

# Migration Cookbook

Migration from Tivoli Asset Discovery for Distributed version 7.5  
to IBM Endpoint Manager for Software Use Analysis version 9.0  
Cookbook

*ILMT Central Team*  
*Version 1.0.1*

*Forum: [https://ibm.biz/ILMT\\_Forum](https://ibm.biz/ILMT_Forum)*  
*LinkedIn: [https://ibm.biz/ILMT\\_LinkedIn](https://ibm.biz/ILMT_LinkedIn)*  
*Twitter: [https://ibm.biz/ILMT\\_Twitter](https://ibm.biz/ILMT_Twitter)*  
*Wiki: [https://ibm.biz/ILMT\\_Wiki](https://ibm.biz/ILMT_Wiki)*  
*YouTube: [https://ibm.biz/ILMT\\_YouTube](https://ibm.biz/ILMT_YouTube)*

## Table of Contents

Introduction .....	7
One goal two approaches .....	7
Step 1: Preparing for migration .....	8
Choosing TAD4D 7.5 agents to be migrated .....	8
all-agents.csv.....	9
hostsToMigration.txt .....	9
all-agents-bundles.csv.....	10
all-agents-excluded-software.csv .....	12
vm-managers.txt.....	13
all-agents-excluded-directories.txt .....	14
Step 2: Migrating Software Knowledge Base Toolkit.....	17
Export the canonical file from SwKBT of TAD4D.....	17
Import the canonical file to SwKBT of SUA .....	19
Export the Canonical 2.0 for SUA.....	21
Import the Canonical 2.0 to SUA.....	23
Step 3: Mapping the agents.....	29
Installing IEM clients .....	29
Activate the 'LMT/TAD4D 7.x Agent Mapping' analysis .....	29
Run the 'Map LMT/TAD4D 7.x Agents' fixlet .....	31
Step 4: Scanning your environment.....	35
Activate necessary analyses.....	35
Install scanners on IEM clients .....	36
Run the VM Manager Tool fixlet.....	39
Initiate VM Managers .....	40
Synchronize information between IEM database and SUA database .....	41
Step 5: Migration your environment .....	46
Configure the migration properties .....	46
Export to CSV files .....	46
Generated CSV files .....	47

Content of the CSV files .....	48
agents.csv.....	48
agentsmap.csv .....	48
bundles.csv .....	49
excludeddirectories.csv .....	49
excludedsoftware.csv .....	49
vmmanagers.csv .....	49
Verification.....	50
Agents .....	50
Migrated agents.....	50
Bundles .....	50
Excluded directories.....	50
Excluded software.....	50
VM managers.....	50
Simulation of migration .....	51
Generated CSV files .....	52
Content of the CSV files .....	52
excluded_directories_report.csv .....	52
software_report.csv.....	52
vmmanagers_report.csv .....	53
Verification.....	53
Excluded directories report .....	53
Software report.....	53
VM managers report.....	54
Migration.....	54
Generated CSV files .....	56
Content of the CSV files .....	56
software_report.csv.....	56
Verification.....	56
Excluded directories.....	57
Software.....	58
VM managers.....	60

Verifying the migration .....	62
Sanity check on 9.0 .....	62
Verification of software components .....	63
7.5 .....	63
9.0 .....	66
Software components - host by host verification.....	70
7.5 .....	70
9.0 .....	73
Verification of software products .....	75
7.5 .....	75
9.0 .....	77
Software Products – host by host verification.....	79
7.5 .....	80
9.0 .....	83
Verification of the audit report.....	84
7.5 .....	85
9.0 .....	89
Final steps and removal of TAD4D 7.5 .....	93
Appendix .....	96
Response file parameters .....	96
LMT_TAD4D_DB_TIMEOUT .....	96
IEM_HOST .....	96
IEM_PORT .....	96
IEM_PROTOCOL .....	96
IEM_USER .....	96
IEM_USER_PASSWORD.....	96
IEM_PROTOCOL_TIMEOUT.....	96
LMT_SUA_TOKEN .....	96
LMT_SUA_PORT .....	97
LMT_SUA_PROTOCOL.....	97
LMT_SUA_SITE .....	97
LMT_SUA_PROTOCOL_TIMEOUT .....	97

Migration statuses .....	97
Excluded directories.....	97
UPDATED.....	97
SKIPPED.....	97
Software - bundlings and exclusions .....	98
SUCCEEDED.....	98
SKIPPED.....	98
FAILED .....	99
VM managers.....	99
SUCCEEDED.....	99
SKIPPED.....	99
FAILED .....	99
Installing IEM clients using IBM Endpoint Manager Agent Deployment Wizard.....	99
Frequently asked questions (FAQ).....	111
How to download IEM client native installer? .....	111
How to download IBM Endpoint Manager Agent Deployment Wizard?.....	112
How to download IBM Endpoint Manager masthead file?.....	113
Where to find the tema.log?.....	114
How to open the IBM Endpoint Manager console?.....	114
How to open Tivoli Asset Discovery for Distributed 7.5 Command Line Interface (CLI)? .....	116
How to restart TAD4D server? .....	117
How to open the Tivoli Asset Discovery for Distributed 7.5 web user interface? .....	117
How to open Software Knowledge Base Toolkit web user interface?.....	119
How to open Software Use Analysis 9.0 web user interface? .....	120
Where to find the migration tool? .....	121
How to run migration? .....	121
Is it possible to rerun the migration process?.....	121
How to display the options available for migration? .....	124
Where to find logs from migration? .....	124
Where to change the logging properties? .....	124
How to find SUA authentication token? .....	125
How to monitor the progress of ETL progress? .....	126

How to find to which sites you are subscribed? .....	126
Migration response file template .....	127
How to use filter mechanism to migrate just a subset of agents? .....	128
Troubleshooting.....	131
Migration failed with CTJSM0037E error code .....	131
Migration failed with CTJSM0039E error code .....	131

## Introduction

The migration process moves key data from Tivoli Asset Discovery for Distributed version 7.5 (*also referred to as TAD4D*) to a completely new infrastructure that is based on IBM Endpoint Manager (*also referred to as IEM*) and Software Use Analysis version 9.0.1.2. As opposed to an upgrade which automatically changes the version of the application, migration requires that you 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 Tivoli Asset Discovery for Distributed 7.5, it differs in some aspects. The new environment should be seen as a combination of Software Use Analysis 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 Software Use Analysis. 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 Tivoli Asset Discovery for Distributed or IBM License Metric Tool<sup>1</sup> 7.5 (*also referred to as License Metric Tool, LMT or ILMT*) and all subsequent fix packs and interim fixes to Software Use Analysis 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 SUA 9.0 as it was done in TAD4D 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 TAD4D 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 TAD4D 7.5 agents and migrate them to SUA 9.0. When this task is completed, you can continue with the rest of your environment.

---

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

## Step 1: Preparing for migration

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

Remember:

Agents on i5 systems are not supported in version 9.0. They should not be taken into consideration for migration.

### Choosing TAD4D 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 TAD4D 7.5 Web UI

See: [How to open the Tivoli Asset Discovery for Distributed 7.5 web user interface]

2. Open the **Agents** panel

The screenshot shows the 'Agents' panel in the TAD4D 7.5 web interface. The title bar says 'Agents'. Below it is a sub-header 'Agents in your Infrastructure'. A message states: '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 shows two counts: 'All agents: 5' and 'Not connecting agents: 0'. The main area is a table with the following data:

Select	Status	Version	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
<input type="checkbox"/>	OK	7.5.0.122	[REDACTED]	9.156.47.5	IBM nc047032.kraklab.pl	Windows 2012 6.2	Feb 17, 2015 12:29:36 PM	Feb 18, 2015 9:57:00 PM	Feb 20, 2015 2:02:28 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.122	[REDACTED]	9.167.40.204	IBM nc142253.kraklab.pl	Windows 2008 6.0	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 12:37:00 AM	Feb 20, 2015 2:05:04 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.122	[REDACTED]	9.128.106.178	IBM 8233 06A857P	AIX 6.1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:26:00 AM	Feb 20, 2015 2:01:34 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.121	[REDACTED]	9.128.106.166	IBM 8233 06A84DP	AIX 7.1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:27:00 AM	Feb 20, 2015 2:01:44 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.122	[REDACTED]	9.158.142.184	NC142182	LINUX SUSE Linux Enterprise Server 11 SP1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:35:00 AM	Feb 20, 2015 1:59:48 AM	DEFAULT

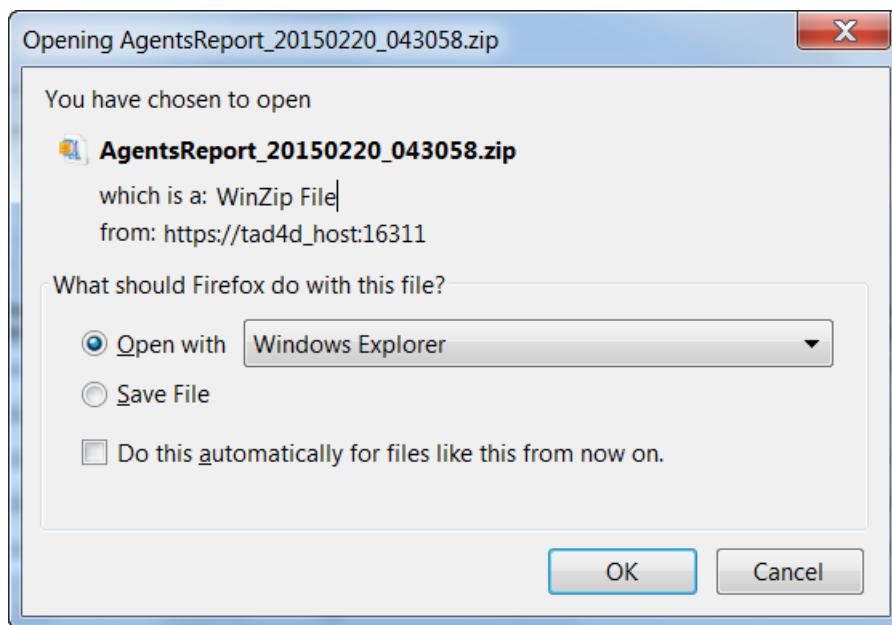
Below the table are buttons for 'Page 1 of 1', '1', 'Go', 'Rows 5', and 'Total: 5 Filtered: 5'. At the bottom are links for 'Download as PDF' and 'Download as CSV'.

3. Export agents from TAD4D 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	
1	Status	Version	Agent Sup	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
2	OK	7.5.0.122	Yes	NC047005		IBM nc047032 krakl	Windows 2012 6.2	2/17/2015 12:29	2/18/2015 21:57	2/20/2015 2:02	DEFAULT
3	OK	7.5.0.122	Yes	NC040204		IBM nc142253 krakl	Windows 2008 6.0	2/17/2015 12:29	2/19/2015 0:37	2/20/2015 2:05	DEFAULT
4	OK	7.5.0.122	Yes	NC106178		IBM 8233 06A857P	AIX 6.1	2/17/2015 12:29	2/19/2015 6:26	2/20/2015 2:01	DEFAULT
5	OK	7.5.0.121	Yes	NC106166		IBM 8233 06A84DP	AIX 7.1	2/17/2015 12:29	2/19/2015 6:27	2/20/2015 2:01	DEFAULT
6	OK	7.5.0.122	Yes	NC142184		NC142182	LINUX SUSE Linux Ent	2/17/2015 12:29	2/19/2015 6:35	2/20/2015 1:59	DEFAULT
7											

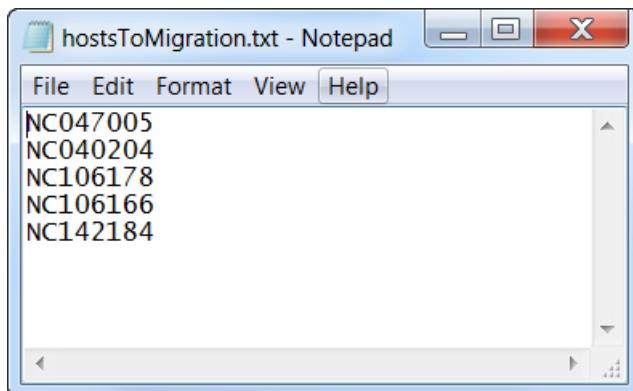
### hostsToMigration.txt

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
1 NC047005
2 NC040204
3 NC106178
4 NC106166
5 NC142184
6

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

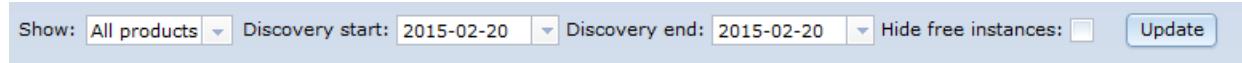


### all-agents-bundles.csv

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



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



3. To filter only IBM products, choose **Manufacturer** and **IBM** as a value, and click the button with arrows.



The **Manage Software Inventory** panel updates.

Manage Software Inventory

Show: All products | Discovery start: 2015-02-20 | Discovery end: 2015-02-20 | Hide free instances:  | Update

Displayed products: 19

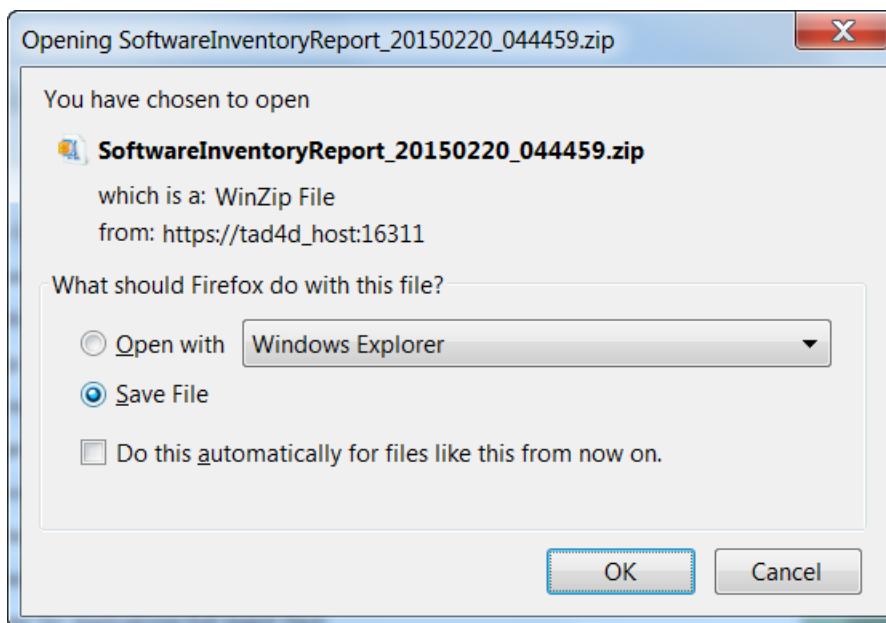
Product/Release/Component	Confidence	Part Numbers	Manufacturer
AIX Express Edition	100%		IBM
IBM DB2 Enterprise Server Edition PVU Option	100%		IBM
IBM DB2 Enterprise Server Edition Unlicensed Product Base	100%		IBM
IBM Developer Kit JavaTM Standard Edition	100%		IBM
IBM Developer Kit, JavaTM 2 Technology Edition	100%		IBM
IBM Endpoint Manager for Lifecycle Management	100%		IBM
IBM Endpoint Manager for Patch Management	100%		IBM
IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	100%		IBM
IBM SDK 5.0 for Windows IA32, Java Technology	100%		IBM
IBM Tivoli Asset Discovery for Distributed	100%		IBM
IBM Tivoli Composite Application Manager for Applications Full Agent Pack	100%		IBM
IBM Tivoli Monitoring	100%		IBM
IBM Tivoli Provisioning Manager	100%		IBM
IBM Tivoli Security Compliance Manager	100%		IBM
IBM WebSphere Application Server - Express	100%		IBM
IBM WebSphere Application Server Liberty Core	100%		IBM
IBM WebSphere Application Server Network Deployment	100%		IBM
IBM WebSphere Application Server for Developers	100%		IBM
IBM WebSphere MQ	100%		IBM

[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 to display assignments of discovered components to software products that will be migrated:

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

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q		
1	Product	Current	Release	Compon	Host Na	Confidence	Explanation of Confid	Exclusio	Installat	Operati	Scan G	Part Nu	Manufa	Free of	Subcapa	Installed	Agent d	ted
2	AIX Expr: IBM 8233	AIX Expr: AIX Expr: NC106178				100 User-bundled	Included	/usr/lpp/bo/AIX 6.1	DEFAULT	IBM	No	No	No	No	No	No	No	
3	AIX Expr: IBM 8233	AIX Expr: IBM solidC NC106178				100 User-bundled	Included	/opt/cluste/AIX 6.1	DEFAULT	IBM	Yes	No	No	No	No	No	No	
4	AIX Expr: IBM 8233	AIX Expr: IBM solidC NC106166				100 User-bundled	Included	/opt/cluste/AIX 7.1	DEFAULT	IBM	Yes	No	No	No	No	No	No	
5	IBM DB2 E IBM nc14 IBM DB2 E IBM DB2 E NC040204					100 User-bundled	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
6	IBM DB2 E IBM nc04 IBM DB2 E IBM DB2 E NC047005					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
7	IBM Endp IBM 8233 IBM Endp IBM Twill NC106166					100 User-bundled	Included	/usr/lpp/Tw AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
15	IBM Endp IBM 8233 IBM Endp IBM Twill NC106166					100 User-bundled	Included	/usr/lpp/Tw AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
16	IBM Endp IBM 8233 IBM Endp IBM Twill NC106166					100 User-bundled	Included	/opt/Tivoli/Tw AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
17	IBM Endp IBM 8233 IBM Endp IBM Twill NC106178					100 User-bundled	Included	/usr/lpp/Tw AIX 6.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
18	IBM Endp IBM 8233 IBM Endp IBM Twill NC106178					100 User-bundled	Included	/opt/Tivoli/Tw AIX 6.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
19	IBM Endp IBM 8233 IBM Endp IBM Endp NC106166					100 User-bundled	Included	/opt/IBM/IT/AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
22	IBM Twill IBM nc14 IBM Twill IBM Licen: NC040204					100 User-confirmed. Based	Included	C:\Windw Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
23	IBM Twill IBM 8233 IBM Twill IBM Licen: NC106166					100 User-confirmed. Based	Included	/opt/itm/pr AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
24	IBM Twill IBM 8233 IBM Twill IBM Licen: NC106178					100 User-confirmed. Based	Included	/opt/itm/pr AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
25	IBM Twill IBM NC142182 IBM Twill IBM Licen: NC142184					100 User-confirmed. Based	Included	/var/itm/pr LINUX SU\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
26	IBM Twill IBM nc04 IBM Twill IBM Licen: NC047005					100 User-confirmed. Based	Included	C:\Windw Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
27	IBM Twill NC142182 IBM Twill IBM Twill NC142184					100 User-bundled	Included	/opt/twoll/I LINUX SU\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
28	IBM Twill IBM 8233 IBM Twill IBM Twill NC106166					100 User-bundled	Included	/opt/IBM/IT/AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
29	IBM Twill IBM 8233 IBM Twill IBM Twill NC106178					100 User-bundled	Included	/opt/IBM/IT/AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
30	IBM Twill IBM nc04 IBM Twill IBM Twill IBM Twill NC047005					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
31	IBM Twill IBM 8233 IBM Twill IBM Twill NC106166					100 User-confirmed. Based	Included	/opt/IBM/IT/AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
32	IBM Twill IBM 8233 IBM Twill IBM Twill NC106178					100 User-confirmed. Based	Included	/opt/IBM/IT/AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
33	IBM Twill NC142182 IBM Twill IBM Twill NC142184					100 User-confirmed. Based	Included	/opt/twoll/I LINUX SU\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
34	IBM Twill IBM nc14 IBM Twill IBM Twill NC040204					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
35	IBM Twill IBM nc04 IBM Twill IBM Twill NC047005					100 User-confirmed. Based	Included	N/A Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
36	IBM Twill IBM 8233 IBM Twill IBM Twill NC106166					100 User-confirmed. Based	Included	N/A AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
37	IBM Twill NC142182 IBM Twill IBM Twill NC142184					100 User-confirmed. Based	Included	N/A LINUX SU\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
38	IBM Twill IBM 8233 IBM Twill IBM Twill NC106178					100 User-confirmed. Based	Included	N/A AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
39	IBM Twill IBM nc14 IBM Twill IBM Twill NC040204					100 User-confirmed. Based	Included	N/A Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
40	IBM Twill IBM nc14 IBM Twill IBM Twill NC040204					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
41	IBM WebS IBM 8233 IBM WebS WebSphere NC106178					100 User-confirmed. Based	Excluded	/usr/IBM/W AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
42	IBM WebS IBM 8233 IBM WebS WebSphere NC106178					100 User-confirmed. Based	Excluded	/usr/IBM/W AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
43	IBM WebS IBM 8233 IBM WebS WebSphere NC106166					100 User-confirmed. Based	Included	/usr/IBM/W AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
44	IBM WebS IBM nc04 IBM WebS WebSphere NC047005					100 User-bundled	Included	C:\Liberty\Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
45	IBM WebS NC142182 IBM WebS WebSphere NC142184					100 User-confirmed. Based	Included	/IBM/wlp/I LINUX SU\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
46	IBM WebS IBM 8233 IBM WebS IBM WebS NC106166					100 User-bundled	Included	/usr/IBM/W AIX 7.1	DEFAULT	IBM	No	No	No	No	No	No	No	
47	IBM WebS IBM nc04 IBM WebS IBM WebS NC047005					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	No	No	No	No	No	No	
48	IBM WebS IBM nc14 IBM WebS IBM WebS NC040204					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	No	No	No	No	No	No	
49	IBM WebS NC142182 IBM WebS IBM WebS NC142184					100 User-confirmed. Based	Included	/usr/IBM/LINUX SU\	DEFAULT	IBM	No	No	No	No	No	No	No	
50	IBM WebS IBM 8233 IBM WebS IBM WebS NC106178					100 User-confirmed. Based	Included	/usr/IBM/W AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	
51	IBM WebS NC142182 IBM WebS IBM WebS NC142184					100 User-confirmed. Based	Included	/usr/IBM/W LINUX SU\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
52	IBM WebS IBM 8233 IBM WebS IBM WebS NC106166					100 User-confirmed. Based	Excluded	/usr/IBM/W AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	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	Q	R	
1	Product	Current	Se	Release	Compon	Host Na	Confidenc	Explanation of Confid	Exclusio	Installation	Operating	Scan G	Part Num	Manufa	Free of ch	Subcapac	Installed	Agent deleted
2	AIX Expr: IBM 8233	AIX Expr: AIX Expr: NC106178				100 User-bundled	Included	/usr/lpp/bo/AIX 6.1	DEFAULT	IBM	No	No	No	No	No	No	No	
3	AIX Expr: IBM 8233	AIX Expr: IBM solidC NC106178				100 User-bundled	Included	/opt/cluste/AIX 6.1	DEFAULT	IBM	Yes	No	No	No	No	No	No	
4	AIX Expr: IBM 8233	AIX Expr: IBM solidC NC106166				100 User-bundled	Included	/opt/cluste/AIX 7.1	DEFAULT	IBM	Yes	No	No	No	No	No	No	
5	IBM DB2 E IBM nc14 IBM DB2 E IBM DB2 E NC040204					100 User-bundled	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
6	IBM DB2 E IBM nc04 IBM DB2 E IBM DB2 E NC047005					100 User-confirmed. Based	Included	C:\Program Windows\	DEFAULT	IBM	No	Yes	No	No	No	No	No	
7	IBM Endp IBM 8233 IBM Endp IBM Twill NC106166					100 User-bundled	Included	/usr/lpp/Tw AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
8	IBM Endp IBM 8233 IBM Endp IBM Twill NC106166					100 User-bundled	Included	/opt/Tivoli/Tw AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
9	IBM Endp IBM 8233 IBM Endp IBM Twill NC106178					100 User-bundled	Included	/usr/lpp/Tw AIX 6.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
10	IBM Endp IBM 8233 IBM Endp IBM Twill NC106178					100 User-bundled	Included	/opt/Tivoli/Tw AIX 6.1	DEFAULT	IBM	Yes	Yes	No	No	No	No	No	
11	IBM Endp IBM 8233 IBM Endp IBM Endp NC106166					100 User-bundled	Included	/opt/IBM/IT/AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No	No	

### 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 the following filter:

- 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	P	Q	R	
1	Produ	Curre	Releas	Compl	Host N	Confid	Explain	Exclusion Status	Install	Operat	Scan	Part N	Manuf	Free	Subcri	Install	Agent	xleted
8	IBM DB2	IBM nc0	IBM DB2	IBM DB2	NC04700	100	No other	Excluded: Not eligible for licensing	C:\Progr	Windows	DEFAULT	IBM	Yes	No	No	No	No	No
41	IBM Web	IBM 823	IBM Web	WebSph	NC10617	100	User-con	Excluded: Evaluation, trial... (30-days free trial period)	/usr/IBM	AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No
42	IBM Web	IBM 823	IBM Web	WebSph	NC10617	100	User-con	Excluded: Evaluation, trial... (30-days free trial period)	/usr/IBM	AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No
52	IBM Web	IBM 823	IBM Web	IBM Web	NC10616	100	User-con	Excluded: Other: (Discount: Buy 2 Get 1 FREE)	/usr/IBM	AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No
53																		

### vm-managers.txt

Open the **VM Managers** panel.



The panel looks as follows.

**VM Managers**

The table lists VM managers used in your IT infrastructure. Polling interval refers to the amount of time between two communication attempts.

Polling interval: 30 min

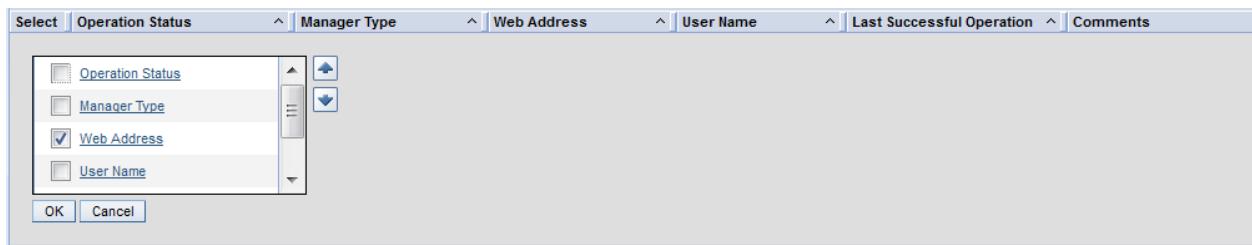
Select	Operation Status	Manager Type	Web Address	User Name	Last Successful Operation	Comments
<input type="radio"/>	OK	KVM - RHEV-M	https://NC044146:8443/api	admin@internal	Feb 20, 2015 4:42:43 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	KVM - RHEV-M	https://NC142232:443/api	admin@internal	Feb 20, 2015 4:42:43 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	Microsoft Hyper-V	http://NC042207/wsman	administrator@cluster.com	Feb 20, 2015 4:42:44 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	Microsoft Hyper-V	http://NC042203/wsman	administrator@cluster.com	Feb 20, 2015 4:42:44 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	VMware ESX, ESXi or vCenter	https://NC142253/sdk	root	Feb 20, 2015 4:42:45 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	VMware ESX, ESXi or vCenter	https://NC142252/sdk	root	Feb 20, 2015 4:42:44 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	VMware ESX, ESXi or vCenter	https://NC042251/sdk	administrator	Feb 20, 2015 4:42:45 AM	There are no problems with the VM manager.
<input type="radio"/>	OK	VMware ESX, ESXi or vCenter	https://NC042194/sdk	administrator	Feb 20, 2015 4:42:45 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 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.



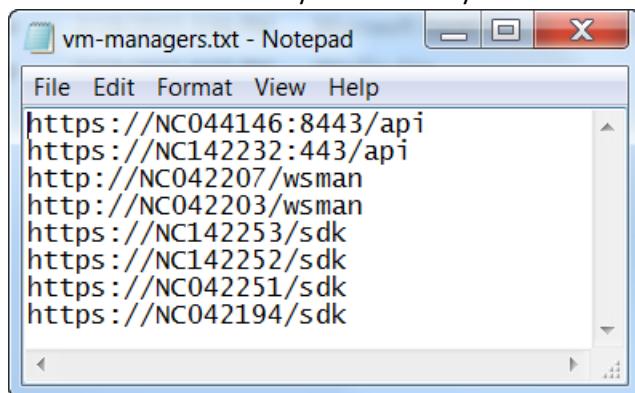
3. Highlight all web addresses and copy them.

A screenshot of the 'VM Managers' interface. The title bar says 'VM Managers'. Below it, a sub-header says 'VM Managers'. A note states: 'The table lists VM managers used in your IT infrastructure. Polling interval refers to the amount of time between two communication attempts.' The 'Polling interval: 30 min' is shown. There is a toolbar with icons for add, edit, delete, search, and refresh. A dropdown menu says '-- Select Action --'. A table titled 'Select' shows a list of web addresses:

	Web Address
1	https://NC044146:8443/api
2	https://NC142232:443/api
3	http://NC042207/wsman
4	http://NC042203/wsman
5	https://NC142253/sdk
6	https://NC142252/sdk
7	https://NC042251/sdk
8	https://NC042194/sdk

At the bottom, there are 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/tippass` credentials to your credentials.

```
/opt/IBM/TAD4D/cli/lmtcli.sh -u tipadmin -p tippass -c listexclusions -p AIX > /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/TAD4D/cli/lmtcli.sh -u tipadmin -p tippass -c listexclusions -p Linux >> /tmp/all-agents-excluded-directories-platforms.txt
```

```
/opt/IBM/TAD4D/cli/lmtcli.sh -u tipadmin -p tippass -c listexclusions -p Solaris >> /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/TAD4D/cli/lmtcli.sh -u tipadmin -p tippass -c listexclusions -p HPUX >> /tmp/all-agents-excluded-directories-platforms.txt
/opt/IBM/TAD4D/cli/lmtcli.sh -u tipadmin -p tippass -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.

```
Linux RH (TAD4D_HOST) root ~ # cat /tmp/all-agents-excluded-directories-platforms.txt
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
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 Linux .
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.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Platform: AIX
Path /proc/*

Platform: AIX
Path */tmp/*

Platform: AIX
Path */eznim/*

Platform: AIX
Path /ICT_archive/*

Platform: AIX
Path /ICT_archive/*

CODCL0033I: The command has been successfully performed.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
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 Linux .
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.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

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

Platform: Linux
Path /ICT_archive/*
```

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/TAD4D/cli/lmtcli.sh -u tipadmin -p tippass -c help listexclusions

Linux RH (TAD4D_HOST) root / # /opt/IBM/TAD4D/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 Linux .
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.

Linux RH (TAD4D_HOST) root / #
```

## Step 2: Migrating Software Knowledge Base Toolkit

This step is required only if you maintain custom catalog content in Software Knowledge Base Toolkit (*also referred to as SwKBT*). If that is the case in your environment, export the custom content to a canonical file and then import it manually to the target instance of Software Knowledge Base Toolkit. Then, import the software catalog to SUA.

Remember:

Migration of SwKBT content created for TAD4D requires a separate installation of SwKBT for SUA. It is not possible to keep using SwKBT installation for TAD4D also for SUA. The target instance of SwKBT must be in version 1.2.2 or higher.

Migration of SwKBT content consists of four parts:

- SwKBT of TAD4D: Export the content
- SwKBT of SUA: Import the content
- SwKBT of SUA: Export the content
- SUA: Import the content and synchronize with IEM database

### Export the canonical file from SwKBT of TAD4D

This part explains how to export the content of SwKBT that is used with TAD4D.

1. Copy the content of the `/opt/ibm/SUA/migration/swkbt` directory from the SUA server machine to the TAD4D server machine. The results might look as follows:

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/swkbt # ls -la
total 28
drwxr-xr-x 4 root root 4096 Feb 17 20:22 .
drwxr-xr-x 4 root root 4096 Feb 17 20:22 ..
drwxr-xr-x 2 root root 4096 Feb 17 20:22 index.luc
drwxr-xr-x 2 root root 4096 Feb 17 20:22 libs
-rw----- 1 root root 2213 Feb 17 20:22 readme.txt
-rw----- 1 root root 1987 Feb 17 20:22 swkbt_migration.bat
-rwx----- 1 root root 2000 Feb 17 20:22 swkbt_migration.sh
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/swkbt #
```

```
Linux RH (TAD4D_HOST) root /migration/swkbt # ls -la
total 28
drwxr-xr-x 4 root root 4096 Feb 20 10:53 .
drwxr-xr-x 3 root root 4096 Feb 20 10:53 ..
drwxr-xr-x 2 root root 4096 Feb 20 10:53 index.luc
drwxr-xr-x 2 root root 4096 Feb 20 10:53 libs
-rw-r--r-- 1 root root 2213 Feb 17 20:22 readme.txt
-rw-r--r-- 1 root root 1987 Feb 17 20:22 swkbt_migration.bat
-rw-r--r-- 1 root root 2000 Feb 17 20:22 swkbt_migration.sh
Linux RH (TAD4D_HOST) root /migration/swkbt #
```

2. Open the command line console and edit the swkbt\_migration\_file.

```
vi swkbt_migration.sh
Linux RH (TAD4D_HOST) root /migration/swkbt # vi swkbt_migration.sh
```

3. If you did not install SwKBT in the default location, change the value of the

```
/opt/IBM/SoftwareKnowledgeBaseToolkit parameter to point to the SwKBT installation directory.
```

```
# Software Knowledge Base Toolkit installation directory:
export SWKBT_HOME=/opt/IBM/SoftwareKnowledgeBaseToolkit
```

4. Add a permission for executing the migration script if necessary.

```
chmod +x ./swkbt_migration.sh
```

5. To run the migration tool, run the following command.

```
./swkbt_migration.sh
Linux RH (TAD4D_HOST) root /migration/swkbt # ./swkbt_migration.sh
::::::::::::::::::
Licensed Materials - Property of IBM
5725-F57 IBM Endpoint Manager for Software Use Analysis
Command line for Windows Server 2008, 2012.
(C) cpright 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.
::::::::::::::::::

Your custom content from the source instance of Software Knowledge Base Toolkit (localhost)
will be exported to the canonical.xml file. This file must be then imported manually to the target instance.

2/20/15 11:19 AM - Start of migration.
2/20/15 11:19 AM - Collecting your custom content from the source instance.
2/20/15 11:21 AM - Your custom content was collected.
2/20/15 11:21 AM - Exporting your custom content to a canonical file.
2/20/15 11:21 AM - Your custom content was exported.
2/20/15 11:21 AM - End of migration.
Linux RH (TAD4D_HOST) root /migration/swkbt #
```

The results are as follow.

