

Symantec™ IT Management Suite 7.5 powered by Altiris™ technology



Quickstart Upgrade Guide: 7.1 to 7.5

Introduction

Symantec IT Management Suite™ powered by Altiris™ technology is a comprehensive, integrated suite. It promotes effective service delivery by reducing the cost and complexity of owning and managing corporate IT assets such as desktops, laptops, thin clients, and servers on heterogeneous platforms such as Windows, UNIX, Linux, and Mac. IT Management Suite is a collection of solutions and components that run on the Symantec Management Platform.

This quick start guide is designed for IT professionals to gain a sense of the steps required to successfully perform an in-place upgrade to 7.5 from a current Altiris 7.1 infrastructure.

Hardware Considerations

While it is supported to perform a combined ITMS and SQL install on-box, it is important to review the hardware requirements for both ITMS as well as SQL Server for your size of organization. It is recommended that organizations larger than 5,000 endpoints separate ITMS and SQL onto separate servers. Also note that while virtual environments are supported, the overall success and performance in virtual environments depends on proper management and resources.

Important Things to Know

Changes in SIM

IT Management Suite 7.5 utilizes a new Symantec Installation Manager (SIM). The new version of SIM has a more user-friendly “upgrades and installed products” interface, which makes it easier to view and apply hot fixes and updates. It also incorporates additional and improved environment checks to ensure that your system is ready for an installation or upgrade. The new SIM now checks the following prerequisites:

- Checks whether Notification Server hierarchy replication is enabled. If you are upgrading Notification Servers in a hierarchy, Symantec recommends that you disable hierarchy replication. For more information, see www.symantec.com/docs/HOWTO44016 and www.symantec.com/docs/HOWTO21657.
- Checks whether there is sufficient OS drive space on the server to store the logs and data that is posted by the agent or Notification Server.
- Checks the database collation during an upgrade that uses an existing database. The collation for the database server and the existing database need to match, otherwise the installation cannot continue.
- Updates version 7.0 trustee assignments to AppIDGuid, if the platform version is 7.1 or higher. It also deletes 7.0 trustee assignments that are no longer necessary.
- Checks whether you have IT Management Suite version 7.1 SP2 installed before you can install IT Management Suite 7.5. If you have a version older than 7.1 SP2 installed, you must upgrade to 7.1 SP2 before you can continue.
- Displays a warning that Java 7 or higher is required for installation to continue. The Free Java 6 SE (Standard Edition) patches became unavailable from Oracle in February 2013.
<http://www.oracle.com/technetwork/java/javase/eol-135779.html#Java6-end-public-updates>
- Checks whether you have Microsoft Silverlight 5 installed on a computer before you can install IT Management Suite 7.5. If you have an older version of Microsoft Silverlight, you must upgrade it to the latest version before you can continue with the installation.



Legacy Agent Communication

- The Legacy Agent Communication (LAC) mode lets you control whether the computers that use older versions of Symantec Management Agent can communicate with the upgraded 7.5 Notification Server. This option lets you upgrade the agents in your environment in phases rather than updating all of them immediately after the upgrade of Notification Server.
- You can perform an on-box upgrade from IT Management Suite 7.1 SP2 to 7.5 in your test environment.

Supported Models

- The following operating systems are supported for the installation of Symantec Management Platform and its components:
 - Windows Server 2008 R2 (64-bit) (Standard, Enterprise or Datacenter edition)
 - Windows Server 2008 R2 SP1 (64-bit) (Standard, Enterprise or Datacenter edition)
 - Note: 7.5 is supported on ESX 3.5, 4.0, 5.0 and 5.1 as well as Hyper-V Server 2008 R2 as well as 2012. If utilizing virtualization for the SMP, please consider carefully performance recommendations by Symantec.
- The following versions of Microsoft SQL Server are supported for the Configuration Management Database (CMDB):
 - Microsoft SQL Server 2008 (SP2, SP3)
 - Microsoft SQL Server 2008 R2 (GA w/ CU4, SP1, SP2)
 - Microsoft SQL Server 2012 (GA & SP1)
- To review a full list operating systems supported for installation of the Symantec Management Agent, please review the ITMS Support Matrix <http://www.symantec.com/docs/HOWTO9965>.

