# Getting Started with Server Backup

The Server Backup application enables you to backup and restore data that is stored on the OmniVista server. You can specify that a backup be performed immediately, or you can schedule a backup for a specific date and time. You can specify that backups be performed at regular, user-defined intervals. Restores can be performed immediately, but may not be scheduled. Backups/restores can be made to/from local, mounted, or shared directory locations, or directories that are accessible via FTP.

The screen below shows the main Server Backup application window. The window contains three panes that provide information on stored backups. The top pane, "Server Backup Directories," lists user-created directories that contain server backup files. The middle pane, "Files in Selected Directory," displays the backup files that are contained in the directory selected in the top pane. The bottom pane, "View OmniVista Server Backup Repository," displays information about the backup repository to which the individual backup selected above belongs. Backup repositories are described below.

Server Backup Application
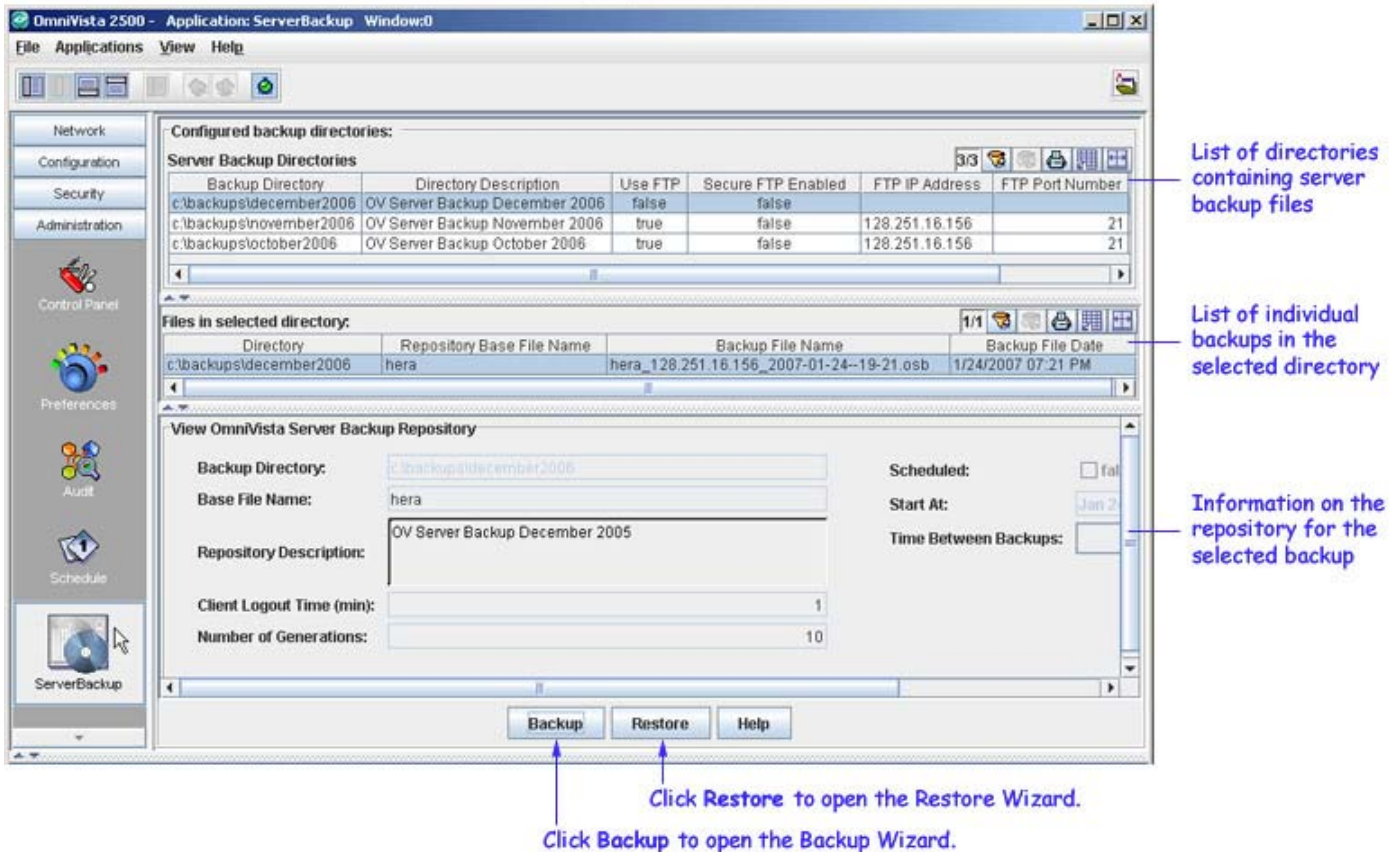
Backup Repositories

The Server Backup application utilizes the concept of backup *repositories*. A backup repository is essentially a collection of backup files with the same base file name, made at different times, and a set of specifications defining the backup parameters. One backup directory can contain multiple backup repositories. A backup repository includes the following specifications:

- A base file name, to which the IP address of the server and the time and date of the backup are appended to create the name of individual backup files in the repository. In the screen shown above, "zeus" is an example of a base file name for a backup repository. zeus_128.251.30.61_2004-06-28--13-57.osb is an example of an individual backup file in the repository, where
    - hera is the base file name of the repository
    - 128.251.30.61 is the IP address of the OmniVista server whose data was backed up
    - 2004-06-28 is the date of the backup in the form *year-month-day*)
    - 13-57 is the time of the backup in 24-hour notation
    - .osb is a file extension that identifies the file as an OmniVista Server Backup
- a user-defined description of the repository.
- a client logout time for backups made using the repository. This defines the period of time, in minutes, that clients are given to log off the server after being warned that the server will shut down (so that the backup can be made).
- the number of generations of backups that will be preserved. This defines the number of backup files that will be saved before the oldest backup file is overwritten. For example, if the number of generations is set to ten, the eleventh backup taken will overwrite the first backup taken and a total of ten backup files will be preserved in the backup directory.
- a true/false checkbox that indicates whether backups in the repository are scheduled to occur automatically at one or more specific times/dates. If this checkbox is set to true, the repository also includes:
    - the date and time that the first automatic scheduled backup will begin
    - the time period between automatic backups (any 24-hour period from one day to seven days)

What Gets Backed-Up?

