	U	h	I	E	9	IBM WebSphere MQ Server	7.5 3289337f-e15f-424f-aede-756e54e34d8b		
14	B	S	U	h	I	E	7	IBM Tivoli Asset Management for IT - Runtime Server	7.2 9ac990b1-0a0f-4dc6-83bc-dc1038a8195a		
15	E	S	K	T	I	E	8				
16	E	S	K	T	I	E	8				
17	E	S	K	T	I	E	6				
18	E	S	K	T	I	E	9				
19	E	S	K	T	I	E	7				
20	E	S	K	T	I	E	1				
21	E	S	K	T	I	E	2				
22	E	S	T	I	E	E	7				
23	E	S	T	I	E	E	1				
24	E	S	T	I	E	E	1				
25											
26											

A	B	C	D	E	F	G	H	I	J	K	L	M
1	I	K	S	D	E	L	M	LMT/TAD4D 7.x Component Path	LMT/SUA Component Path			
2	B	S	T	I	E	b	I					
3	B	S	T	I	E	d	I					
4	B	S	T	I	E	7	I					
5	B	S	T	I	E	e	I					
6	B	S	T	I	E	a	I					
7	B	S	T	I	E	6	I					
8	B	S	T	I	E	7	I					
9	B	S	T	I	E	9	I					
10	B	S	T	I	E	8	I					
11	B	S	T	I	E	3	I					
12	B	S	T	I	E	7	I					
13	B	S	T	I	E	b	I					
14	B	S	T	I	E	1	I					
15	E	S	T	I	E	e	I					
16	E	S	T	I	E	3	I					
17	E	S	T	I	E	f	I					
18	E	S	T	I	E	7	I					
19	E	S	T	I	E	7	I					
20	E	S	T	I	E	2	I					
21	E	S	T	I	E	7	I					
22	E	S	T	I	E	a	I					
23	E	S	T	I	E	a	I					
24	E	S	T	I	E	a	I					
25												
26												

A	B	C	D	E	F	G
N	O	P	Q			
1	INSIDEIPRULLL	Host Name	IP Address	Operating System		
2	BSThe IE bIE 2	NC142183		LINUX Red Hat Enterprise Linux Server release 6.0 (Santiago) (2.6.32-71.el6.x86_64)		
3	BSThe IE dIE 2	NC142183		LINUX Red Hat Enterprise Linux Server release 6.0 (Santiago) (2.6.32-71.el6.x86_64)		
4	BSThe IE 7 IE 1	NC040212		LINUX SUSE Linux Enterprise Server 10 (i586) VERSION = 10 PATCHLEVEL = 2 (2.6.16.60-0.21-bigsm)		
5	BSThe IE eIE fC	NC040212		LINUX SUSE Linux Enterprise Server 10 (i586) VERSION = 10 PATCHLEVEL = 2 (2.6.16.60-0.21-bigsm)		
6	BSTI IE aIE 6	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)		
7	BSTI IE 6 IE d	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)		
8	BSTI IE aIE 9	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)		
9	BSTI IE aIE 2	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)		
10	BSTI IE aIE 6	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)		
11	BSTI IE 3 IE 9	NC107087		AIX 7.1		
12	BSTI A 2 IE 7	NC107087		AIX 7.1		
13	BSTI IE bIE 3	NC107087		AIX 7.1		
14	BSTI IE 1 IE 9	NC107087		AIX 7.1		
15	ESThe IE e					
16	ESThe IE 3					
17	ESThe IE f					
18	ESThe IE 1					
19	ESThe IE 7					
20	ESThe IE 2					
21	ESThe IE 7	NC040212		LINUX SUSE Linux Enterprise Server 10 (i586) VERSION = 10 PATCHLEVEL = 2 (2.6.16.60-0.21-bigsm)		
22	ESTI IE a	NC142155		LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 0 (2.6.27.19-5-default)		
23	ESTI IE a	NC107072		AIX 6.1		
24	ESTI IE a	NC107087		AIX 7.1		
25						
26						

vmmanagers_report.csv
Report of virtual managers.

A	B	C	D	E	F	G
1	Item	Status	Description	URL	User Name	Type
2	VMMANAGER	SUCCEEDED	VM Manager was added.	https://NC041088/sdk	administrator	2
3	VMMANAGER	SUCCEEDED	VM Manager was added.	https://NC044146:8443/apiK	admin@internal	3
4	VMMANAGER	SUCCEEDED	VM Manager was added.	https://NC042194/sdk	administrator	2
5	VMMANAGER	SUCCEEDED	VM Manager was added.	http://NC142102:5985/wsman	administrator@cluster.com	1
6	VMMANAGER	SUCCEEDED	VM Manager was added.	http://NC042203/wsman	administrator@cluster.com	1
7	VMMANAGER	SUCCEEDED	VM Manager was added.	http://NC042207/wsman	administrator@cluster.com	1
8	VMMANAGER	SUCCEEDED	VM Manager was added.	https://NC142232:443/api	admin@internal	3
9	VMMANAGER	SUCCEEDED	VM Manager was added.	https://NC042251/sdk	administrator	2
10						
11						

Verification

This stage of migration still does not save anything in the LMT 9.0 database. To verify it, you must check each CSV file separately.

Excluded directories report

Similarly as it was in the [Verification > Excluded directories] section, compare the *excluded_directories_report.csv* file with the *all-agents-excluded-directories-*.txt* file or files depending on the settings on your environment.

[See: *all-agents-excluded-directories.txt*]

Unless your environment changed in the meantime, the files should have the same set of excluded directories. However, this time you should pay special attention to all entries that have status other than UPDATED. To understand what might be the reason of a particular status, see: [Migration statuses > Excluded directories].

The i5 platform is not supported in version 9.0, therefore all exclusions on this platform are skipped.

Software report

Similarly as it was in the [Verification >

Bundles] and [Verification > Excluded software] sections, compare the *software_report.csv* file with the *all-agents-bundles.csv* and *all-agents-excluded-software.csv* files.

See: [all-agents-bundles.csv] and [all-agents-excluded-software.csv].

Unless your environment changed in the meantime, the files should have the same set of bundlings and excluded software. However, this time you should pay special attention to all entries that have status other than SUCCEEDED. To understand what might be the reason of a particular status, see: [Migration statuses > Software - bundlings and exclusions].

VM managers report

Similarly as it was in the [Verification > VM managers] section, compare the *vmmanagers_report.csv* file with the *vm-managers.txt* file.

See: [vm-managers.txt].

Unless your environment changed in the meantime, the files should have the same set of VMs. However, this time you should pay special attention to all entries that have a status other than SUCCEEDED. To understand what might be the reason of a particular status, see: [Migration statuses > VM managers].

Migration

The third stage of migration is the proper migration process. To run the migration, use the following command:

```
./migration.sh –migrate
```

```
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product # ./migration.sh -migrate
#####
# Licensed Materials - Property of IBM
#   IBM License Metric Tool
# 5725-F57 IBM Endpoint Manager for Software Use Analysis
# (C) Copyright IBM Corp. 2014.
# All Rights Reserved. US Government Users Restricted Rights - Use,
# duplication or disclosure restricted by GSA ADP Schedule Contract with
# IBM Corp.
# For more detailed help, refer to product manual.
#####

Start of migration.
Exporting agent mappings.
Exporting software exclusions.
Exporting software bundlings.
Retrieving software from LMT/SUA.
Reconciling software exclusions.
Reconciling software bundlings.
Importing software bundlings and exclusions.
Progress: 100%
Verifying if the import succeeded.
Exporting excluded directories.
Retrieving excluded directories from the IEM server.
Reconciling excluded directories and sending them to the IEM server.
Exporting VM managers.
Retrieving VM Managers from LMT/SUA.
Reconciling VM Managers.
Importing VM Managers.

Migration summary:
Agent mappings exported: 5
Software bundlings exported: 12
Software bundlings imported: 8
Software bundlings skipped: 4
Software bundlings failed: 0
Software exclusions exported: 10
Software exclusions imported: 2
Software exclusions skipped: 8
Software exclusions failed: 0
VM Managers exported: 8
VM Managers imported: 8
VM Managers skipped: 0
VM Managers failed: 0
Excluded directories exported: 6
Excluded directories skipped: 1
Excluded directories failed: 0
Excluded directories updated: 5

Migration completed successfully.
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product #
```

Generated CSV files

As a result, three files are generated:

- excluded_directories_report.csv

- software_report.csv
- vmmangers_report.csv

```
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product # ls -la *report*.csv
-rw-r--r-- 1 root root 1285 Dec 19 16:42 excluded_directories_report.csv
-rw-r--r-- 1 root root 7523 Dec 19 16:42 software_report.csv
-rw-r--r-- 1 root root 740 Dec 19 16:42 vmmangers_report.csv
Linux RH (ILMT9Migration) root /opt/ibm/LMT/migration/product #
```

Content of the CSV files

The content of the CSV files in migration is the same as in simulation. The only change concerns the **Description** column in the software report file. The values in this column change depending on the action that was taken during the migration:

- confirmation
(The software bundling was migrated successfully.)
- reassignment and confirmation
(The software was reassigned and confirmed successfully.)

software_report.csv

Report of software.

A	B	C	D	E
1	Item	Status	Description	IEM Client ID LMT/TAD4D 7.x Agent ID Product
2	BUNDLING	SKIPPED	The IEM client is not installed.	6535577450540171264 IBM
3	BUNDLING	SKIPPED	The IEM client is not installed.	6535577450540171264 IBM
4	BUNDLING	SKIPPED	The software was not discovered in the target instance.	6437935815092250377 IBM
5	BUNDLING	SKIPPED	The software was not discovered in the target instance.	6437935815092250377 IBM
6	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	13360905 6438530029416521225 IBM
7	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	13360905 6438530029416521225 IBM
8	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	13360905 6438530029416521225 IBM
9	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	13360905 6438530029416521225 IBM
10	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	13360905 6438530029416521225 IBM
11	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	10529700 5214932094795153417 IBM
12	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	10529700 5214932094795153417 IBM
13	BUNDLING	SUCCEEDED	The software was reassigned and confirmed successfully.	10529700 5214932094795153417 IBM
14	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	10529700 5214932094795153417 IBM
15	EXCLUSION	SKIPPED	The IEM client is not installed.	8661434279433961481 IBM
16	EXCLUSION	SKIPPED	The IEM client is not installed.	7340643651670416393 IBM
17	EXCLUSION	SKIPPED	The IEM client is not installed.	6046711726960453385 IBM
18	EXCLUSION	SKIPPED	The IEM client is not installed.	5033764553243926666 IBM
19	EXCLUSION	SKIPPED	The IEM client is not installed.	7345651151369840393 IBM
20	EXCLUSION	SKIPPED	The IEM client is not installed.	6046711726960453385 IBM
21	EXCLUSION	SKIPPED	The software exclusion could not be migrated because the related software does not exist in the target instance.	6437935815092250377 IBM
22	EXCLUSION	SKIPPED	The software exclusion could not be migrated because the related software does not exist in the target instance.	13360905 6438530029416521225 IBM
23	EXCLUSION	SUCCEEDED	The software exclusion was migrated successfully.	4305947 6522628736889225225 IBM
24	EXCLUSION	SUCCEEDED	The software exclusion was migrated successfully.	10529700 5214932094795153417 IBM
25				
26				

Verification

Verification of this stage of migration should be preceded by verification of the simulation.

See: [Simulation of migration > Verification]

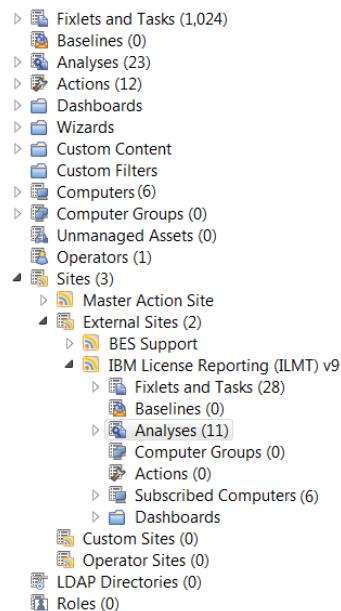
Excluded directories

To check whether excluded directories were successfully migrated, use the following procedure:

1. Open the IEM console.

See: [How to open the IBM Endpoint Manager console]

2. In the navigation tree, go to **Sites > External Sites > IBM License Reporting (ILMT) v9 > Analyses**.



3. Select the **Excluded Directories** analysis.

Status	Name	Site	Applicable Comput...	Activated By	Time Activated
Activated Globally	Scanner Trace Settings	ILMT Development...	5	IEMAdmin	12/17/2014 3:05:51...
Activated Globally	Environment Information	ILMT Development...	1	IEMAdmin	12/17/2014 3:05:25...
Activated Globally	Scanner Information	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:02...
Activated Globally	Shared Disk Information	ILMT Development...	1	IEMAdmin	12/15/2014 1:30:03...
Activated Globally	Installed UNIX Packages	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:00...
Activated Globally	Software Scan Status	ILMT Development...	6	IEMAdmin	12/12/2014 2:10:03...
Activated Globally	LMT/TAD4D 7.x Agent Mapping	ILMT Development...	6	IEMAdmin	12/17/2014 5:41:28...
Activated Globally	Excluded Directories	ILMT Development...	6	IEMAdmin	12/17/2014 3:02:39...
Activated Globally	VM Manager Information	ILMT Development...	1	IEMAdmin	12/12/2014 2:09:59...

4. Check the excluded directories on the **Result** tab.

List view:

The screenshot shows the 'Results' tab for the 'Excluded Directories' analysis. At the top, there are buttons for 'Activate', 'Deactivate', 'Edit', 'Export', 'Hide Locally', 'Hide Globally', and 'Remove'. Below these are tabs for 'Description', 'Details', 'Results' (which is selected), and 'Applicable Computers (6)'. The main area displays a table with columns: 'Applicable Computers (6)', 'Computer Name', 'Operating System', 'Excluded Directo...', and 'Excluded Directories (semicolon separated)'. The table lists six computers, each with its name, operating system, and a list of excluded directory paths separated by semicolons.

Applicable Computers (6)	Computer Name	Operating System	Excluded Directo...	Excluded Directories (semicolon separated)
NC040212	Linux SuSE Enterprise Server 10 (2.6.16.60-0.21-bigsm)	<multiple results>	<multiple results>	*/cache/out-of-date/*;/eznim/*;/tmp/*;/tmp/*;/proc/*;/proc/*
NC043026	Linux Red Hat Enterprise Server 6.2 (2.6.32-220.el6.x86_64)	<multiple results>	<multiple results>	*/cache/out-of-date/*;/eznim/*;/tmp/*;/tmp/*;/proc/*;/proc/*
NC107072	AIX 6.1	<multiple results>	<multiple results>	*/eznim/*;/eznim/*;/tmp/*;/tmp/*;/proc/*;/proc/*;/usr/lpp
NC107087	AIX 7.1	<multiple results>	<multiple results>	*/eznim/*;/eznim/*;/tmp/*;/tmp/*;/proc/*;/proc/*;/usr/lpp
NC142155	Linux SuSE Enterprise Server 11 (2.6.27.19-5-default)	<multiple results>	<multiple results>	*/cache/out-of-date/*;/eznim/*;/tmp/*;/tmp/*;/proc/*;/proc/*
NC9128110048	Linux Red Hat Enterprise Server 6.4 (2.6.32-358.el6.x86_64)	<multiple results>	<multiple results>	*/cache/out-of-date/*;/eznim/*;/tmp/*;/tmp/*;/proc/*;/proc/*

Summary view:

Excluded Directories

Count	Percentage	Result
4	66.67%	*/cache/out-of-date/*
6	100.00%	*/eznim
2	33.33%	*/eznim/*
6	100.00%	*/tmp
6	100.00%	*/tmp/*
6	100.00%	*/proc
6	100.00%	*/proc/*
2	33.33%	*/usr/lpp

Excluded Directories (semicolon separated)

Count	Percentage	Result
4	66.67%	*/cache/out-of-date/*;*/eznim;*/tmp;*/tmp/*;*/proc;*/proc/*
2	33.33%	*/eznim;*/eznim/*;*/tmp;*/tmp/*;*/proc;*/proc/*;*/usr/lpp

Software

To check if the software configuration (user-confirmed bundlings and product instance) was successfully migrated, use the following procedure:

1. Open the LMT interface.

See: [How to open IBM License Metric Tool 9.0 web user interface]

2. Go to Reports > All IBM Metrics.

Deployment Health

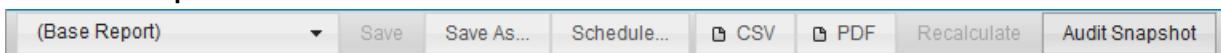
Category	Count
0 Discard	0
0 Outdated	0
1 Low Discard	1
0 Out of Date	0
0 Missing	0

Last Import at 12/22/2014 12:00 AM

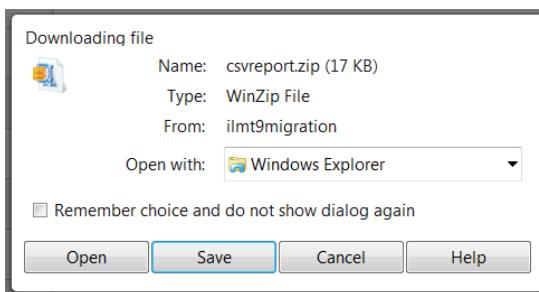
A new panel opens.