General Preparation Items

Agent communication and connectivity options have changed and now have several features and improvements to plan for.

1. Cloud-enabled Management (CEM) lets you manage remote endpoints even when those endpoints are not connected to the corporate network through VPN. This functionality helps to improve inventory, software and patch deployment coverage of your mobile workforce and telecommuting employees. CEM requires fully secure communication between roaming endpoints and Notification Server(s) on the internal network and supports most CMS/ITMS solutions. CEM is supported on Windows computers only. Clients that utilize cloud-enabled management are required to use SSL. SSL communications are required between the SMP, the internet Gateway Server and the CEM endpoint. This does not mean all clients in an Altiris implementation require SSL. While enabling all clients to utilize SSL may be easier, it may also increase processing of SSL based communications. It is possible to configure just your group of CEM clients for SSL while allowing others to communicate over regular http. This requires multiple client policies – at least one for CEM based endpoints requiring communications via https and one for non CEM based endpoints allowing for http communications. To allow both http and https traffic to the SMP server, perform the install in SIM without https/ssl as a required option.
2. When performing an upgrade or re-direction of agents from your 6.x system, it is required to enable legacy agent communication mode. Depending on how you perform the installation within the SIM, you may have to



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enable this functionality once 7.5 is installed. If an upgrade install is performed, legacy communication is enabled by default.

3. Consider deployment locations for site servers' services. With 7.5, it is now possible to install task services, package services and netboot services (NBS/PXE) individually. A general recommendation is to consider concentrating task services while deploying package and NBS services closer to managed endpoints. As an example, NBS services require traffic forwarded between subnets if the NBS services are not on the same network segment as the computer PXE booting.
4. If you wish to perform Mac management, you will need OS X Server tools as well as an OS X Source computer to create NetBoot and NetInstall packages. Once these are created, NBS services are utilized for imaging and installation tasks.

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Hardware Specifications

Symantec Management Platform

SMP Hardware:

Component	Evaluation	100-1,000 endpoints	1,000 – 5,000	5,000 – 10,000	10,000 -20,000
Processors	Two Cores\2.4 Ghz or more	Eight Cores\2.4 Ghz or more	Eight Cores\2.4 Ghz or more	Eight Cores\2.4 Ghz or more	8-12 Cores\2.4 Ghz or more
Disk Speed (in IOPS)	180 – C: OS, SMP	180 – C: OS, SMP	180 – C: OS, SMP	180 – C: OS 130 – D: SMP	180 – C: OS 130 – D:SMP 130 – E:Storage
Disk Capacity	80GB	80GB	200GB	400GB	600GB
RAM	4GB	8GB	16GB	16GB	16GB
Cache	6MB L2 or More				
Network	Dual Gigabit – Load Balanced				
OS	Windows Server 2008 R2 SP1 x64 Standard Edition				

SMP Software:

Component	
OS	2008 R2 (SP1 supported)
IIS	7.0 + 6.0 compatibility
.net	3.5 SP1
IE	Internet Explorer 7.0 SP1 through Internet Explorer 10 (Compatibility Mode)

Service Account:

Domain Account	Local Admin
Altiris Service Account	Local Admin on the Symantec Management Platform. It is also Beneficial for the account to be a Local Admin on site Servers, however that is not a Requirement.

