MAC OS X Agent Version 2.6

Installation and User's Guide

STOREWAY DPA

BULL

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MAC OS X Agent Version 2.6

Installation and User's Guide

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Chapter 1. StoreWay DPA Agent for Mac OS X - overview

File System

The StoreWay DPA Agent for Mac OS X enables you to backup HFS+ file systems (Mac specific) and UFS (Unix type file systems).

Rresource forks are linked to HFS+ volumes. In the most recent versions of the MAC OS X, they are being used less and less. However, for compatibility reasons, the StoreWay DPA Agent for Mac OS X enables you to backup and restore resource forks.

Cross-platform restoration

The HFS+ file system, thanks to its "metadata" manages the different forks natively, which is not the case for UFS. To get a this problem, the Mac OS X system installed on a UFS stores the resource fork in a separate file whose name begins by a '_' followed by the name of the data fork. For example, for an application called 'myappli', the data fork is saved in the file 'nameappli' and the resource fork in the file '_nameappli'.

The StoreWay DPA Agent for Mac OS X works on two types of file system. For HFS+ system backups and a restoration on a UFS system, the resource fork will automatically be in a second file starting by '_' followed by the name of the data fork. The metadata cannot be restored on a UFS system.

For the backup of a UFS system containing data forks and resource forks, when the restoration takes place on an HFS+ system we still have these two files (the agent cannot manage both files as being the resource fork and data fork for the same application).

Meta-data

Files on an HFS+ system contain metadata such as "finder info". This data is backed up and restored with the files on an HFS+ system.

Encryption

The StoreWay DPA Agent for Mac OS X supports encryption and compression.

Chapter 2. Installation

You can install the StoreWay DPA Agent for Mac OS X in either graphical or command-line mode.

Important : for this installation, you need to be root.

Prerequisites for installing the StoreWay DPA Agent for Mac OS X

> The StoreWay DPA Agent for Mac OS X requires a minimum version of the Mac OS 10 (version 10.3.9).

> Supported architecture: PowerPC.

> 32-bits and/or 64-bits.

> **Note** : The StoreWay DPA Mac Agent has a license key enabling you to back up an unlimited number of Mac machines.

> **Le CD Agent StoreWay DPA** (graphical or command-line mode version).

> The **StoreWay DPA Agents (Unix, Linux, AS400 & MAC OS) Command Line Interface Setup** CD.

> The **StoreWay® DPA Initial Setup (Windows), Agents (Windows, Linux, Netware, MAC OS), Graphical User Interface Setup, ASM & Disaster Recovery Agents Windows) Version X.X.XXX** CD.

> 4.1 MB disk space for the graphical installation (with uninstaller) and 2.3 MB for the installation in command line mode.

Installing the StoreWay DPA Agent on the Mac (graphical mode)

1   Insert the CD **StoreWay® DPA Initial Setup (Windows), Agents (Windows, Linux, Netware, MAC OS), Graphical User Interface Setup, ASM & Disaster Recovery Agents Windows) Version X.X.XXX** into the selected Mac machine.

2   Open the Finder and navigate in the CD to **StoreWay DPA/setup/install.htm**. Open the file in a browser web.

3   In the list, click twice on the Mac agent. The **install.zip** file is displayed.

4   Move this file to a location where your can unzip it. Once moved, unzip this file to generate the **install.app** application.

5   Double-click on "install.app" and follow the installation wizards.

    WARNING: You must be « root » to install the agent on your machine.

6   Double-click on **install.app** and follow the installation wizard.

    The installation directory by default is : **</usr/dpa>**. This location is only accessible to users who are not « root ». If you want to give your users access to the StoreWay DPA installation, you can modify this location (use the directory **/Applications**, for example). **Important** : if you do not use the default path (**/usr/dpa**), you will no longer be able to use this installation path. **/Applications** will be proposed by default.

    In the installation wizard, you also need to enter the name of the StoreWay DPA which will handle your Mac OS X system.

