



ALTIRIS[®]
CONNECTOR 6.1 FOR
MICROSOFT SMS
PRODUCT GUIDE



altiris[®]

Notice

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Other patents pending.

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Altiris Connector for Microsoft SMS

The Altiris Connector for Microsoft SMS allows you to extend the functionality of Altiris solutions to integrate with and leverage Microsoft SMS. You can use the Connector to send Notification Server inventory data to Microsoft SMS, allowing you to use Altiris solutions to extend your SMS infrastructure and more fully manage your enterprise.

From the SMS Administrator (MMC) console, you can extend and manage SMS natively with the following Altiris functionality:

- **Deployment Solution** - Mass system deployment, including cloning, imaging and computer configuration
- **PC Transplant Pro** - PC Personality Migration
- **Mobile Client for SMS** - Mobile and remote user support, including inventory and software distribution
- **Unix Client for SMS** - Unix management from SMS, including inventory and software delivery
- **Web Admin for SMS** - Web administration and comprehensive Web reporting for SMS, including remote control from the Web
- **Asset Mgmt Suite** - Comprehensive asset management, including fixed asset, and lease and contract tracking
- **Inventory Solution** - Enhanced PC inventory, including serial number support, Exchange profile in SMS, and data normalization
- **Helpdesk for SMS** - Web-based help desk and problem resolution support

Quick Links

- [“Installation” on page 2](#)
- [“Using the Altiris Connector for Microsoft SMS” on page 3](#)
- [“Using with Microsoft SMS” on page 10](#)
- [“Troubleshooting” on page 10](#)

Installation

This section tells you how to install and uninstall the Altiris Connector for Microsoft SMS.

Quick Links

- [“Installation Prerequisites for Altiris Connector for Microsoft SMS” on page 2](#)
- [“Installing the Altiris Connector for Microsoft SMS” on page 3](#)
- [“Uninstalling the Altiris Connector for Microsoft SMS” on page 3](#)

Installation Prerequisites for Altiris Connector for Microsoft SMS

- Notification Server 6.0 SP2 or later
- Altiris Connector 6.1 SP1 or later

- Microsoft SMS 2003 SP1 or later, or Microsoft SMS 2.0 SP5 or later

Note: Altiris recommends upgrading to Altiris Software Delivery Solution 6.1 for use with Altiris Connector for Microsoft SMS 6.1.

Installing the Altiris Connector for Microsoft SMS

- 1 Open the **Altiris Console**.
 - Click **Start > Programs > Altiris > Altiris Console**.
- 2 Select the **Getting Started** tab.
- 3 Click **Install Altiris Solutions from the Solution Center** under **Install Solutions**.
- 4 Click **Altiris Connector for Microsoft SMS** on the **Available Solutions** tab.
- 5 Click **Start**.

When the Altiris Connector for Microsoft SMS has been installed, you will be able to see a new task when you click the Altiris Console **Configuration** tab: **Server Settings > Notification Server Infrastructure > SMS Connector**.

Uninstalling the Altiris Connector for Microsoft SMS

- 1 Open **Add/Remove Programs** from the Control Panel.
- 2 Remove **Altiris SMS Connector**.

Note: If Altiris Connector 6.1 has been uninstalled then Altiris Connector for Microsoft SMS should also be uninstalled as it will be redundant.

Using the Altiris Connector for Microsoft SMS

This section tells you how to configure and use the Altiris Connector for Microsoft SMS on your Notification Server.

Quick Links

- [“SMS Forwarding Rules” on page 3](#)
- [“SMS Settings” on page 6](#)
- [“Reports” on page 9](#)
- [“SMS Integration and MIFs” on page 9](#)

SMS Forwarding Rules

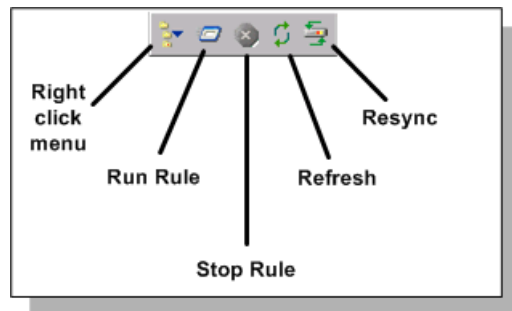
SMS forwarding rules specify how Notification Server interacts with Microsoft SMS. Notification Server can forward inventory data (including full Win32 or Unix inventory, and Data Discovery Records) to your SMS 2.x (including SMS 2003) server. Create SMS forwarding rules in the **SMS Forwarding Rules** folder.

