### Enterprise Vault.cloud™ Folder Sync 1.11 Administration Guide



#### Enterprise Vault.cloud: Folder Sync 1.11 Administration Guide

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### Contents

Chapter 1	Folder Sync Overview	7
	About this guide About Folder Sync 1.11 Revision history Prerequisite knowledge	8 8
Chapter 2	Requirements for Folder Sync	11
	About the Exchange Server versions that Folder Sync works with Folder Sync application instances required Folder Sync Microsoft SQL Server requirements Requirements for the server on which Folder Sync is installed	11 12
Chapter 3	Steps to set up Folder Sync	14
	Steps to set up Folder Sync	14
Chapter 4	Preparing the Folder Sync service account	15
	Preparing the Folder Sync service account Setting the permissions for the Folder Sync service account on Exchange 2003	
	Setting the permissions for the Folder Sync service account on Exchange 2007 Setting the permissions for the Folder Sync service account on	
	Exchange 2010 and Exchange 2013	18
Chapter 5	Configuring sufficient concurrent MAPI sessions for Folder Sync	20
	Configuring sufficient concurrent MAPI sessions for Folder Sync	
	Exchange 2003 and 2007 Removing MAPI session throttling for Folder Sync on Exchange 2010	
	Removing MAPI session throttling for Folder Sync on Exchange 2013	21
	· · · · · · · · · · · · · · · · · · ·	22

Chapter 6	Installing or upgrading Folder Sync	23
	About installing or upgrading the Folder Sync application Installing the Folder Sync application Upgrading the Folder Sync application	23
Chapter 7	Configuring Folder Sync	27
	Configuring the Folder Sync application Configuring the initial setup of Folder Sync Configuring the Item Synch task's message service settings Restarting the Item Synch task	28 28
Chapter 8	Running and scheduling Folder Sync synchronizations	33
	About performing and scheduling Folder Sync synchronizations Performing a "Run Now" Folder Sync synchronization About the Reset Mailbox(es) option Configuring scheduled Folder Sync synchronizations About Folder Sync scheduling and choosing a scheduling strategy	34 35
	Creating scheduled Folder Sync synchronization events Selecting the mailboxes to target for scheduled Folder Sync synchronizations Changing the iterative restart period for scheduled Folder Sync	38 40
	synchronization events	
Chapter 9	Monitoring and managing Folder Sync	44
	About monitoring and managing Folder Sync Checking the Folder Sync synchronization status from the ArchiveTools	44
	Management Console	
	About the Folder Sync job list	
	Viewing the Folder Sync job list	
	About the Folder Sync Mailbox Report Viewing the Folder Sync Mailbox Report	
	Disabling or enabling Folder Sync from the Administration Console	51
		51
	Viewing the Folder Sync synchronization status of an account from the Administration Console	52

About the Folder Sync	Troubleshooting Folder Sync	53
	About the Folder Sync event log errors and log files	53
	Folder Sync fails to work for some mailboxes	54
	Troubleshooting occasional timeouts of the Folder Sync service	55

## Folder Sync Overview

This chapter includes the following topics:

- About this guide
- About Folder Sync 1.11
- Revision history
- Prerequisite knowledge

#### About this guide

This guide describes version 1.11 of the Veritas Enterprise Vault.cloud<sup>™</sup> Folder Sync application, which provides Exchange on-premises mailbox folder synchronization.

**Note:** This version has now been superseded by Folder Sync 1.13, which supports both Office 365 and Exchange on-premises folder synchronization. New users should use Folder Sync 1.13, and existing users should upgrade to Folder Sync 1.13. For more information about Folder Sync 1.13, see the following article on our support site: http://www.veritas.com/docs/000127562.

This guide describes how to:

- Install and configure or upgrade to Folder Sync version 1.11.
- Use Folder Sync version 1.11 to perform and manage the replication of Exchange on-premises mailbox folder structures to Personal.cloud.
- Monitor the results of the mailbox folder synchronizations.
- Troubleshoot issues with Folder Sync version 1.11.

#### About Folder Sync 1.11

Folder Sync version 1.11 provides an add-on service for Enterprise Vault.cloud that synchronizes users' Exchange on-premises mailbox folder structures to Personal.cloud.

A Folder Sync synchronization does the following for each targeted mailbox, if the mailbox has a provisioned account in your company's Enterprise Vault.cloud archive:

- It synchronizes the mailbox's folder structure to Personal.cloud.
- It moves the archived items in Personal.cloud to their synchronized folders.

If users create, rename, or move mailbox folders, or move items between folders, Folder Sync updates the folder structure and the item locations during subsequent synchronizations.

Following the application installation, the Folder Sync configuration wizard takes you through the steps to create the SQL Server database and install Folder Sync's ArchiveTools Management Console. You can then use the Management Console to configure the connections with Enterprise Vault.cloud and Exchange.

The ArchiveTools Management Console then lets you run, schedule, and manage the Item Synch task that performs the mailbox folder synchronizations. A synchronization can be started manually at any time. You can also set up regular scheduled synchronizations. The scheduled synchronizations can be set to target automatically any new mailboxes that get added between synchronizations.

**Note:** Personal.cloud supports up to 6,000 folders. When users access Personal.cloud, they may experience a significant loading time if their mailbox has a large number of folders. For more than 4,000 folders, a user may experience a loading time of up to 5 minutes.

Folder Sync is purchasable on a per-user basis. Contact your Enterprise Vault.cloud support representative for more information about purchasing the service.

#### **Revision history**

Table 1-1 lists the changes to Folder Sync in recent releases.

Folder Sync version	Release date	Changes
Folder Sync 1.11	February 2016	This version of Folder Sync introduces the following enhancements:
(V1.93.5735 binaries)		<ul> <li>A new Auto Select New Targets configuration option. If the option is selected, scheduled Folder Sync synchronizations target any new mailboxes that are added between synchronizations. See "Configuring the Item Synch task's message service settings" on page 28.</li> <li>Support for SQL Server 2012 as the Folder Sync database.</li> <li>Support for Windows Server 2012 R2 as the Folder Sync host server.</li> <li>This version also includes a number of bug fixes, including the following:</li> <li>If the default language of the Folder Sync service account's SQL login was set to a language other than British English that supports an international date format, synchronizations could fail to run.</li> <li>Folder Sync threw an exception when you created a new scheduled synchronization, if you typed a value in the minute field.</li> <li>Folder Sync did not synchronize a folder if the folder name consisted of a tab character only, or a tab and a space.</li> <li>The Job Type column of the job list always displayed "Messages", regardless of the job type. Also the Processed column did not include processed folders, only messages.</li> <li>The Is equal to filter option for the Started and Stopped columns of the job list did not work.</li> </ul>
Folder Sync 1.10.1	March 2015	Included fixes for the following issues:
(V1.92.5493 binaries)		<ul> <li>During an upgrade, database index creation could time out and result in an "incompatible database schema" error.</li> </ul>
		<ul> <li>Under some circumstances, transactions that failed due to a connection error were not retried when the connection was restored. This issue could lead to folder display issues in Personal.cloud.</li> <li>If the default language of the Folder Sync service account's SQL login was set to British English, Folder Sync failed to start new jobs after the 12th day of each month.</li> </ul>
Folder Sync 1.10	March 2014	Contained the following enhancements:
(V1.92.5155 binaries)		<ul> <li>Support for Exchange 2013</li> <li>Support for Exchange 2013 DAG (Database Availability Groups)</li> <li>Support for Active Directory resource forests</li> <li>Support for child domain synchronization</li> <li>A new Workers configuration option lets you set the number of threads to use for concurrent mailbox synchronizations.</li> </ul>

 Table 1-1
 Folder Sync revision history

### Prerequisite knowledge

Folder Sync should be installed, configured, and maintained by a qualified Microsoft Exchange Server administrator.

### Requirements for Folder Sync

This chapter includes the following topics:

- About the Exchange Server versions that Folder Sync works with
- Folder Sync application instances required
- Folder Sync Microsoft SQL Server requirements
- Requirements for the server on which Folder Sync is installed

# About the Exchange Server versions that Folder Sync works with

For information on the versions of Microsoft Exchange Server that Folder Sync works with, see the Enterprise Vault.cloud Compatibility List, at http://www.veritas.com/docs/000016792.

