

# Administrator Guide

## XenData Metadata Backup

Version 5.0x



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# Metadata Backup Program

## 1. Overview

The XenData Metadata Backup program is designed for use with XenData Archive Series software.

The XenData Metadata Backup program deals with:

- **File system metadata** which is stored on the magnetic disk logical drive dedicated for use by the XenData Archive Series software.
- The **XenData state file** which contains tape information and the XenData Management Console settings, including File Group and Volume Set configuration settings.

If the system has to be rebuilt, perhaps due to a RAID failure, the file system metadata may be rebuilt on the magnetic disk by using the Import Folder Structure or Import Data functions available from the XenData Archive Series Management Console. However, this can be a lengthy process for a system with a large number of Volumes. Alternatively, by using the XenData Metadata Backup program the system can be rebuilt more rapidly.

The XenData Metadata Backup program speeds up the process of rebuilding the magnetic disk logical drive by restoring the file system metadata and XenData state file to the condition they were in at the time of the backup. This means that the Import Catalog function needs only be used for Volumes which have been written to since the latest backup.

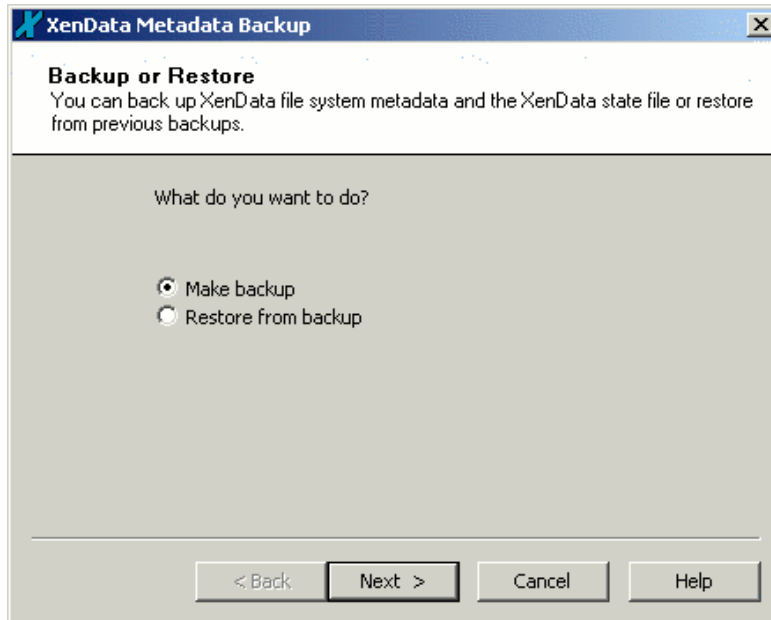
## 2. Starting the Program

The XenData Metadata Backup program provides backup and restore functionality for the file system metadata and XenData state file.

**To start the Program:**

1. Click **Start**
2. Click **Programs**
3. Click **XenData**
4. Click **XenData Metadata Backup**

### 3. Selecting Backup or Restore



The XenData Metadata Backup program performs two types of operation:

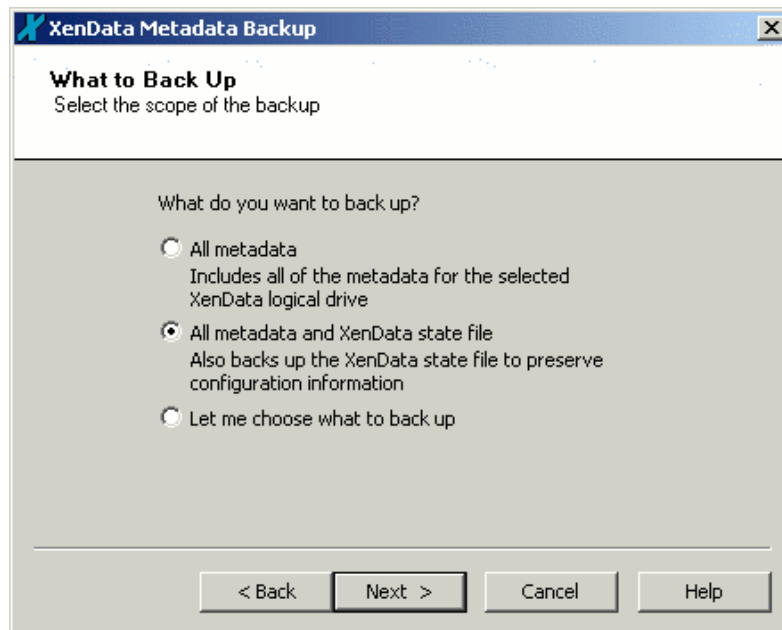
- **Make backup** - Make a backup of the metadata in the system in its current state. See section 4, '**Making a Pre-defined backup**' or section 5, '**Making a Custom Backup**'.
- **Restore from backup** - Restore information from a backup file into the current XenData logical drive. See section '**Restore from backup**'.

