

DS-Recovery Tools Installation Guide



Assumptions

The following assumptions are made about the audience for this document:

Familiarity: User is familiar with the Operating System platform. User is familiar with basic Internet browsing.

Correct Input: User enters the correct data (e.g. user names, passwords, etc.) when asked or required. If invalid data is entered, an error message will appear, and you will be forced to correct the error before you may proceed.

Canceling activities: The option to cancel the current activity (in some cases the option is “No”) will exit the activity.

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This document may contain sample screen shots, used to demonstrate Asigra Cloud Backup™ procedures. All information appearing in this document is used for illustration purposes only, and it should be considered fictitious.

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About Asigra Cloud Backup™

Asigra Cloud Backup™ is a unique alternative to traditional backup methods, replacing conventional tape based systems with a fully automated Online solution. It provides centralized and automated backups of PCs, file servers and application/database servers with secure offsite storage and immediate Online restoration.

The system uses a DS-Client, installed onto the customer network, which hosts the Asigra Cloud Backup™ client application software that performs the backup and restore activity.

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DS-Recovery Tools Installation

DS-Recovery Tools offer solutions to perform on-line backup / restore of:

- E-Mail messages at the individual message level (Message Level Restore).
- MS SharePoint servers at individual item-level.

The following services are installed, depending on your installation selections:

DS-MLR Service

- DS-MLR Service is for E-Mail messages.
- DS-MLR searches for new E-Mails based on a user defined filter.
- DS-MLR transforms the E-Mail into a data stream and passes this stream to DS-Client for processing in order to back it up to DS-System.
- E-Mails are saved as individual objects on DS-System.

DS-Recovery Tools Service

- DS-Recovery Tools Service is for MS SharePoint.

Note: “DS-Recovery Tools” consists of DS-MLR Service and/or DS-Recovery Tools Service.

The DS-Recovery Tools must be installed and running on the computer where the E-Mails are stored or where MS SharePoint is running.

- Like other DS-Client tools, your Service Provider must enable DS-Recovery Tools from the DS-System.
- Once enabled, your DS-Client can connect to any running DS-MLR service or DS-Recovery Tools service.

Before you install DS-Recovery Tools

Make sure the target installation computer meets the following requirements:

Note: If the target installation platform is 32-bit, you must install the 32-bit version of DS-Recovery Tools. Similarly, if the target installation platform is 64-bit, you must install the 64-bit version of DS-Recovery Tools. Do not install the 32-bit version on a 64-bit platform, since it will be missing required components.

Installation Platform Requirements

Service	Platform	Version
DS-MLR Service for E-Mail Message Server type: <ul style="list-style-type: none"> Microsoft Exchange <p>The tool can be installed on all these platforms. However, the backup target (i.e. the specific Exchange server version) may not be supported on all these platforms.</p>	Windows® 2003 x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP2 Enterprise SP2 / R2 SP2 SBS SP2 Data Center SP2 (64-bit only)
	Windows® 2008 x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP1 Enterprise SP2 / R2 SP1 SBS SP2 Data Center SP2 / R2 SP1
	Windows® SBS 2011 (64-bit)	<ul style="list-style-type: none"> Standard
DS-MLR Service for E-Mail Message Server type: <ul style="list-style-type: none"> Microsoft Outlook <p>The tool can be installed on all these platforms. However, the backup target (i.e. the specific Outlook server version) may not be supported on all these platforms.</p>	Windows® XP x86 (32-bit)	<ul style="list-style-type: none"> Media Center SP3 Professional SP3 Home SP3
	Windows® XP x64 (64-bit)	<ul style="list-style-type: none"> Media Center SP2 Professional SP2
	Windows® VISTA x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Ultimate SP2 Enterprise SP2 Home Basic SP2 Business SP2 Home Premium SP2
	Windows® 2003 x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP2 Enterprise SP2 / R2 SP2 SBS SP2 Data Center SP2 (64-bit only)
	Windows® 2008 x86 (32-bit)	<ul style="list-style-type: none"> Standard SP2 Enterprise SP2 SBS SP2
	Windows® 2008 x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP1 Enterprise SP2 / R2 SP1 SBS SP2 Data Center SP2 / R2 SP1
	Windows® 7 x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Ultimate SP1 Professional SP1 Enterprise SP1
	Windows® 2012 (64-bit)	<ul style="list-style-type: none"> Essentials Standard Datacenter
	Windows® 8 (32-bit or 64-bit)	<ul style="list-style-type: none"> Windows 8 Pro Enterprise
	Windows® SBS 2011 (64-bit)	<ul style="list-style-type: none"> Standard