When a backup is performed, OmniVista copies all proprietary data from the LDAP server, the OmniVista database, and the OmniVista server's **data** directory and writes all data to a single backup file. The backup includes all data needed to restore the OmniVista server to the state it was in when the backup was made.

Note: If the OmniVista client and the OmniVista server are not running on the same host machine at the time of the backup, client-based Preferences data will reflect client preferences for the server host machine.

Performing Backups

To perform a backup, click the **Backup** button. The first page of the Backup Wizard opens. The first page of the Backup Wizard enables you to create backup directories, edit or delete backup directories, and select the desired backup directory for the next backup. A backup directory is a file system directory in which backup files are stored. One backup directory can store backup files from multiple backup repositories. Backup directories can be local, mounted, or shared, or they can be remote and accessible via FTP. Go to "Backup Wizard Page One" on page 6 for more information on the first page of the Backup Wizard.

The First Page of the Backup Wizard
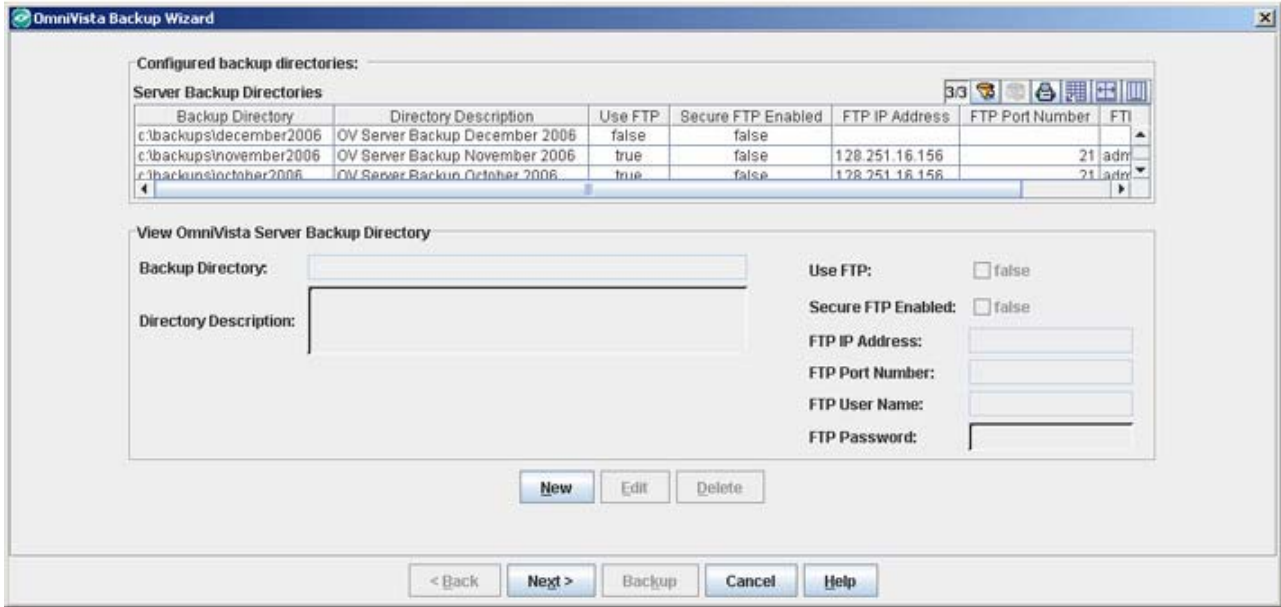
The second page of the Backup Wizard, shown below, enables you to create backup repositories, edit or delete backup repositories, and select the desired backup repository for the next backup. The second page of the Backup Wizard also enables you to schedule backups and to perform an immediate backup. Go to "Backup Wizard Page Two" on page 9 for more information on the second page of the Backup Wizard.

Second Page of the Backup Wizard
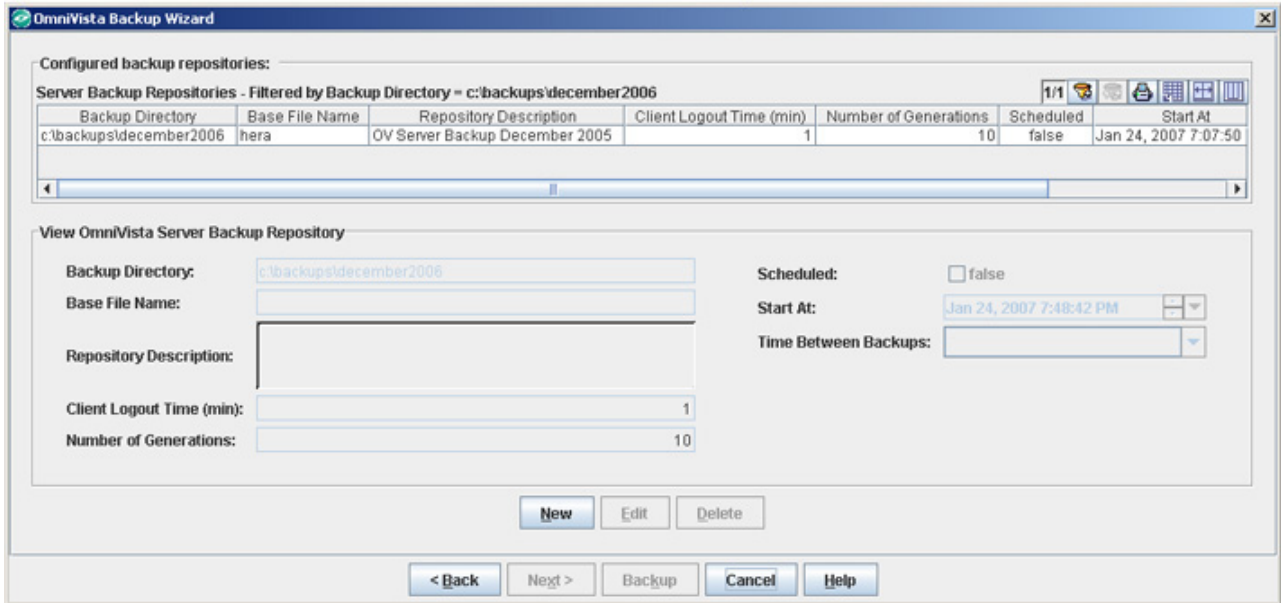
Backup Behavior

