

Managing File Transfers with webMethods ActiveTransfer Agent

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This document applies to webMethods ActiveTransfer Version 10.5 and to all subsequent releases.

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Table of Contents

About this Guide.....	5
Document Conventions.....	5
Online Information and Support.....	6
Data Protection.....	7
Understanding ActiveTransfer Agent.....	9
What is ActiveTransfer Agent?.....	10
How ActiveTransfer Agent Works.....	10
Setup Summary for ActiveTransfer Agent.....	11
Installing ActiveTransfer Agent.....	15
Overview.....	16
ActiveTransfer Agent License File.....	16
Prerequisites for Installing ActiveTransfer Agent.....	16
Preparing ActiveTransfer Server for ActiveTransfer Agent Installation.....	17
Using Command Central to Install ActiveTransfer Agent.....	18
Configuring ActiveTransfer Server Details for the Agent.....	18
Installing ActiveTransfer Agent Directly On-Premise.....	20
Configuring the ActiveTransfer Server on the ActiveTransfer Agent Host.....	20
Managing Agents, Groups, and Events.....	23
Overview.....	24
Managing ActiveTransfer Agents.....	24
Synchronizing ActiveTransfer Agent Installations from Command Central.....	24
Registering ActiveTransfer Agents Directly Installed On Premise.....	25
Editing Agent Details.....	25
Defining Filters for Agents.....	26
ActiveTransfer Agent Statuses in ActiveTransfer Server.....	27
ActiveTransfer Agent Availability in ActiveTransfer Server.....	28
Creating Agent Groups.....	28
Creating Agent Events.....	29
Agent Event Statuses in ActiveTransfer Server.....	34
Monitoring ActiveTransfer Agents.....	35
Overview.....	36
Defining Filters for Agent Event Logs.....	36
Viewing Agent Event Logs.....	37
Defining Filters for Agent Activity Logs.....	37
Viewing Agent Activity Log Details.....	39
Configuration Parameters and Variables.....	41
Server Configuration Parameters.....	42

mft.agent.user.....	42
mft.agent.event.log.activityTypes.....	42
mft.commandcentral.....	42
Agent Configuration Parameters.....	43
mft.agent.client.assets.refresh.interval.....	43
mft.agent.client.auth.retry.interval.....	43
mft.agent.client.auth.retry.count.....	43
Server Variables.....	44
ActiveTransfer Agent Variables.....	44
File Reference Variables.....	44
Date/Time Variables.....	45

About this Guide

Managing File Transfers with webMethods ActiveTransfer Agent explains how to install, configure, and manage file transfers for webMethods ActiveTransfer Agent.

Managing File Transfers with webMethods ActiveTransfer Agent assumes you are familiar with ActiveTransfer Server as described in *Managing File Transfers with webMethods ActiveTransfer*.

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Narrowfont	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the symbol.
[]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [] symbols.

Convention	Description
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

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1 Understanding ActiveTransfer Agent

■ What is ActiveTransfer Agent?	10
■ How ActiveTransfer Agent Works	10
■ Setup Summary for ActiveTransfer Agent	11

What is ActiveTransfer Agent?

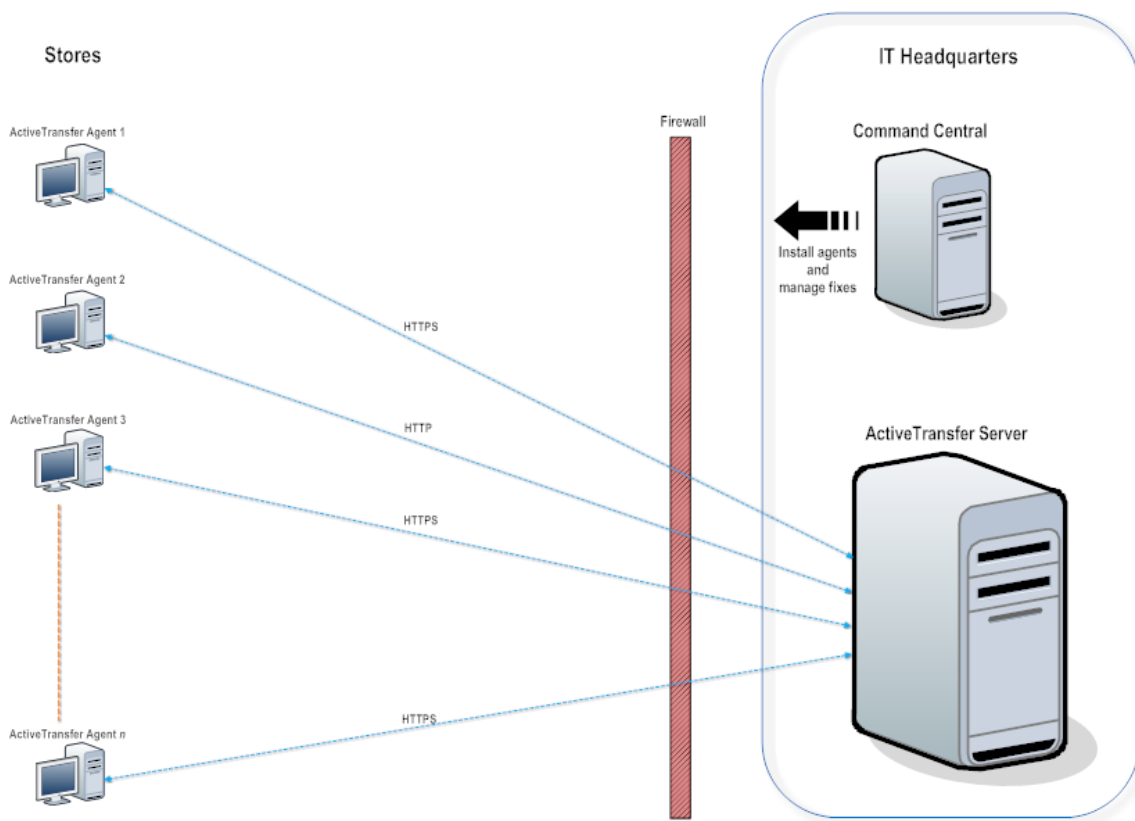
ActiveTransfer Agent is a light-weight application that helps you automate file transfers from multiple systems throughout your enterprise. These systems can be located remotely or on premise. Operating as the central management hub, an ActiveTransfer Server instance can be used to configure scheduled file transfer events, push the event configurations to the agents, and monitor file transfers that the agents execute.