<p>DS-MLR Service for E-Mail Message Server type:</p> <ul style="list-style-type: none"> Lotus <p>The tool can be installed on all these platforms. However, the backup target (i.e. the specific Lotus server version) may not be supported by the vendor on all these platforms.</p>	Windows® XP x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Professional SP2
	Windows® 2003 x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP2 Enterprise SP2 / R2 SP2
	Windows® VISTA x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Enterprise SP2 Business SP2
	Windows® 7 x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Professional SP1 Enterprise SP1
	Windows® 2008 x86 (32-bit)	<ul style="list-style-type: none"> Standard SP2 Enterprise SP2
	Windows® 2008 x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP1 Enterprise SP2 / R2 SP1
<p>DS-MLR Service for E-Mail Message Server type:</p> <ul style="list-style-type: none"> GroupWise <p>The tool can be installed on all these platforms. However, the backup target (i.e. the specific GroupWise server version) may not be supported by the vendor on all these platforms.</p>	Windows® XP x86 (32-bit)	<ul style="list-style-type: none"> Media Center SP3 Professional SP3 Home SP3
	Windows® VISTA x86 (32-bit)	<ul style="list-style-type: none"> Ultimate SP2 Enterprise SP2 Business SP2
	Windows® 2003 x86 (32-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP2 Enterprise SP2 / R2 SP2
	Windows® 2008 x86 (32-bit)	<ul style="list-style-type: none"> Standard SP2 Enterprise SP2
	Windows® 7 x86 (32-bit)	<ul style="list-style-type: none"> Ultimate SP1 Professional SP1 Enterprise SP1
<p>DS-Recovery Tools Service for:</p> <ul style="list-style-type: none"> Microsoft SharePoint Servers <p>The tool can be installed on all these platforms. However, the backup target (i.e. the specific SharePoint server version) may not be supported by the vendor on all these platforms.</p>	Windows® 2003 x86 (32-bit) or x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP2 Enterprise SP2 / R2 SP2 SBS SP2 Data Center SP2 (64-bit only)
	Windows® 2008 x86 (32-bit)	<ul style="list-style-type: none"> Standard SP2 Enterprise SP2 SBS SP2
	Windows® 2008 x64 (64-bit)	<ul style="list-style-type: none"> Standard SP2 / R2 SP1 Enterprise SP2 / R2 SP1 SBS SP2
	Windows® 2012 x64 (64-bit)	<ul style="list-style-type: none"> Server

Supported Servers (for Backup / Restore)

E-Mail Message Server	Version	Special Requirements
MS Exchange (Clustered and non-Clustered)	<ul style="list-style-type: none"> • 2003 (x86) • 2007 (x64) 	See "MS Exchange Requirements" on page 8.
MS Exchange (DAG and Stand-Alone)	<ul style="list-style-type: none"> • 2010 (x64) ** • 2013 (x64) ** 	** In addition to E-Mail level backup and restore, supports Item-Level restores using DS-Recovery Tools from full MS Exchange 2010 or 2013 backups (made with the VSS-aware backup set type).
MS Outlook	<ul style="list-style-type: none"> • 2003 • 2007 • 2010 	See "MS Outlook Requirements" on page 9.
Lotus Domino / Lotus Notes	<ul style="list-style-type: none"> • 8 • 8.5 • 8.5.2 • 8.5.3 	See "Lotus Domino / Lotus Notes Server Requirements" on page 10.
GroupWise	<ul style="list-style-type: none"> • 6.5.x (only E-Mails whose body is less than 32K) • 7.0 • 8.0 • 2013 	See "GroupWise Requirements" on page 10.
Microsoft SharePoint Server	Version	Special Requirements
MS SharePoint	<ul style="list-style-type: none"> • 2007 • 2010 • 2010 SP1 * • 2013 * 	* Supports Item-Level restores using DS-Recovery Tools from full SharePoint 2010 SP1 or 2013 backups (made with the VSS-aware backup set type).

