

Introduction

As of Windows® 2008, Microsoft® no longer supports tape backup solutions. This document discusses the Avamar backup solution.

Some of the advantages of using the ECI remote backup solution include:

- Disaster recovery system. Your backups physically reside in another location.
- Backing up any amount of data. You can back up data at the file and folder level.
- Block level backup. The backup only copies unique blocks of data (no duplication), so backups are faster.
- Full and partial backups. There are 2 backups made each day: one full and one partial.
- Restore data at file level. If needed, backups can be restored at file level.

Additionally, our policy is to run two full backups overnight. Thereafter, backups are changes only or incremental backups on a daily basis. Remember, the first two day-end backups take longer than subsequent backups.

Backup schedules are set on Central Standard Time (CST).

The backup retention policy is as follows:

- Database-only backups capture the files in the DDMS® directory. Daily backups are retained for 30 days. Monthly and yearly backups are retained for 18 months.
- Database/Operating System backups capture all of the files on the DDMS server including the operating system. Daily backups are retained for 30 days. Monthly and yearly backups are retained for 18 months.
- DR Database/Operating System backups capture all of the files on the DDMS server, including the operating system with an extended retention period for year-end backups. Daily backups are retained for 30 days. Monthly backups are retained for 18 months. Year-end backups are retained for 7 years.

In this document, we discuss how to restore backups.

Implementing the Remote Backup Solution

When you decide to use the ECI remote backup solution for your software, there are a couple of things you should know. First, a DDMS Support technician will contact you regarding your setup. This tech will work with you to get your backup software customized for your business. File paths must be created for the backups and you must determine what level of backup you need.

Second, you must open a port on your firewall. If the port is not opened, backups can not be restored when the need arises.

Month and year-end backups must be run manually or set up using Windows Scheduler. ECI provides a desktop shortcut for your month and year-end backups so that you can run those backups at your convenience.

Third, you must have at least three gigs of hard drive space available on your C:\ drive for the Avamar client software to properly install and operate.

Using the Avamar Client Software

Use the Avamar client software to view backup logs and restore backups.

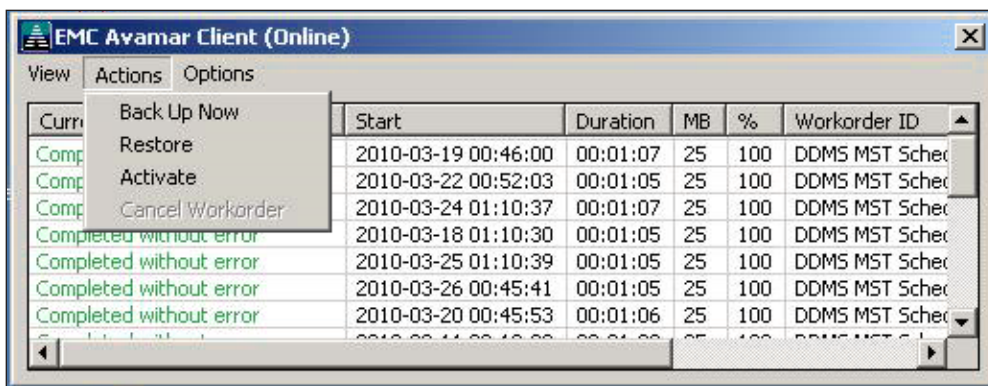
Restoring a Backup

To restore a backup, you must know your login and password.

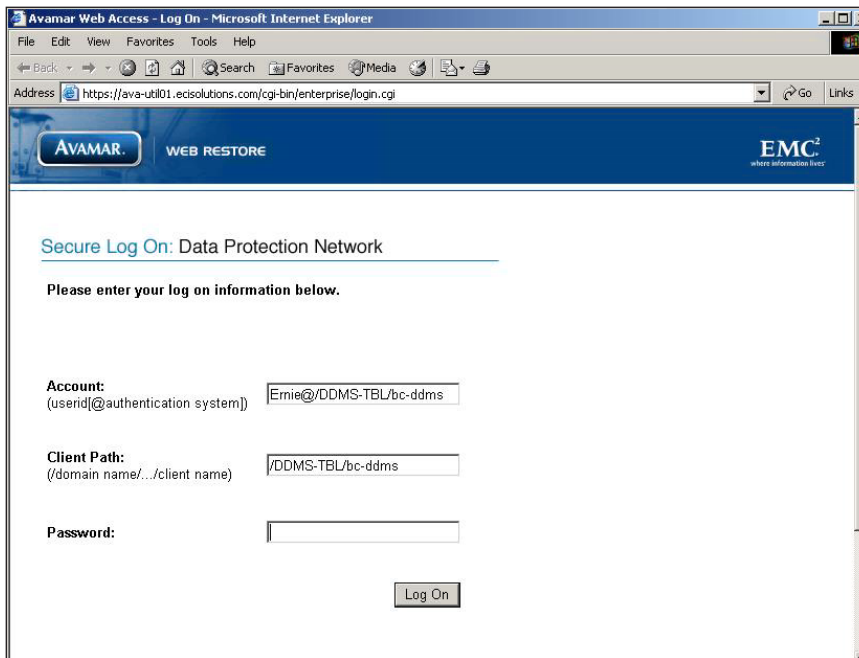
If you select more than one file to restore, the sum of all the files cannot exceed one gig. If you need to restore more, you need to follow the steps below until all files are restored.