Typical business scenarios in which ActiveTransfer Agent can be deployed are:

- A retail giant that wants to transfer files that include pricing data, coupon information, point-of-sale data, and store inventory from a central system with its various retail outlets.
- Large banking organizations that want to share files between the bank's headquarters and its branches.
- An organization that wants to perform file transfers within its internal systems.

How ActiveTransfer Agent Works

The following diagram illustrates a typical setup for ActiveTransfer Agent and also how ActiveTransfer Server communicates with ActiveTransfer Agents:



Setup Summary for ActiveTransfer Agent

The process of setting up ActiveTransfer Agent involves the high-level steps outlined here. For detailed information, see the specific sections in this document.

- Step 1** Install ActiveTransfer Server, if not already installed. This is a prerequisite, without which ActiveTransfer Agent cannot function.
- Step 2** Prepare ActiveTransfer Server for ActiveTransfer Agent by completing these tasks:
- Add a Hypertext Transfer Protocol (HTTP) or an HTTP Secure (HTTPS) port that the agent instance will be able to access through the firewall.
 - Add a user profile that the agent will use to connect to ActiveTransfer Server.
 - Add the user name of the new user profile for the agent in the `properties.cnf` file located in the `Integration Server_directory\instances\instance_name\packages\WmMFT\config` folder.

- Register the Software AG Command Central instance in the CommandCentral.cnf properties file if you want to use Command Central to install ActiveTransfer Agent.

For more information on these tasks, see [“Preparing ActiveTransfer Server for ActiveTransfer Agent Installation”](#) on page 17.

Step 3 Install ActiveTransfer Agents by using one these methods:

- Command Central
- Direct installation with Software AG Installer or an image of ActiveTransfer Agent installation

For more information, see [“Installing ActiveTransfer Agent”](#) on page 15.

Step 4 Depending on how you have installed ActiveTransfer Agent, follow these steps:

1. If you have installed the agents through Command Central:
 - a. Configure ActiveTransfer Server details for each agent.
For more information, see [“Configuring ActiveTransfer Server Details for the Agent”](#) on page 18.
 - b. Verify if the Command Central details are available in the CommandCentral.cnf file on the ActiveTransfer Server instance.
For more information, see [“Preparing ActiveTransfer Server for ActiveTransfer Agent Installation”](#) on page 17.
2. If you have used the direct installation method, register ActiveTransfer Server details in the `Installation_directory\profiles\MAG\configuration\com.softwareag.platform.config.propsloader` file on the agent's host machine.
For more information, see [“Configuring the ActiveTransfer Server on the ActiveTransfer Agent Host”](#) on page 20.

Step 5 Register the installed agents on the ActiveTransfer Server instance in My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**.

For more information, see [“Synchronizing ActiveTransfer Agent Installations from Command Central”](#) on page 24 and [“Registering ActiveTransfer Agents Directly Installed On Premise”](#) on page 25.

Step 6 Create agent groups on the ActiveTransfer Server instance in My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agent Groups**.

For more information, see [“Creating Agent Groups” on page 28](#).

Step 7 Configure agent events in My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agent Events**, and associate them with agent events.

For more information, see [“Creating Agent Events” on page 29](#).

Your ActiveTransfer Agent is now ready to receive and send files.

2 Installing ActiveTransfer Agent

■ Overview	16
■ Prerequisites for Installing ActiveTransfer Agent	16
■ Preparing ActiveTransfer Server for ActiveTransfer Agent Installation	17
■ Using Command Central to Install ActiveTransfer Agent	18
■ Installing ActiveTransfer Agent Directly On-Premise	20

Overview

ActiveTransfer Agent supports all the operating systems that Integration Server supports. For more information on the operating systems supported, see *System Requirements for Software AG Products*.

Use one of these options to install ActiveTransfer agents:

- A single agent instance at a time with Command Central on a remote machine from your enterprise's headquarters.
- A single agent instance directly on premise either by using Software AG Installer or an image of the ActiveTransfer Agent installation.

ActiveTransfer Agent License File

You require a valid license file to install ActiveTransfer Agent. While installing ActiveTransfer Agent, you are prompted to specify the location of the license file. Therefore, ensure that the license file is in a location that is accessible during the installation. By default, the license file is stored at *Installation_directory* \profiles\MAG \configuration\agent directory.

You will receive the license in the form of an XML file (for example, MAG105.xml). You can view the product information in the license file:

```
<ProductCode>MAG</ProductCode>
...
<ProductName>ActiveTransfer Agent</ProductName>
<ProductVersion>10.5</ProductVersion>
```

Prerequisites for Installing ActiveTransfer Agent

Successful installation of ActiveTransfer Agent assumes that the following requirements are met:

- Ensure that the machines that you plan to host the agents comply with the hardware and software requirements described in *System Requirements for Software AG Products* and *Installing Software AG Products*.
- You have a valid license for ActiveTransfer Agent. For information on the license file, see [“ActiveTransfer Agent License File” on page 16](#).
- ActiveTransfer Server is installed.