MS Exchange Requirements

- Install DS-Recovery Tools (DS-MLR Service) on the MS Exchange Server.
 - For Clustered or DAG MS Exchange Servers, DS-MLR Service must be installed and running on each node of the cluster / Database Availability Group.
 - For MS Exchange 2010, you must install the DS-MLR Service on the server where the CAS (Client Access Server) Role is installed.
 - The MAPI client is still required by DS-MLR and must be downloaded and installed separately from Microsoft (free download). For Exchange 2007 / 2010, you must download it separately from Microsoft and install it on the DS-MLR machine / Exchange server.
1. For backup of MS Exchange Server E-Mails, the DS-MLR Service Account has additional requirements:
 - When installing the DS-MLR Service on MS Exchange Server, the user account that runs the service determines the rights to backup the MS Exchange Server's E-Mails. Even if the service is run by a user from the local Administrators group, that user may not have enough rights to backup all the MS Exchange Server's E-Mails.
 - Users that are members of the Domain Admins Group, or who are delegated as "Exchange Full Administrator" should be able to backup all E-Mails from the MS Exchange Server. However, sometimes those users are not explicitly

granted the necessary privileges. Therefore, the DS-MLR tries to grant itself those rights and use them on behalf of privileged users.

- DS-MLR Service Account User Scenarios for MS Exchange Server:

Service Account	User Scenarios
Domain Admins	<ul style="list-style-type: none"> • DS-MLR service account must be a member of Domain Admins and local/Builtin Administrators groups. • This scenario is simple, but some network security policies may not allow use of the Domain Admins group.
Domain User	<ul style="list-style-type: none"> • DS-MLR service account must be a member of local Administrators group. • DS-MLR service account must be a member of Domain Builtin Backup Operator or Administrators group. • DS-MLR service account must be delegated as Exchange Full Administrator. • This scenario is a little complicated, but does not require use of the Domain Admins group.
Local Administrator	<ul style="list-style-type: none"> • When starting up, DS-MLR may fail to grant the "Receive As" right for the service account. • This option is more flexible, but you need to manually add the "Receive As" privilege.

- The installation verifies if the service account is Domain Admins or Exchange Full Administrator:

Service Account Verification (MS Exchange Servers)
<ol style="list-style-type: none"> 1. If it is a member of Domain Admins, installation continues. 2. If it is an Exchange Full Administrator, a warning message will popup: "The service account is not a domain administrator. DS-MLR will grant "Receive As" right for this account. Click OK to continue. Click Cancel to select another account." 3. If it is neither, a warning message will popup: "The service account is not a domain administrator or Exchange Full Administrator. Only users with "Receive As" right will be able to backup E-Mails from other mailboxes. Click OK to continue. Click Cancel to select another account." 4. If the user that runs the installation does not have rights to Active Directory, and / or the service account is not a member of the Domain Admins group, the Installation is not able to check if the account is an Exchange Full Administrator. The Installation will popup a warning message: "Installation can not verify if the Service account is an Exchange Full Administrator. If it is not, only users with "Receive As" right will be able to backup E-Mails from other mailboxes. Click OK to continue. Click Cancel to select another account." 5. For each backup or restore request, DS-MLR checks if the user is a member of the Domain Admins group or is an Exchange Full Administrator, and if the service account has the "Receive As" privilege: <ul style="list-style-type: none"> • If yes, DS-MLR will proceed using the service account and the user will be able to see all mail boxes. • If no, DS-MLR will proceed using the user's credentials.

MS Outlook Requirements

- Install DS-Recovery Tools (DS-MLR Service) on the computer with MS Outlook.
- The DS-MLR Service Account must be a local administrator.

Lotus Domino / Lotus Notes Server Requirements

- Install DS-Recovery Tools (DS-MLR Service) on the Lotus Notes Client or Lotus Domino Server.
- The DS-MLR Service Account must be a local administrator.

Lotus Notes Client Requirements

- The Lotus Notes Client software must not be configured with the "Connect to Domino Server" option. (Otherwise, the E-Mail database will be on the Domino Server side, which is not supported. As an alternative, you can choose either "POP" or "SMTP" to connect to the Domino Server.)