7 When the installation is over, you can log onto the StoreWay DPA which manages your Mac OS X system backups and check that the communication exists between both machines.

> **NOTE:** To test this connection, see the following section: (« Check the communication between the Mac and the StoreWay DPA».)

Installing the StoreWay DPA Agent on the Mac (in command line mode)

1 Insert the **StoreWay DPA Agents (Unix, Linux, AS400 & MAC OS) Command Line Interface Setup** CD in the chosen Mac unit.

2 Open a console and connectez-vous en tant que « root ».

3 Change directories: **cd/Volumes/StoreWay DPA** and launch the **setup. sh** script.

4 Select the installation language (English or French).

5 Enter the name of the StoreWay DPA which will manage your Mac OS X system backups.

6 Select the installation path.

The installation directory by default is : **</usr/dpa>**. This location is only accessible to users who are not « root ». If you want to give your users access to the StoreWay DPA installation, you can modify this location (use the directory **/Applications**, for example). **Important** : if you do not use the default path (**/usr/dpa**), you will no longer be able to use this installation path. **/Applications** will be proposed by default.

7 Confirm the installation. The package is installed and the daemon starts. You can check the daemon is running by launching the command : **ps -eax | grep esav**. Search for the StoreWay DPA daemon (esavdaemon) in the list.

8 When the installation is over, you can log onto the StoreWay DPA which manages your Mac OS X system backups and check that the communication exists between both machines.

> **NOTE:** To test this connection, see the following section: (« Check the communication between the Mac and the StoreWay DPA».)

Check the communication between the Mac and the StoreWay DPA

The Mac must be recognized on a network equipped with DNS and DHCP. This is the procedure to follow to check, and if necessary, troubleshoot the connection between the two machines:

> Ensure the StoreWay DPA (esavedaemon) agent is running on the Mac.

> Perform a *ping* between the Mac and the StoreWay DPA (by using the name of the StoreWay DPA or its IP address).

> Open the StoreWay DPA interface and go to the page **settings/Systems**. Select the Mac system (or create this system if necessary) and in the **System Edit** page, click on the **Browse** button. The Mac file system structure should appear in a separate window.

> If the StoreWay DPA name resolution is still not occurring, you can declare the StoreWay DPA in the "host" file in **/etc/hosts**. Of course, if your network changes, or if you change the StoreWay DPA, you will need to modify this information.

Uninstall the StoreWay DPA Agent on the Mac (graphical mode)

1 Open the Finder and navigate in the file system to: **<StoreWay DPA_install_dir/StoreWay DPA/Uninstall**.

2 Double-click on the uninstaller « StoreWay DPA.app ».

3 You should reboot your machine to complete the uninstall and stop the StoreWay DPA daemon (esavdaemon).

Uninstall the StoreWay DPA Agent on the Mac (in command line mode)

1 In a terminal (« root »), change directory : **cd /usr** (or go to the chosen installation directory) and launch the command **rm –rf StoreWay DPA**.

2 Stop the StoreWay DPA daemon. This daemon is called **esavdaemon**. Use the command **ps -eax | grep esav** to locate it.

The number of the daemon and its complete path will be displayed. Stop the daemon with **kill num** where « num » is the number of the daemon to stop. It is advisable to check the daemon has stopped by with **ps -eax | grep esav**. If the daemon is still running, execute **kill -9 num**

3 Uninstall startup scripts in **/Library/StartUpItems**. Run the command **rm –rf Backupappliance**.

4 You need to reboot your machine to complete the uninstall.

Chapter 3. Mac OS X system backup

See:

Perform a Mac OS X system backup

1. In the StoreWay DPA interface, open the page **settings/Systems**.

2. Click on the button **Create a new system** ( ) and complete the fields on the Edit page which opens on the right.

3. Once the StoreWay DPA Agent for Mac OS X is installed on your Mac, this machine will be automatically backed up on the StoreWay DPA. You need to declare it then associate it with a backup profile.

   - In the **Description** section, select **Type : MacOS**.