Preparing ActiveTransfer Server for ActiveTransfer Agent Installation

Follow these preparatory steps on ActiveTransfer Server before starting ActiveTransfer Agent installation.

For details on how to perform the ActiveTransfer Server setup tasks, see the "Configuring webMethods ActiveTransfer" chapter in *Managing File Transfers with webMethods ActiveTransfer*.

To prepare ActiveTransfer Server for ActiveTransfer Agent installation

1. Add an HTTP or HTTPS listener for the agent to use when connecting to ActiveTransfer Server. Software AG recommends HTTPS for more secure communication.

Note: Ensure that the agent is able use the port to communicate with ActiveTransfer Server through any firewall that you might have in place.

2. Add a user profile that the agent can use, and make note of the user name and password.

The agent instance connects to ActiveTransfer Server by using these user credentials. You can add more than one user profile, if required.

Note: Multiple agent instances can use the same user credentials to communicate with a single ActiveTransfer Server instance.

3. Add the user name of the new user profile in the in the `properties.cnf` file.
 - a. Navigate to the `Integration Server_directory \instances\instance_name \packages \WmMFT\config` directory, and open the `properties.cnf` file.
 - b. In the parameter `mft.agent.user`, add the user name of the new user profile for the agent.

You can add multiple user names with comma as the separator.

For details on `mft.agent.user`, see "[Configuration Parameters and Variables](#)" on page 41.

4. If you plan to use Command Central to install the agent, follow these steps:
 - a. Navigate to `Integration Server_directory \instances\instance_name \packages \WmMFT\config` directory, and open the `CommandCentral.cnf` file.
 - b. Register the Command Central instance by configuring the parameters:
 - `mft.server.commandCentral.host`
 - `mft.server.commandCentral.port`

- `mft.server.commandCentral.port.secure`
- `mft.server.commandCentral.username`
- `mft.server.commandCentral.password`

For details on these parameters, see “[Configuration Parameters and Variables](#)” on page 41.

This configuration enables ActiveTransfer Server to synchronize the ActiveTransfer Agent installations with Command Central.

Using Command Central to Install ActiveTransfer Agent

You can install a single ActiveTransfer Agent instance at a time from a remote location by using Command Central. For information on how to use Command Central to install a product and for information about Platform Manager, see *Software AG Command Central Help*.

Configuring ActiveTransfer Server Details for the Agent

Prerequisites: Ensure that you have the details of the agent port and agent user profile created in ActiveTransfer Server.

After installing ActiveTransfer Agent through Command Central, you must register the ActiveTransfer Server instance that will be used to manage the agent. You can configure agents to communicate with ActiveTransfer Server either through basic authentication or certificate-based authentication.

To register the ActiveTransfer Server instance for the agent instance in Command Central

1. In Command Central: **Home > ALL > Installations > Instances > *instance_name***.
2. Click **Configuration > ATServerDetail**.
3. Click **Edit**, and add the following details of the ActiveTransfer Server instance that will be used to manage the agent:

Field	Description
Host	Type the ActiveTransfer Server host name or IP address.
Port	Type the HTTP(S) port number created in ActiveTransfer Server for the agent. For details, see “ Preparing ActiveTransfer Server for ActiveTransfer Agent Installation ” on page 17.

Field	Description
Use SSL	Select this option if Secure Sockets Layer (SSL) protocol must be used when ActiveTransfer Server communicates with the agent instance.

Basic Authentication

Username	Type the user name for the agent user created in ActiveTransfer Server. For details, see “Preparing ActiveTransfer Server for ActiveTransfer Agent Installation” on page 17.
Password	Type the password for the agent user in ActiveTransfer Server.

Certificate Based Authentication

Configured Certificate	This field is populated with the keystore if it is preconfigured. By default, this field is empty.
Upload New certificate	Click Browse... to select a different keystore file for SSL connections. This keystore file overrides the default file selected in the Configured Certificate field.
Certificate Password	Type a password for the specified keystore file.

Command Central pushes the keystore files to the agent's *Installation_directory* \profiles \MAG\configuration\agent directory and configurations such as, hosts, ports, passwords, and certificates to the *Installation_directory* \profiles\MAG\configuration \com.softwareag.platform.config.propsloader\com.softwareag.mag.common.properties file.

Next Steps:

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**, synchronize agent installations with ActiveTransfer Server.
2. On the same Agents page, enable the agent instances.
3. Configure agent groups and agent events.

Installing ActiveTransfer Agent Directly On-Premise

If you do not want to use Command Central to install ActiveTransfer Agent, you can directly install an agent instance on any machine at the required location. To do so, you require Software AG Installer or an image of the ActiveTransfer Agent installation.

When installing the ActiveTransfer Agent instance with Software AG Installer, select the **ActiveTransfer Agent *product version*** node in the Installer, and follow the installation wizard. For information on Software AG Installer, see *Using Software AG Installer*.

Configuring the ActiveTransfer Server on the ActiveTransfer Agent Host

Prerequisites: Ensure that you have the details of the agent port and agent user profile created in ActiveTransfer Server.

After installing ActiveTransfer Agent on a machine on premise, you must configure details of the ActiveTransfer Server instance that will be used to manage the agent.