When a user initiates a backup, or when a backup is automatically scheduled to occur, the following actions take place:

1. The OmniVista server sends a message to all users that are logged in, notifying them that the server is scheduled to be shut down in *x* minutes. (The *x* minutes period is determined by the setting of **Client Logout Time** in the current backup repository.) At the end of this period, the server logs out any user who is still logged in and sends a message to that effect.

2. The server reboots itself. Very early in the reboot cycle, before any system services have been started, the server checks to see if a backup is requested or scheduled. If so, the server copies appropriate data from the LDAP Server, the OmniVista database, and the server's **data** directory and creates a single backup file with an .osb file extension. The .osb (OmniVista Server Backup) file is created in JAR format.

> **Caution**. Do not edit or tamper with OmniVista backup files. It is important that the files contain a complete, consistent data set, so that any restore performed from the file will be valid.

3. The backup file is written or FTPed to the backup directory, as determined by the specifications in the backup directory.

4. OmniVista services are restarted, and entries detailing the backup are written to log **backuprestore.txt**, which can be viewed from the Audit application.

Note: You must log back into OmniVista when the server reboot is completed.

Performing Restores

To perform a restore, click the **Restore** button. The first page of the Restore Wizard opens. The first page of the Restore Wizard lists existing backup directories and enables you to select the backup directory that contains the backup file you want to restore. Go to "Restore Wizard Page One" on page 12 for more information on the first page of the Restore Wizard.

> **Note**: If you are performing a restore for a crashed system in which OmniVista backup specifications have been lost, you will need to manually reenter the backup directory parameters for the backup directory that contains your backup files.

First Page of the Restore Wizard
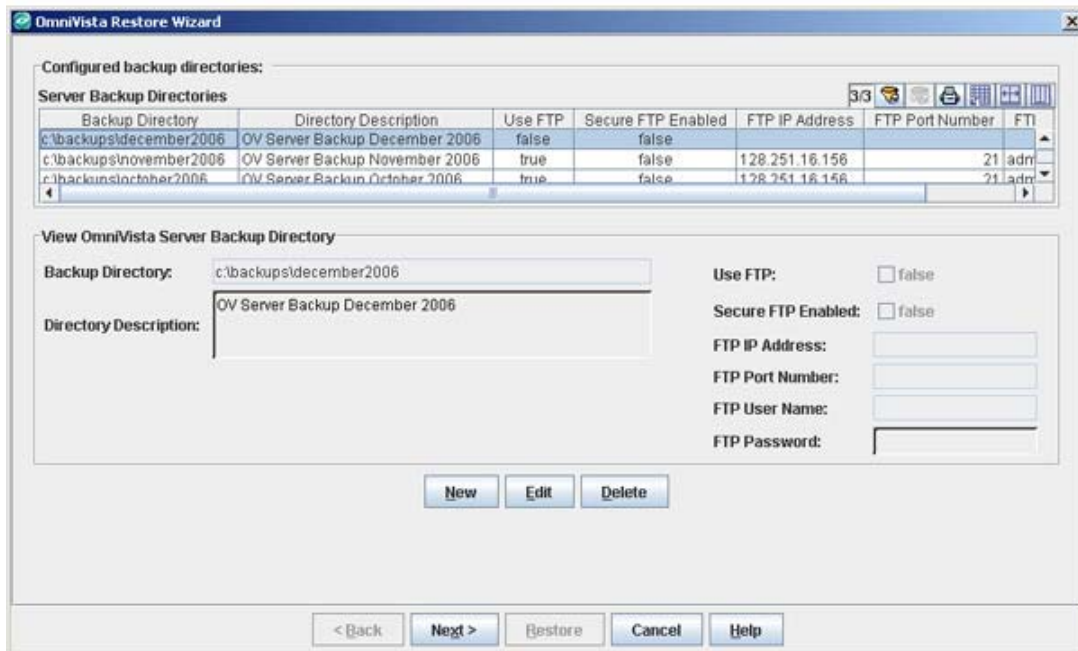
The second page of the Restore Wizard enables you to perform the restore. To do so, simply click on a backup repository in the list of Configured Backup Repositories, select the desired backup file from the pull-down menu in the **Repository Files** field, and click the **Restore** button. Go to "Restore Wizard Page Two" on page 13 for more information on the second page of the Restore Wizard.

> **Note**: If you are performing a restore for a crashed system, you will need to reenter the repository base file name manually.