Product	License Type	License Peak Value	License Peak Value History
IBM Tivoli Performance Analyzer	PVU Full Capacity	840	09/23/2014 - 12/22/2014
IBM Tivoli Performance Analyzer	PVU Subcapacity	140	
IBM Lotus Quickr for WebSphere Portal from Limited Use	PVU Full Capacity	3200	
IBM Lotus Quickr for WebSphere Portal from Limited Use	PVU Subcapacity	200	
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Full Capacity	12	
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Subcapacity	2	
IBM Informix Dynamic Server Enterprise Edition	PVU Full Capacity	840	
IBM Informix Dynamic Server Enterprise Edition	PVU Subcapacity	140	
IBM Tivoli Storage Manager	PVU Full Capacity	3200	
IBM Tivoli Storage Manager	PVU Subcapacity	200	

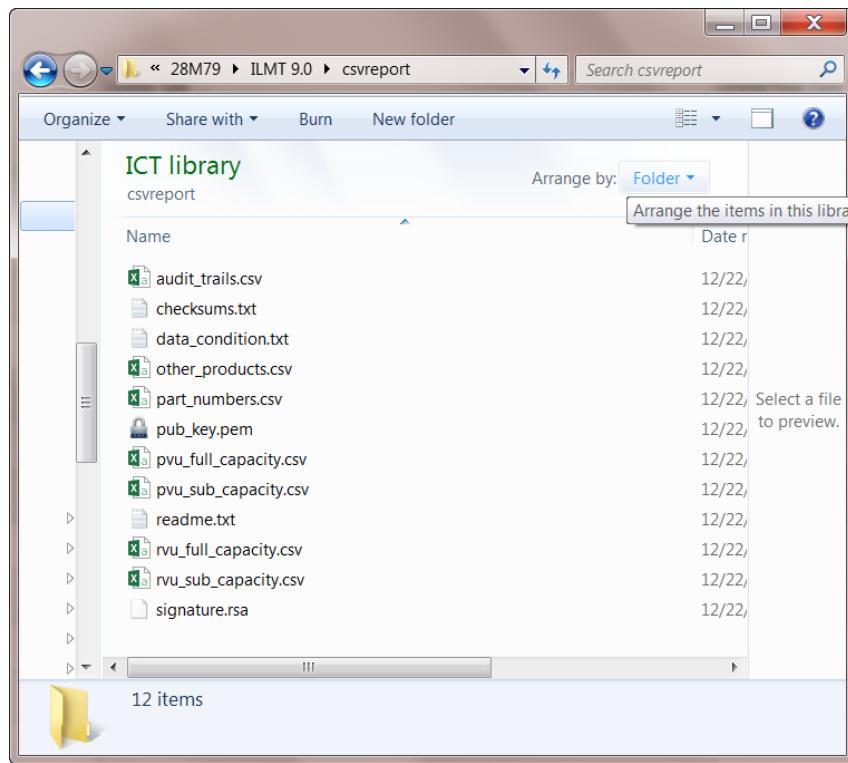
3. Click Audit Snapshot.



4. Save the results.



5. Extract the file.



6. To check the software configuration, use the following three files:

- pvu_sub_capacity.csv
- rvu_sub_capacity.csv
- other_products.csv

VM managers

To check whether the configuration of VM managers was successfully migrated, use the following procedure:

1. Open the LMT user interface.

See: [How to open IBM License Metric Tool 9.0 web user interface]

2. Go to **Management > VM Managers**.

The displayed information should reflect the information that was available in LMT 7.5.

Management: VM Managers				
+ New Delete Test Connection 8 rows				
Operation Status	VM Manager Type	VM Manager URL	User Name	Last Successful Operation
! Invalid credentials - suspen...	VMware ESX, ESXi or vCenter	https://NC041088/sdk	administrator	12/19/2014 05:43 PM
! Connection failed	KVM RHEV-M	https://NC044146:8443/api/k	admin@internal	12/21/2014 06:13 AM
OK	VMware ESX, ESXi or vCenter	https://NC042194/sdk	administrator	12/21/2014 01:43 PM
! Connection failed	Microsoft Hyper-V	http://NC142102:5985/wsman	administrator@cluster.com	12/21/2014 06:13 AM
OK	Microsoft Hyper-V	http://NC042203/wsman	administrator@cluster.com	12/21/2014 05:43 AM
OK	Microsoft Hyper-V	http://NC042207/wsman	administrator@cluster.com	12/21/2014 05:43 AM
OK	KVM RHEV-M	https://NC142232:443/api	admin@internal	12/21/2014 05:13 AM
OK	VMware ESX, ESXi or vCenter	https://NC042251/sdk	administrator	12/21/2014 06:13 AM

Remember:

After you complete the migration, only definitions of VM Managers are added to LMT.

The access details are then passed on to the VM Manager Tool that starts connecting to VM Managers and collecting data about their capacity. It might take time, depending on the number of VMMS.

When the capacity data is gathered by the VMM Tool, it is uploaded to IEM every 12 hours. However, you can trigger the upload by running the **Upload VM Manager Tool Scan Results** task in the IEM console, and then running an import in LMT.

After max. 2 days (2 daily imports in LMT), all capacity data should be available in LMT. Unless there are some obstacles not related to the migration itself, the VM Manager statuses change to **OK**.

Part 3: Validation of migration

This part explains how to verify the migration.

To ensure that the verification is reliable, you should have both LMT 7.5 and 9.0 up and running for some period of time. As soon as the verification is completed, you can remove the 7.5 installation from your environment.

Depending on the size of your environment, some parts of the verification might have to be modified to fulfill your needs.

If your 7.5 environment was not appropriately maintained (assignments of discovered component instances were not confirmed or VM Managers were not configured for some hosts), some parts of the verification (based only on the host by host verification) might be very difficult or impossible, especially if the environment that you monitored with LMT 7.5 contains computers with the i5 operating system.

Sanity check on 9.0

Before you start the comparison, ensure that the environment is monitored by IEM clients.

1. Go to **Reports > Computers**.

The screenshot shows the LMT interface with the 'Computers' report selected. The main area displays deployment health with a bar chart showing 1 computer with low disk space. A tooltip indicates 16 computers total. The 'Deployment Health' section shows 1 Low Disk Space (16%). The 'Reports' menu is open, showing options like General, Saved Reports, Software Inventory, License Metrics, and Infrastructure. The 'Infrastructure' section lists Computers, Computer Groups, and Hardware Inventory. The 'Catalog' section lists Software Catalog and Signatures. A note at the bottom right says 'To learn how to validate the migration, see the help topic'.

The following report opens.

Computer Name	Last Seen	Operating System	IP Address	Latest Scan Import	Installed Software
NC9128110048	about 14 hours ago	Linux Red Hat Enterprise S...	192.168.1.100	12/27/2014 12:00 AM	9
NC040212	about 14 hours ago	Linux SuSE Enterprise Serv...	192.168.1.101	12/30/2014 12:00 AM	11
NC043026	about 14 hours ago	Linux Red Hat Enterprise S...	192.168.1.102	12/17/2014 04:59 PM	4
NC142155	about 14 hours ago	Linux SuSE Enterprise Serv...	192.168.1.103	12/17/2014 04:59 PM	28
NC107087	about 14 hours ago	AIX 7.1	192.168.1.104	12/18/2014 12:00 AM	28
NC107072	about 14 hours ago	AIX 6.1	192.168.1.105	12/18/2014 12:00 AM	8

For a simple sanity check it is important to have data in all columns, especially in the **Latest Scan Import** and **Installed Software**. In case some data is missing, open the IEM console and investigate why the data is missing before you start the verification of other elements.

Verification of software components

Compare whether all components discovered in version 7.5 are also discovered in 9.0.

7.5

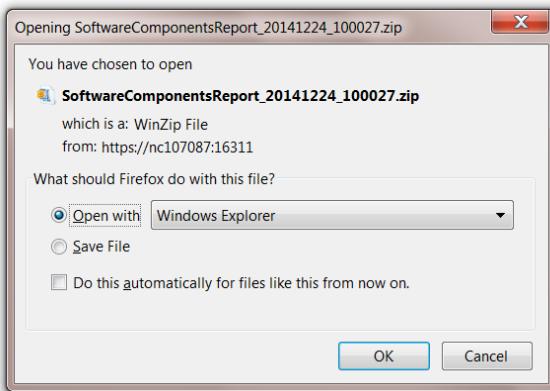
1. Navigate to **IBM License Metric Tool > Software > Software Components**.

Component	Instances
IBM Lotus Domino 5.0	1
IBM DB2 Enterprise Server Edition - CPU Option 9.5	1
IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	5
IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition 4.1	1
IBM WebSphere MQ Client 6.0	1
InfoSphere Optim Data Find 1.1	1
IBM Tivoli Performance Analyzer 6.1	1
IBM Tivoli Monitoring for Databases - DB2 Agent 6.2	1
IBM Optim Database Relationship Analyzer - Runtime Server 2.1	1
IBM DB2 Workgroup Server Edition PVU Option 9.1	1
IBM Tivoli Netview 6.0	1
IBM WebSphere Application Server Network Deployment 7.0	1

2. To export the results to a CSV file, click **Download as CSV**.

[Download as PDF](#) [Download as CSV](#)

3. Save the file.

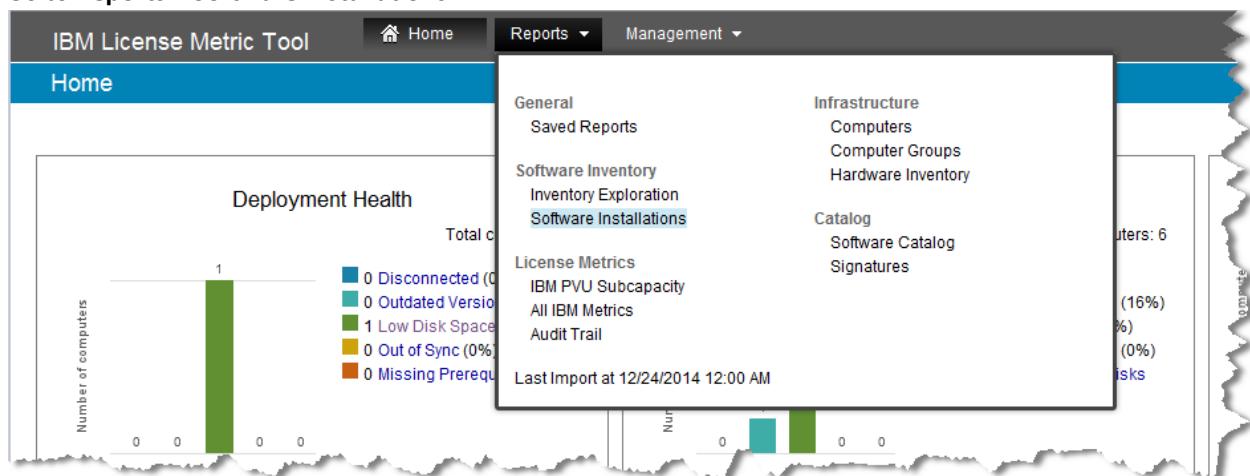


4. Extract the file and open it in an editor.

A	B	C
Component	Instances	
1 AIX Express Edition 6.1	1	
3 AIX Express Edition 7.1	1	
4 DB2 Query Patroller 7.1	1	
5 DB2 Warehouse Base Edition 9.5	1	
6 DOORS Database Server & Client 9.5	1	
7 IBM Cognos Business Intelligence Server 8.4	1	
8 IBM DB2 Developer Edition 9.7	1	
9 IBM DB2 Enterprise Server Edition - Authorized User Option 9.7	1	
10 IBM DB2 Enterprise Server Edition - CPU Option 9.1	2	
11 IBM DB2 Enterprise Server Edition - CPU Option 9.5	1	
12 IBM DB2 Enterprise Server Edition - CPU Option 9.7	2	
13 IBM DB2 Enterprise Server Edition OEM Limited Use 9.7	1	
14 IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7	2	
15 IBM DB2 OEM Limited Use 10.1	1	
16 IBM DB2 UDB Enterprise Server Edition 8.1	1	
17 IBM DB2 UDB Enterprise Server Edition 8.2	1	
18 IBM DB2 Workgroup Server Edition - CPU 9.5	1	
19 IBM DB2 Workgroup Server Edition - CPU 9.7	1	

9.0

1. Go to Reports > Software Installations.

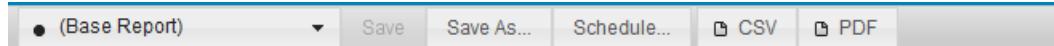


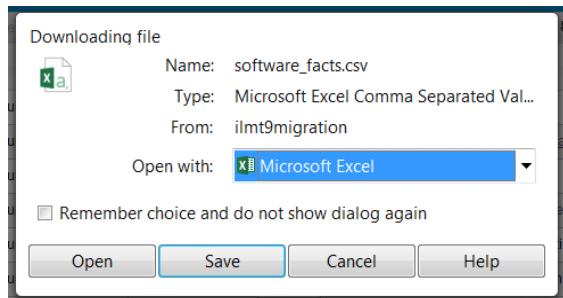
Software Installations report opens.

The screenshot shows the 'Software Installations' report table. The columns are Computer Name, Last Seen, Publisher Name, Name, Version, and Details. There are 88 rows of data. Some entries are truncated. The 'Details' column contains links like 'DETAILS >'.