If you use Exchange database availability groups (DAG), the mailboxes that Folder Sync synchronizes must be a part of a mailbox store that is DAG enabled.

#### Folder Sync application instances required

One instance of the Folder Sync application must be installed in each Active Directory domain that contains Exchange Servers that you want to process, excluding related child domains.

#### Folder Sync Microsoft SQL Server requirements

Each instance of the Folder Sync application requires its own SQL Server database on a separate SQL Server instance. When you configure Folder Sync you must specify the SQL Server instance that Folder Sync is to use.

For details of the versions of SQL Server that Folder Sync works with, see the Enterprise Vault.cloud Compatibility List, at http://www.veritas.com/docs/000016792.

**Note:** We recommend that SQL Server is located on a standalone system, and not on the computer on which the Folder Sync application is installed.

# Requirements for the server on which Folder Sync is installed

For optimal performance, we recommend that you install the Folder Sync application on a standalone server or standalone virtual machine. We recommend that you do not install Folder Sync on an Active Directory domain controller due to the effect on performance.

For optimal performance, we recommend that you install the Folder Sync application on a standalone server or virtual machine. We recommend that you do not install Folder Sync on an Active Directory domain controller, SQL Server computer, or Exchange server, due to the effect on performance.

If you use ArchiveTools CloudLink, you can install Folder Sync on the CloudLink server, if that server meets all of the requirements of Folder Sync. If you install CloudLink and Folder Sync on the same server, then before you run either application, log in to the associated application's service account. For example, always log in to the Folder Sync service account before you run the Folder Sync application.

The computer on which you install Folder Sync must be on the same primary domain as the Exchange Servers with which it communicates.

Table 2-1 specifies the other requirements for a server on which you install Folder Sync.

**Note:** Some of these requirements are new for recent versions of Folder Sync. Before you upgrade Folder Sync, make sure that your server meets the latest requirements.

ltem	Requirement
Operating system	One of the following:
	<ul> <li>Microsoft Windows Server 2012 R2</li> <li>Microsoft Windows Server 2008 R2 Standard Edition 32-bit and 64-bit</li> <li>Microsoft Windows Server 2003 Enterprise Edition SP2, 32-bit and 64-bit</li> </ul>
	Note: Microsoft Windows Server 2008 R2 or 2012 R2 are recommended.
	<b>Note:</b> For Windows Server 2008 R2 and 2012 R2 you must either turn off User Account Control (UAC), or install and run Folder Sync as an administrator.
CPU and RAM	Multi-core x86 or x64 processor with at least 4 GB RAM. 8 GB or more is recommended.
Network connection	Fast Internet connection.
Microsoft Outlook	Outlook 2007 or 2010 (32-bit only), with the latest Microsoft updates applied.
Microsoft .NET Framework	Microsoft .NET Framework 3.5 SP1, or 4.0, or 4.5.1
Microsoft Visual C++	Microsoft Visual C++ 2010 Redistributable Package (x86).
	This package installs runtime components of C Runtime (CRT), Standard C++, ATL, MFC, OpenMP and MSDIA libraries.
	You can obtain this package from the following Microsoft location:
	http://www.microsoft.com/en-us/download/details.aspx?id=5555
Microsoft Exchange	One of the following must be installed:
Server Management Tools	<ul> <li>Exchange Server 2007 SP3 Management Tools         See How to Install the Exchange 2007 Management Tools at         http://technet.microsoft.com/en-us/library/bb232090(v=exchg.80).aspx.         For 32-bit download information, see Microsoft Exchange Server 2007 Management         Tools (32-Bit) at http://www.microsoft.com/en-us/download/details.aspx?id=11876         Exchange Server 2010 Management Tools.         See Install the Exchange 2010 Management Tools at         http://technet.microsoft.com/en-us/library/bb232090%28v=EXCHG.141%29.aspx.         Exchange Server 2013 Management Tools         See Install the Exchange 2013 Management Tools at         http://technet.microsoft.com/en-us/library/bb232090%28v=EXCHG.141%29.aspx.     </li> </ul>

 Table 2-1
 Folder Sync server requirements

### Steps to set up Folder Sync

This chapter includes the following topics:

Steps to set up Folder Sync

#### Steps to set up Folder Sync

Table 3-1 lists the steps that are required to set up Folder Sync.

Action	Reference
Set up the Folder Sync service account, and set the required permissions for the account on the Exchange servers.	See "Preparing the Folder Sync service account" on page 15.
Configure sufficient MAPI settings on the Exchange servers.	See "Configuring sufficient concurrent MAPI sessions for Folder Sync" on page 20.
Install or upgrade the Folder Sync application.	See "About installing or upgrading the Folder Sync application" on page 23.
Configure the Folder Sync application for its first use. <b>Note:</b> This step is not required if you	See "Configuring the Folder Sync application" on page 27.
	Set up the Folder Sync service account, and set the required permissions for the account on the Exchange servers. Configure sufficient MAPI settings on the Exchange servers. Install or upgrade the Folder Sync application. Configure the Folder Sync application for its first use.

#### Table 3-1 Principal steps to set up Folder Sync

# Preparing the Folder Sync service account

This chapter includes the following topics:

- Preparing the Folder Sync service account
- Setting the permissions for the Folder Sync service account on Exchange 2003
- Setting the permissions for the Folder Sync service account on Exchange 2007
- Setting the permissions for the Folder Sync service account on Exchange 2010 and Exchange 2013

#### Preparing the Folder Sync service account

During the installation of Folder Sync you must specify a service account for Folder Sync to run under. Before you install Folder Sync you must prepare a Windows account with the required attributes. You must also give the Folder Sync service account the required permissions on each Exchange server that Folder Sync has to process. The Folder Sync service account must be able to synchronize mail items from all of the mailboxes within the Exchange environment.

#### To prepare the Folder Sync service account

- Create a Windows Active Directory domain user account with a non-expiring password.
- 2 Enable an Exchange mailbox for the account.
- **3** Make the account a member of the local Administrators group on the server on which Folder Sync is to be installed.

- 4 Create a login for the account in SQL Server, and give the SQL Server login the sysadmin server role. This server role is required to enable Folder Sync to deploy its database.
- 5 Use the account to log on to the server on which you want to install Folder Sync. Then create an Outlook profile for the account. Use the default profile name, which is Outlook.
- **6** Give the Folder Sync service account the required permissions on each Exchange server that Folder Sync has to process.

Follow the procedure that applies to your version of Exchange Server.

Exchange Server 2003	See "Setting the permissions for the Folder Sync service account on Exchange 2003" on page 16.
Exchange Server 2007	See "Setting the permissions for the Folder Sync service account on Exchange 2007" on page 17.
Exchange Server 2010 and 2013	See "Setting the permissions for the Folder Sync service account on Exchange 2010 and Exchange 2013" on page 18.

# Setting the permissions for the Folder Sync service account on Exchange 2003

You must set the required permissions for the Folder Sync service account on the properties of each Exchange 2003 server that Folder Sync is to process.

To set the permissions for the Folder Sync service account on Exchange 2003

- 1 On the Exchange server, click **Start** and select **All Programs > Microsoft Exchange > System Manager**.
- 2 In the left pane of Exchange System Manager, expand the Administrative Groups node, and then expand the Servers node.
- **3** Under the **Servers** node, right-click the Exchange Server name and on the shortcut menu select **Properties**.

4 On the **Properties** dialog, select the **Security** tab.

**Note:** By default, Exchange System Manager does not display the Security tab when you view the properties of an organizational object. To view the Security tab you must edit the registry.

For details, see the following Microsoft knowledge base article: http://support.microsoft.com/kb/264733.

- 5 If the Folder Sync service account is not listed in the **Group or user names** area, click **Add**. Then on the **Select Users, Computers, or Groups** window, select the Folder Sync service account, and click **OK**.
- 6 On the **Security** tab, in the **Group or user names** area, select the Folder Sync service account.
- 7 In the **Permissions for** *account* area, make sure that the following permissions are allowed for the account:
  - Read
  - Execute
  - Read permissions
  - List content
  - Read properties
  - View information store status

Typically none of these permissions is denied by default, but the selected user account may have inherited some deny permissions from an Active Directory Group membership.

Clear the check box for any permissions that are not required.

8 Click OK to save your changes.

# Setting the permissions for the Folder Sync service account on Exchange 2007

You must set the required permissions for the Folder Sync service account on each Exchange 2007 server that Folder Sync is to process.

