

DigiPath Customer Bulletin

Configuration: DigiPath 3.0 and 4.x

Release: DigiPath 3.0 and 4.x

Bulletin Number:

DigiPath 75

Distribution Date:

1/04

Expiration:

Next release

Title: Disaster Recovery Procedures for DigiPath 3.0 and 4.x releases

ANNOUNCEMENT:

The following procedures are to be used to recover a DigiPath system in case of a failed hard drive that needs to be replaced. Different procedures are used depending on whether or not your system is configured with an Oracle database since TapeWare cannot automatically recover Oracle.

Xerox Representatives, please distribute this new process directly to customers.

For more information on how to use DigiPath Rescue and Tapeware, please refer to the following documentation:

- DigiPath Rescue:
 - Chapter 5 in the DigiPath 3.0 System Administration Guide
- TapeWare:
 - Chapter 5 in the DigiPath 3.0 System Administration Guide
 - TapeWare User Guide documentation at [Start: Programs: TapeWare: TapeWare Documentation: Printable Documents: TapeWare Users Guide] -or- located at C:\Program Files\TapeWare\twusreng.pdf.

Note: Customer data backup is solely the responsibility of the customer. Xerox is not responsible for loss of customer data. These procedures cover disaster recovery scenarios following hardware failures.

Pre-conditions - Xerox CSE / Analyst responsibility:

For all systems:

1. Ensure that the TapeWare Database Server correctly references the name of the system. The default machine name is "My Computer" and any previous backups can only be associated with that name. Once the correct machine name is set in TapeWare, new customer backups should be made.

Pre-conditions - Customer responsibility:

Note: If the pre-condition Customer backup steps are not performed, a full system recovery cannot be achieved.

For all systems:

1. Create a full TapeWare system backup.
 - a. If backing up a Document Library Server configuration:
 - i. Take all cabinets offline and dismount MODs prior to running DigiPath Rescue Backup.
 - ii. Run DigiPath Rescue Backup of your database "Attributes/Properties and configurations".
 - b. For all configurations, run the xstopdgp.bat file to cycle down the DigiPath software. Select [Start:Run], then enter e:\digipath\xstopdgp.bat in the window
 - c. For all configurations, perform a full TapeWare backup by selecting "Backup Local Machine" in TapeWare.

For non-Document Library Server configurations:

1. Execute the TapeWare Disaster Recovery option to create bootable diskettes.
 - a. Open the TapeWare Administrator icon on your desktop.
 - b. Select 'Ok' at the login screen
 - c. Select the 'Disaster Recovery' option in the main TapeWare window.
 - d. Select the 'Make Diskettes' option and follow the instructions to create the bootable floppies.

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Pre-conditions (Cont'd): (Customer responsibility)

For Document Library Server configurations:

1. Back up the following files on a separate "Document Library Repository" tape (via TapeWare to a Travan or AIT device). You will now have two copies of your repository data (full backup tape and separate DL backup tape):
 - a. Database files and structure (**must be backed up in sync**)
 - i. Take all cabinets offline and dismount MODs prior to running DigiPath Rescue Backup.
 - ii. DigiPath Rescue backup of your database "Attributes/Properties and configurations".
 - iii. All XDLCabinets directories on your C:, D:, E: and RAID drives.
 - b. Windows Registry (DP 3.0) / System State (DP 4.x) (checkbox in TapeWare)
 - c. TapeWare Storage Server Database (checkbox in TapeWare)
 - d. DigiPath log files – all contents of: C:\Program Files\Xerox\Digipath

If Drive 0 fails:

For non-Document Library Server configurations:

The following steps are the responsibility of the Xerox CSE:

1. Replace drive 0.
2. Ensure that your system is configured to boot from floppy in the BIOS setup.

The following steps are the responsibility of the Customer:

3. Insert the first TapeWare's Disaster Recovery bootable floppy and the first backup travan tape or AIT tape cartridge.
4. Reboot system and select option to recover entire system.
5. Follow instructions to recover system.

For Document Library Server configurations:

The following steps are the responsibility of the Xerox CSE:

1. Replace drive 0.
2. Re-image system with DigiPath restore CD.
3. The recovery process can only guarantee a restore back to the latest backup. If you believe that your current repository is newer than the latest backup tape, rename all remaining XDLCabinets folders to save for later reconciliation. You may have to move your renamed cabinets to a remote location if disk space will be a problem when restoring the backup copy of the XDLCabinets in step #9 below. See step #12 for manual recovery of cabinet data.
4. Delete the e:/DigiPath and e:/Orant directories.
5. Install DigiPath and appropriate 3rd-party software.
6. Update the computer name in the TapeWare.ini file as per step #1 under the Xerox CSE/Analyst pre-conditions for all systems. The computer name needs to be the same name as was used when the TapeWare backup was created.