(Base Report)					88 rows (all data)	Configure View...
Computer Name	Last Seen	Publisher Name	Name	Version	Details	
NC9128110048	about 10 hours ago	IBM	Platform Application Center	9.1	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM SDK 5.0 for Linux AMD/E...	5.0	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM License Metric Tool - Ser...	7.5	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM Endpoint Manager Platfo...	9.1	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM Tivoli System Automation...	3.2	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM SDK 5.0 for Linux IA32, J...	5.0	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM License Metric Tool - Ser...	9.0	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM DB2 Workgroup Server E...	10.5	DETAILS >	
NC9128110048	about 10 hours ago	IBM	IBM Endpoint Manager Platfo...	9.1	DETAILS >	
NC043026	about 10 hours ago	IBM	IBM License Metric Tool and...	7.5	DETAILS >	
NC043026	about 10 hours ago	IBM	IBM SDK 5.0 for Linux AMD/E...	5.0	DETAILS >	
NC043026	about 10 hours ago	IBM	IBM DB2 Workgroup Server E...	10.1	DETAILS >	
NC043026	about 10 hours ago	IBM	IBM Endpoint Manager Platfo...	9.2	DETAILS >	

2. To export the results to a CSV file, click **CSV** and then **Save**.





3. Open the file in an editor.

A	B	C	D	E	F	G
Computer Name	Last Seen	Publisher Name	Name	Version	Details	
1 NC9128110048	12/23/2014 22:48	IBM	Platform Application Center	9.1	1	
3 NC9128110048	12/23/2014 22:48	IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5	1	
4 NC9128110048	12/23/2014 22:48	IBM	IBM License Metric Tool - Server	7.5	1	
5 NC9128110048	12/23/2014 22:48	IBM	IBM Endpoint Manager Platform Server	9.1	1	
6 NC9128110048	12/23/2014 22:48	IBM	IBM Tivoli System Automation for Multiplatforms	3.2	1	
7 NC9128110048	12/23/2014 22:48	IBM	IBM SDK 5.0 for Linux IA32, Java Technology	5	1	
8 NC9128110048	12/23/2014 22:48	IBM	IBM License Metric Tool - Server	9	1	
9 NC9128110048	12/23/2014 22:48	IBM	IBM DB2 Workgroup Server Edition OEM Limited Use	10.5	1	
10 NC9128110048	12/23/2014 22:48	IBM	IBM Endpoint Manager Platform Agent	9.1	1	
11 NC043026	12/23/2014 22:51	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	
12 NC043026	12/23/2014 22:51	IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5	1	
13 NC043026	12/23/2014 22:51	IBM	IBM DB2 Workgroup Server Edition - CPU option	10.1	1	
14 NC043026	12/23/2014 22:51	IBM	IBM Endpoint Manager Platform Agent	9.2	1	
15 NC142155	12/23/2014 22:59	IBM	IBM Endpoint Manager Platform Agent	9	1	
16 NC142155	12/23/2014 22:59	IBM	IBM Tivoli Performance Analyzer	6.1	1	
17 NC142155	12/23/2014 22:59	IBM	IBM WebSphere Application Server	7	1	
18 NC142155	12/23/2014 22:59	IBM	IBM Tivoli Monitoring - Eclipse Help Server	6.2	1	
19 NC142155	12/23/2014 22:59	IBM	IBM WebSphere Application Server	8	1	
20 NC142155	12/23/2014 22:59	IBM	IBM Tivoli Monitoring - Windows OS Agent	6.3	1	
21 NC142155	12/23/2014 22:59	IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5	1	
22 NC142155	12/23/2014 22:59	IBM	IBM Tivoli Monitoring - Tivoli Enterprise Monitoring Server	6.2	1	
23 NC142155	12/23/2014 22:59	IBM	DOORS Database Server & Client	9.5	1	
24 NC142155	12/23/2014 22:59	IBM	IBM Tivoli Monitoring - Tivoli Enterprise Portal Server	6.2	1	
25 NC142155	12/23/2014 22:59	IBM	Informix Dynamic Server	11.5	1	
26 NC142155	12/23/2014 22:59	IBM	IBM DB2 UDB Enterprise Server Edition	8.1	1	
27 NC142155	12/23/2014 22:59	IBM	IBM Tivoli Provisioning Manager - Subagent	7.2	1	
28 NC142155	12/23/2014 22:59	IBM	IBM Tivoli System Automation - Base	2.2	1	
29 NC142155	12/23/2014 22:59	IBM	IBM DB2 Enterprise Server Edition OEM Limited Use	9.7	1	

4. Edit the file:

- Remove the first three columns: **Computer Name**, **Last Seen**, and **Publisher Name**.
- Sort the results by using the **Name** column and then the **Version** column.
- Find duplicates and remove them. Each removed entry must increment the value in the **Details** column for a component in the given version whose duplicate is being removed. As a result, you will have the accurate number of components with a given version in the **Details**

column.

	A	B	C	D	E
1	Name	Version	Details		
2	DOORS Database Server & Client	9.5	1		
3	IBM Cognos Business Intelligence Server	8.4	1		
4	IBM DB2 Developer Edition	9.7	1		
5	IBM DB2 Enterprise Server Edition - Authorized User Option	9.7	1		
6	IBM DB2 Enterprise Server Edition - CPU Option	9.1	1		
7	IBM DB2 Enterprise Server Edition - CPU Option	9.7	1		
8	IBM DB2 Enterprise Server Edition OEM Limited Use	9.7	1		
9	IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	2		
10	IBM DB2 OEM Limited Use	10.1	1		
11	IBM DB2 UDB Enterprise Server Edition	8.1	1		
12	IBM DB2 Workgroup Server Edition - CPU option	10.1	1		
13	IBM DB2 Workgroup Server Edition OEM Limited Use	10.5	1		
14	IBM Domino Enterprise Server	8.5	1		
15	IBM Endpoint Manager Platform Agent	9	1		
16	IBM Endpoint Manager Platform Agent	9.1	2		
17	IBM Endpoint Manager Platform Agent	9.2	4		
18	IBM Endpoint Manager Platform Server	9.1	1		
19	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	4.1	1		
20	IBM JavaTM Standard Edition	6.2	2		
21	IBM JavaTM Standard Edition	6.3	1		
22	IBM License Metric Tool - Server	7.5	3		
23	IBM License Metric Tool - Server	9	1		
24	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.2	1		
25	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	4		
26	IBM Lotus Quickr services for WebSphere Portal - Library	8.5	1		
27	IBM Sametime - Community Server Edition	8.5	1		

Remember:

In the 9.0 report you will have additional components related to IBM Endpoint Manager.

If your software catalogs are different in version 7.5 and 9.0, your discovered components might be different as well.

In case of any discrepancies, see: [Software components - host by host verification].

Software components - host by host verification

Compare whether components discovered in version 7.5 on every host are also discovered in 9.0. This detailed comparison should be used to check discrepancies between 7.5 and 9.0 discovery or when overall verification of software components cannot be performed.

7.5

1. Go to IBM License Metric Tool > Infrastructure > Agents.

The screenshot shows the 'Agents' page of the IBM License Metric Tool. The left sidebar navigation includes sections for Home, IBM Audit Reports, Software, Hardware, Infrastructure (selected), and Administration. The main content area displays a table of agents with columns for Select, Status, Version, Network Address, IP Address, Server ID, and Operating System. There are six entries in the table:

Select	Status	Version	Network Address	IP Address	Server ID	Operating
<input type="checkbox"/>	OK	7.5.0.121	NC107087		IBM 8233 06A855P	AIX 7.1
<input type="checkbox"/>	OK	7.5.0.121	NC107072		IBM 8233 06A84CP	AIX 6.1
<input type="checkbox"/>	OK	7.5.0.10	NC040212		IBM NC142253.KRAKLAB.PL.IBM.COM	LINUX SUSE
<input type="checkbox"/>	OK	7.2.2.2	NC142155		IBM NC142252.KRAKLAB.PL.IBM.COM	LINUX SUSE
<input type="checkbox"/>	OK	7.5.0.121	NC043026		IBM NC043011.KRAKLAB.PL.IBM.COM	LINUX Red Hat
<input type="checkbox"/>	Incomplete	7.5.0.121	NC142183		TLM_VM_KVM-3550d94f-593d-4b75-9fb1-d615d1583156	LINUX Red Hat

Below the table are links for 'Download as PDF' and 'Download as CSV'. A 'Related task' section with a 'Scan groups' link is also present.

2. To open a selected host, click the link in the **Network Address** column.

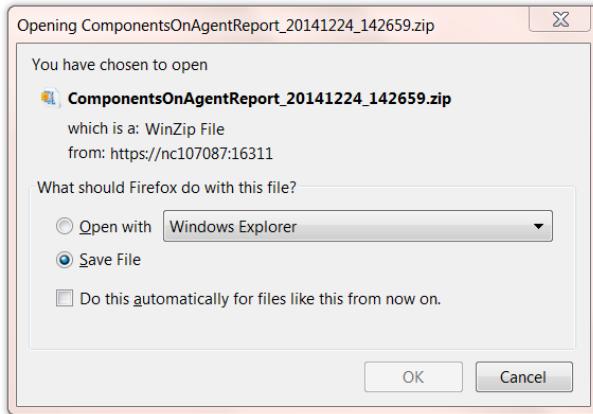
The screenshot shows the 'Agents' tab selected in the 'Agent Details' section of the ILMT interface. The left sidebar lists various management categories like Home, Audit Reports, Software, Hardware, Infrastructure, Administration, and Agent Problems. The main panel displays detailed information about the selected agent, including its version (7.5.0.121), scan group (DEFAULT), host name (NC107087), IP address (10.0.0.10), operating system (AIX 7.1), and agent ID (5214932094795153417). It also shows server details (IBM 8233 06A85P), processor information (IBM(R) POWER7 (750, 755, 775 servers) Multi-core All Existing 8233-E8B), and CPU cores (2 cores on partition, 32 cores on server). The agent status is marked as OK (checked). The software scan status is also marked as successful. The last expected software scan is listed as Jan 17, 2014 2:05:00 PM.

3. Open the **Components** tab.

The screenshot shows the 'Components' tab selected in the 'Agent Details' section. The left sidebar has tabs for Agent Details, Products, Components, and Agent Problems. The main panel displays a grid titled 'Components Discovered by Agent' with columns for Component, Product, and Shared File System. The grid lists various IBM products such as the License Metric Tool, Java Standard Edition, InfoSphere Optim Performance Manager, DB2 Enterprise Server Edition, Worklight, WebSphere Portal Express, AIX Express Edition, SDK, solidDB, WebSphere Application Server Network Deployment, and Tivoli Directory Server. All entries show 'No' under 'Shared File System'. Navigation controls at the bottom include 'Page 1 of 3', 'Rows 12', and 'Total 28 Filtered: 28'. There are also links to 'Download as PDF' and 'Download as CSV'.

4. To export the results to a CSV file, click **Download as CSV**.

[Download as PDF](#) [Download as CSV](#)

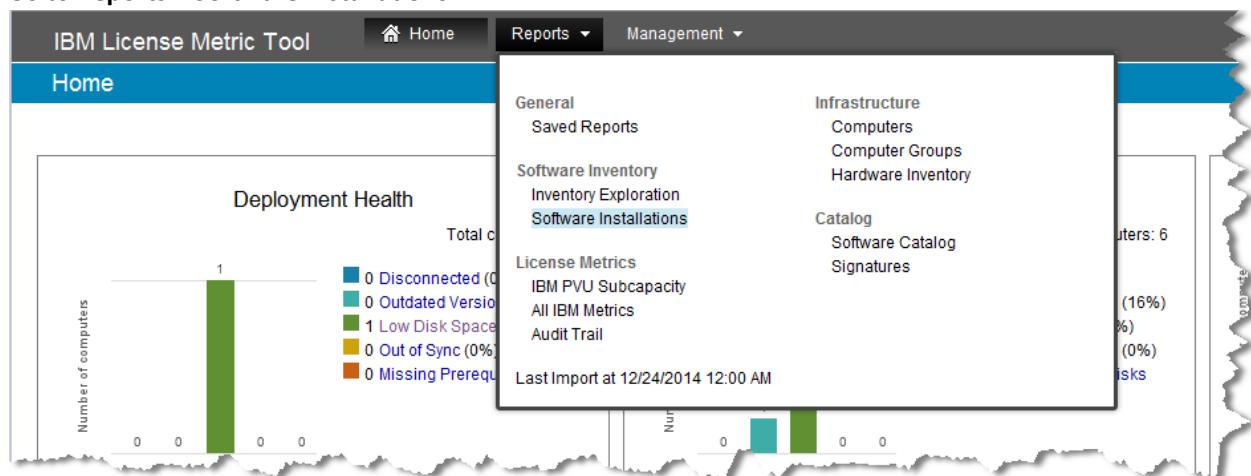


5. Extract the file and open it in an editor.

A	B	C	D	E	F	G	H	I
Host Name	IP Address	Agent ID	Operatin	Server ID	Component	Product	Shared File System	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	AIX Express Edition 7.1	AIX Express Edition 7.1	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM DB2 Enterprise Server Edition - Authorized User Option 9.7	IBM InfoSphere Warehous	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7	IBM DB2 Enterprise Serve	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition 4.1	IBM InfoSphere Optim Peri	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM JavaTM Standard Edition 6.2	IBM Developer Kit JavaTM	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM JavaTM Standard Edition 6.3	IBM Developer Kit JavaTM	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM License Metric Tool - Server 7.5	IBM License Metric Tool 7.	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	IBM License Metric Tool 7.	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Lotus Quickr services for WebSphere Portal - Library 8.5	IBM WebSphere Portal Ext	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Lotus Sametime - Community Server Entry 8.5	IBM WebSphere Portal Ext	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM SDK 5.0 for AIX Power 64, Java Technology 5.0	IBM SDK 5.0 for AIX Powe	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM solidDB 6.5	AIX Express Edition 7.1	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Asset Management for IT - Runtime Server 7.2	IBM Tivoli Asset Manageme	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Directory Integrator 7.1	IBM WebSphere Portal Ext	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Directory Server - WhitePages 6.3	IBM License Metric Tool 7.	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Endpoint 3.7	IBM Tivoli Endpoint 3.7	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Software Knowledge Base Toolkit - Content Management Server 1.2	IBM Tivoli Asset Discovery	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Storage Manager Client 6.3	IBM Tivoli Workload Sched	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Tivoli Storage Manager Server 6.3	IBM Tivoli Storage Manage	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Web Content Manager 8.0	IBM Web Content Manage	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Web Experience Factory 8.0	IBM WebSphere Portal Ext	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Web Experience Factory Designer 8.0	IBM WebSphere Portal Ext	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM WebSphere Application Server Network Deployment 8.0	IBM WebSphere Applicatio	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM WebSphere MQ Managed File Transfer Service 7.5	IBM WebSphere MQ Mana	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM WebSphere MQ Server 7.5	IBM Tivoli Workload Sched	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM WebSphere Portal Express 8.0	IBM WebSphere Portal Exp	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	IBM Worklight 6.0	IBM WebSphere Portal Ext	No	
NC107087		5214932094795153417	AIX 7.1	IBM 8233	TWS Core 8.6	IBM Tivoli Workload Sched	No	

9.0

1. Go to Reports > Software Installations.

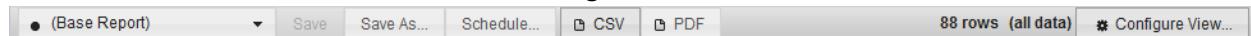


Software Installations report opens.

The screenshot shows the 'Software Installations' report table. The columns are Computer Name, Last Seen, Publisher Name, Name, Version, and Details. There are 88 rows of data. Some entries have a 'DETAILS >' link next to the Version column.