```
ls -la *.xml
Linux RH (TAD4D_HOST) root /migration/swkbt # ls -la *.xml
-rw-r--r-- 1 root root 3581 Feb 20 11:21 canonical.xml
Linux RH (TAD4D_HOST) root /migration/swkbt #
```

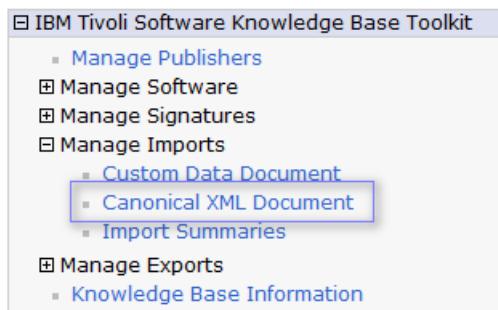
## Import the canonical file to SwKBT of SUA

This procedure describes how to import the content to SwKBT that is used with SUA.

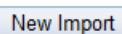
1. Log in to the target instance of Software Knowledge Base Toolkit.

See: [How to open Software Knowledge Toolkit web user interface?]

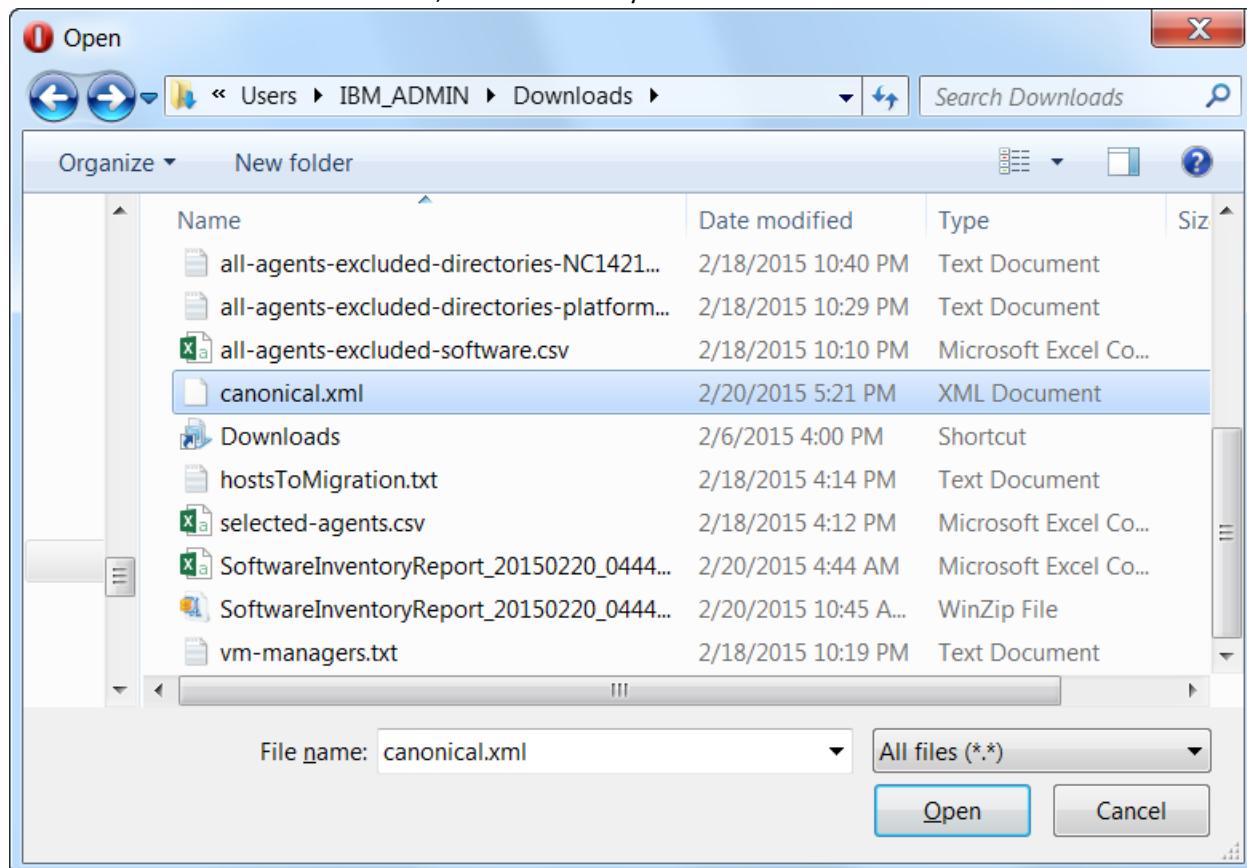
2. In the navigation bar, expand **IBM Tivoli Software Knowledge Base Toolkit > Manage Imports** and click **Canonical XML Document**:



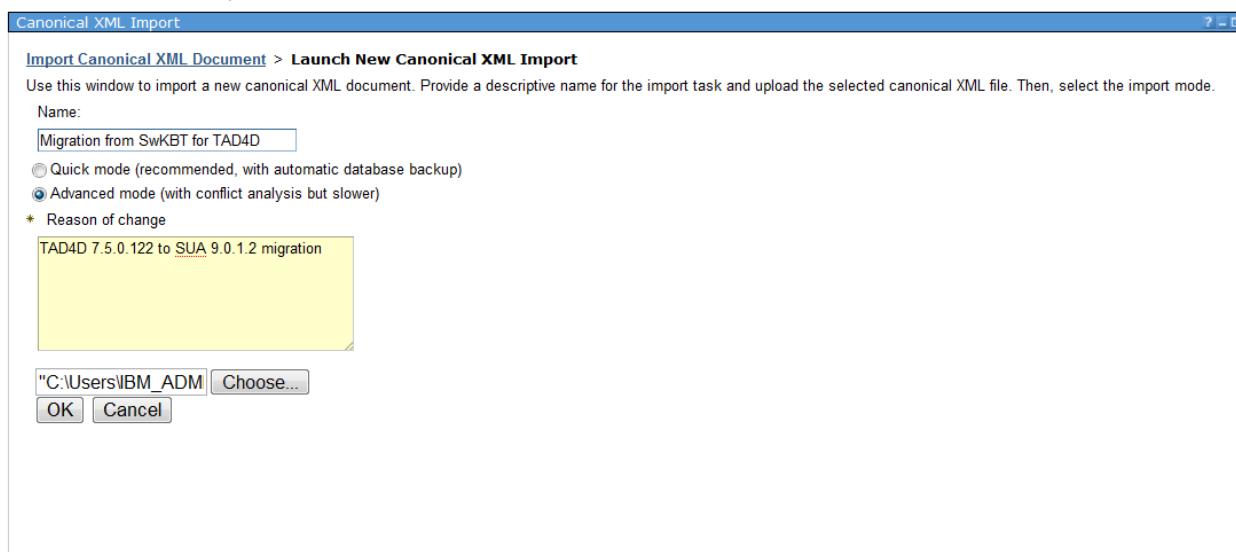
3. Canonical XML Import window opens. Click **New Import**.



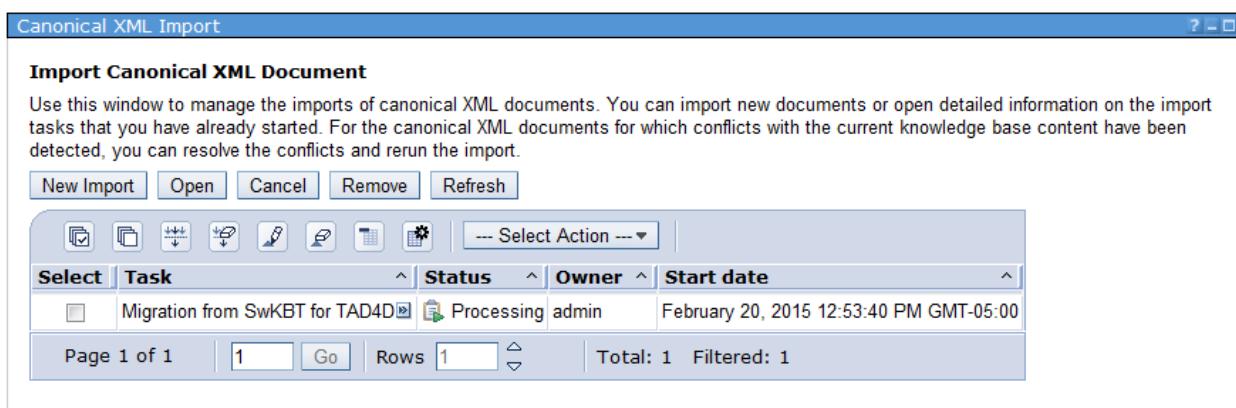
4. Select the **Advanced mode** check box, and browse for your canonical file.



5. Then, click **OK** to import the file.



The XML document is being uploaded:



When the canonical XML document is imported, its content is analyzed for conflicts with the data that is currently stored in your knowledge base. If any conflicts are displayed, resolve them.

Remember:

If you blocked any of your signatures from receiving canonical XML updates, you must do it again in the target Software Knowledge Base Toolkit because this flag was removed from all your signatures during the migration.

6. When you see 100% in the **Status** column, the process is completed.

The screenshot shows the 'Canonical XML Import' window. At the top, there are buttons for 'New Import', 'Open', 'Cancel', 'Remove', and 'Refresh'. Below these are several icons for file operations like Open, Save, Print, and Filter. A toolbar below the icons has a dropdown menu labeled '--- Select Action ---'. The main area is a grid table with columns: 'Select', 'Task', 'Status', 'Owner', and 'Start date'. There is one row in the grid:

Select	Task	Status	Owner	Start date
<input type="checkbox"/>	Migration from SwKBT for TAD4D	Completed	admin	February 20, 2015 12:53:40 PM GMT-05:00

At the bottom of the grid, it says 'Page 1 of 1', '1', 'Go', 'Rows 1', 'Total: 1', and 'Filtered: 1'.

## Export the Canonical 2.0 catalog for SUA

Now you can export the catalog content which will be imported directly to SUA.

1. In the navigation bar, expand **IBM Tivoli Software Knowledge Base Toolkit > Manage Exports** and click **Export Catalogs**.

The screenshot shows the navigation tree under 'IBM Tivoli Software Knowledge Base Toolkit':

- Manage Publishers
- Manage Software
- Manage Signatures
- Manage Imports
- Manage Exports
  - Export Catalogs (selected)
  - Publish Catalog
- Knowledge Base Information

2. Select **Canonical 2.0 (for Software Use Analysis 2.0)** and click **Launch**.

The screenshot shows the 'Manage Knowledge Base Exports' window. At the top, it says 'Manage Knowledge Base Exports' and 'Use this window to export the content of the knowledge base to a catalog.' Below this is a section for 'Knowledge Base Data Version' showing 'Content data version: 352873' and 'Last modification date: February 20, 2015 11:21:48 AM GMT-05:00'. To the right, under 'Exported Knowledge Base Content', there is a 'Refresh' button and a folder icon labeled 'CANONICAL\_2\_FORM'. The 'New Export Task' section contains two checkboxes:

- Canonical 1.0 (for Tivoli Asset Management for IT and IBM Tivoli Asset Discovery for Distributed 7.2.2 and above)
- Canonical 2.0 (for Software Use Analysis 2.0)

A 'Launch' button is located below these checkboxes. The 'Export Tasks' section at the bottom says 'No tasks have been defined.' and has a 'Refresh List' button.

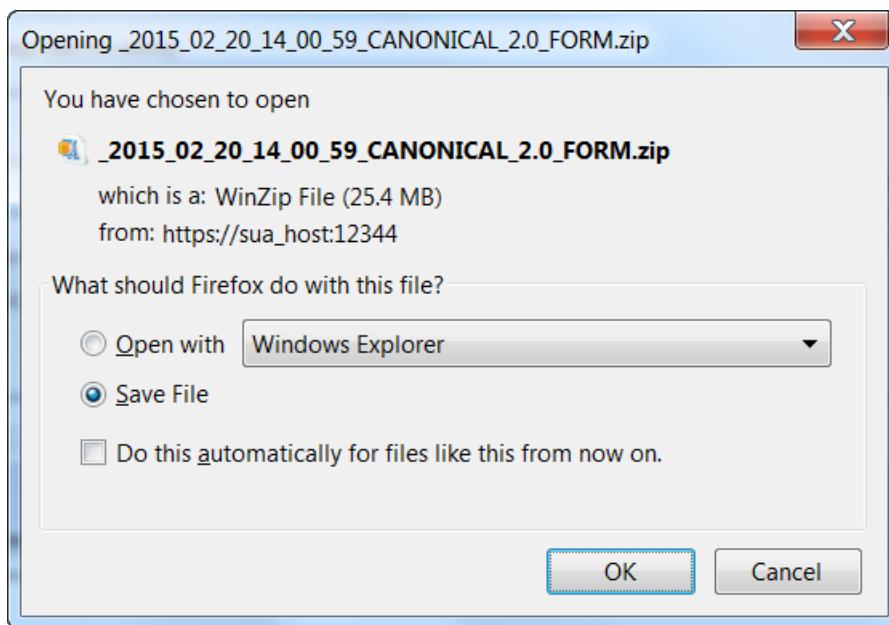
The process begins.

The screenshot shows the 'Manage Knowledge Base Exports' window. At the top, a message box displays 'CTGKB2021! The following export type has been added to the list of tasks to run: Canonical 2.0 knowledge base'. Below this, the 'Manage Knowledge Base Exports' section is visible with the sub-section 'Knowledge Base Data Version'. It shows 'Content data version: 352873' and 'Last modification date: February 20, 2015 11:21:48 AM GMT-05:00'. The 'New Export Task' section contains two checkboxes: 'Canonical 1.0 (for Tivoli Asset Management for IT and IBM Tivoli Asset Discovery for Distributed 7.2.2 and above)' and 'Canonical 2.0 (for Software Use Analysis 2.0)'. A 'Launch' button is present. The 'Export Tasks' section includes buttons for 'Cancel Task', 'Remove Completed Tasks', and 'Refresh List'. A table lists one task: 'Export: Canonical 2.0 knowledge base' (Status: The task is running, Owner: admin, Start Time: 2/20/15 2:00 PM). The 'Task Details' section is empty with the placeholder 'Select a task to view its details.' The 'Exported Knowledge Base Content' section shows a tree view with 'CANONICAL\_2\_FORM' expanded, revealing two zip files: '2015\_02\_19\_12\_56\_50\_CANONICAL\_2.0\_FORM.zip' and '2015\_02\_20\_14\_00\_59\_CANONICAL\_2.0\_FORM.zip'.

- After the task is finished, you can download the catalog by expanding the forms under CANONICAL\_2\_FORM and clicking the right one.

The screenshot shows the 'Manage Knowledge Base Exports' window. The 'Export Tasks' section lists one task: 'Export: Canonical 2.0 knowledge base' (Status: The task finished successfully, Owner: admin, Start Time: 2/20/15 2:00 PM). The 'Task Details' section is empty with the placeholder 'Select a task to view its details.' The 'Exported Knowledge Base Content' section shows a tree view with 'CANONICAL\_2\_FORM' expanded, revealing two zip files: '2015\_02\_19\_12\_56\_50\_CANONICAL\_2.0\_FORM.zip' and '2015\_02\_20\_14\_00\_59\_CANONICAL\_2.0\_FORM.zip'.

4. Save the file.



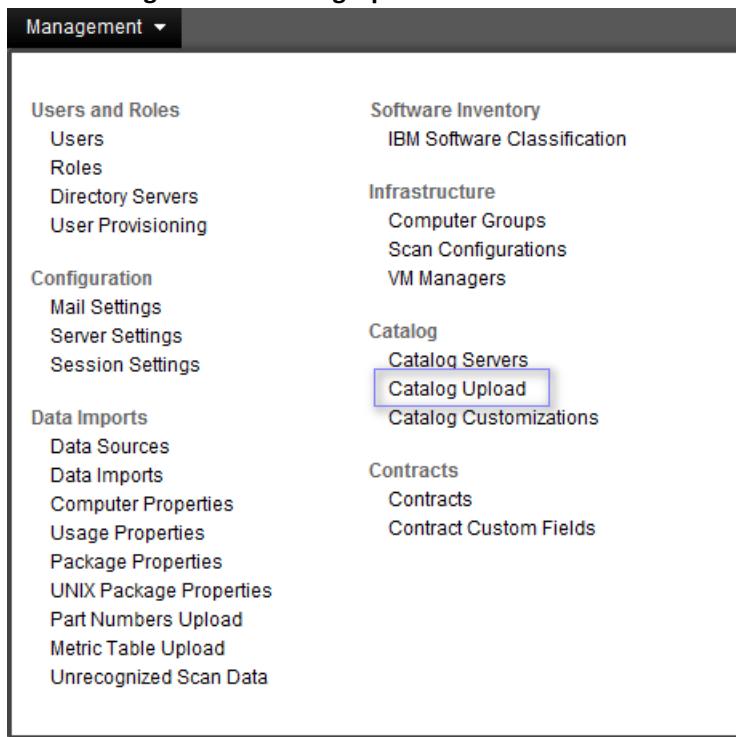
## Import the Canonical 2.0 catalog to SUA

The next part of migrating the content of SwKBT is importing software catalog to Software Use Analysis.

1. Open the SUA interface.

See: [How to open Software Use Analysis 9.0 web user interface]

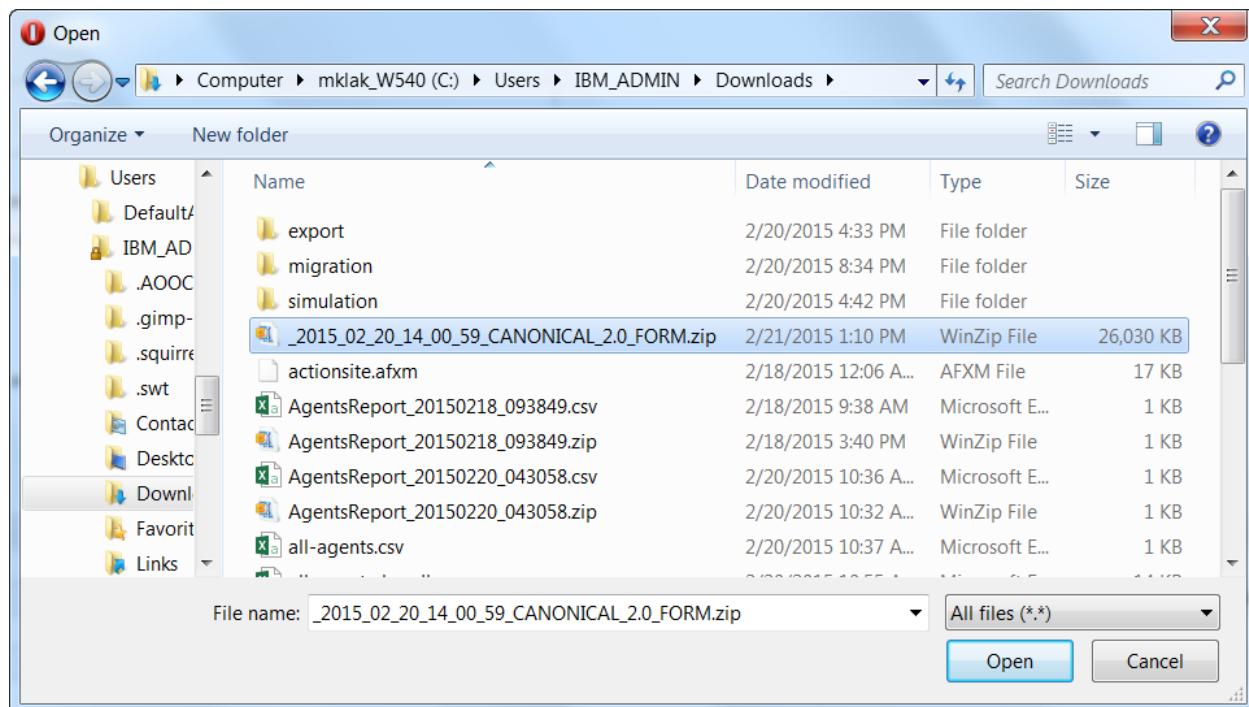
2. Go to **Management > Catalog Upload**.



The Catalog Upload window opens.

The screenshot shows the 'Catalog Upload' page of the IBM Endpoint Manager interface. At the top, there's a navigation bar with 'Home', 'Reports', 'Management', and a user 'admin'. Below the header, it says 'Software Catalog: Catalog Upload'. A note states: 'To correctly identify software, ensure that the latest version of the catalog is uploaded. You can also upload the charge units file. The catalog, charge units file, or both will be imported during the next automatic import.' It shows current catalog version 349258 and charge units version 1221585. There's a 'Comments' input field and a 'Catalog file' input field with a 'Choose...' button. A note below says: 'After a newly uploaded IBM catalog is imported, catalogs of the scanner are automatically updated. If the automatic update fails, a manual update is required.' Another note says: 'When you upload a catalog in the native format, the current software catalog and your customizations will be overwritten.' A large 'Upload' button is present. Under 'Catalog Export', it says: 'You can export the IBM software catalog together with your customizations to an XML file and import it to another instance of Software Use Analysis.' A 'Export' button is shown. Finally, there's a 'Upload and Import History' table with columns: Uploaded By, Uploaded At, Content, Provider, Version, Catalog Format, Date, Imported At, Status, and Comments. It lists several entries, including 'Initial upload' and 'admin' entries.

3. Click **Choose** to find the catalog file that you want to import.



4. Provide a comment.

The screenshot shows the 'Catalog Upload' window again. In the 'Comments' field, the text 'Software catalog from SwKBT for SUA' is typed. Below the 'Catalog file' input field, which contains 'C:\Users\IBM\_ADMIN', is a 'Choose...' button.

5. Click **Upload** to import the catalog file to SUA.

To correctly identify software, ensure that the latest version of the catalog is uploaded. You can also upload the charge units file. The catalog, charge units file, or both will be imported during the next automatic import.

Current catalog version: 349258  
Current charge units version: 1221585

Catalog file\*:  Choose...

Comments: Software catalog from SwKBT for SUA

After a newly uploaded IBM catalog is imported, catalogs of the scanner are automatically updated. If the automatic update fails, a manual update is required. [?](#)

[! When you upload a catalog in the native format, the current software catalog and your customizations will be overwritten.](#)

**Catalog Export**  
You can export the IBM software catalog together with your customizations to an XML file and import it to another instance of Software Use Analysis.

**Upload and Import History**

Uploaded By	Uploaded At	Content	Provider	Version	Catalog Format	Date	Imported At	Status	Comments
admin	02/20/2015 07:05 PM	Charge unit data	<no data>	1221585	Other	<no data>	02/20/2015 07:10 PM	Success	
admin	02/19/2015 08:28 PM	Catalog XML file	Custom	349258	Canonical	02/18/2015 03:28 AM	02/19/2015 08:35 PM	Success	Software Catalog Jan 2...
Initial upload	02/18/2015 02:28 AM	Charge unit data	<no data>	1210211	Canonical	<no data>	02/18/2015 03:05 AM	Success	
Initial upload	02/18/2015 02:28 AM	Catalog XML file	IBM	1210211	Native	12/05/2014 09:34 AM	02/18/2015 03:05 AM	Success	

6. Soon the new entry should appear on the list together with status **Pending** and appropriate message at the top of page.

To correctly identify software, ensure that the latest version of the catalog is uploaded. You can also upload the charge units file. The catalog, charge units file, or both will be imported during the next automatic import.

Current catalog version: 349258  
Current charge units version: 1221585

Catalog file\*:  Choose...

Comments: Software catalog from SwKBT for SUA

After a newly uploaded IBM catalog is imported, catalogs of the scanner are automatically updated. If the automatic update fails, a manual update is required. [?](#)

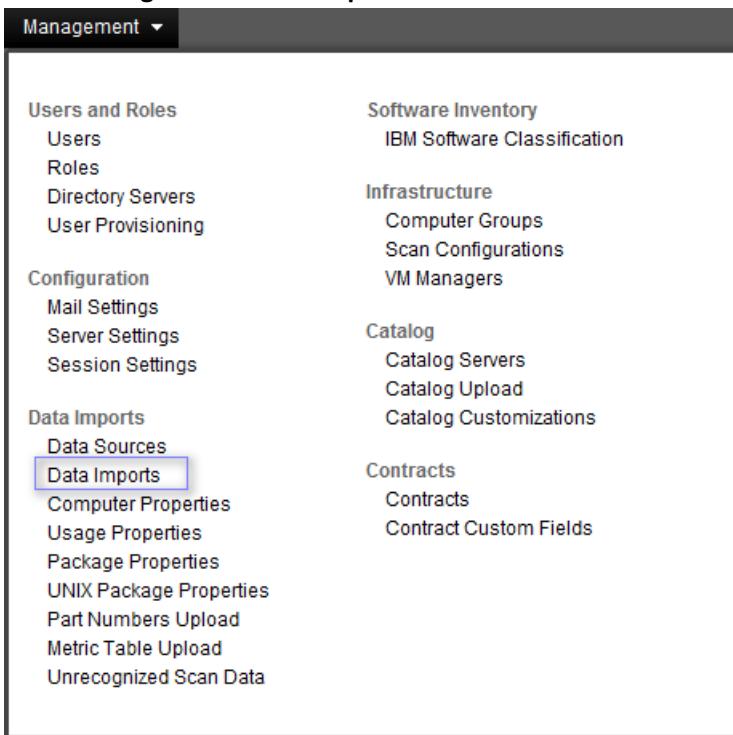
[! When you upload a catalog in the native format, the current software catalog and your customizations will be overwritten.](#)

**Catalog Export**  
You can export the IBM software catalog together with your customizations to an XML file and import it to another instance of Software Use Analysis.

**Upload and Import History**

Uploaded By	Uploaded At	Content	Provider	Version	Catalog Format	Date	Imported At	Status	Comments
admin	02/21/2015 11:31 PM	Catalog XML file	Custom	352873	Canonical	02/20/2015 04:21 PM	<no data>	Pending	Software catalog from SwKBT for SUA
admin	02/20/2015 07:05 PM	Charge unit data	<no data>	1221585	Other	<no data>	02/20/2015 07:10 PM	Success	
admin	02/19/2015 08:28 PM	Catalog XML file	Custom	349258	Canonical	02/18/2015 03:28 AM	02/19/2015 08:35 PM	Success	Software Catalog Jan 2015 exported ...
Initial upload	02/18/2015 02:28 AM	Charge unit data	<no data>	1210211	Canonical	<no data>	02/18/2015 03:05 AM	Success	
Initial upload	02/18/2015 02:28 AM	Catalog XML file	IBM	1210211	Native	12/05/2014 09:34 AM	02/18/2015 03:05 AM	Success	

## **7. Go to Management > Data Imports.**



The Data Imports panel opens.

IBM Endpoint Manager for Software Use Analysis

Home Reports Management admin

## Management: Data Imports

### Import Settings

Enabled

Imports per day  
2 (times specified in UTC +01:00)  
06:00AM   
08:00PM

Save Import Now

### Import History

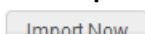
Start Time	User Name	Duration
02/21/2015 08:00 PM	Scheduled	0.02:20
02/21/2015 06:00 AM	Scheduled	0.02:18
02/20/2015 08:00 PM	Scheduled	0.02:03
02/20/2015 07:10 PM	admin	0.05:18
02/20/2015 04:07 PM	admin	0.05:07
02/20/2015 03:33 PM	admin	0.02:35
02/20/2015 06:00 AM	Scheduled	0.04:51
02/19/2015 08:35 PM	admin	1.07:22
02/19/2015 08:01 PM	Scheduled	0.01:49
02/19/2015 06:00 AM	Scheduled	0.01:53
02/18/2015 08:00 PM	Scheduled	0.03:49
02/18/2015 06:00 AM	Scheduled	0.01:48
02/18/2015 03:05 AM	admin	1.15:41

Start Time: 02/21/2015 07:00 PM  
Status: Successful  
Duration: 0.02:20

### Import Log:

```
#LogFile created on 2015-02-21 19:00:37 +0000 by logger.rb/1.2.7
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO TEMA version: 9.0.1-20150107-1519
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Starting Model: /var/lib/tema/Imports/Start
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog model before_snapshot: Success
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Install software catalog to staging tables: Start
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog SAM_Catalog before_snapshot: Start
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog SAM_Catalog before_snapshot: Success
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog SAM_Catalog before_snapshot: Start
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog SAM_Catalog before_snapshot: Success
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog SAM_Performance before_snapshot: Start
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Catalog SAM_Performance before_snapshot: Success
2015-02-21 19:00:45 +0000 [0.00:00:00] INFO Calling SAM_ClsRunConfigFile before_snapshot: Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Calling SAM_ClsRunConfigFile before_snapshot: Success
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Calling SAM_ControfFact.before_snapshot: Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Calling SAM_ControfFact.before_snapshot: Success
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Initialize property mappings for catalog: _head_property_mappings: Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Check convergence for catalog: _head_property_mappings: Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Determine models which need catalog update: Success
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Importing charge units as needed: Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Importing charge units as needed: Success
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO Initialize datasource Data_Source: Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO ETL from Data_Source -> Data_Source: Success
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO ETL from Data_Source -> DataSourceSite (0x000000000000475A8 - N/A): Start
2015-02-21 19:00:47 +0000 [0.00:00:00] INFO ETL from Data_Source -> DataSourceSite (0x000000000000475A8 - 0x0000000000005318C): Success
2015-02-21 19:00:48 +0000 [0.00:00:00] INFO ETL from Data_Source -> DataSourceAnalysisActivation (0x000000000000475A8 - N/A): Start
2015-02-21 19:00:48 +0000 [0.00:00:00] INFO ETL from Data_Source -> DataSourceAnalysisActivation (0x000000000000475A8 - 0x0000000000005318C): Success
2015-02-21 19:00:48 +0000 [0.00:00:00] INFO ETL from Data_Source -> DataSourceAnalysis (0x000000000000475A8 - N/A): Start
2015-02-21 19:00:48 +0000 [0.00:00:00] INFO ETL from Data_Source -> DataSourceAnalysis (0x000000000000475A8 - 0x0000000000005318C): Success
```

#### **8. Click Import Now.**



9. After several seconds, refresh the web page (Ctrl+r) to see the status of the process.

Start Time	User Name	Duration
02/22/2015 12:03 AM	admin	0:00:03
02/21/2015 08:00 PM	Scheduled	0:02:20
02/21/2015 06:00 AM	Scheduled	0:02:18
02/20/2015 08:00 PM	Scheduled	0:02:03
02/20/2015 07:10 PM	admin	0:05:18
02/20/2015 04:07 PM	admin	0:05:07
02/20/2015 03:33 PM	admin	0:02:35
02/20/2015 06:00 AM	Scheduled	0:04:51
02/19/2015 08:35 PM	admin	1:07:22
02/19/2015 08:01 PM	Scheduled	0:01:49
02/19/2015 06:00 AM	Scheduled	0:01:53
02/18/2015 08:00 PM	Scheduled	0:03:49
02/18/2015 06:00 AM	Scheduled	0:01:48
02/18/2015 03:05 AM	admin	1:15:41

10. After some time the process finishes and the status is **Successful**.

Start Time	User Name	Duration
02/22/2015 12:03 AM	admin	1:16:49
02/21/2015 08:00 PM	Scheduled	0:02:20
02/21/2015 06:00 AM	Scheduled	0:02:18
02/20/2015 08:00 PM	Scheduled	0:02:03
02/20/2015 07:10 PM	admin	0:05:18
02/20/2015 04:07 PM	admin	0:05:07
02/20/2015 03:33 PM	admin	0:02:35
02/20/2015 06:00 AM	Scheduled	0:04:51
02/19/2015 08:35 PM	admin	1:07:22
02/19/2015 08:01 PM	Scheduled	0:01:49
02/19/2015 06:00 AM	Scheduled	0:01:53
02/18/2015 08:00 PM	Scheduled	0:03:49
02/18/2015 06:00 AM	Scheduled	0:01:48
02/18/2015 03:05 AM	admin	1:15:41

11. Go to **Management > Catalog Upload**. The status value in the **Upload and Import History** table changed from **Pending** to **Success**.

The screenshot shows the IBM Endpoint Manager for Software Use Analysis interface. At the top, there's a navigation bar with Home, Reports, Management, and a user account. Below it, a blue header bar says "Software Catalog: Catalog Upload".  
**Catalog Upload Section:** It includes fields for "Catalog file" (with a "Choose..." button) and "Comments". A note says: "After a newly uploaded IBM catalog is imported, catalogs of the scanner are automatically updated. If the automatic update fails, a manual update is required." A warning message states: "When you upload a catalog in the native format, the current software catalog and your customizations will be overwritten." Buttons for "Upload" and "Export" are present.  
**Upload and Import History Section:** A table titled "Upload and Import History" lists the following data:

Uploaded By	Uploaded At	Content	Provider	Version	Catalog Format	Date	Imported At	Status	Comments
admin	02/21/2015 11:31 PM	Catalog XML file	Custom	352873	Canonical	02/20/2015 04:21 PM	02/22/2015 12:03 AM	Success	Software catalog from SwKBT for SUA
admin	02/20/2015 07:05 PM	Charge unit data	<no data>	1221585	Other	<no data>	02/20/2015 07:10 PM	Success	
admin	02/19/2015 08:28 PM	Catalog XML file	Custom	349258	Canonical	02/18/2015 03:28 AM	02/19/2015 08:35 PM	Success	Software Catalog Jan 2015 exported ...
Initial upload	02/18/2015 02:28 AM	Charge unit data	<no data>	1210211	Canonical	<no data>	02/18/2015 03:05 AM	Success	
Initial upload	02/18/2015 02:28 AM	Catalog XML file	IBM	1210211	Native	12/05/2014 09:34 AM	02/18/2015 03:05 AM	Success	

The content of SwKBT is already migrated.

## Step 3: Mapping the agents

Map the TAD4D 7.5 agents to recognize their IDs and versions. It is necessary to migrate your specific software inventory.

### Installing IEM clients

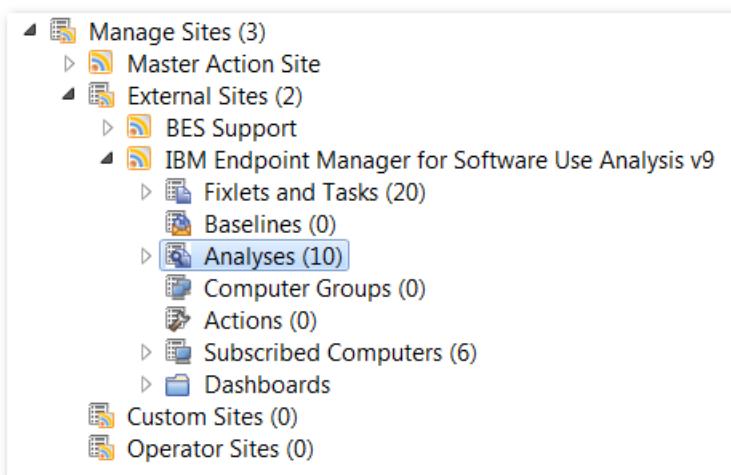
Install IEM clients side-by-side with TAD4D 7.5 agents on every endpoint that you want to include in the migrated environment. There are a few different ways of installing IEM clients. To help you with this task, you might use the following procedure.

See: [Installing IEM clients using IBM Endpoint Manager Agent Deployment Wizard]

### Activate the LMT/TAD4D 7.x Agent Mapping analysis

Decisions regarding software classifications link software instances to agents on which the instances are installed. Tivoli Asset Discovery for Distributed 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.

1. Open the IEM console on the **BigFix Management** view.  
See: [How to open the IBM Endpoint Manager console]
2. In the navigation tree, go to **Manage Sites > External Sites > IBM Endpoint Manager for Software Use Analysis v9 > Analyses**.



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

Analyses						Search Analyses
Status	Name	Site	Applicable Computer Count	Activated By	Time Activated	
Not Activated	Installed Windows Applications	IBM Endpoint Manager for Software Use Analysis v9	1			
Not Activated	Scanner Trace Settings	IBM Endpoint Manager for Software Use Analysis v9	3			
Not Activated	Application Usage Statistics	IBM Endpoint Manager for Software Use Analysis v9	1			
Not Activated	Environment Information	IBM Endpoint Manager for Software Use Analysis v9	1			
Not Activated	Scanner Information	IBM Endpoint Manager for Software Use Analysis v9	6			
Not Activated	Installed UNIX Packages	IBM Endpoint Manager for Software Use Analysis v9	2			
Not Activated	Software Scan Status	IBM Endpoint Manager for Software Use Analysis v9	4			
Not Activated	LMT/TAD4D 7.x Agent Mapping	IBM Endpoint Manager for Software Use Analysis v9	6			
Not Activated	Excluded Directories	IBM Endpoint Manager for Software Use Analysis v9	6			
Not Activated	VM Manager Information	IBM Endpoint Manager for Software Use Analysis v9	1			

4. Click Activate.



The analysis is activated globally.

Analyses						Search Analyses
Status	Name	Site	Applicable Computer Count	Activated By	Time Activated	
Not Activated	Installed Windows Applications	IBM Endpoint Manager for Software Use Analysis v9	1			
Not Activated	Scanner Trace Settings	IBM Endpoint Manager for Software Use Analysis v9	3			
Not Activated	Application Usage Statistics	IBM Endpoint Manager for Software Use Analysis v9	1			
Not Activated	Environment Information	IBM Endpoint Manager for Software Use Analysis v9	1			
Not Activated	Scanner Information	IBM Endpoint Manager for Software Use Analysis v9	6			
Not Activated	Installed UNIX Packages	IBM Endpoint Manager for Software Use Analysis v9	2			
Not Activated	Software Scan Status	IBM Endpoint Manager for Software Use Analysis v9	4			
Activated Globally	LMT/TAD4D 7.x Agent Mapping	IBM Endpoint Manager for Software Use Analysis v9	6	IEMAdmin	2/20/2015 12:59:01...	
Not Activated	Excluded Directories	IBM Endpoint Manager for Software Use Analysis v9	6			
Not Activated	VM Manager Information	IBM Endpoint Manager for Software Use Analysis v9	1			

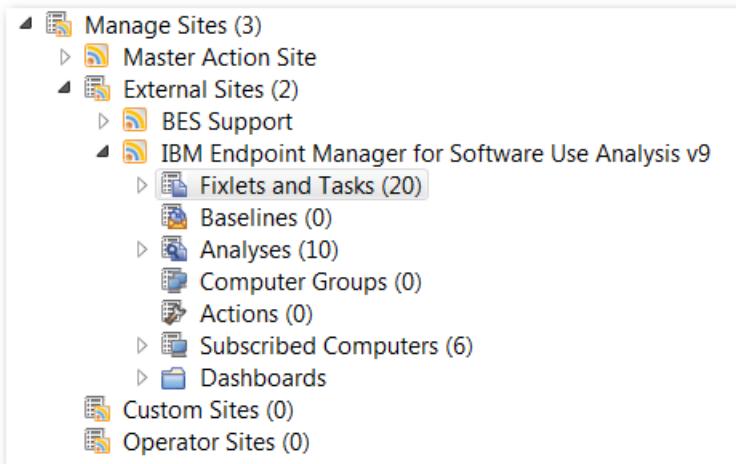
The Results tab contains important information.

Analysis: LMT/TAD4D 7.x Agent Mapping								
<input type="button" value="Activate"/> <input type="button" value="Deactivate"/> <input type="button" value="Edit"/> <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="Results"/> <input type="button" value="Applicable Computers (6)"/>								
<input type="button" value="View as list"/>								
<input type="checkbox"/> Applicable Computers (6)								
Computer ...	Computer ID	LMT/TAD4... Version	LMT/TAD4... Version	Operating S... System	Mapped L... Count	Mapped L... Count		
NC040204	1590021	469315362...	7.5.0.122	Win2008				
NC047005	12425724	468531594...	7.5.0.122	Win2012				
NC106166	10880762	467853761...	7.5.0.121	AIX 7.1				
NC106178	13325247	467803386...	7.5.0.122	AIX 6.1				
NC142184	6117602	467965544...	7.5.0.122	Linux SuSE ...				
NC91431...	9863884	The agent i...	The agent i...	Linux Red ...				

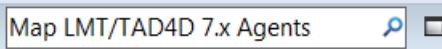
## Run the Map LMT/TAD4D 7.x Agents fixlet

After you activate the analysis, map TAD4D 7.5 agents to IEM 9.0 clients.

1. In the navigation tree, go to **Manage Sites > External Sites > IBM Endpoint Manager for Software Use Analysis v9 > Fixlets and Tasks**.



2. Use a filter to find **Map LMT/TAD4D 7.x Agents** fixlet.



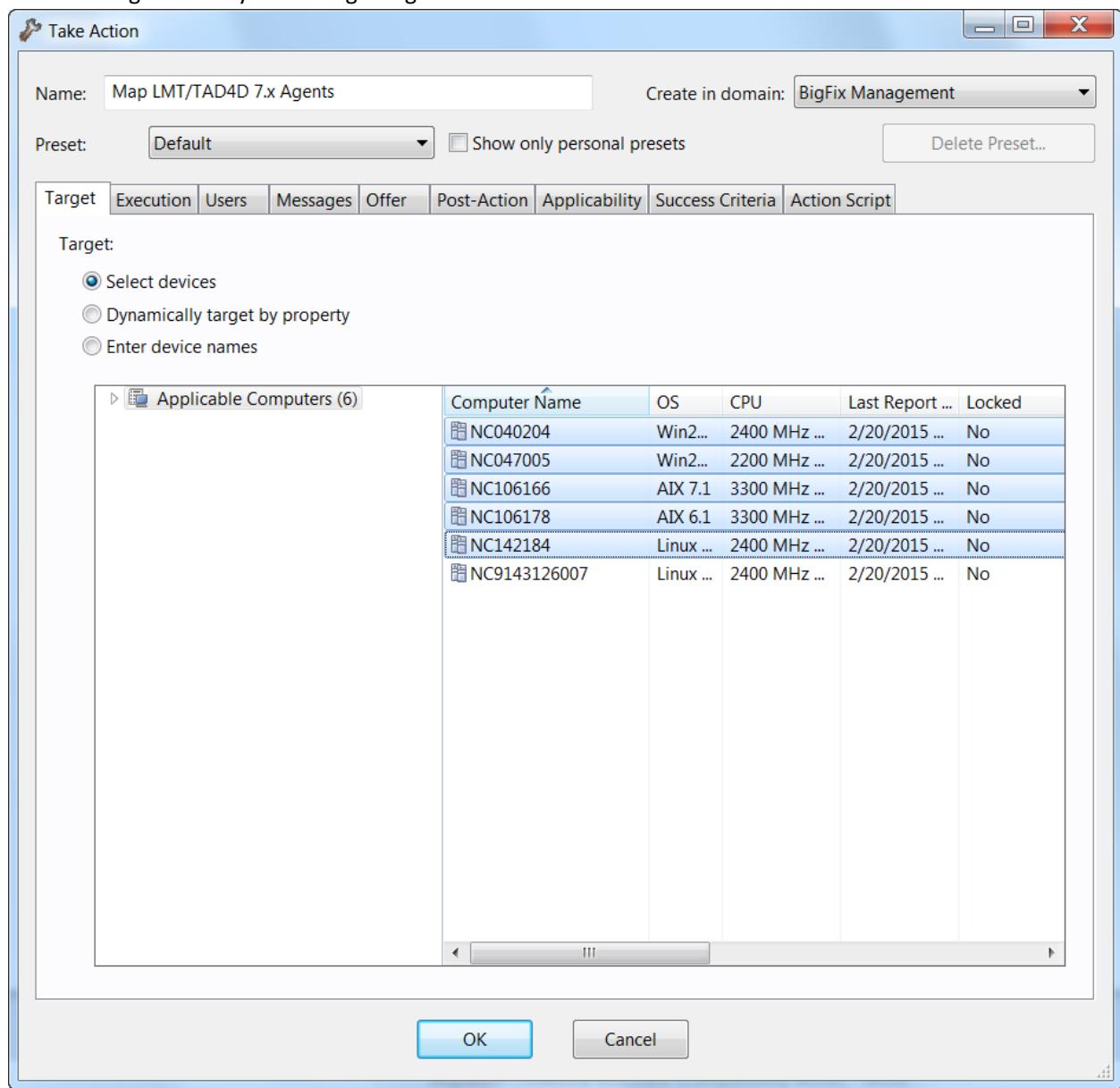
3. Select this fixlet.

Fixlets and Tasks								Map LMT/TAD4D 7.x Agents			
Name	Source Sev...	Site	Applicable ...	Ope...	Category	Download ...	Source				
Map LMT/TAD4D 7.x Agents	Low	IBM Endpoint Manager for Softw...	6 / 6	0	Migration		IBM				

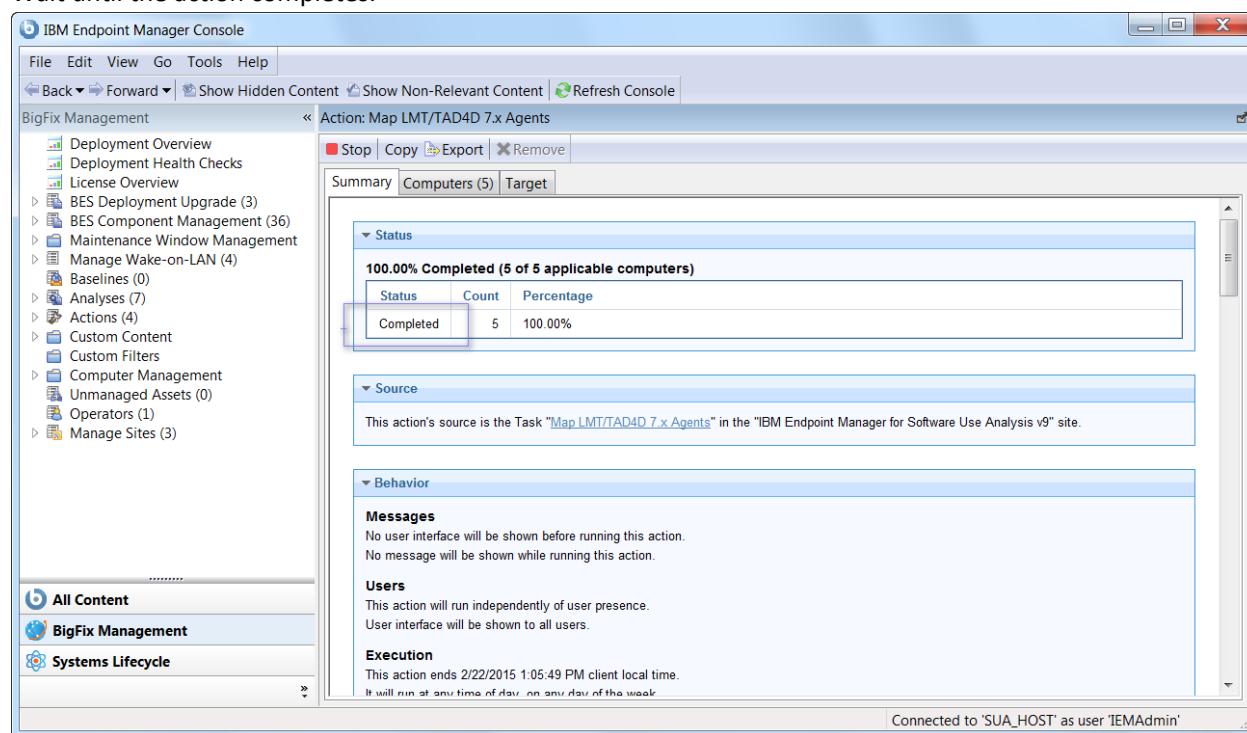
4. Click **Take Action**.



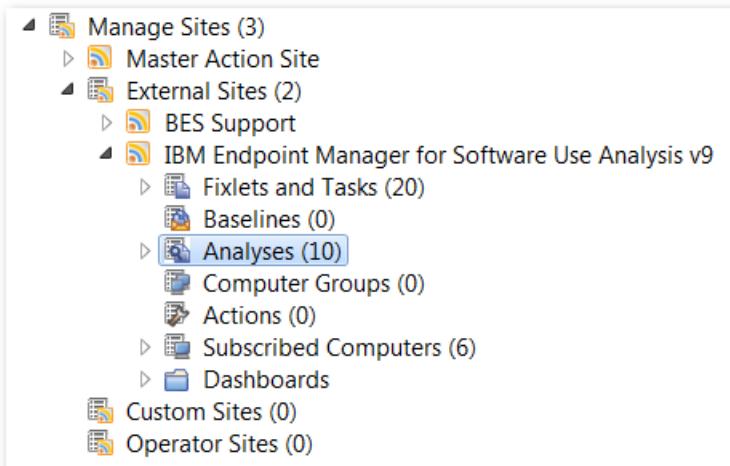
5. Choose all agents that you are migrating and click **OK**.



Wait until the action completes.



6. To check whether the results are available, go to **Manage Sites > External Sites > IBM Endpoint Manager for Software Use Analysis v9 > Analyses**.



7. Choose the **LMT/TAD4D Agent Mapping** analysis. The following two columns should be filled in:
  - Mapped LMT/TAD4D 7.x Agent ID

- Mapped LMT/TAD4D 7.x Agent Version

The screenshot shows the IBM Endpoint Manager interface. At the top, there is a table titled 'Analyses' with columns: Status, Name, Site, Applicable Computer Count, Activated By, and Time Activated. Below this is a toolbar with buttons for Activate, Deactivate, Edit, Export, Hide Locally, Hide Globally, and Remove. A sub-menu bar below the toolbar includes Description, Details, Results, and Applicable Computers (6). The main area displays a grid titled 'Applicable Computers (6)' with columns: Computer Name, Computer ID, LMT/TAD..., LMT/TAD4D 7.x Agent Version, Operating..., Mapped LMT/TAD4D 7.x Age..., and Mapped L.... The grid lists six computer entries, each with a small icon and some descriptive text.

Status	Name	Site	Applicable Computer Count	Activated By	Time Activated
Not Activated	Scanner Trace Settings	IBM Endpoint Manager for Software Use Analysis v9	3		
Not Activated	Application Usage Statistics	IBM Endpoint Manager for Software Use Analysis v9	1		
Not Activated	Environment Information	IBM Endpoint Manager for Software Use Analysis v9	1		
Not Activated	Scanner Information	IBM Endpoint Manager for Software Use Analysis v9	6		
Not Activated	Installed UNIX Packages	IBM Endpoint Manager for Software Use Analysis v9	2		
Not Activated	Software Scan Status	IBM Endpoint Manager for Software Use Analysis v9	4		
Activated Globally	LMT/TAD4D 7.x Agent Mapping	IBM Endpoint Manager for Software Use Analysis v9	6	IEMAdmin	2/20/2015 12:59:01...
Not Activated	Excluded Directories	IBM Endpoint Manager for Software Use Analysis v9	6		

Analysis: LMT/TAD4D 7.x Agent Mapping

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

Description Details Results Applicable Computers (6)

View as list

Computer Name	Computer ID	LMT/TAD...	LMT/TAD4D 7.x Agent Version	Operating...	Mapped LMT/TAD4D 7.x Age...	Mapped L...
NC040204	1590021	4693153...	7.5.0.122	Win2008	4693153620718001657	7.5.0.122
NC047005	12425724	4685315...	7.5.0.122	Win2012	4685315941853731849	7.5.0.122
NC106166	10880762	4678537...	7.5.0.121	AIX 7.1	4678537617125179401	7.5.0.121
NC106178	13325247	4678033...	7.5.0.122	AIX 6.1	4678033869419741193	7.5.0.122
NC142184	6117602	4679655...	7.5.0.122	Linux SuS...	4679655442678193673	7.5.0.122
NC9143126007	9863884	The agen...	The agent is not installed.	Linux Red...		

**Remember:**

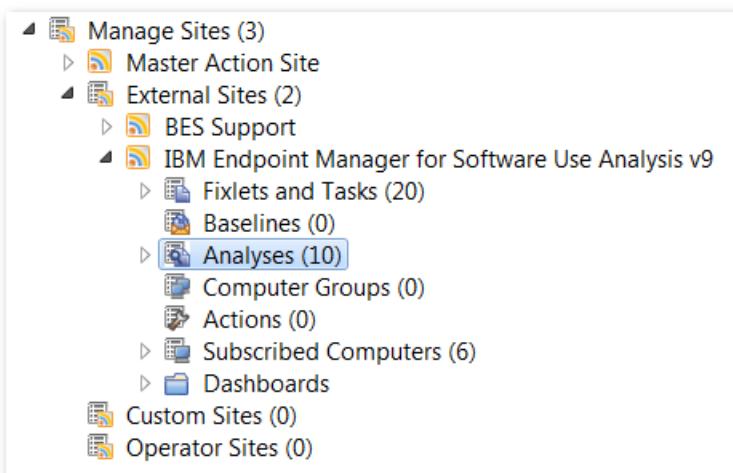
You can remove 7.5 agents now. However, we recommend that you keep them working until you verify the migration. To avoid unnecessary workload, you may consider changing their software scanning schedule so that scans are not performed until the migration is over.

## Step 4: 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 **Manage Sites > External Sites > IBM Endpoint Manager for Software Use Analysis v9 > Analyses**.



3. Unless you have expert knowledge and know exactly whether a particular analysis is applicable for your environment, select all analyses, right click on them and choose **Activate** to activate them all.

The screenshot shows a table titled 'Analyses' with columns: Status, Name, Site, Applicable Computer Count, Activated By, and Time Activated. The table lists various software scan types. A context menu is open over the last row ('VM Manager Information'), with the 'Activate' option highlighted. Other options in the menu include 'Deactivate', 'Add Comment...', 'Edit...', 'Remove', 'Export', and 'Create New Analysis...'. The status column for most rows is 'Not Activated', except for 'LMT/TAD4D 7.x Agent Mapping' which is 'Activated Globally'. The site column for all rows is 'IBM Endpoint Manager for Software Use Analysis v9'. The time activated column shows '2/20/2015 12:59:01...' for the last row.

Status	Name	Site	Applicable Computer Count	Activated By	Time Activated
Not Activated	Installed Windows Applications	IBM Endpoint Manager for Software Use Analysis v9	1		
Not Activated	Scanner Trace Settings	IBM Endpoint Manager for Software Use Analysis v9	3		
Not Activated	Application Usage Statistics	IBM Endpoint Manager for Software Use Analysis v9	1		
Not Activated	Environment Information	IBM Endpoint Manager for Software Use Analysis v9	1		
Not Activated	Scanner Information	IBM Endpoint Manager for Software Use Analysis v9	6		
Not Activated	Installed UNIX Packages	IBM Endpoint Manager for Software Use Analysis v9	2		
Not Activated	Software Scan Status	IBM Endpoint Manager for Software Use Analysis v9	4		
Activated Globally	LMT/TAD4D 7.x Agent Mapping	IBM Endpoint Manager for Software Use Analysis v9	6		2/20/2015 12:59:01...
Not Activated	Excluded Directories	IBM Endpoint Manager for Software Use Analysis v9	6		
Not Activated	VM Manager Information	IBM Endpoint Manager for Software Use Analysis v9	1		

The screen should look like this.

Analyses						
Status	Name	Site	Applicable Computer Count	Activated By	Time Activated	Search Analyses
Activated Globally	Installed Windows Applications	IBM Endpoint Manager for Software Use Analysis v9	1	IEMAdmin	2/20/2015 1:16:48 PM	
Activated Globally	Scanner Trace Settings	IBM Endpoint Manager for Software Use Analysis v9	3	IEMAdmin	2/20/2015 1:16:49 PM	
Activated Globally	Application Usage Statistics	IBM Endpoint Manager for Software Use Analysis v9	1	IEMAdmin	2/20/2015 1:16:49 PM	
Activated Globally	Environment Information	IBM Endpoint Manager for Software Use Analysis v9	1	IEMAdmin	2/20/2015 1:16:48 PM	
Activated Globally	Scanner Information	IBM Endpoint Manager for Software Use Analysis v9	6	IEMAdmin	2/20/2015 1:16:49 PM	
Activated Globally	Installed UNIX Packages	IBM Endpoint Manager for Software Use Analysis v9	2	IEMAdmin	2/20/2015 1:16:49 PM	
Activated Globally	Software Scan Status	IBM Endpoint Manager for Software Use Analysis v9	4	IEMAdmin	2/20/2015 1:16:48 PM	
Activated Globally	LMT/TAD4D 7.x Agent Mapping	IBM Endpoint Manager for Software Use Analysis v9	6	IEMAdmin	2/20/2015 12:59:01 PM	
Activated Globally	Excluded Directories	IBM Endpoint Manager for Software Use Analysis v9	6	IEMAdmin	2/20/2015 1:16:49 PM	
Activated Globally	VM Manager Information	IBM Endpoint Manager for Software Use Analysis v9	1	IEMAdmin	2/20/2015 1:16:49 PM	

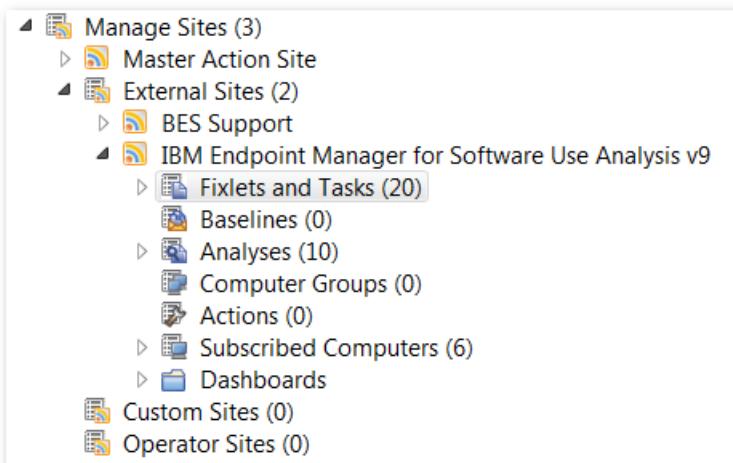
## Install scanners on IEM clients

Next step is to run software and hardware scans. The following four fixlets should be executed on every endpoint:

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

You can follow this procedure:

1. In the navigation tree, go to **Manage Sites > External Sites > IBM Endpoint Manager for Software Use Analysis v9 > Fixlets and Tasks**.



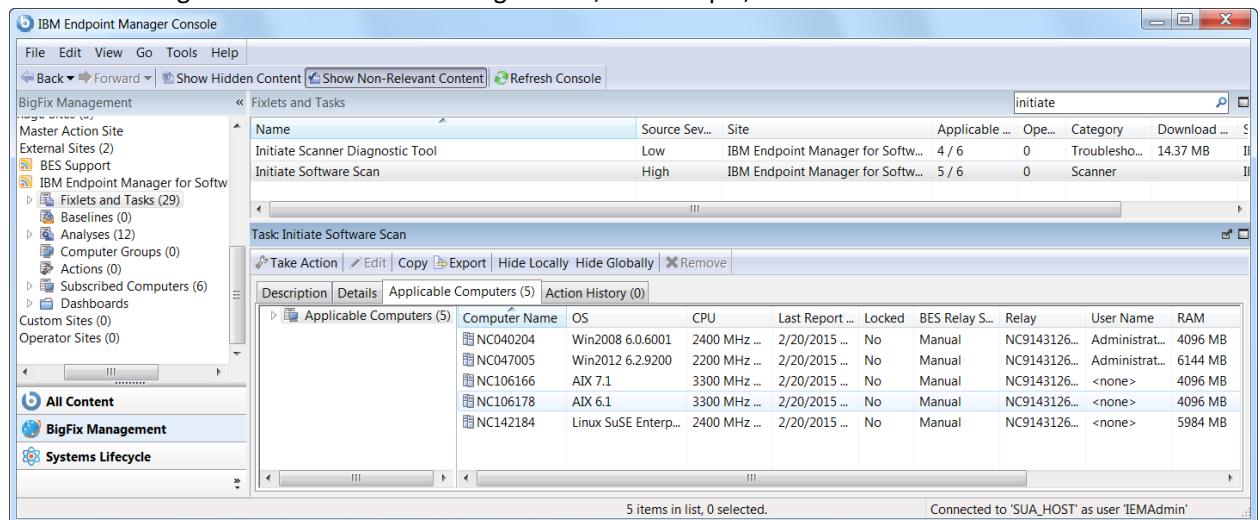
2. Run all the following fixlets:

- Install Scanner
- Initiate Software Scan
- Upload Software Scan Results

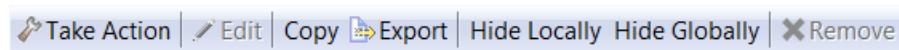
- Run Capacity Scan and Upload Results

For every chosen fixlet perform the following steps:

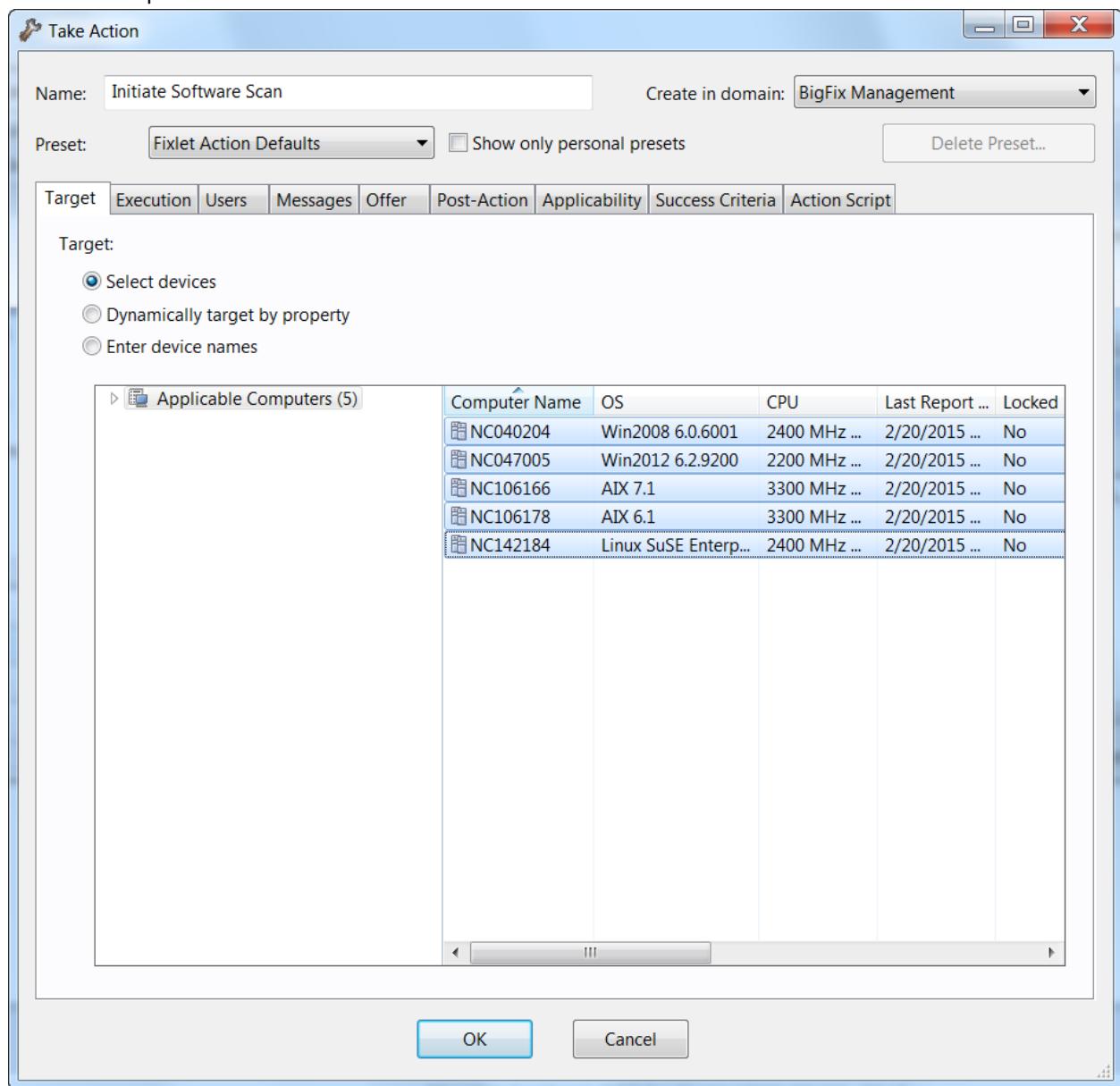
- a. Use the filtering mechanism and find the right fixlet, for example, **Initiate Software Scan**.



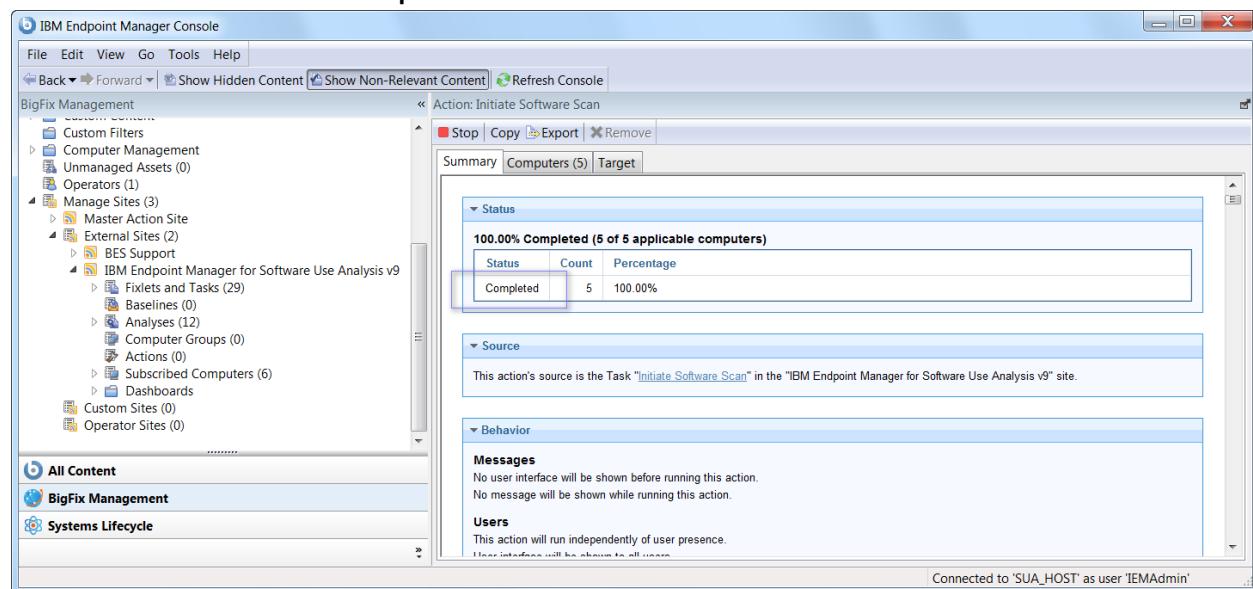
- b. Click Take Action.



- c. Select all computers and click **OK**.



Wait until the action reaches **Completed** status.



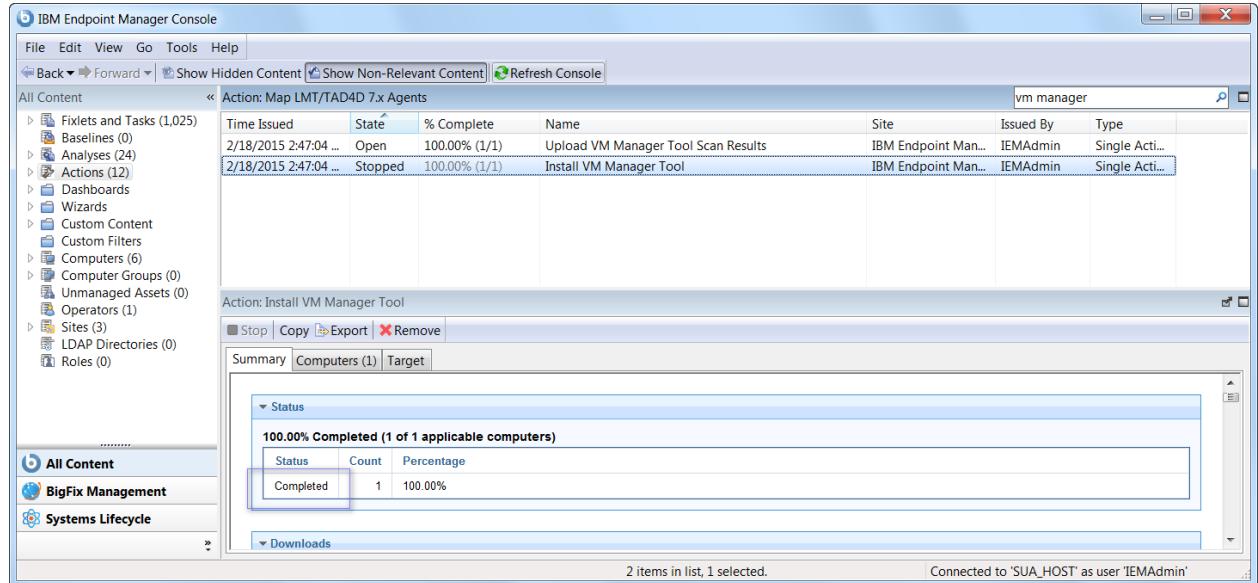
**Remember:**

The **Initiate Software Scan** fixlet initiates the scan but does not wait for the scan to complete. If the status of the fixlet is **Completed**, it means that the scan was successfully started.

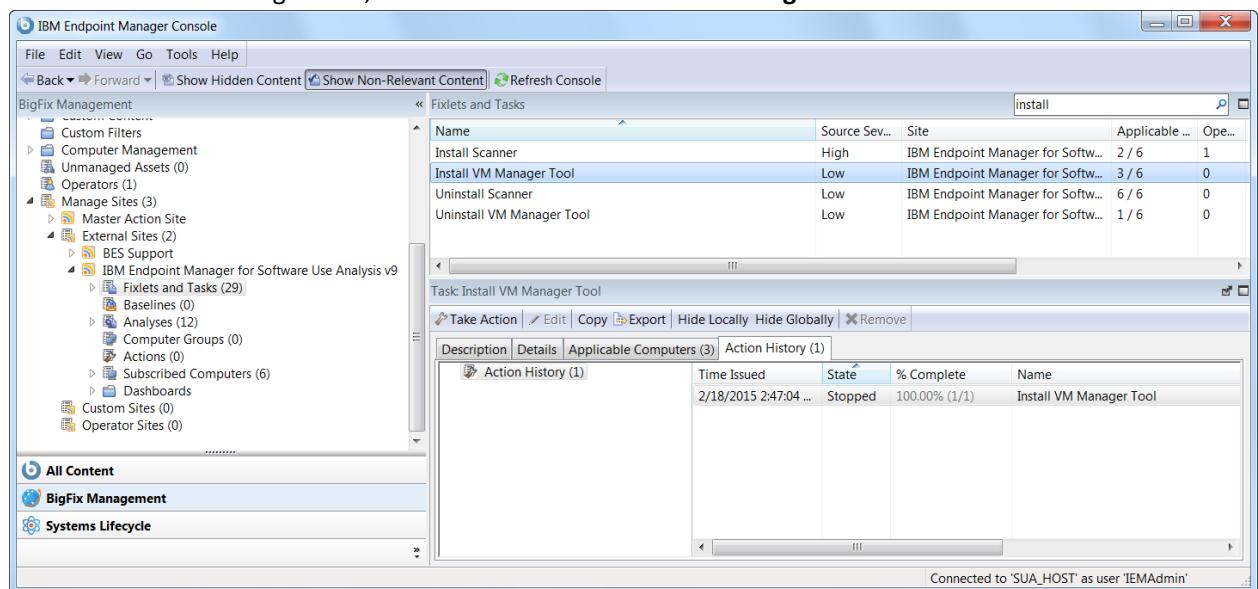
## Run the VM Manager Tool fixlet

The 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.

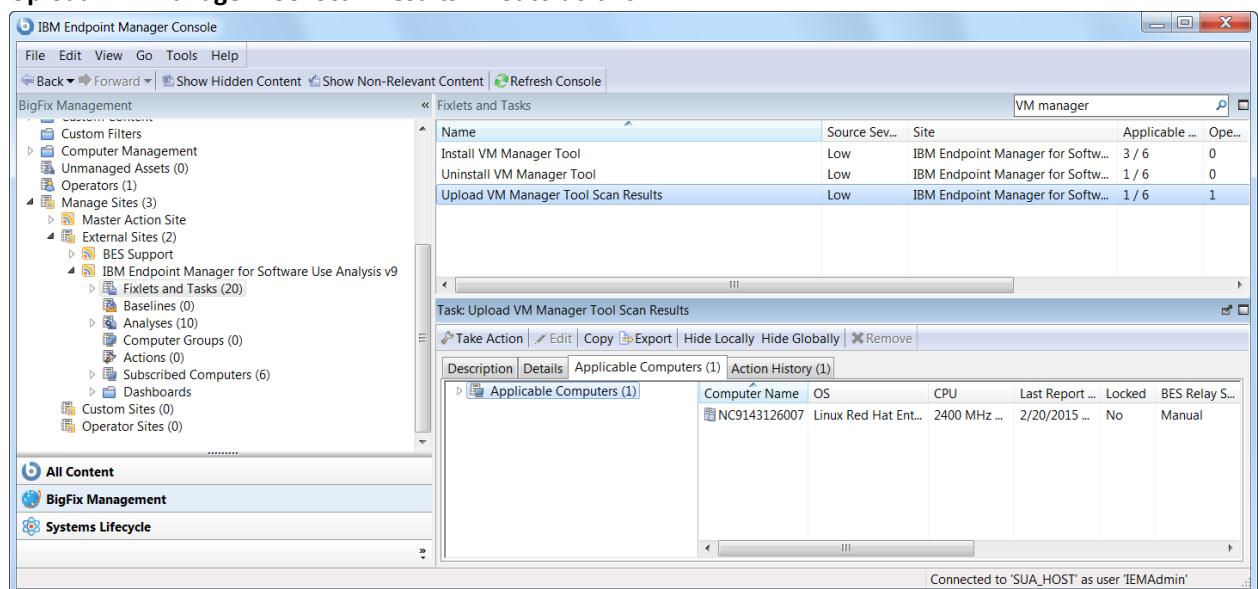
1. To check if the VM Manger Tool is installed, open the **All Content** view and then **Actions**. Filter the entries to find **Install VM Manager Tool** and check the status on the **Summary** panel.



- To install the VM Manager Tool, take action on the **Install VM Manager Tool** fixlet.



- When the data arrives from the VM Manager Tool, you are able to upload the results to SUA. Run the **Upload VM Manager Tool Scan Results** fixlet to do this.



## Initiate VM Managers

This part describes how to initiate the VM Manager Tool.

- Open the SUA 9.0 interface.

See: [How to open Software Use Analysis 9.0 web user interface]

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

The screenshot shows the 'Management' dropdown menu expanded. Under the 'Management' heading, there are several categories: 'Users and Roles', 'Software Inventory', 'Infrastructure', 'Catalog', 'Contracts', and 'Data Imports'. Each category contains sub-links. The 'VM Managers' link under the 'Management' heading is highlighted with a blue box.

3. After you open the panel, the code that initiates VM Managers is run automatically.

The screenshot shows the 'Management: VM Managers' page. At the top, there are buttons for '+ New', 'Delete', and 'Test Connection', followed by a message '0 rows'. Below is a table with five columns: 'Operation Status', 'VM Manager Type', 'VM Manager URL', 'User Name', and 'Last Successful Operation'. The table is currently empty.

## Synchronize information between IEM database and SUA database

To synchronize data between the IEM database and SUA database, you should execute Export, Transform and Load process (*also referred to as ETL*).

1. Open the SUA 9.0 interface.  
See: [How to open Software Use Analysis 9.0 web user interface]
2. Go to **Management > Data Imports** and click **Import Now**.

**Import Now**

3. Refresh the web page (CTRL+r) to see the progress of the process.

The screenshot shows the 'Management: Data Imports' section of the IBM Endpoint Manager interface. At the top, there is a message 'Import is now running'. Below this, the 'Import Settings' section shows 'Enabled' checked, with a frequency of '2' (times specified in UTC +01:00), scheduled for '06:00AM' and '08:00PM'. There are 'Save' and 'Import Now' buttons. The 'Import History' section displays a table of imports with columns: Start Time, User Name, and Duration. The last entry is for 02/20/2015 at 02:33 PM by user 'admin' with a duration of 0:00:13. The 'Import Log' section shows a detailed log of the import process, starting with the creation of a log file and listing numerous informational messages related to cataloging, snapshotting, and data source initialization.

Start Time	User Name	Duration
02/20/2015 03:33 PM	admin	0:00:13
02/20/2015 06:00 AM	Scheduled	0:04:51
02/19/2015 08:35 PM	admin	1:07:22
02/19/2015 08:01 PM	Scheduled	0:01:49
02/19/2015 06:00 AM	Scheduled	0:01:53
02/18/2015 08:00 PM	Scheduled	0:03:49
02/18/2015 06:00 AM	Scheduled	0:01:48
02/18/2015 03:05 AM	admin	1:15:41

```

# Logfile created on 2015-02-20 14:33:52 +0000 by logger.rb/v1.2.7
2015-02-20 14:33:52 (+00:00:00) [INFO] TEMA version: 9.0.1-20150107-1519
2015-02-20 14:33:52 (+00:00:44) [INFO] Calling Model before_snapshot: Start
2015-02-20 14:34:01 (+00:00:08) [INFO] Calling Model before_snapshot: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Install software catalog to staging tables: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Install software catalog to staging tables: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::Catalog.before_snapshot: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::Catalog.before_snapshot: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::PartNumber.before_snapshot: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::PartNumber.before_snapshot: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::CiswConfigFile.before_snapshot: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::CiswConfigFile.before_snapshot: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::ContractFact.before_snapshot: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Calling SAM::ContractFact.before_snapshot: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Check for computer_health_property_mappings: Start
2015-02-20 14:34:01 (+00:00:05) [INFO] Check for computer_health_property_mappings: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Determine models which need catalog update: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Determine models which need catalog update: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Importing charge units as needed: Start
2015-02-20 14:34:01 (+00:00:02) [INFO] Importing charge units as needed: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] Initialize datasource Data Source: Start
2015-02-20 14:34:01 (+00:00:00) [INFO] Initialize datasource Data Source: Success
2015-02-20 14:34:01 (+00:00:00) [INFO] ETL from Data Source - DatasourceSite (0x000000000002E16E - N/A): Start
2015-02-20 14:34:02 (+00:00:00) [INFO] DatasourceSite items: 0
2015-02-20 14:34:02 (+00:00:00) [INFO] ETL from Data Source - DatasourceSite (0x000000000002E16E - 0x000000000000037AFD): Success
2015-02-20 14:34:02 (+00:00:00) [INFO] ETL from Data Source - RawDatasourceAnalysisActivation (0x000000000002E16E - N/A): Start
2015-02-20 14:34:02 (+00:00:00) [INFO] ETL from Data Source - RawDatasourceAnalysisActivation (0x000000000002E16E - 0x000000000000037AFD): Success
2015-02-20 14:34:02 (+00:00:00) [INFO] ETL from Data Source - RawDatasourceAnalysis (0x000000000002E16E - N/A): Start
2015-02-20 14:34:02 (+00:00:00) [INFO] ETL from Data Source - RawDatasourceAnalysis (0x000000000002E16E - 0x000000000000037AFD): Success
2015-02-20 14:34:04 (+00:00:00) [INFO] ETL from Data Source - DatasourceAnalysis (0x000000000002E16E - N/A): Start
2015-02-20 14:34:04 (+00:00:00) [INFO] ETL from Data Source - DatasourceAnalysis (0x000000000002E16E - 0x000000000000037AFD): Success
2015-02-20 14:34:04 (+00:00:00) [INFO] ETL from Data Source - DatasourceProperty (0x000000000002E16E - N/A): Start
2015-02-20 14:34:04 (+00:00:00) [INFO] ETL from Data Source - DatasourceProperty (0x000000000002E16E - 0x000000000000037AFD): Success

```

After some time, the import is completed.

IBM Endpoint Manager for Software Use Analysis

Management: Data Imports

Import Settings

Enabled

Imports per day: 2 (times specified in UTC +01:00)

06:00AM ↑  
08:00PM ↓

Save Import Now

Import History

Start Time	User Name	Duration
02/20/2015 03:33 PM	admin	0:02:35
02/20/2015 06:00 AM	Scheduled	0:04:51
02/19/2015 08:35 PM	admin	1:07:22
02/19/2015 08:01 PM	Scheduled	0:01:49
02/19/2015 06:00 AM	Scheduled	0:01:53
02/18/2015 08:00 PM	Scheduled	0:03:49
02/18/2015 06:00 AM	Scheduled	0:01:48
02/18/2015 03:05 AM	admin	1:15:41

Logs:

```
2015-02-20 14:35:21 (+0:00:00.024) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractNoTransactionEtAction::process(): Finished execution of step: ImportVmManScans, with total time: 396 ms.
2015-02-20 14:35:21 (+0:00:00.000) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractEtAction::process(): Starting execution of step: RefreshHardwareTable
2015-02-20 14:35:22 (+0:00:00.508) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractEtAction::process(): Finished execution of step: RefreshHardwareTable, with total time: 505 ms.
2015-02-20 14:35:22 (+0:00:00.000) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractEtAction::process(): Starting execution of step: RunInventoryBuilder
2015-02-20 14:35:23 (+0:00:01.785) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.RunInventoryBuilderAction::doAction(): STATISTICS: 0 product instances were processed.
2015-02-20 14:35:24 (+0:00:00.003) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractEtAction::process(): Finished execution of step: RunInventoryBuilder, with total time: 1788 ms.
2015-02-20 14:35:24 (+0:00:00.000) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractNoTransactionEtAction::process(): Starting execution of step: RunReaggregation
2015-02-20 14:35:24 (+0:00:00.078) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractNoTransactionEtAction::process(): Finished execution of step: RunReaggregation, with total time: 75 ms.
2015-02-20 14:35:24 (+0:00:00.000) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractNoTransactionEtAction::process(): Starting execution of step: RunAggregation
2015-02-20 14:38:16 (+0:00:52.162) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractNoTransactionEtAction::process(): Finished execution of step: RunAggregation, with total time: 52162 ms.
2015-02-20 14:38:16 (+0:00:00.000) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractEtAction::process(): Starting execution of step: UpdateComputerSystems
2015-02-20 14:38:17 (+0:00:01.059) INFO: (ImportThread) com.ibm.license.mgmt.etl.core.actions.AbstractEtAction::process(): Finished execution of step: UpdateComputerSystems, with total time: 1059 ms.
2015-02-20 14:38:27 (+0:00:10.056) INFO: LMT import registered tasks: ["MergeComputersAction", "VUTImport", "PartNumbersImport", "ImportCapacity", "ImportVmManScans", "RefreshHardwareTable", "RunInventoryBuilder", "RunReaggregation", "RunAggregation", "UpdateComputerSystems"]
2015-02-20 14:38:27 (+0:00:00.000) INFO: Running LMT ETL: Success
2015-02-20 14:38:27 (+0:00:00.037) INFO: Import succeeded in 0:02:35
```

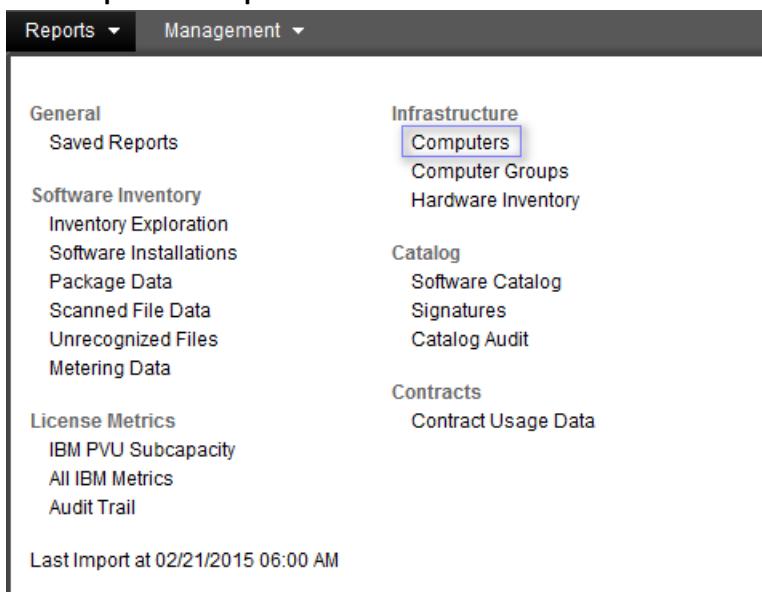
## Scanning environment check point

Before you move to the next step, make sure that all the required scan information has been imported to the SUA database.

1. Open the SUA 9.0 interface.

See: [How to open Software Use Analysis 9.0 web user interface]

2. Go to **Reports > Computers**.

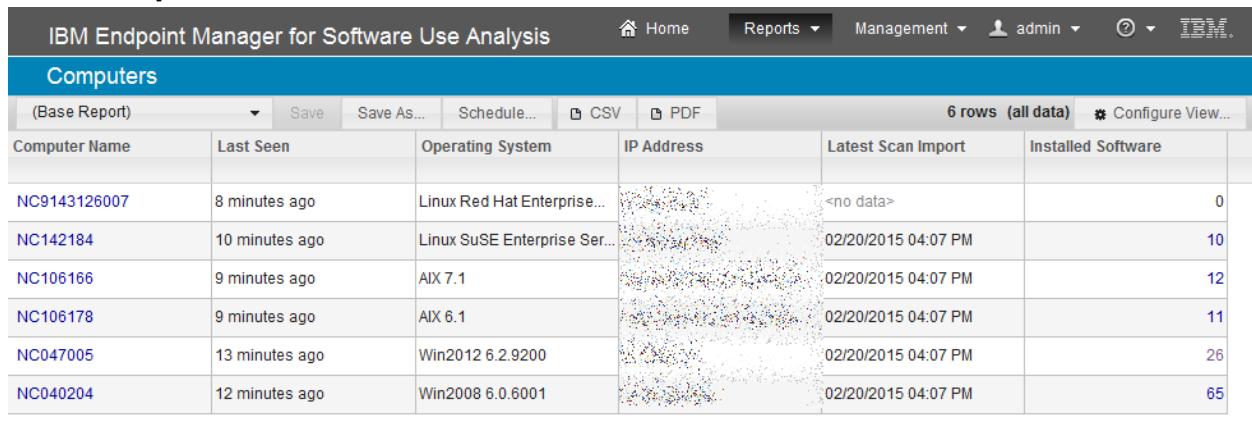


The **Computers** panel opens.

Computers						6 rows (all data)	Configure View...
(Base Report)	Save	Save As...	Schedule...	CSV	PDF		
Computer Name	Last Seen	Operating System	IP Address	Latest Scan Import	Installed Software		
NC9143126007	22 minutes ago	Linux Red Hat Enterprise S...	<no data>	<no data>	0		
NC142184	24 minutes ago	Linux SuSE Enterprise Serv...	<no data>	<no data>	0		
NC106166	23 minutes ago	AIX 7.1	<no data>	<no data>	0		
NC106178	24 minutes ago	AIX 6.1	<no data>	<no data>	0		
NC047005	12 minutes ago	Win2012 6.2.9200	<no data>	<no data>	2		
NC040204	12 minutes ago	Win2008 6.0.6001	<no data>	<no data>	3		

3. Make sure that all migrated agents have relevant rows and the then **Latest Scan Import** column contains some data. If the column contains a **<no data>** value, wait some time and rerun the ETL process. Sometimes rerunning some fixlets is necessary. Sometimes additional investigation is required.

4. As soon as the data is visible on the SUA web user interface, this step: [Step 4: Scanning your environment] is finished.



The screenshot shows a web-based application titled "IBM Endpoint Manager for Software Use Analysis". The main header includes "Home", "Reports", "Management", "admin", and the IBM logo. Below the header, a blue navigation bar says "Computers". The main content area is a table with the following columns: Computer Name, Last Seen, Operating System, IP Address, Latest Scan Import, and Installed Software. There are seven rows of data:

Computer Name	Last Seen	Operating System	IP Address	Latest Scan Import	Installed Software
NC9143126007	8 minutes ago	Linux Red Hat Enterprise...	<no data>	<no data>	0
NC142184	10 minutes ago	Linux SuSE Enterprise Ser...	<no data>	02/20/2015 04:07 PM	10
NC106166	9 minutes ago	AIX 7.1	<no data>	02/20/2015 04:07 PM	12
NC106178	9 minutes ago	AIX 6.1	<no data>	02/20/2015 04:07 PM	11
NC047005	13 minutes ago	Win2012 6.2.9200	<no data>	02/20/2015 04:07 PM	26
NC040204	12 minutes ago	Win2008 6.0.6001	<no data>	02/20/2015 04:07 PM	65

## Step 5: Migration your environment

---

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 SUA version 9.0.1.2.

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

```
/opt/ibm/SUA/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=TAD4D_HOST
LMT_TAD4D_DB_PORT=50000
LMT_TAD4D_DB_USER=db2inst1
LMT_TAD4D_DB_PASSWORD=password
LMT_TAD4D_DB_TIMEOUT=15000
IEM_HOST=localhost
IEM_PORT=52311
IEM_PROTOCOL=https
IEM_USER=IEMAdmin
IEM_USER_PASSWORD=password
IEM_PROTOCOL_TIMEOUT=120000
LMT_SUA_TOKEN=token
LMT_SUA_PORT=9081
LMT_SUA_PROTOCOL=https
LMT_SUA_SITE=IBM Endpoint Manager for Software Use Analysis
LMT_SUA_PROTOCOL_TIMEOUT=120000
```

### Export to CSV files

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

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

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/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: 5
Agent mappings exported: 5
Software bundlings exported: 41
Software exclusions exported: 3
VM Managers exported: 8
Excluded directories exported: 7

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

## Generated CSV files

As a result, six files are generated:

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

```
ls -la *.csv
```

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/product # ls -la *.csv
-rw-r--r-- 1 root root 461 Feb 20 10:30 agents.csv
-rw-r--r-- 1 root root 400 Feb 20 10:30 agentsmap.csv
-rw-r--r-- 1 root root 10522 Feb 20 10:30 bundles.csv
-rw-r--r-- 1 root root 820 Feb 20 10:30 excludeddirectories.csv
-rw-r--r-- 1 root root 554 Feb 20 10:30 excludedsoftware.csv
-rw-r--r-- 1 root root 825 Feb 20 10:30 vmmangers.csv
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/product # [REDACTED]
```

## 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	4685315941853731849	7.5.0.122	NC047005	[REDACTED]	Windows 2012 6.2
3	4693153620718001657	7.5.0.122	NC040204	[REDACTED]	Windows 2008 6.0
4	4678033869419741193	7.5.0.122	NC106178	[REDACTED]	AIX 6.1
5	4678537617125179401	7.5.0.121	NC106166	[REDACTED]	AIX 7.1
6	4679655442678193673	7.5.0.122	NC142184	[REDACTED]	LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 2 (3.0.13-0.27-default)
7					

### agentsmap.csv

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

A	B	C	D	E	
1	IEM Client ID	LMT/TAD4D 7.x Agent ID	LMT/TAD4D 7.x Agent Version	Host Name	Operating System
2	10880762	4678537617125179401	7.5.0.121	NC106166	AIX 7.1
3	13325247	4678033869419741193	7.5.0.122	NC106178	AIX 6.1
4	12425724	4685315941853731849	7.5.0.122	NC047005	Win2012
5	6117602	4679655442678193673	7.5.0.122	NC142184	Linux SuSE Enterprise Server 11
6	1590021	4693153620718001657	7.5.0.122	NC040204	Win2008
7					