Second Page of the Restore Wizard
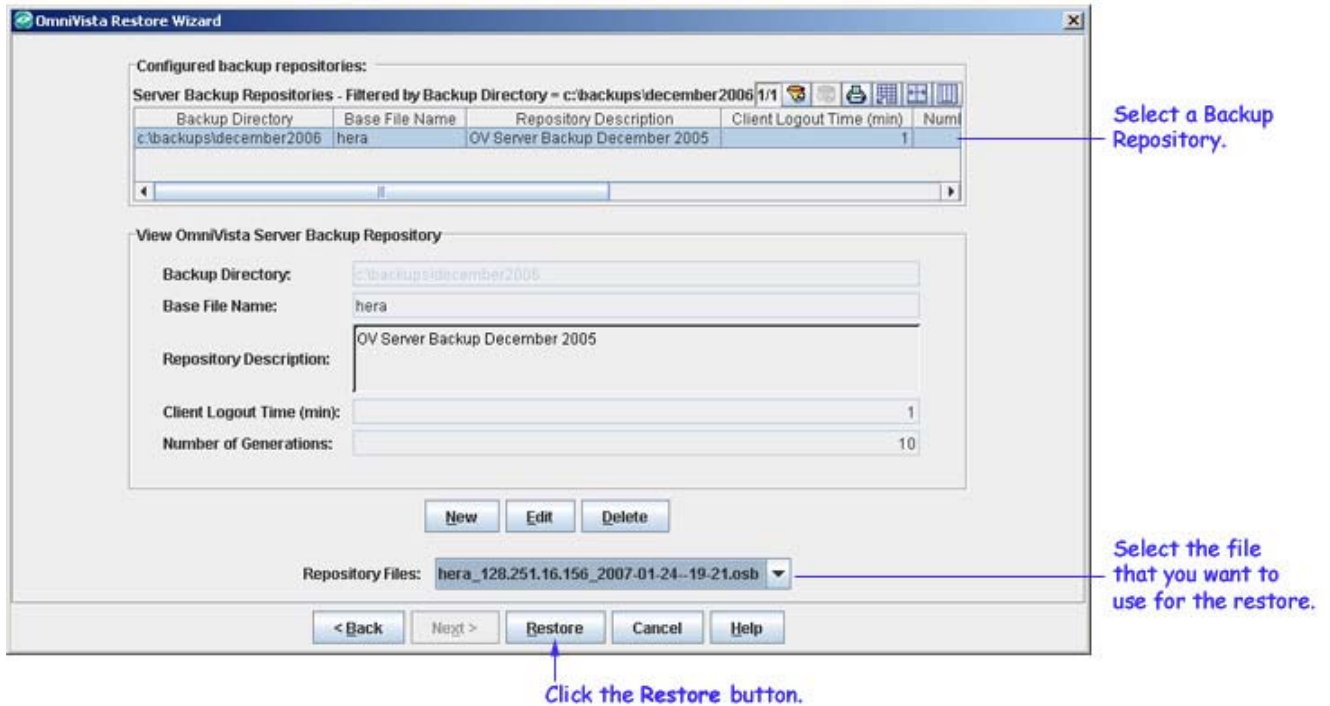
Restore Behavior

When the **Restore** button is clicked, the OmniVista server sends a message to all users that are logged in, notifying them that the server is scheduled to be shut down in x minutes. (The x minutes period is determined by the setting of **Client Logout Time** in the backup repository.) At the end of this period, the server logs out any user who is still logged in and sends a message to that effect.

The server then reboots itself. Early in the reboot process, the server copies appropriate data from the backup file to the LDAP Server, the OmniVista database, and the server's **data** directory. OmniVista services are then restarted, and entries detailing the restore are written to log **backuprestore.txt**, which can be viewed from the Audit application.

> **Note**: You must log back into OmniVista when the server reboot is completed.

Backup Wizard Page One

The first page of the Backup Wizard lists existing backup directories and enables you to select the backup directory in which the backup will be saved. The first page of the Backup Wizard also enables you to create new backup directories, edit existing backup directories, and delete empty backup directories. Backup directories can be local, mounted, or shared, or they can be remote and accessible via FTP or Secure FTP (SFTP).

> **Note**: The name or pathname entered in the **Backup Directory** field when a backup directory is created determines the location of the backup directory. More detailed information is found below.

The First Page of the Backup Wizard
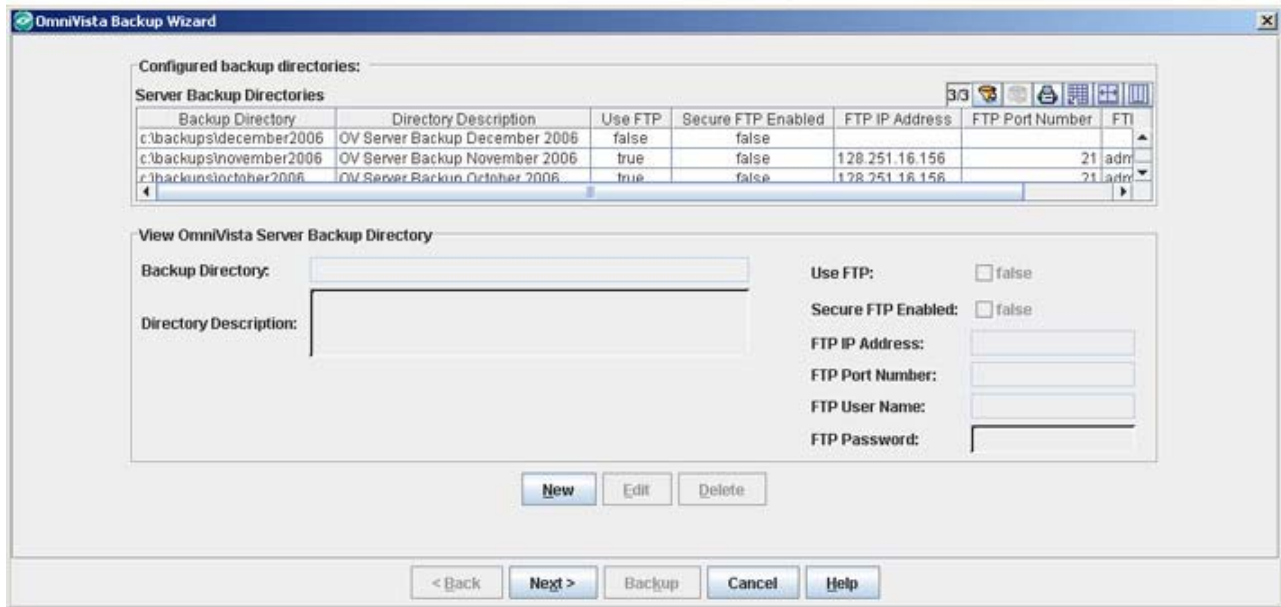
Selecting a Backup Directory