You can use the Exchange Management Shell to set the required properties.

#### To set the permissions for the Folder Sync service account on Exchange 2007

- 1 Log in using administrator credentials.
- 2 Click Start > All Programs > Microsoft Exchange Server 2007 > Exchange Management Shell.
- **3** Enter the following command to create an Exchange View-Only Administrator role:

```
Add-ExchangeAdministrator -Role ViewOnlyAdmin -Identity domain \
"Service Account"
```

4 Enter the following commands to give the service account the required permissions to synchronize mail items from all of the mailboxes within your Exchange environment:

```
Get-MailboxDatabase | Add-ADPermission -AcccessRights GenericRead
-User "Service Account"
Get-MailboxDatabase | Add-ADPermission -AccessRights ExtendedRight
-User "Service Account"
```

If you add more mailboxes at a later date, re-run the commands in step 4. Alternatively you can run the following commands to set the permissions for all of the mailboxes that are associated with a named mailbox database.

```
Add-ADPermission -Identity "mailbox database name" -AccessRights
GenericRead -User "Service Account"
```

Add-ADPermission -Identity "mailbox database name" -AccessRights ExtendedRight -User "Service Account"

# Setting the permissions for the Folder Sync service account on Exchange 2010 and Exchange 2013

You must set the required permissions for the Folder Sync service account on each Exchange 2010 and Exchange 2013 server that Folder Sync is to process.

You can use the Exchange Management Console and the Exchange Management Shell to set the required properties on an Exchange 2010 or 2013 server.

### To set the permissions for the Folder Sync service account on Exchange 2010 and 2013

- 1 Log in using administrator credentials.
- 2 Start the Exchange Management Console, and from its Toolbox open the Roles Based Access Control (RBAC) User Editor.

Use the RBAC User Editor to add the Folder Sync service account to the **View-Only Organization Management** role group.

- **3** Close the Exchange Management Console.
- 4 Start the Exchange Management Shell.
- **5** Enter the following shell commands to give the Folder Sync service account the correct permissions for all of the mailboxes within your Exchange environment:

```
Get-MailboxDatabase | Add-ADPermission -AccessRights GenericRead
-User "Service Account"
```

Get-MailboxDatabase | Add-ADPermission -AccessRights ExtendedRight
-User "Service Account"

If you add more mailboxes at a later date, re-run the commands in step 5. Alternatively you can run the following commands to set the permissions for all of the mailboxes that are associated with a named mailbox database:

```
Add-ADPermission -Identity "mailbox database name" -AccessRights
GenericRead -User "Service Account"
```

Add-ADPermission -Identity "mailbox database name" -AccessRights ExtendedRight -User "Service Account"

## Configuring sufficient concurrent MAPI sessions for Folder Sync

This chapter includes the following topics:

- Configuring sufficient concurrent MAPI sessions for Folder Sync
- About increasing the maximum number of allowed MAPI sessions on Exchange 2003 and 2007
- Removing MAPI session throttling for Folder Sync on Exchange 2010
- Removing MAPI session throttling for Folder Sync on Exchange 2013

# Configuring sufficient concurrent MAPI sessions for Folder Sync

Folder Sync makes a MAPI connection to the Exchange server to enable it to read the folder structure within each mailbox and the items within each folder. To avoid MAPI errors for the number of concurrent mail threads, you can do one of the following, depending on the version of Exchange Server:

- Increase the number of allowed MAPI sessions.
- Remove the MAPI session throttling that the Exchange servers perform for concurrent mail threads.

Follow the procedure that applies for your version of Exchange Server.

Exchange Server version	Reference
Exchange Server 2003 and 2007	See "About increasing the maximum number of allowed MAPI sessions on Exchange 2003 and 2007" on page 21.
Exchange Server 2010	See "Removing MAPI session throttling for Folder Sync on Exchange 2010" on page 21.
Exchange Server 2013	See "Removing MAPI session throttling for Folder Sync on Exchange 2013" on page 22.

#### Table 5-1 Setting the permissions for the Folder Sync service account on the Exchange servers

# About increasing the maximum number of allowed MAPI sessions on Exchange 2003 and 2007

Exchange Server 2003 and 2007 impose a restriction on the number of allowed MAPI sessions for every user. By default this restriction is set to hexadecimal 0x20 (decimal 32). If you experience MAPI session exhaustion when you use Folder Sync, we recommend that you increase this value by decimal 16, 32, 48, and so on, until the server can accommodate the number of MAPI sessions. Alternatively you can decrease the maximum number of threads that the Folder Sync application uses.

Microsoft provides instructions on how to increase the maximum number of permitted MAPI sessions per user from the default value. See the *More Information* section of the following knowledge base article on the Microsoft Support site:

http://support.microsoft.com/kb/842022

# Removing MAPI session throttling for Folder Sync on Exchange 2010

You can use Exchange Management Shell commands to create a new throttling policy which sets no throttling, and then to set the Folder Sync service account to use the new policy.

#### To remove MAPI session throttling for Folder Sync on Exchange 2010

- 1 Start the Exchange Management Shell.
- 2 Enter the following command to create the new throttling policy:

New-ThrottlingPolicy ATFSPolicy -RCAMaxConcurrency \$null -RCAPercentTimeInAD \$null -RCAPercentTimeInCAS \$null -RCAPercentTimeInMailboxRPC \$null -DomainController DC\_Fully\_Qualified\_HostName

where  ${\it DC\_Fully\_Qualified\_HostName}$  is the fully qualified host name of the domain controller

**3** Enter the following command to assign the new policy to the Folder Sync service account:

Set-Mailbox "Service\_Account" -ThrottlingPolicy ATFSPolicy

where *Service Account* is the name of the Folder Sync service account.

# Removing MAPI session throttling for Folder Sync on Exchange 2013

You can use Exchange Management Shell commands to create a new throttling policy which sets no throttling, and then to set the Folder Sync service account to use the new policy.

#### To remove MAPI session throttling for Folder Sync on Exchange 2013

- **1** Start the Exchange Management Shell.
- 2 Enter the following command to create the new throttling policy:

New-ThrottlingPolicy ATFSPolicy -IsServiceAccount:\$true -RcaMaxConcurrency Unlimited -RcaMaxBurst Unlimited -RcaRechargeRate Unlimited -RcaCutOffBalance Unlimited -DomainController DC Fully Qualified HostName

where  ${\it DC\_Fully\_Qualified\_HostName}$  is the fully qualified host name of the domain controller

**3** Enter the following command to assign the new policy to the Folder Sync service account:

Set-Mailbox "Service Account" -ThrottlingPolicy ATFSPolicy

where *Service Account* is the name of the Folder Sync service account.

### Installing or upgrading Folder Sync

This chapter includes the following topics:

- About installing or upgrading the Folder Sync application
- Installing the Folder Sync application
- Upgrading the Folder Sync application

# About installing or upgrading the Folder Sync application

You can download the Folder Sync application and either install it on a computer with the required prerequisites, or use it to upgrade an existing Folder Sync installation:

- See "Installing the Folder Sync application" on page 23.
- See "Upgrading the Folder Sync application" on page 24.

#### Installing the Folder Sync application

Before you install the Folder Sync application, make sure that the server on which you plan to install it meets all of the requirements.

See "Requirements for the server on which Folder Sync is installed" on page 12.

#### To install the Folder Sync application

1 Download the compressed Folder Sync setup file from the following location on our Support website:

http://www.veritas.com/docs/000023448

- 2 Extract the contents of the compressed setup file.
- 3 Run Archive Accelerator Synch Service Setup.msi.
- **4** The ArchiveTools Folder Sync setup wizard displays. Click **Next** to proceed with the installation of Folder Sync.
- 5 Specify the installation location for Folder Sync and then click **Next** to continue.

We recommend that you use the default location.

- 6 In the Enter Service Account and Password window, provide the logon credentials for the Folder Sync service account:
  - Enter the Folder Sync service account user name in the format Domain\ServiceAccount
  - Enter the password for the Folder Sync service account, and then re-enter the password to confirm it.
- 7 Click **Install** to continue with the installation.

#### Upgrading the Folder Sync application

To upgrade the Folder Sync application you must first uninstall the current version, and then install the new version. The following procedures enable you to upgrade Folder Sync and retain the existing Folder Sync database to preserve its data.