Select the desired option and click **Next** to continue.

### 4. Making a Pre-defined Backup

The instructions in this section describe how to perform a backup using a pre-defined backup type. The section **Making a Custom Backup** shows how to exert more control over what is backed up (for example to exclude a temporary directory).

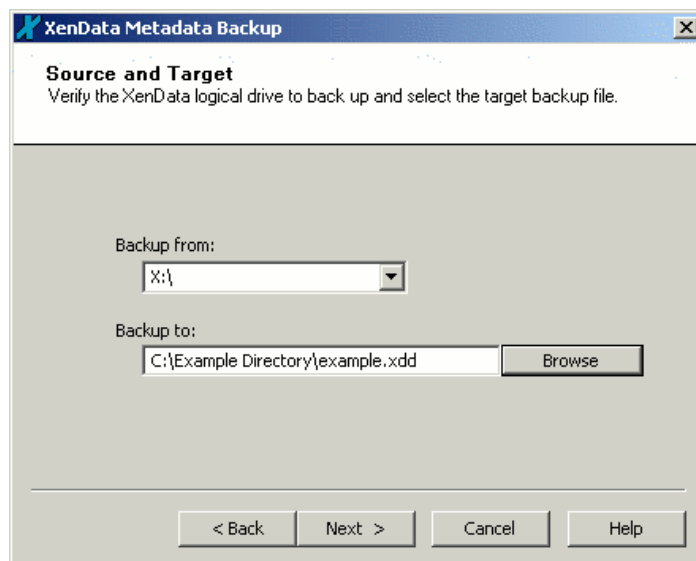
Having started the XenData Metadata Backup program and selected **Make backup**, click **Next**.



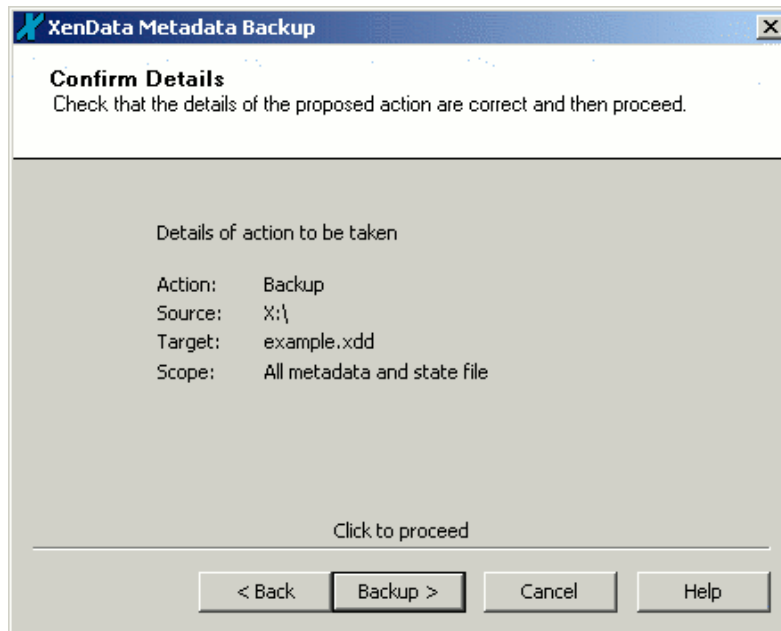
There are two pre-defined backup types. **All metadata** will back up all of the file system metadata, and **All metadata and XenData state file** will also include the XenData state file.