You can choose to either forward Data Discovery Records (DDRs) only or forward DDRs and Inventory Data (MIFs). DDRs can be generated whenever Notification Server receives basic inventory from an Altiris Agent. This then makes the Altiris-enabled computer appear in the SMS database. MIFs are generated whenever Notification Server receives detailed inventory from one of the Inventory Solutions. Notification Server will only send those groups of information that have changed since the last time data for that computer was forwarded to SMS.

Note: MIFs can be sent with only basic inventory being reported by the Altiris Agent. This data is not as useful as when an Inventory Solution generated it, but the rule does not fail if no Inventory Solution has been installed.

IMPORTANT: Data for any computer will not be forwarded if the computer name exceeds the Altiris specified maximum length of 16 characters. Also, if, forwarded inventory data is not appearing on your Microsoft SMS, Altiris recommends restarting the Microsoft SMS.

SMS Forwarding Rule Toolbar



The clickable icons on the SMS Forwarding Rule toolbar are:

- **Right click menu** - Displays the right click menu for the folder.
- **Run rule** - Manually run the rule.
- **Stop rule** - Stop the rule while it is running.
- **Refresh status** - Refresh the status.
- **Resynchronize** - Resynchronizes all the resources and data classes that apply to this rule. This resynchronizes the rule with the Microsoft SMS server, ignoring whether the data has changed or not since the last run.

Forwarding both Data Discovery Records (DDR) and Inventory Data (MIFs)

The following Notification Database tables must contain entries of the Altiris Agent data to be forwarded for Notification Server to forward both Altiris Agent DDRs and Inventory Data to SMS.

- **ItemResource** table.
- **ResourceType** table (The Altiris Agent does not add entries to this because Notification Server sets up the **Computer** resource type automatically).
- An entry in the **AeX AC Identification** table (called **Inv_AeX_AC_Identification**).

Note: Data from each Altiris Agent must be in the following core tables: **ItemResource**, and **ResourceType** (pre-populated). If the Altiris Agent data is not found in these two tables, there is something wrong with that particular Altiris Agent data. If so, Notification Server will log an “Unknown Resource GUID {Resource Guid}” error and will not forward the DDR and Inventory Data from that Altiris Agent to SMS.

Note: If the Altiris Agent has no entry in the **AeX AC Identification** table, no error will be logged, but Notification Server will not forward the DDR and Inventory Data from that Altiris Agent to SMS.

Forwarding Inventory Data

The following Notification Database tables must contain entries of the Altiris Agent data to be forwarded for Notification Server to forward Altiris Agent Inventory Data to SMS.

- **ItemResource** table
- **ResourceUpdateSummary** table

Note: Data from each Altiris Agent must be in the following core tables: **ItemResource**, **ResourceUpdateSummary**. If the Altiris Agent data is not found in these tables, there is something wrong with that particular Altiris Agent data. If so, no error will be logged, but Notification Server will not forward Inventory Data from that Altiris Agent to SMS.

To create a new SMS forwarding rule

- 1 In the Altiris Console, select the **Configuration** tab.
- 2 In the treeview pane, navigate to **Configuration > Server Settings > Notification Server Infrastructure > SMS Connector**.
- 3 Click **SMS Settings** and update your SMS settings (see “[SMS Settings](#)” on page 6).
- 4 Right-click the **SMS Forwarding Rules** folder and select **New > Forwarding Rule**.
- 5 In the content pane, make the changes that you want. See the table below for field descriptions.
- 6 Click **Apply** to save your changes.

After clicking **Apply**, the rule is created and is ready to be run. To run the rule, you either need to manually run it or set a schedule for the rule to follow.

To manually run the rule, click the **Run** icon in the toolbar of the currently highlighted rule. At the top of the rule page is a status box that shows the current state of the rule. This is updated automatically and reflects its running status. There is also a **Resynchronize** icon on the toolbar that resynchronizes the rule with the SMS server, ignoring whether data has changed or not since the last run.

To set a schedule for the rule to follow, make changes to the embedded schedule control within the page to reflect the requirements of the rule. Upon the designated point(s) in time, the rule will automatically run in the background.

When the rule runs, it forwards the selected dataclasses of the selected resources to the configured SMS computer only if it determines that at least one dataclass has been modified since its last run.

It also writes an entry into the SMSForwarding table that can then be reviewed by running various SMS reports.