To select an existing backup directory, merely click on the desired directory in the list of Configured Server Backup Directories. Then click the **Next** button.

Note: If the desired backup directory is displayed in the View OmniVista Server Backup Directory fields, it is not necessary to click on the directory in the list of Configured Server Backup Directories. The directory displayed in the View OmniVista Server Backup Directory fields will be automatically selected when **Next** is clicked.

Creating a New Backup Directory

The information in the following sections provides instructions for creating a new backup directory. These instructions also apply when you are performing a restore for a crashed system in which OmniVista backup specifications have been lost, and you need to manually reenter the backup directory parameters for the backup directory that contains your backup files.

Before You Begin

The name or pathname entered in the **Backup Directory** field when a backup directory is created determines the location of the backup directory.

> **Important Note**. Backups are typically placed on another machine, or at least on another drive. This is advisable so that if a disk crash occurs, backups will be preserved and available for use in restoring the system.

Backup Directories Not Accessed via FTP (Includes Local, Mounted, or Shared Locations)

If you are creating a backup directory that will not be accessed via FTP or SFTP, you should specify the complete pathname of the directory, including the drive designation for Windows systems, in the **Backup Directory** field. For example, on Windows systems:

S:\backups\ovserver\june2004

OmniVista will create the final directory in the path automatically, but all other directories must preexist. In the example above, the **S:\backups\ovserver** location must preexist, but OmniVista will automatically create the **june2004** directory. Note that OmniVista does not check that the directory pathname entered is valid.

Backup Directories accessed via FTP

If you are creating a backup directory that will be accessed via FTP or SFTP, enter the relative path on the remote machine (relative to the default FTP server directory) in the **Backup Directory** field. For example on UNIX systems:

backups/ovserver/june2004

How to Create a New Backup Directory

To create a new backup directory, follow the steps below:

1. Click the **New** button. The Create OmniVista Server Backup Directory fields activate.

2. In the **Backup Directory** field, enter a pathname for the new backup directory. The entry that you make in this field determines the location where the backup directory will be created. Refer to the section above, "Before You Begin," for more detailed information.

Note: If you enter a directory name without a path (for example, **junebackups**) the backup directory will be created under the *omnivista_installation_directory*, which defaults to **Alcatel OmniVista 2500**. Note that this is NOT advisable.

3. In the **Directory Description** field, enter a description of the new backup directory.

4. If the new backup directory is remote and accessed via FTP, click the **Use FTP** checkbox. To use **SFTP**, click the **Use FTP** checkbox, then click the **Secure FTP Enabled** checkbox. The FTP fields activate. Complete steps **5** - **8** below.

5. In the **FTP IP Address** field, enter the IP address of the remote machine.

6. In the **FTP Port Number** field, enter the FTP port number or accept the default port number (21 for FTP, 22 for SFTP).

7. In the **FTP User Name** field, enter the FTP user name configured on the remote machine.

8. In the **FTP Password** field, enter the FTP password configured on the remote machine.

9. Click the **OK** button.

Note: FTP/SFTP parameters are not validated by OmniVista. If FTP parameters are incorrect, the backup file will not be created. Always check the log **backuprestore.txt**, which can be viewed from the Audit application, to ensure that backups are performed successfully.

10. Click the **Next** button to display page two of the Backup Wizard.

Editing a Backup Directory

To edit an existing backup directory, select the directory in the list of Configured Server Backup Directories and click the **Edit** button. Any field except the backup directory name can be edited.

Deleting a Backup Directory

Note: When you delete a backup directory, you are deleting the directory from OmniVista's backup specifications. However, the actual backup directory on the host or FTP file system is NOT deleted.

To delete a backup directory, select the directory in the list of Configured Server Backup Directories and click the **Delete** button. Only empty backup directories can be deleted -- you cannot delete a backup directory that contains a backup repository. Delete any repositories that exist in the backup directory and then delete the backup directory.

Backup Wizard Page Two

The second page of the Backup Wizard, shown below, enables you to create backup repositories, edit or delete backup repositories, and select the desired backup repository. The second page of the Backup Wizard also enables you to perform immediate backups.