1. Select **All metadata** or **All metadata and XenData state file** as appropriate.
2. Click **Next** to continue.

(Note that the option **Let me choose what to back up** provides finer grained control over what is backed up than the two pre-defined backup types. For example, a directory only used for temporary files may be excluded from the backup as the files it contains will not be necessary again. See **Making a Custom Backup** for more information.)



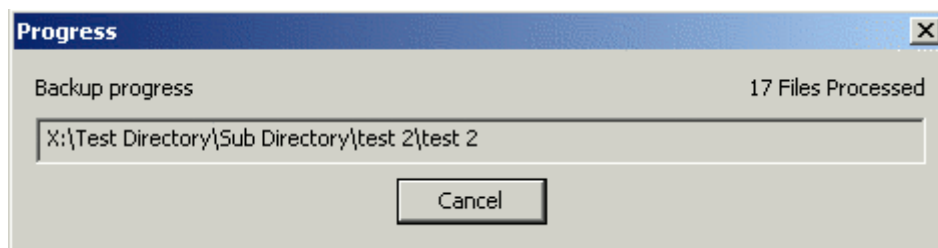
1. Verify the XenData logical drive to be backed up. Although XenData Archive Series only supports one XenData logical drive per system, you should verify that it has been correctly detected as the source for the backup.
2. Specify the output path and file name. The output file name should be inserted in the **Backup to** edit box. Click **Browse** to assist in specifying the path and filename.
3. Click **Next** to continue.



The next page presents the details of the backup, and gives the option to go back and correct if necessary.

1. Verify the backup details.
2. Click **Backup** to perform the backup.

A progress dialog appears that shows the backup progress, as illustrated below.



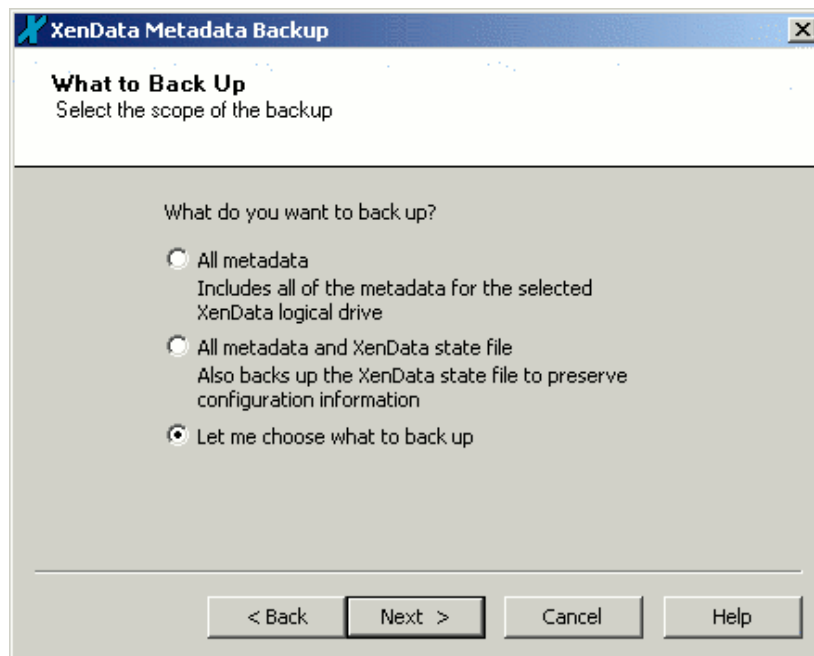
If the backup completed successfully, you will be presented with a confirmation page saying **Backup Complete**. Click **Finish** to dismiss the dialog and exit the program.

## 5. Making a Custom Backup

The instructions in this section describe how to perform a backup with fine grained custom control over what is included in the backup.