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SQL Hardware:

Processors and RAM	Evaluation	100-1,000 endpoints	1,000 – 5,000	5,000 – 10,000	10,000 -20,000
Processors	Two Cores/2.4Ghz or More	Four Cores/2.4Ghz or More	Eight Cores/2.4Ghz or more	8-16 Cores/2.4Ghz or more	16 Plus Cores/2.4Ghz or more
Disk Speed (IOPS)	180 - C: OS, SMP 200 - D:SQL	180 - C: OS, SMP 200 - D:SQL	180 - C: OS, SQL App 300 - D: SQL DB 300 - E: Logs 200 - F: TempDB	180 - C: OS, SQL App 400 - D: SQL DB 400 - E: Logs 300 - F: TempDB	180 - C: OS, SQL App 600 - D: SQL DB 600 - E: Logs 400 - F: TempDB
RAM (GB)	16 GB	16 GB	16+ GB	24+ GB	32+ GB
Drives	Disk Configuration	IOPS	Write %	Read %	Drive Size
Operating System Drive	RAID 1 (Mirrored)				
CMDB Drive	RAID 10 or RAID 0+1	250	98%	2%	=>5-8 MB Per Client
TempDB Drive	RAID 0 (Striped)	2	49%	51%	=>10% of CMDB
Transaction Log Drive	RAID 10 or RAID 0+1	600	100%	0%	=>10% of CMDB

SQL Software:

Evaluation	100-1,000 endpoints	1,000 – 5,000	5,000 – 10,000	10,000 -20,000
Microsoft SQL Server Express 2005 SP4, 2008 SP2 or higher, and 2012.	Microsoft SQL Server 2005 SP4, 2008 SP2 or higher, or 2012 Standard or Enterprise. On-box SQL is supported; off-box SQL is recommended.	Microsoft SQL Server 2005 SP4, 2008 SP2 or higher, or 2012 Standard or Enterprise. On-box SQL is supported; off-box SQL is recommended.	Microsoft SQL Server 2005 SP4, 2008 SP2 or higher, or 2012 Standard or Enterprise. Symantec recommends that you host SQL server off box	Microsoft SQL Server 2005 SP4, 2008 SP2 or higher, or 2012 Enterprise. Symantec recommends that you host SQL server off box.

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Site Server – Package / Site / PXE

SS Hardware:

Component	10-100 endpoints	100 – 1,000	1,000 – 5,000	5,000 - 7500
Operating System	Desktop / Server OS	Server OS	Server OS	Server OS
Processors	One core	Two cores	Four cores	Four cores
Disk Capacity	100 GB – 250 GB	100 GB – 250 GB	100 GB – 250 GB	100 GB – 250 GB
RAM	4	4	4-6 GB	4-8 GB

SS Software:

Component	
OS	XP x86/x64 SP2 + Vista x86/x64 SP2 + Win 7 x86/x64 2003 R2 SP2 x86/x64 2008 SP1 + 2008 R2 +
.net	3.5 SP1
IIS	IIS 7 with IIS 6 compatibility components
IE	Internet Explorer 7.0 SP1 or newer

Recommended Internet Gateway Hardware

Symantec recommends having at least two Internet gateways to provide failover options, load balancing, and to maintain communication continuity. Each Internet gateway can serve multiple Notification Servers. This configuration is supported even if Notification Servers are organized in a hierarchy structure. Each Internet gateway supports 1- 60,000 endpoints and 3,000 concurrent connections.

Running Internet gateway on a virtual computer is not recommended. Running Internet gateway on virtual hardware can lower its scalability by up to 40%.

Component	Requirement
OS	Windows 2008 R2 SP1 with .NET Framework 3.5.1
Processors	Dual Core CPU
RAM (GB)	8 GB
Disk Capacity	At least 40GB



Migration/Upgrade Paths

Use the Symantec Installation Manager to upgrade to IT Management Suite 7.5. Supported upgrade paths include upgrades from:

- 7.1 SP2
- 7.1 SP2 MP1
- 7.1 SP2 MP1.1

Migration Steps from Altiris 7.1 to 7.5

STEP 1: Prepare for the upgrade

1. Back up the IT Management Suite server using the backup tool of your choice.
2. Back up the CMDB database.
3. If hierarchy and replication are enabled, disable them. Follow the instructions in the knowledgebase article “Disabling hierarchy replications” at www.symantec.com/docs/HOWTO44016.
4. Ensure that replications schedules are disabled and no replications are running.
5. In the Symantec Management Console, on the Settings menu, click Notification Server > Hierarchy, right-click the parent node, and then click Edit.
6. Select the schedule tab, uncheck the schedules, and then click Save. This action disables the complete and differential standard replication schedules to prevent replication rules from running while the upgrade is in progress.
7. In the Symantec Management Console, on the Reports menu, click All Reports, and then in the left pane, go to Reports > Notification Server Management > Server > Replication > Current Replication Activity. If the “Current Replication Activity” report returns any results, you must wait until all replication activity has been completed before you perform the upgrade.
8. Before you begin the upgrade process, ensure that the Distributed Component Object Model (DCOM) service is enabled on the computer. If the DCOM service is disabled, the Windows Management Instrumentation (WMI) connection fails on the server. If a version of pcAnywhere prior to version 7.1 SP2 is currently installed, the latest version will modify the registry disabling DCOM services. Therefore, the WMI connection fails on the server. See www.symantec.com/docs/TECH109673 for more information.
9. Ensure that all application pools that were separated in 7.1 for any solution is reverted back to its default configuration in IIS.
<http://www.iis.net/configreference/system.applicationhost/applicationpools/applicationpooldefaults>
<http://www.iis.net/configreference/system.applicationhost/applicationpools>
10. Click Start > All Programs > Symantec > Diagnostics > Altiris Log Viewer to open the Log Viewer. Check Symantec logs for existing errors or warnings. If any errors or warnings are found, take note and try to resolve them before the upgrade.
11. Click Start > All Programs > Accessories > System Tools > Task Scheduler > Microsoft. Select the task NS package refresh and click Run.
12. Disable all agent and plugin install and upgrade policies for clients.
13. Disable all agent and plugin install and upgrade policies for Site Servers.

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STEP 2: Perform an upgrade to IT Management Suite 7.5

1. Open the Symantec Installation Manager located in the Start menu under the Symantec > Symantec Installation Manager folder.
2. To upgrade installed products to the IT Management Suite 7.5, click Upgrade installed products.
3. On the “Upgrade Installed Products” page, in the “Upgrade to product version” drop-down list, click 7.5, and then click Next.
4. On the “End User License Agreement” page, check “I accept the terms in the license agreements,” and then click Next.
5. On the “Contact Information” page, verify or modify your contact information, and then click Next.
6. On the “Install Readiness Check” page, resolve the requirements that are marked with a red icon, and then click Next.
7. Review the Installation Summary.
8. Click Begin install to start the upgrade.

STEP 3: Ensure a successful upgrade

1. If you have hierarchy implemented in your environment, upgrade all the servers in the hierarchy. The supported method is to upgrade Notification Servers in the hierarchy from the bottom up. This means that you should upgrade the lowest child node first and then work up to the parent. Ensure that each child Notification Server is upgraded to a higher version before its parent. You do not need to break any hierarchy relationships in the process. For more information, see www.symantec.com/docs/HOWTO21657.
2. Turn hierarchy and replication back on.
3. Click Start > All Programs > Symantec > Diagnostics > Altiris Log Viewer to open the Log Viewer. Check Symantec logs for errors or warnings and resolve them.
4. Perform a database defragmentation of the Symantec CMDB database.
5. Update Site Server Agents and plugins.
 - a. Enable SMA install and upgrade policies.
 - b. Enable all Site Server plugin install and upgrade policies.
 - c. Ensure that all site servers are updated before moving to step 6.
6. Update client Agents and plugins.
 - a. Clone Upgrade policies, agent and plugin, and enable them for a test group of machines.
 - b. Verify that test group has upgraded successfully.
 - c. Enable original upgrade policies for agents and plugins.
 - d. Enable agent install and upgrade policies.