**Note:** Recent versions of Folder Sync have revised requirements. Before you upgrade Folder Sync, make sure that your Folder Sync server meets all of the current requirements.

See "Requirements for the server on which Folder Sync is installed" on page 12.

#### **To uninstall Folder Sync**

- 1 Click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- 2 In the left pane of the management console, expand the Archive Accelerator node and click the Task List folder.
- 3 In the Task List window, right-click Item Sync and select Stop to end the task.

- 4 Wait for the status of the Item Synch task to change to **Stopped**. If necessary, click **Refresh** in the **Actions** pane to refresh the display.
- **5** Close the ArchiveTools Management Console.
- 6 Open the Windows Services MMC snap-in, and ensure that the ArchiveTools Folder Sync service has stopped running.
- 7 If you have made any changes to the Folder Sync .config files, copy the files to a backup folder. The .config files are located in the Folder Sync installation folder, typically C:\Program Files (x86)\ArchiveTools\ArchiveTools Folder Sync. These files are deleted when you remove the Folder Sync application in step 9.
- 8 Click Start > Control Panel > Programs > Programs and Features.
- 9 In Uninstall or change a program, right-click ArchiveTools Folder Sync and click Uninstall.

**Note:** If Windows fails to completely remove ArchiveTools Folder Sync, see the following article on our Support website:

http://www.veritas.com/docs/000023753

#### To install and configure the new version of Folder Sync

1 Download the compressed Folder Sync setup file from the following location on our Support website:

http://www.veritas.com/docs/000023448

- 2 Extract the contents of the compressed setup file.
- 3 Run Archive Accelerator Synch Service Setup.msi.
- **4** The ArchiveTools Folder Sync setup wizard displays. Click **Next** to proceed with the installation of Folder Sync.
- **5** When you are prompted, specify the installation location for Folder Sync and then click **Next** to continue.
- 6 In the Enter Service Account and Password window, provide the logon credentials for the Folder Sync service account:
  - Enter the Folder Sync account user name in the format Domain\ServiceAccount
  - Enter the password for the Folder Sync service account, and then re-enter the password to confirm it.
- 7 Click **Install** to continue with the installation.

- 8 When the application installation has completed, click Start > All Programs > ArchiveTools > ArchiveTools Configuration.
- **9** The Archive Accelerator Configuration Wizard starts, and prompts you for the SQL instance to use for the Archive Accelerator configuration database.

Specify the SQL Server instance that Folder Sync is to use, in the following format:

 $SQL\_computer\_name \setminus SQL\_instance$ 

**Note:** If you want to use the default SQL instance, omit the *sQL\_instance* and specify only the following:

SQL\_computer\_name\

- 10 The Folder Sync database configuration wizard displays a dialog stating that the Archive Accelerator database already exists. It asks you if you want to use the existing database. Click **Yes** to use the existing Folder Sync database and preserve its existing data.
- **11** Complete the configuration process.
- 12 If you saved any modified .config files when you uninstalled Folder Sync, you can edit the new .config files to reinstate your changes if required. The .config files are located in the Folder Sync installation folder, typically C:\Program Files (x86)\ArchiveTools\ArchiveTools Folder Sync.

**Note:** Save a backup copy of the new .config files before you make any changes.

13 Click Start > All Programs > ArchiveTools > ArchiveTools Management Console to launch the management console.

The upgrade is now complete.

# **Configuring Folder Sync**

This chapter includes the following topics:

- Configuring the Folder Sync application
- Configuring the initial setup of Folder Sync
- Configuring the Item Synch task's message service settings
- Restarting the Item Synch task

#### **Configuring the Folder Sync application**

When you have installed the Folder Sync application, you must configure it for first use.

Step	Action	Reference
Step 1	Configure the initial setup of Folder Sync	See "Configuring the initial setup of Folder Sync" on page 28.
Step 2	Configure the Folder Sync Item Synch task's message service settings.	See "Configuring the Item Synch task's message service settings" on page 28.
Step 3	Restart the Item Synch task.	See "Restarting the Item Synch task" on page 31.

 Table 7-1
 Steps to configure the installed Folder Sync application

#### Configuring the initial setup of Folder Sync

After you have installed the Folder Sync application you must run its configuration wizard to configure the Folder Sync database and to complete the initial setup of Folder Sync.

#### To configure the initial setup of Folder Sync

- 1 Log on to the Folder Sync server using the Folder Sync service account credentials.
- 2 Click Start and select All Programs > ArchiveTools > ArchiveTools Configuration.
- **3** The Archive Accelerator Configuration Wizard starts, and prompts you for the SQL instance to use for the Archive Accelerator database.

Specify the SQL Server instance that Folder Sync is to use, in the following format:

SQL\_computer\_name\SQL\_instance

**Note:** If you want to use the default SQL instance, omit the *sQL\_instance* and specify only the following:

SQL computer name\

- 4 Click Next. The Archive Accelerator Configuration Wizard displays your configuration settings.
- **5** Click **Next** to begin the configuration.

The Archive Accelerator Configuration Wizard notifies you when the configuration is complete and the Archive Tools Management Console has been installed.

# Configuring the Item Synch task's message service settings

Before you can use Folder Sync you must configure the Item Synch task's message service settings. These settings include the geographical region of your Enterprise Vault.cloud data center, and the credentials of an Enterprise Vault.cloud Administration Console account. The account must have the System Administrator administration role in the Enterprise Vault.cloud Administration Console. If you do not have this information, obtain it from your Enterprise Vault.cloud administrator.

#### To configure the Folder Sync Item Synch task's message service settings

- 1 Log on to the Folder Sync server using the Folder Sync service account credentials.
- 2 Click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- **3** In the left pane of the Management Console, expand the **Archive Accelerator** node.
- 4 Select the Task List folder.
- 5 In the Task List pane, right-click the Item Synch folder and select Properties.
- 6 On the Item Synch Properties dialog, select the Message Service Settings for computer\_name tab.

em Synch Properties	2
tem Synch Scheduling Message Service Settings for EVSRV	
Mailbox Settings           Image: Process Deleted Items folder         Image: Deselect Disabled Mailboxes	
Hosted Archive Location	
FOLDERSYNC.LAX.ARCHIVECLOUD.NET	
Server: North America	
Hosted Archive Authentication	
Usemame:	
Password:	
Use SSL Test Connection	
Profile Settings for EVSRV	
Exchange 2013 Profile: <a>Coefault&gt;</a>	
Exchange Profile: CDefault>	
- Service Options	
Auto Select New Targets	
Workers: 30	
OK Cancel	Apply

7 Enter the required configuration information on the Message Service Settings page. See the following table for more information:

Mailbox Settings	<b>Process Deleted Items folder</b> . Select this option if you want to provide Folder Sync users with a Deleted Items folder in Personal.cloud:
	<ul> <li>If this check box is selected, any items that are moved to the Deleted Items Folder in Outlook appear in the Deleted Items Folder in Personal.cloud after synchronization.</li> <li>If this check box is cleared, the Deleted Items Folder does not appear with the other synchronized folders in Personal.cloud. Items that are moved to the Deleted Items Folder in Outlook remain in the original mailbox folder in Personal.cloud after synchronization.</li> </ul>
	<b>Deselect Disabled Mailboxes</b> : Select this option if you want to prevent Folder Sync from synchronizing disabled mailboxes.
	<b>Note:</b> Do not use the <b>Deselect Disabled Mailboxes</b> setting in an Active Directory resource forest environment.
Hosted Archive Location	<b>Server</b> : In the drop-down list, select the geographical location of your Enterprise Vault data center.
	Folder Sync then populates the <b>Hosted Archive</b> <b>Location</b> box with the appropriate value for the Enterprise Vault server location.
	<b>Note:</b> If your data center location is not listed or if you are unsure about what to select, contact a support representative.
Hosted Archive Authentication	<b>Username</b> : Type the user name for the Enterprise Vault.cloud Administration Console account, in the format administrator@company.com.
	<b>Password</b> : Type the password for the Enterprise Vault.cloud Administration Console account.
Use SSL	<b>Use SSL</b> : Select this option if you want to use a secure connection between the Folder Sync server and the Enterprise Vault.cloud archive server.