## bundles.csv

### Software bundlings.

A	B	C	D	E	F	G	H	I	J	K	L	M
1	LMT/TAD4D 7.x Agent ID	Component GUID	Product GUID	Component Path	Component Name	Component Product Name	Release	Host Name	LMT/TAD4D 7.x Agent ID	Operating System	Report Group ID	
2	467803369419741193	83e38a3613aa44d245598d77804754	/usr/lpp/bos	AIX Express Edition	6.1 AIX Express Editi	6.1 NC106178			AIX 6.1	1		
3	4693153620718001657	1434bfc8000040153c0b9caaa413	C:/Windows/itm/p	IBM License Metric Tc	7.5 IBM Tivoli Asset I	7.5 NC040204			Windows 2008 6.0	1		
4	4678537617125179401	1434bfc8000040153c0b9caaa413	/opt/itm/properties	IBM License Metric Tc	7.5 IBM Tivoli Asset I	7.5 NC106166			AIX 7.1	1		
5	467803369419741193	1434bfc8000040153c0b9caaa413	/var/itm/properties	IBM License Metric Tc	7.5 IBM Tivoli Asset I	7.5 NC106178			AIX 6.1	1		
6	4679655442678193673	1434bfc8000040153c0b9caaa413	/var/itm/properties	IBM License Metric Tc	7.5 IBM Tivoli Asset I	7.5 NC142184			LINUX SUSE Linux	1		
7	4693153620718001657	2e20f76ba7a34dd9164b637fb36ea4	C:/Program Files/I	IBM WebSphere Appl	7 IBM WebSphere	7 NC040204			Windows 2008 6.0	1		
8	4679655442678193673	1434bfc8000040153c0b9caaa413	/usr/IBM/WebSphere	IBM WebSphere Appl	7 IBM WebSphere	7 NC142184			LINUX SUSE Linux	1		
9	4693153620718001657	a52dc5d5174b291d395d1c0bd4	C:/Program Files/I	IBM DB2 Enterprise S	9.7 IBM DB2 Enterpr	9.7 NC040204			Windows 2008 6.0	1		
10	467803369419741193	89f5771513de4160a2e57fe1f96e4	/usr/IBM/WebSphere	WebSphere Applicat	8.5 IBM WebSphere	8.5 NC106178			AIX 6.1	1		
11	4678537617125179401	dfb254228cb04c1e3777113522c4	/usr/lpp/Tivoli	Man IBM Tivoli Endpoint	3.7 IBM Endpoint Ma	9.2 NC106166			AIX 7.1	1		
12	4678537617125179401	dfb254228cb04c1e3777113522c4	/opt/Tivoli/lcf/bin/ai	IBM Tivoli Endpoint	3.7 IBM Endpoint Ma	9.2 NC106166			AIX 7.1	1		
13	4679655442678193673	3289337fe15f424fa342c00083ca6	/usr/IBM/WebSphere	IBM WebSphere MQ :	7.5 IBM WebSphere	7.5 NC142184			LINUX SUSE Linux	1		
14	4679655442678193673	477d67e83b35451a45e41d49c172	/IBM/wlp/lib/versio	WebSphere Applicat	8.5 IBM WebSphere	8.5 NC142184			LINUX SUSE Linux	1		
15	4685315941853731849	411220ae7774d6a45e41d49c172	C:/Liberty/lib/versi	WebSphere Applicat	8.5 IBM WebSphere	8.5 NC047005			Windows 2012 6.2	1		
16	4693153620718001657	231e88ab7a184d67fe81b0e272a4	C:/Program	Files/I	IBM Tivoli Security Cc	5.1 IBM Tivoli Securit	5.1 NC040204		Windows 2008 6.0	1		
17	467803369419741193	444e69af5b334bb3:b13e55309254	/opt/IBM/ITM	IBM Tivoli Monitoring	6.3 IBM Tivoli Monitor	6.3 NC106178			AIX 6.1	1		
18	467803369419741193	75142b915f9484c2e2dd66c8cff4	/opt/cluster/solidDI	IBM solidDB	6.5 AIX Express Editi	6.1 NC106178			AIX 6.1	1		
19	4678537617125179401	75142b915f9484c2e2dd66c8cff4	/opt/cluster/solidDI	IBM solidDB	6.5 AIX Express Editi	7.1 NC106166			AIX 7.1	1		
20	4685315941853731849	1434bfc8000040153c0b9caaa413	C:/Windows/itm/p	IBM License Metric Tc	7.5 IBM Tivoli Asset I	7.5 NC047005			Windows 2012 6.2	1		
21	4678537617125179401	2e20f76ba7a34dd9164b637fb36ea4	/usr/IBM/WebSphere	IBM WebSphere Appl	7 IBM WebSphere	7 NC106166			AIX 7.1	1		
22	4685315941853731849	a52dc5d5174b291d395d1c0bd4	C:/Program	Files/I	IBM DB2 Enterprise S	9.7 IBM DB2 Enterpr	9.7 NC047005		Windows 2012 6.2	1		
23	4685315941853731849	231e88ab7a184d67fe81b0e272a4	C:/Program	Files/I	IBM WebSphere Appl	7 IBM WebSphere	7 NC047005		Windows 2012 6.2	1		
24	467803369419741193	dfb254228cb04c1e3777113522c4	/usr/lpp/Tivoli	Man IBM Tivoli Endpoint	3.7 IBM Endpoint Ma	9.2 NC106178			AIX 6.1	1		
25	467803369419741193	dfb254228cb04c1e3777113522c4	/opt/Tivoli/lcf/bin/ai	IBM Tivoli Endpoint	3.7 IBM Endpoint Ma	9.2 NC106178			AIX 6.1	1		
26	467803369419741193	89f5771513de4160a2e57fe1f96e4	/usr/IBM/WebSphere	WebSphere Applicat	8.5 IBM WebSphere	8.5 NC106178			AIX 6.1	1		
27	467803369419741193	3289337fe15f424fa342c00083ca6	/usr/IBM/WebSphere	IBM WebSphere MQ :	7.5 IBM WebSphere	7.5 NC106178			AIX 6.1	1		
28	4678537617125179401	c7f244f322b47e6a45e8	/usr/IBM/WebSphere	WebSphere Applicat	8.5 IBM WebSphere	8.5 NC106166			AIX 7.1	1		
29	4678537617125179401	3289337fe15f424fa342c00083ca6	/usr/IBM/WebSphere	IBM WebSphere MQ :	7.5 IBM WebSphere	7.5 NC106166			AIX 7.1	1		
30	4678537617125179401	0768fb15383c41243e22b9a8e5c1	/opt/IBM/EM	IBM Endpoint Manage	9 IBM Endpoint Ma	9 NC106166			AIX 7.1	1		

## excludeddirectories.csv

### Excluded directories.

A	B	C	D	E	F	
1	Excluded Directory	Platform	LMT/TAD4D 7.x Agent ID	IP Address	Host Name	Operating System
2	*\$Recycle Bin/*,/ICT_archive/*,/RECYCLER/*,*\$NIServicePackUninstall*\$/*,\$NtUninstall*\$/*,\$hf_mig\$/*,/ServicePackFiles/i386/*,/cache/out-of-					
3	date/*,/system32/dllcache/*,/tmp/*,/tmp/*,/tmp/*,/dfs	WINDOWS				
4	/cache/out-of-date/*,/tmp/*,/QNTC/*,/QSYS LIB/QRCL LIB/*,/proc/*	i5				
5	/cache/out-of-date/*,/tmp/*,/ICT_archive/*,/proc/*	SOLARIS				
6	/cache/out-of-date/*,/tmp/*,/ICT_archive/*,/proc/*	LINUX				
7	/*eznim/*,/tmp/*,/ICT_archive/*,/proc/*	HP_UX				
8	/ICT/docs/*,/ICT/movies/*,/ICT/sounds/*	AIX	4679655442678193673		NC142184	LINUX SUSE Linux Er
9						
10						

## excludedsoftware.csv

### Excluded software.

A	B	C	D	E	F	G	H	I	
1	LMT/TAD4D 7.x Agent ID	Product GUID	Reason for Exclusion	Comment	Product Name	Release Version	Report Group	Host Name	IP Address
2	467803369419741193	a2e57e1f1996c794d5dbe93b872a7	0-30 days free trial period		IBM WebSphere Application Server - Express	8.5	1	NC106178	
3	4678537617125179401	342c00b83c64ab8abb9cbe	6 Discount: Buy 2 Get 1 FREE		IBM WebSphere MQ	7.5	1	NC106166	
4	4685315941853731849	9ec009856d6546c4819408471f1140f	4		IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	1	NC047005	
5									
6									
7									
8									
9									
10									
11									

## vmmanagers.csv

### Virtual machine managers.

A	B	C	D	E	F	
1	IP Address	User Name	Password	URL	Type	Shared Credentials
2		admin@internal	{encrypted}	https://NC044146:8443/api	3	FALSE
3		admin@internal	{encrypted}	https://NC142232:443/api	3	FALSE
4		administrator@cluster.com	{encrypted}	http://NC042207/wsman	1	FALSE
5		administrator@cluster.com	{encrypted}	http://NC042203/wsman	1	FALSE
6		root	{encrypted}	https://NC142253/sdk	2	FALSE
7		root	{encrypted}	https://NC142252/sdk	2	FALSE
8		administrator	{encrypted}	https://NC042251/sdk	2	FALSE
9		administrator	{encrypted}	https://NC042194/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 *all-agents.csv* file that you created during the preparation phase.

See: [all-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 SUA 9.0 database. To run the simulation, use the following command:

```
./migration.sh -migrate -simulate

Linux RH (SUA_HOST) root /opt/ibm/SUA/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: 41
Software bundlings imported: 37
Software bundlings skipped: 4
Software bundlings failed: 0
Software exclusions exported: 3
Software exclusions imported: 3
Software exclusions skipped: 0
Software exclusions failed: 0
VM Managers exported: 8
VM Managers imported: 8
VM Managers skipped: 0
VM Managers failed: 0
Excluded directories exported: 7
Excluded directories skipped: 1
Excluded directories failed: 0
Excluded directories updated: 6

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

## Generated CSV files

As a result, three files are generated:

- excluded\_directories\_report.csv
- software\_report.csv
- vmmangers\_report.csv

```
ls -la *report*.csv
```

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/product # ls -la *report*.csv
-rw-r--r-- 1 root root 1651 Feb 20 10:37 excluded_directories_report.csv
-rw-r--r-- 1 root root 528357 Feb 20 10:37 software_report.csv
-rw-r--r-- 1 root root 703 Feb 20 10:37 vmmangers_report.csv
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/product #
```

## Content of the CSV files

### excluded\_directories\_report.csv

#### Report of excluded directories.

A	B	C	D	E	F	G	H	I	J	K
1	Status	Description	Platform	IEM Client ID	LMT/TAD4D 7.x Agent ID	LMT/SUA Directories	LMT/TAD4D Directories	Migrated Directories	Operatin Host Name	IP Address
2	UPDATED	New directories were sent to the IEM server.		6117602	4679655442678193673	*eznim;"/tmp;/proc	/ICT/docs/*;/ICT/movies/*;/ICT/sounds/*	/ICT/docs/*;/ICT/movies/*;/ICT/sounds/*	Linux	NC142184
3	UPDATED	New directories were sent to the IEM server.	AIX				*eznim;"/tmp;/ICT_archive/*;/proc/*	*eznim;"/tmp;/ICT_archive/*;/proc/*		
4	SKIPPED	Unsupported platform.	IS				*\$Recycle.Bin/*;/ICT_archive/*;/RECYCLER/*;/recycler/*;\$NServicePackUninstall*\$;*\$UnInstall*\$;*\$h_mig*\$;*\$ServicePackFiles;i386/*;/cache/out-of-date/*;/system32/dllcache/*;*temp/*;*tmp/*;dfs/*;/cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*	*\$Recycle.Bin/*;/ICT_archive/*;/RECYCLER/*;/recycler/*;\$NServicePackUninstall*\$;*\$UnInstall*\$;*\$h_mig*\$;*\$ServicePackFiles;i386/*;/cache/out-of-date/*;/system32/dllcache/*;*temp/*;*tmp/*;dfs/*;/cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*		
5	UPDATED	New directories were sent to the IEM server.	WINDOWS				*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*	*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*		
6	UPDATED	New directories were sent to the IEM server.	HP_UX				*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*	*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*		
7	UPDATED	New directories were sent to the IEM server.	SOLARIS				*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*	*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*		
8	UPDATED	New directories were sent to the IEM server.	LINUX				*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*	*\$cache/out-of-date/*;/tmp/*;/ICT_archive/*;/proc/*		

### software\_report.csv

#### Report of installed software.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Item	Status	Description	IEM Client ID	LMT/TAD4D 7 Product Name	Versi	LMT/SUA Rel	LMT/SUA Con	LMT/SUA Cor	LMT/TAD4D 7 LMT/SUA Con	LMT/TAD4D 7 Host Name	IP Address	Operating Sys		
2	BUNDLING	SKIPPED	The software was not discoverable.	4679655442671712	IBM Endpoint Express	9.3e22b9a8-e5c	IBM Endpoint Express	9.0768fb15-383	/opt/IBM/IEM	NC106166		AIX 7.1			
3	BUNDLING	SKIPPED	The software was not discoverable.	46790338694	AIX Express E	6.1.5598d778-047	AIX Express E	6.1.83e38a36-13a	/usr/lpp/bos	NC106178		AIX 6.1			
4	BUNDLING	SKIPPED	The software was not discoverable.	4679655442671712	IBM Twiki Mon	9.2.377113-522	IBM Twiki Mon	3.7	dtb25422-8cb	/usr/lpp/Twiki_Management	NC106178		AIX 6.1		
5	BUNDLING	SKIPPED	The software was not discoverable.	467853761712	IBM Endpoint Express	9.2.377113-522	IBM Twiki Mon	3.7	dtb25422-8cb	/usr/lpp/Twiki_Management	NC106166		AIX 7.1		
6	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
7	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
8	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
9	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
10	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
11	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
12	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
13	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
14	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
15	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
16	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
17	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
18	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
19	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
20	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
21	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM Twiki Mon	6.3.b13e5530-92	IBM Twiki Mon	6.3.44469af-5b3	/opt/twiki/ITM	NC142184			LINUX SUSE I		
22	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM WebSphere	7.5.342c00b8-3ca	IBM WebSphere	7.5.3289337-e15	/usr/IBM/Web	NC142184			LINUX SUSE I		
23	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM WebSphere	7.5.342c00b8-3ca	IBM WebSphere	7.5.3289337-e15	/usr/IBM/Web	NC142184			LINUX SUSE I		
24	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM WebSphere	7.5.342c00b8-3ca	IBM WebSphere	7.5.3289337-e15	/usr/IBM/Web	NC142184			LINUX SUSE I		
25	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM WebSphere	7.5.342c00b8-3ca	IBM WebSphere	7.5.3289337-e15	/usr/IBM/Web	NC142184			LINUX SUSE I		
26	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM WebSphere	7.5.342c00b8-3ca	IBM WebSphere	7.5.3289337-e15	/usr/IBM/Web	NC142184			LINUX SUSE I		
27	BUNDLING	SUCCEEDED	The software t6117602	4679655442671712	IBM WebSphere	7.5.342c00b8-3ca	IBM WebSphere	7.5.3289337-e15	/usr/IBM/Web	NC142184			LINUX SUSE I		

### vmmanagers\_report.csv

Report of virtual managers.

A	B	C	D	E	F	
1	Item	Status	Description	URL	User Name	Type
2	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="https://NC044146:8443/api">https://NC044146:8443/api</a>	admin@internal	3
3	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="https://NC142232:443/api">https://NC142232:443/api</a>	admin@internal	3
4	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="http://NC042207/wsman">http://NC042207/wsman</a>	administrator@cluster.com	1
5	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="http://NC042203/wsman">http://NC042203/wsman</a>	administrator@cluster.com	1
6	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="https://NC142253/sdk">https://NC142253/sdk</a>	root	2
7	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="https://NC142252/sdk">https://NC142252/sdk</a>	root	2
8	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="https://NC042251/sdk">https://NC042251/sdk</a>	administrator	2
9	VMMANAGER	SUCCEEDED	VM Manager was added.	<a href="https://NC042194/sdk">https://NC042194/sdk</a>	administrator	2
10						

### Verification

This stage of migration still does not save anything in the SUA 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. In this chapter the approach of migrating all agents at once will be presented.

### Remember:

In either approach, all items from version 7.5 are included in the CSV files that are created during the migration. This is to be expected, because the files list all items that are eligible for migration, not only those that were actually migrated. Items that were not migrated are listed as skipped with an explanation saying that the IBM Endpoint Manager client is not installed. Filter the files by host names to limit the view only to items from a particular group of endpoints. Although the items are listed in the CSV files, they are not saved in the target environment.

To run the migration, use the following command:

```
./migration.sh -migrate
```

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/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: 41
Software bundlings imported: 35
Software bundlings skipped: 4
Software bundlings failed: 2
Software exclusions exported: 3
Software exclusions imported: 1
Software exclusions skipped: 0
Software exclusions failed: 2
VM Managers exported: 8
VM Managers imported: 8
VM Managers skipped: 0
VM Managers failed: 0
Excluded directories exported: 7
Excluded directories skipped: 1
Excluded directories failed: 0
Excluded directories updated: 6

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

## Generated CSV files

As a result, three files are generated:

- excluded\_directories\_report.csv
- software\_report.csv
- vmmangers\_report.csv

```
ls -la *report*.csv
```

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/migration/product # ls -la *report*.csv
-rw-r--r-- 1 root root 1651 Feb 20 14:11 excluded_directories_report.csv
-rw-r--r-- 1 root root 87427 Feb 20 14:11 software_report.csv
-rw-r--r-- 1 root root 703 Feb 20 14:11 vmmangers_report.csv
Linux RH (SUA_HOST) root /opt/ibm/SUA/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	F	G		
1	Item	Status	Description	IEM Client ID	LMT/TAD4D 7.x Agent ID	Product Name	Release Version	LMT/
2	BUNDLING	SKIPPED	The software was not discovered in the target instance.	4678537617125179401		IBM Endpoint Manager for Patch Management	9.3	3e22
3	BUNDLING	SKIPPED	The software was not discovered in the target instance.	4678033869419741193		AX Express Edition	6.1	5598
4	BUNDLING	SKIPPED	The software was not discovered in the target instance.	4678033869419741193		IBM Endpoint Manager for Lifecycle Management	9.2	3717
5	BUNDLING	SKIPPED	The software was not discovered in the target instance.	4678537617125179401		IBM Endpoint Manager for Lifecycle Management	9.2	3717
6	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM Tivoli Monitoring	6.3	b13e
7	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM Tivoli Monitoring	6.3	b13e
8	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM Tivoli Monitoring	6.3	b13e
9	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM Tivoli Monitoring	6.3	b13e
10	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
11	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
12	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
13	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
14	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
15	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
16	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
17	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	6117602	4679655442678193673	IBM WebSphere MQ	7.5	342c
18	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	1590021	4693153620718001657	IBM WebSphere Application Server for Developers	7	64b6
19	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	1590021	4693153620718001657	IBM WebSphere Application Server for Developers	7	64b6
20	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	1590021	4693153620718001657	IBM WebSphere Application Server for Developers	7	64b6
21	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	1590021	4693153620718001657	IBM WebSphere Application Server for Developers	7	64b6
22	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	1590021	4693153620718001657	IBM WebSphere Application Server for Developers	7	64b6
23	BUNDLING	SUCCEEDED	The software bundling was migrated successfully.	1590021	4693153620718001657	IBM WebSphere Application Server for Developers	7	64b6

## Verification

Verification of this stage of migration should be preceded by verification of the simulation. The entries with the SKIPPED status as well as the entries with the FAILED status should be checked in the first place.

See: [Simulation of migration > Verification]

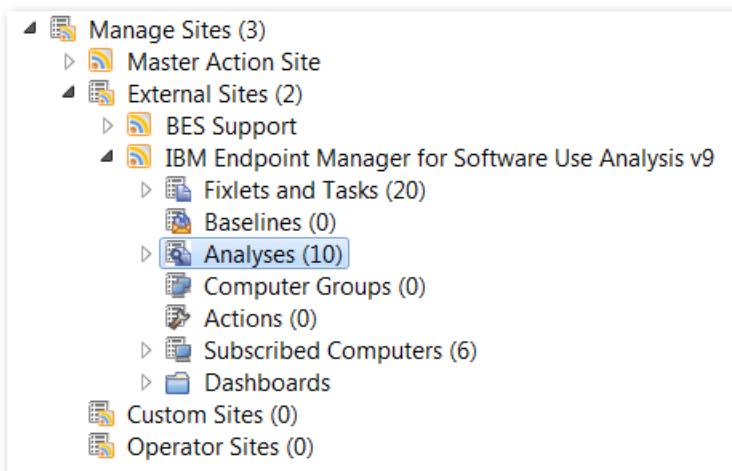
#### Excluded directories

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 **Manage Sites > External Sites > IBM Endpoint Manager for Software Use Analysis v9 > Analyses**.



3. Use filter mechanism, select the **Excluded Directories** analysis and check the excluded directories on the **Result** tab.

The screenshot shows the 'Analyses' table and the 'Analysis: Excluded Directories' details view. The table lists one analysis entry: 'Excluded Directories' (Status: Activated Globally, Name: Excluded Directories, Site: IBM Endpoint Manager for Software Use Analysis v9, Applicable Computer Count: 6, Activated By: IEMAdmin, Time Activated: 2/20/2015 1:16:49 PM). The details view shows the 'Applicable Computers (6)' tab, which lists six computers with their operating systems and excluded directory patterns. The excluded directory patterns are listed in a semicolon-separated format.

Computer Name	Operating System	Excluded Director...
NC040204	Win2008 6.0.6001	<multiple results> %CSIDL_WINDOWS%\$NServicePackUninstall\$;%CSIDL_WINDOWS%\$NtUninstall;%CSIDL_WINDOWS%\$hf_mig\$;%CSIDL_WIND...
NC047005	Win2012 6.2.9200	<multiple results> %CSIDL_WINDOWS%\$NServicePackUninstall\$;%CSIDL_WINDOWS%\$NtUninstall;%CSIDL_WINDOWS%\$hf_mig\$;%CSIDL_WIND...
NC106166	AIX 7.1	<multiple results> */eznim;/eznim/*;/tmp;/tmp/*;/ICT_archive/;/proc/proc/*;/usr/lpp
NC106178	AIX 6.1	<multiple results> */eznim;/eznim/*;/tmp;/tmp/*;/ICT_archive/;/proc/proc/*;/usr/lpp
NC142184	Linux SuSE Enterpr...	<multiple results> */cache/out-of-date/*;/eznim;/tmp;/tmp/*;/ICT/docs/*;/ICT/movies/*;/ICT_archive/*;/proc/proc/*
NC9143126007	Linux Red Hat Ent...	

## Summary view:

The screenshot shows the IBM Endpoint Manager for Software Use Analysis interface. At the top, there's a table titled 'Analyses' with columns: Status, Name, Site, Applicable Computer Count, Activated By, and Time Activated. One entry is listed: 'Activated Globally' for 'IBM Endpoint Manager for Software Use Analysis v9' with an 'Applicable Computer Count' of 6, activated by 'IEMAdmin' on 2/20/2015 at 1:16:49 PM.

Below the table is a section titled 'Analysis: Excluded Directories'. It includes buttons for Activate, Deactivate, Edit, Export, Hide Locally, Hide Globally, and Remove. There are tabs for Description, Details, Results, and Applicable Computers (6). A dropdown menu 'View as summary' is open.

The main content area displays a table titled 'Excluded Directories (semicolon separated)'. The columns are Count, Percentage, and Result. The results are as follows:

Count	Percentage	Result
1	16.67%	%CSIDL_WINDOWS%/\$NTServicePackUninstall*%\$%CSIDL_WINDOWS%/\$NtUninstall;%CSIDL_WINDOWS%/\$hf_mig%\$%CSIDL_WINDOWS%/ServicePackFiles% CSIDL_WINDOWS%/\$SysWOW64%\$%CSIDL_WINDOWS%/\$System32%\$%CSIDL_WINDOWS%/\$installer;%CSIDL_WINDOWS%/\$winss%\$%cache/out-of- date;\$/temp;\$/tmp;\$/Recycle.Bin;*/\$ICT_archive*/\$RECYCLER*/\$recycler*/\$NTServicePackUninstall*\$%\$NtUninstall*\$%\$hf_mig\$%\$ServicePackF %\$cache/out-of-date;*/\$system32\$%\$dllcache*/\$temp;\$/tmp;\$/Recycle.Bin;\$/RECYCLER;\$/System Volume Information;dfs %\$CSIDL_WINDOWS%/\$NTServicePackUninstall*\$%\$CSIDL_WINDOWS%/\$NTUninstall;%CSIDL_WINDOWS%/\$hf_mig%\$%CSIDL_WINDOWS%/ServicePackFiles% CSIDL_WINDOWS%/\$sysWOW64%\$%CSIDL_WINDOWS%/\$System32%\$%CSIDL_WINDOWS%/\$installer;%CSIDL_WINDOWS%/\$winss%\$%Temporary Internet
1	16.67%	Files;/\$cache/out-of- date;\$/temp;\$/tmp;\$/Recycle.Bin;*/\$ICT_archive*/\$RECYCLER*/\$recycler*/\$NTServicePackUninstall*\$%\$NtUninstall*\$%\$hf_mig\$%\$ServicePackFiles% %\$cache/out-of-date;*/\$system32\$%\$dllcache*/\$temp;\$/tmp;\$/Recycle.Bin;\$/RECYCLER;\$/System Volume Information;dfs
1	16.67%	*/\$cache/out-of-date;*/\$eznim;\$/tmp;\$/tmp;\$/ICT/docs*/\$ICT/movies*/\$ICT/sounds*/\$ICT_archive*/\$proc;/proc;/proc;/ eznim;*/\$eznim;*/\$tmp;*/\$tmp;*/\$ICT_archive*/\$proc;/proc;/proc;/usr;/ipp
2	33.33%	*/\$eznim;*/\$eznim;*/\$tmp;*/\$tmp;*/\$ICT_archive*/\$proc;/proc;/proc;/usr;/ipp

## Software

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

1. Open the SUA interface.

See: [How to open Software Use Analysis 9.0 web user interface]

2. Go to Reports > All IBM Metrics.

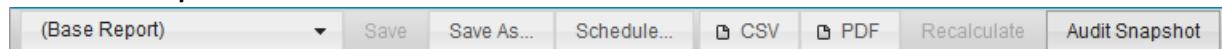
The screenshot shows the IBM Endpoint Manager for Software Use Analysis interface with the 'Reports' menu open. The 'All IBM Metrics' option is highlighted with a blue box. Other options visible in the 'Reports' menu include Reports, Management, General, Saved Reports, Software Inventory, License Metrics, IBM PVU Subcapacity, Audit Trail, Infrastructure, Computers, Computer Groups, Hardware Inventory, Catalog, Software Catalog, Signatures, Catalog Audit, Contracts, Contract Usage Data, and Last Import at 02/21/2015 06:00 AM.

A new panel opens.

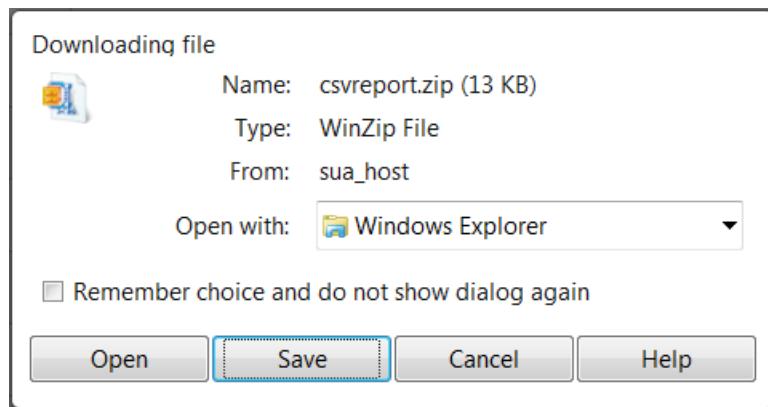
The screenshot shows a software interface titled "IBM Endpoint Manager for Software Use Analysis". The top navigation bar includes "Home", "Reports", "Management", and a user account. Below the title, it says "All IBM Metrics". The main area displays a table with columns: "Product", "License Type", "License Peak Value", and "License Peak Value History". The table lists various IBM products and their license types and peak values. For example, "IBM ITCAM for Microsoft Applications Advance" has a license type of "RVU Managed Activated Processor Cores Full Capacity" with a peak value of 67. Other products listed include IBM solidDB, IBM Tivoli Provisioning Manager, IBM Tivoli Security Compliance Manager, IBM WebSphere Application Server - Express, and IBM Tivoli Asset Discovery for Distributed.

Product	License Type	License Peak Value	License Peak Value History
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Full Capacity	67	11/25/2014 - 02/23/2015
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Subcapacity	7	
IBM solidDB	PVU Full Capacity	6400	
IBM solidDB	PVU Subcapacity	400	
IBM Tivoli Provisioning Manager	RVU Managed Activated Processor Cores Full Capacity	67	
IBM Tivoli Provisioning Manager	RVU Managed Activated Processor Cores Subcapacity	7	
IBM Tivoli Security Compliance Manager	PVU Full Capacity	70	
IBM Tivoli Security Compliance Manager	PVU Subcapacity	70	
IBM WebSphere Application Server - Express	PVU Full Capacity	0	
IBM WebSphere Application Server - Express	PVU Subcapacity	0	
IBM Tivoli Asset Discovery for Distributed	PVU Full Capacity	6670	
IBM Tivoli Asset Discovery for Distributed	PVU Subcapacity	670	

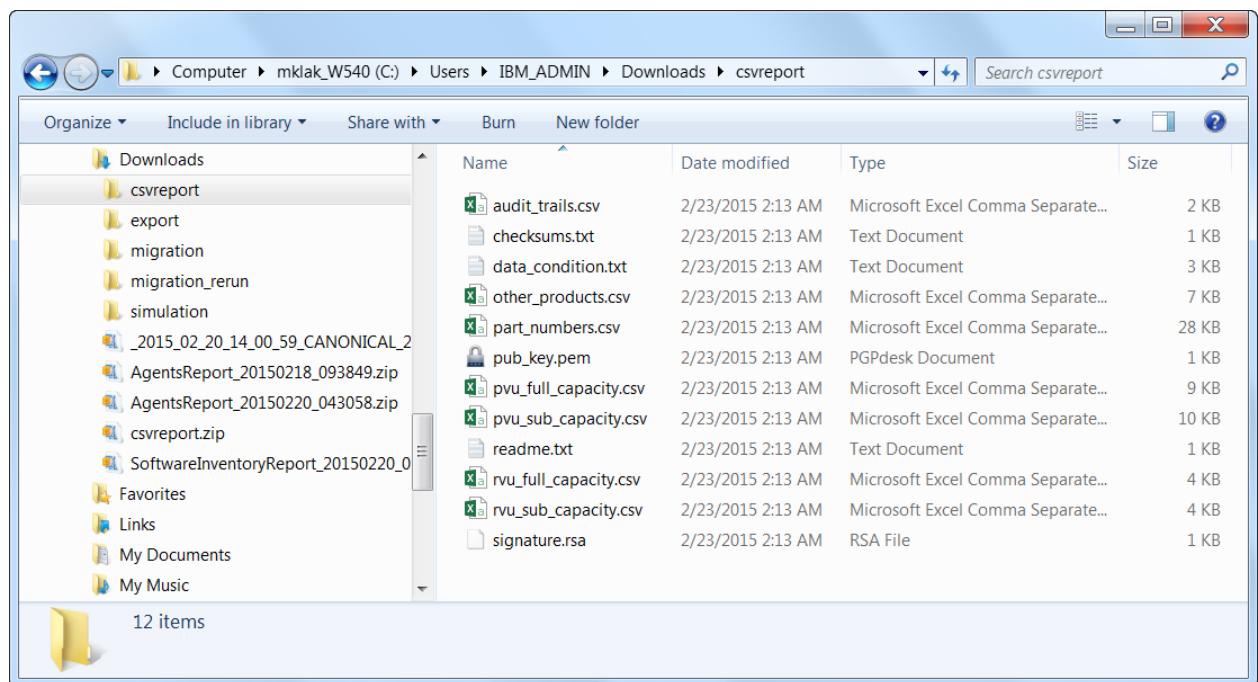
3. Click Audit Snapshot.



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

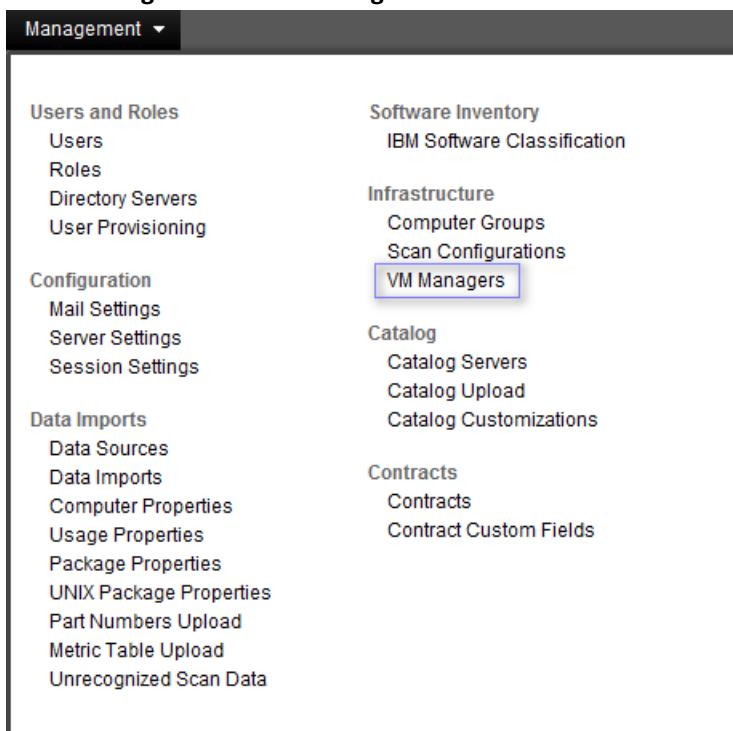
#### VM managers

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

1. Open the SUA user interface.

See: [How to open Software Use Analysis 9.0 web user interface]

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



The displayed information should reflect the information that was available in TAD4D 7.5.

IBM Endpoint Manager for Software Use Analysis				
Management: VM Managers				
<a href="#">+ New</a> <a href="#">Delete</a> <a href="#">Test Connection</a> 8 rows				
Operation Status	VM Manager Type	VM Manager URL	User Name	Last Successful Operation
OK	KVM RHEV-M	<a href="https://NC044140:8443/api">https://NC044140:8443/api</a>	admin@internal	02/22/2015 09:42 AM
OK	KVM RHEV-M	<a href="https://NC142232:443/api">https://NC142232:443/api</a>	admin@internal	02/22/2015 09:42 AM
OK	Microsoft Hyper-V	<a href="http://NC042207/wsman">http://NC042207/wsman</a>	administrator@cluster.com	02/22/2015 09:42 AM
OK	Microsoft Hyper-V	<a href="http://NC042203/wsman">http://NC042203/wsman</a>	administrator@cluster.com	02/22/2015 09:12 AM
OK	VMware ESX, ESXi or vCenter	<a href="https://NC142253/sdk">https://NC142253/sdk</a>	root	02/22/2015 09:12 AM
OK	VMware ESX, ESXi or vCenter	<a href="https://NC142252/sdk">https://NC142252/sdk</a>	root	02/22/2015 09:12 AM
OK	VMware ESX, ESXi or vCenter	<a href="https://NC042251/sdk">https://NC042251/sdk</a>	administrator	02/22/2015 09:12 AM
OK	VMware ESX, ESXi or vCenter	<a href="https://NC042194/sdk">https://NC042194/sdk</a>	administrator	02/22/2015 09:12 AM

Remember:

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

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 some 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 SUA.

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

## Verifying the migration

This part explains how to verify the migration.

To ensure that the verification is reliable, you should have both TAD4D 7.5 and SUA 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 TAD4D 7.5 contains computers with the i5 operating system.

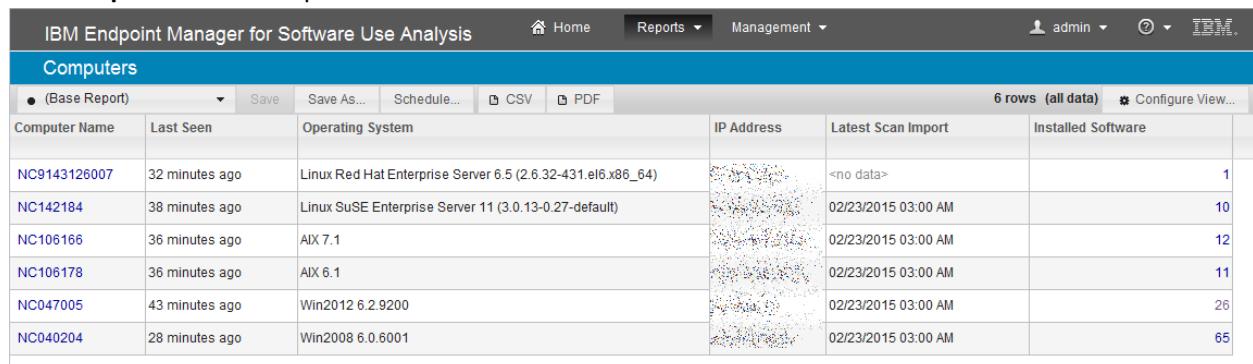
## Sanity check on 9.0

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

Go to Reports > Computers.

The screenshot shows a navigation menu with two main categories: 'Reports' and 'Management'. Under 'Management', there are several sub-options: General, Saved Reports, Software Inventory, Inventory Exploration, Software Installations, Package Data, Scanned File Data, Unrecognized Files, Metering Data, License Metrics, IBM PVU Subcapacity, All IBM Metrics, and Audit Trail. The 'Computers' option under the 'Infrastructure' section is highlighted with a blue box. At the bottom of the screen, a message indicates 'Last Import at 02/21/2015 06:00 AM'.

The **Computers** window opens.



Computers					
Computer Name	Last Seen	Operating System	IP Address	Latest Scan Import	Installed Software
NC9143126007	32 minutes ago	Linux Red Hat Enterprise Server 6.5 (2.6.32-431.el6.x86_64)		<no data>	1
NC142184	38 minutes ago	Linux SuSE Enterprise Server 11 (3.0.13-0.27-default)		02/23/2015 03:00 AM	10
NC106166	36 minutes ago	AIX 7.1		02/23/2015 03:00 AM	12
NC106178	36 minutes ago	AIX 6.1		02/23/2015 03:00 AM	11
NC047005	43 minutes ago	Win2012 6.2.9200		02/23/2015 03:00 AM	26
NC040204	28 minutes ago	Win2008 6.0.6001		02/23/2015 03:00 AM	65

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 **Tivoli Asset Discovery for Distributed > Software > Software Components**.



The **Software Components** panel opens.

This screenshot shows the 'Software Components' panel with a 'Components List'. The table has columns for 'Vendor' and 'Component'. The 'Vendor' column is sorted by name. The 'Component' column lists various software packages. The 'Instances' column shows the number of instances for each component. A total of 48 components are listed, with 48 instances in total. The interface includes standard navigation buttons like 'Page 1 of 4', 'Go', 'Rows 12', and download links for 'Download as PDF' and 'Download as CSV'.

Vendor	Component	Instances
Igor Pavlov	Igor Pavlov 7-Zip (SP) 4.42	1
-	ShutDown (SP) 1.1	2
Symantec	Symantec LiveUpdate (SP) 3.3	1
Symantec	Symantec Endpoint Protection (SP) 11.0	1
AT&T	VNC (SP) 1.2	1
IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	1
IBM	IBM SDK 5.0 for Windows IA32, Java Technology 5.0	1
IBM	IBM Tivoli Endpoint 3.7	4
IBM	IBM JavaTM Standard Edition 6.2	3
IBM	IBM JavaTM Standard Edition 6.3	2
IBM	IBM WebSphere Application Server 7.0	4
IBM	IBM Developer Kit, JavaTM 2 Technology Edition (SP) 5.0	1

2. Filter the results to IBM components and sort by using the **Component** name.

This screenshot shows the same 'Software Components' panel, but with a filter applied. The 'Vendor' column is sorted, and the first entry 'IBM' is checked. The 'Component' column lists various IBM software packages. The 'Instances' column shows the number of instances for each component. A total of 48 components are listed, with 23 instances in total. The interface includes standard navigation buttons like 'Page 1 of 2', 'Go', 'Rows 12', and download links for 'Download as PDF' and 'Download as CSV'.

Vendor	Component	Instances
<input checked="" type="checkbox"/> IBM	Filter...	Filter...
IBM	AIX Express Edition 6.1	1
IBM	AIX Express Edition 7.1	1
IBM	IBM DB2 Enterprise Server Edition - CPU Option 9.7	2
IBM	IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7	1
IBM	IBM Developer Kit, JavaTM 2 Technology Edition (SP) 5.0	1
IBM	IBM Endpoint Manager Platform Agent 9.0	1
IBM	IBM JavaTM Standard Edition 6.2	3
IBM	IBM JavaTM Standard Edition 6.3	2
IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	5
IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	1
IBM	IBM SDK 5.0 for Windows IA32, Java Technology 5.0	1
IBM	IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1	3

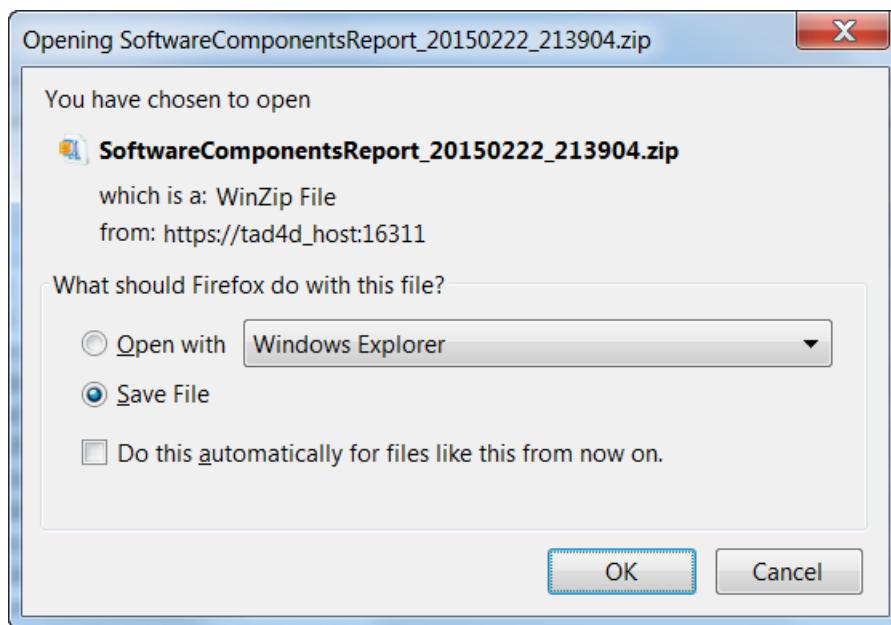
Remember:

Software catalogs with products of vendors other than IBM differ between TAD4D and SUA. Therefore, comparison of such components will be skipped in this document. If you want to do this, follow the same procedure however without filtering the result set.