Computer Name	Last Seen	Publisher Name	Name	Version	Details
NC9128110048	about 10 hours ago	IBM	Platform Application Center	9.1	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM SDK 5.0 for Linux AMD/E...	5.0	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM License Metric Tool - Ser...	7.5	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM Endpoint Manager Platfo...	9.1	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM Tivoli System Automation...	3.2	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM SDK 5.0 for Linux IA32, J...	5.0	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM License Metric Tool - Ser...	9.0	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM DB2 Workgroup Server E...	10.5	DETAILS >
NC9128110048	about 10 hours ago	IBM	IBM Endpoint Manager Platfo...	9.1	DETAILS >
NC043026	about 10 hours ago	IBM	IBM License Metric Tool and...	7.5	DETAILS >
NC043026	about 10 hours ago	IBM	IBM SDK 5.0 for Linux AMD/E...	5.0	DETAILS >
NC043026	about 10 hours ago	IBM	IBM DB2 Workgroup Server E...	10.1	DETAILS >
NC043026	about 10 hours ago	IBM	IBM Endpoint Manager Platfo...	9.2	DETAILS >

2. To filter the results to the selected host, click **Configure View...**.



3. Add a filter with **Computer Name equals** to the particular host name and click **Submit**.

Options

Autosize Columns

Columns

Computer

<input checked="" type="checkbox"/> Computer Name	<input type="checkbox"/> DNS Name
<input type="checkbox"/> Data Source Name	<input type="checkbox"/> IP Address
<input checked="" type="checkbox"/> Last Seen	<input type="checkbox"/> Computer ID
<input type="checkbox"/> Operating System	

Software in Catalog

<input checked="" type="checkbox"/> Publisher Name	<input type="checkbox"/> Creation
<input checked="" type="checkbox"/> Name	<input type="checkbox"/> Modification
<input checked="" type="checkbox"/> Version	<input type="checkbox"/> Software Catalog

Software Installation

<input checked="" type="checkbox"/> Details	
---------------------------------------------	--

Filters

Specify the report filter which matches **all** of the following conditions:

Computer Name	equals	NC107087	<input type="button" value="Delete"/>	<input type="button" value="Add"/>
---------------	--------	----------	---------------------------------------	------------------------------------

Submit **Cancel**

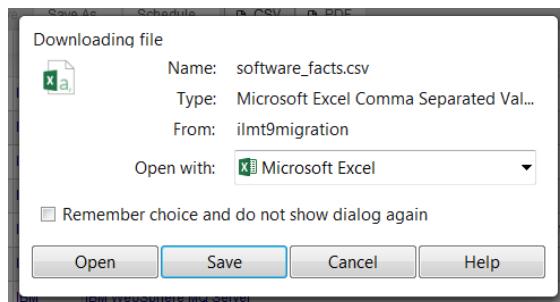
IBM License Metric Tool [Home](#) [Reports](#) [Management](#) [admin](#) [IBM](#)

Software Installations

Computer Name	Last Seen	Publish...	Name	Version	Details
NC107087	about 16 hours ago	IBM	IBM Tivoli Storage Manager Client	6.3	DETAILS >
NC107087	about 16 hours ago	IBM	IBM Web Experience Factory Designer	8.0	DETAILS >
NC107087	about 16 hours ago	IBM	IBM Web Experience Factory	8.0	DETAILS >
NC107087	about 16 hours ago	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	DETAILS >
NC107087	about 16 hours ago	IBM	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	4.1	DETAILS >
NC107087	about 16 hours ago	IBM	IBM WebSphere Portal Express	8.0	DETAILS >
NC107087	about 16 hours ago	IBM	IBM WebSphere MQ Server	7.5	DETAILS >
NC107087	about 16 hours ago	IBM	IBM Tivoli Directory Integrator	7.1	DETAILS >
NC107087	about 16 hours ago	IBM	IBM Tivoli Storage Manager Server	6.3	DETAILS >
NC107087	about 16 hours ago	IBM	IBM License Metric Tool - Server	7.5	DETAILS >
NC107087	about 16 hours ago	IBM	IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	DETAILS >
NC107087	about 16 hours ago	IBM	IBM WebSphere Application Server Network Deployment	8.0	DETAILS >
NC107087	about 16 hours ago	IBM	IBM JavaTM Standard Edition	6.2	DETAILS >
NC107087	about 16 hours ago	IBM	IBM solidDB	6.5	DETAILS >

4. To export the results to a CSV, click **CSV**.

● (Base Report) **Save** **Save As...** **Schedule...** **CSV** **PDF**



5. Open the file in an editor.

A	B	C	D	E	F	G
Computer Name	Last Seen	Publisher Name	Name	Version	Details	
1 NC107087	12/23/2014 22:55	IBM	IBM DB2 Enterprise Server Edition - Authorized User Option	9.7	1	
3 NC107087	12/23/2014 22:55	IBM	IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	1	
4 NC107087	12/23/2014 22:55	IBM	IBM Endpoint Manager Platform Agent	9.2	1	
5 NC107087	12/23/2014 22:55	IBM	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	4.1	1	
6 NC107087	12/23/2014 22:55	IBM	IBM JavaTM Standard Edition	6.2	1	
7 NC107087	12/23/2014 22:55	IBM	IBM JavaTM Standard Edition	6.3	1	
8 NC107087	12/23/2014 22:55	IBM	IBM License Metric Tool - Server	7.5	1	
9 NC107087	12/23/2014 22:55	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	
10 NC107087	12/23/2014 22:55	IBM	IBM Lotus Quickr services for WebSphere Portal - Library	8.5	1	
11 NC107087	12/23/2014 22:55	IBM	IBM Lotus Sametime - Community Server Entry	8.5	1	
12 NC107087	12/23/2014 22:55	IBM	IBM SDK 5.0 for AIX Power 64, Java Technology	5	1	
13 NC107087	12/23/2014 22:55	IBM	IBM solidDB	6.5	1	
14 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Asset Management for IT - Runtime Server	7.2	1	
15 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Directory Integrator	7.1	1	
16 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Directory Server - WhitePages	6.3	1	
17 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Endpoint	3.7	1	
18 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Software Knowledge Base Toolkit - Content Management Server	1.2	1	
19 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Storage Manager Client	6.3	1	
20 NC107087	12/23/2014 22:55	IBM	IBM Tivoli Storage Manager Server	6.3	1	
21 NC107087	12/23/2014 22:55	IBM	IBM Web Content Manager	8	1	
22 NC107087	12/23/2014 22:55	IBM	IBM Web Experience Factory	8	1	
23 NC107087	12/23/2014 22:55	IBM	IBM Web Experience Factory Designer	8	1	
24 NC107087	12/23/2014 22:55	IBM	IBM WebSphere Application Server Network Deployment	8	1	
25 NC107087	12/23/2014 22:55	IBM	IBM WebSphere MQ Managed File Transfer Service	7.5	1	
26 NC107087	12/23/2014 22:55	IBM	IBM WebSphere MQ Server	7.5	1	
27 NC107087	12/23/2014 22:55	IBM	IBM WebSphere Portal Express	8	1	
28 NC107087	12/23/2014 22:55	IBM	IBM Worklight	6	1	
29 NC107087	12/23/2014 22:55	IBM	TWS Core	8.6	1	
30						
31						

6. Edit the file:

- a. Remove the first three columns: **Computer Name**, **Last Seen** and **Publisher Name**.
- b. Sort the results by using the **Name** column and then the **Version** column.
- c. Find duplicates and remove them. Each removed entry must increment the value in the **Details** column for a component in the given version whose duplicate is being removed. As a result, you will have the accurate number of components with a given version in the **Details** column.

	A	B	C	D	E
1	Name	Version	Details		
2	DOORS Database Server & Client	9.5	1		
3	IBM Cognos Business Intelligence Server	8.4	1		
4	IBM DB2 Developer Edition	9.7	1		
5	IBM DB2 Enterprise Server Edition - Authorized User Option	9.7	1		
6	IBM DB2 Enterprise Server Edition - CPU Option	9.1	1		
7	IBM DB2 Enterprise Server Edition - CPU Option	9.7	1		
8	IBM DB2 Enterprise Server Edition OEM Limited Use	9.7	1		
9	IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	2		
10	IBM DB2 OEM Limited Use	10.1	1		
11	IBM DB2 UDB Enterprise Server Edition	8.1	1		
12	IBM DB2 Workgroup Server Edition - CPU option	10.1	1		
13	IBM DB2 Workgroup Server Edition OEM Limited Use	10.5	1		
14	IBM Domino Enterprise Server	8.5	1		
15	IBM Endpoint Manager Platform Agent	9	1		
16	IBM Endpoint Manager Platform Agent	9.1	2		
17	IBM Endpoint Manager Platform Agent	9.2	4		
18	IBM Endpoint Manager Platform Server	9.1	1		
19	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	4.1	1		
20	IBM JavaTM Standard Edition	6.2	2		
21	IBM JavaTM Standard Edition	6.3	1		
22	IBM License Metric Tool - Server	7.5	3		
23	IBM License Metric Tool - Server	9	1		
24	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.2	1		
25	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	4		
26	IBM Lotus Quickr services for WebSphere Portal - Library	8.5	1		
27	IBM Lotus Sametime - Community Server Edition	8.5	1		

Remember:

In the 9.0 report you will have additional components related to IBM Endpoint Manager.

If your software catalogs are different in version 7.5 and 9.0, your discovered components might be different as well.

In case of any discrepancies, see: [Software components - host by host verification].

Verification of software products

Compare whether all products that are confirmed in version 7.5 are also confirmed in version 9.0.

7.5

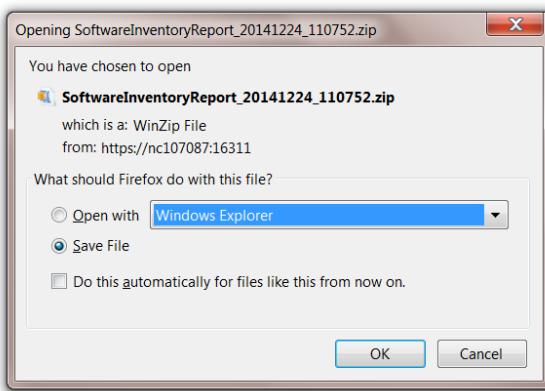
1. Go to IBM License Metric Tool > Software > Manage Software Inventory.

The screenshot shows the 'Manage Software Inventory' page of the IBM License Metric Tool. The left sidebar contains a navigation tree with categories like IBM License Metric Tool, IBM Audit Reports, Software, Hardware, Infrastructure, and Administration. The 'Software' category is expanded, showing 'Manage Software Inventory' as the selected item. The main panel displays a table of products with their confidence levels. A toolbar at the top of the main panel includes buttons for 'Update', 'Actions', and filters for 'Product/Release/Component' and 'Filter'. Below the table is a link to 'Download as CSV'.

Product/Release/Component	Confidence	Part Numbers
AIX Express Edition	85%	
DB2 UDB Query Patroler	100%	
IBM DB2 Developer Edition	40%	
IBM DB2 Enterprise Server Edition Unlicensed Product Base	100%	
IBM DB2 Workgroup Server Edition PVU Option	100%	
IBM Developer Kit JavaTM Standard Edition	100%	
IBM Domino Enterprise Server	0%	E020KLL
IBM Endpoint Manager for Patch Management	54%	D0HSPLL
IBM InfoSphere Information Services Director for NonProduction Environments	100%	
IBM InfoSphere Optim Application Retirement Solution Data Find	40%	
IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	100%	
IBM InfoSphere Optim Test Data Management Solution	0%	D08E9LL
IBM InfoSphere Optim Test Data Management Solution NonRelational	100%	

2. To export the results to a CSV, click **Download as CSV**.

[Download as CSV](#)



3. Extract the file and open it in an editor.

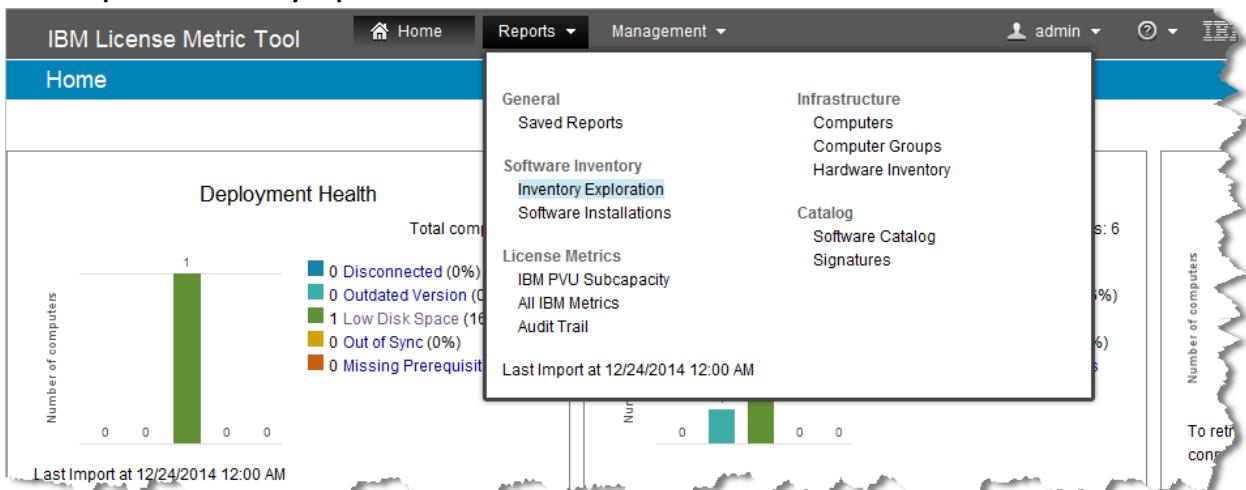
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1 Product		Current Sv Release	Componer Host Name	Confidence	Explanation/Exclusion	Operating	Scan Grov	Part Numb	Free of ch	Subcapac	Installed or Agent				
2 AIX Express Edition	IBM 8233	AIX Expr: AIX Expr	NC107072	55	Based on: Included	AIX 6.1	DEFAULT	No	No	No	No	No	No	No	No
3 AIX Express Edition	IBM 8233	AIX Expr: AIX Expr	NC107087	100	No other b Included	AIX 7.1	DEFAULT	No	No	No	No	No	No	No	No
4 AIX Express Edition	IBM 8233	AIX Expr: IBM solid	NC107087	100	User-bund	AIX 7.1	DEFAULT	Yes	No	No	No	No	No	No	No
5 DB2 UDB Query Patrolle	TLM_VM_1 IBM DB2 UDB	DB2 Quer	NC142183	100	No other b	LINUX Re	Linux	No	Yes	No	No	No	No	No	No
6 IBM DB2 Developer Edition	IBM NC14 IBM DB2	DB2	NC142155	40	Based on: Included	LINUX SU	Linux	No	No	No	No	No	No	No	No
7 IBM DB2 Enterprise Server Edition Unlicensed Product	IBM 8233	IBM DB2	IBM DB2	1 NC107087	100	No other b	Included	AIX 7.1	DEFAULT	Yes	No	No	No	No	No
8 IBM DB2 Enterprise Server Edition Unlicensed Product	IBM 8233	IBM DB2	IBM DB2	1 NC107072	100	No other b	Included	AIX 7.1	DEFAULT	Yes	No	No	No	No	No
9 IBM DB2 Workgroup Server Edition PVU Option	TLM_VM_1 IBM DB2	IBM DB2	IBM DB2	1 NC142183	100	User-bund	Included	LINUX Re	Linux	No	Yes	No	No	No	No
10 IBM DB2 Workgroup Server Edition PVU Option	TLM_VM_1 IBM DB2	IBM DB2	IBM DB2	1 NC142183	100	User-confi	Included	LINUX Re	Linux	No	Yes	No	No	No	No
11 IBM Developer Kit JavaTM Standard Edition	IBM 8233	IBM Devel	IBM Java	1 NC107087	100	No other b	Included	AIX 7.1	DEFAULT	No	No	No	No	No	No
12 IBM Developer Kit JavaTM Standard Edition	IBM NC14 IBM Devel	IBM Java	NC040212	100	No other b	Included	LINUX SU	Linux	No	No	No	No	No	No	No
13 IBM Developer Kit JavaTM Standard Edition	IBM 8233	IBM Devel	IBM Java	1 NC107087	100	No other b	Included	AIX 7.1	DEFAULT	No	No	No	No	No	No
14 IBM Domino Enterprise Server	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	E020KLL	N/A	No	N/A	N/A	N/A
15 IBM Endpoint Manager for Patch Management	IBM NC14 IBM Endp	IBM Endp	IBM NC142155	54	Based on: Included	LINUX SU	Linux	D0HSPLL	No	Yes	No	No	No	No	No
16 IBM InfoSphere Information Services Director for Non	IBM NC14 IBM InfoS	IBM InfoS	IBM InfoS	NC040212	100	User-confi	Excluded	LINUX SU	Linux	No	Yes	No	No	No	No
17 IBM InfoSphere Optim Application Retirement Solution	IBM NC14 IBM InfoS	IBM InfoS	IBM InfoS	NC040212	40	Based on:	Included	LINUX SU	Linux	No	No	No	No	No	No
18 IBM InfoSphere Optim Performance Manager for DB2	IBM 8233	IBM InfoS	IBM InfoS	1 NC107087	100	No other b	Included	AIX 7.1	DEFAULT	No	Yes	No	No	No	No
19 IBM InfoSphere Optim Test Data Management Solution	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	D08E9LL	N/A	No	N/A	N/A	N/A
20 IBM InfoSphere Optim Test Data Management Solution	IBM NC14 IBM InfoS	IBM Optim	IBM Optim	NC040212	100	User-bund	Included	LINUX SU	Linux	No	Yes	No	No	No	No
21 IBM InfoSphere Warehouse Enterprise Base Edition	TLM_VM_1 IBM InfoS	IBM DB2	IBM DB2	1 NC142183	55	Based on: Included	LINUX Re	Linux	No	Yes	No	No	No	No	No
22 IBM Informix Enterprise Ed User Option	IBM NC14 IBM Infor	IBM Infor	IBM Infor	NC142155	14	Based on:	Included	LINUX SU	Linux	No	No	No	No	No	No
23 IBM Informix Extended Parallel Server (XPS)	TLM_VM_1 IBM Infor	IBM Infor	IBM Infor	NC142183	100	No other b	Included	LINUX Re	Linux	No	Yes	No	No	No	No
24 IBM Infosphere Warehouse Advanced Enterprise Edit	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	D0K2BLL	N/A	No	N/A	N/A	N/A
25 IBM Integration Bus	TLM_VM_1 IBM Integr	IBM Web	IBM Web	NC142183	33	Based on:	Included	LINUX Re	Linux	No	Yes	No	No	No	No
26 IBM License Metric Tool	IBM NC14 IBM Licen	IBM DB2	IBM DB2	1 NC142155	100	User-bund	Excluded	LINUX SU	Linux	D561HLL	Yes	No	No	No	No
27 IBM License Metric Tool	IBM 8233	IBM Licen	IBM Licen	1 NC107087	100	No other b	Excluded	AIX 7.1	DEFAULT	D561HLL	Yes	No	No	No	No
28 IBM License Metric Tool	IBM 8233	IBM Licen	IBM Licen	1 NC107072	100	No other b	Excluded	AIX 6.1	DEFAULT	D561HLL	Yes	No	No	No	No
29 IBM License Metric Tool	IBM NC14 IBM Licen	IBM Licen	IBM Licen	NC142155	63	Based on:	Excluded	LINUX SU	Linux	D561HLL	Yes	No	No	No	No
30 IBM License Metric Tool	IBM NC14 IBM Licen	IBM Licen	IBM Licen	NC040212	71	Based on:	Included	LINUX SU	Linux	D561HLL	Yes	No	No	No	No
31 IBM License Metric Tool	IBM NC04 IBM Licen	IBM Licen	IBM Licen	NC043026	71	Based on:	Included	LINUX Re	Linux	D561HLL	Yes	No	No	No	No
32 IBM License Metric Tool	TLM_VM_1 IBM Licen	IBM Licen	IBM Licen	NC142183	71	Based on:	Included	LINUX Re	Linux	D561HLL	Yes	No	No	No	No
33 IBM License Metric Tool	IBM 8233	IBM Licen	IBM Licen	1 NC107087	80	Based on:	Excluded	AIX 7.1	DEFAULT	D561HLL	Yes	No	No	No	No
34 IBM License Metric Tool	IBM 8233	IBM Licen	IBM Licen	NC107072	88	Based on:	Excluded	AIX 6.1	DEFAULT	D561HLL	Yes	No	No	No	No