To configure the ActiveTransfer Server details on the agent host machine

1. On the machine hosting the ActiveTransfer Agent instance, navigate to the `Installation_directory\profiles\MAG\configuration\com.softwareag.platform.config.propsloader` directory, and open the `com.softwareag.mag.common.properties` file.
2. Register ActiveTransfer Server by adding the following details:

```
at.server.host=<ActiveTransfer Server hostname>
at.server.user=<ActiveTransfer Agent user name>
@secure.at.server.password=<ActiveTransfer Agent user password>
at.server.port=<The HTTP or HTTPS port configured to access ActiveTransfer Server>
at.server.useSSL=<true or false>
at.server.cert.path=<Path to access ActiveTransfer Agent client certificate>
@secure.at.server.cert.password=<Password for ActiveTransfer Agent client certificate>
```

The password is replaced with a security token by ActiveTransfer Agent after viewing it.

Note: The configuration `profiles\MAG\configuration\agent\` directory also contains `<node id>system-generated ID for the agent node</node id >`. Do not change this value, but make note of it so that it is available to you when adding the agent to ActiveTransfer Server.

Next Steps:

1. Add the agent in My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**.
2. On the same Agents page, enable the agent instances.

3. Configure agent groups and agent events.

3 Managing Agents, Groups, and Events

- Overview 24
- Managing ActiveTransfer Agents 24
- Creating Agent Groups 28
- Creating Agent Events 29

Overview

After installing ActiveTransfer Agents, you must perform the following configuration tasks in **Administration > Integration > Managed File Transfer > Agent Management**:

- In **Agents**:
 - Fetch agent installations from Command Central to ActiveTransfer Server as described in “[Synchronizing ActiveTransfer Agent Installations from Command Central](#)” on page 24.
 - Add the agents that were directly installed on premise as described in “[Registering ActiveTransfer Agents Directly Installed On Premise](#)” on page 25.
- In **Agents**, enable the agents as described in “[Editing Agent Details](#)” on page 25.
- In **Agents Groups**, create agent groups as described in “[Creating Agent Groups](#)” on page 28.
- In **Agents Events**, create agent events and associate them with agent groups or all agents as described in “[Creating Agent Events](#)” on page 29.

The agent group and agent event configurations are *assets* that ActiveTransfer Server pushes to the relevant agents. These configurations, along with the agent instances registered in either ActiveTransfer Server or Command Central, control ActiveTransfer Server-ActiveTransfer Agent authentication, identification, communication, and file transfers.

Managing ActiveTransfer Agents

The Agents page allows you to synchronize agent instances installed through Command Central, register agent instances that were installed directly on premise in ActiveTransfer Server, enable agents, view, and edit agent configuration details.

Synchronizing ActiveTransfer Agent Installations from Command Central

Prerequisites: Ensure that you have registered the Command Central instance in the `CommandCentral.cnf` file available in the `Integration Server_directory\instances\instance_name\packages\WmMFT\config` directory.

On the Agents page, you must register the agents installed through Command Central. To do this, you must synchronize ActiveTransfer Server with Command Central.

To synchronize Command Central agent installations with ActiveTransfer Server

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**.
2. Click **Synchronize** at the top of the agent list.

The agents appear in the agents list on the page, and have *Command Central* as the **Source**.

Next Steps:


- Enable the agents as described in [“Editing Agent Details” on page 25](#).

Registering ActiveTransfer Agents Directly Installed On Premise

Prerequisites: Ensure that you have the agent node ID available in the ATServerDetail.xml file on the agent host. For information about the node ID see [“Configuring the ActiveTransfer Server on the ActiveTransfer Agent Host” on page 20](#).

If you have installed an ActiveTransfer Agent instance directly on premise, you must add the agent instance to ActiveTransfer Server in the Agent page.

To register an ActiveTransfer Agent instance installed on premise in ActiveTransfer Server

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**.
2. Click  above the agent list, and specify the agent details:

Field	Description
Agent Name	Type the name of the agent instance.
Agent ID	Type the 24-character node ID for the agent generated during installation.
Description	Type a suitable description for the agent.

The agent appears in the agents list on the page. The **Status** of the agent is *Disabled*, and the **Source** is *ActiveTransfer*.


Next Steps:

- Enable the agent as described in [“Editing Agent Details” on page 25](#).

Editing Agent Details

Use this procedure to edit the agent details and as well as enable individual agents.

To edit the details of an ActiveTransfer Agent instance

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**.
2. In the agent list, click  in the agent row.
3. In the Edit Agent dialog box, modify any of the following agent details:

Field	Description
Description	Description for the agent.
Host/SPM URL	The host name, IP address, or URL of the agent host machine.
Status	Select Enable or Disable . <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> <p>Tip: You can also enable or disable multiple agents by selecting agents in the list, and then clicking Enable or Disable above the agent list.</p> </div>
Agent ID	Type the 24-character node ID for the agent generated during installation. You can modify the agent ID only for agents directly installed on premise. This field does not appear in the dialog box for agents installed through Command Central.
Group	The agent group of which the agent is a member.


4. Click **OK**.

Defining Filters for Agents

You can narrow the agents displayed in the agent list by using filters to specific agent details (such as name, alias, host, and so on), group membership, enabled status, and creation source.