Profile Settings	<b>Exchange 2013 profile</b> : For Exchange Server 2013 servers, select the Exchange profile that the Folder Sync service account uses.
	<b>Exchange profile</b> : For Exchange Servers other than Exchange 2013, select the Exchange profile that the Folder Sync service account uses.
Service Options	Auto Select New Targets: Select this option if you want scheduled Folder Sync synchronizations to target any new Exchange Server mailboxes that are added between the synchronizations. For every newly added mailbox, Folder Sync sets the Selected value to True in the mailbox database table.
	<b>Note:</b> If you select this option before Folder Sync has performed its first scheduled synchronization, Folder Sync also sets the <b>Selected</b> value to <b>True</b> for all existing Exchange mailboxes. Scheduled synchronizations target all the existing mailboxes in addition to any newly added ones.
	If you select this option after Folder Sync has performed its first scheduled synchronization, Folder Sync does not change the <b>Selected</b> value for existing mailboxes. Only newly added mailboxes are targeted automatically.
	<b>Note:</b> Do not select the <b>Auto Select New Targets</b> option unless you have sufficient Folder Sync licenses for the provisioned Personal.cloud users in your Exchange environment.
	<b>Workers</b> : Select the number of threads to use for concurrent mailbox synchronizations. The default value of 30 is the recommended value for most configurations.
Test Connection	<b>Test Connection</b> : When you have entered all of the configuration information, click <b>Test Connection</b> to test whether Folder Sync can make the connection to your Enterprise Vault.cloud company with the supplied details.

8 When you have successfully tested the connection, click OK.

#### **Restarting the Item Synch task**

After you configure the Item Synch message service settings you can restart the **Item Synch** task to trigger Folder Sync to check whether a provisioned archive

account exists for each mailbox. Folder Sync does not perform folder synchronizations for a mailbox until it has confirmed that a provisioned account exists for the mailbox in your company's Enterprise Vault.cloud archive.

**Note:** You must also restart the Item Synch task if you make changes to the Folder Sync configuration file ArchiveAcceleratorSynchService.exe.config.

A restart of the **Item Synch** task triggers a check for provisioned archive accounts if at least 60 minutes have passed since the provisioned accounts were last checked.

#### To restart the Item Synch task

- 1 On the Folder Sync server, click Start > All Programs > ArchiveTools> ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the Archive Accelerator node.
- 3 Select the Task List folder.
- 4 In the Task List pane, right-click the Item Synch folder and select Stop.
- **5** Wait for the status of the Item Synch task to change to **Stopped**. If necessary, click **Refresh** in the **Actions** pane to refresh the display.
- 6 In the Task List pane, right-click the Item Synch folder and select Start.

Confirm that the status of the Item Synch task changes back to **Started**. If necessary click **Refresh** in the **Actions** pane to refresh the display.

**Note:** If the mailbox account synchronization has succeeded for a mailbox, the mailbox database table in the ArchiveTools Management Console shows the account ID in the **Account ID** column.

See "Folder Sync fails to work for some mailboxes" on page 54.

### Running and scheduling Folder Sync synchronizations

This chapter includes the following topics:

- About performing and scheduling Folder Sync synchronizations
- Performing a "Run Now" Folder Sync synchronization
- Configuring scheduled Folder Sync synchronizations
- About Folder Sync scheduling and choosing a scheduling strategy
- Creating scheduled Folder Sync synchronization events
- Selecting the mailboxes to target for scheduled Folder Sync synchronizations
- Changing the iterative restart period for scheduled Folder Sync synchronization events

# About performing and scheduling Folder Sync synchronizations

From the ArchiveTools Management Console you can create a Folder Sync synchronization event to run immediately. You can also configure folder synchronization events to run on a schedule at a specific day and time each week. In both cases you must select the mailboxes that you want Folder Sync to process.

- See "Performing a "Run Now" Folder Sync synchronization" on page 34.
- See "Configuring scheduled Folder Sync synchronizations" on page 35.

# Performing a "Run Now" Folder Sync synchronization

From the ArchiveTools Management Console you can perform a Folder Sync synchronization immediately for one or more mailboxes.

Folder Sync may take some time to complete the processing of all of the mailboxes. The processing time depends on several factors including the number of selected mailboxes and the size of the mailboxes.

**Note:** You cannot prioritize mailboxes for synchronization. Folder Sync synchronizes the selected mailboxes in alphabetical order, as shown in the ArchiveTools Management Console.

#### To perform a Run Now Folder Sync synchronization

- On the Folder Sync server, click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the **Archive Accelerator** node.
- 3 Expand the Archive Tools node.
- 4 Expand the Servers node.
- **5** Expand the node for the required Exchange server, and select the required mailbox database store folder.

The main pane then displays the mailbox database table, which shows the Folder Sync status for each mailbox in the mailbox database.

6 In the list of mailboxes, select the mailboxes on which you want to run the synchronization.

To select multiple mailboxes, hold down the **Ctrl** key while you select the mailboxes. To select multiple consecutive mailboxes, hold down the **Shift** key while you select the mailboxes.

**Note:** To select all of the mailboxes that are currently provisioned in Enterprise Vault.cloud, sort the table on the **Archived** column, then select all of the mailboxes that have the value **True** in that column.

- 7 Right-click any one of the selected mailboxes, and choose Run Now.
- 8 On the Run Now dialog, click OK to start the Folder Sync synchronization.

**Note:** You should never normally select the **Reset Mailbox(es)** check box. This feature must only be used with the assistance of Veritas Services & Support.

See "About the Reset Mailbox(es) option" on page 35.

The Status column displays the Folder Sync synchronization status for each mailbox. To update the Status column, click **Refresh**.

#### About the Reset Mailbox(es) option

When you select one or more mailboxes and then select **Run Now** from the right-click menu, the **Run Now** dialog appears. The dialog includes a **Reset Mailbox(es)** check box. which you should always keep unchecked unless you are advised otherwise.

**Note:** Never select the **Reset Mailbox(es)** check box unless Veritas Services & Support advise you to do so. Do not use the **Reset Mailbox(es)** option simply because a mailbox encountered errors while processing.

If the **Reset Mailbox(es)** option is selected when you click **OK** on the **Run Now** dialog, the Run Now operation executes a reset on all of the selected mailboxes. The next time that Folder Sync processes a reset mailbox, the mailbox is processed as if for the first time.

#### Configuring scheduled Folder Sync synchronizations

The Folder Sync scheduling feature lets you configure folder synchronization events to run on a schedule.

Table 8-1 lists the steps to consider when you configure scheduled Folder Sync synchronizations. Note that the steps can be performed and repeated in any order, as required.

events" on page 42.

Step	Reference
Understand the scheduling process, and decide on a suitable folder synchronization schedule.	See "About Folder Sync scheduling and choosing a scheduling strategy" on page 36.
Create one or more scheduled synchronization events.	See "Creating scheduled Folder Sync synchronization events" on page 38.
Select the target mailboxes for the scheduled folder synchronization events.	See "Selecting the mailboxes to target for scheduled Folder Sync synchronizations" on page 40.
If required, modify the pause period between iterative reruns of the scheduled folder	See "Changing the iterative restart period for scheduled Folder Sync synchronization

 Table 8-1
 Steps to configure scheduled Folder Sync synchronization events

# About Folder Sync scheduling and choosing a scheduling strategy

synchronization events.

Folder Sync lets you configure folder synchronization events to run on a schedule. Note the following about the scheduled synchronization events:

- Each scheduled synchronization event runs once a week, on the day and time that you specify. For example, if you schedule an event to run on Wednesdays at 9:00 P.M., the event runs every Wednesday at that time until you remove the event. To configure Folder Sync to run on multiple days of the week you can create a separate synchronization event for each day.
- For each scheduled synchronization event you must define a duration period, which can be up to 23 hours and 59 minutes.

**Note:** We recommend that you avoid periods when the Exchange Servers or the Folder Sync server are busy with system tasks, such as backup.

- The time that Folder Sync takes to complete the processing of all of the mailboxes depends on several factors, including:
  - The number of selected mailboxes.
  - The size of the mailboxes.
  - The duration period that you set for the scheduled synchronization events.

The processing may take a considerable time to complete if you synchronize a large number of mailboxes, or if the mailboxes hold a lot of items.