Page Items

Item	Description
Rule Name	Name of the rule.
Description	Description of the rule.
Collections	Collection or collections to which this rule applies. Only the data for the selected collection or collections will be sent for this rule. The Collection Selector appears when you click the Select a collection link. Select the collection or collections you want and then click OK . This lets you define which resources are forwarded to Microsoft SMS for this rule. This gives you control over what computers are forwarded. For instance, you might forward all Win32 server class computers at 02:00 and all other computers every hour.
Inventory classes	Inventory classes forwarded for the selected collections on this rule. By default, all inventory classes are selected. To edit which inventory classes are selected, click all inventory classes . When the Inventory Classes selector appears, select the inventory classes you want and click OK .

SMS Settings

The **SMS Settings** page lets you configure Notification Server to forward data to Microsoft SMS. It also allows you to receive data from the Microsoft SMS. The following table lists the types of data that can be received from Microsoft SMS:

Data Type	Note
Resources	Resources can only be imported from Microsoft SMS if they are part of a collection. To access received resources on the Resources tab, select Resources in the treeview pane and navigate to the appropriate collection.
Collections	Collections must contain at least one computer-based resource in order to be imported. To access received collections on the Resources tab, select Collections in the treeview pane and navigate to the appropriate collection.
Packages	Packages will always be imported. To access received packages on the Resources tab, select Resources > SMS Software Management .
Programs	Programs will always be imported as part of a package. To access received programs double-click the package it belongs to and click the Programs tab in the Resource Manager dialog.
Advertisements	Advertisements will always be imported. However, if you have an advertisement that points to a collection the collection must contain at least one computer-based resource in order to be imported. To access received advertisements on the Tasks tab, select Resources > SMS Software Management > Software Delivery . Note: Notification Server taking ownership of an advertisement disables the SMS program on the SMS computer. Update the distribution points for the package on the SMS machine to ensure SMS clients do not execute the SMS program. Note: Microsoft SMS will not receive WBEM events for packages that are owned by NS unless you right-click the Advertisement and select SMS Connector > Manage from SMS in the pop-up menu.
Software Inventory	Software Inventory will only be imported if you have Altiris Inventory Solution installed containing all the software data that Microsoft SMS is aware of for synchronized resources. To access received software inventory double-click the required computer and click the Inventory tab in the Resource Manager dialog.

Note: Resources deleted on Microsoft SMS will still reside in the Notification Server database once a delivery synchronization has occurred.

To access this page

- 1 In the **Altiris Console**, select the **Configuration** tab.
- 2 In the treeview pane, select **Server Settings > Notification Server Infrastructure > SMS Connector > SMS Settings**.

General Tab Settings

Item	Description
Server Settings	
Client lookup interval	At this interval, the Connector attempts to retrieve the client lookup file from the SMS computer. This file contains entries that designate resources that SMS requires a full resynchronization for. A full resynchronization can be requested when needed; for example, due to inventory corruption.
Last cached lookup time	The last time the client lookup file (see Client lookup interval) was copied locally to the Notification Server.

General Tab Settings

Item	Description
SMS Server	SMS Site Server name.
SMS Site Code	SMS Site Code.
Inventory Location	<ul style="list-style-type: none"> Upload files to the CAP Share <p>Configure the SMS Client Access Point as the location on the SMS server where the DDR and MIF files will be placed.</p> <p>You must enter an appropriate SMS directory so that the DDR and MIF files can be correctly processed. You can modify the SMS Cap value to point to another share on the SMS server, if required.</p> <p>Example: If the SMS Cap value is \\SMS-Server2\CAP_ccc and you want to point to a hidden share (called 'c') on the SMS server, you would change this value to \\SMS-Server2\c\$\CAP_ccc.</p> <ul style="list-style-type: none"> Upload files to the site server share <p>Configure the site server share as the location on the SMS server where the DDR and MIF files will be placed.</p> <p>Example: If the site server share value is \\SMS-Server2\SMS_ccc and you want to point to a hidden share (called 'c') on the SMS server, you would change this value to \\SMS-Server2\c\$\SMS_ccc.</p> <ul style="list-style-type: none"> Upload files to a custom location <p>Configure a custom location on the SMS server where the DDR and MIF files will be placed. Enter the appropriate location in the text box provided.</p>
Test	Attempts to determine connectivity to the upload location. If it can't, an error is displayed.

Administrative Credentials

Use application credentials	Use the credentials that you entered on the Application Identity page in the Altiris Console. These credentials must work for the target SMS computer.
Use these credentials	Use other credentials than what you entered on the Application Identity page in the Altiris Console. These credentials must work for the target SMS computer.