The following steps are the responsibility of the Customer:

7. Insert your latest TapeWare full backup tape or specific Database Backup tape.
8. Since the latest TapeWare Storage Server Database no longer exists since it resides on the C: drive, the tape index needs to be retrieved from the tape before files can be restored. To restore the TapeWare Database index file:

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- a. Open the TapeWare application.
- b. Go to the Device Tab
- c. Select Network
- d. Select the machine you are restoring. The tape devices should be listed.
- e. Right click on the tape device, and select "Restore Database".
- f. Select "Restore" to restore the tape index file. This should only take a few minutes to rewind to the end of the tape and retrieve the tape index file.

Note: if you encounter error 333 - Unexpected Bus Free or if the Restore Database appears to be taking longer than it should, then you will need to select "Import Media" instead. Import Media will recreate the index file by reading everything on the tape, which can take many hours.

- g. In order to access the newly created database, you must restart TapeWare. If TapeWare is running as a service, you must stop and restart it.
9. In TapeWare, restore the specific files from your backup tapes:
 - a. All XDLCabinets directories onto C:, D:, E, and RAID drives
 - b. The DigiPath Rescue cabinet "Attributes/Properties and configuration" backup folder.
 - c. Windows Registry (DP 3.0) / System State (DP 4.x) (checkbox in TapeWare)
 - d. C:\Program Files\Xerox\DigiPath log files.
 - e. Any non-Document Library data from the C:, D:, or E: drive. Specifically any important files in the E:\DigiPath folder from your full backup tape. (e.g., Scan Directory, Shared Files, and Converted Jobs sub directories, .set files, etc.)
10. Run DigiPath Rescue to restore the database "Attributes/Properties and configuration"
11. Mount MODs as appropriate to update the Document Library.
12. Check the Database integrity by opening Document Library and browsing each cabinet and randomly open files.

Note: If there are files to recover from the renamed XDLCabinets from step #3, contact the Xerox Customer Support Center for assistance. **Assistance will be provided on a best effort basis only.**

13. Manually check that all users still exist and that the printer and network settings were recovered. Some items may need to be manually restored.

If Drive 1 fails:

For non-Document Library Server configurations:

The following steps are the responsibility of the Xerox CSE:

1. Replace drive 1.
2. Install DigiPath from the DigiPath Install CDs. You may be asked to uninstall DigiPath first.

The following steps are the responsibility of the Customer:

3. Insert your latest TapeWare full backup tape. (The TapeWare Storage Server Database, which contains the tape index, still exists on the C: drive.)
4. In TapeWare, select Restore Specific in the main Wizard screen and select only the E: drive to restore all data files back onto the E: drive (all files and registry settings on the C:/D: drive are still intact.)

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If Drive 1 fails (Cont'd):

For Document Library Server configurations:

The following steps are the responsibility of the Xerox CSE:

1. Replace drive 1.
2. The recovery process can only guarantee a data restore back to the latest backup. If you believe that your current repository is newer than the latest backup tape, rename all remaining XDLCabinets folders to save for later reconciliation. You may have to move your renamed cabinets to a remote location if disk space will be a problem when restoring the backup copy of the XDLCabinets in step #6 below. See step #8 for manual recovery of cabinet data.
3. Install DigiPath from the DigiPath Install CDs. You may be asked to uninstall DigiPath first.

The following steps are the responsibility of the Customer:

4. Insert your latest TapeWare full backup tape or your specific Database backup tape. (The TapeWare Storage Server Database, which contains the tape index, still exists from the C: drive.)
5. Restore the following files from your full system backup:
 - a. All XDLCabinets across the C:, D:, E:, and RAID drives.
 - b. The DigiPath Rescue cabinet "Attributes/Properties and configurations" backup folder.
 - c. Any non-Document Library data from the E: drive. Specifically any important files in the E:\DigiPath folder from your full backup tape (e.g., Scan Directory, Shared Files, and Converted Jobs sub directories, .set files, etc).
6. Run DigiPath Rescue to restore the database "Attributes/Properties and configuration"
7. Mount MODs as appropriate to update the Document Library.
8. Check the DigiPath database integrity by opening Document Library, and browsing each cabinet and randomly open files. Ensure that cabinets are seen on each of the drives where user cabinets exist.

Note: If there are files to recover from the renamed XDLCabinets from step #2, contact the Xerox Customer Support Center for assistance. **Assistance will be provided on a best effort basis only.**

9. Manually check that all your users still exist and that the printer and network settings were recovered as well. Some items may need to be manually restored.

Expires: Next Release.