- If the Item Synch task fails to process all of the mailboxes within the event duration period, it resumes the synchronization where it left off in the next scheduled event.
- If the Item Synch task completes the processing of all the mailboxes within the event duration period, it pauses for a set time and then begins to process the mailboxes again from the beginning. The pause period is referred to as the iterative restart period. The default value of the iterative restart period is 60 minutes. You can change this period if you want.
  See "Changing the iterative restart period for scheduled Folder Sync

See "Changing the iterative restart period for scheduled Folder Sy synchronization events" on page 42.

- You cannot select different mailboxes for different scheduled synchronization events. If you want to perform a synchronization for an extemporary list of mailboxes, perform a Run Now synchronization.
- Folder Sync processes the selected mailboxes in alphabetical order, as shown in the ArchiveTools Management Console. You cannot prioritize mailboxes for synchronization.

The following example illustrates the behavior of Folder Sync with a single scheduled synchronization. Suppose that you configure a single synchronization event to run on Mondays starting at 2:00 A.M. and with a duration of 2 hours. Suppose also that the iterative restart period is set to the default value of 60 minutes. The processing proceeds as follows:

- The Folder Sync Item Synch task begins the synchronization at 2:00 A.M. on Monday.
- Suppose that it takes the task 45 minutes to complete the processing of all of the selected mailboxes. The task completes the synchronizations at 2:45 A.M.
- The Item Synch task then pauses processing for the iterative restart period of 60 minutes.
- At 3:45 A.M. the task begins a rerun of the mailbox synchronizations again, from the beginning.
- At 4:00 A.M. the end of the event duration period is reached, so the Item Synch task stops processing the mailboxes. Only some of the mailboxes were processed for a second time.
- At the beginning of the next scheduled synchronization event on the following Monday, the Item Synch tasks restarts the synchronization from the mailbox where it left off previously.

In practice you need to set an aggressive synchronization strategy to ensure that new emails are synchronized from the Exchange folders to the archive folders without much delay. For example you can:

- Create a synchronization event for every day of the week.
- Configure each synchronization event to run with a duration period that is as long as possible. You can configure a duration of up to 23 hours and 45 minutes.

**Note:** Avoid periods when the Exchange Servers or the Folder Sync server are busy with system tasks such as backup.

• Reduce the iterative restart period to 30 minutes.

# Creating scheduled Folder Sync synchronization events

The Folder Sync scheduling feature lets you schedule synchronization events. Each synchronization event runs on a weekly basis. We recommend that you create a scheduled synchronization event for every day of the week.

For each event you must specify a day of the week on which to run the event, a start time, and a duration period.

#### To create scheduled Folder Syncsynchronization events

- 1 On the Folder Sync server, click Start > All Programs > ArchiveTools> ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the **Archive Accelerator** node.
- 3 Select the Task List folder.
- 4 In the Task List pane, right-click the Item Synch folder and select Properties.

em Synch Propertie	5	
Item Synch Scheduling	Message Service Settings for EVSRV	
Start Time	Duration	
		Remove Removes selection from list.
		Add Schedule a new runtime.
		OK Cancel Apply

5 On the **Item Synch Properties** dialog, ensure that the **Item Synch Scheduling** tab is selected.

6 Click Add to create a new scheduled synchronization event.

The Schedule New Task dialog appears.

Schedul 🖓	e New Task	X
Time:	Day Tuesday	Hour Minute
Duration:	Hours Minutes	Add
		Cancel
		li.

7 On the Schedule New Task dialog, specify the required schedule as follows:

Time	Select the day of the week and the time at which you want the synchronization event to start.
	The synchronization event runs at the selected day and time each week.
Duration	Select the duration period for the synchronization event.
	Avoid periods when the Exchange Servers or the Folder Sync server are busy with system tasks such as backup.

- 8 Click Add to create the synchronization event.
- 9 To schedule additional synchronization events, repeat steps 6 to 8.

To remove a scheduled synchronization event, select the task and then click **Remove**.

**Note:** You cannot edit a scheduled synchronization event. If necessary, remove the event and create a new one.

# Selecting the mailboxes to target for scheduled Folder Sync synchronizations

If you create scheduled Folder Sync synchronization events, you must select the mailboxes to target for scheduled folder synchronizations.

**Note:** You cannot select different mailboxes for different scheduled synchronization events. If you want to perform a synchronization for an extemporary list of mailboxes, you can perform a Run Now synchronization.

Folder Sync processes the selected mailboxes in alphabetical order, as shown in the ArchiveTools Management Console. You cannot prioritize mailboxes for synchronization.

You use the ArchiveTools Management Console to select the mailboxes to target. You can also remove mailboxes from the list of targeted mailboxes, if required. **Note:** To target automatically any new mailboxes that are added between synchronizations, use the **Auto Select New Targets** configuration option.

See "Configuring the Item Synch task's message service settings" on page 28.

#### To select the mailboxes to target for scheduled Folder Sync synchronizations

- On the Folder Sync server, click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the **Archive Accelerator** node.
- 3 Expand the Archive Tools node and then the Servers node.
- 4 Expand the node for the required Exchange server, and select the required mailbox database store folder.

The main pane then displays the mailbox database table, which shows the Folder Sync status for each mailbox in the mailbox database.

**5** In the mailbox database table, select one or more mailboxes that you want to target for folder synchronization.

To select multiple mailboxes, hold down the **Ctrl** key while you select the mailboxes. To select multiple consecutive mailboxes, hold down the **Shift** key while you select the mailboxes.

- 6 Right-click any one of the mailboxes that you selected, and choose **Select for Sync**.
- 7 To confirm that the mailboxes are selected, you can examine the **Selected** column of the table. This column displays **True** for all of the mailboxes in the mailbox database that are targeted for scheduled synchronization.

**Note:** To refresh the information in the mailbox database table, click **Refresh** under **Actions** in the right pane.

## To remove mailboxes from the list of mailboxes that are targeted for scheduled Folder Sync synchronizations

- 1 On the Folder Sync server, click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the Archive Accelerator node.
- 3 Expand the Archive Tools node and then the Servers node.

4 Expand the node for the required Exchange server, and select the required mailbox database store folder.

The main pane then displays the mailbox database table, which shows the Folder Sync status for each mailbox in the mailbox database.

**5** In the mailbox database table, select one or more mailboxes that you want to remove from folder synchronization.

To select multiple mailboxes, hold down the **Ctrl** key while you select the mailboxes. To select multiple consecutive mailboxes, hold down the **Shift** key while you select the mailboxes.

- 6 Right-click any one of the mailboxes that you selected, and choose **Select for Sync**.
- 7 The Select Mailboxes for Sync dialog lists the mailboxes you selected. Clear Select at the bottom of the dialog, and click OK.

**Note:** You must clear the **Select** check box, otherwise the mailboxes are selected for synchronization.

8 To confirm that the mailboxes are now unselected, examine the **Selected** column of the mailbox database table. This column displays **False** for all of the mailboxes in the mailbox database that are not targeted for scheduled synchronization.

**Note:** To refresh the information in the mailbox database table, click **Refresh** under **Actions** in the right pane.

# Changing the iterative restart period for scheduled Folder Sync synchronization events

Within the duration period that you set for a scheduled Folder Sync synchronization the Item Sync task performs repeat runs of the folder synchronizations. That is, if the Item Synch task finishes processing all of the selected mailboxes, it pauses for a set period and then begins a repeat run of the synchronizations. The pause period between the reruns is called the iterative restart period.

The iterative restart period is set to 60 minutes by default. You can change this value if you want. For example, to set a more aggressive policy for folder synchronizations, you can reduce the iterative restart period to, say, 30 minutes.

**Note:** Setting the iterative restart period to 0 disables the restart of the folder synchronization event. That is, it disables the scheduled restarts.

To change the iterative restart period you must edit a value in a Folder Sync configuration file.

## To change the iterative restart period for scheduled Folder Sync synchronizations

- 1 On the Folder Sync server, navigate to the Folder Sync installation folder, typically C:\Program Files (x86)\ArchiveTools\ArchiveTools Folder Sync
- 2 Take a backup copy of the file **ArchiveAcceleratorSynchService.exe.config** and paste it in a suitable location in case you want to revert to it later.
- **3** Open **ArchiveAcceleratorSynchService.exe.config** with a text editor such as Notepad.
- 4 Find the setting ScheduleRestartPeriodMinutes.
- **5** Change the value of this setting from the default of 60 to the number of minutes that you require.
- 6 Close the file, and save the changes.
- 7 Restart the Item Synch task.