To define filters for ActiveTransfer Agents

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agents**.
2. Expand the **Filters** section, and define a filter for the agents you want to view based on the following criteria:

<u>Filter</u>	<u>Do this...</u>
Agent Details	<p>Type the agent name, alias, host name or IP, SPM URL, or agent (node) ID.</p> <p>You do not need to specify the full details. For example, the full agent name or host name. Search is also possible on partial information. For example if you type the <i>br1</i>, will list all agents that include "br1" in their name, alias, host name, URL, or agent ID.</p>
Group	<p>Retain the default option, All or <i>All Groups</i>. You can also search for and select a specific group:</p> <ol style="list-style-type: none"> Click . Select The Following Group, and type the group name. In the box, select a group from the list that appears or type the name. Click OK.
Status	<p>All is the default option. You can also select one of the other statuses: <i>Enabled</i>, <i>Disabled</i>, <i>Installed</i>, or <i>Not Available</i>.</p> <p>For more information on the agent statuses, see "ActiveTransfer Agent Statuses in ActiveTransfer Server" on page 27.</p>
Source	<p>All is the default option. You can also select ActiveTransfer or Command Central.</p>

3. Click **Apply**.

The Agents page displays a list of the agents that match the filters.

ActiveTransfer Agent Statuses in ActiveTransfer Server



The agents listed on the Agents page can have the following statuses.

<u>Agent Status</u>	<u>Description</u>
<i>Enabled</i>	The agent is enabled for file transfers.
<i>Disabled</i>	The agent is disabled for file transfers. This is the default status for any agent created in ActiveTransfer Server.

Agent Status	Description
<i>Installed</i>	The agent was installed through Command Central, but has not been enabled for file transfers in ActiveTransfer Server. If you delete this agent from ActiveTransfer Server, it does not affect the agent installation in Command Central.
<i>Not Available</i>	The agent was installed through Command Central, but a recent synchronization with ActiveTransfer Server indicates that the agent has been uninstalled. You can delete this agent from ActiveTransfer Server, if required.

ActiveTransfer Agent Availability in ActiveTransfer Server

The agents listed on the Agents page can have the following availability statuses:

Agent Status	Description
	The agent is installed through Command Central. This icon implies that the agent is active and is available for file transfers.
	The agent is installed through Command Central. This icon implies that the agent is inactive and is not available for file transfers.
<i>Not Available</i>	The agent is either installed through Command Central or created in ActiveTransfer Server. This status implies that the agent data is unknown.

Creating Agent Groups

Use this procedure to group ActiveTransfer Agents. On the Agent Groups page, you can organize agents into logical groupings so that you can efficiently and easily associate them with agent events. For example, you might want to group them by time zones or regions.

A simple filter **Group** at the top of the Agent Groups page, allows you to narrow the agent groups listed by using the full or partial group name.

Tip: ActiveTransfer does not support event execution for group members who are not in the time zone configured for the event. To work around this issue,

create a group with members who belong to the same time zone. The time zone of an agent is determined by its host machine.

To create an agent group

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agent Groups**.
2. Click **+** above the agent group list.
3. In the Add Agent Group dialog box, type the group name and description in the respective boxes.
4. Click **Add**.
The new group appears in the agent group list.
5. Click on the agent row to select it.
6. Scroll down to **Group Members** and click **+**.
7. In the Add Agents dialog box, either search for the agent or select the agents to add from the available list.
8. Click **Add**, and then click **Save** to save the agent group.

The agent group appears in the agent group list on the page. The **Status** of the agent is *Disabled*, and the **Source** is *ActiveTransfer*.

Note: When you delete an agent group, it is automatically removed from any agent event associated with the agent group.

Creating Agent Events

Use this procedure to create events, configure events, and associate events either with all agents available ActiveTransfer Server or with specific agent groups. All agent events are scheduled.


In an agent event, the primary action on files is to copy from a source location to a destination location, with a few other additional actions to perform on the file.

You can create agent events in order to transfer files between:

- ActiveTransfer Server and ActiveTransfer Agents.
- ActiveTransfer Server and third-party, remote File Transfer Protocol (FTP) or SSH File Transfer Protocol (SFTP) servers that are accessible to the ActiveTransfer Agent.
- ActiveTransfer Agents and third-party, remote FTP or SFTP servers.

A simple filter **Event Name** at the top of the Agent Events page, allows you to narrow the agent events listed by using the full or partial event name.

To create an agent event

1. In My webMethods: **Administration > Integration > Managed File Transfer > Agent Management > Agent Events**.
2. Click  above the event list.
3. In the Add Agent Event dialog box, select how you want to create the event:
 - If you want to create a new event that is not based on an existing, similar one, select **A new event**.
 - If you want to create a new event that is similar to one that already exists:
 - i. Select **A copy of an existing event**.
 - ii. In the box below, select the event on which you want to base the new one.
4. Type the event name and description in the respective boxes.

The event appears in the event list.
5. Click on the event row to select it.
6. Select **Activate**.
7. In the **Criteria** section, select one of the following options:
 - **All agents**, to associate the event with all agents available in ActiveTransfer Server.
 - **All agents in the following groups**, to select agent groups.

Note: If the time zone of an agent in the group does not match the time zone configured for the event, the event execution fails for the agent.
8. If you have selected **All agents in the following groups**, then select the agent groups to associate with the event in the Add Agent Groups dialog box:
 - a. Search for an agent group and select it, or select an agent group from the available list.
 - b. Click **Select Group**.

This button is enabled only when you select a group. You can continue to add more users to the selected group list.
 - c. Click **Add**.
9. In the **Execute Actions** list, follow these steps:
 - a. Specify when and how often to execute the event actions. For detailed information about this field, see the "Managing Events" chapter in *Managing File Transfers with webMethods ActiveTransfer*.
 - b. In **Time Zone**, select the time zone on which to base the event execution.

10. Under the **Transfer Definition** section, in **Copy Files From**, specify the source file details and the action to perform on the source file:

Note: When you enter file path locations, be sure to end the path with a slash character ("/") to identify the location as a directory and not a file.