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

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

4. Save the file.

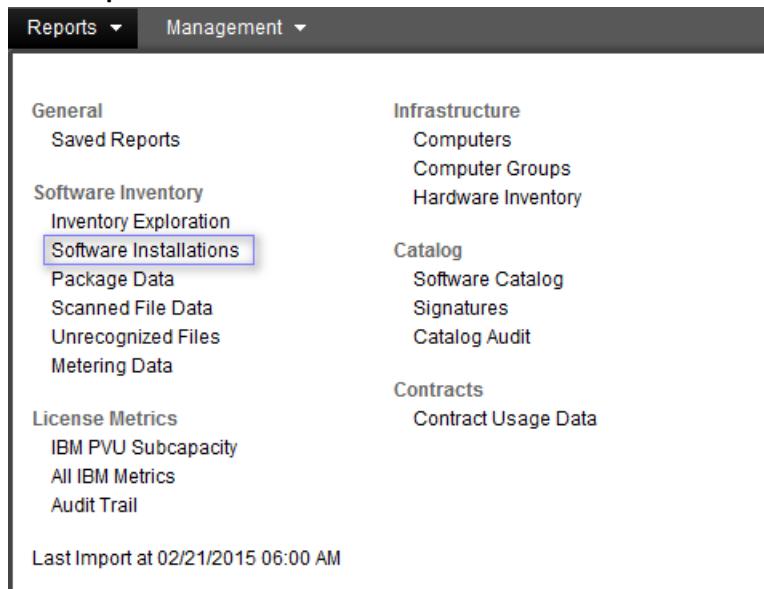


5. Extract the file and open it in an editor.

A	B	C
1	Vendor Component	Instances
2	IBM AIX Express Edition 6.1	1
3	IBM AIX Express Edition 7.1	1
4	IBM IBM DB2 Enterprise Server Edition - CPU Option 9.7	2
5	IBM IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7	1
6	IBM IBM Developer Kit, JavaTM 2 Technology Edition (SP) 5.0	1
7	IBM IBM Endpoint Manager Platform Agent 9.0	1
8	IBM IBM JavaTM Standard Edition 6.2	3
9	IBM IBM JavaTM Standard Edition 6.3	2
10	IBM IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	5
11	IBM IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	1
12	IBM IBM SDK 5.0 for Windows IA32, Java Technology 5.0	1
13	IBM IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1	3
14	IBM IBM Tivoli Endpoint 3.7	4
15	IBM IBM Tivoli Monitoring - Windows OS Agent 6.3	5
16	IBM IBM Provisioning Manager - Subagent 7.2	5
17	IBM IBM Tivoli Security Compliance Manager Client 5.1	1
18	IBM IBM WebSphere Application Server 7.0	4
19	IBM IBM WebSphere MQ Server 7.5	3
20	IBM IBM solidDB 6.5	2
21	IBM WebSphere Application Server - Base 8.5	1
22	IBM WebSphere Application Server - Express 8.5	2
23	IBM WebSphere Application Server Liberty Core 8.5	1
24	IBM WebSphere Application Server Network Deployment 8.5	1
25		

## 9.0

1. Go to Reports > Software Installations.



The Software Installations report opens.

Software Installations									
(Base Report)		Save	Save As...	Schedule...	CSV	PDF	125 rows (all data) <span>Configure View...</span>		
Computer Name	Last Seen	Publisher Name	Name	Version	Total Runs	Last Used	Average Runs per D...	Details	
NC047005	about an hour ago	Microsoft	Microsoft Windows S...	6.2.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>	
NC047005	about an hour ago	Microsoft	Microsoft .NET Frame...	4.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>	
NC040204	44 minutes ago	Microsoft	Microsoft .NET Frame...	3.5.0	<no data>	<no data>	<no data>	<a href="#">MANY &gt;</a>	
NC040204	44 minutes ago	Symantec	Symantec Endpoint P...	11.0	<no data>	<no data>	<no data>	<a href="#">MANY &gt;</a>	
NC040204	44 minutes ago	Microsoft	Microsoft Windows O...	6.0.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>	
NC142184	about an hour ago	IBM	IBM License Metric To...	7.5.1	2 days ago	2 days ago	1	<a href="#">DETAILS &gt;</a>	
NC142184	about an hour ago	IBM	IBM WebSphere Appli...	7.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>	
NC142184	about an hour ago	IBM	IBM WebSphere MQ S...	7.5	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>	
NC142184	about an hour ago	IBM	IBM Tivoli Monitoring ...	6.3	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>	

2. Filter the results.

The dialog box is titled "Configure View". It has sections for "Options" (with "Autosize Columns" checked), "Columns" (with "Computer" and "Software in Catalog" sections), and "Filters". The "Filters" section contains a dropdown menu set to "all" and a search bar with "Publisher Name" set to "equals" and "IBM". Buttons for "Submit" and "Cancel" are at the bottom.

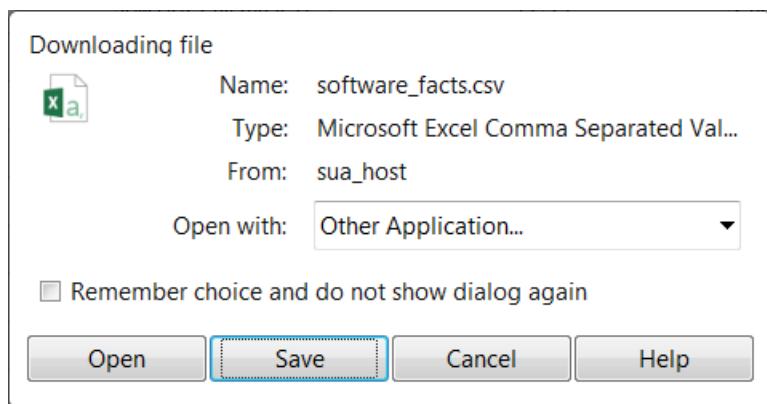
3. Sort the results by using the **Name** column.

The report title is "Software Installations". It shows a table with columns: Computer Name, Last Seen, Publisher Name, Name, Version, Total Runs, Last Used, Average Runs per D..., and Details. A single row is visible: NC047005, about an hour ago, IBM, IBM DB2 Enterprise S..., 9.7, 15, 2 days ago, 0.0583909350596385, and DETAILS >. The "Name" column is highlighted.

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

The toolbar includes buttons for "Base Report", "Save", "Save As...", "Schedule...", "CSV", and "PDF". The "CSV" button is highlighted.

5. Click **Save**.



6. Open the file in an editor.

A	B	C	D	E	F	G	H	I	
1	Computer Name	Last Seen	Publisher Name	Name	Version	Total Runs	Last Used	Average Runs per Day	Details
2	NC047005	2/23/2015 1:45	IBM	IBM DB2 Enterprise Server Edition - CPU Option	9.7	15	2/20/2015 13:54	0.058390935	1
3	NC040204	2/23/2015 1:59	IBM	IBM DB2 Enterprise Server Edition - CPU Option	9.7	0			1
4	NC047005	2/23/2015 1:45	IBM	IBM DB2 Enterprise Server Edition Unlicensed Product Base	9.7	0			1
5	NC040204	2/23/2015 1:59	IBM	IBM Developer Kit, JavaTM 2 Technology Edition	5	1	2/20/2015 13:54		1 2
6	NC142184	2/23/2015 1:49	IBM	IBM Endpoint Manager Platform Agent	9.2	0			1
7	NC106166	2/23/2015 1:51	IBM	IBM Endpoint Manager Platform Agent	9.2	0			1
8	NC106178	2/23/2015 1:51	IBM	IBM Endpoint Manager Platform Agent	9.2	0			1
9	NC047005	2/23/2015 1:45	IBM	IBM Endpoint Manager Platform Agent	9.2	0			1
10	NC040204	2/23/2015 1:59	IBM	IBM Endpoint Manager Platform Agent	9.2	0			1
11	NC106166	2/23/2015 1:51	IBM	IBM JavaTM Standard Edition	6.2	0			1
12	NC106166	2/23/2015 1:51	IBM	IBM JavaTM Standard Edition	6.3	0			1
13	NC106178	2/23/2015 1:51	IBM	IBM JavaTM Standard Edition	6.2	0			1
14	NC106178	2/23/2015 1:51	IBM	IBM JavaTM Standard Edition	6.3	0			1
15	NC142184	2/23/2015 1:49	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2/20/2015 13:54		1 1
16	NC106166	2/23/2015 1:51	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2/20/2015 13:54		1 1
17	NC106178	2/23/2015 1:51	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2/20/2015 13:54		1 1
18	NC047005	2/23/2015 1:45	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2/20/2015 13:54		1 1
19	NC040204	2/23/2015 1:59	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2/20/2015 13:54		1 1
20	NC142184	2/23/2015 1:49	IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5	0			1
21	NC040204	2/23/2015 1:59	IBM	IBM SDK 5.0 for Windows IA32, Java Technology	5	0			1
22	NC142184	2/23/2015 1:49	IBM	IBM Tivoli Composite Application Manager Agent for SAP Applications	7.1	0			1

7. Edit the file:

- a) Remove all columns other than **Publisher Name**, **Name**, **Version** and **Details**.
- b) Change **Publisher Name** column name to **Vendor**
- c) Change **Details** column name to **Instances**
- d) Concatenate **Name** and **Version** column with space character in between and name the new column as **Component**
- e) Sort the results by using the **Component** column.
- f) Find duplicates and remove them. Each removed entry must increment the value in the **Instances** 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 **Instances**

column.

A	B	C
1	Vendor Component	Instances
2	IBM IBM DB2 Enterprise Server Edition - CPU Option 9.7	2
3	IBM IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7	1
4	IBM IBM Developer Kit, JavaTM 2 Technology Edition 5	2
5	IBM IBM Endpoint Manager Platform Agent 9.2	5
6	IBM IBM JavaTM Standard Edition 6.2	2
7	IBM IBM JavaTM Standard Edition 6.3	2
8	IBM IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	5
9	IBM IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5	1
10	IBM IBM SDK 5.0 for Windows IA32, Java Technology 5	1
11	IBM IBM solidDB 6.5	2
12	IBM IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1	3
13	IBM IBM Tivoli Endpoint 3.7	2
14	IBM IBM Tivoli Monitoring - Windows OS Agent 6.3	5
15	IBM IBM Tivoli Provisioning Manager - Subagent 7.2	5
16	IBM IBM Tivoli Security Compliance Manager Client 5.1	1
17	IBM IBM WebSphere Application Server 7	4
18	IBM IBM WebSphere MQ Server 7.5	3
19	IBM IBM WebSphere Application Server - Base 8.5	1
20	IBM IBM WebSphere Application Server - Express 8.5	1
21	IBM IBM WebSphere Application Server Liberty Core 8.5	1
22	IBM IBM WebSphere Application Server Network Deployment 8.5	1
23		

#### 8. Compare both files by using a preferable tool.

C:\Users\IBM_ADMIN\Downloads\SoftwareComponentsReport_20150222_213904.csv	C:\Users\IBM_ADMIN\Downloads\software.facts.csv
Vendor,Component,Instances	Vendor,Component,Instances
IBM, AIX Express Edition 6.1,1	
IBM, AIX Express Edition 7.1,1	
IBM, IBM DB2 Enterprise Server Edition - CPU Option 9.7,2	IBM, IBM DB2 Enterprise Server Edition - CPU Option 9.7,2
IBM, IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7,1	IBM, IBM DB2 Enterprise Server Edition Unlicensed Product Base 9.7,1
IBM, "IBM Developer Kit, JavaTM 2 Technology Edition (SP) 5.0",1	IBM, "IBM Developer Kit, JavaTM 2 Technology Edition 5",2
IBM, IBM Endpoint Manager Platform Agent 9.0,1	IBM, IBM Endpoint Manager Platform Agent 9.2,5
IBM, IBM JavaTM Standard Edition 6.2,3	IBM, IBM JavaTM Standard Edition 6.2,2
IBM, IBM JavaTM Standard Edition 6.3,2	IBM, IBM JavaTM Standard Edition 6.3,2
IBM, IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5,5	IBM, IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5,5
IBM, "IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0",1	IBM, "IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5",1
IBM, "IBM SDK 5.0 for Windows IA32, Java Technology 5.0",1	IBM, "IBM SDK 5.0 for Windows IA32, Java Technology 5",1
IBM, IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1,3	IBM, IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1,3
IBM, IBM Tivoli Endpoint 3.7,4	IBM, IBM Tivoli Endpoint 3.7,2
IBM, IBM Tivoli Monitoring - Windows OS Agent 6.3,5	IBM, IBM Tivoli Monitoring - Windows OS Agent 6.3,5
IBM, IBM Tivoli Provisioning Manager - Subagent 7.2,5	IBM, IBM Tivoli Provisioning Manager - Subagent 7.2,5
IBM, IBM Tivoli Security Compliance Manager Client 5.1,1	IBM, IBM Tivoli Security Compliance Manager Client 5.1,1
IBM, IBM WebSphere Application Server 7.0,4	IBM, IBM WebSphere Application Server 7,4
IBM, IBM WebSphere MQ Server 7.5,3	IBM, IBM WebSphere MQ Server 7.5,3
IBM, IBM solidDB 6.5,2	IBM, IBM solidDB 6.5,2
IBM, WebSphere Application Server - Base 8.5,1	IBM, WebSphere Application Server - Base 8.5,1
IBM, WebSphere Application Server - Express 8.5,2	IBM, WebSphere Application Server - Express 8.5,1
IBM, WebSphere Application Server Liberty Core 8.5,1	IBM, WebSphere Application Server Liberty Core 8.5,1
IBM, WebSphere Application Server Network Deployment 8.5,1	IBM, WebSphere Application Server Network Deployment 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 **Tivoli Asset Discovery for Distributed > Infrastructure > Agents**.

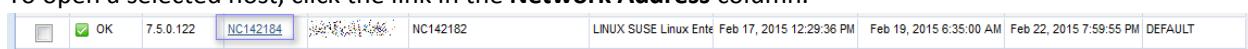


The **Agents** panel opens.

The screenshot shows the 'Agents' panel with a table of discovered hosts. The columns include 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 shows five hosts, all marked as 'OK'. The last host listed, NC142184, is highlighted with a blue box.

Select	Status	Version	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
<input type="checkbox"/>	OK	7.5.0.122	NC047005	IBM nc047032.kraklab.pl.ibm.com	Windows 2012 6.2	Feb 17, 2015 12:29:36 PM	Feb 18, 2015 9:57:00 PM	Feb 22, 2015 8:02:34 PM	DEFAULT	
<input type="checkbox"/>	OK	7.5.0.122	NC040204	IBM nc142253.kraklab.pl.ibm.com	Windows 2008 6.0	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 12:37:00 AM	Feb 22, 2015 8:05:10 PM	DEFAULT	
<input type="checkbox"/>	OK	7.5.0.122	NC106176	IBM 8233 06A857P	AIX 6.1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:26:00 AM	Feb 22, 2015 8:01:42 PM	DEFAULT	
<input type="checkbox"/>	OK	7.5.0.121	NC106166	IBM 8233 06A84DP	AIX 7.1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:27:00 AM	Feb 22, 2015 8:01:51 PM	DEFAULT	
<input type="checkbox"/>	OK	7.5.0.122	NC142184	NC142182	LINUX SUSE Linux Enterprise Server 11 SP1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:35:00 AM	Feb 22, 2015 7:59:55 PM	DEFAULT	

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



The Agent Details panel opens.

The screenshot shows the 'Agent Details' panel with the following details:

- Agent Details** tab selected.
- Details** section:
  - Agent version: 7.5.0.122
  - Scan group: DEFAULT
  - Scan group type: Standard
  - Host name: NC142184
  - IP address: [REDACTED]
  - Operating system: LINUX SUSE Linux Enterprise Server 11 (x86\_64) VERSION = 11 PATCHLEVEL = 2 (3.0.13-0.27-default)
  - Agent ID: 4679655442678193673
  - Server ID: NC142182
  - Virtualization Layer ID: 22
  - Processor: Intel(R) Xeon(R) Multi-core 3400-3699 or 5500-5699
  - CPU cores on partition: 2
  - CPU cores on server: 12
  - Logical CPU cores on partition: 2
  - Agent status:  OK (There are no problems with the agent)
  - Last agent activity: Feb 22, 2015 7:59:55 PM
  - Software scan status:  Scan successful
  - Last expected software scan: Feb 17, 2015 12:29:36 PM
  - Last successful software scan: Feb 19, 2015 12:35:00 AM
  - Next software scan: Feb 24, 2015 12:29:36 PM
  - Next hardware scan: Feb 24, 2015 12:29:36 PM
  - Last hardware scan: Feb 17, 2015 8:00:00 PM
  - Software catalog version: Feb 13, 2015 10:57:52 AM
- Custom Agent Data** section: No user data has been specified on the agent.

3. Open the **Components** tab and sort by the **Component** column.

The screenshot shows the 'Components' tab selected in the 'Agent Details' panel. The table displays the following data:

Component	Installation Path	Product	Shared File System
IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	/var/tlm/properties/version/	IBM Tivoli Asset Discovery for Distributed 7.5	No
IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	/opt/ibm/java2-x86_64-50/docs/	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	No
IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1	/opt/tivoli/ITCAM/	IBM Tivoli Composite Application Manager for Applications Full Agent Pack 7.1	No
IBM Tivoli Monitoring - Windows OS Agent 6.3	/opt/tivoli/TM/	IBM Tivoli Monitoring 6.3	No
IBM Tivoli Provisioning Manager - Subagent 7.2		IBM Tivoli Provisioning Manager 7.2	No
IBM WebSphere Application Server 7.0	/usr/IBM/WebSphere/AppServer/	IBM WebSphere Application Server for Developers 7.0	No
IBM WebSphere MQ Server 7.5	/usr/IBM/WebSphere/MQ/	IBM WebSphere MQ 7.5	No
SUSE Linux Enterprise Server 11.2		SUSE Linux Enterprise Server 11.2	No
WebSphere Application Server Network Deployment 8.5	/IBM/wlp/lib/versions/tags/	IBM WebSphere Application Server Network Deployment 8.5	No

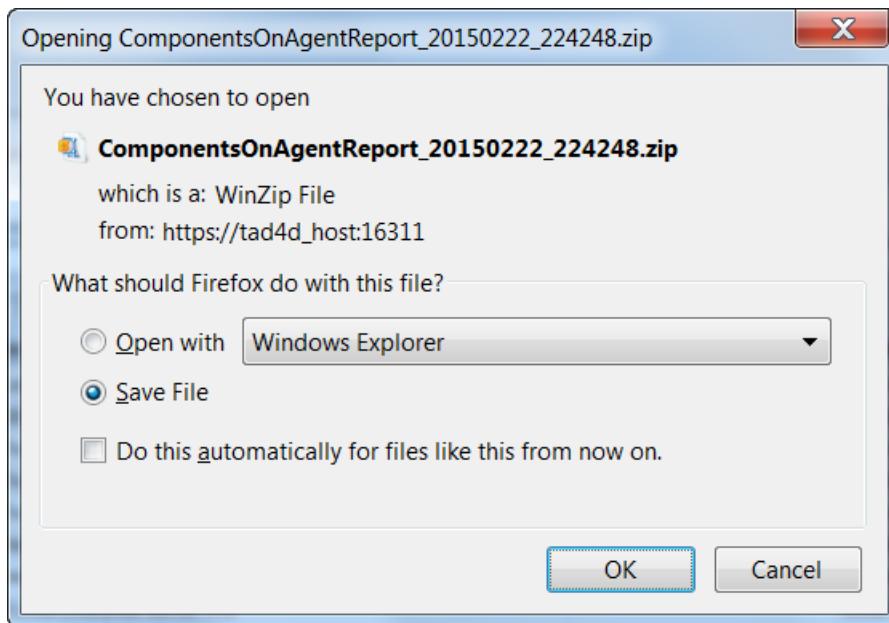
Page 1 of 1    1    Go    Rows: 9    Total: 9 Filtered: 9

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

4. Click **Download as CSV** to export the results.

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

5. Click **Save**.



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

A	B	C	D	E	F	G	H	I
Host Name	IP Ad	Agent ID	Operati	Server ID	Component	Installation Path	Product	Shared File Sys
2 NC142184	4679655-LINUX :NC142182				IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent 7.5	/var/itm/properties/version/	IBM Tivoli Asset Discovery for Distributed 7.5	No
3 NC142184	4679655-LINUX :NC142182				IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	/opt/ibm/java2-x86_64-50/docs/	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	No
4 NC142184	4679655-LINUX :NC142182				IBM Tivoli Composite Application Manager Agent for SAP Applications 7.1	/opt/tivoli/ITCAM/	IBM Tivoli Composite Application Manager for Applications Full	No
5 NC142184	4679655-LINUX :NC142182				IBM Tivoli Monitoring - Windows OS Agent 6.3	/opt/tivoli/ITM/	IBM Tivoli Monitoring 6.3	No
6 NC142184	4679655-LINUX :NC142182				IBM Tivoli Provisioning Manager - Subagent 7.2		IBM Tivoli Provisioning Manager 7.2	No
7 NC142184	4679655-LINUX :NC142182				IBM WebSphere Application Server 7.0	/usr/IBM/WebSphere/AppServer/	IBM WebSphere Application Server for Developers 7.0	No
8 NC142184	4679655-LINUX :NC142182				IBM WebSphere MQ Server 7.5	/usr/IBM/WebSphere/MQ/	IBM WebSphere MQ 7.5	No
9 NC142184	4679655-LINUX :NC142182				SUSE Linux Enterprise Server 11.2		SUSE Linux Enterprise Server 11.2	No
10 NC142184	4679655-LINUX :NC142182				WebSphere Application Server Network Deployment 8.5	/IBM/wlp/lib/versions/tags/	IBM WebSphere Application Server Network Deployment 8.5	No
11								

## 9.0

1. Go to Reports > Software Installations.

The screenshot shows the 'Reports' and 'Management' navigation tabs at the top. Under 'Software Inventory', the 'Software Installations' link is highlighted with a blue box. Other options like 'Inventory Exploration', 'Package Data', 'Scanned File Data', 'Unrecognized Files', 'Metering Data', 'License Metrics', 'IBM PVU Subcapacity', 'All IBM Metrics', and 'Audit Trail' are also listed. Below the navigation area, it says 'Last Import at 02/21/2015 06:00 AM'.

The Software Installations report opens.

Computer Name	Last Seen	Publisher Name	Name	Version	Total Runs	Last Used	Average Runs per D...	Details
NC047005	about an hour ago	Microsoft	Microsoft Windows S...	6.2.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC047005	about an hour ago	Microsoft	Microsoft .NET Frame...	4.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC040204	44 minutes ago	Microsoft	Microsoft .NET Frame...	3.5.0	<no data>	<no data>	<no data>	<a href="#">MANY &gt;</a>
NC040204	44 minutes ago	Symantec	Symantec Endpoint P...	11.0	<no data>	<no data>	<no data>	<a href="#">MANY &gt;</a>
NC040204	44 minutes ago	Microsoft	Microsoft Windows O...	6.0.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about an hour ago	IBM	IBM License Metric To...	7.5.1	2 days ago	1	<a href="#">DETAILS &gt;</a>	
NC142184	about an hour ago	IBM	IBM WebSphere Appli...	7.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about an hour ago	IBM	IBM WebSphere MQ S...	7.5	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about an hour ago	IBM	IBM Tivoli Monitoring ...	6.3	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>

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

The screenshot shows the report header with a 'Configure View...' button. The table below has 88 rows of data.

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

The dialog box is titled "Configure View". It has sections for "Options" (with "Autosize Columns" checked), "Columns" (grouped by "Computer" and "Software in Catalog"), and "Filters". Under "Filters", there is a dropdown menu set to "all" and a condition "Computer Name equals NC142182". At the bottom are "Submit" and "Cancel" buttons.

A panel with filtered data is refreshed.

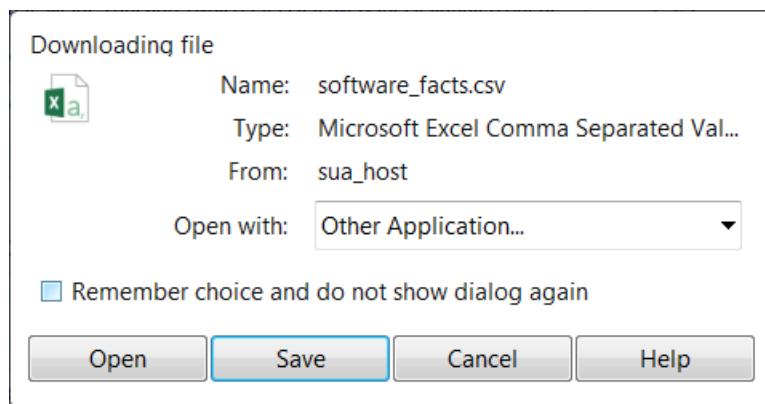
The table has columns: Computer Name, Last Seen, Publisher Name, Name, Version, Total Ru..., Last Used, Average Runs per Day, and Details. The data rows are:

Computer Name	Last Seen	Publisher Name	Name	Version	Total Ru...	Last Used	Average Runs per Day	Details
NC142184	about 2 hours ago	IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2 days ago	1	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM WebSphere Application Server	7.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM WebSphere MQ Server	7.5	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM Tivoli Monitoring - Windows OS Agent	6.3	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	WebSphere Application Server Network Deployment	8.5	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM Tivoli Provisioning Manager - Subagent	7.2	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM Tivoli Composite Application Manager Agent for SAP Applications	7.1	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
NC142184	about 2 hours ago	IBM	IBM Endpoint Manager Platform Agent	9.2	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>

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

The toolbar includes buttons for "Base Report", "Save", "Save As...", "Schedule...", "CSV", and "PDF".

5. Click **Save**.



6. Open the file in an editor.

A	B	C	D	E	F	G	H	I
Computer Name	Last Seen	Publisher Name	Name	Version	Total Runs	Last Used	Average Runs per Day	Details
2 NC142184	2/23/2015 1:49 IBM		IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5	1	2/20/2015 13:54		1 1
3 NC142184	2/23/2015 1:49 IBM		IBM WebSphere Application Server	7	0			1
4 NC142184	2/23/2015 1:49 IBM		IBM WebSphere MQ Server	7.5	0			1
5 NC142184	2/23/2015 1:49 IBM		IBM Tivoli Monitoring - Windows OS Agent	6.3	0			1
6 NC142184	2/23/2015 1:49 IBM		WebSphere Application Server Network Deployment	8.5	0			1
7 NC142184	2/23/2015 1:49 IBM		IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5	0			1
8 NC142184	2/23/2015 1:49 IBM		IBM Tivoli Provisioning Manager - Subagent	7.2	0			1
9 NC142184	2/23/2015 1:49 IBM		IBM Tivoli Composite Application Manager Agent for SAP Applications	7.1	0			1
10 NC142184	2/23/2015 1:49 IBM		IBM Endpoint Manager Platform Agent	9.2	0			1
11								
12								

7. From this point you can follow the procedure from: [Verification of software components]

## 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 **Tivoli Asset Discovery for Distributed > Software > Manage Software Inventory**.



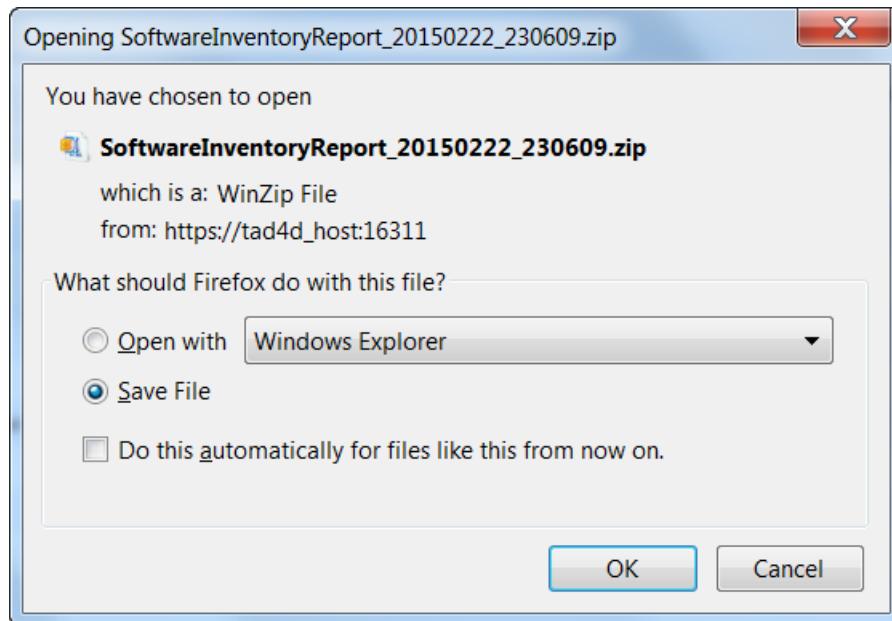
The **Manage Software Inventory** panel opens.

The screenshot shows the 'Manage Software Inventory' interface. At the top, there are filters for 'Discovery start' (2015-02-10) and 'Discovery end' (2015-02-23), and a button to 'Update'. Below this, it says 'Displayed products: 40'. A table lists various software components with their confidence levels (all at 100%) and manufacturers. The columns are 'Product/Release/Component', 'Confidence', 'Part Numbers', and 'Manufacturer'. Some entries include 'Actions' and 'Filter' buttons. The products listed include AIX Express Edition, ActiveState ActivePerl, BZIP2s, BgInfo, IBM DB2 Enterprise Server Edition PVU Option, IBM DB2 Enterprise Server Edition Unlicensed Product Base, IBM Developer Kit JavaTM Standard Edition, IBM Developer Kit, JavaTM 2 Technology Edition, IBM Endpoint Manager for Lifecycle Management, IBM Endpoint Manager for Patch Management, IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology, IBM SDK 5.0 for Windows IA32, Java Technology, IBM Tivoli Asset Discovery for Distributed, IBM Tivoli Composite Application Manager for Applications Full Agent Pack, IBM Tivoli Management Agent, IBM Tivoli Monitoring, and IBM Tivoli Provisioning Manager. A 'Download as CSV' link is at the bottom left.

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

[Download as CSV](#)

3. Click **OK** to save the file.



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

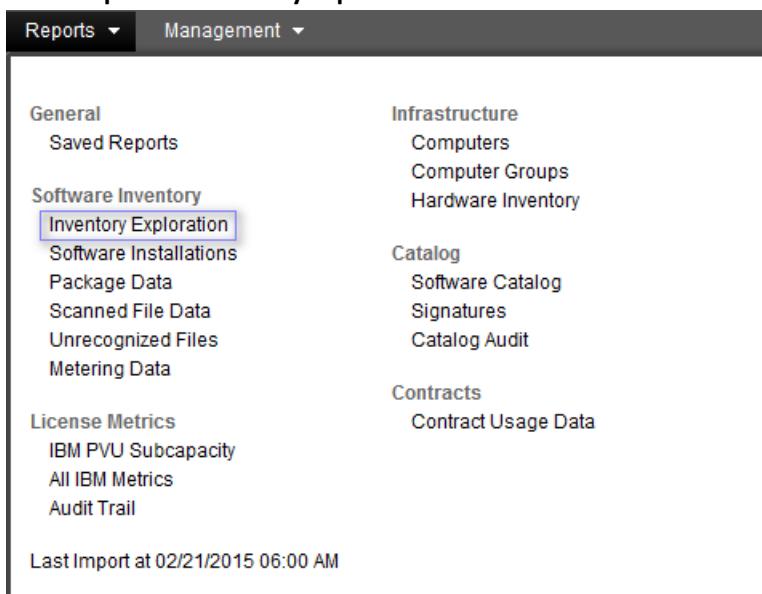
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Product	Current Se	Release	Componer	Host Name	Confidenc	Explanatio	Exclusion	: Installation	Operating	Scan Gro	Part Numb	Manufactu	Free of ch	Subcapac	Installed o	Agent deleted
2	AIX Expr: IBM 8233	AIX Expr: AIX Expr: IBM solidC	NC106178	100 User-bund	Included	/usr/lpp/bo	AIX 6.1	DEFAULT	IBM	No	No	No	No	No	No	No	No
3	AIX Expr: IBM 8233	AIX Expr: IBM solidC	NC106178	100 User-bund	Included	/opt/clustel	AIX 6.1	DEFAULT	IBM	Yes	No	No	No	No	No	No	No
4	AIX Expr: IBM 8233	AIX Expr: AIX Expr: NC106166	100 No other b	Included	/usr/lpp/bo	AIX 7.1	DEFAULT	IBM	No	No	No	No	No	No	No	No	No
5	AIX Expr: IBM 8233	AIX Expr: IBM solidC	NC106166	100 User-bund	Included	/opt/clustel	AIX 7.1	DEFAULT	IBM	Yes	No	No	No	No	No	No	No
6	ActiveSta	IBM nc14	ActiveSta	ActiveStat	NC040204	100 No other b	Included	C:\Perl\bin	Windows	1 DEFAULT	Active Sta	No	No	No	No	No	No
7	BZIP2s	IBM nc14	BZIP2s 1.BZIP2s	(S	NC040204	100 No other b	Included	C:\cygwin\Windows	1 DEFAULT	BZIP2	Org No	No	No	No	No	No	No
8	BglInfo	IBM nc14	BgInfo 4.7	BgInfo	(SF NC040204	100 No other b	Included	C:\ospm\Windows	1 DEFAULT	Sysinterne	No	No	No	No	No	No	No
9	IBM DB2	IBM nc14	IBM DB2	IBM DB2	NC040204	100 User-bund	Included	C:\Program	Windows	1 DEFAULT	IBM	No	Yes	No	No	No	No
10	IBM DB2	IBM nc04	IBM DB2	IBM DB2	ENC047005	100 User-confi	Included	C:\Program	Windows	1 DEFAULT	IBM	No	Yes	No	No	No	No
11	IBM DB2	IBM nc04	IBM DB2	IBM DB2	ENC047005	100 No other b	Included	C:\Program	Windows	1 DEFAULT	IBM	Yes	No	No	No	No	No
12	IBM Devel	IBM 8233	IBM Devel	IBM JavaT	NC106178	100 No other b	Included	/home/inst	AIX 6.1	DEFAULT	IBM	No	No	No	No	No	No
13	IBM Devel	IBM 8233	IBM Devel	IBM JavaT	NC106166	100 No other b	Included	/usr/java6	AIX 7.1	DEFAULT	IBM	No	No	No	No	No	No
14	IBM Devel	IBM 8233	IBM Devel	IBM JavaT	NC106178	100 No other b	Included	/usr/java6	AIX 6.1	DEFAULT	IBM	No	No	No	No	No	No
15	IBM Devel	IBM 8233	IBM Devel	IBM JavaT	NC106178	100 No other b	Included	/usr/java6	AIX 6.1	DEFAULT	IBM	No	No	No	No	No	No
16	IBM Devel	IBM 8233	IBM Devel	IBM JavaT	NC106166	100 No other b	Included	/usr/java6	AIX 7.1	DEFAULT	IBM	No	No	No	No	No	No
17	IBM Devel	IBM nc14	IBM Devel	IBM Devel	NC040204	100 No other b	Included	C:\Program	Windows	1 DEFAULT	IBM	No	No	No	No	No	No
18	IBM Endp	IBM 8233	IBM Endp	IBM Tivoli	NC106166	100 User-bund	Included	/usr/lpp/Tn	AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No
19	IBM Endp	IBM 8233	IBM Endp	IBM Tivoli	NC106166	100 User-bund	Included	/opt/Tivoli/	AIX 7.1	DEFAULT	IBM	Yes	Yes	No	No	No	No
20	IBM Endp	IBM 8233	IBM Endp	IBM Tivoli	NC106178	100 User-bund	Included	/usr/lpp/Tn	AIX 6.1	DEFAULT	IBM	Yes	Yes	No	No	No	No
21	IBM Endp	IBM 8233	IBM Endp	IBM Tivoli	NC106178	100 User-bund	Included	/opt/Tivoli/I	AIX 6.1	DEFAULT	IBM	Yes	Yes	No	No	No	No
22	IBM Endp	IBM 8233	IBM Endp	IBM Endp	NC106166	100 User-bund	Included	/opt/IBM/I	AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No
23	IBM SDK	NC142182	IBM SDK	IBM SDK	NC142184	100 No other b	Included	/opt/ibm/ja	LINUX SU	DEFAULT	IBM	No	No	No	No	No	No
24	IBM SDK	IBM nc14	IBM SDK	IBM SDK	NC040204	100 No other b	Included	C:\Program	Windows	1 DEFAULT	IBM	No	No	No	No	No	No
25	IBM Tivoli	IBM nc14	IBM Tivoli	IBM Licen	NC040204	100 User-confi	Included	C:\Window	Windows	1 DEFAULT	IBM	No	Yes	No	No	No	No
26	IBM Tivoli	IBM 8233	IBM Tivoli	IBM Licen	NC106166	100 User-confi	Included	/opt/itm/pr	AIX 7.1	DEFAULT	IBM	No	Yes	No	No	No	No
27	IBM Tivoli	IBM 8233	IBM Tivoli	IBM Licen	NC106178	100 User-confi	Included	/opt/itm/pr	AIX 6.1	DEFAULT	IBM	No	Yes	No	No	No	No
28	IBM Tivoli	IBM NC142182	IBM Tivoli	IBM Licen	NC142184	100 User-confi	Included	/var/itm/pr	LINUX SU	DEFAULT	IBM	No	Yes	No	No	No	No
29	IBM Tivoli	IBM nc04	IBM Tivoli	IBM Licen	NC047005	100 User-confi	Included	C:\Windov	Windows	1 DEFAULT	IBM	No	Yes	No	No	No	No

Use the above file for comparison purposes.

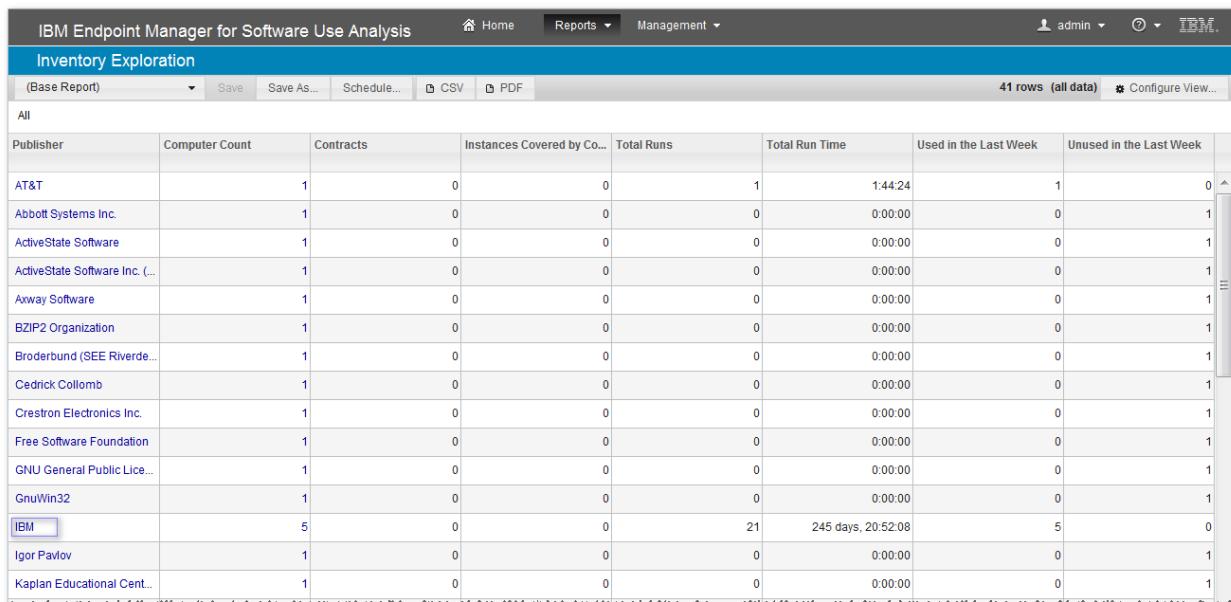
Remember: Only confirmed products are migrated to 9.0. Component instances that were not confirmed might be assigned to different products after migration.