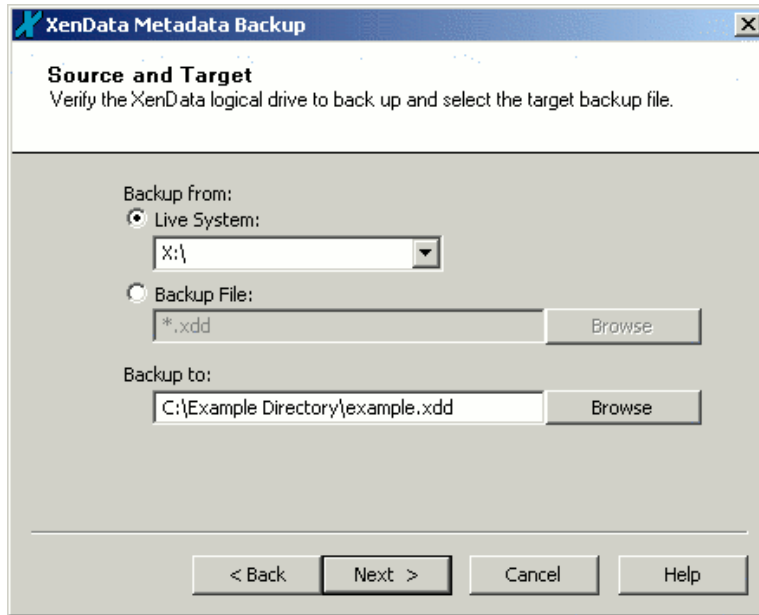
For example, a directory only used for temporary files may be excluded from the backup as the files it contains will not be necessary again. It also enables making a sub-backup from a pre-existing backup file.

Open XenData Metadata Backup. Select **Make backup** and click **Next** on the starting page as described in **Backup and Restore**.



The option **Let me choose what to back up** provides fine grained control over what file system metadata gets backed up, and whether the XenData state file is included.

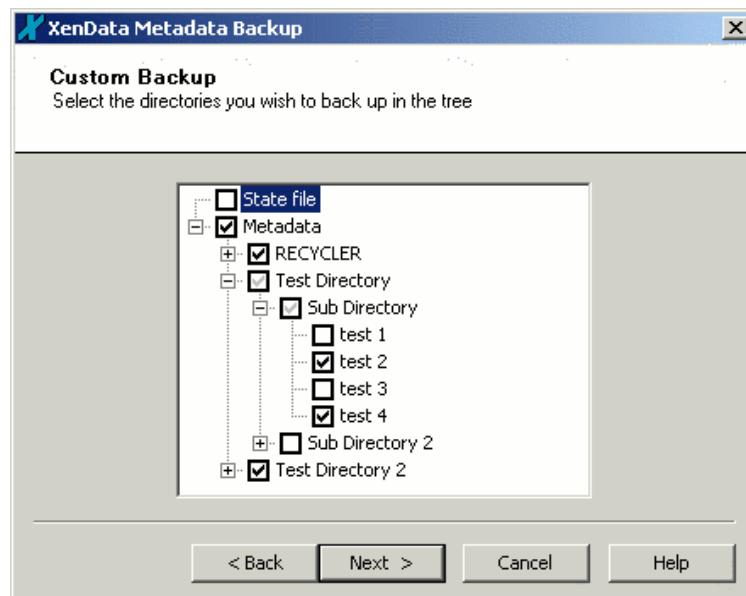
1. Select **Let me choose what to back up**.
2. Click **Next** to continue.



If a sub-backup of an existing backup file is being made, an already existing backup file should be selected as the source. This cannot then be used as the target backup file. The **Browse** buttons can be used to assist in specifying the filenames.

Although XenData Archive Series only supports one XenData logical drive per system, you should verify that it has been correctly detected as the source for the backup.