See "Restarting the Item Synch task" on page 31.

## Chapter

# Monitoring and managing Folder Sync

This chapter includes the following topics:

- About monitoring and managing Folder Sync
- Checking the Folder Sync synchronization status from the ArchiveTools Management Console
- About the Folder Sync job list
- Viewing the Folder Sync job list
- About the Folder Sync Mailbox Report
- Viewing the Folder Sync Mailbox Report
- Disabling or enabling Folder Sync from the Administration Console
- Viewing the Folder Sync synchronization status of an account from the Administration Console

#### About monitoring and managing Folder Sync

The Archive Tools Management Console provides the following ways to monitor and manage Folder Sync:

 From the mailbox database tables under the ArchiveTools node you can check the synchronization status of each mailbox.
 See "Checking the Folder Sync synchronization status from the ArchiveTools Management Console" on page 45.  The job list under the Archive Accelerator node presents a dynamic record of all the Folder Sync jobs that have run or that are currently executing, with details about each job.

See "About the Folder Sync job list" on page 47. See "Viewing the Folder Sync job list" on page 48.

 The Folder Sync Mailbox Report under the Reports node provides information on the status of each mailbox that Folder Sync has processed.
 See "About the Folder Sync Mailbox Report" on page 49.
 See "Viewing the Folder Sync Mailbox Report" on page 51.

In addition an Enterprise Vault.cloud administrator can also perform the following actions from the Enterprise Vault.cloud Administration Console:

- Disable or enable Folder Sync.
   See "Disabling or enabling Folder Sync from the Administration Console" on page 51.
- View the synchronization status of an individual account.
   See "Viewing the Folder Sync synchronization status of an account from the Administration Console" on page 52.

### Checking the Folder Sync synchronization status from the ArchiveTools Management Console

You can check the Folder Sync synchronization status for all your Exchange mailboxes from the ArchiveTools Management Console.

## To check the Folder Sync synchronization status from the ArchiveTools Management Console

- 1 On the Folder Sync server, click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the **Archive Accelerator** node.
- 3 Expand the Archive Tools node.
- 4 Expand the Servers node.
- **5** Expand the node for the required Exchange server, and select the mailbox database folder for which you want information.

In the main pane the columns of the mailbox database table provide the following information for each mailbox.

<b>Note:</b> The ArchiveTools Management Console does not automatically update
statuses for the table. Click <b>Refresh</b> to update the synchronization status.

Display Name	The mailbox display name.
Display Name	The manbox display name.
Mailbox DN	The Distinguished Name of the mailbox.
Account ID	Displays the ID of the provisioned account in Enterprise Vault.cloud, if Folder Sync has identified a provisioned account.
	<b>Note:</b> If the entry is blank, Folder Sync has not identified a provisioned account for the mailbox, and folder synchronizations do not proceed.
Primary Email	The primary email address for the mailbox.
Started	The last date and time when the latest folder synchronization started.
Finished	The date and time when the latest folder synchronization completed.
Last Completed	The date and time of the last occasion on which folder synchronization completed.
Archived	<b>True</b> : Folder Sync has established that a provisioned account exists in Enterprise Vault.cloud.
	<b>False</b> : Folder Sync has not identified a provisioned account in Enterprise Vault.cloud.
Selected	<b>True</b> : The mailbox is selected for a scheduled synchronization.
	<b>False</b> : The mailbox is unselected for scheduled synchronization.

Status	Indicates the folder synchronization status, as follows:
	<ul> <li>To be started. Folder synchronization has not run.</li> <li>Started. Folder synchronization is in progress.</li> <li>Stopped. The Item Synch task stopped while folder synchronizations were in progress.</li> </ul>
	<ul> <li>Completed. Folder synchronization finished successfully.</li> </ul>
	<ul> <li>Erred. An error occurred during processing. See the Event Log column for details.</li> </ul>
	Deleted. Unable to resolve the mailbox distinguished name in Active Directory.
	• <b>To be synchronized</b> . This status may occur if the Item Synch task is interrupted while synchronizing the Folder Sync database with Active Directory.
Event Log	An event log error that was generated for Folder Sync for this mailbox.

## About the Folder Sync job list

A Folder Sync folder synchronization event runs a separate synchronization job for each selected mailbox that it processes. The Job List node of the ArchiveTools Management Console presents a dynamic record of all the Folder Sync jobs that have run or that are currently executing, with details about each job.

Table 9-1 describes the information that the Folder Sync job list table presents for each job.

Column heading	Description
Job	The unique job number of this job.
Started	The date and time when the job started.
Stopped	The date and time when the job stopped.
Target	The display name of the mailbox that was the target of this job.
Sub Target	The folder that the job is processing, or last processed.
Processed	The number of messages and folders that were processed.
Erred	The number of errors that occurred during processing

 Table 9-1
 Folder Sync job list column descriptions

Column heading	Description
Event	The most recent error message that is associated with this job.
Job Status	One of Completed, Erred, or Interrupted.
Last Update	The last occurrence of an update to any column in this job row.
Server	The name of the server that is running the Folder Sync application.
Job Source	The source of the job:
	<ul> <li>Manual: A run now synchronization</li> </ul>
	Schedule: A scheduled synchronization.
Task Name	For Folder Sync the task name is always <b>Item Synch</b> .
Job Type	Indicates whether Messages or Folders have been processed.
Report Only	Whether the job ran in Report Only mode.
Info	The number of folders and email messages that Folder Sync has sent to the web service for archiving.
	<b>Note:</b> This number does not indicate the number of folders or email messages that were archived at the time of the synchronization event.
Logfile	The name of the log file that is associated with the job.
	See "About the Folder Sync event log errors and log files" on page 53.

**Table 9-1**Folder Sync job list column descriptions (continued)

#### Viewing the Folder Sync job list

You can view details about any synchronization job that Folder Sync has run by examining the job list in the ArchiveTools Management Console.

#### To view the Folder Sync job list

- 1 On the Folder Sync server, click Start > All Programs > ArchiveTools > ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the **Archive Accelerator** node.
- 3 Select Job List to display the job list.

See "About the Folder Sync job list" on page 47.

You can sort and filter the contents of the job list as follows:

- To sort the list on a column, click the column heading. To reverse the sort order, click the column heading again.
- To filter the content that is included in a column, click the filter icon in the column heading and in the filter dialog specify the filter details. The available filter options depend on the column that is selected.

To remove a filter from a column, click the filter icon in the column heading, and then click **Clear Filter**.

#### About the Folder Sync Mailbox Report

The ArchiveTools Management Console can display a ArchiveTools Folder Sync Mailbox Report, which shows the status of each mailbox that Folder Sync has processed. The report includes a list of the folders that have been synchronized for each mailbox. You can click a folder in the list to view a child report, the ArchiveTools Folder Sync Folder Report. The Folder Report shows details of the emails that Folder Sync has processed for the selected folder.

	H   + 🛞 🚱   🏟 🖡	📑 💷 💐 -   100	% •	Find   Next				
		Ar	chiveTo	ols Folder Sy	nc Mailbox Re	port		
Run Time: 1/6/2017 7:33	3:43 AM						Version 1.1	
Mailbox Name 🖇	Mailbox # Identity	Archived #	Status \$	Time of First Sync 💲	Time of Last Sync 💲	Time Started 🕴	Time Stopped 🕴	Folder Lis
STestUser	30	True	5	12/20/2016 5:12:38 PM	1/4/2017 11:31:34 AM	1/4/2017 2:31:45 PM	1/4/2017 2:32:02 PM	•
STestUser2		True		12/20/2016 1:57:46 PM	1/4/2017 2:29:00 PM	1/4/2017 2:31:53 PM	1/4/2017 2:32:12 PM	
STestUser3		True		1/4/2017 9:34:51 AM	1/4/2017 2:28:02 PM	1/4/2017 2:32:01 PM	1/4/2017 2:32:21 PM	

Table 9-2 lists the information that the Folder Sync Mailbox Report includes.

Column heading	Description
Mailbox name	The display name of the mailbox for which information is provided.
Mailbox Identity	An integer that identifies this mailbox.
Archived	<b>True</b> : Folder Sync has established that a provisioned account exists in Enterprise Vault.cloud.
	<b>False</b> : Folder Sync has been unable to identify a provisioned account exists in Enterprise Vault.cloud.