## 9.0

1. Go to Reports > Inventory Exploration.

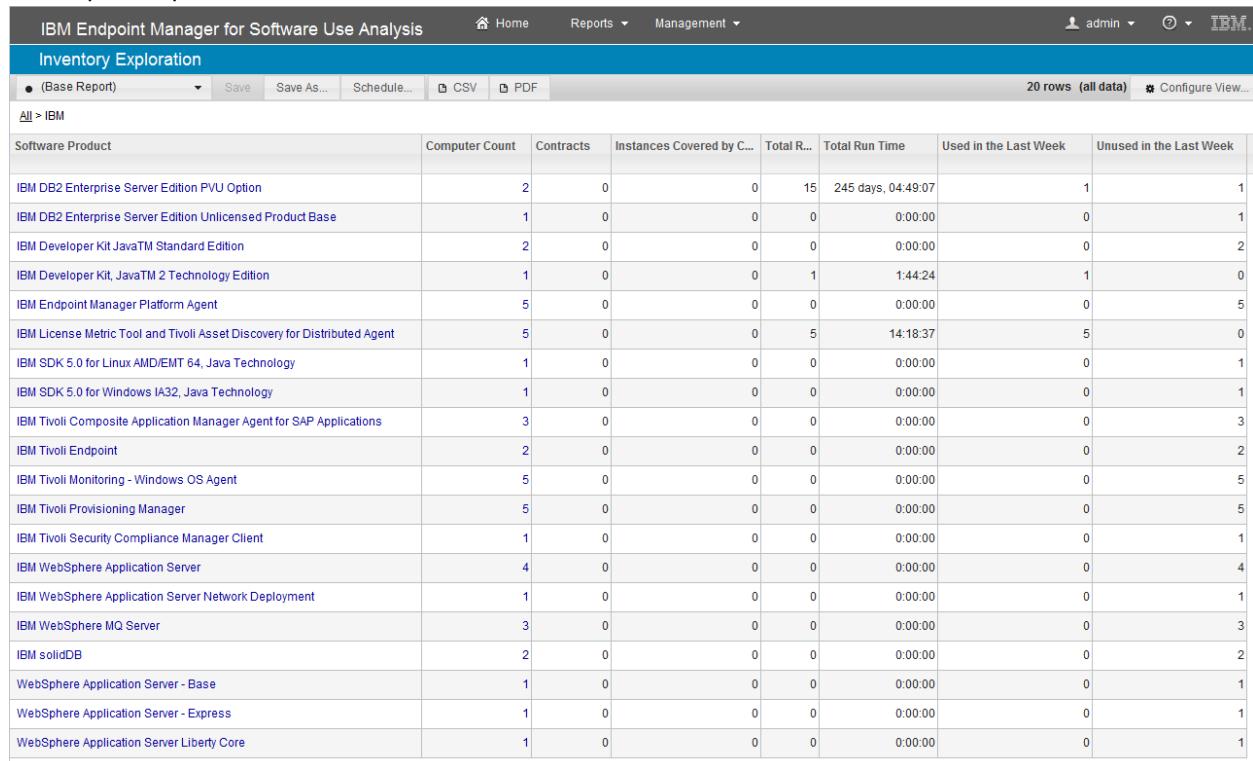


**2. Inventory Exploration panel opens. Click IBM.**



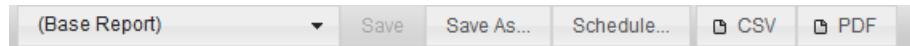
Publisher	Computer Count	Contracts	Instances Covered by Co...	Total Runs	Total Run Time	Used in the Last Week	Unused in the Last Week
AT&T	1	0	0	1	1:44:24	1	0
Abbott Systems Inc.	1	0	0	0	0:00:00	0	1
ActiveState Software	1	0	0	0	0:00:00	0	1
ActiveState Software Inc. (...	1	0	0	0	0:00:00	0	1
Axway Software	1	0	0	0	0:00:00	0	1
BZIP2 Organization	1	0	0	0	0:00:00	0	1
Broderbund (SEE Riverde...	1	0	0	0	0:00:00	0	1
Cedrick Colomb	1	0	0	0	0:00:00	0	1
Crestron Electronics Inc.	1	0	0	0	0:00:00	0	1
Free Software Foundation	1	0	0	0	0:00:00	0	1
GNU General Public Lice...	1	0	0	0	0:00:00	0	1
GnuWin32	1	0	0	0	0:00:00	0	1
IBM	5	0	0	21	245 days, 20:52:08	5	0
Igor Pavlov	1	0	0	0	0:00:00	0	1
Kaplan Educational Cent...	1	0	0	0	0:00:00	0	1

A new panel opens.

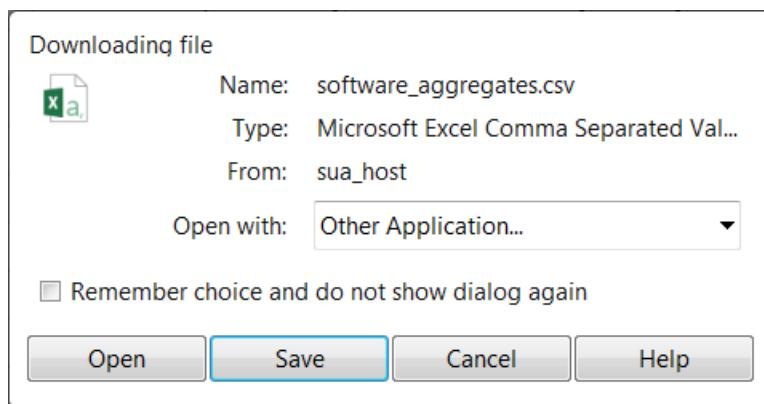


Software Product	Computer Count	Contracts	Instances Covered by C...	Total R...	Total Run Time	Used in the Last Week	Unused in the Last Week
IBM DB2 Enterprise Server Edition PVU Option	2	0	0	15	245 days, 04:49:07	1	1
IBM DB2 Enterprise Server Edition Unlicensed Product Base	1	0	0	0	0:00:00	0	1
IBM Developer Kit JavaTM Standard Edition	2	0	0	0	0:00:00	0	2
IBM Developer Kit, JavaTM 2 Technology Edition	1	0	0	1	1:44:24	1	0
IBM Endpoint Manager Platform Agent	5	0	0	0	0:00:00	0	5
IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	5	0	0	5	14:18:37	5	0
IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	1	0	0	0	0:00:00	0	1
IBM SDK 5.0 for Windows IA32, Java Technology	1	0	0	0	0:00:00	0	1
IBM Tivoli Composite Application Manager Agent for SAP Applications	3	0	0	0	0:00:00	0	3
IBM Tivoli Endpoint	2	0	0	0	0:00:00	0	2
IBM Tivoli Monitoring - Windows OS Agent	5	0	0	0	0:00:00	0	5
IBM Tivoli Provisioning Manager	5	0	0	0	0:00:00	0	5
IBM Tivoli Security Compliance Manager Client	1	0	0	0	0:00:00	0	1
IBM WebSphere Application Server	4	0	0	0	0:00:00	0	4
IBM WebSphere Application Server Network Deployment	1	0	0	0	0:00:00	0	1
IBM WebSphere MQ Server	3	0	0	0	0:00:00	0	3
IBM solidDB	2	0	0	0	0:00:00	0	2
WebSphere Application Server - Base	1	0	0	0	0:00:00	0	1
WebSphere Application Server - Express	1	0	0	0	0:00:00	0	1
WebSphere Application Server Liberty Core	1	0	0	0	0:00:00	0	1

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



4. Click **Save**.



5. Open the file in an editor.

A	B	C	D	E	F	G	H	
1	Software Product	Computer Count	Contracts	Instances Covered by Contracts	Total Runs	Total Run Time	Used in the Last Week	Unused in the Last Week
2	IBM DB2 Enterprise Server Edition PVU Option	2	0	0	15	245 days, 04:49:07	1	1
3	IBM DB2 Enterprise Server Edition Unlicensed Product Base	1	0	0	0	0.00:00	0	1
4	IBM Developer Kit JavaTM Standard Edition	2	0	0	0	0.00:00	0	2
5	IBM Developer Kit, JavaTM 2 Technology Edition	1	0	0	1	1:44:24	1	0
6	IBM Endpoint Manager Platform Agent	5	0	0	0	0.00:00	0	5
7	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	5	0	0	5	14:18:37	5	0
8	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	1	0	0	0	0.00:00	0	1
9	IBM SDK 5.0 for Windows IA32, Java Technology	1	0	0	0	0.00:00	0	1
10	IBM Tivoli Composite Application Manager Agent for SAP Applications	3	0	0	0	0.00:00	0	3
11	IBM Tivoli Endpoint	2	0	0	0	0.00:00	0	2
12	IBM Tivoli Monitoring - Windows OS Agent	5	0	0	0	0.00:00	0	5
13	IBM Tivoli Provisioning Manager	5	0	0	0	0.00:00	0	5
14	IBM Tivoli Security Compliance Manager Client	1	0	0	0	0.00:00	0	1
15	IBM WebSphere Application Server	4	0	0	0	0.00:00	0	4
16	IBM WebSphere Application Server Network Deployment	1	0	0	0	0.00:00	0	1
17	IBM WebSphere MQ Server	3	0	0	0	0.00:00	0	3
18	IBM solidDB	2	0	0	0	0.00:00	0	2
19	WebSphere Application Server - Base	1	0	0	0	0.00:00	0	1
20	WebSphere Application Server - Express	1	0	0	0	0.00:00	0	1
21	WebSphere Application Server Liberty Core	1	0	0	0	0.00:00	0	1
22								
~								

Use the above file 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 an overall verification of software products cannot be performed.

## 7.5

1. Go to **Tivoli Asset Discovery for Distributed > Infrastructure > Agents.**

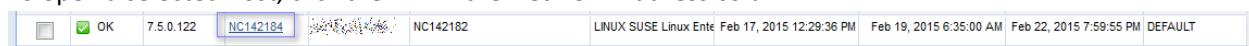


The **Agents** panel opens.

The screenshot shows the 'Agents' panel with the title 'Agents'. It displays a table of agent status information. The table has 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 five rows of data, each representing an agent with its details like IP address, server ID, operating system, and last scan times. At the bottom, there are links for 'Download as PDF' and 'Download as CSV', and a 'Related task: Scan groups' link.

Select	Status	Version	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
<input type="checkbox"/>	<span>OK</span>	7.5.0.122	NC047005	192.168.1.105	IBM nc047032.kraklab.pl.ibm.com	Windows 2012 6.2	Feb 17, 2015 12:29:36 PM	Feb 18, 2015 9:57:00 PM	Feb 22, 2015 8:02:34 PM	DEFAULT
<input type="checkbox"/>	<span>OK</span>	7.5.0.122	NC040204	192.168.1.104	IBM nc142253.kraklab.pl.ibm.com	Windows 2008 6.0	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 12:37:00 AM	Feb 22, 2015 8:05:10 PM	DEFAULT
<input type="checkbox"/>	<span>OK</span>	7.5.0.122	NC106178	192.168.1.178	IBM 8233 06A857P	AIX 6.1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:26:00 AM	Feb 22, 2015 8:01:42 PM	DEFAULT
<input type="checkbox"/>	<span>OK</span>	7.5.0.121	NC106168	192.168.1.168	IBM 8233 06A84DP	AIX 7.1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:27:00 AM	Feb 22, 2015 8:01:51 PM	DEFAULT
<input type="checkbox"/>	<span>OK</span>	7.5.0.122	NC142184	192.168.1.184	NC142182	LINUX SUSE Linux Enterprise Server 11 SP1	Feb 17, 2015 12:29:36 PM	Feb 19, 2015 6:35:00 AM	Feb 22, 2015 7:59:55 PM	DEFAULT

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



The Agent Details panel opens.

The screenshot shows the 'Agent Details' panel with the 'Products' tab selected. The left sidebar lists 'Products', 'Components', 'Unmatched Registry Entries', and 'Agent Problems'. The main area is titled 'Details' and contains the following information:

Agent version:	7.5.0.122
Scan group:	DEFAULT
Scan group type:	Standard
Host name:	NC142184
IP address:	[REDACTED]
Operating system:	LINUX SUSE Linux Enterprise Server 11 (x86_64) VERSION = 11 PATCHLEVEL = 2 (3.0.13-0.27-default)
Agent ID:	4679655442678193673
Server ID:	NC142182
Virtualization Layer ID:	22
Processor:	Intel(R) Xeon(R) Multi-core 3400-3699 or 5500-5699
CPU cores on partition:	2
CPU cores on server:	12
Logical CPU cores on partition:	2
Agent status:	<input checked="" type="checkbox"/> OK (There are no problems with the agent)
Last agent activity:	Feb 22, 2015 7:59:55 PM
Software scan status:	<input checked="" type="checkbox"/> Scan successful
Last expected software scan:	Feb 17, 2015 12:29:36 PM
Last successful software scan:	Feb 19, 2015 12:35:00 AM
Next software scan:	Feb 24, 2015 12:29:36 PM
Next hardware scan:	Feb 24, 2015 12:29:36 PM
Last hardware scan:	Feb 17, 2015 8:00:00 PM
Software catalog version:	Feb 13, 2015 10:57:52 AM

Below the details, there is a section titled 'Custom Agent Data' with the message: 'No user data has been specified on the agent.'

3. Open the Products tab.

The screenshot shows the 'Agent Details' panel with the 'Products' tab selected. The left sidebar lists 'Products', 'Components', 'Unmatched Registry Entries', and 'Agent Problems'. The main area is titled 'Products Discovered by Agent' and displays a grid of discovered products:

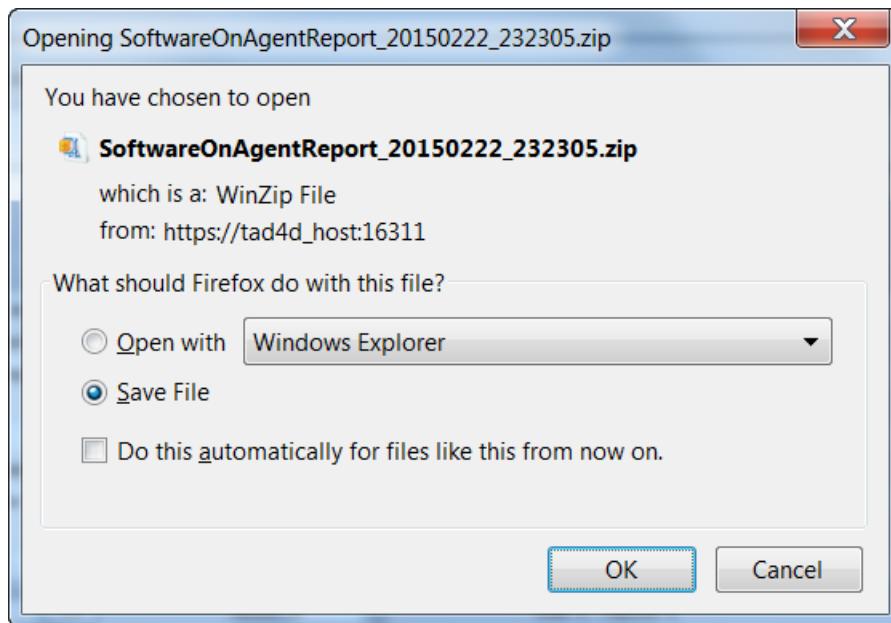
Product	Shared File System
IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	No
IBM Tivoli Asset Discovery for Distributed 7.5	No
IBM Tivoli Composite Application Manager for Applications Full Agent Pack 7.1	No
IBM Tivoli Monitoring 6.3	No
IBM Tivoli Provisioning Manager 7.2	No
IBM WebSphere Application Server Network Deployment 8.5	No
IBM WebSphere Application Server for Developers 7.0	No
IBM WebSphere MQ 7.5	No
SUSE Linux Enterprise Server 11.2	No

At the bottom of the grid, there are buttons for 'Page 1 of 1', '1', 'Go', 'Rows 9', and 'Total: 9 Filtered: 9'. Below the grid, there are links for '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. Click **OK** to save the file.



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

A	B	C	D	E	F	G	
1	Host Name	IP Address	Agent ID	Operating System	Server ID	Product	Shared File System
2	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology 5.0	No
3	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM Tivoli Asset Discovery for Distributed 7.5	No
4	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM Tivoli Composite Application Manager for Applications Full Agent Pack 7.1	No
5	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM Tivoli Monitoring 6.3	No
6	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM Tivoli Provisioning Manager 7.2	No
7	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM WebSphere Application Server Network Deployment 8.5	No
8	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM WebSphere Application Server for Developers 7.0	No
9	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	IBM WebSphere MQ 7.5	No
10	NC142184	4679655442678193673	4679655442678193673	LINUX SUSE Linux	EiNC142182	SUSE Linux Enterprise Server 11.2	No
11							
12							
13							
14							
15							

The above file serves you for comparison purposes.

## 9.0

1. Go to Reports > Computers.

The screenshot shows the 'Reports' tab selected in the top navigation bar. Under the 'Computers' section, the 'Computers' link is highlighted with a blue box. Other options like 'Computer Groups' and 'Hardware Inventory' are also visible. Below the navigation, there's a sidebar with links for General, Software Inventory, License Metrics, and Contracts. At the bottom left, it says 'Last Import at 02/21/2015 06:00 AM'.

The **Computers** panel opens.

The screenshot shows a table with columns: Computer Name, Last Seen, Operating System, IP Address, Latest Scan Import, and Installed Software. The table lists six hosts: NC9143126007, NC142184, NC106166, NC106178, NC047005, and NC040204. The 'Installed Software' column shows values 1, 10, 12, 11, 26, and 65 respectively. The 'Latest Scan Import' column shows the date 02/23/2015 03:00 AM for all hosts.

2. Click on the chosen host in the **Computer Name** column.

The screenshot shows a table row for host NC142184. The 'Computer Name' column is highlighted with a blue box. The row contains: NC142184, 38 minutes ago, Linux SuSE Enterprise Server 11 (3.0.13-0.27-default), a small icon, 02/23/2015 03:00 AM, and 10.

3. A new panel opens. Click on the first link with the number of assigned software installations.

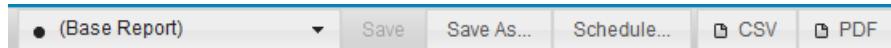
The screenshot shows a detailed host properties panel for 'Computer: NC142184'. The main title is 'Software on NC142184'. It displays '10 Software Installations' including IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent, IBM WebSphere Application Server, IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology, WebSphere Application Server Network Deployment, IBM Tivoli Monitoring - Windows OS Agent, and IBM WebSphere MQ Server. Below this, there are sections for 'Computer Properties' and 'Operating System' with details like DNS Name (NC142184.kraklab.pl.ibm.com), IP Address (192.168.1.10), and Last Seen (02/23/2015 02:49 AM).

A new panel opens.

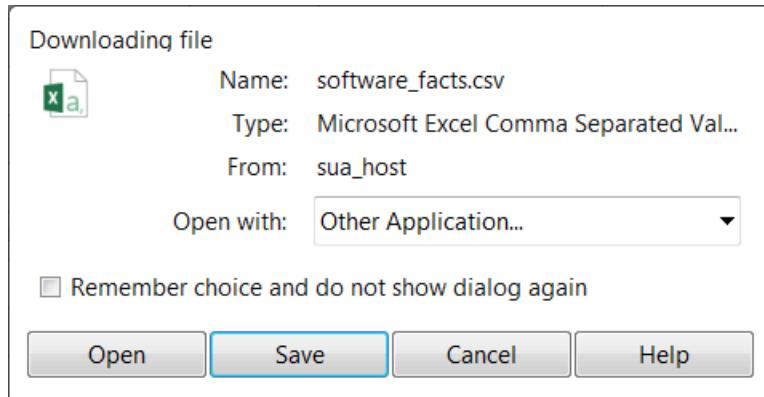
The screenshot shows a software installations report for host NC142184. The table has columns for Publisher Name, Name, Version, Total Runs, Last Used, Average Runs per Day, and Details. The data includes various IBM products like License Metric Tool, WebSphere Application Server, and Tivoli Monitoring, along with Novell's SUSE Linux Enterprise Server.

Publisher Name	Name	Version	Total Runs	Last Used	Average Runs per Day	Details
IBM	IBM License Metric Tool and Tivoli Asset Discovery for Distributed Agent	7.5.1	<no data>	2 days ago	1	<a href="#">DETAILS &gt;</a>
IBM	IBM WebSphere Application Server	7.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	IBM WebSphere MQ Server	7.5	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	IBM Tivoli Monitoring - Windows OS Agent	6.3	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	WebSphere Application Server Network Deployment	8.5	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	IBM SDK 5.0 for Linux AMD/EMT 64, Java Technology	5.0	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	IBM Tivoli Provisioning Manager - Subagent	7.2	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	IBM Tivoli Composite Application Manager Agent for SAP Applications	7.1	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
IBM	IBM Endpoint Manager Platform Agent	9.2	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>
Novell	SUSE Linux Enterprise Server	11.2	<no data>	<no data>	<no data>	<a href="#">DETAILS &gt;</a>

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



5. Click **Save**.



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 **Tivoli Asset Discovery for Distributed > IBM Audit Reports > View Reports.**

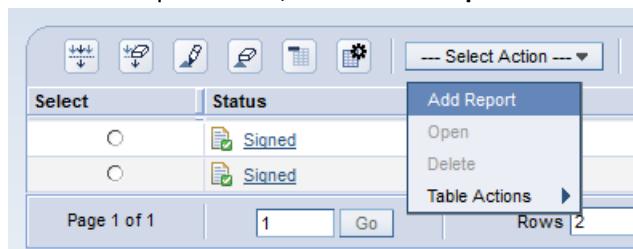


2. **View Reports** panel opens.

The screenshot shows the 'View Reports' panel with the title 'View Reports' and 'Audit Reports'. A message at the top states: 'Audit reports show statistics for products installed in your IT infrastructure. When a report's status is Ready, open the report to verify its accuracy. If you disagree with any data, classify or reassign instances of installed software, for example to exclude a license on a cold backup server. Once you agree with the report, sign it to finalize the audit history for that time period.' Below this is a table with columns: Select, Status, Start Date, End Date, and Comments. Two rows are listed, both with 'Signed' status, Feb 15, 2015, and Feb 21, 2015 start/end dates, and comments indicating they were signed on Feb 23, 2015 by tipadmin. Navigation controls at the bottom include 'Page 1 of 1', 'Rows 2', and 'Total: 2 Filtered: 2 Selected: 0'.

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.

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



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

A screenshot of a 'Select Reporting Period' dialog box. It contains instructions: 'Audit reports can be created only for a time period that has already occurred and that does not have a signed report. Creating a new report does not change the currently scheduled reporting frequency. The Start Date and End Date are in the Greenwich mean time (GMT).'. Below this are two date input fields: 'Start date:' with the value '2/22/2015' and 'End date:' with the value '2/22/2015'. At the bottom are 'Create' and 'Cancel' buttons.

A new report is created.

A screenshot of the 'View Reports' page under 'Audit Reports'. The page displays a table of audit reports. The columns are 'Select', 'Status', 'Start Date', 'End Date', and 'Comments'. There are three rows in the table:

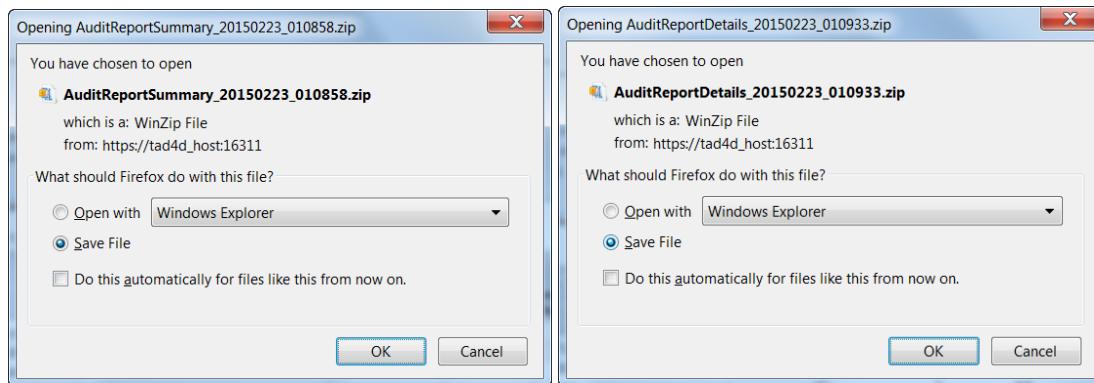
Select	Status	Start Date	End Date	Comments
<input type="radio"/>	Ready	Feb 22, 2015	Feb 22, 2015	Report is ready to be signed.
<input type="radio"/>	Signed	Feb 15, 2015	Feb 21, 2015	Signed on Feb 23, 2015 by tipadmin.
<input type="radio"/>	Signed	Feb 10, 2015	Feb 14, 2015	Signed on Feb 23, 2015 by tipadmin.

The table includes pagination controls at the bottom: 'Page 1 of 1', '1', 'Go', 'Rows 3', and 'Total: 3 Filtered: 3 Selected: 0'.

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

Screenshot of the Audit Report Summary page showing the PVU Report section. The table displays software products and their PVU metrics. A note indicates that a delta report must be generated first to see differences from a previously signed report.

Product	CPU Core Full Capacity	CPU Core Subcapacity	PVU Full Capacity	PVU Subcapacity	Comments
IBM DB2 Enterprise Server Edition PVU Option	44	6	4040	540	
IBM Tivoli Asset Discovery for Distributed	120	12	11280	1080	
IBM Tivoli Security Compliance Manager	12	2	840	140	
IBM WebSphere Application Server - Express	0	0	0	0	All product instances are excluded
IBM WebSphere Application Server Liberty Core	32	2	3200	200	
IBM WebSphere Application Server Network Deployment	44	6	4040	540	
IBM WebSphere MQ	44	4	4040	340	



**View Reports**

Audit Reports > Feb 22, 2015 - Feb 22, 2015

**Audit Report Summary**

Reporting period: Feb 22, 2015 - Feb 22, 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](#)

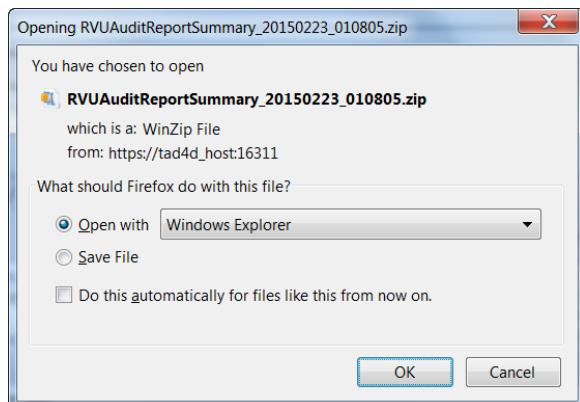
To view missing software scan history for the reporting period, [download the CSV file](#).

[Details](#)

PVU Report	Systems Report	RVU Report	... Select Action ---							
			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	32	2	32	2	VUE139	Managed Activated Processor Cores	
			IBM Tivoli Composite Application Manager for Applications Full Age	76	6	76	6	VUE139	Managed Activated Processor Cores	
			IBM Tivoli Monitoring	120	12	120	12	VUE139	Managed Activated Processor Cores	
			IBM Tivoli Provisioning Manager	120	12	120	12	VUE139	Managed Activated Processor Cores	

Page 1 of 1 | 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 Endpoint Manager interface. At the top, there are two tabs: 'Reports' and 'Management'. Under the 'Reports' tab, there is a dropdown menu with several options: General, Saved Reports, Software Inventory, License Metrics, IBM PVU Subcapacity, All IBM Metrics (which is highlighted with a blue box), and Audit Trail. To the right of these, there are sections for Infrastructure (Computers, Computer Groups, Hardware Inventory), Catalog (Software Catalog, Signatures, Catalog Audit), and Contracts (Contract Usage Data). At the bottom left, it says 'Last Import at 02/21/2015 06:00 AM'.

All IBM Metrics panel opens.

The screenshot shows the 'All IBM Metrics' report panel. At the top, there is a toolbar with buttons for Home, Reports, Management, and user admin. Below the toolbar, the title 'All IBM Metrics' is displayed, along with a note about the time range (11/25/2014 - 02/23/2015) and catalog version (352873). The main area is a table with four columns: Product, License Type, License Peak Value, and License Peak Value History. The table lists various IBM products and their corresponding license types and peak values. The table has 22 rows.

Product	License Type	License Peak Value	License Peak Value History
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Full Capacity	67	11/25/2014 - 02/23/2015
IBM ITCAM for Microsoft Applications Advance	RVU Managed Activated Processor Cores Subcapacity	7	
IBM solidDB	PVU Full Capacity	6400	
IBM solidDB	PVU Subcapacity	400	
IBM Tivoli Provisioning Manager	RVU Managed Activated Processor Cores Full Capacity	67	
IBM Tivoli Provisioning Manager	RVU Managed Activated Processor Cores Subcapacity	7	
IBM Tivoli Security Compliance Manager	PVU Full Capacity	70	
IBM Tivoli Security Compliance Manager	PVU Subcapacity	70	
IBM WebSphere Application Server - Express	PVU Full Capacity	0	
IBM WebSphere Application Server - Express	PVU Subcapacity	0	
IBM Tivoli Asset Discovery for Distributed	PVU Full Capacity	6670	
IBM Tivoli Asset Discovery for Distributed	PVU Subcapacity	670	

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**.

**Configure View**

**Columns**  
All IBM Metrics

Product       Imported Part Numbers  
 License Type       License Peak Value History  
 License Peak Value

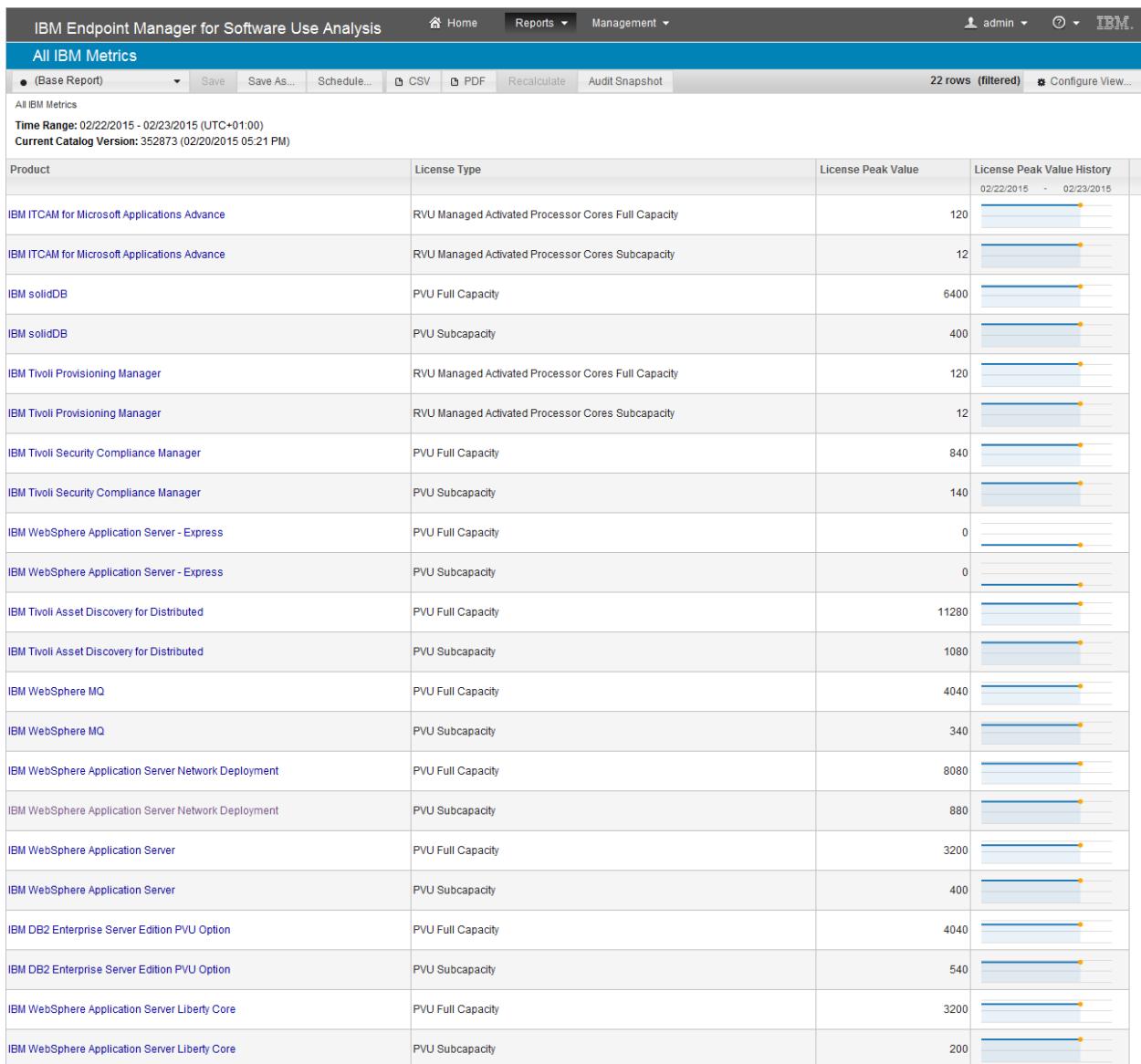
**Time Range**

Last 90 days       02/22/2015 to now  
 11/25/2014 to 02/23/2015

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

**Submit** **Cancel**

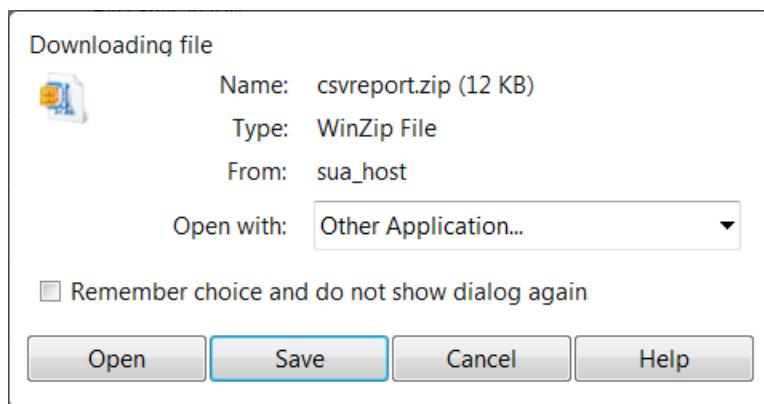
3. Data on the panel is updated



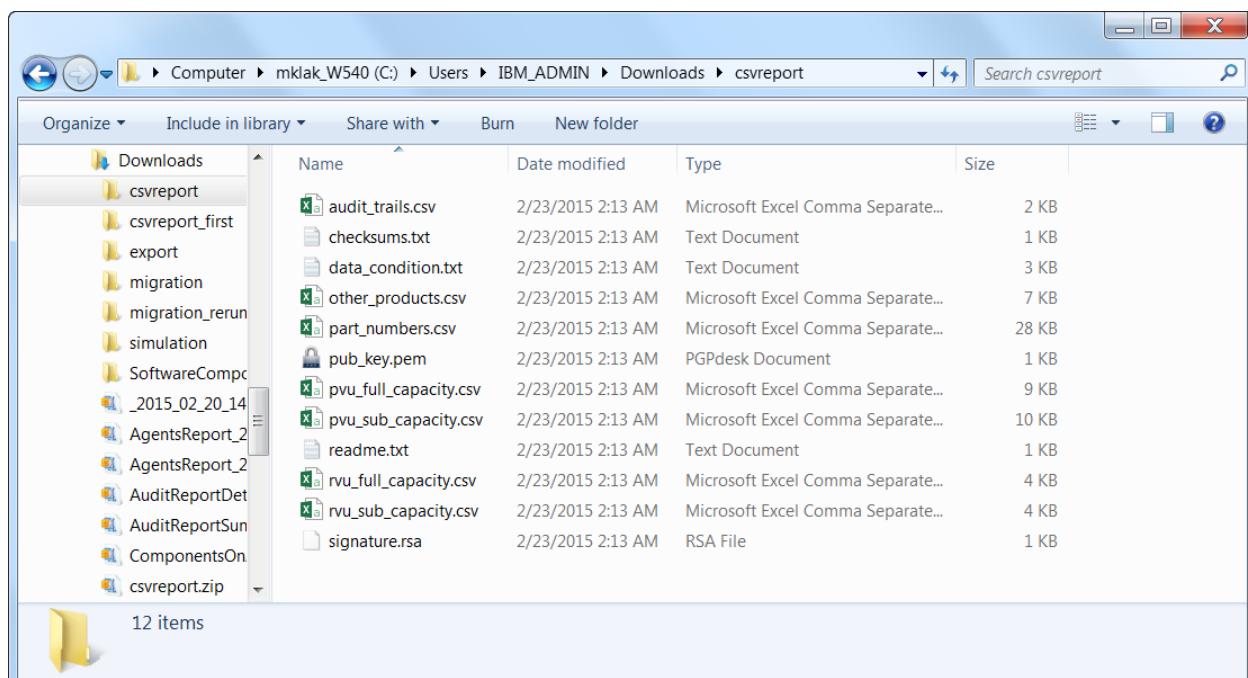
**4. Click Audit Snapshot.**



5. Save the results.



The content is as follows:



The above CSV files serve you for comparison purposes.

## Final steps and removal of TAD4D 7.5

This part explains what to do before you remove TAD4D 7.5 from your environment.

1. Log in to TAD4D 7.5 Web UI  
See: [How to open the Tivoli Asset Discovery for Distributed 7.5 web user interface?]
2. Go to **Tivoli Asset Discovery for Distributed > IBM Audit Reports > View Reports**.



The **View Reports** panel opens.

**Remember:**

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

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

The screenshot shows the 'View Reports' panel with a heading 'Audit Reports'. A sub-instruction below states: 'Audit reports show statistics for products installed in your IT infrastructure. When a report's status is Ready, open the report to verify its accuracy. If you disagree with any data, classify or reassign instances of installed software, for example to exclude a license on a cold backup server. Once you agree with the report, sign it to finalize the audit history for that time period.' The main area is a grid table with the following 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 for each row. Navigation controls at the bottom include 'Page 1 of 1', 'Rows 16', and 'Total: 16 Filtered: 16 Selected: 0'.

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.

**Audit Report Summary** panel opens.

The screenshot shows the Audit Report Summary panel with the PVU Report selected. The report displays software usage data across various products. The columns include Product, CPU Core Full Capacity, CPU Core Subcapacity, PVU Full Capacity, PVU Subcapacity, and Comments. A note in the comments column states: "0 All product instances are excluded". The report is paginated at page 1 of 2, with 12 rows shown per page, totaling 20 rows.

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	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	

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

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

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

5. 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 panel with the RVU Report selected. The report displays software usage data across various products. The columns include Product, CPU Core Full Capacity, CPU Core Subcapacity, RVU Full Capacity, RVU subcapacity, RVU Charge Unit, RVU Measure, and Comments. The report is paginated at page 1 of 1, with 4 rows shown per page, totaling 4 rows.

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	

Download summary as: [CSV](#)

6. Repeat the same procedure for all reports that cover the last two years or a period from the installation of TAD4D 7.5 if the application was installed for less than two years.

In 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:

See: [How to find SUA 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 SUA installation.

LMT\_SUA\_PROTOCOL

Description: LMT/SUA communications protocol

Default: https

Comment: Leave the default value unless you changed it during or after the SUA 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:

See: [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 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 SUA fixlet site. The task is used to migrate the directories and is available starting from SUA 9.0.1.2. Update the fixlet site to the latest version.
- The Add Excluded Directories task in the 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 TAD4D 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 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 SUA, go to Management > IBM Software Classification, and reassign the software manually, if needed.

#### FAILED

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

```
/opt/ibm/SUA/wlp/usr/servers/server1/logs/temа. log
```

#### 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 SUA 9.0.1.2.

#### FAILED

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

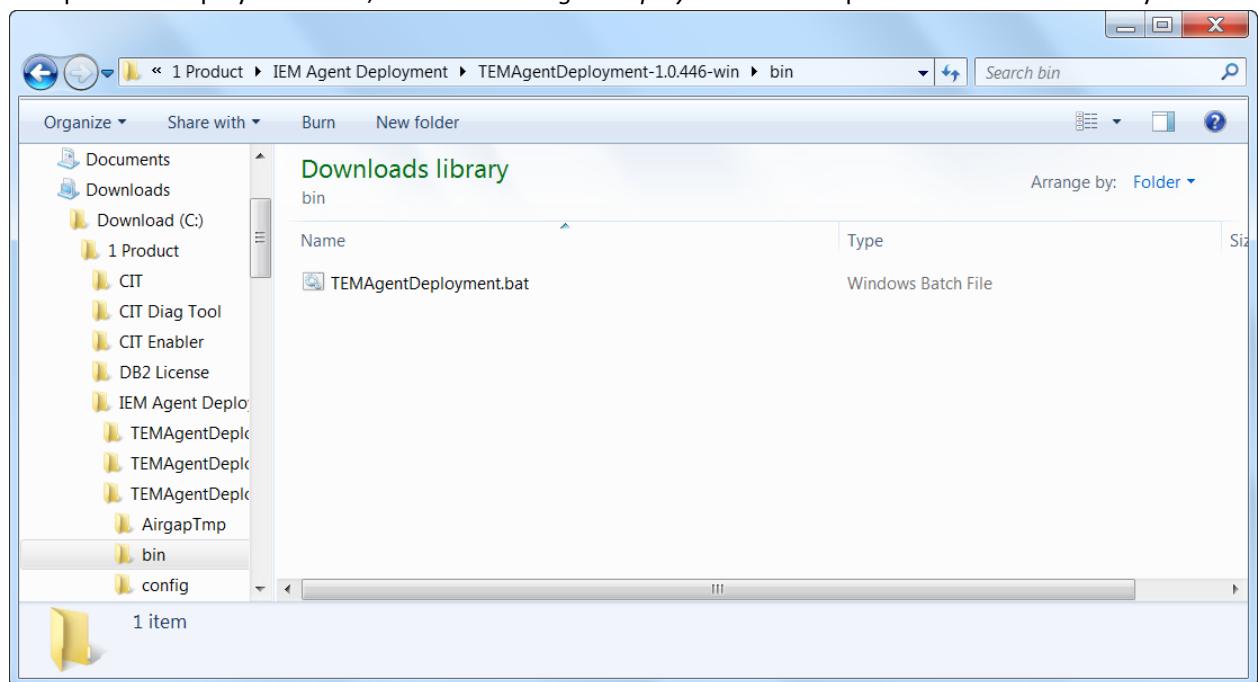
```
/opt/ibm/SUA/wlp/usr/servers/server1/logs/temа. log
```

## Installing IEM clients using IBM Endpoint Manager Agent Deployment Wizard

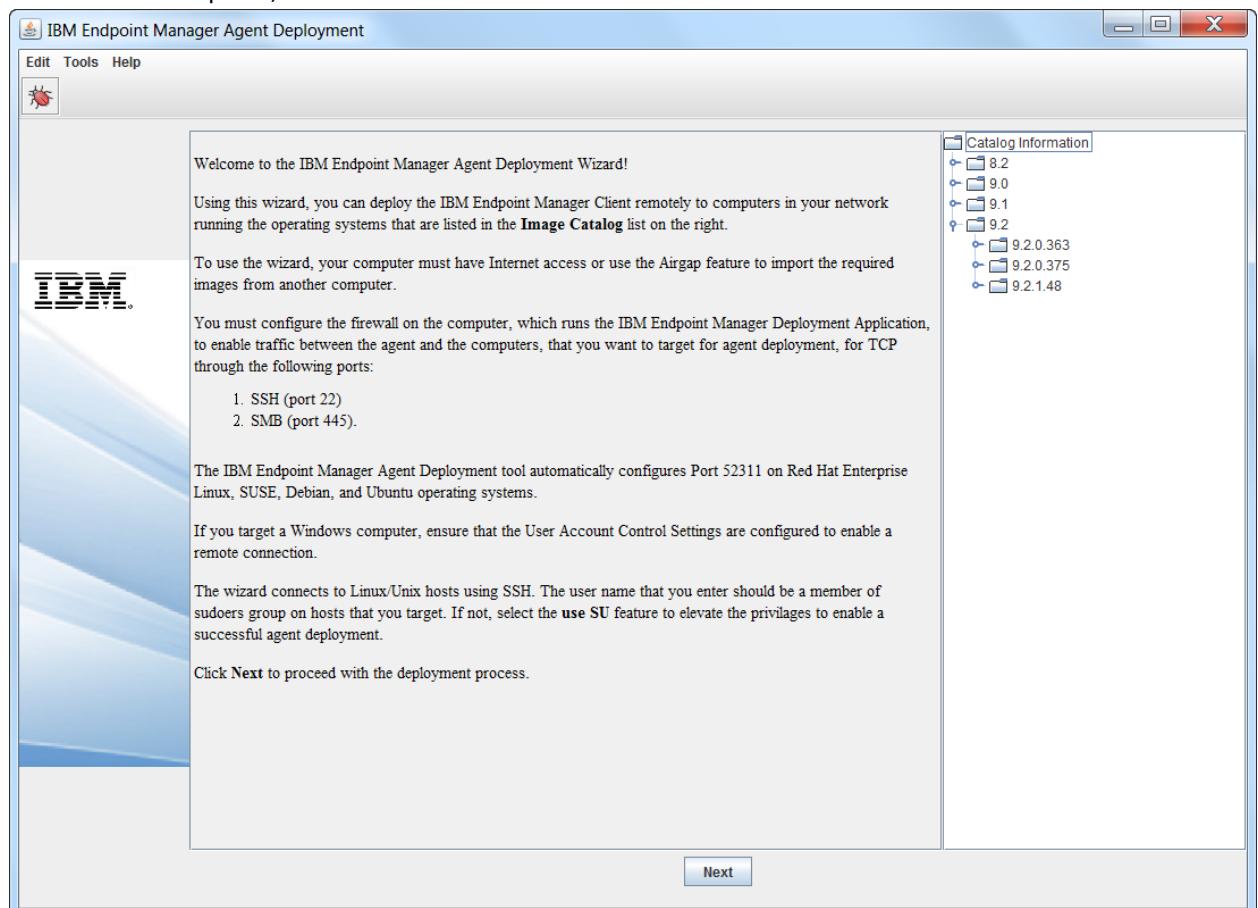
The following procedure shows how to install IEM clients by using IBM Endpoint Manager Deployment Wizard.