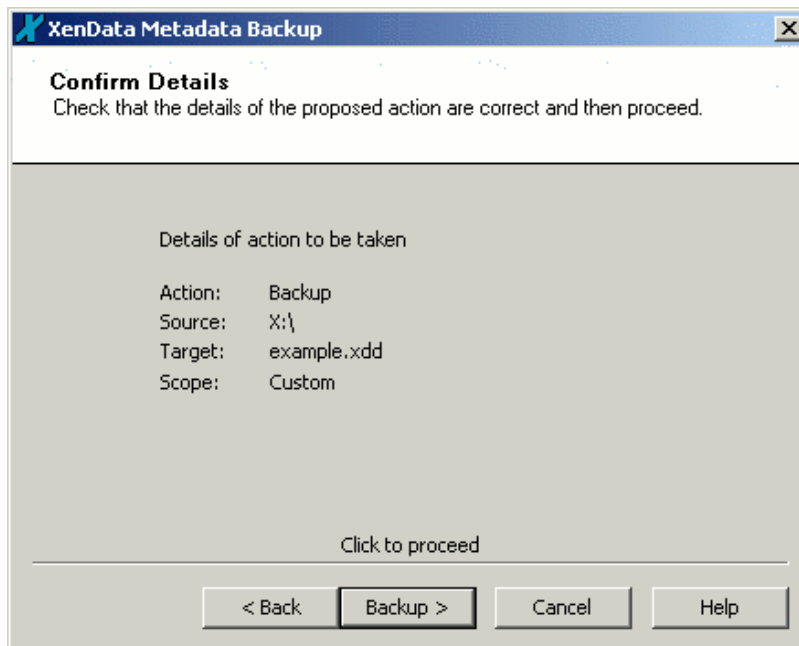
1. Select **Live System** or **Backup File** as appropriate.
2. Either verify the XenData logical drive to backup from or specify the backup file to use as a source as appropriate
3. Specify the output file name.
4. Click **Next** to continue.



A directory which is to be included in the backup is marked with a black tick, and one which is to be ignored is left unchecked. A directory whose presence will be recorded but for which no file system metadata will be saved is marked with a 'greyed out' tick.

Clicking on the "+" sign expands a subdirectory tree, and clicking on a "-" sign contracts it. Selecting a directory in the tree, to include all of the files in it, causes all of its parent directories to be selected as required to enable the selection to take place.

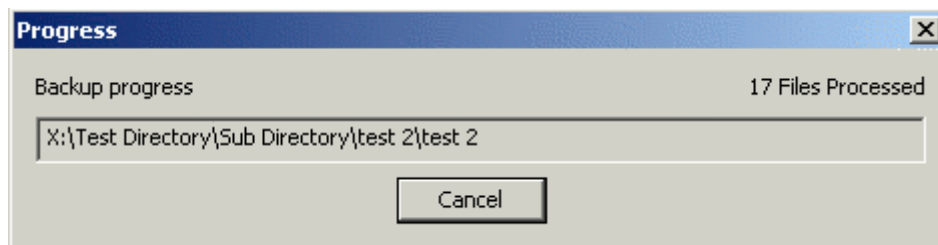
1. Select and deselect directories in the tree as appropriate to indicate what should be backed up.
2. Click **Finish** to continue.



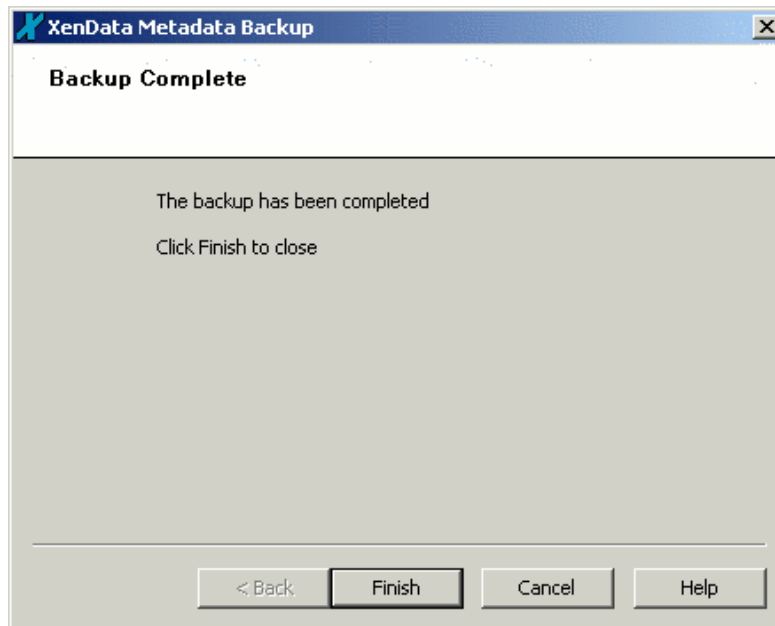
This page presents the details of the backup, and gives the option to go back and correct if necessary.