Second Page of the Backup Wizard
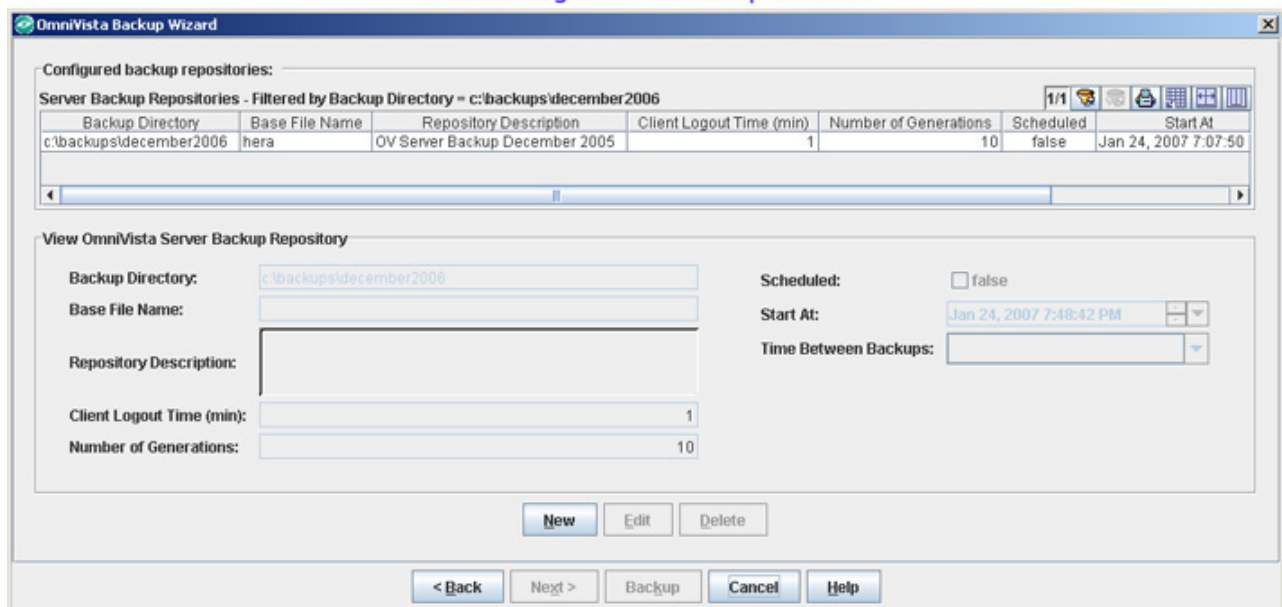
Performing an Immediate Backup

To perform an immediate backup, follow the steps below:

1. Select the desired backup repository by clicking on the desired repository in the list of Configured Backup Repositories. The selected repository displays in the View OmniVista Server Backup Repository fields.

> **Note**: When a backup repository specifies one or more scheduled backups, you cannot perform an immediate backup. Immediate backups can be performed only in repositories that do not specify scheduled backups.

2. Click the **Backup** button. The OmniVista server sends a message to all users that are logged in, notifying them that the server is scheduled to be shut down in x minutes. (The x minutes period is determined by the setting of **Client Logout Time** in the backup repository.) At the end

of this period, the server logs out any user who is still logged in and sends a message to that effect.

The server then reboots itself. Very early in the reboot cycle, before any system services have been started, the server copies appropriate data from the LDAP Server, the OmniVista database, and the server's **data** directory and creates a single backup file with an .osb (OmniVista Server Backup) file extension. The backup file is written or FTPed to the backup directory, as determined by the specifications in the backup directory. OmniVista services are restarted, and entries detailing the backup are written to log **backuprestore.txt**, which can be viewed from the Audit application.

> **Note**. You must log back into OmniVista when the server reboot is completed.

Creating a New Backup Repository

To create a new backup repository, follow the steps below:

1. Click the **New** button. The Create OmniVista Server Backup Repository fields activate.

2. In the **Base File Name** field, enter the base file name for the new repository. As its name implies, the base file name will be used as the base name for all backup files created in the repository. The IP address of the server and the time and date of the backup will be appended to the base file name to create the file name of individual backup files in the repository.

Note: Alcatel recommends that you record the base file name since you will need to enter the name manually during a fresh restore of data.

3. In the **Repository Description field**, enter a description of the repository.

4. In the **Client Logout Time** field, enter the number of minutes notice you want OmniVista clients to receive before the server logs them out. The server logs out all clients and then reboots to create a backup.

5. In the **Number of Generations** field, enter the number of generations of backups that will be preserved (Range = 1 - 30). The value in this field defines the number of backup files that will be saved before the oldest backup file is overwritten. For example, if the number of generations is set to ten, the eleventh backup taken will overwrite the first backup taken and a total of ten backup files will be preserved in the backup directory.

> **Note:** Although you can generate and save up to 30 backups, the amount of memory used/required should be taken into account when setting this field.

6. If you wish to schedule one or more backups for the new repository, click the **Scheduled** checkbox and set it to **true**. Click in the **Start At** field to display the calendar pull-down shown below. The date selected on the calendar pull-down sets the date of the first backup and the fields at the bottom of the calendar pull-down set the time of all scheduled backups.