See: [How to download IBM Endpoint Manager Agent Deployment Wizard?]

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

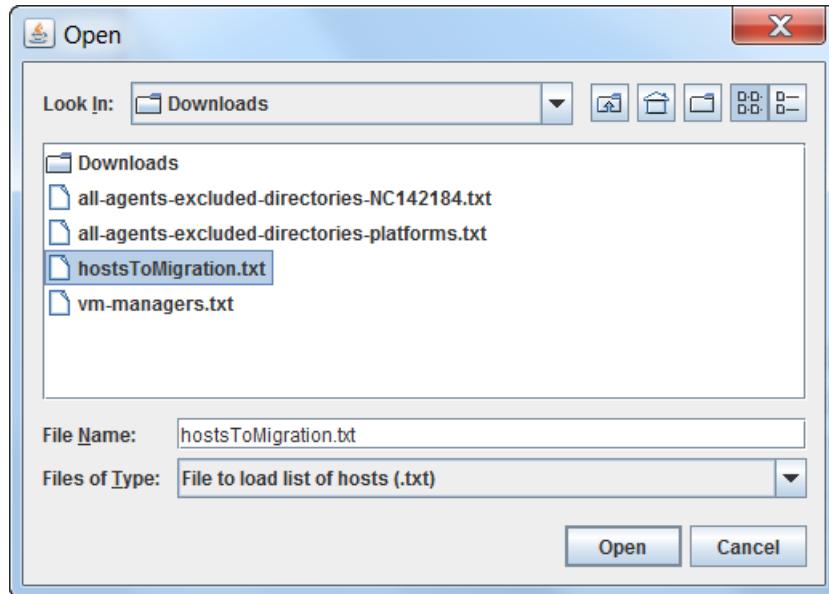


2. On the **Welcome** panel, click **Next**.



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*).

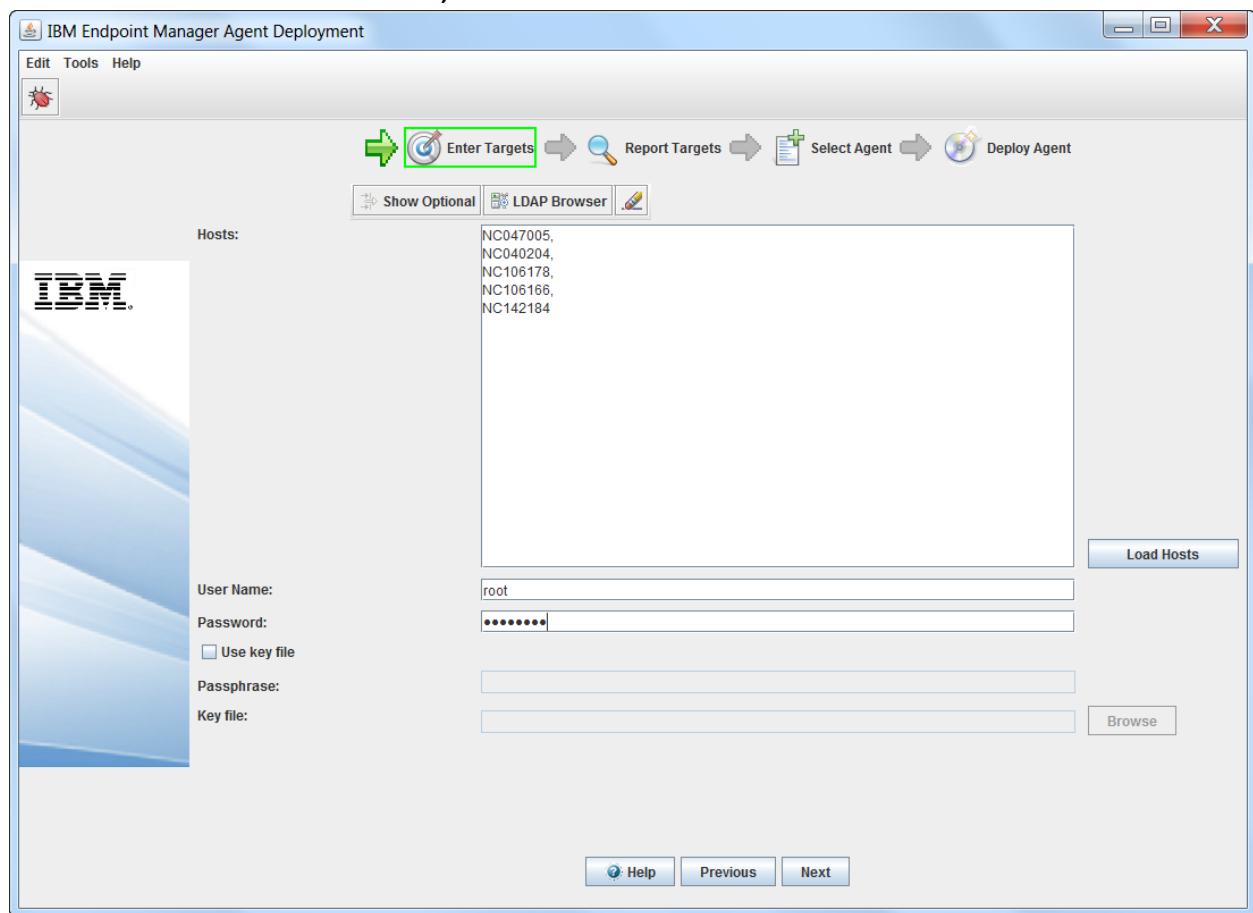
See: [hostsToMigration.txt]



The results are displayed on the screen.

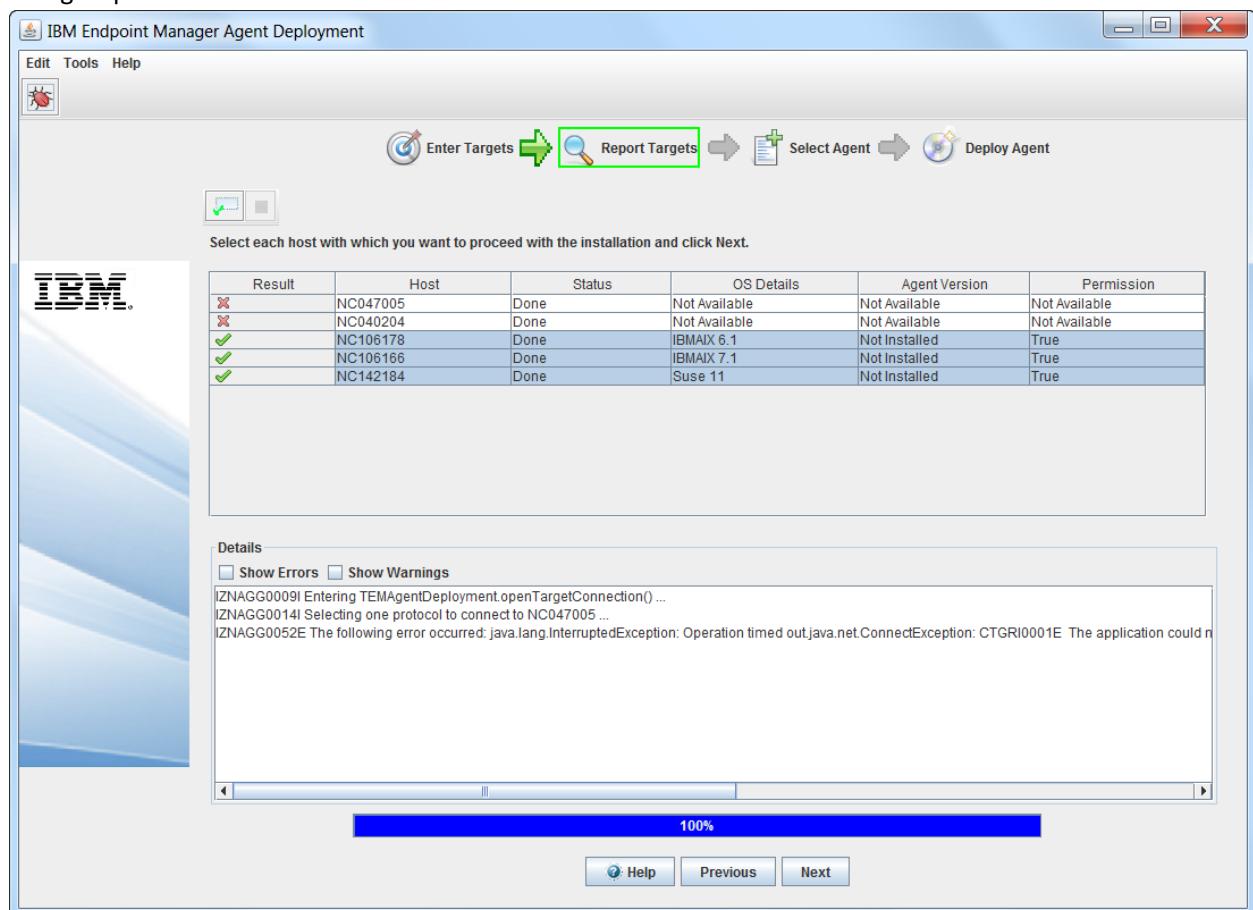
```
NC047005,  
NC040204,  
NC106178,  
NC106166,  
NC142184
```

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

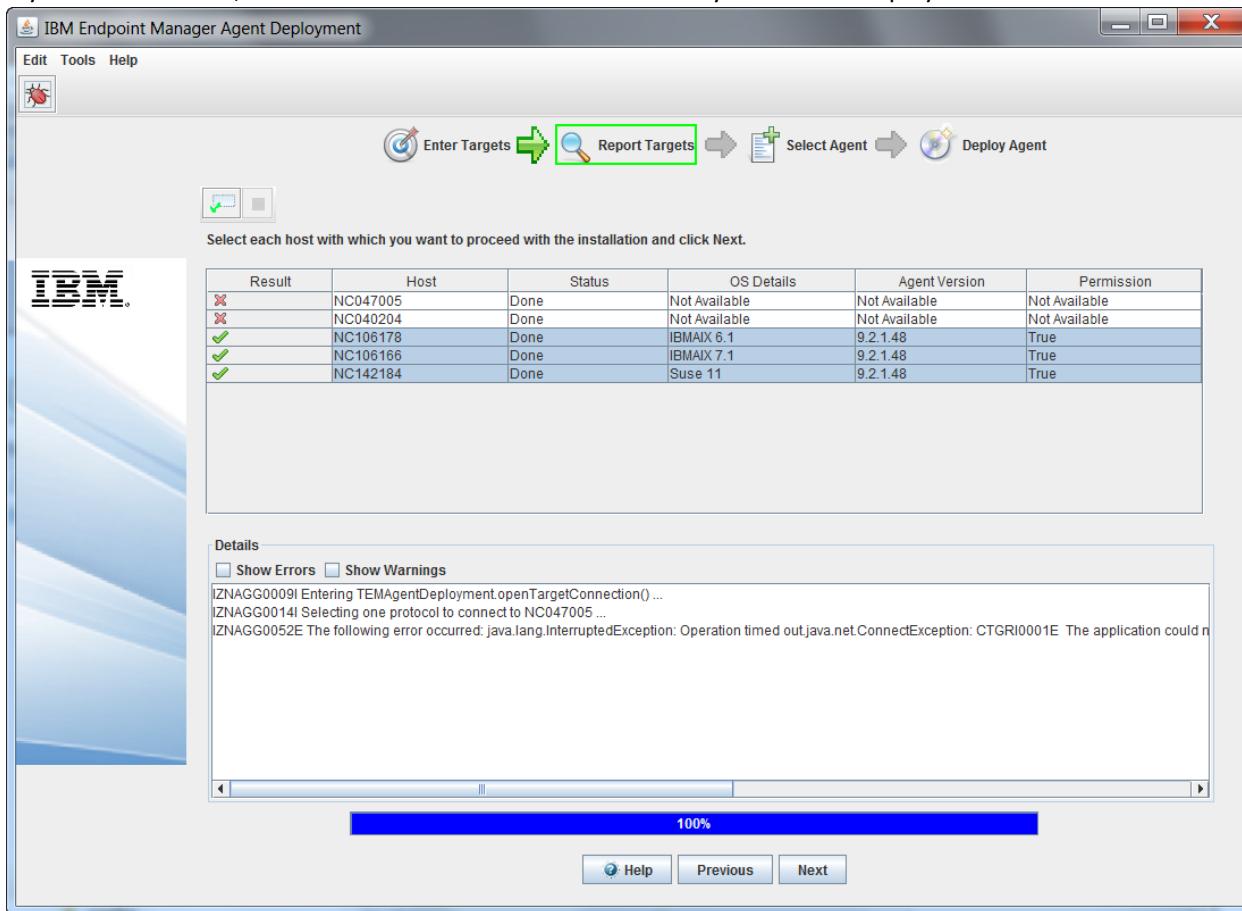


After a while, the task is completed and the results are displayed on the screen. If credentials provided are not the same for all host (as shown on the screen), you might consider divide your host

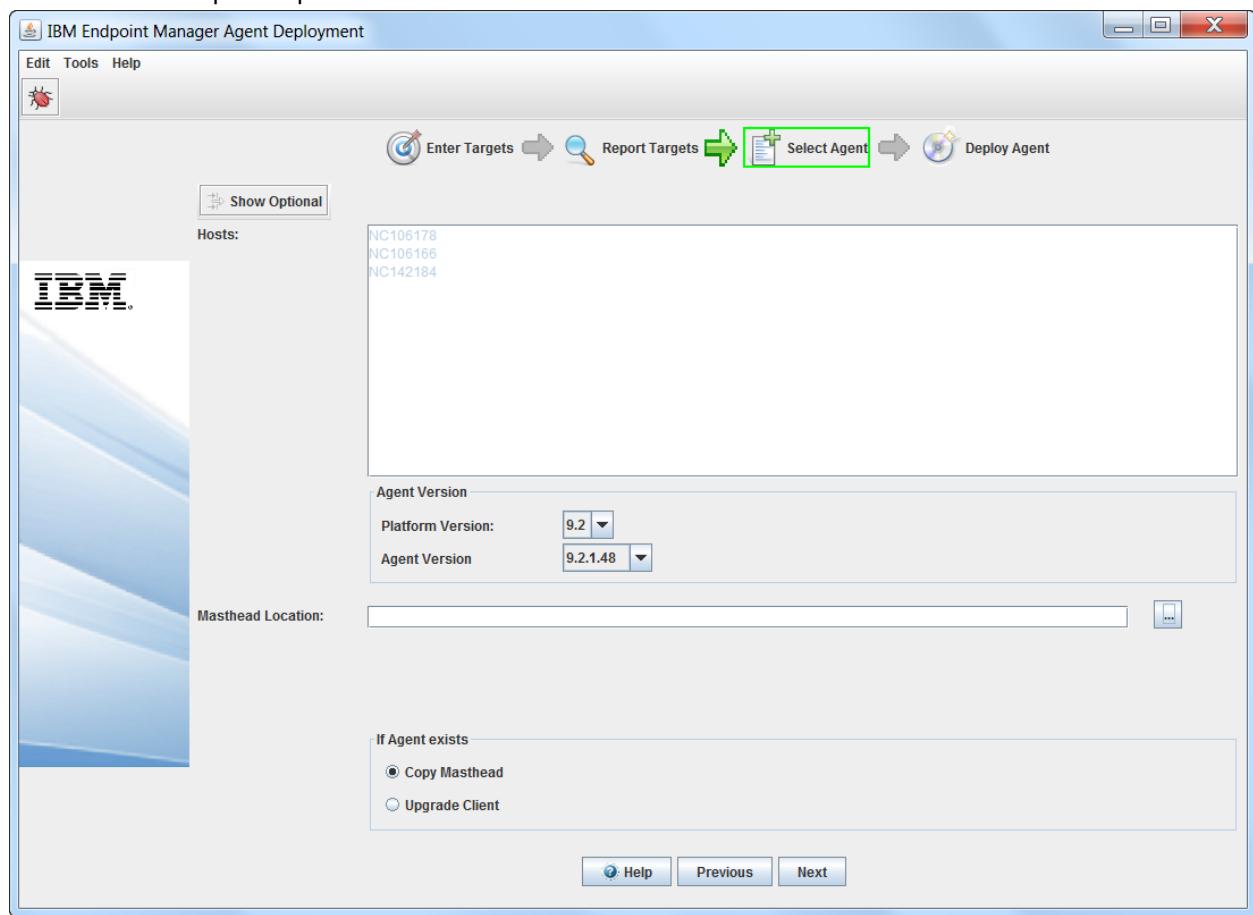
into groups or rerun the tool with different credentials afterwards.



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.



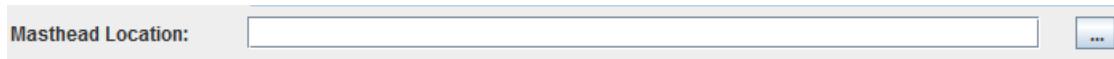
6. Click **Next**. A new panel opens.



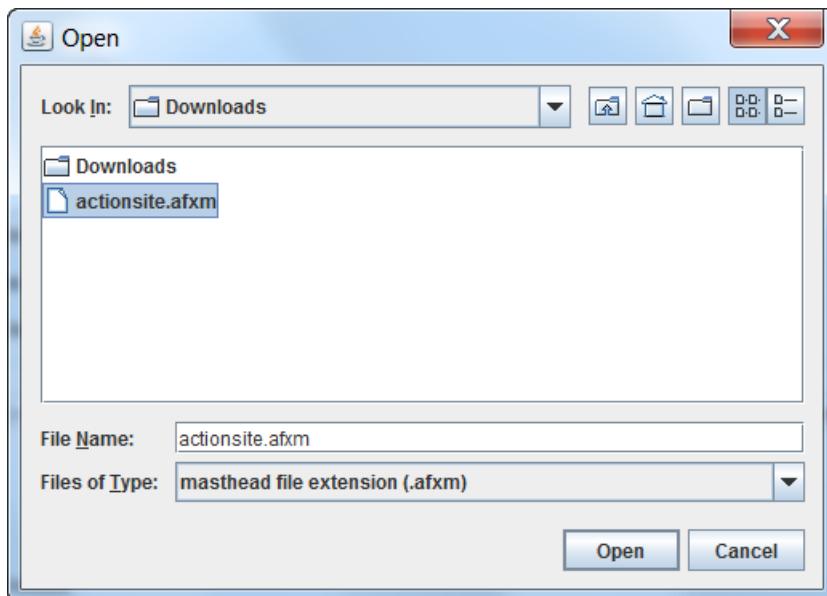
7. Optional: You can change the version of clients to be installed to the newest one, for example, 9.2.1.48. It is recommended to use clients with the same version as the IEM server. However, unlike in TAD4D 7.5, newer clients can work with an older server.



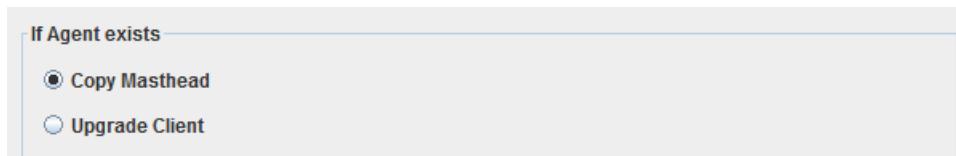
8. Provide the location of the masthead file. Browse for the *actionsitefile.afxm* file from your IEM server, for example, `/var/opt/BESInstallers/Client` and click **Open**.



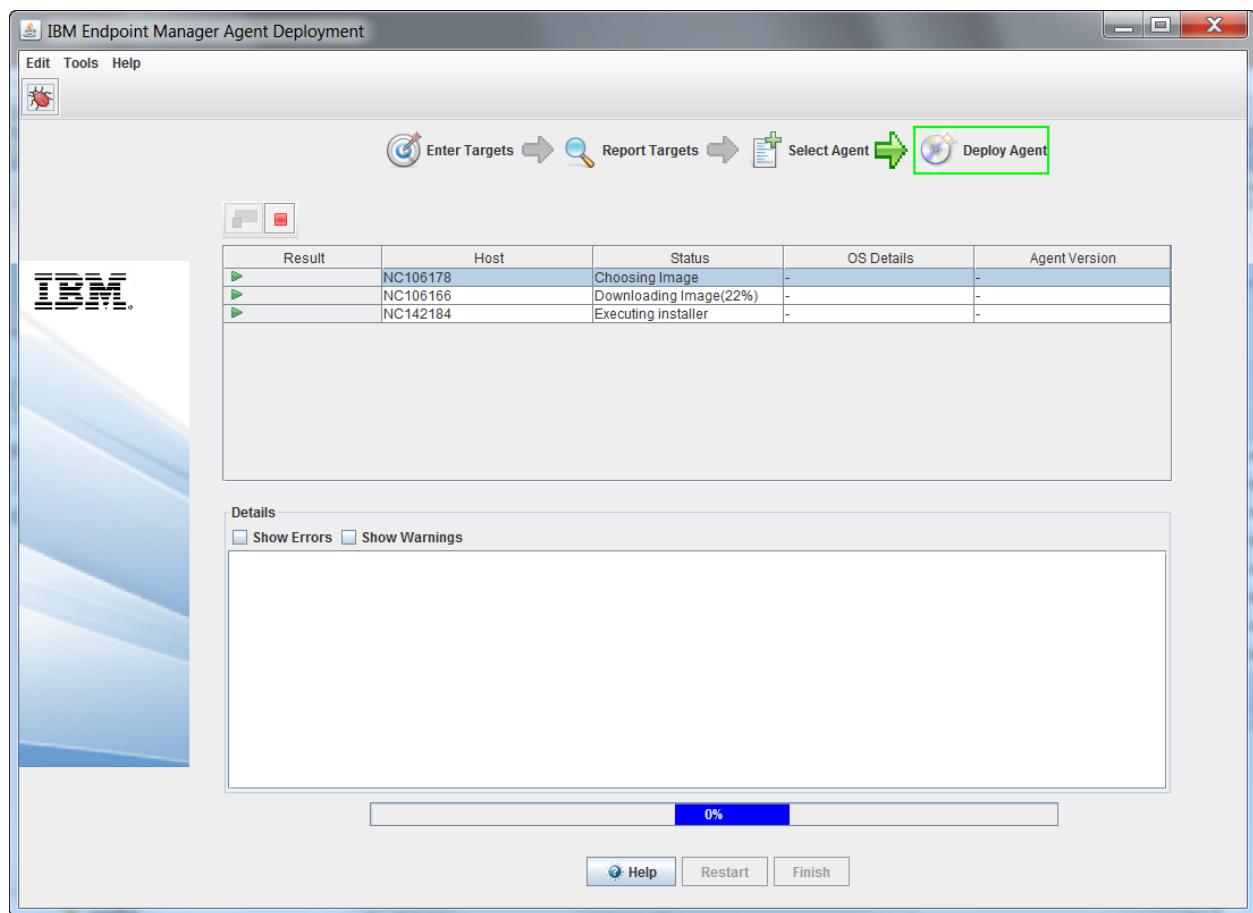
See: [How to download IBM Endpoint Manager masthead file?]



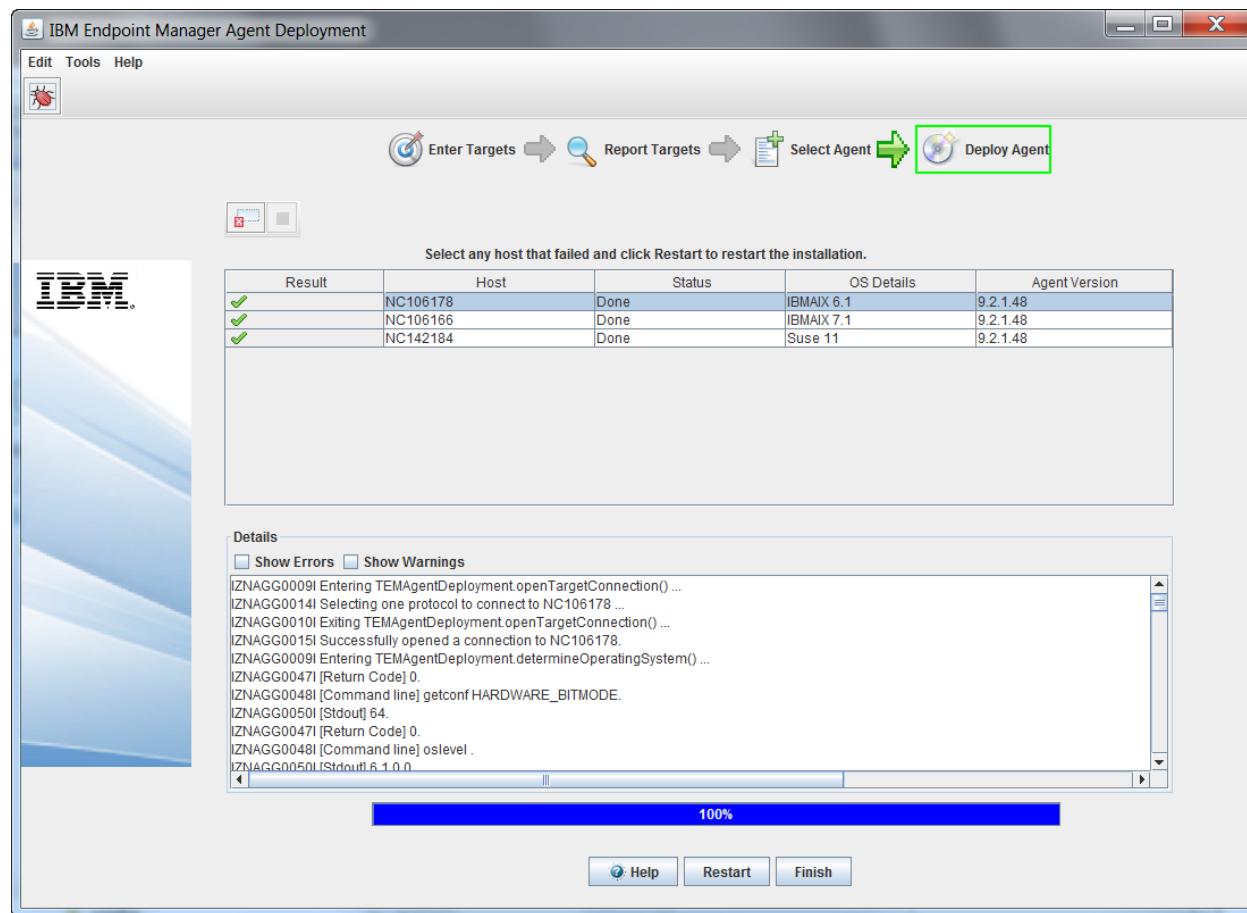
9. If you are installing a fresh environment, do not change anything in the **If Agent exists** section.



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



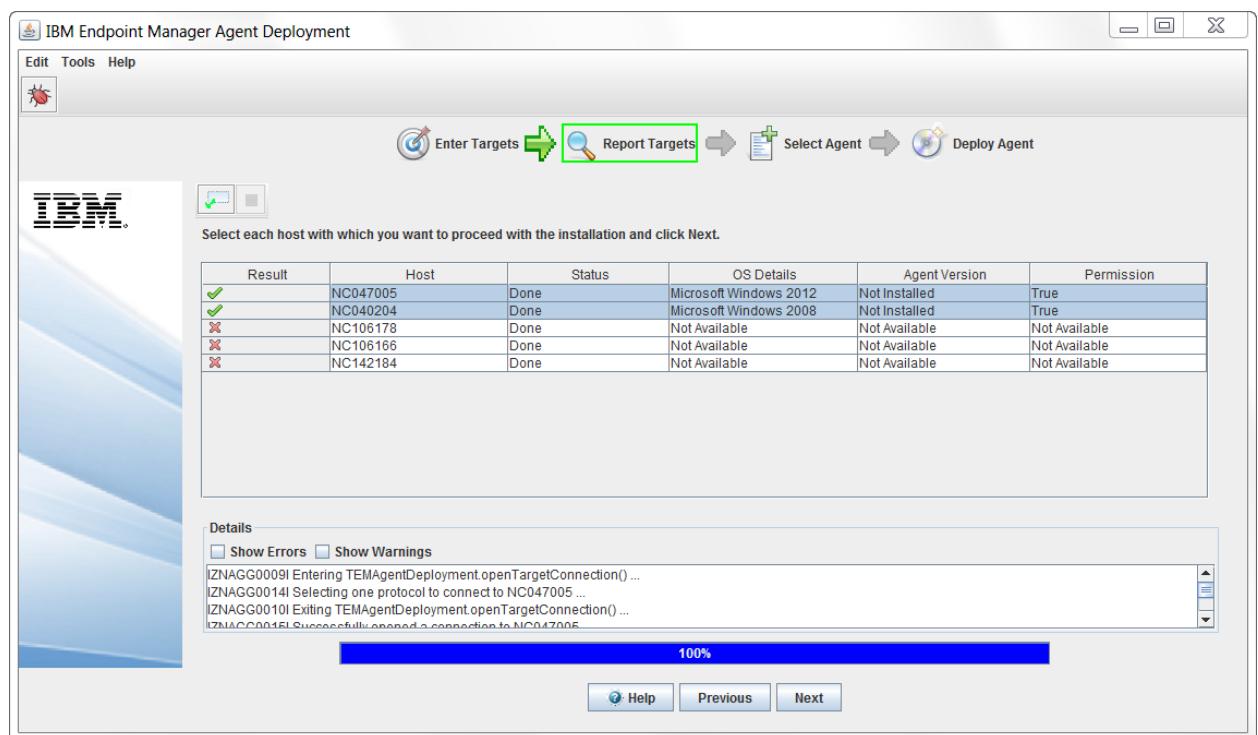
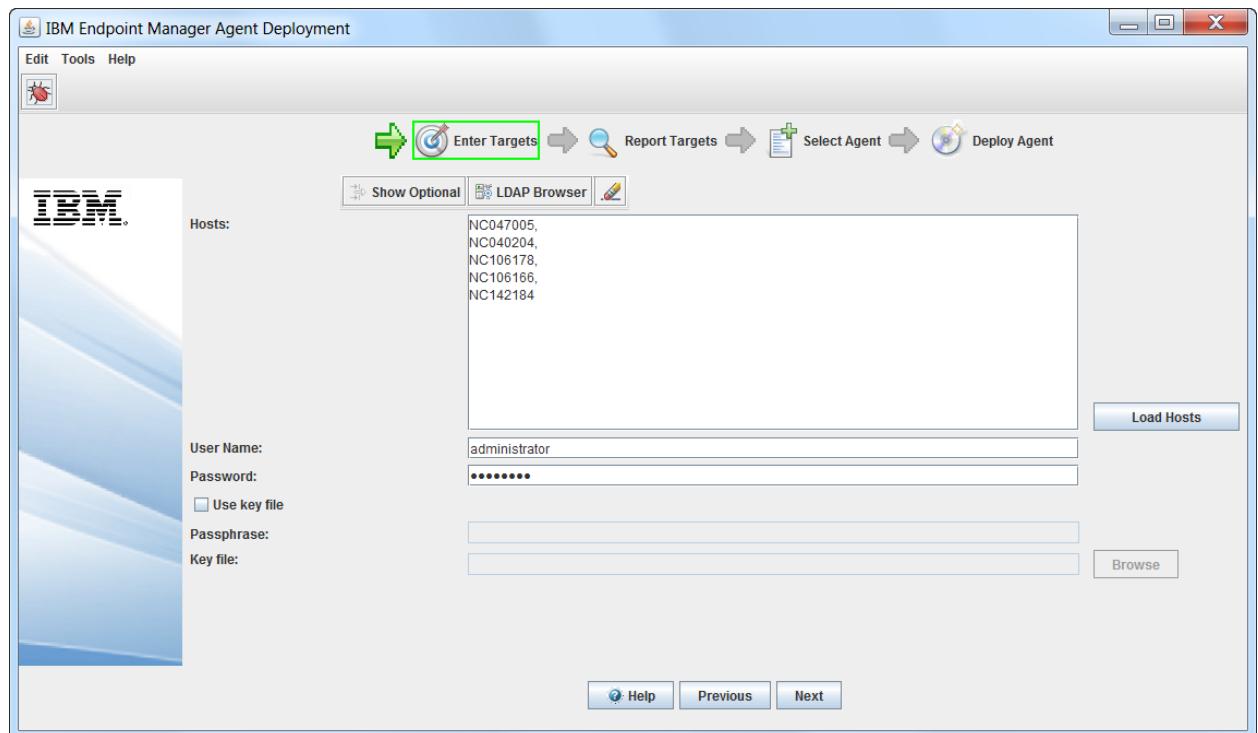
After some time (it depends on the number of clients to be deployed and the bandwidth of your intranet) the task should be finished.

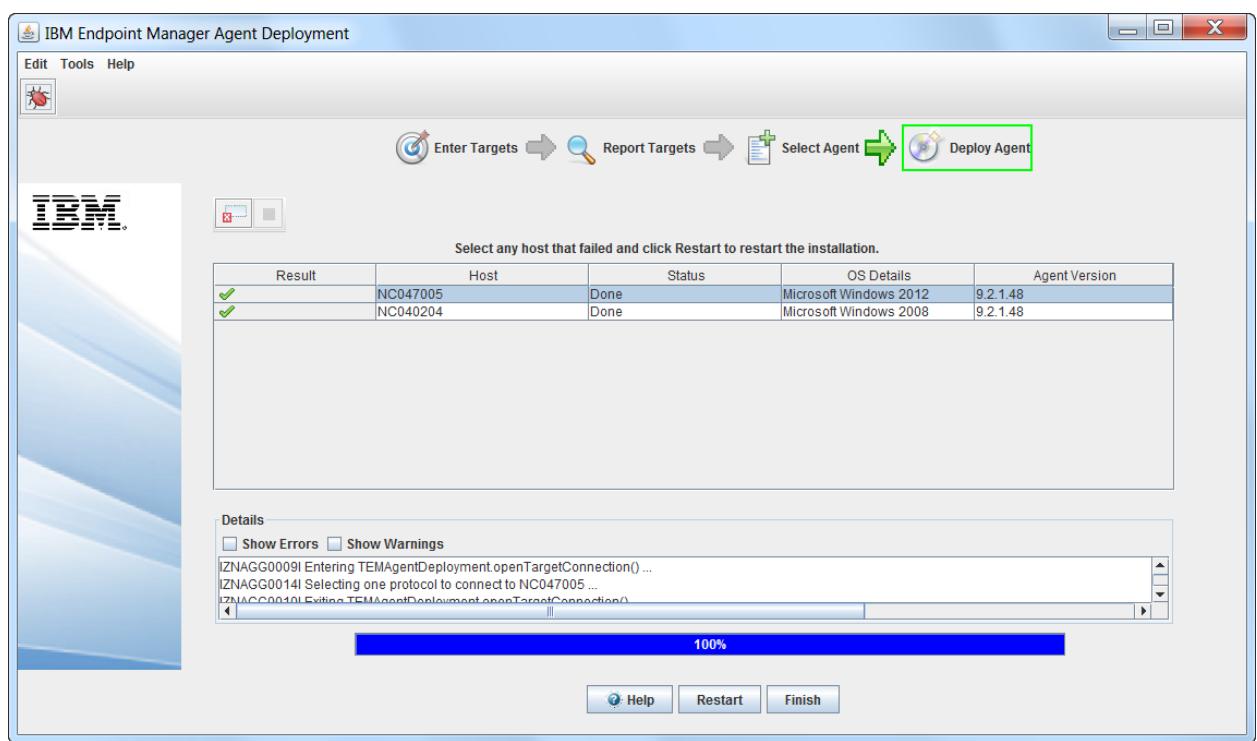
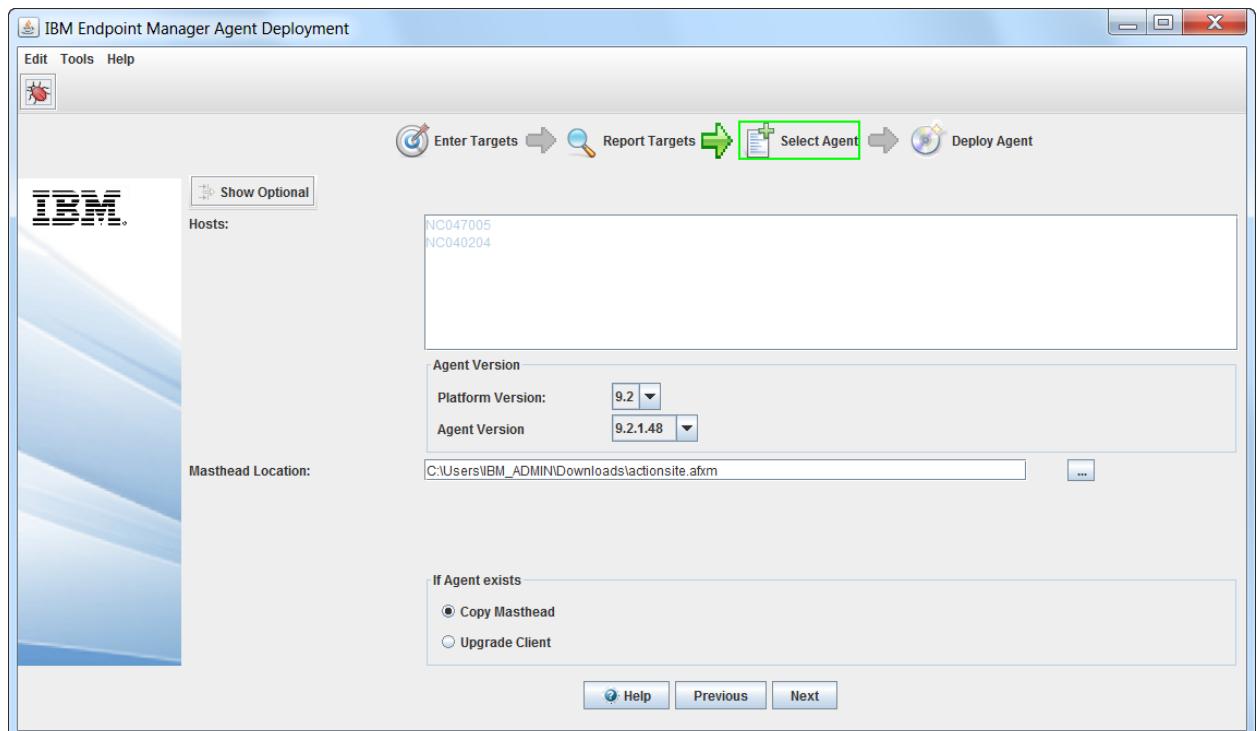


**Hint:**

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** to exit the tool or **Restart** to install IEM client on other machines using different credentials like presented below:





## Frequently asked questions (FAQ)

This part provides answers to frequently asked questions

### How to download IEM client native installer?

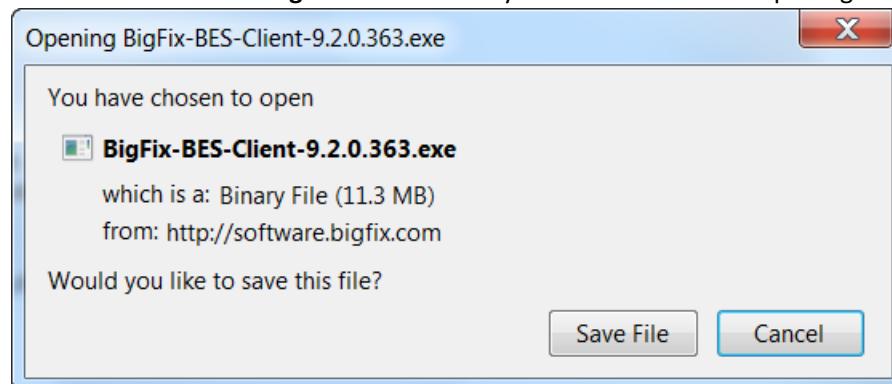
To download IBM Endpoint Manager Client native installer, open the following link:

<http://support.bigfix.com/bes/install/downloadbes.html>

Scroll to **BigFix Clients** section:

The screenshot shows the 'BigFix Clients' section of a web page. It starts with a note: 'You must first have the BigFix Server installed before installing BigFix Clients'. Below this is the heading '9.2.0'. Under 'Windows', there is a bulleted list: 'Windows XP or greater' with three SHA values. Under 'Linux, Unix, Mac', there is a link: 'support.bigfix.com/bes/install/besclients-nonwindows.html'.