Lotus Domino Server Requirements

- The Lotus Domino Server must have the files **notes.ini** and **user.id** available locally. They can be copied from a computer that has Lotus Notes Client installed, or you can install Lotus Notes Client/Administrator on the Lotus Domino Server. If they are copied, you must manually edit "KeyFilename" in the notes.ini file to point to the local user.id file.
- In the same folder that contains the notes.ini and user.ini files, copy the following files from the DS-Client computer's installation directory (by default C:\Program Files\CloudBackup\DS-Client):
`dslotus_x64.dll, dslotus.dll, lcppn70.dll, lcppn801.dll`
- You must copy the following files from the DS-Client computer's installation directory to the Lotus Domino Server's installation directory (by default this is C:\Program Files\IBM\Lotus\Domino):
`nextpwd_x64.dll, nextpwd.dll`

GroupWise Requirements

- Install DS-Recovery Tools (DS-MLR Service) on the computer with GroupWise client.
- The DS-MLR Service Account must be a local administrator.
- The target DS-MLR computer must be running Novell Client (v 4.9.0 SP2 or higher) and GroupWise client (v 6.5.4 or higher).
- Copy both **Regtapp.exe** and **GWTApp.dll** from the DS-Recovery Tools Installation directory to the target DS-MLR Service computer.
- From the Command Prompt, run "Regtapp.exe \\Groupwise_Domain_server\PathToGroupwise_Domain_Folder". This will return a "Trusted application key": a number that you must input during DS-MLR Installation (see "**GroupWise Settings**" on page 13). (Save this key and use it for all other DS-MLR Service Installations that will backup this GroupWise server.)
- In order to backup a GroupWise server with multiple DS-MLR services, you must configure all DS-MLR services with the same "Trusted application key".
- For GroupWise 2012, on the GroupWise server, you must create the DS-MLR "Trusted application key" in Novell ConsoleOne > GroupWise System Operations > Trusted Applications > Create.
- For GroupWise 2012, on the DS-MLR machine, you must follow the instructions in the following Novell knowledge base articles, otherwise you may get errors getting the user list during backups:
 - Novell TID 7000312: for Novell Client 4.91
 - Novell TID 7008266: for Novell Client 2

MS SharePoint Requirements

- Install DS-Recovery Tools (DS-Recovery Tools service) on the computer with MS SharePoint.
- The DS-Recovery Tools Service Account must be a local administrator.

Install DS-Recovery Tools

Step 1. Run the Installation Program

1. [Option A] Run the installation program from the download directory or from the corresponding folder on the installation DVD:
32-Bit Version: \Software\DS-Recovery-Tools\Windows_32_bit\setup.exe
64-Bit Version: \Software\DS-Recovery-Tools\Windows_64_bit\setup.exe
[Option B] Run the Installation Center for Windows Products (**setup.exe**) located in the root directory of the installation DVD.
 - The Installation Center is a common launcher for all Windows-platform installations. It allows you to choose the specific installation package you want, without the need to browse the installation DVD.
2. Choose the Setup Language:
 - English
 - German
3. A pre-requisite check is performed on the installation machine. This scans the hardware and Operating System for compatibility (see ["Installation Platform Requirements" on page 6](#)).
 - Click "Install". The license agreement screen appears. You must accept the license agreement to continue.
4. Click Next.

Step 2. Select Installation Location

1. The Choose Destination Location Page appears.
2. You must choose the location where DS-Recovery Tools will be installed, or accept the default one.
3. Click Next.

Step 3. Select the types of backup items

1. You must select the items that will be backed up with this DS-Recovery Tools installation:
 - MS Exchange / Outlook
 - Lotus (Setup will display the [Lotus Notes / Domino Server Settings](#) screen.)
 - GroupWise (Setup will display the [GroupWise Settings](#) screen.)
 - MS SharePoint
2. Click Next.