Scheduling Backups
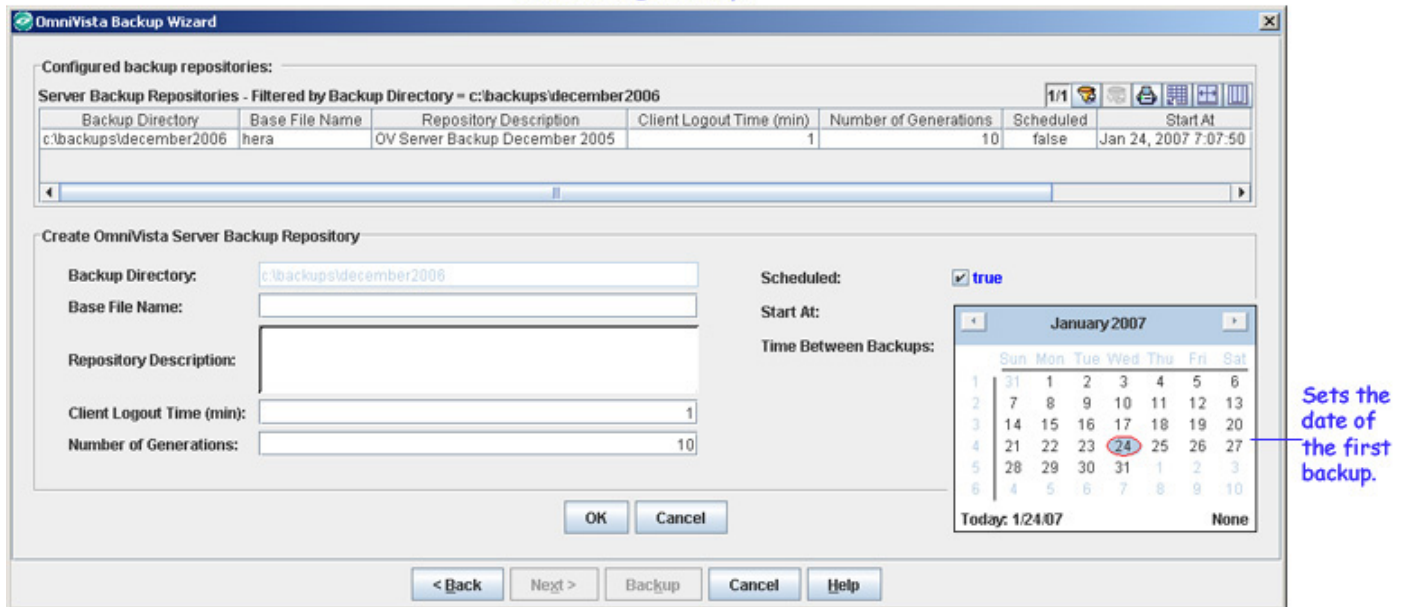
7. If you wish to schedule regular backups, set the **Time Between Backups** field to **one day**, **two days**, **three days**, **four days**, **five days**, **six days**, or **one week**. Regular backups will be scheduled for the time specified in the calendar pull-down at the interval specified in the **Time Between Backups** field. If you do not want to schedule regular backups, set this field to null (no value).

8. Click the **OK** button. The new backup repository is created. If you scheduled regular backups for the repository, a message displays confirming that the backups have been scheduled.

9. Click the **Backup** button to exit the Backup Wizard.

> **Note on Scheduled Backups**. Backups are scheduled via OmniVista's Schedule application. From the Schedule application, it is possible to reschedule or delete a scheduled backup. If a scheduled backup is changed in this manner, and if the Server Backup application is open, a message displays querying the user about the change. The user is given the option of accepting the change made via the Schedule application. A sample message is shown below. If the Server Backup application is not open when a change is made via the Schedule application, no query message displays and the change is made.
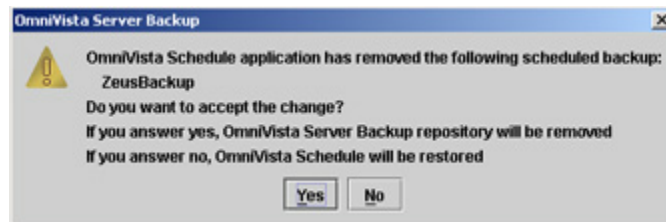
Editing a Backup Repository

To edit an existing backup repository, select the repository in the list of Configured Server Backup Repositories and click the **Edit** button. Any field except the repository base file name can be edited.

Deleting a Backup Repository

To delete a backup repository, select the repository in the list of Configured Server Backup Repositories and click the **Delete** button. Messages display informing you that:

- The backup files that were created in the repository will not be deleted.
- The repository's specifications and backup schedule will be deleted.

Note that backup files can be deleted manually, outside of OmniVista.

Restore Wizard Page One

The first page of the Restore Wizard lists existing backup directories and enables you to select the backup directory that contains the backup file you want to restore. To select the desired backup directory, merely click on it in the list of Configured Server Backup Directories. Then click the **Next** button.