1. Verify the backup details.
2. Click **Backup** to perform the backup.

A progress dialog appears that shows the backup progress, as illustrated below.



If the backup completed successfully, you will be presented with a confirmation page saying **Backup Complete**. Click **Finish** to dismiss the dialog and exit the program.

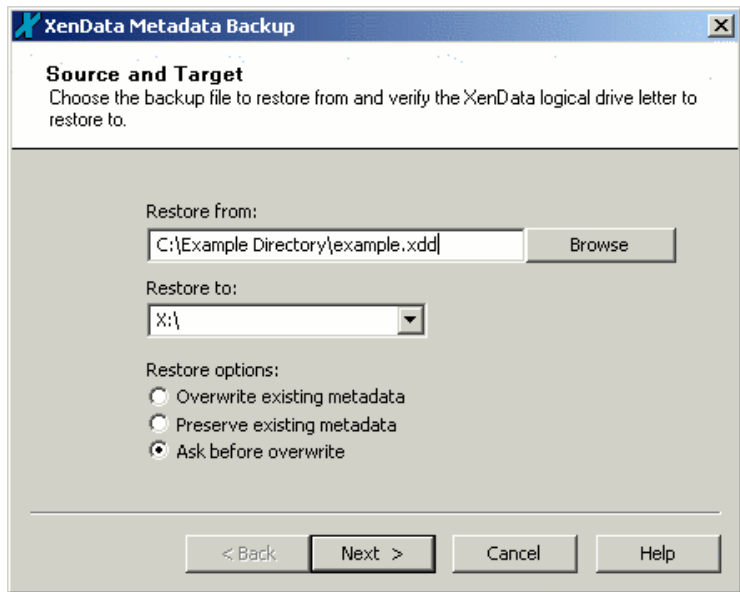


## 6. Restore From Backup

The instructions in this section describe how to restore a selection of the file system metadata in a backup file onto a live system, and/or restoring the XenData state file.

If restoring the XenData state file, the XenData Archive Series service must be stopped before performing the restore and then restarted after the restore.

Either start the XenData Metadata Backup program, select **Restore from backup** and click **Next** on the starting page as described in **Backup and Restore**, or double click on a XenData backup file (\*.xdd) to enter the **Restore from backup** section.



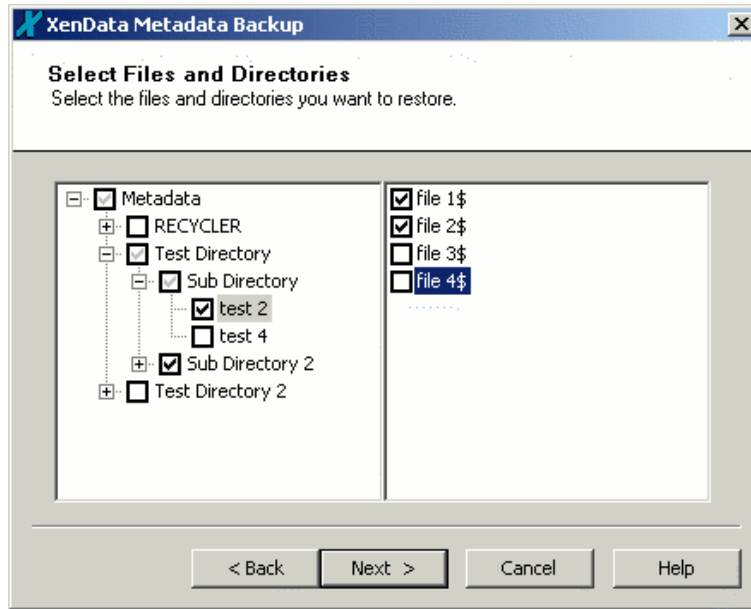
If the restore section has been accessed from the start page, the **Back** button will be enabled.