Click on **Windows XP or greater** and directly download installation package for Windows:



Click on [support.bigfix.com/bes/install/besclients-nonwindows.html](http://support.bigfix.com/bes/install/besclients-nonwindows.html) to go to page with packages for other operating systems.

The screenshot shows a web page for 'BigFix Unix, Linux, and Mac Clients'. At the top left is the BigFix logo with the text 'BIGFIX An IBM Company'. A navigation bar at the top includes 'Home > Support'. The main title 'BigFix Unix, Linux, and Mac Clients' is centered above a paragraph of text. To the right is a sidebar titled 'BigFix Support' containing links to various support resources. Below the main title is a list of operating systems with links to their respective pages. Underneath this list is a section for 'AIX' with a link to its download page.

All mastheads on this page are Evaluation mastheads and should only be used on Evaluation licenses of BigFix. If you have a Production licenses of BigFix, please contact your sales rep to obtain Production mastheads.

For previous non-Windows versions, please refer to the following text file:  
[support.bigfix.com/bes/install/besnonwindowsarchive.html](http://support.bigfix.com/bes/install/besnonwindowsarchive.html).

For the latest BigFix release information, visit <http://support.bigfix.com/bes/release/>.

- [AIX](#)
- [CentOS](#)
- [Debian](#)
- [HP-UX](#)
- [Mac OS X](#)
- [RedHat Linux](#)
- [Solaris](#)
- [SUSE Linux](#)
- [Ubuntu](#)
- [VMWare ESX Server](#)

**AIX**

[AIX - Downloads](#)

**9.2**

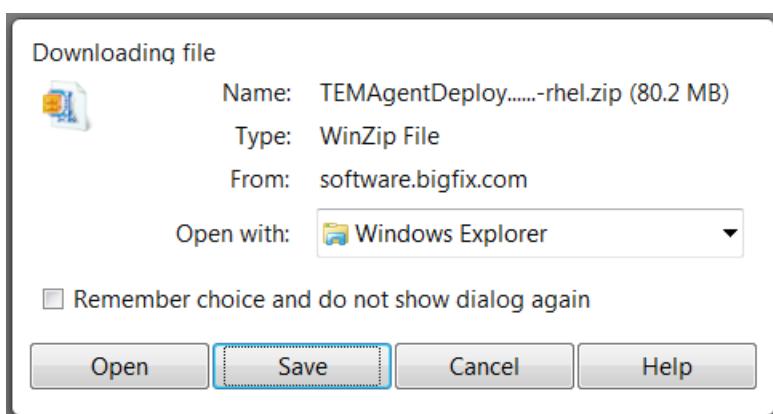
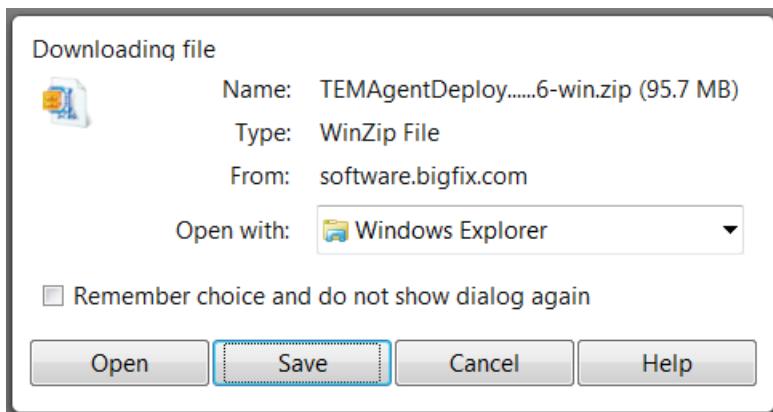
- [AIX 6.1 \(TL4+\), 7.1 - ppc64 9.2.0.363](#)
  - Size: 43 MB

## 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>

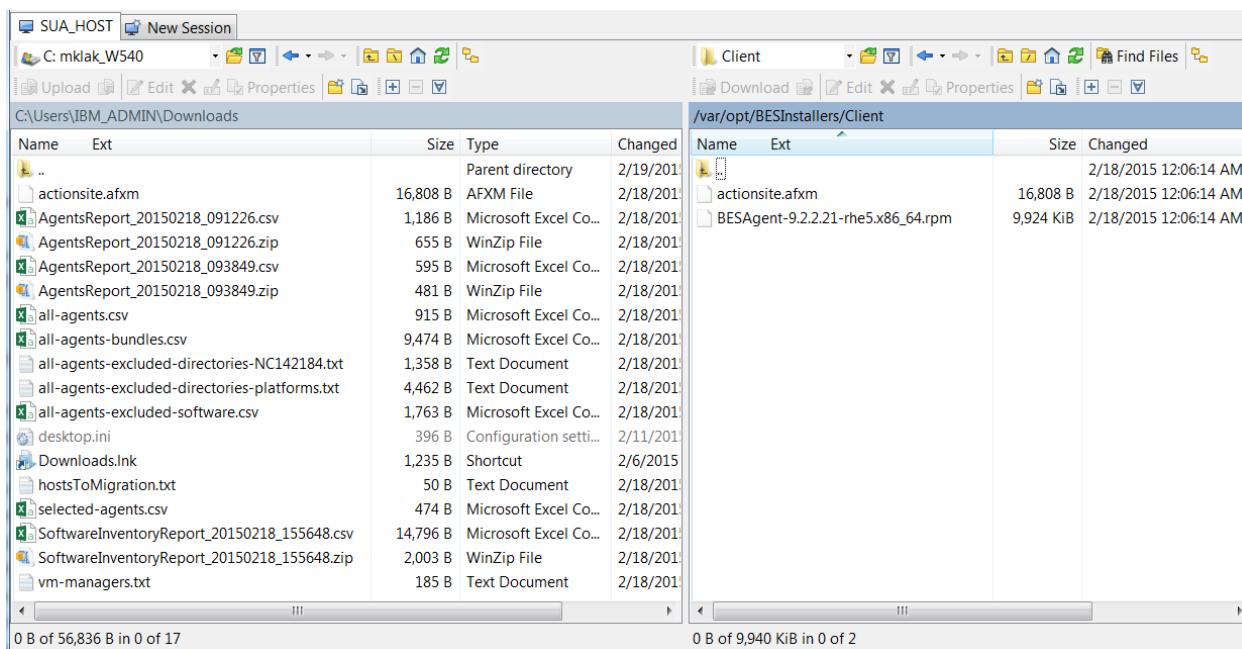
Download the proper ZIP file. At the moment of writing this cookbook, the newest version is 1.0.446:  
<http://software.bigfix.com/download/bes/util/AgentDeployment/TEMAgentDeployment-1.0.446-win.zip>  
<http://software.bigfix.com/download/bes/util/AgentDeployment/TEMAgentDeployment-1.0.446-rhel.zip>



## 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?

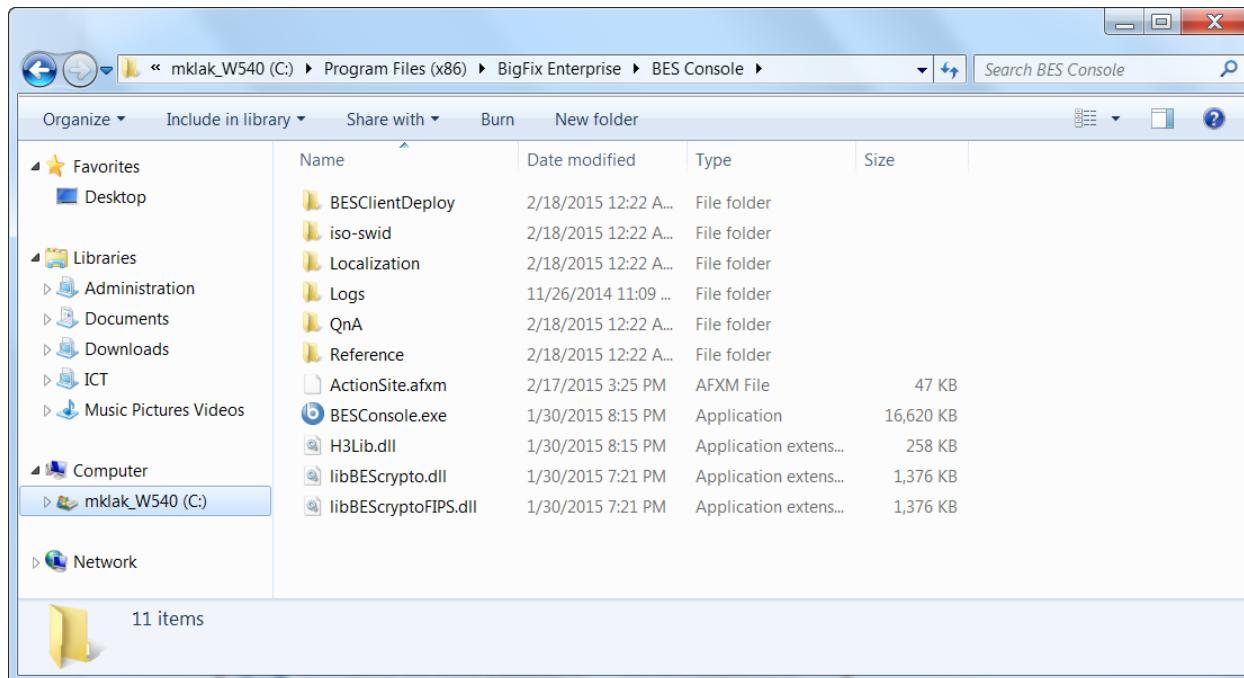
Go to:

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

```
Linux RH (SUA_HOST) root ~ # ls -la /opt/ibm/SUA/wlp/usr/servers/server1/logs
total 3272
drwxrwx--- 3 root root 4096 Feb 17 21:05 .
drwxr-xr-x 13 root root 4096 Feb 17 22:21 ..
-rw-rw---- 1 root root 209 Feb 17 20:22 console.log
drwxrwx--- 2 root root 4096 Feb 18 14:00 imports
-rw-rw---- 1 root root 785 Feb 17 20:22 messages.log
-rw-rw---- 1 root root 46730 Feb 18 14:04 production.log
-rw-rw---- 1 root root 3275762 Feb 18 15:11 tema.log
Linux RH (SUA_HOST) 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.



After opening the console, you may choose any of available views in your IEM installation, for instance:

- All Content
- BigFix Management

- Systems Lifecycle

The screenshot shows the IBM Endpoint Manager Console interface. The left sidebar has a tree view with 'All Content' expanded, showing categories like Baselines (0), Analyses (17), Actions (8), Dashboards, Wizards, Custom Content, Custom Filters, Computers (6), Computer Groups (0), Unmanaged Assets (0), Operators (1), Sites (3), LDAP Directories (0), and Roles (0). The main pane is titled 'Fixlets and Tasks' and lists various fixlets. A specific fixlet, 'TROUBLESHOOTING:Run IEM Server Diagnostic', is selected. Below the list, there's a detailed view of this fixlet with tabs for Description, Details, Applicable Computers (1), and Action History (0). The status bar at the bottom right indicates 'Connected to 'SUA\_HOST' as user 'IEMAdmin''. The title bar says 'IBM Endpoint Manager Console'.

Name	Source Sev...	Site	Applicable
TROUBLESHOOTING:Run IEM Server Diagnostic	<Unspecifi...	BES Support	1 / 6
Automatically Restart Stopped BES Clients Using TaskScheduler	<Unspecifi...	BES Support	2 / 6
BES Client Setting: BESClientUI Enable Mode	<Unspecifi...	BES Support	2 / 6
BES Client Setting: Client UI Balloon Mode Selection	<Unspecifi...	BES Support	2 / 6
BES Client Setting: Client UI Enable/Disable Main Dialog	<Unspecifi...	BES Support	2 / 6
BES Client Setting: Client UI Minimum Analysis Interval	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Client UI Tray Mode Selection	<Unspecifi...	BES Support	2 / 6
BES Client Setting: Communication Method	<Unspecifi...	BES Support	2 / 6
BES Client Setting: CPU Usage	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Download Throttling	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Enable Auto Relay Selection	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Enable Command Polling	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Enable Debug Logging	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Enable/Disable Dynamic Throttling	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Encrypted Reports	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Hold Mode For Missing Client UI	<Unspecifi...	BES Support	2 / 6
BES Client Setting: Lock Computer	<Unspecifi...	BES Support	6 / 6
BES Client Setting: Relav Selection Controls	<Unspecifi...	BES Support	6 / 6

## How to open Tivoli Asset Discovery for Distributed 7.5 Command Line Interface (CLI)?

Open command line of the operating system where the TAD4D 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**.

```
Linux RH (TAD4D_HOST) root / # /opt/IBM/TAD4D/cli/lmtcli.sh
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
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 Linux .
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.
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

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

CODCL0033I: The command has been successfully performed.

lmt>
```

## How to restart TAD4D server?

To restart TAD4D server you should open command line of the operating system where the TAD4D server is installed. Navigate to `cli` folder under the installation directory and run two commands, first one to stop and second one to start the server. Do not forget to use correct **username** and **password**.

```
# /opt/IBM/TAD4D/cli/srvstop.sh -username tipadmin -password tipass
# /opt/IBM/TAD4D/cli/srvstart.sh
```

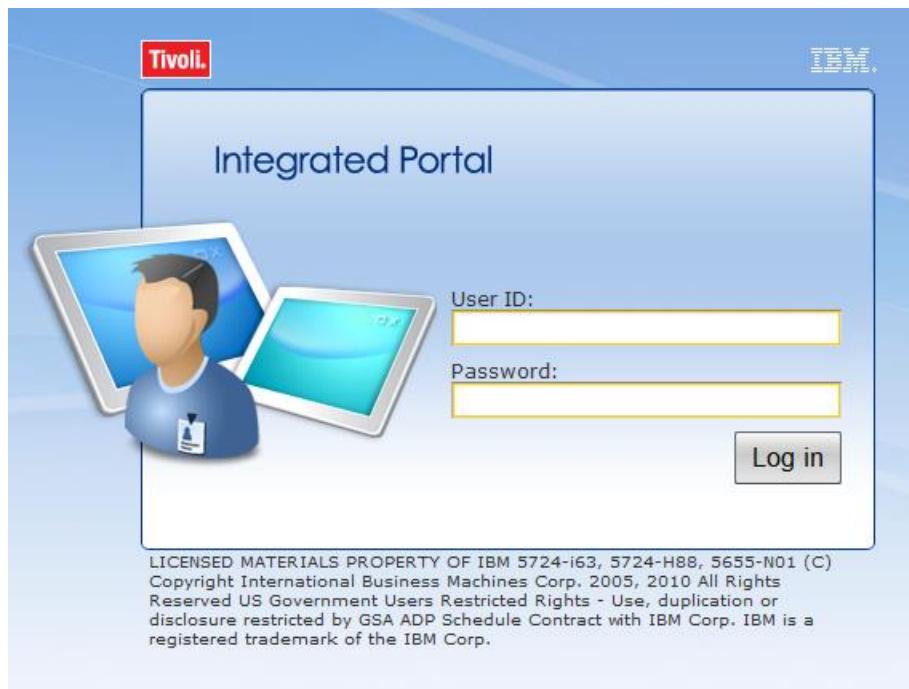
```
Linux RH (TAD4D_HOST) root ~ # /opt/IBM/TAD4D/cli/srvstop.sh -username tipadmin -password tipass
ADMU0116I: Tool information is being logged in file
    /opt/IBM/TIP/profiles/TIPPProfile/logs/server1/stopServer.log
ADMU0128I: Starting tool with the TIPPProfile profile
ADMU3100I: Reading configuration for server: server1
ADMU3200I: Server stop request issued. Waiting for stop status.
ADMU4000I: Server server1 stop completed.

Linux RH (TAD4D_HOST) root ~ # /opt/IBM/TAD4D/cli/srvstart.sh
ADMU0116I: Tool information is being logged in file
    /opt/IBM/TIP/profiles/TIPPProfile/logs/server1/startServer.log
ADMU0128I: Starting tool with the TIPPProfile profile
ADMU3100I: Reading configuration for server: server1
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server server1 open for e-business; process id is 18965
Linux RH (TAD4D_HOST) root ~ # █
```

## How to open the Tivoli Asset Discovery for Distributed 7.5 web user interface?

Replace the hostname with the host or IP address where the TAD4D 7.5 server is installed and open the following link in a web browser.

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



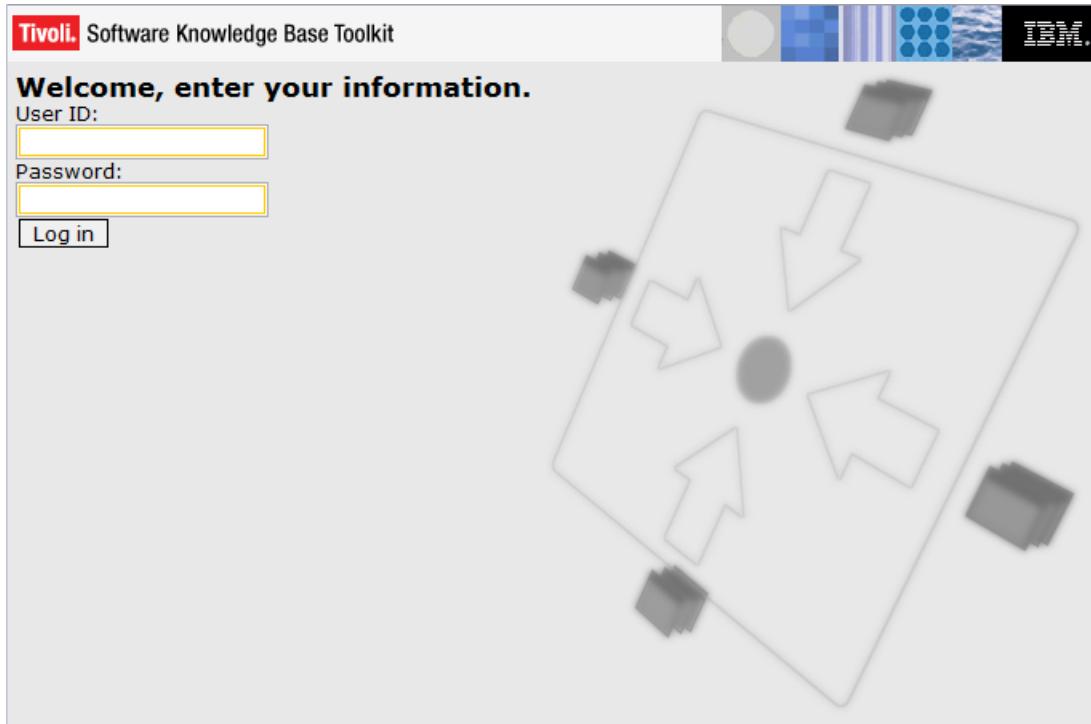
After you provide the **User ID** and **Password**, you will be able to see the TAD4D 7.5 **Home** panel as shown below.

The screenshot displays the 'IBM Tivoli Asset Discovery for Distrib' home page. The top navigation bar includes 'View: IBM Tivoli Asset Discovery for Distrib', 'Welcome tipadmin', 'Help | Communities | Logout', and the 'IBM.' logo. On the left is a vertical navigation menu with sections: 'Tivoli Asset Discovery' (Home), 'IBM Audit Reports' (View Reports, Reporting Options), 'Software' (Manage Software Inventory, Software Monitoring Configuration, Software Components, Unmatched Registry Entries), '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 'Software Product Status'. It features a 'Recent Audit Reports' section with a table showing audit status (Status: Signed, Reporting Period: Feb 10, 2015 - Feb 17, 2015) and a green progress bar indicating 100% completion. Below this is an 'Unconfirmed products: 0 ( 0 % )' message. There are also 'Related tasks' links for 'View reports' and 'Manage notifications'. Another section titled 'Infrastructure Health' shows 'Agent Status', 'Software Scans', and 'Infrastructure Coverage' with 100% completion for all metrics. Below these are 'Agents with problems: 0 ( 0 % )', 'Software scan failed: 0 ( 0 % )', and 'Unmonitored systems: 0 ( 0 % )'. Each metric has a corresponding green progress bar. Related tasks for this section include 'Agents', 'Scan groups', 'VM managers', 'Manage notifications', 'Systems without agents', and 'Shared file systems'.

## How to open Software Knowledge Base Toolkit web user interface?

Replace the hostname with the host or IP address where the SwKBT 1.2.2 server is installed and open the following link in a web browser.

<https://hostname:12344/ibm/console>



After you provide the **User ID** and **Password**, you will be able to see the **Welcome** panel of SwKBT 1.2.2 as shown below.

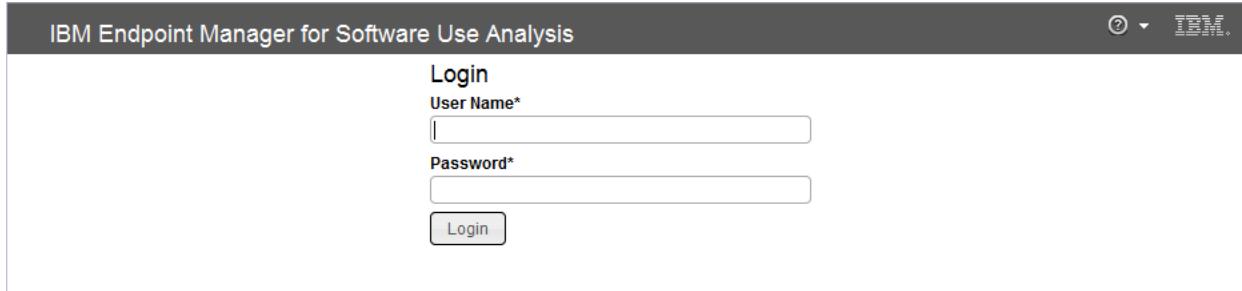
The screenshot shows the "Welcome admin" page of the Tivoli Software Knowledge Base Toolkit. The left sidebar has a "View: All tasks" dropdown set to "All tasks" and a list of links: "Welcome", "My Startup Pages", "Security", "Users and Groups", "Troubleshooting", "IBM Tivoli Software Knowledge Base T", and "Settings". The main content area has a "Welcome" header. Below it, a "Welcome" sub-header is followed by a text block: "Integrated Solutions Console provides a common administration console for multiple products. The table lists the product suites that can be administered through this installation. Select a product suite to view more information." To the right of this is a "About this Integrated Solutions Console" section with details: "Integrated Solutions Console, 6.1.0.43", "Build Number: cf431207.50", "Build Date: 2/18/12", and "LICENSED MATERIALS PROPERTY OF IBM 5724-i63, 5724-H88, 5655-N01 (C)". At the bottom left is a table:

Suite Name	Version
IBM Tivoli Software Knowledge Base Toolkit	1.2.2

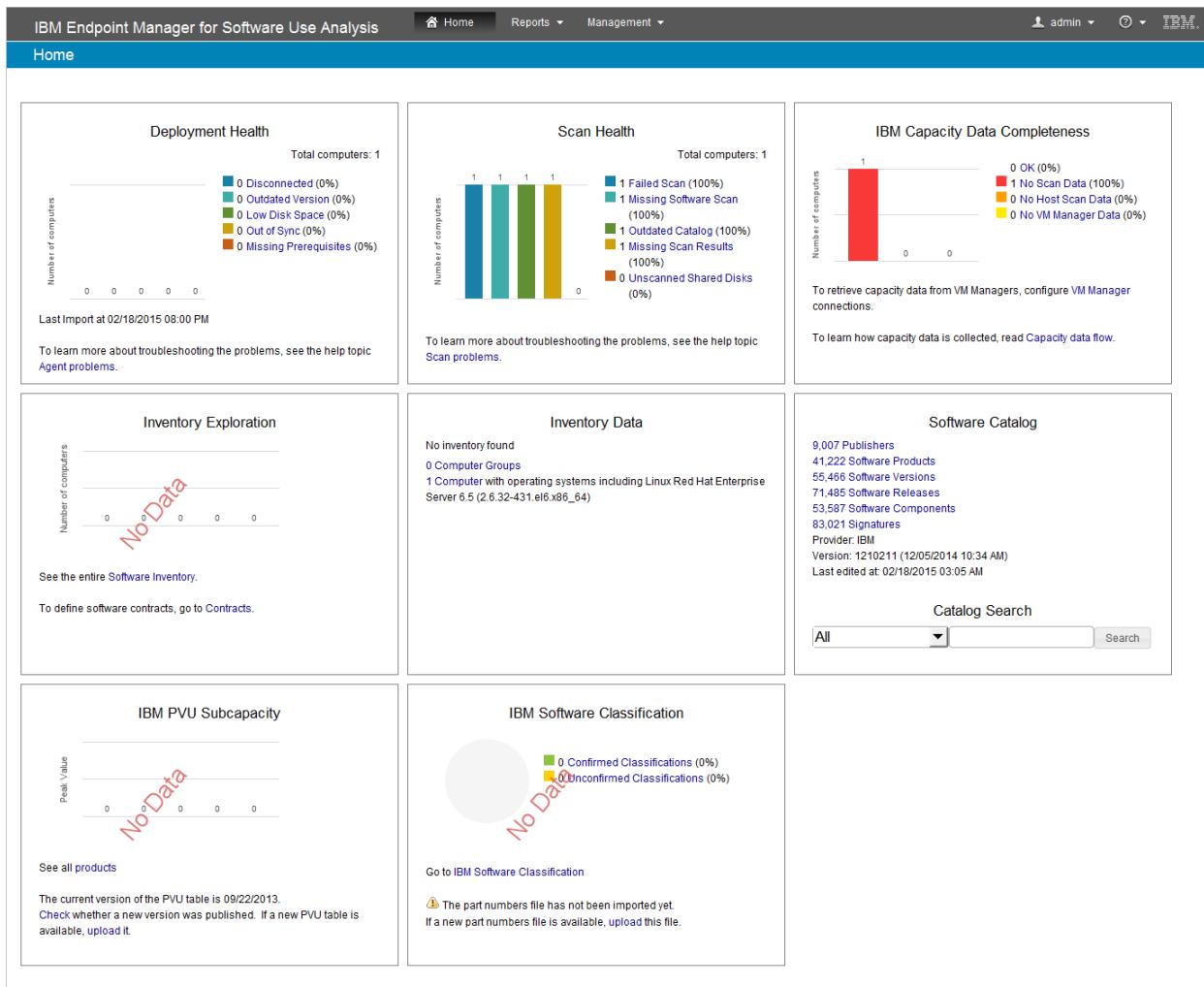
## How to open Software Use Analysis 9.0 web user interface?

Replace the hostname with the host or IP address where the SUA 9.0 server is installed and open the following link in a web browser.

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



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



## Where to find the migration tool?

The migration tool is installed together with Software Use Analysis server. By default, it is in the SUA home directory, under migration/product directories, for example:

/opt/ibm/SUA/migration/product

```
Linux RH (SUA_HOST) root ~ # ls -la /opt/ibm/SUA/migration/product
total 32
drwxr-xr-x 3 root root 4096 Feb 17 20:22 .
drwxr-xr-x 4 root root 4096 Feb 17 20:22 ..
drwxr-xr-x 2 root root 4096 Feb 17 20:22 lib
-rw----- 1 root root 2763 Feb 17 20:22 logging.properties
-rw----- 1 root root 2926 Feb 17 20:22 migration.bat
-rw----- 1 root root 1562 Feb 17 20:22 migration.properties
-rw----- 1 root root 1562 Feb 17 20:22 migration.properties_template
-rwx----- 1 root root 2577 Feb 17 20:22 migration.sh
Linux RH (SUA_HOST) root ~ #
```

## 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

## Is it possible to rerun the migration process?

Yes, migration can be rerun, however if you rerun the process on the same set of agents majority of the items will be skipped, due to implemented rules. One of example of such items are bundlings. After the first run of the migration tool they are confirmed and cannot be re-confirmed during consecutive run of the tool. Therefore they are skipped. Below you can find three consecutive execution of migration tool:

First

See: [Migration]

Second

```
# ./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: 41
Software bundlings imported: 0
Software bundlings skipped: 41
Software bundlings failed: 0
Software exclusions exported: 3
Software exclusions imported: 2
Software exclusions skipped: 1
Software exclusions failed: 0
VM Managers exported: 8
VM Managers imported: 0
VM Managers skipped: 8
VM Managers failed: 0
Excluded directories exported: 7
Excluded directories skipped: 2
Excluded directories failed: 0
Excluded directories updated: 5

Migration completed successfully.
#
```

Third

```
Linux RH (SUA_HOST) root /opt/ibm/SUA/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.
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: 41
Software bundlings imported: 0
Software bundlings skipped: 41
Software bundlings failed: 0
Software exclusions exported: 3
Software exclusions imported: 0
Software exclusions skipped: 3
Software exclusions failed: 0
VM Managers exported: 8
VM Managers imported: 0
VM Managers skipped: 8
VM Managers failed: 0
Excluded directories exported: 7
Excluded directories skipped: 2
Excluded directories failed: 0
Excluded directories updated: 5

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

## 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 (SUA_HOST) root ~ # /opt/ibm/SUA/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 (SUA_HOST) root ~ #
```

## 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/SUA/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/SUA/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

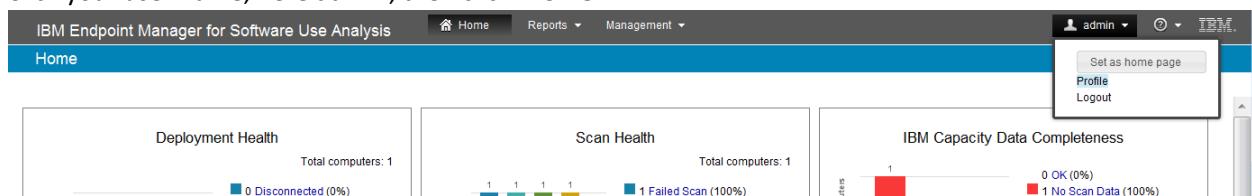
```
com.ibm.license.mgmt.suamigration.level = ALL
```

## How to find SUA authentication token?

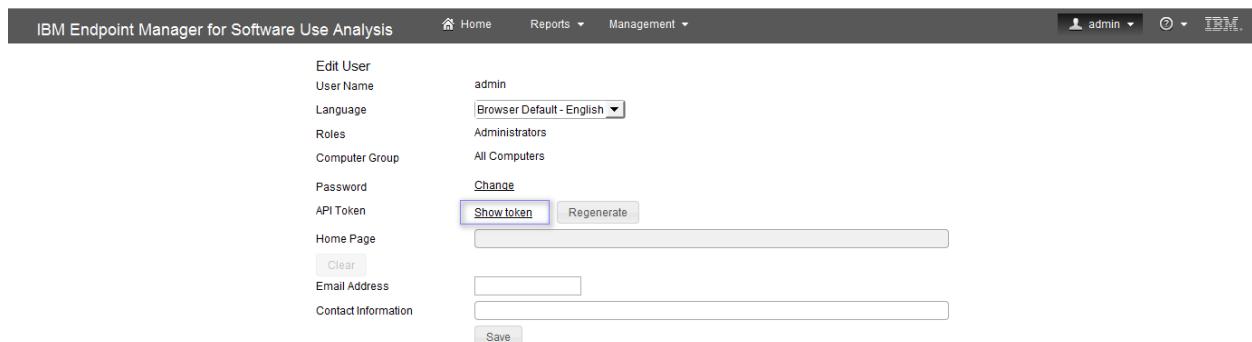
1. Login to SUA web interface.

See: [How to open Software Use Analysis 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      4cc87e      830afe      Regenerate

## How to monitor the progress of ETL progress?

Just open **Reports** menu and watch the progress at the bottom.



## 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://SUA\\_HOST:52311/api/sites](https://SUA_HOST:52311/api/sites)

(Log in as IEMAdmin user)

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

```
This document had no style information.

<BESAPI xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="BESAPI.xsd">
  <ExternalSite Resource="https://sua_host:52311/api/site/external/BES%20Support">
    <Name>
      BES Support
    </Name>
  </ExternalSite>
  <ExternalSite Resource="https://sua_host:52311/api/site/external/IBM%20Endpoint%20Manager%20for%20Software%20Use%20Analysis">
    <Name>
      IBM Endpoint Manager for Software Use Analysis
    </Name>
    <DisplayName>
      IBM Endpoint Manager for Software Use Analysis v9
    </DisplayName>
  </ExternalSite>
  <OperatorSite Resource="https://sua_host:52311/api/site/operator/IEMAdmin">
    <Name>
      IEMAdmin
    </Name>
  </OperatorSite>
  <ActionSite Resource="https://sua_host: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,

```
# less /opt/ibm/SUA/migration/product/migration.properties_template
```

```
# MIGRATION.PROPERTIES FILE
#
# The migration tool uses this file to read the access details of your servers
# to recognize the source and target for migrating your information. After you
# specify all of the values included in this file, you can start the migration.
```

```
# SOURCE OF MIGRATION: LMT 7.5 or TAD4D 7.5
```

```
# LMT/TAD4D database host name or IP address:
LMT_TAD4D_DB_HOST=localhost
```

```
# LMT/TAD4D database port number:
LMT_TAD4D_DB_PORT=50000
```

```
# LMT/TAD4D database user and password:
LMT_TAD4D_DB_USER=db2inst1
LMT_TAD4D_DB_PASSWORD=password
# The password will be encrypted after you start the migration.
```

```
# 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 Endpoint Manager for Software Use Analysis  
  
# LMT/SUA connection timeout in milliseconds:  
LMT_SUA_PROTOCOL_TIMEOUT=120000
```

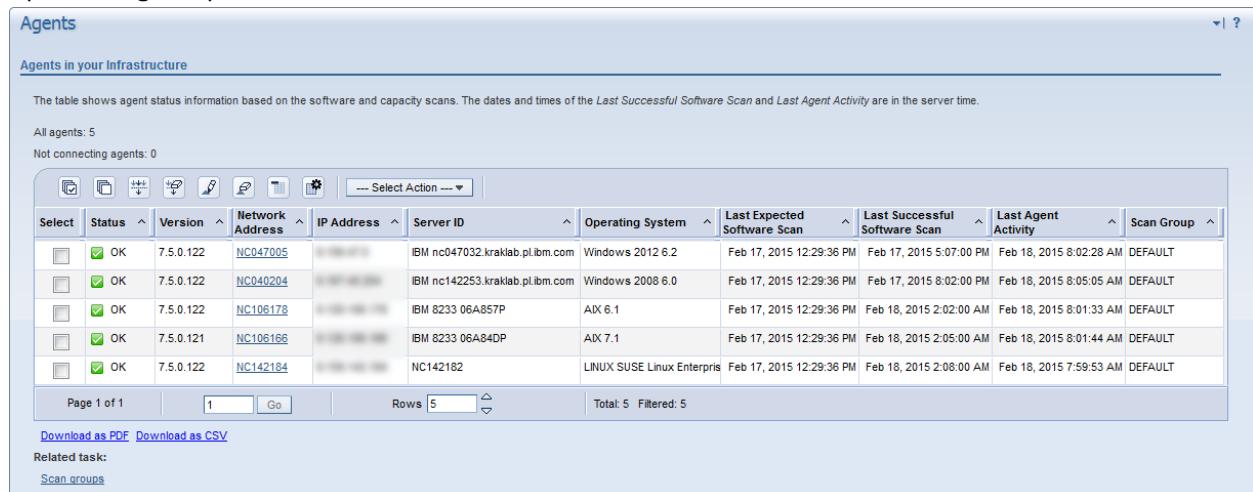
## How to use filter mechanism to migrate just a subset of agents?

Instead of exporting all agents at once, you can use a filter to export only selected agents. The following example shows how to choose only a subset of agents, for instance only those that are installed on Windows operating systems.

1. Log in to TAD4D 7.5 Web UI

See: [How to open the Tivoli Asset Discovery for Distributed 7.5 web user interface]

2. Open the **Agents** panel.



Select	Status	Version	Network Address	IP Address	Server ID	Operating System	Last Expected Software Scan	Last Successful Software Scan	Last Agent Activity	Scan Group
<input type="checkbox"/>	OK	7.5.0.122	NC047005		IBM nc047032.kraklab.pl.ibm.com	Windows 2012 6.2	Feb 17, 2015 12:29:36 PM	Feb 17, 2015 5:07:00 PM	Feb 18, 2015 8:02:28 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.122	NC040204		IBM nc142253.kraklab.pl.ibm.com	Windows 2008 6.0	Feb 17, 2015 12:29:36 PM	Feb 17, 2015 8:02:00 PM	Feb 18, 2015 8:05:05 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.122	NC106178		IBM 8233 06A857P	AIX 6.1	Feb 17, 2015 12:29:36 PM	Feb 18, 2015 2:02:00 AM	Feb 18, 2015 8:01:33 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.121	NC106166		IBM 8233 06A84DP	AIX 7.1	Feb 17, 2015 12:29:36 PM	Feb 18, 2015 2:05:00 AM	Feb 18, 2015 8:01:44 AM	DEFAULT
<input type="checkbox"/>	OK	7.5.0.122	NC142184		NC142182	LINUX SUSE Linux Enterpris	Feb 17, 2015 12:29:36 PM	Feb 18, 2015 2:08:00 AM	Feb 18, 2015 7:59:53 AM	DEFAULT

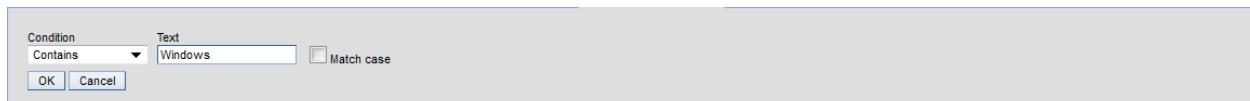
3. Trigger the filtering mechanism.



4. In the **Operating System** 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	Filter	Filter	Filter	Filter	Filter	Filter	Filter

5. Choose **Contains** as Condition and **Windows** as Text and then click **OK**.



The filtered agents are displayed on the screen.

Agents

Agents in your Infrastructure

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.

All agents: 5  
Not connecting agents: 0

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	Filter	Filter	Filter	Filter	Filter	Filter	Filter
<input checked="" type="checkbox"/>	OK	7.5.0.122	NC047005	[REDACTED]	IBM nc047032.kraklab.pl.ibm.com	Windows 2012 6.2	Feb 17, 2015 12:29:36 PM	Feb 17, 2015 5:07:00 PM	Feb 18, 2015 8:02:28 AM	DEFAULT
<input checked="" type="checkbox"/>	OK	7.5.0.122	NC040204	[REDACTED]	IBM nc142253.kraklab.pl.ibm.com	Windows 2008 6.0	Feb 17, 2015 12:29:36 PM	Feb 17, 2015 8:02:00 PM	Feb 18, 2015 8:05:05 AM	DEFAULT

Page 1 of 1    1    Go    Rows 5    Total: 5 Filtered: 2

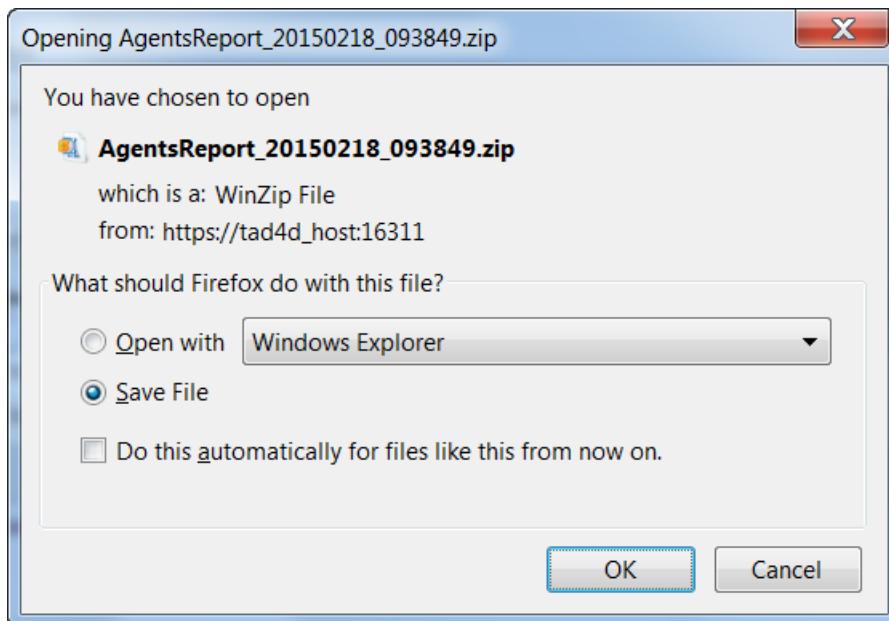
[Download as PDF](#) [Download as CSV](#)

Related task:  
[Scan groups](#)

6. Click **Download as CSV**.

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

7. Save the file.



8. Change the name of the file, for example to *selected-agents.csv* and keep it for verification purposes.

Migration from Tivoli Asset Discovery for Distributed version 7.5  
to IBM Endpoint Manager for Software Use Analysis version 9.0 - Cookbook

ILMT Central Team

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	7.5.0.122	Yes	NC047005	IBM nc047032.kraklab.pl.ibm.com	Windows 2012 6.2	2/17/2015 12:29		2/17/2015 17:07	2/18/2015 8:02	DEFAULT
3	OK	7.5.0.122	Yes	NC040204	IBM nc142253.kraklab.pl.ibm.com	Windows 2008 6.0	2/17/2015 12:29		2/17/2015 20:02	2/18/2015 8:05	DEFAULT
4											

## 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.