Restoring any backup larger than one gig must be done by ECI.

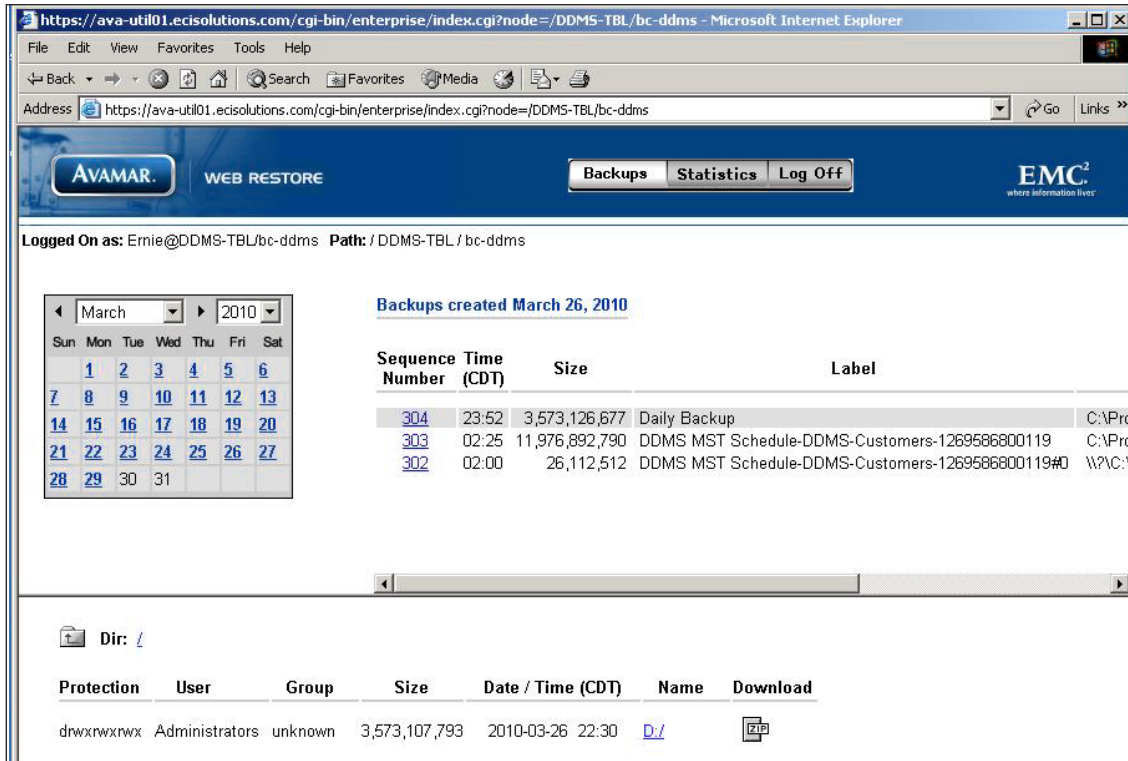
1. Double-click the Avamar client on your desktop.
2. Click the Actions menu and select Restore.



3. In the Secure Log On window, enter the password that you received from ECI.



4. Click Log On.
5. Once you are logged in, use the calendar to select the date of the backup you need to restore.
6. Once you've selected the date, select the backup to restore. Using the example shown in the following figure, click Sequence Number 304 to select the daily backup.



7. A list of the files for this backup opens at the bottom of the page. Click the drive name to drill down into the files. When the file to restore is displayed, click the magnifying glass icon next to the file name. See the figure on the following page. A prompt opens giving you the option of downloading and saving the file to your system.
8. Click Save. Save the file to a convenient location on your system. After the download is complete, you can save the file to the proper folder. When restoring DDMS files, you must restore all three parts of the file, .dbf, .cdx, and .key. You must select and restore these files one at a time.

The screenshot shows the DDMS web interface in Microsoft Internet Explorer. The browser address bar shows the URL: `https://ava-util01.ecisolutions.com/cgi-bin/enterprise/index.cgi?node=/DDMS-TBL/bc-ddms`. The page header includes the AVAMAR logo, "WEB RESTORE" text, and buttons for "Backups", "Statistics", and "Log Off". The EMC logo is also present in the top right corner.

Below the header, the user is logged in as "Ernie@DDMS-TBL/bc-ddms" with the path "/ DDMS-TBL / bc-ddms".

A calendar widget shows the month of March 2010. The "Backups created March 26, 2010" section contains a table with the following data:

Sequence Number	Time (CDT)	Size	Label
304	23:52	3,573,126,677	Daily Backup
303	02:25	11,976,892,790	DDMS MST Schedule-DDMS-Customers-1269586800119
302	02:00	26,112,512	DDMS MST Schedule-DDMS-Customers-1269586800119#0

Below the backup table is a file list with columns for permissions, owner, group, size, date, time, and filename. The files listed include:

- z-calls.cdx (3,072 bytes, 2008-08-19 15:11)
- z-calls.dbf (1,090 bytes, 2008-08-19 15:11)
- z-calls.key (10 bytes, 2008-08-19 15:11)
- z-cback.cdx (3,072 bytes, 2008-08-19 15:11)
- z-cback.dbf (386 bytes, 2008-08-19 15:19)
- z-cback.key (10 bytes, 2008-08-19 15:11)
- z-codes.cdx (3,072 bytes, 2008-08-19 15:11)
- z-codes.dbf (610 bytes, 2008-08-19 15:11)