The above file serves you for comparison purposes.

Remember: Only confirmed products are migrated to 9.0. Component instances that were not confirmed might be assigned to different products after migration.

9.0

1. Go to Reports > Inventory Exploration.



Inventory Exploration panel opens. Click **IBM**.

Publisher	Computer Count
IBM	6

A new panel opens.

Software Product	Computer Count
IBM Cognos Business Intelligence Server	1
IBM DB2 Developer Edition	1
IBM DB2 Enterprise Server Edition	1
IBM DB2 Enterprise Server Edition Authorized User Single Install	1
IBM DB2 Enterprise Server Edition OEM Limited Use	1
IBM DB2 Enterprise Server Edition PVU Option	1
IBM DB2 Enterprise Server Edition Unlicensed Product Base	2
IBM DB2 OEM Limited Use	1
IBM DB2 Workgroup Server Edition OEM Limited Use	1
IBM DB2 Workgroup Server Edition Processor Value Unit	1
IBM Java Standard Edition	1

2. To export the results to a CSV file, click **CSV**.

Downloading file

Name: software_aggregates.csv
Type: Microsoft Excel Comma Separated Val...
From: ilmt9migration

Open with: Microsoft Excel

Remember choice and do not show dialog again

Open Save Cancel Help

3. Open the file in an editor.

	A	B	C	D
	Software Product	Computer Count		
1	Software Product			
2	IBM Cognos Business Intelligence Server	1		
3	IBM DB2 Developer Edition	1		
4	IBM DB2 Enterprise Server Edition	1		
5	IBM DB2 Enterprise Server Edition Authorized User Single Install	1		
6	IBM DB2 Enterprise Server Edition OEM Limited Use	1		
7	IBM DB2 Enterprise Server Edition PVU Option	1		
8	IBM DB2 Enterprise Server Edition Unlicensed Product Base	2		
9	IBM DB2 OEM Limited Use	1		
10	IBM DB2 Workgroup Server Edition OEM Limited Use	1		
11	IBM DB2 Workgroup Server Edition Processor Value Unit	1		
12	IBM Developer Kit JavaTM Standard Edition	2		
13	IBM Domino Enterprise Server	1		
14	IBM Endpoint Manager Platform Agent	6		
15	IBM Endpoint Manager Platform Server	1		
16	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	1		
17	IBM License Metric Tool	3		
18	IBM License Metric Tool - Server	1		
19	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	5		

The above file serves you for comparison purposes.

Software Products – host by host verification

Compare whether products that were bundled in version 7.5 on every host are also bundled in 9.0. This detailed comparison should be used to check discrepancies between 7.5 and 9.0 bundlings or when overall verification of software products cannot be performed.

7.5

1. Go to IBM License Metric Tool > Infrastructure > Agents.

The screenshot shows the 'Agents' page of the IBM License Metric Tool. The left sidebar navigation includes 'IBM License Metric Tool' (Home, IBM Audit Reports, View Reports, Reporting Options), 'Software' (Manage Software Inventory, Software Components), 'Hardware' (Processors), 'Infrastructure' (Agents, Scan Groups, Systems without Agents, Shared File Systems, Software Catalog Versions, VM Managers), and 'Administration' (Import Software Catalog, Import PVU Table, Import Systems Tier Table, Import Stand-alone Scan Results, Import Part Numbers, Manage Notifications). The main content area is titled 'Agents' and displays a table of agent status information. The table has columns: Select, Status, Version, Network Address, IP Address, Server ID, and Operating System. There are 6 rows listed:

Select	Status	Version	Network Address	IP Address	Server ID	Operating
<input type="checkbox"/>	OK	7.5.0.121	NC107087		IBM 8233 06A855P	AIX 7.1
<input type="checkbox"/>	OK	7.5.0.121	NC107072		IBM 8233 06A84CP	AIX 6.1
<input type="checkbox"/>	OK	7.5.0.10	NC040212		IBM NC142253.KRAKLAB.PL.IBM.COM	LINUX SUSE 11 SP1
<input type="checkbox"/>	OK	7.2.2.2	NC142155		IBM NC142252.KRAKLAB.PL.IBM.COM	LINUX SUSE 11 SP1
<input type="checkbox"/>	OK	7.5.0.121	NC043026		IBM NC043011.KRAKLAB.PL.IBM.COM	LINUX Red Hat Enterprise Linux 6
<input type="checkbox"/>	Incomplete	7.5.0.121	NC142183		TLM_VM_KVM-3550d94f-593d-4b75-9fb1-d615d1583156	LINUX Red Hat Enterprise Linux 6

Below the table, there are links for 'Download as PDF' and 'Download as CSV'. A 'Related task' section contains a link to 'Scan groups'.

2. To open a selected host, click the link in the **Network Address** column.

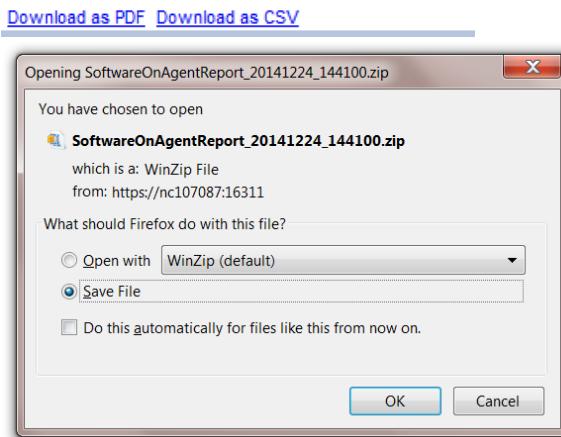
The screenshot shows a Firefox browser window displaying the IBM Tivoli Integrated Portal. The URL in the address bar is <https://nc107087:16311/ibm/console/login.do?action=secure>. The page title is "IBM License Metric Tool". The left sidebar menu includes sections for IBM License Metric Tool, IBM Audit Reports, Software, Hardware, Infrastructure, and Administration. The main content area is titled "Agents" and shows "Agent Details" for an agent with ID 5214932094795153417. The "Details" tab is selected, displaying the following information:

Details	
Agent version:	7.5.0.121
Scan group:	DEFAULT
Scan group type:	Standard
Host name:	NC107087
IP address:	View details
Operating system:	AIX 7.1
Agent ID:	5214932094795153417
Server ID:	IBM 8233 06A855P
Virtualization Layer ID:	9
Processor:	IBM(R) POWER7 (750, 755, 775 servers) Multi-core All Existing 8233-E8B
CPU cores on partition:	2
CPU cores on server:	32
Agent status:	<input checked="" type="checkbox"/> OK (There are no problems with the agent)
Last agent activity:	Dec 24, 2014 9:42:23 AM
Software scan status:	<input checked="" type="checkbox"/> Scan successful
Last expected software scan:	Jan 17, 2014 2:05:00 PM

3. Open the **Products** tab.

The screenshot shows a Firefox browser window displaying the Tivoli Integrated Portal. The address bar shows the URL <https://nc107087:16311/ibm/console/login.do?action=secure>. The page title is "Tivoli. View: IBM License Metric Tool". The main content area is titled "Agents" and "Agent Details". A sidebar on the left has tabs for "Agent Details", "Products" (which is selected), "Components", and "Agent Problems". The main pane displays a table titled "Products Discovered by Agent" with columns for "Product" and "Shared File System". The table lists various IBM products, all marked as "No" in the "Shared File System" column. At the bottom of the table are links for "Download as PDF" and "Download as CSV".

4. To export the results to a CSV file, click **Download as CSV**.



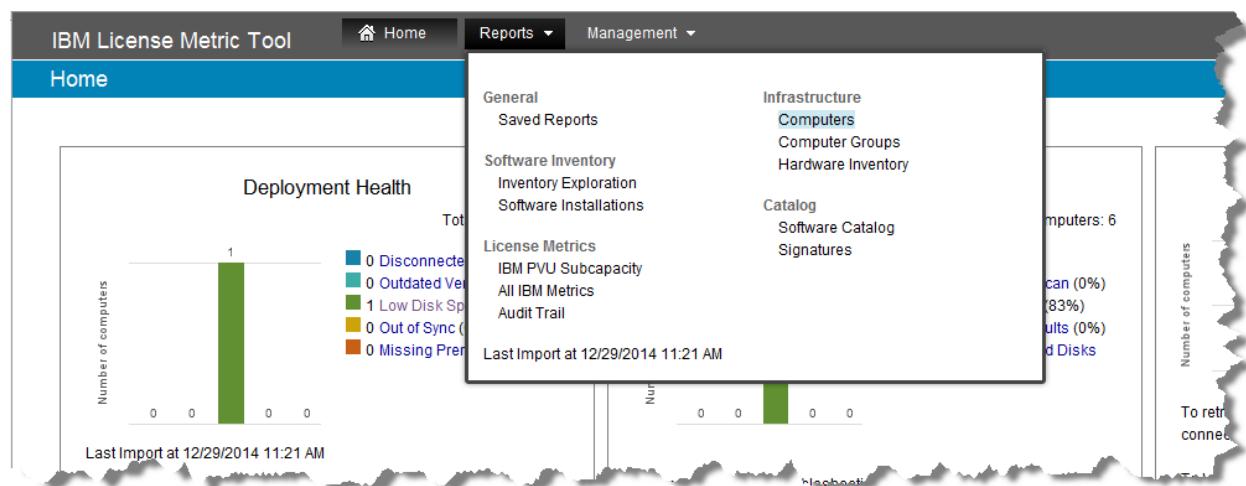
5. Extract the file and open it in an editor.

A	B	C	D	E	F	G	H
1	Host Name	IP Address	Agent ID	Operating System	Server ID	Product	
2	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM AIX Express Edition 7.1	No
3	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7	No
4	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Developer Kit JavaTM Standard Edition 6.2	No
5	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Developer Kit JavaTM Standard Edition 6.3	No
6	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition 4.1	No
7	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM InfoSphere Warehouse Advanced Enterprise Edition - Terabyte Option 9.7	No
8	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM License Metric Tool 7.5	No
9	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM SDK 5.0 for AIX Power 64, Java Technology 5.0	No
10	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Tivoli Asset Discovery for Distributed 7.5	No
11	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Tivoli Asset Management for IT for Internal Service Providers FCT 7.2	No
12	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Tivoli Endpoint 3.7	No
13	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Tivoli Storage Manager Extended Edition 6.3	No
14	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Tivoli Workload Scheduler 8.6	No
15	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Tivoli Workload Scheduler 9.1	No
16	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM Web Content Manager 8.0	No
17	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM WebSphere Application Server Network Deployment 8.0	No
18	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM WebSphere MQ Managed File Transfer Service Idle Standby 7.5	No
19	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM WebSphere Portal Express 8.0	No
20	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM WebSphere Portal Extend 7.0	No
21	NC107087	[REDACTED]	5214932094795153417	AIX 7.1	IBM 8233 06A855P	IBM WebSphere Portal Extend 8.0	No
22							
23							

The above file serves you for comparison purposes.

9.0

1. Go to Reports > Computers.



Computers panel opens.

2. Click on the chosen host in the Computer Name column, for example, NC107087.

Computers		Save	Save As...	Schedule...	CSV	PDF	6 rows (all data)	Configure View...
Computer Name	Last Seen	Operating System			IP Address	Latest Scan Import	Installed Software	
NC9128110048	26 minutes ago	Linux Red Hat Enterprise Server 6.4 (2.6.32-358.el6.x86_64)			[REDACTED]	12/27/2014 12:00 AM		9
NC040212	38 minutes ago	Linux SuSE Enterprise Server 10 (2.6.16.60-0.21-bigsmpl)			[REDACTED]	12/22/2014 04:48 PM		11
NC043026	24 minutes ago	Linux Red Hat Enterprise Server 6.2 (2.6.32-220.el6.x86_64)			[REDACTED]	12/17/2014 04:59 PM		4
NC142155	34 minutes ago	Linux SuSE Enterprise Server 11 (2.6.27.19-5-default)			[REDACTED]	12/17/2014 04:59 PM		28
NC107087	35 minutes ago	AIX 7.1			[REDACTED]	12/18/2014 12:00 AM		28
NC107072	34 minutes ago	AIX 6.1			[REDACTED]	12/18/2014 12:00 AM		8

Computer: NC107087 panel opens.

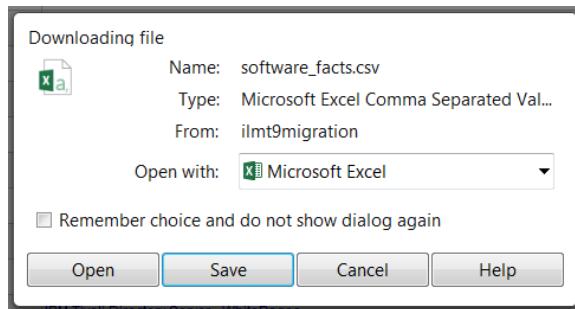
- Click on the first link, here **28 Software Installations**.