> **Note**: If you are performing a restore for a crashed system in which OmniVista backup specifications have been lost, you will need to manually reenter the backup directory parameters for the backup directory that contains your backup files.
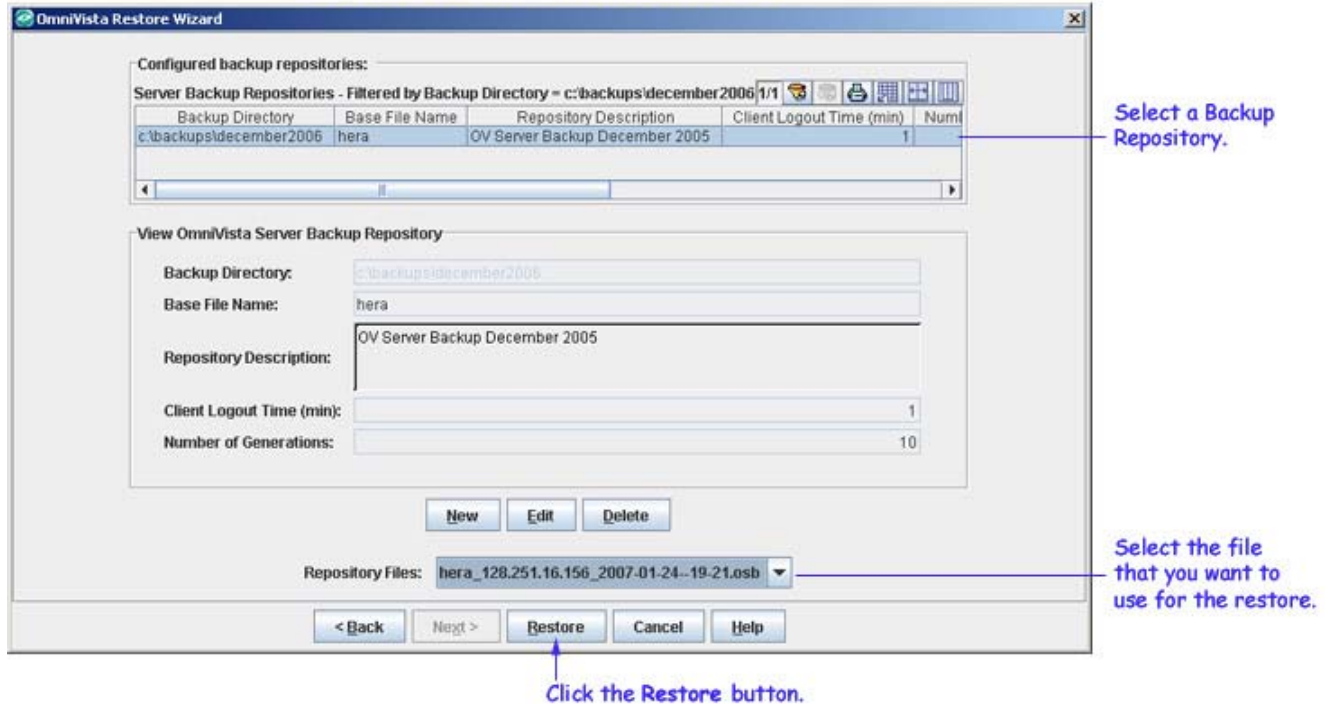
First Page of the Restore Wizard
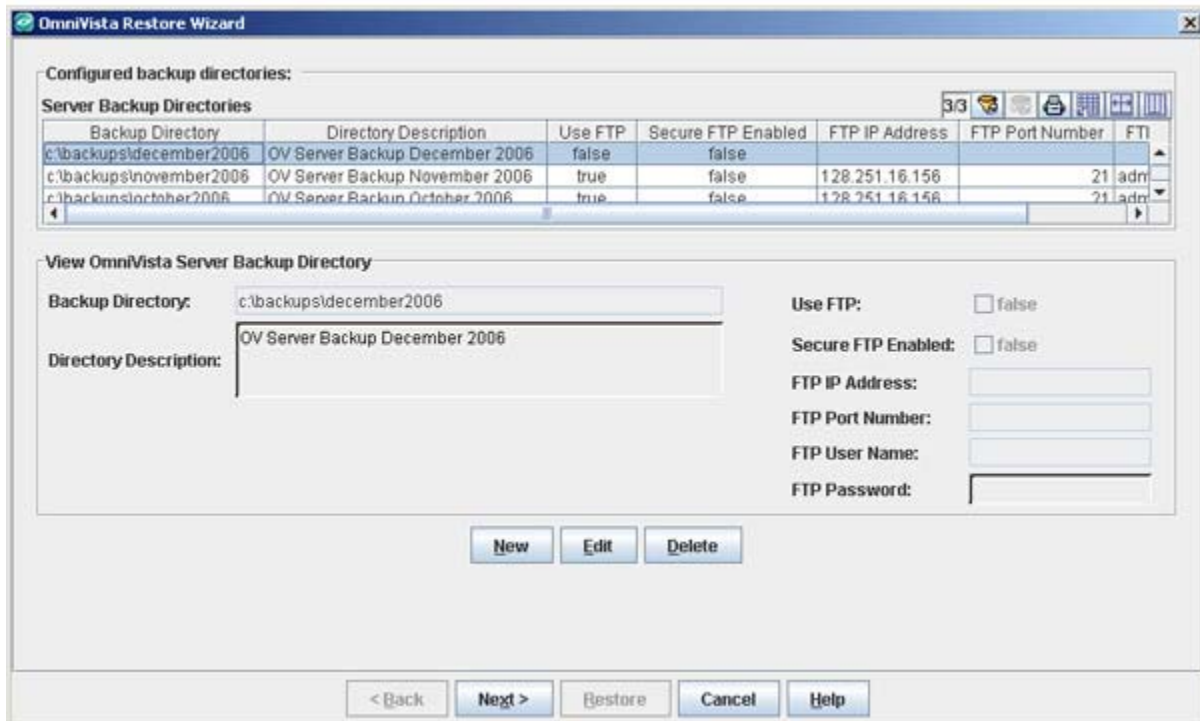
The first page of the Restore Wizard also enables you to create new backup directories, edit existing backup directories, and delete empty backup directories.

Restore Wizard Page Two

The second page of the Restore Wizard enables you to perform the restore. To do so, simply click on a backup repository in the list of Configured Backup Repositories, select the desired backup file from the pulldown menu in the **Repository Files** field, and click the **Restore** button. Restoration behavior is described below.

> **Note**: If you are performing a restore for a crashed system, you will need to reenter the repository base file name manually.

Second Page of the Restore Wizard

When the **Restore** button is clicked, the OmniVista server sends a message to all users that are logged in, notifying them that the server is scheduled to be shut down in x minutes. (The x minutes period is determined by the setting of **Client Logout Time** in the backup repository.) At the end of this period, the server logs out any user who is still logged in and sends a message to that effect.

The server then reboots itself. Early in the reboot process, the server copies appropriate data from the backup file to the LDAP Server, the OmniVista database, and the server's **data** directory. OmniVista services are then restarted, and entries detailing the restore are written to log **backuprestore.txt**, which can be viewed from the Audit application.

> **Note**. You must log back into OmniVista when the server reboot is completed.

The second page of the Restore Wizard also enables you to create new backup repositories, edit existing backup repositories, and delete backup repositories.