   - In the **Backup** section, you can select the Synthetic backup selection. Check the **Full Synthetic** checkbox. A synthetic backup combines the latest full backup of selected data and all combined subsequent incremental backups.

   - In the **Data to back up** section, add a directory name (for example **/** for the entire Mac file system).

   - Select a backup profile for this system.

   For more information on creating systems, please consult the StoreWay DPA online help.

Monitoring Mac OS X backups

To display available backups :

1 Log onto the StoreWay DPA then click on the menu **operations/Backup**.

2 In the left-hand menu, select your Mac OS X machine.

3 Select the **Backup activity** tab which will enable you to display available system backups.
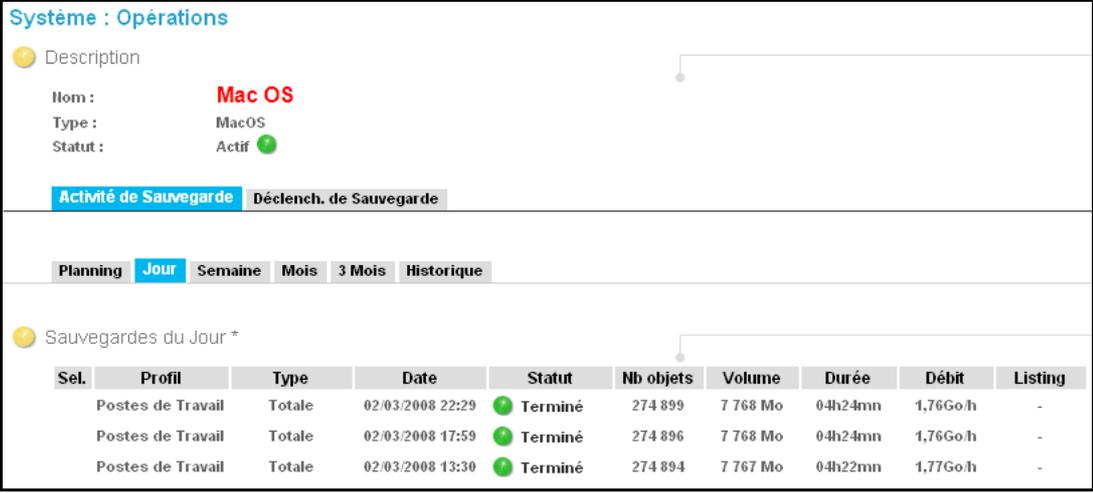
Système : Opérations

🟡 Description

Nom :	**Mac OS**
Type :	MacOS
Statut :	Actif 🟢

Activité de Sauvegarde   Déclench. de Sauvegarde

Planning **Jour** Semaine Mois 3 Mois Historique

🟡 Sauvegardes du Jour *

Sel.	Profil	Type	Date	Statut	Nb objets	Volume	Durée	Débit	Listing
	Postes de Travail	Totale	02/03/2008 22:29	🟢 Terminé	274 899	7 768 Mo	04h24mn	1,76Go/h	-
	Postes de Travail	Totale	02/03/2008 17:59	🟢 Terminé	274 896	7 768 Mo	04h24mn	1,76Go/h	-
	Postes de Travail	Totale	02/03/2008 13:30	🟢 Terminé	274 894	7 767 Mo	04h22mn	1,77Go/h	-

4 Click on an icon in the **Status** column to display more information on how this particular backup went.

Chapter 4. System restoration

Perform a Mac OS system restoration

See Chapter 6 of the Quick Start guide for more information on how to perform a restoration using the StoreWay DPA.

Cross-platform restoration

The HFS+ file system, thanks to its "métadata" manages the different forks natively, which is not the case for UFS. To get a this problem, the Mac OS X system installed on a UFS stores the resource fork in a separate file whose name begins by a '_' followed by the name of the data fork. For example, for an application called 'myappli', the data fork is saved in the file 'nameappli' and the resource fork in the file '_nameappli'.

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