The screenshot shows the IBM License Metric Tool interface. At the top, there's a navigation bar with links for Home, Reports, Management, and user authentication. Below the navigation bar, the title "Computer: NC107087" is displayed. Underneath the title, the heading "Software on NC107087" is shown, followed by a list of 28 software installations. To the left of the software list, there's a section titled "Computer Properties" with fields for DNS Name (NC107087.kraklab.pl.ibm.com), IP Address (with a small network icon), and Operating System (AIX 7.1). On the right side, there are "Last Seen" and "Latest Scan Import" details.

- To export the results to a CSV file, click **CSV**.

The screenshot shows the "Software Installations" list within the IBM License Metric Tool. The list contains 28 rows of data, all from the "all data" source. The columns are "Name", "Version", and "Details". Each row lists a different IBM product or service, such as "IBM DB2 Enterprise Server Edition - Authorized User Option", "IBM Endpoint Manager Platform Agent", and "IBM License Metric Tool - Server". Each entry has a "DETAILS >" link to its specific details page.

Name	Version	Details
IBM DB2 Enterprise Server Edition - Authorized User Option	9.7	DETAILS >
IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	DETAILS >
IBM Endpoint Manager Platform Agent	9.2	DETAILS >
IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	4.1	DETAILS >
IBM JavaTM Standard Edition	6.2	DETAILS >
IBM JavaTM Standard Edition	6.3	DETAILS >
IBM License Metric Tool - Server	7.5	DETAILS >
IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	DETAILS >
IBM Lotus Quickr services for WebSphere Portal - Library	8.5	DETAILS >
IBM Lotus Sametime - Community Server Entry	8.5	DETAILS >
IBM SDK 5.0 for AIX Power 64, Java Technology	5.0	DETAILS >
IBM Tivoli Asset Management for IT - Runtime Server	7.2	DETAILS >
IBM Tivoli Directory Integrator	7.1	DETAILS >



The above file serves you for comparison purposes.

Verification of the audit report

Compare whether all Processor Value Units (PVUs) calculated for confirmed products as well as Resource Value Units (RVUs) for Managed Active Processor Cores (MAPC) in version 7.5 have the same values as on reports calculated for confirmed products in 9.0.

The results of this verification will be reliable only if all migration prerequisites are met, including:

- VM managers were defined for all migrated agents in both environments (all migrated agents means all applicable agents whose operating system and type of virtualization needed such settings).
- All discovered component instances were confirmed in version 7.5.
- Audit reports are from the same environment. It means that software and hardware scans performed by agents in version 7.5 and 9.0 were run on the same environment and the environment did not change between those scans.
- All agents from the environment are migrated at once or this is the last group of agents in the iterative migration process.

Additionally, you should compare audit reports produced in 7.5 and 9.0 that span the same period of time. If coexistence of two agents is impossible on your environment for a longer period of time, you should find at least one day that both versions could cover and create reports based on that day. If this is also impossible, the best way is to create an audit report in 7.5 that covers only the last day and similarly create an audit report in 9.0 that covers only the first day.

Remember: You are not checking the correctness of your audit report data but verifying audit reports part of the whole migration process.

7.5

1. Go to IBM License Metric Tool > IBM Audit Reports > View Reports.



View Reports panel opens.

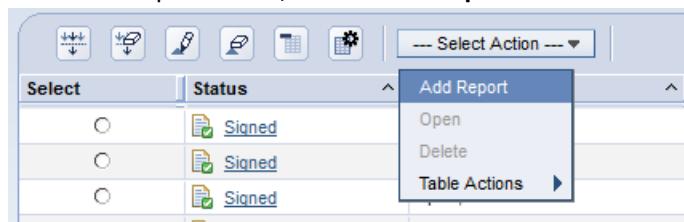
The 'View Reports' panel displays a table of audit reports. The table has columns: Select, Status, Start Date, End Date, and Comments. The 'Status' column contains icons for 'Signed' (green checkmark) and 'Not Signed' (red X). The 'Comments' column provides details about each report's status and signing history.

Select	Status	Start Date	End Date	Comments
<input type="radio"/>	Signed	Oct 1, 2014	Dec 31, 2014	Signed on Jan 7, 2015 by tipadmin.
<input type="radio"/>	Signed	Jul 1, 2014	Sep 30, 2014	Signed on Dec 24, 2014 by tipadmin.
<input type="radio"/>	Signed	Apr 1, 2014	Jun 30, 2014	Signed on Dec 24, 2014 by tipadmin.
<input type="radio"/>	Signed	Mar 1, 2014	Mar 31, 2014	Signed on Dec 24, 2014 by tipadmin.
<input type="radio"/>	Signed	Feb 1, 2014	Feb 28, 2014	Signed on Sep 30, 2014 by tipadmin.
<input type="radio"/>	Signed	Jan 31, 2014	Jan 31, 2014	Signed on Sep 30, 2014 by tipadmin.
<input type="radio"/>	Signed	Jan 23, 2014	Jan 30, 2014	Signed on Sep 29, 2014 by tipadmin.
<input type="radio"/>	Signed	Nov 21, 2013	Jan 22, 2014	Signed on Jan 31, 2014 by tipadmin.
<input type="radio"/>	Signed	Nov 1, 2013	Nov 20, 2013	Signed on Nov 21, 2013 by tipadmin.
<input type="radio"/>	Signed	Oct 1, 2013	Oct 31, 2013	Signed on Nov 21, 2013 by tipadmin.
<input type="radio"/>	Signed	Jul 1, 2013	Sep 30, 2013	Signed on Oct 24, 2013 by tipadmin.
<input type="radio"/>	Signed	Jun 16, 2013	Jun 30, 2013	Signed on Oct 23, 2013 by tipadmin.

The next scheduled report will cover the period from: Jan 1, 2015 to Jan 31, 2015

Because the last report might have changed, for example software that was installed during the last report period might not be installed any more, you should create a report whose period will span the same time interval in 7.5 and 9.0. Moreover, the period should be long enough for data from the software scan to be displayed.

2. From the drop down list, choose **Add Report**.



3. Specify the right time and click **Create**.

The screenshot shows a 'View Reports' page with a 'Select Reporting Period' dialog. The dialog has fields for 'Start date' (1/1/2015) and 'End date' (1/6/2015), with calendar icons. Below the fields are 'Create' and 'Cancel' buttons.

A new report is created.

The screenshot shows a 'View Reports' page with a 'Audit Reports' section. It displays a table of audit reports with columns: Select, Status, Start Date, End Date, and Comments. The table lists 17 reports, all of which are 'Signed'. The comments column provides details about when each report was signed by tipadmin.

Select	Status	Start Date	End Date	Comments
○	Signed	Jan 1, 2015	Jan 6, 2015	Report is ready to be signed.
○	Signed	Oct 1, 2014	Dec 31, 2014	Signed on Jan 7, 2015 by tipadmin.
○	Signed	Jul 1, 2014	Sep 30, 2014	Signed on Dec 24, 2014 by tipadmin.
○	Signed	Apr 1, 2014	Jun 30, 2014	Signed on Dec 24, 2014 by tipadmin.
○	Signed	Mar 1, 2014	Mar 31, 2014	Signed on Dec 24, 2014 by tipadmin.
○	Signed	Feb 1, 2014	Feb 28, 2014	Signed on Sep 30, 2014 by tipadmin.
○	Signed	Jan 31, 2014	Jan 31, 2014	Signed on Sep 30, 2014 by tipadmin.
○	Signed	Jan 23, 2014	Jan 30, 2014	Signed on Sep 29, 2014 by tipadmin.
○	Signed	Nov 21, 2013	Jan 22, 2014	Signed on Jan 31, 2014 by tipadmin.
○	Signed	Nov 1, 2013	Nov 20, 2013	Signed on Nov 21, 2013 by tipadmin.
○	Signed	Oct 1, 2013	Oct 31, 2013	Signed on Nov 21, 2013 by tipadmin.
○	Signed	Jul 1, 2013	Sep 30, 2013	Signed on Oct 24, 2013 by tipadmin.

Page 1 of 2 | 1 Go Rows 12 ▲ Total: 17 Filtered: 17 Selected: 0

The next scheduled report will cover the period from: Jan 1, 2015 to Jan 31, 2015

4. Click the report and download CSV versions of the PVU and RVU reports.

View Reports

Audit Reports > Jan 1, 2015 - Jan 6, 2015

Audit Report Summary

Reporting period: Jan 1, 2015 - Jan 6, 2015

If you agree this report matches your consumption of licensed products, [enter comments and sign it](#).

To resolve discrepancies in the PVU, RVU, or systems report, click this link [Manage Software Inventory](#)

To view missing software scan history for the reporting period, [download the CSV file](#).

[Details](#)

PVU Report

To see how this report differs from the previously signed one, delta report must be generated first: [Generate Delta Report](#).

PVU table version: Dec 15, 2014

Product	CPU Core Full Capacity	CPU Core Subcapacity	PVU Full Capacity	PVU Subcapacity	Comments
DB2 UDB Query Patroller	0	0	0	0	All product instances are excluded
IBM DB2 Workgroup Server Edition Processor Value Unit	0	0	0	0	All product instances are excluded
IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	32	2	3200	200	
IBM InfoSphere Optim Test Data Management Solution NonRelational Connectors	12	4	840	280	
IBM Informix Extended Parallel Server (XPS)	0	0	0	0	All product instances are excluded
IBM Integration Bus	0	0	0	0	All product instances are excluded
IBM Lotus Domino	0	0	0	0	All product instances are excluded
IBM Optm Database Relationship Analyzer for Linux, UNIX, and Windows	12	4	840	280	
IBM Optm Test Data Management Solution for Siebel CRM-Call Center Family	12	4	840	280	
IBM Tivoli Netview	0	0	0	0	All product instances are excluded
IBM Tivoli Storage Manager	0	0	0	0	All product instances are excluded
IBM Tivoli Storage Manager Extended Edition	32	2	3200	200	

Page 1 of 2 | Go | Rows 12 | Total: 19 Filtered: 19

Download summary as: [PDF](#) [CSV](#)

Download the whole report as: [PDF](#) [CSV](#)

View Reports

Audit Reports > Jan 1, 2015 - Jan 6, 2015

Audit Report Summary

Reporting period: Jan 1, 2015 - Jan 6, 2015

If you agree this report matches your consumption of licensed products, [enter comments and sign it](#).

To resolve discrepancies in the PVU, RVU, or systems report, click this link [Manage Software Inventory](#)

To view missing software scan history for the reporting period, [download the CSV file](#).

[Details](#)

RVU Report

Product	CPU Core Full Capacity	CPU Core Subcapacity	RVU Full Capacity	RVU subcapacity	RVU Charge Unit	RVU Measure	Comments
IBM Endpoint Manager for Patch Management	12	2	12	2	VUE139	Managed Activated Processor Cores	
IBM Tivoli Composite Application Manager for Applications	12	2	12	2	VUE139	Managed Activated Processor Cores	
IBM Tivoli Monitoring	12	2	12	2	VUE139	Managed Activated Processor Cores	
IBM Tivoli Provisioning Manager	12	2	12	2	VUE139	Managed Activated Processor Cores	

Page 1 of 1 | Go | Rows 4 | Total: 4 Filtered: 4

Download summary as: [CSV](#)

The CSV files serve you for comparison purposes.

9.0

1. Go to Reports > All IBM Metrics.

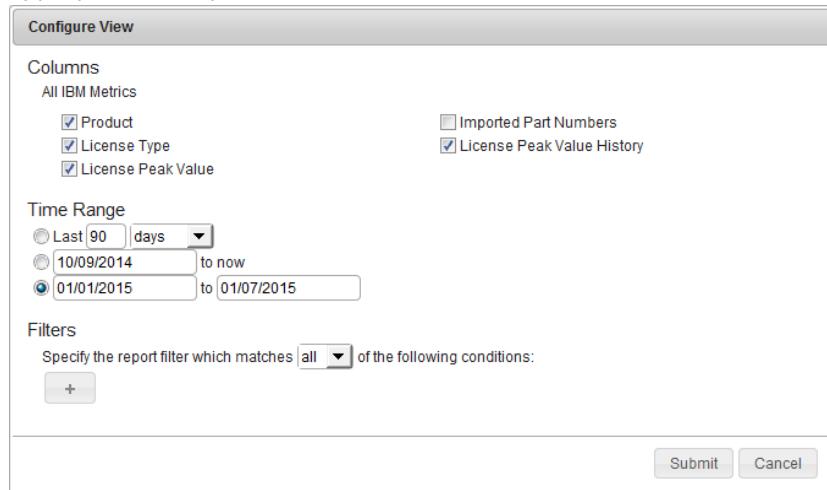
The screenshot shows the IBM License Metric Tool interface with the 'Reports' menu open, highlighting 'All IBM Metrics'. The main panel displays 'Deployment Health' with a bar chart showing 1 Low Disk Space. It also shows 'IBM Capacity Data Completeness' with a bar chart showing 3 OK (50%). Navigation links for General, Saved Reports, Software Inventory, Infrastructure, and Catalog are visible.

All IBM Metrics panel opens.

The screenshot shows the 'All IBM Metrics' report table with 54 rows. The columns include Product, License Type, License Peak Value, and License Peak Value History. The table lists various IBM products and their license types, such as PVU Full Capacity, PVU Subcapacity, and RVU Managed Activated Processor Cores. A legend at the bottom right indicates the color coding for the history graph: light blue for 0-12, medium blue for 12-280, dark blue for 280-840, orange for 840-1400, and yellow for 1400-3200.

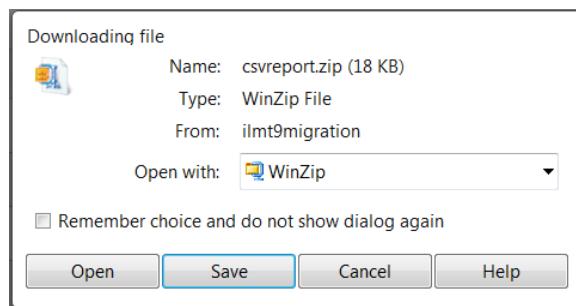
Product	License Type	License Peak Value	License Peak Value History
IBM Tivoli Performance Analyzer	PVU Full Capacity	840	840
IBM Tivoli Performance Analyzer	PVU Subcapacity	140	140
IBM Optim Database Relationship Analyzer for Linux, UNIX, and Windows	PVU Full Capacity	840	840
IBM Optim Database Relationship Analyzer for Linux, UNIX, and Windows	PVU Subcapacity	280	280
IBM Lotus Quickr for WebSphere Portal from Limited Use	PVU Full Capacity	3200	3200
IBM Lotus Quickr for WebSphere Portal from Limited Use	PVU Subcapacity	200	200
InfoSphere Optim Data Find	PVU Full Capacity	840	840
InfoSphere Optim Data Find	PVU Subcapacity	280	280
IBM I Optim Test Data Management Sol for Amdocs CRM	PVU Full Capacity	840	840
IBM I Optim Test Data Management Sol for Amdocs CRM	PVU Subcapacity	280	280
IBM InfoSp Optim Test Data Mgmt Sol for Siebel CRM DMO	PVU Full Capacity	840	840
IBM InfoSp Optim Test Data Mgmt Sol for Siebel CRM DMO	PVU Subcapacity	280	280
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Full Capacity	12	12
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Subcapacity	2	2
IBM Informix Dynamic Server Enterprise Edition	PVU Full Capacity	840	840
IBM Informix Dynamic Server Enterprise Edition	PVU Subcapacity	140	140
IBM Tivoli Storage Manager	PVU Full Capacity	3200	3200

2. If you want to change the dates to adhere to dates in 7.5 click **Configure View**, choose the appropriate time period and click **Submit**.