- Select **Agent** if the file source is on the agent host or on the agent host network. In the box below:
 - For a location on the agent machine, specify the file location. For example, `FILE://C:/documents/bills/`.
 - For a file on a shared location on the agent network, use the syntax `FILE:///host/SharedFolder/`. Ensure that the operating system user running the ActiveTransfer Server instance has full access to the shared location on the agent network.
- Select **ActiveTransfer Server** if the file source is an ActiveTransfer Server VFS, and follow these steps:
 - i. Type the virtual folder name in the text box or use the browse option.
 - ii. If you use the browse button, in the Select virtual folder look up window, select the virtual folder by highlighting the element and click **Select**.
 - iii. If you want to point to a subfolder in the virtual folder, append the URL in the text box with the details of the subfolder.

Note: The virtual folder that you select should be the ActiveTransfer Server instance on which you are configuring the event.

- Select **Remote Server** if file URL is on a remote, third-party FTP or SFTP server, and follow these steps:
 - i. In the box below, browse to or enter the location in the format:
`protocol://host:port/DestinationFolder/`.
 - ii. In the **User Name** and **Password** boxes, type the user credentials to access the remote file.
11. Under the **Transfer Definition** section, in **Copy Files To**, specify the destination details for the file transfer. The destination can be an agent, an ActiveTransfer VFS, or a remote, third-party location.
 12. In the **Advanced Settings** section, choose from the following options:

- **Source File Settings**

Field	Description
File name filter	The find action is performed based on the search filter specified for file types. For example, you can restrict users from uploading files with <code>.exe</code> extension.
Max items to find	The maximum number of files for display when the find action is performed. The default is 0, where all the items that match the search criteria are displayed.
Exclude files that are being updated	To exclude the find action for files that are in-process.

■ Additional Actions

Field	Description
Rename Files at Source	<p>To rename files at source before copying them to the destination.</p> <p>The rename argument must include appropriate server variables. For example, <code>{stem}_{ext}</code> or <code>{stem}_{HH}{mm}{ss}.txt</code>. For more information about server variables, see “Server Variables” on page 44.</p>
Rename Files at Destination	To verify the data integrity of the file before moving the file to the destination.
Delete Original Files	To delete the original files at source after they are copied. In effect, this option is the move action, where the file is removed from the source after it is copied to the destination.
Verify File Checksum	To verify the data integrity of the file before moving the file to the destination.
	<p>Note: This option is enabled only when you select ActiveTransfer Server for either the Copy Files From or Copy Files To option under the Transfer Definition section.</p>
Zip Files	To zip the files at source, and then select one of the ZIP options:
	<p>Note: The ZIP operation only includes files in the source folder. It ignores subfolders.</p>

Field	Description
	<ul style="list-style-type: none"> ■ Select Create single Zip file to ZIP all files into a single ZIP file. ■ Select Create separate Zip file to ZIP each individual file separately. <p>The ZIP file is not unzipped at the destination.</p>

- **Error Handling**

Select the error handling mechanism in case agent event execution fails.

Field	Description
Fail if no files are found	To enable the agent event execution to fail when no relevant files are found.
Send an email on failure	<p>To allow users to send an email to and from the email address configured with the following details:</p> <ul style="list-style-type: none"> ■ From. Email address of the sender. ■ To. Email address of the receiver. ■ CC. Email addresses of other recipients. ■ Subject. Brief description of the error. ■ Body. Detailed description of the error. <p>This action is applicable for agent event execution failures only when:</p> <ul style="list-style-type: none"> ■ A valid SMTP server is configured in ActiveTransfer Server. ■ A connection is established between the agent and ActiveTransfer Server. ■ This action is executed on the server-side. <p>Note: This action is executed on the server-side.</p>
Execute IS Service on failure	<p>To allow users to browse, select, and trigger the Integration Server service that is configured by the administrator. The user can specify appropriate server variables. For example, <code>{stem}_{ext}</code> or <code>{stem}_{HH}{mm}{ss}.txt</code>.</p> <p>Note: This option is enabled only when a connection is established between the agent and ActiveTransfer Server and is executed on the server-side.</p>

- **Logging**

Field	Description
Log events only if files are found	Select this option to log only those events that find files and result in file transfers or failures. By default, all events that either find files or not and result in file transfers or failures are logged.

- *

13. Click **Save**.

ActiveTransfer Server pushes the events to the relevant agents, and the agent events are immediately active. You can monitor the status of all event executions in **Monitoring > Integration > Managed File Transfer > Agent Event Log**.

Agent Event Statuses in ActiveTransfer Server

The agent events listed on the Agent Events page can have the following statuses.

Event Status	Description
<i>Success</i>	Event execution was successful.
<i>Failure</i>	Event execution failed.
<i>Not Started</i>	Event execution not triggered.
<i>In Queue</i>	Event is triggered, but waiting in the execution queue.
<i>In Progress</i>	Event execution is in progress.
<i>Done with Error</i>	Event execution completed with errors.

4 Monitoring ActiveTransfer Agents

■ Overview	36
■ Defining Filters for Agent Event Logs	36
■ Viewing Agent Event Logs	37
■ Defining Filters for Agent Activity Logs	37
■ Viewing Agent Activity Log Details	39

Overview

ActiveTransfer Agent activities can range from download of configurations from ActiveTransfer Server, event execution, and file transfers by the agents, to agent authentication when connecting to ActiveTransfer Server. All agent activities are logged:

- On the agent host machine, in *Installation_directory* \profiles\MAG\log\sag.osgi.log.
- On ActiveTransfer Server, in the configured ActiveTransfer log file. ActiveTransfer Server log also fetches the agent logs and writes them to the ActiveTransfer log.