There are three metadata restore options

- **Overwrite existing metadata** always writes metadata from the file into the XenData logical drive, ignoring metadata already present.
- **Preserve existing metadata** will only write metadata for a particular file from the backup if there is none already present on the XenData logical drive for that file.
- **Ask before overwrite** will ask whether to overwrite existing metadata for each file whose metadata already exists, providing options to overwrite all of a certain type (for example, the metadata on the XenData logical drive is currently invalid).

Although XenData Archive Series only supports one XenData logical drive per system, you should verify that it has been correctly detected as the target for the restore. Use the file dialog opened by clicking **Browse** to assist in specifying the filename of the source backup file.

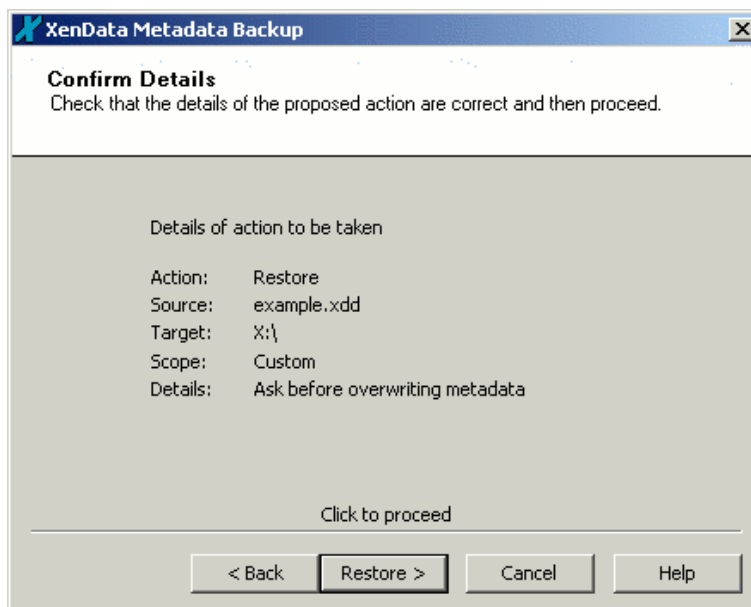
1. Specify the input backup file to restore from, or verify that the correct filename has been determined automatically.
2. Verify the XenData logical drive to restore to.
3. Select the desired **restore option**.
4. Click **Next** to continue.



A directory or file which is to be restored is marked with a black tick, and one which is to be ignored is left unchecked. A directory which needs to be traversed to reach checked items, but which will not itself be included is marked with a 'greyed out' tick. If a directory is selected, the files within it are all selected by default, unless manually deselected.

Clicking on the "+" sign expands a subdirectory tree, and clicking on a "-" sign contracts it. Selecting a directory or file in the tree, in order to include it in the restore, causes all of its parent directories to be selected as required to enable the selection to take place.

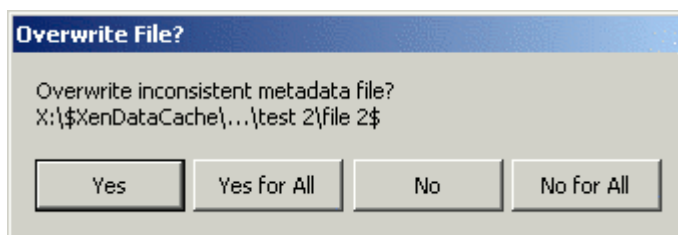
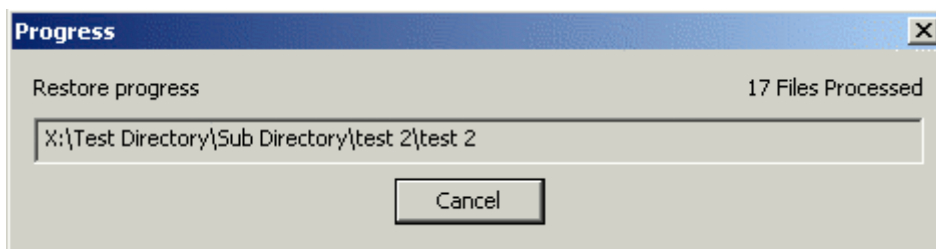
1. Select and deselect directories and files in the tree as appropriate to indicate what should be restored.
2. Click **Next** to continue.