Gotchas

- Cloud enabled management requires HTTPS and the use of certificates. These cannot be self signed, they must either be in house using a Certificate Authority or purchased.
- External remote package servers for CEM may require name changes to match the internal DNS names.
- Altiris 7.0 will require a server rebuild to Windows Server 2008 R2 no on box migration is possible. Package data can be migrated with the software replicator tool.
<http://www.symantec.com/business/support/index?page=content&id=TECH166711>
- PXE (SBS) Service names have changed. Jobs to restart these services will need to be recreated.
- ServiceDesk is automatically upgraded to version 7.5. A warning will be displayed in the SIM. For more information, see www.symantec.com/docs/TECH200807.



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- When upgrading to 7.5 any solutions that have not yet been updated to 7.5 (i.e. - Mobile Management), will be uninstalled if the upgrade is allowed to proceed.
- Out of Band Management (OoB) is no longer bundled with ITMS. You should obtain the latest OoB component directly from Intel. This can be done from <http://www.intel.com/go/scs>. Although the OoB provisioning component is no longer bundled, existing RTMS features will continue to function on supported AMT computers. When you upgrade from previous versions of ITMS, the OoBRemover utility performs removal of OoB items from the Notification Server and Site Servers. The Intel SCS/RCS database will remain and provisioned computers will be unaffected by the OoBRemover utility. The Symantec OoB discovery tool can then be used to populate provisioned computers into the CMDB.
- The Deployment share is not re-created with Deployment Site Server Components install. Custom scripts may require changes, or the share will need to be created manually. The share requires Full control by the Altiris application ID and read from the everyone group. Custom scripts that are dependent on 7.1 Deployment folder paths and shares will need to be reviewed and edited to reflect the new 7.5 paths.

- Example:

Path to preboot source in 7.1:

`%AGENTPATH%\Agents\Deployment\Task Handler\bootwiz\oem\DS\winpe2\x86\Base\`

New Path in 7.5:

`%AGENTPATH%\Agents\Deployment\SBS\Bootwiz\{374E1C49-4F58-4F5C-8D51-07A30F0D44AD}\cache\bootwiz\oem\DS\winpe\x86\Base\`

- Consider uninstalling all agent plug-ins on the 7.1 Symantec Management Agent before migrating.

To perform this automatically, make use of the plug-in uninstall policies. Create a filter to track all endpoints which meet the criteria of “no plug-ins” installed and use this as a basis to target with a new policy to re-direct/migrate the agent.

- Consider utilizing DS 6.x in the environment to migrate 7.1 Symantec Management Agents to Symantec Management Agents on 7.5

The 6.x AClient and DAgent can co-exist with the SMA. While this approach requires careful consideration of PXE/NBS services, it allows you to perform a rip-and-replace style migration of the agent. Create a script that will remove the 7.1 Symantec Management Agent and associated components and install a clean 7.5 Symantec Management Agent pointing to the new server.

- If migrating into a hierarchy, map out how you wish for clients to be connected and by which SMP servers the management should be handled. In some environments, it may be as simple as pointing one NS' clients to another SMP server, while you would need to apply additional logic and policies to migrate one NS' clients to multiple SMP servers perhaps based on geography.

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Helpful Links

- Symantec IT Management Suite 7.5 Documentation <http://www.symantec.com/docs/DOC5131>
- Migration Guide 7.0 to 7.5 <http://www.symantec.com/docs/DOC5669>
- Installation and Upgrade Guide <http://www.symantec.com/docs/DOC5697>
- Planning for Implementation Guide <http://www.symantec.com/docs/DOC5670>
- Symantec Connect <http://www.symantec.com/connect/endpoint-management>
- Knowledge Base <http://www.symantec.com/page.jsp?id=support-knowledgebase>
- SQL 2008 Optimizing <http://www.symantec.com/business/support/index?page=content&id=HOWTO8589>
- Software Replicator Tool <http://www.symantec.com/business/support/index?page=content&id=TECH166711>
- Symantec Management Platform Support Matrix <http://www.symantec.com/docs/HOWTO9965>