The agent activity logs from the ActiveTransfer Server log are available in the **My webMethods** user interface in the **Agent Event Log** or **Agent Activity Log**.

Defining Filters for Agent Event Logs

Agent event executions are available in the **Agent Event Log**. Similar to event filters, you can use filters to narrow the search results for agent event logs to a specific time period, event name, or event execution status.

To define an agent event log filter

1. In My webMethods: **Monitoring > Integration > Managed File Transfer > Agent Event Log**.
2. Expand the **Filters** section, and define a filter for the agent events you want to view based on the following criteria:
 - In **Period of Time**:
 - i. Select from the available time periods in the list or specify a custom date range, with a time range in the HH:MM:SS (12-hour clock) format.
 - ii. Click **OK**.
 - In **Status**, select the event execution status (Any, Success, Done with Error, Cancelled, In Progress, or Not Started).
 - In **Event Name**, choose one of these options:
 - Select **All Events**.
 - Select **The Following Event**, and type the whole event name or a few letters of the event name in the box below.
 - If you want to search for a specific event name with **The Following Event**, select **Match whole word**.
 - ii. Click **OK**.
3. Click **Apply**.

The agent events that match the filters appear in the event list. The event details available in the list are the event name, status, execution start and end times, and the event log ID.

Viewing Agent Event Logs

After filtering on the event list on the Agent Event Log page, you can then view the agent execution log for each event.

To view an agent event log

1. In My webMethods: **Monitoring > Integration > Managed File Transfer > Agent Event Log**.
2. In the **Filters** section, apply the relevant filters, and click **Apply**.
3. In the event list, click the event name.

The Agent Activity Log page appears, with a list of all the agents that executed the event.

4. Select the agent row for which you want to view the event execution details, and then click **Activities** tab.

The complete event execution log for the agent appears.

Defining Filters for Agent Activity Logs

ActiveTransfer Agent activity logs include the following:

- Logs for the download of assets (agent configuration details, agent events, agent group details) from ActiveTransfer Server
- Event execution logs
- Agent authentication logs when connecting to ActiveTransfer Server

To narrow the search results for the agent activity logs, you can use the activity type and status to filter on the agent activity logs, and also add additional criteria, such as a specific time period, agent name, agent event, and file name.

To define an agent activity log filter

1. In My webMethods: **Monitoring > Integration > Managed File Transfer > Agent Activity Log**.
2. Expand the **Filters** section, and define a filter for the agent activity you want to view based on the following criteria:
 - In **Period of Time**:
 - i. Select from the available time periods in the list or specify a custom date range, with a time range in the HH:MM:SS (12-hour clock) format.

- ii. Click **OK**.
 - In **Activity Type**, select the event execution status (Any, Asset Download, Event Execution, or Authentication).
 - In **Status**, select the agent activity status (Any, Success, Failure, Not Started, In Queue, In Progress, or Done with Error).
 - In **Agent Name**, choose one of these options:
 - Select **All Agents**.
 - Select **The Following Agent**, and type the whole agent name or a few letters of the agent name in the box below.
 - ii. Click **OK**.
 - In **Event Name**, choose one of these options:
 - Select **All Events**.
 - Select **The Following Event**, and type the whole event name or a few letters of the event name in the box below.
 - If you want to search for a specific event name with **The Following Event**, select **Match whole word**.
 - ii. Click **OK**.
 - In **File Name**, type a few letters of the file name or the full file name, and select **Match whole word** to search for the exact file name you provided.
3. Click **Apply**.

The agent activities that match the filters appear in the agent activities list. In addition to the agent name, event name, activity time, activity start and end times, and activity status, the list also includes the following details for agent activities:

Agent Activity Detail	Description
Agent URL	The host name of the agent or the SPM URL on the agent host.
Trigger Source	The only trigger source for the agent activity. Currently, only <i>System</i> .
Node Alias	The alias for the agent instance.
Node ID	The agent ID generated during installation.

Agent Activity Detail	Description
Scheduled Time	The scheduled time for the event if the agent event status is <i>Not Started</i> .

Viewing Agent Activity Log Details

After filtering on the agent activity list on the Agent Activity Log page, you can view basic and detailed agent activity details in the **Details** and **Activities** tabs, respectively.

To view an agent activity log

1. In My webMethods: **Monitoring > Integration > Managed File Transfer > Agent Activity Log**.
2. In the **Filters** section, apply the relevant filters, and click **Apply**.
3. In the activities list, click the agent activity row and then one of these tabs to view the activity details:
 - **Details**. Displays basic information of the agent activity: agent name, activity type, activity start time, and status.
 - **Activities**. Displays the complete execution log for the agent activity.

A Configuration Parameters and Variables

■ Server Configuration Parameters	42
■ Agent Configuration Parameters	43
■ Server Variables	44

Server Configuration Parameters

This section contains a description of the parameters you must specify in the ActiveTransfer Server property files, `properties.cnf` or `CommandCentral.cnf`. These files are located in the *Integration Server_directory*\instances*instance_name*\packages\WmMFT\config directory. To update this file, you should first shut down ActiveTransfer Server and, if you are using a Gateway, ActiveTransfer Gateway and then edit the file using a text editor. After you make the changes, restart the server and Gateway.

You can also use the `wm.mft.admin:manageProperties` service to view and change the values of some of these parameters. For details, see *webMethods ActiveTransfer Built-In Services Reference*.

mft.agent.user

Specifies the user name that the ActiveTransfer Agent instance uses to connect to ActiveTransfer Server. To list multiple user names, use comma as the separator.