General Settings

Use no history MIFs	By default, the Connector sends MIFs containing history, which makes them larger. History MIFs send all inventory classes for a given resource. If you want to send MIFs without history, select Use no history MIFs . If you choose to send No History MIFs, Notification Server performs a delta before forwarding the data. For more information, see “SMS Integration and MIFs” on page 9 .
Performance Monitoring	When enabled, various counters are integrated into the performance system of the Notification Server computer. You will be able to see these counters when you run Start > Programs > Administrative Tools > Performance . A new performance object is created called “Altiris SMS Connector”. This object has seven defined counters that chart various values in real time.

Tools Tab Settings

Item	Description
Integration with SMS	<p>Associate custom actions with computers listed in the SMS Administration Console.</p> <p>Select Integration with SMS to enable the Add icon which allows you to add tools to the Tools tab.</p> <p>Click the Add icon to configure a tool. When the Configure Tools dialog appears, update the following fields:</p> <ul style="list-style-type: none"> • Name - Enter the name of the tool. • Description - Enter a description for the tool. • Action - Select Custom or Predefined. If you want to enter values that are substituted from SMS at runtime, select Custom Actions and enter a value. If you want to use a predefined action, select Predefined and select the action from the drop-down menu. • Apply - Click Apply to save the changes and add this tool to the Tools tab. <p>After an SMS integration tool has been added to the Tools tab, the tool can be disabled by clearing the box next to the tool name (it is enabled by default). You can also click on the tool name to edit the tool. If you want to delete the tool, click the Delete icon and click OK.</p> <p>Once you Apply the tools, they become visible immediately from the SMS Console. To view these tools within the SMS Administrator Console, navigate to a particular Collection node in the left pane that contains one or more resources. Right-click on a resource and you will see a new entry at the top of the context menu, "SMS Tools". Expand this entry to view the tools that have been integrated. Select one of these tools to run that tool using the currently selected resource as a reference.</p>

Synchronization Tab Settings

Item	Description
Enable Software Delivery Synchronization	<p>Enable Microsoft SMS to forward inventory data to your Notification Server.</p> <p>Note: This check box will only become active if you have successfully applied all settings and credentials on the General tab.</p>

Database Credentials

Use application credentials	Use Notification Server credentials to connect to Microsoft SMS.
Use specified credentials	<p>Enter a specific Username and Password in the appropriate text boxes. These credentials will be used to connect to the Microsoft SMS SQL database.</p> <p>Note: The account specified will connect to the database using SQL authentication.</p>
Refresh	Automatically populate the Database drop down list. Notification Server will best guess the most appropriate database from the list but you may wish to select a different option if required.

Synchronization Schedule

Synchronize Now	Run the last saved configuration immediately.
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Synchronization Tab Settings

Item	Description
Everything at once	<p>Synchronize all objects at once. Next, select one of the following options in the Schedule drop down list;</p> <ul style="list-style-type: none"> • Business Hours • Half-Hour • Hourly • Monthly • Package Refresh • Weekly • Custom Schedule <p>If you selected Custom Schedule then click the activated hyperlink to open the Schedule Editor. Next, in the Schedule Editor dialog enter a name in the text box and configure your schedule as required.</p>
Individual Schedules	<p>Synchronize different categories at different times. Select one or more of the following categories and configure the appropriate schedule as shown above;</p> <ul style="list-style-type: none"> • Resource/Collections • Packages/Programs/Advertisements • Software Delivery Events • Software Inventory (will only appear active if Inventory Solution is installed)

Synchronization Options

Collections currently in use by software delivery	Only synchronize collections on Microsoft SMS currently assigned to SMS advertisements.
All collections	Synchronize all collections on Microsoft SMS.
Apply	Save all changes.
Cancel	Cancel all changes.

IMPORTANT: The Notification Server account used to communicate with Microsoft SMS must have WBEM access on the Microsoft SMS. Example: members of an SMSAdmins group on the Notification Server or members of the Notification Server Administrators group must have WBEM access on the Microsoft SMS.

Reports

Notification Server contains several Microsoft SMS related reports that let you see whether or not Altiris Agent Inventory Data is getting forwarded to Microsoft SMS. These reports are found by clicking the **Reports** tab in the Altiris Console, and then navigating to **Reports > Notification Server Infrastructure > SMS Connector**.

SMS Integration and MIFs

By default, Notification Server sends history MIFs to Microsoft SMS every time it forwards inventory data. This sends the selected inventory classes for a given resource. There is no attempt, on the Notification Server side, to send a delta of the data. When Microsoft SMS receives the history MIF, it performs its own delta if needed. The SMS delta is a per-row delta.