3. Click **Audit Snapshot**.

4. Save the results.



The content is as follows:

Name	Type	Size
audit_trails.csv	Microsoft Excel Comma Separated Values File	2 KB
checksums.txt	Text Document	1 KB
data_condition.txt	Text Document	3 KB
other_products.csv	Microsoft Excel Comma Separated Values File	28 KB
part_numbers.csv	Microsoft Excel Comma Separated Values File	69 KB
pub_key.pem	PGPdesk Document	1 KB
pvu_full_capacity.csv	Microsoft Excel Comma Separated Values File	10 KB
pvu_sub_capacity.csv	Microsoft Excel Comma Separated Values File	11 KB
readme.txt	Text Document	1 KB
rvu_full_capacity.csv	Microsoft Excel Comma Separated Values File	3 KB
rvu_sub_capacity.csv	Microsoft Excel Comma Separated Values File	3 KB
signature.rsa	RSA File	1 KB

The above CSV files serve you for comparison purposes.

Part 4: Final steps and removal of LMT 7.5

This part explains what to do before you remove LMT 7.5 from your environment.

1. Go to **IBM License Metric Tool > IBM Audit Reports > View Reports**.



View Reports panel opens.

Remember: All the reports must be signed before proceeding to the next step.

2. Open one of the reports by clicking its status in the **Status** column.

The screenshot shows the 'Audit Reports' panel with the following details:

Select	Status	Start Date	End Date	Comments
<input type="radio"/>	Signed	Oct 1, 2014	Dec 31, 2014	Signed on Jan 7, 2015 by tipadmin.
<input type="radio"/>	Signed	Jul 1, 2014	Sep 30, 2014	Signed on Dec 24, 2014 by tipadmin.
<input type="radio"/>	Signed	Apr 1, 2014	Jun 30, 2014	Signed on Dec 24, 2014 by tipadmin.
<input type="radio"/>	Signed	Mar 1, 2014	Mar 31, 2014	Signed on Dec 24, 2014 by tipadmin.
<input type="radio"/>	Signed	Feb 1, 2014	Feb 28, 2014	Signed on Sep 30, 2014 by tipadmin.
<input type="radio"/>	Signed	Jan 31, 2014	Jan 31, 2014	Signed on Sep 30, 2014 by tipadmin.
<input type="radio"/>	Signed	Jan 23, 2014	Jan 30, 2014	Signed on Sep 29, 2014 by tipadmin.
<input type="radio"/>	Signed	Nov 21, 2013	Jan 22, 2014	Signed on Jan 31, 2014 by tipadmin.
<input type="radio"/>	Signed	Nov 1, 2013	Nov 20, 2013	Signed on Nov 21, 2013 by tipadmin.
<input type="radio"/>	Signed	Oct 1, 2013	Oct 31, 2013	Signed on Nov 21, 2013 by tipadmin.
<input type="radio"/>	Signed	Jul 1, 2013	Sep 30, 2013	Signed on Oct 24, 2013 by tipadmin.
<input type="radio"/>	Signed	Jun 16, 2013	Jun 30, 2013	Signed on Oct 23, 2013 by tipadmin.

Page 1 of 1 | 1 | Go | Rows 16 | Total: 16 Filtered: 16 Selected: 0

The next scheduled report will cover the period from: Jan 1, 2015 to Jan 31, 2015

Audit Report Summary panel opens.

The screenshot shows the 'Audit Report Summary' panel with the following details:

PVU Report

Systems Report

RVU Report

PVU table version: Dec 15, 2014

Product	CPU Core Full Capacity	CPU Core Subcapacity	PVU Full Capacity	PVU Subcapacity	Comments
DB2 UDB Query Patroller	12	4	1200	400	
IBM DB2 Workgroup Server Edition Processor Value Unit	12	4	1200	400	
IBM InfoSphere Information Services Director for NonProduction Environments	0	0	0	0	All product instances are excluded
IBM InfoSphere Optim Performance Manager for DB2 for LUW Workgroup Edition	32	2	3200	200	
IBM InfoSphere Optim Test Data Management Solution NonRelational Connectors	12	4	1200	400	
IBM Informix Extended Parallel Server (XPS)	12	4	1200	400	
IBM Integration Bus	12	4	840	280	
IBM Lotus Domino	12	4	1200	400	
IBM Optim Database Relationship Analyzer for Linux, UNIX, and Windows	12	4	840	280	
IBM Optim Test Data Management Solution for Siebel CRM-Call Center Family	12	4	840	280	
IBM Tivoli Netview	12	4	1200	400	
IBM Tivoli Storage Manager	12	4	1200	400	

Page 1 of 2 | 1 | Go | Rows 12 | Total: 20 Filtered: 20

Download summary as: [PDF](#) [CSV](#)

Download the whole report as: [PDF](#) [CSV](#) [XML](#)

3. Download the whole report in the PDF, CSV and XML format.

Download the whole report as: [PDF](#) [CSV](#) [XML](#)

4. If you have products based on RVU MAPC licensing, perform the following steps for this report. It can be downloaded only in the CSV format.

The screenshot shows the 'Audit Report Summary' page for the 'RVU Report'. The table displays the following data:

Product	CPU Core Full Capacity	CPU Core Subcapacity	RVU Full Capacity	RVU subcapacity	RVU Charge Unit	RVU Measure	Comments
IBM Endpoint Manager for Patch Management	12	2	12	2	VUE139	Managed Activated Processor Cores	
IBM Tivoli Composite Application Manager for Applications Full Agent Pack	12	2	12	2	VUE139	Managed Activated Processor Cores	
IBM Tivoli Monitoring	24	6	24	6	VUE139	Managed Activated Processor Cores	
IBM Tivoli Provisioning Manager	12	2	12	2	VUE139	Managed Activated Processor Cores	

5. Repeat the same procedure for all reports that cover the last two years or a period from the installation of LMT 7.5 if the application was installed shorter than for two years.

This way you gather a complete set of signed reports required by the IBM compliance team. All downloaded files must be kept in a safe place for two years. Having this done, you can remove the 7.5 installation from your environment.

Appendix

Response file parameters

Below you will find the explanation of all the parameters used in the response file.

LMT_TAD4D_DB_TIMEOUT

Description: LMT/TAD4D database connection timeout in milliseconds

Default: 15000

Comment: Leave the default value unless you really need to change it.

IEM_HOST

Description: IEM server host name or IP address

Default: localhost

Comment: If IBM Endpoint Manager is on the same machine as the migration tool, leave the default value. Otherwise, change it to the host name or IP address of the machine where the IEM is installed.

IEM_PORT

Description: IEM server port number

Default: 52311

Comment: Leave the default value unless you changed it during or after the IEM installation.

IEM_PROTOCOL

Description: IEM server communications protocol

Default: https

Comment: Leave the default value unless you changed it during or after the IEM installation.

IEM_USER

Description: IEM console user

Default: IEMAdmin

Comment: Leave the default value unless you changed it during or after the IEM installation.

IEM_USER_PASSWORD

Description: IEM console user's password

Default: password

Comment: Provide the password in plain text. The password will be encrypted after you start the migration.

IEM_PROTOCOL_TIMEOUT

Description: IEM connection timeout in milliseconds

Default: 120000

Comment: Leave the default value unless you need to change it.

LMT_SUA_TOKEN

Description: LMT/SUA authentication token

Default: token

Comment: Change this value and provide the authentication token. The token will be encrypted after you start the migration. To show your unique token, follow this procedure:

[How to find ILMT authentication token?]

LMT_SUA_PORT

Description: LMT/SUA server port number

Default: 9081

Comment: Leave the default value unless you changed it during or after the ILMT installation.

LMT_SUA_PROTOCOL

Description: LMT/SUA communications protocol

Default: https

Comment: Leave the default value unless you changed it during or after the ILMT installation.

LMT_SUA_SITE

Description: LMT/SUA fixlet site

Default (LMT): IBM License Reporting

Default (SUA): IBM Endpoint Manager for Software Use Analysis

Comment: Leave the default value. To show the sites to which you are subscribed, follow this procedure:

[How to find to which sites you are subscribed?]

LMT_SUA_PROTOCOL_TIMEOUT

Description: LMT/SUA connection timeout in milliseconds

Default: 120000

Comment: Leave the default value unless you need to change it.

Migration statuses

Each migrated item is described with a status and an explanation that summarizes the result of the migration. The status of each migrated item is saved in the migration reports: *excluded_directories_report.csv*, *software_report.csv* and *vmmanagers_report.csv*.

Excluded directories

You may find the below statuses in this migration report: *excluded_directories_report.csv*.

UPDATED

Directories were updated on the IEM server, which then delivers them to the endpoints.

SKIPPED

Items were not migrated because of one of the following reasons:

- The IEM client is not installed.
Only items from endpoints that have both the 7.5 agent and the IEM client installed can be migrated.

- Directories are already excluded.
No need to migrate because directories are already excluded in LMT/SUA 9.0.1.2.
- Unsupported platform
Directories are excluded on i5 systems, which are not supported by 9.x. and cannot be migrated.

FAILED

The items were not migrated because of one of the following reasons.

- The Add Excluded Directories task cannot be found in the LMT/SUA fixlet site. The task is used to migrate the directories and is available starting from LMT/SUA 9.0.1.2. Update the fixlet site to the latest version.
- The Add Excluded Directories task in the LMT/SUA fixlet site cannot be initiated. The task cannot be initiated probably due to connection problems to the IEM server (perhaps wrong host, port, etc.). Check the *migration.log* file for details.

Software - bundlings and exclusions

You may find the below statuses in this migration report: *software_report.csv*.

SUCCEEDED

Items were successfully migrated and no action is required.

SKIPPED

Items were not migrated for one of the following reasons:

- The IEM client is not installed.
Only items from endpoints that have both the 7.5 agent and the IEM client installed can be migrated.
- The software exclusion already exists in the target instance.
No need to migrate.
- The software bundling already exists in the target instance.
No need to migrate.
- Shared components cannot be migrated.
Components shared between multiple products cannot be migrated.
- The report group ID is incorrect.
Only software that belongs to the default group can be migrated. See: [Reassigning the software instance to the default report group](#).
- The software was not discovered in the target instance.
The software was not discovered by the LMT/SUA 9.0.1.2 scans. It might be installed on remote disks.
- The software exclusion could not be migrated because the related software does not exist in the target instance.
Same as above, the 9.0.1.2 scans didn't discover the software.

- The component is assigned to a different product in the target instance. Different assignment; the migration tool cannot overwrite it if it is confirmed. Log in to LMT/SUA, go to Management > IBM Software Classification, and reassign the software manually, if needed.

FAILED

Errors returned from the LMT/SUA/IEM servers, for example, connection problems. You have to check the temा.лог file to determine the cause.

```
/opt/ibm/LMT/wlp/usr/servers/server1/logs/temа.лог
```

VM managers

You may find all below statuses in this migration report: *vmmanagers_report.csv*.

SUCCEEDED

Items were migrated and no action is required.

SKIPPED

Items were not migrated. In case of VM Managers, they can be skipped only if they're already defined in LMT/SUA 9.0.1.2.

FAILED

Errors returned from the LMT/SUA/IEM servers, e.g. connection problems. You have to check the temа.лог file to determine the cause.

```
/opt/ibm/LMT/wlp/usr/servers/server1/logs/temа.лог
```

Frequently asked questions (FAQ)

This part provides answers to frequently asked questions.

How to download IBM Endpoint Manager Agent Deployment Wizard?

To download IEM Agent Deployment Wizard for Windows or for Red Hat Enterprise Linux, open the following link:

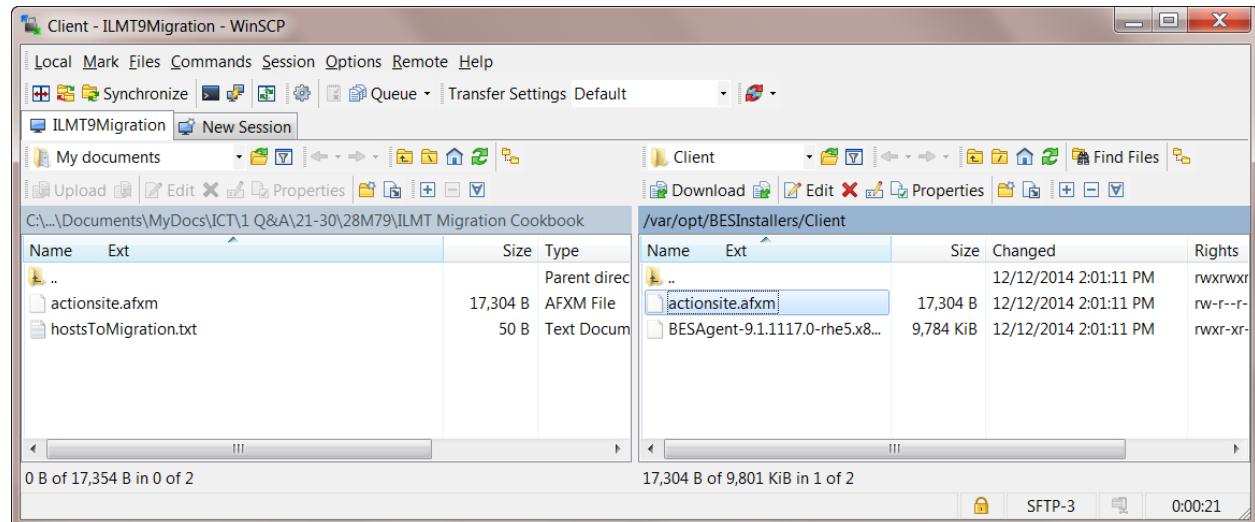
<https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/Tivoli%20Endpoint%20Manager/page/IEM%20Agent%20Deployment%20Wizard%20%28stand-alone%29>

Download the proper ZIP file. At the moment of writing this cookbook, the newest version is 1.0.446:
<http://software.bigfix.com/download/bes/util/AgentDeployment/TEMAgentDeployment-1.0.446-win.zip>
<http://software.bigfix.com/download/bes/util/AgentDeployment/TEMAgentDeployment-1.0.446-rhel.zip>

How to download IBM Endpoint Manager masthead file?

To download IEM server *actionsite.afxm* masthead file, go to the following location of your IEM server installation:

/var/opt/BESInstallers/Client



Where to find the tema.log?

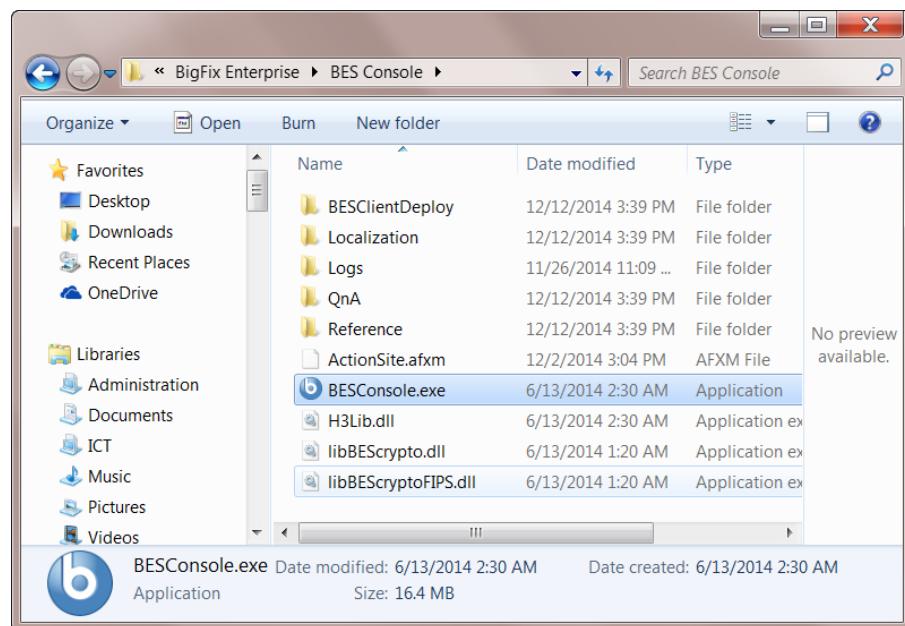
Go to:

/opt/ibm/LMT/wlp/usr/servers/server1/logs/tema.log

```
Linux RH (ILMT9Migration) root ~ # ls -la /opt/ibm/LMT/wlp/usr/servers/server1/logs
total 1380
drwxrwx--- 3 root root 4096 Dec 12 14:12 .
drwxr-xr-x 13 root root 4096 Dec 12 14:36 ..
-rw-rw---- 1 root root 209 Dec 12 14:04 console.log
drwxrwx--- 2 root root 4096 Dec 22 00:00 imports
-rw-rw---- 1 root root 787 Dec 12 14:04 messages.log
-rw-rw---- 1 root root 148858 Dec 22 00:02 production.log
-rw-rw---- 1 root root 1230004 Dec 22 00:02 tema.log
Linux RH (ILMT9Migration) root ~ #
```

How to open the IBM Endpoint Manager console?