Table 9-2	Contents of the ArchiveTools Folder Sync Mailbox Report
-----------	---------------------------------------------------------

Column heading	Description
Status	A code that indicates the folder synchronization status, as follows:
	<ul> <li>1 - To be started. Folder synchronization has not run.</li> <li>2 - Started. Folder synchronization is in progress.</li> <li>3 - Stopped. Item Synch task stopped while folder synchronizations were in progress.</li> <li>4 - Completed. Folder synchronization finished successfully.</li> <li>5 - Erred. An error occurred during processing. See the Event log column of the Folder Sync mailbox database entry for details.</li> <li>See "Checking the Folder Sync synchronization status from the ArchiveTools Management Console" on page 45</li> <li>6 - Deleted. Unable to resolve the mailbox distinguishe name in Active Directory.</li> <li>0 - To be synchronized. This status may occur if the Iter Synch task is interrupted while synchronizing the Folder Sync database with Active Directory.</li> </ul>
Time of First Sync	The date and time when the first successful synchronizatio of the mailbox completed.
Time of Last Sync	The date and time when the most recent successful synchronization of the mailbox completed.
Time Started	The date and time when the most recent synchronization attempt started.
Time Stopped	The date and time when the most recent synchronization attempt finished.
Folder List	<ul> <li>Click the Expand icon to see a list of folders that Folder Syn processed in the last synchronization.</li> <li>Click any folder in the list to view a ArchiveTools Folder Syn Folder Report for the folder. The Folder Report lists details of the items that Folder Sync processed for the selected folder.</li> <li>To return to the parent mailbox report, click the left arrow button above the folder report's title in the main pane.</li> </ul>

#### Table 9-2 Contents of the ArchiveTools Folder Sync Mailbox Report (continued)

### **Viewing the Folder Sync Mailbox Report**

The ArchiveTools Management Console includes a report on the status of each mailbox that Folder Sync has processed.

#### To view the Folder Sync Mailbox Report

- On the Folder Sync server, click Start > All Programs > ArchiveTools> ArchiveTools Management Console.
- 2 In the left pane of the Management Console, expand the Archive Accelerator node.
- 3 Expand the **Reports** node.
- 4 Expand the FolderSync node and select FolderSync Mailbox Report.

**Note:** If you have run the report before, the most recently generated report is shown. To refresh the report, click the refresh icon in the report's menu bar.

See "About the Folder Sync Mailbox Report" on page 49.

You can use the report's menu bar options to page through the report, print or export the report, and to search for a text string.

To sort the report on a column, click the sort icon in the column heading. To reverse the sort order, click the icon again.

#### Disabling or enabling Folder Sync from the Administration Console

Folder synchronization is enabled by default in the Administration Console after you have installed and configured Folder Sync.

When you have completed the installation and configuration of Folder Sync, you can enable or disable all Folder Sync synchronization activity from the Enterprise Vault.cloud Administration Console.

**Note:** If you enable Folder Sync it does not run immediately, but at the next scheduled synchronization event.

#### To disable or enable Folder Sync from the Administration Console

- 1 In a supported Internet browser, navigate to the URL for your Enterprise Vault.cloud Administration Console, and log in.
- 2 In the left pane of the Administration Console, expand the **Policy Management** node and select **Archive Options**.
- **3** Under Active Folder Synchronization, the Administration Console displays the current enablement status of Folder Sync, the number of users whose folders are being synchronized, and the date and time of the last synchronization event.

In the Status drop-down box, select Enable or Disable.

# Viewing the Folder Sync synchronization status of an account from the Administration Console

For individual users you can view the synchronization status and the date and time of the last synchronization event from the **Accounts** node of the Enterprise Vault.cloud Administration Console.

**Note:** You cannot make Folder Sync-related changes for individual users from the Administration Console. Changes must be made in the ArchiveTools Management Console.

## To view the Folder Sync synchronization status of an account from the Administration Console

- 1 In an Internet browser, navigate to the URL for your Enterprise Vault.cloud Administration Console, and log in.
- 2 In the left pane of the Administration Console, expand the **My Config** node and select **Accounts**.
- **3** Click a user from the list on the **Accounts** page, to display the **Edit Account** page for that user.
- 4 On the Edit Account page, **Folder Synchronization Status** shows the synchronization status for the selected user, and the date and time of the last synchronization event.
- **5** Click **Cancel** to exit the Edit Account page without making any changes.

# Chapter 10

## Troubleshooting Folder Sync

This chapter includes the following topics:

- About the Folder Sync event log errors and log files
- Folder Sync fails to work for some mailboxes
- Troubleshooting occasional timeouts of the Folder Sync service

# About the Folder Sync event log errors and log files

The Folder Sync application writes to the Windows Application log. The event log entries show the source as ArchiveTools Folder Sync. Synchronization errors are displayed in the following places in the ArchiveTools Management Console:

- In the Event Log column of the mailbox store tables.
   See "Checking the Folder Sync synchronization status from the ArchiveTools Management Console" on page 45.
- In the Event column of the job list.
   See "About the Folder Sync job list" on page 47.

The Folder Sync log files are located by default on the installation drive under the **ProgramData** folder, typically in **C:\ProgramData\Vault Solutions\Archive Accelerator**.

**Note:** To see the **ProgramData** folder you must set your Windows file options to view hidden files.

To change the log file location or configure which items to log, edit the file **ArchiveAcceleratorSynchService.exe.config** in the Folder Sync installation folder, typically **C:\Program Files (x86)\ArchiveTools\ArchiveTools Folder Sync**.

- To change the output location for the log files, set a value for the setting **logPath**.
- To log interactions with the Microsoft Exchange Servers, change the value of the logMAPI setting to 5.
- To log errors from the Item Synch service, set the value of **logService** to **True**.
- To log errors from the job scheduler, set the value of **logJob** to **True**.
- If you set the value of IogXML to True, Folder Sync creates a series of XML files that include the information that it sends to the Enterprise Vault.cloud data center. The information includes folder names and item IDs.

If you make changes to the **ArchiveAcceleratorSynchService.exe.config** file, you must restart the Item Synch task to implement the changes.

See "Restarting the Item Synch task" on page 31.

#### Folder Sync fails to work for some mailboxes

For Folder Sync to synchronize folders and their contents in a timely manner, the Folder Sync scheduler must run events on a daily basis. The events should be run with as near to a 24-hour duration as possible. Bear in mind that you should avoid running events at times of high server demand, such as when Exchange Server or Folder Sync server backups are run.

Folder Sync does not perform folder synchronizations on mailboxes for which it cannot identify a provisioned account ID in Enterprise Vault.cloud. If Folder Sync has not found a provisioned account ID for a mailbox, then the ArchiveTools Management Console shows the following in the entry for the mailbox database under **Archive Accelerator > ArchiveTools > Servers**:

- The Account ID column is empty.
- After an attempted folder synchronization, the Event Log column shows the error No Account ID has been specified.

To fix this condition, ensure that Enterprise Vault.cloud has provisioned an archive account for the mailboxes, and then let Folder Sync perform a check for the provisioned mailbox accounts.

Folder Sync performs a check for provisioned mailbox accounts in the following circumstances:

 When the Item Synch task starts, if at least 60 minutes have passed since it last checked the mailbox accounts.  If no scheduled folder synchronization is running and at least 60 minutes have passed since a scheduled folder synchronization completed.

## Troubleshooting occasional timeouts of the Folder Sync service

If the Folder Sync host server is slightly underpowered you may experience occasional timeouts of the ArchiveTools Folder Sync service.

An error such as the following may be received:

Windows could not start the ArchiveTools Folder Sync service on Local Computer. Error 1053: The service did not respond to the start or control request in a timely fashion.

To help to avoid a time out of the service in this situation, you can set a Windows registry value on the host server as follows.

#### To troubleshoot occasional timeouts of the Folder Sync service

- 1 Start the Windows registry editor on the Folder Sync host server.
- 2 Locate the following registry subkey:

```
HKEY_LOCAL_MACHINE
\SYSTEM
\CurrentControlSet
\Control
```

 Under this subkey, edit or create the following DWORD value: ServicesPipeTimeout.

Give ServicesPipeTimeout a decimal value of 180000.

- 4 Exit from the registry editor.
- **5** You must restart the host server to apply this change.