If Notification Server sends No History MIFs, Notification Server performs a delta before forwarding. The Notification Server delta is a per-row delta also. This means that for a given resource and a given inventory class, only the specific entries that have changed will be sent (the entire class will be sent). When Microsoft SMS receives the No History MIF, it does not calculate any deltas before forwarding through the Microsoft SMS hierarchy. In order to use No History MIFs, Notification Server must be maintaining history on its inventory classes. This is enabled on the **Resource Data History** page in the **Configuration** tab view.

Example:

The entire inventory for a given resource results in a MIF file of 800 KB. Also, the inventory for that resource was updated by the Notification Server inventory agent and there were only 4 differences – 2 rows had changed in 2 different classes. When configured to send history MIFs, the Notification Server will still send the 800 KB file to the SMS CAP. Microsoft SMS will calculate a delta, realize only 4 rows have changed, and forward a smaller file (approximately 2 KB) up the Microsoft SMS hierarchy. If, however, the Notification Server is configured to send No History MIFs, it will calculate its own delta for the resource. It will only send the rows that have changed since the last send, not the entire inventory class. This file would be approximately 2 KB in size. Microsoft SMS would get this 2 KB file and forward it around the Microsoft SMS hierarchy because it is a No History MIF and it will not calculate its own delta.

Using No History MIFs reduces the Notification Server-to-Microsoft SMS network load. This option generates smaller MIF files to be sent to Microsoft SMS, but requires Notification Server to be tracking inventory history. The difference in load depends upon which classes are changing and how many rows are changing.

Using with Microsoft SMS

The Connector places three tools in Microsoft SMS: Altiris Helpdesk (when Altiris Helpdesk is installed on the Notification Server), Altiris Notification Server, and Altiris Resource Manager. These tools are accessed by right-clicking on a computer in a collection and selecting SMS Tools.

When using the Altiris Helpdesk and Altiris Notification Server tools, the default configuration is to launch these tools using the URL that contains the computer name that you selected. However, if the computer name that you selected does not have Notification Server installed on it, the tool will not launch. For these two tools to launch, you must select a Notification Server computer, then right-click and select SMS Tools > *tool*.

There is a collection in Notification Server called **All Notification Servers**. You can use this collection to build a collection in Microsoft SMS that only shows Notification Servers. Then you can open this collection and launch an Altiris tool from any computer in this collection.

Troubleshooting

This section lists common troubleshooting problems and gives probable resolutions.

Quick Links

- [“What Is Causing the Slow Loading of Software Audit Agent MIF Files?” on page 10](#)
- [“Altiris Tools Not Launching Properly from Microsoft SMS” on page 11](#)

What Is Causing the Slow Loading of Software Audit Agent MIF Files?

If you are forwarding data to an SMS server and are experiencing issues with data loading, here are some possible causes.

- Insufficient space in the SMS database.
Make sure you have sufficient space in the SMS database. We recommend at least 30 to 40% available data space. Also remember that looking in SQL enterprise manager at the available space is not an exact measure unless you have just run the correct dbcc procedure.
- SMS services are hung.
To make sure none of the SMS services are hung, perform a site reset if you haven't done so recently.
- There are SQL Server issues.

In some cases, Software Audit agent MIF files will load slowly due mainly to SQL Server issues. Try the following:

- See the Microsoft knowledgebase article entitled: “SMS: Inventory MIFs Processes Slowly” (Q225533). This article deals with resolving problems in a common scenario.
- Update the indexes in the SMS database. See the Microsoft knowledgebase article entitled: “BUG: DOC: Update Statistics Example to Update All Tables Wrong” (Q156025).
- For general SMS database setup and maintenance, which sometimes turn out to be the entire cause of the problem, see this white paper on the MS TechNet CD titled “MS Systems Management Server Database Maintenance.” (This article does not have a Q number but searching on the exact title given will get you right there). This is a great resource on SMS SQL topics.
- Slow processing might also be caused by a slow network card that was failing on either the SMS or SQL Server.

Altiris Tools Not Launching Properly from Microsoft SMS

When your Microsoft SMS server and your Notification Server are on different domains or you use different accounts to manage them, the Altiris tools that you launch from SMS Tools will be launched in your current user’s context. This may not give you the rights you need in Notification Server. If this is the case, you need to change your logon user authentication in Internet Explorer.

To change your logon user authentication

- 1 In Internet Explorer, select **Tools > Internet Options**.
- 2 Select the **Security** tab.
- 3 Select **Local intranet** and click the **Custom Level** button.
- 4 Scroll down to the bottom of the list and select **Prompt for user name and password** under **User Authentication > Logon**.
- 5 Click OK twice.
- 6 Close Internet Explorer.

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