To open the IBM Endpoint Manager console, you must start the `BESConsole.exe` file. It is in the installation home folder of IEM console. By default, `C:\Program Files (x86)\BigFix Enterprise\BES Console`.



How to open IBM License Metric Tool 7.5 Command Line Interface (CLI)?

Open command line of the operating system where the LMT server is installed. Navigate to `cli` folder under the installation directory and run the `lmtcli.sh` command. Then, run the login command and provide a correct **user name** and **password**.

```
AIX 7.1.0.0 NC107087 [09:35] root / # /opt/IBM/LMT/cli/lmtcli.sh
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
x Licensed Materials - Property of IBM
x 5724-T40 IBM License Metric Tool
x 5725-C68 IBM Tivoli Asset Discovery for Distributed
x Command line version 7.5.0.10 for AIX .
x (C) Copyright IBM Corp. 2002, 2012.
x All Rights Reserved. US Government Users Restricted Rights - Use,
x duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.
x For more detailed help, refer to product manual.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

lmt>login
Enter the user name: tipadmin
Enter the user password:

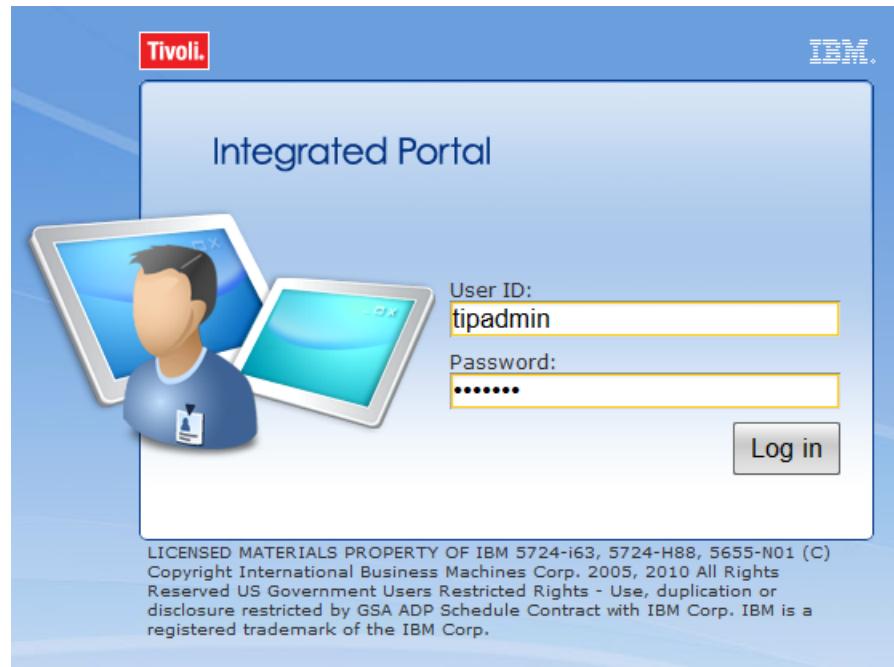
CODCL0033I: The command has been successfully performed.

lmt>
```

How to open the IBM License Metric Tool 7.5 web user interface

Replace the hostname with the host or IP address where the LMT server is installed and open the following link in a web browser.

<https://hostname:16311/ibm/console>



After you provide the **User ID** and **Password**, you will be able to see the ILMT 7.5 **Home** panel as shown below.

The screenshot shows the ILMT 9.0 dashboard. On the left is a navigation sidebar with sections like Home, IBM Audit Reports, Software, Hardware, Infrastructure, and Administration. The main area has two main sections: 'Software Product Status' and 'Infrastructure Health'. The 'Software Product Status' section includes a 'Recent Audit Reports' table and a 'Software Bundle Management' progress bar (0% to 100%). The 'Infrastructure Health' section includes 'Agent Status' (0% to 100%), 'Software Scans' (0% to 100%), and 'Infrastructure Coverage' (0% to 100%). Each section has related tasks listed below it.

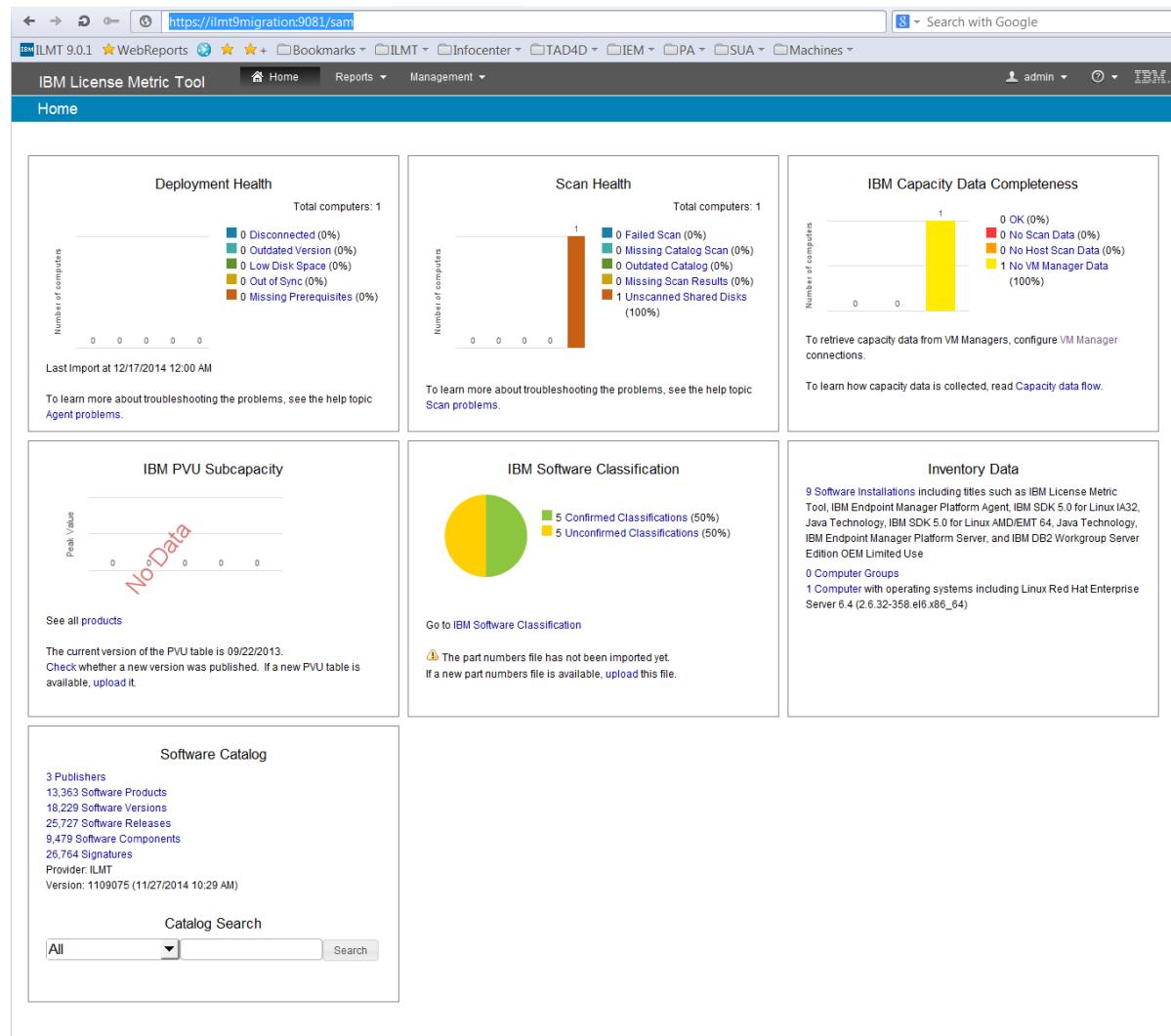
How to open IBM License Metric Tool 9.0 web user interface

Replace the hostname with the host or IP address where the LMT server is installed and open the following link in a web browser.

<https://hostname:9081/management/sam>

The login page for the IBM License Metric Tool. It features a header with the tool's name and an IBM logo. Below the header is a 'Login' section containing fields for 'User Name*' and 'Password*', both marked with red asterisks indicating they are required. A 'Login' button is located at the bottom of the form.

After you provide the **User Name** and **Password**, you will be able to see the ILMT 9.0 dashboard as shown below.



Where to find the migration tool?

The migration tool is installed together with IBM License Metric Tool server. By default, it is in the LMT home directory, under migration/product directories, for example:

/opt/ibm/LMT/migration/product

How to run migration?

Migration has three stages of execution:

1. Export to CSV files
2. Simulation of migration
3. Migration

The simplest way to execute each of them is:

1. ./migration.sh -export
2. ./migration.sh -migrate -simulate
3. ./migration.sh -migrate

How to display the options available for migration?

To display all options that are available for migration, run the migration tool without any parameters:
./migration.sh.

```
Linux RH [09:40] root /opt/ibm/LMT/migration/product # ./migration.sh

#####
# Licensed Materials - Property of IBM
#           IBM License Metric Tool
# 5725-F57 IBM Endpoint Manager for Software Use Analysis
# (C) Copyright IBM Corp. 2014.
# All Rights Reserved. US Government Users Restricted Rights - Use,
# duplication or disclosure restricted by GSA ADP Schedule Contract with
# IBM Corp.
# For more detailed help, refer to product manual.
#####

Usage:

UNIX:   ./migration.sh <COMMAND>
Windows: migration.bat <COMMAND>

List of supported commands:

-migrate [-dir <directory>] [-simulate]
          Migrate your information directly from the source to target.
          If you specify the simulate parameter, you can perform a test
          migration without saving the information in the target.
          If you do not specify the directory, the csv report files are saved
          in the main directory of the migration tool.

-export [-dir <directory>]
          Export your information from the source to csv files.
          If you do not specify the directory, the csv files are saved
          in the main directory of the migration tool.

Examples:

migration.bat -export
migration.bat -migrate -dir c:\temp -simulate
./migration.sh -export -dir /output
./migration.sh -migrate
Linux RH [09:40] root /opt/ibm/LMT/migration/product # 
```

Where to find logs from migration?

If you do not specify the directory by using the -dir parameter while running the migration tool, the migration.log file is saved in the main directory of the migration, for example /opt/ibm/LMT/migration/product.

Where to change the logging properties?

The settings of logging the migration process are taken from the `logging.properties` file. It is located in the main directory of the migration tool, for example `/opt/ibm/LMT/migration/product`. For instance, to track all messages during the migration process, you can change the migration logging level from `INFO` to `ALL`. To do this, change the following line from

```
com.ibm.license.mgmt.suamigration.level = INFO
```

to

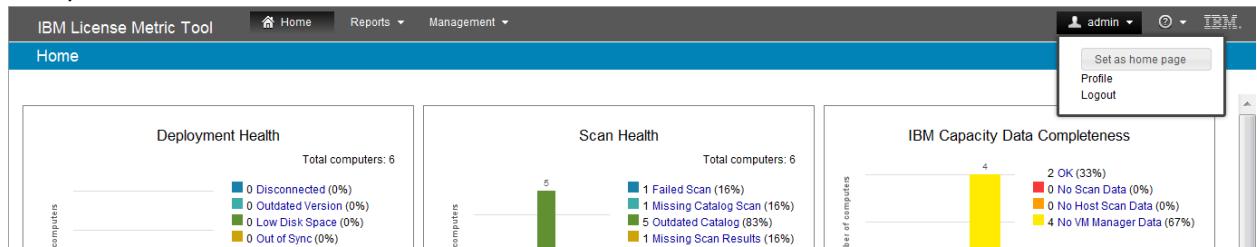
```
com.ibm.license.mgmt.suamigration.level = ALL
```

How to find ILMT authentication token?

1. Login to LMT interface.

[How to open IBM License Metric Tool 9.0 web user interface]

2. Click your user name, here **admin**, then click **Profile**.



3. Click **Show token**.

The link will change into a token.

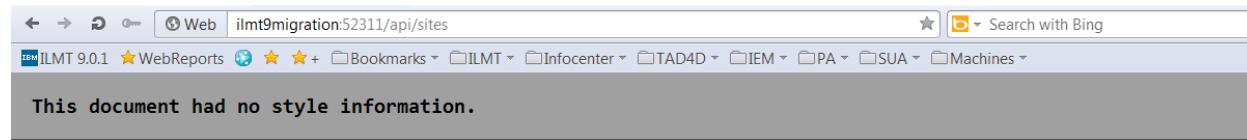
API Token **Regenerate**

How to find to which sites you are subscribed?

Open a web browser and type the following URL: `https://hostname:52311/api/sites` where `hostname` should be the host name or IP address of the machine where IEM is installed. For example:

`https://ilmt9migration:52311/api/sites`

The required names are the strings between `Name` tags.



```

<BESAPI xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="BESAPI.xsd">
  <ExternalSite Resource="http://ilmt9migration:52311/api/site/external/BES%20Support">
    <Name>
      BES Support
    </Name>
  </ExternalSite>
  <ExternalSite Resource="http://ilmt9migration:52311/api/site/external/IBM%20License%20Reporting">
    <Name>
      IBM License Reporting
    </Name>
    <DisplayName>
      IBM License Reporting (ILMT) v9
    </DisplayName>
  </ExternalSite>
  <OperatorSite Resource="http://ilmt9migration:52311/api/site/operator/IEMAdmin">
    <Name>
      IEMAdmin
    </Name>
  </OperatorSite>
  <ActionSite Resource="http://ilmt9migration:52311/api/site/master">
    <Name>
      ActionSite
    </Name>
  </ActionSite>
</BESAPI>

```

Migration response file template

You may find migration response file template `migration.properties_template` in the main directory of the migration tool, for example, `/opt/ibm/LMT/migration/product # less migration.properties_template`

```

# LMT/TAD4D database connection timeout in milliseconds:
LMT_TAD4D_DB_TIMEOUT=15000

# TARGET OF MIGRATION: IBM Endpoint Manager, and LMT or SUA

# IEM server host name or IP address:
IEM_HOST=localhost

# IEM server port number:
IEM_PORT=52311

# IEM server communications protocol:
IEM_PROTOCOL=https

# IEM console user and password:
IEM_USER=IEMAdmin
IEM_USER_PASSWORD=password

# The password will be encrypted after you start the migration.

```

```
# IEM connection timeout in milliseconds:  
IEM_PROTOCOL_TIMEOUT=120000  
  
# LMT/SUA authentication token:  
LMT_SUA_TOKEN=token  
# To view your unique token, log in to LMT/SUA, hover over your user name,  
# and click Profile > Show Token.  
  
# LMT/SUA server port number:  
LMT_SUA_PORT=9081  
  
# LMT/SUA communications protocol:  
LMT_SUA_PROTOCOL=https  
  
# LMT/SUA fixlet site:  
LMT_SUA_SITE=IBM License Reporting  
  
# LMT/SUA connection timeout in milliseconds:  
LMT_SUA_PROTOCOL_TIMEOUT=120000
```

Troubleshooting

This section provides solutions to the most common issues that you may face during the migration.

Migration failed with CTJSM0037E error code

If you see such error message on your console:

```
Start of migration.  
The following error occurred: Cannot connect to the LMT/TAD4D database.  
Migration failed.
```

Open the `migration.properties` file and correct the `LMT_TAD4D_DB_PORT` parameter.

Migration failed with CTJSM0039E error code

If you see such error message on your console:

```
Start of migration.  
The following error occurred: CTJSM0039E The LMT/TAD4D database host name is incorrect.  
Migration failed.
```

Open the `migration.properties` file and correct the `LMT_TAD4D_DB_HOST` parameter.