Step 4. DS-Recovery Tools Startup / Service Logon Account

1. The DS-Recovery Tools Service Logon Account screen appears.
2. You are prompted to enter the account to use. This same account will be used for DS-MLR Service and DS-Recovery Tools Service.
 - **Local System Account:** This option will use the Windows "Local System account" instead of a specific user account.
 - **This account:** Enter the Windows User Account and Password in the appropriate fields. This must be a valid Windows user account that has already been created.
 - For MS Exchange, see ["MS Exchange Requirements" on page 8](#)

- For MS Outlook, see [“MS Outlook Requirements” on page 9](#)
 - For Lotus, see [“Lotus Domino / Lotus Notes Server Requirements” on page 10](#)
 - For GroupWise, see [“GroupWise Requirements” on page 10](#)
 - For MS SharePoint, see [“MS SharePoint Requirements” on page 11](#)
3. By default, the Auto Start box is checked. This means the service(s) start automatically each time the target computer boots (recommended).
 - Uncheck this box if you do not want the DS-MLR / DS-Recovery Tools Services to start on reboot. (This means you must manually start the Services before you can use them.)
 4. Click Next.

Step 5. E-Mail Server Settings

This step depends on the selection in [“Step 3. Select the types of backup items” on page 12](#):

- **MS Exchange / Outlook:** Skip to [“Step 6. Start Copying Files” on page 13](#)
- **Lotus:** Setup will display the [“Lotus Notes / Domino Server Settings” on page 13](#) screen.
- **GroupWise:** Setup will display the [“GroupWise Settings” on page 13](#) screen.

Lotus Notes / Domino Server Settings

1. The Lotus Notes and Domino Server setting page appears.
2. You must select the path to the Notes.ini file that contains the User ID file.
3. If you are installing to a:

Lotus Notes Client machine	<ul style="list-style-type: none"> • You do not need to provide a password. (This is because in this mode, DS-MLR backs up E-Mails locally from this Lotus Notes machine.) Go to the next step.
Lotus Domino server	<ul style="list-style-type: none"> • Enter the password for the User ID file (contained in the Notes.ini file). (This User ID file must be for a user who is a full rights Lotus Administrator.) The default path of this file is "C:\Program Files\lotus\notes". DO NOT select the notes.ini file generated by the Domino Server (usually located in "C:\Lotus\Domino").

4. Click Next.

GroupWise Settings

1. The GroupWise setting page appears.
2. Enter the GroupWise server IP address.
3. Enter the GroupWise server port.
4. Enter the "Trusted application key" ([See “GroupWise Requirements” on page 10.](#)).
5. Enter the Novell Account and Password. This account is used to connect to the GroupWise Domain path.
6. Click Next.

Step 6. Start Copying Files

1. When all specific E-Mail type settings are completed, the Start Copying Files screen appears.
2. The installation will indicate when it is finished.
3. Click Finish.

You can start/stop the service(s) from Start > All Programs > Asigra DS-Recovery Tools:

- DS-MLR Service Manager
- DS-Recovery Tools Service Manager

DS-Recovery Tools Upgrade

Before upgrading, read the new version's Release Notes for any special steps you need to perform.

Normally, the DS-Recovery Tools Service / DS-MLR Service should be the same version / Service Pack as the DS-Clients.

Manual Upgrade

To manually upgrade DS-Recovery Tools Service / DS-MLR Service from one version / Service Pack to the next, do the following:

1. Make sure the DS-Recovery Tools Service / DS-MLR Service is not running backup/restore activities that are of critical importance for your customers.
2. Stop the DS-Recovery Tools Service / DS-MLR Service.
3. Run the DS-Recovery Tools Release / Service Pack installation on the machine where the DS-Recovery Tools Service / DS-MLR Service software is installed.
4. Finish the installation.
5. Start the DS-Recovery Tools Service / DS-MLR Service.
6. Verify that the DS-Clients can successfully connect to the DS-Recovery Tools Service / DS-MLR Service by triggering a test backup / restore.

Auto Upgrade

If the DS-System is configured for "Auto Upgrade", the DS-Client will verify what DS-Recovery Tools / DS-MLR Auto Upgrade Packages are available.

When required, DS-Client will download the DS-Recovery Tools / DS-MLR autoupgrade package and save it to a location on the DS-Client computer (the DS-Client Installation directory). The DS-Client will send this package to the DS-Recovery Tools / DS-MLR computer to run the autoupgrade.