This page presents the details of the restore, and gives the option to go back and correct if necessary.

1. Verify the restore details.
2. Click **Restore** to perform the restore.

A progress dialog will appear so that one can check that the restore is progressing:

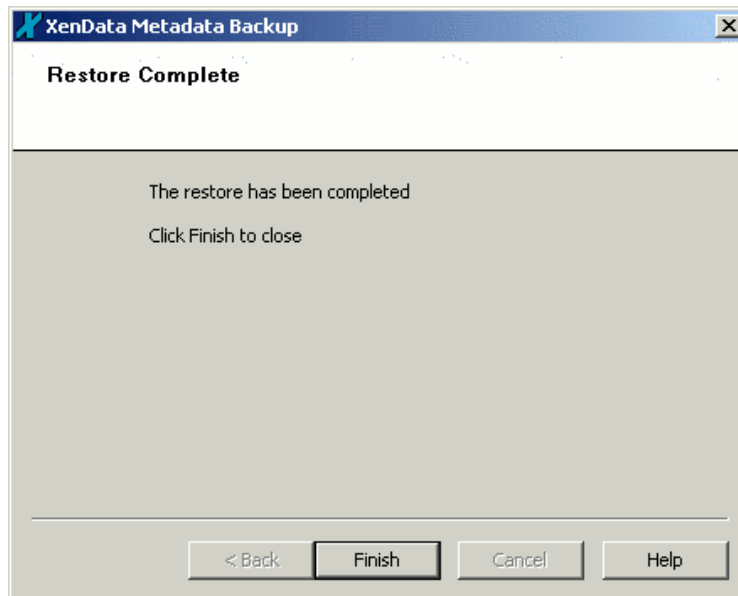


If **Ask before overwrite** was specified in the first step step, dialog boxes similar to the one shown above may appear, asking if existing metadata should be overwritten, and giving a category of file to consider - in this case where the original metadata is inconsistent. This gives the option to deal with these cases on a file by file basis (yes/no) or to specify what action should be taken for all files of this type (Yes for All/No for All), which prevent further dialogs appearing.

1. Click **Yes** or **No** to (not) overwrite the file system metadata for the current file.
2. Click **Yes for All** or **No for All** to (not) overwrite the file system metadata for all files in the same category.

**Note:** If the metadata on disk for a file is exactly the same as that in the backup file, no overwrite dialog will be displayed, and the file will be silently skipped.

If the restore completed successfully, you will be presented with a confirmation page saying **Restore Complete**. Click **Finish** to dismiss the dialog and exit the program.



## 7. Glossary

Terms used in this manual and other XenData documentation are described in this section.

**File Group** A File Group is a collection of files that have the same XenData file management policy and consequently are all treated in the same way by the system. Every file that is handled by the system belongs to exactly one File Group. Files are assigned to a File Group on the basis of their names. This assignment can be based on the name of the directory that contains a file, the name of the file or both. When the 'Save files to tape' option is enabled for a File Group, all files in that File Group will be saved to a designated Volume Set.

**Volume** If replication is not enabled, the XenData term 'Volume' refers to an individual tape. If replication is enabled, a Volume consists of a complete set of replica tapes which, when up-to-date, all contain the same data. For example, when replication is enabled and one additional copy of each cartridge has been specified by the administrator, a Volume will consist of two tapes.

**Volume Set** This is a set of one or more Volumes which stores files from designated File Groups. As more data is written to a Volume Set, the initial Volume will eventually become full. At a preset threshold, defined by the administrator, the system will automatically add another Volume by taking the appropriate number of tapes from the blank media set and will extend the Volume Set.

**XenData Management Console** This is used to configure all File Group, Volume Set and tape replication options, and to view diagnostic information about the system.

**XenData state file** This contains tape information and the XenData Management Console settings, including File Group and Volume Set configuration settings.