When an agent attempts to connect to ActiveTransfer Server, ActiveTransfer Server allows the connection only if the agent's user name is registered in this parameter. If the user name is not listed, ActiveTransfer Server rejects the connection and records the failed connection as invalid.

For example: `mft.agent.user=FS_agent1,FS_agent2,FS_agent6`

mft.agent.event.log.activityTypes

Specifies the types of agent event activities for which logs are created. This property also controls the level of logging that happens. The default value is `mft.agent.event.log.activityTypes=asset,auth,event`.

Where, all the agent asset, authorization, event activities are logged. Modify the default parameter value as required.

mft.commandcentral

This section describes the parameters available in the `CommandCentral.cnf` file. Use these parameters to register the Command Central instance used to install ActiveTransfer Agent instances. ActiveTransfer Server uses the information in these parameters to connect to Command Central in order to synchronize agent installation details.

mft.server.commandCentral.host

Specifies the host name or IP address of the machine that hosts the Command Central instance used to install ActiveTransfer Agent instances.

mft.server.commandCentral.port

Specifies the port for the Command Central instance used to install ActiveTransfer Agent instances.

mft.server.commandCentral.port.secure

Specifies if communication between the Command Central instance and ActiveTransfer Server must use SSL protocol.

mft.server.commandCentral.username

Specifies the user name to use when ActiveTransfer Server connects with Command Central.

mft.server.commandCentral.password

Specifies the password to use when ActiveTransfer Server connects with Command Central.

Agent Configuration Parameters

This section contains a description of the parameters you must specify in the ActiveTransfer Agent property file, `com.softwareag.mag.common.properties`. This file is located in the *Installation_directory* \profiles\MAG\configuration \com.softwareag.platform.config.propsloader directory. ActiveTransfer Agent uses the values updated for these parameters during runtime.

mft.agent.client.assets.refresh.interval

Specifies the time interval at which an agent interacts with an ActiveTransfer Server instance to check for updates about the agent event assets. The default value is 300 seconds. You can decrease the value to view recent updates or increase the value to avoid unnecessary checks when there are very few agent event updates to the server. Modify the default parameter value as required.

mft.agent.client.auth.retry.interval

Specifies the interval at which an agent checks for client authentication with an ActiveTransfer Server instance after every failed attempt. The default value is 60 seconds. Modify the default parameter value as required.

mft.agent.client.auth.retry.count

Specifies the number of retries allowed after failed attempts by an agent for client authentication checks with an ActiveTransfer Server instance. The default value is 100 seconds. Modify the default parameter value as required. However, the agent stops attempting to perform the checks once it reaches this limit.

Server Variables

You can use these server variables in agent event configurations.

Note: The variables are case sensitive.

ActiveTransfer Agent Variables

These agent-specific variables are supported as path variables and in rename actions.

Variable	Description
{agent_event_name}	The name of the agent event.
{agent_host}	The host name of the agent executing the event action.
{agent_id}	The node ID of the agent executing the event action.
{agent_name}	The agent name executing the event action.
{agent_transfer_id}	The unique file transaction ID for the agent file transaction.
{error}	The reason for a file transfer failure of an event. This server variable is applicable only for agent events and only for error handling scenarios.

File Reference Variables

These variables are only supported in rename actions for agents.

Variable	Description
{ext}	Last part of the file name, including the period.
{group}	Applicable only to third-party servers. Retrieves information from the UNIX

Variable	Description
	ownership class <code>group</code> , <i>os-depend-fact</i> in MLST RFC 3659.
<code>{modified}</code>	Applicable only to third-party servers. Date when the file was last modified in UNIX epoch time (milliseconds).
<code>{name}</code>	Name of the file.
<code>{owner}</code>	Applicable only to third-party servers. Retrieves information from the UNIX ownership class <code>owner</code> , <i>os-depend-fact</i> in MLST RFC 3659.
<code>{permissions}</code>	Applicable only to third-party servers. Permission for the file on the FTP server to which ActiveTransfer is connected. The format is <code>-rw-r--r--</code> . For MLST, this format is maintained only when <code>unix.mode</code> is available. If <code>unix.mode</code> is not available, the format is <code>r,w,a,d,f</code> , and is retrieved from <code>perm</code> .
<code>{size}</code>	Size of the file.
<code>{stem}</code>	First part of the file name, before the period.
<code>{url}</code>	Actual URL that points to the file.

Date/Time Variables

These variables are only supported in rename actions for agents. You can precede any of the date/time variables with the following symbols:

- Preceding a variable with a dot (.) results in replacing the variable with the current value. For example, `{.dd}` results in the current day, and `{.hh}` results in the current hour.
- Preceding a variable with an underscore (_) results in replacing the variable with the file's ending transfer time. For example, if a file was downloaded on Monday, and if the event triggered a "file rename" action with a value of `Report_{EEE}` provided for the new file name, ActiveTransfer Server would rename the downloaded file to `Report_Mon`.

Variable	Description
{MM}	Month (for example, 06 to represent June).
{dd}	Day (for example, 05 to represent the fifth day of the month).
{YY} or {YYYY}	Year, represented in two digits (for example, 13 to represent 2013) or four digits (for example, 2013).
{HH}	Hours, using the 24-hour time format (for example, 14 to represent the hour of 2 o'clock PM).
{hh}	Hours, using the 12-hour clock format (for example, 02 to represent the hour of 2 o'clock PM).
{mm}	Minutes.
{aa}	AM or PM.
{ss}	Seconds.
{S}	Milliseconds.
{EEE}	Weekday abbreviation (for example, Mon to represent Monday).
