

Campus Backup Processing and Restoration

AgIT Operations

Procedure No. S1.3.6

Procedure Statement

The Agriculture Information Technology (AgIT) procedure regarding campus backup processing and restoration will provide users with a clear understanding on how backup data is created, the policies on storing that data, and how to restore that data if necessary.

Reason for Procedure

This procedure will clearly communicate AgIT's guidelines on storing backup and data and how to properly retrieve that data if necessary.

General Backup Information

Devices utilized:

- The secure web server copies data over the network to file server AGADNT3.
- The file server uses a Quantum DLT1 Drive to backup the data to tape.

Software utilized:

- The servers use built-in Windows NTBackup.

Backup media type:

- DLT tape IV

Labeling of media:

- Each tape is labeled with the server name and numbered sequentially from 1 to 15 (ie AGADNT3 #1). Each tape represents one complete backup the file server containing the secure web server's data folders. The secure server uses built-in Windows NTBackup.

Rotation schedule:

- Tapes are rotated once a day, Monday through Friday. Friday's tape remains in the server throughout the weekend. Each tape is reused every 15 business days.

Extent of backup:

- Secure server backs up system state, web directories, and database directories to a NTBackup file on the file server.
- A full backup to tape is then performed on the file server.

Age tolerance of the media; cycle of media replacement:

- Age tolerance is 30 years.
- Media is replaced every 7 years.

Procedure

Campus Backup Processing and Restoration

AgIT Operations

Procedure No. S1.3.6

Off-site storage:

- All tapes are stored two buildings away from the server room in the Agriculture Administration building.

Backup storage:

- All media is stored in a locked, fire-safe storage unit.

Application and operation systems:

- NTBackup Tape Disaster Recovery is used for the file server.
- Secure server is manually rebuilt. Applications are manually reinstalled.

Data:

- Use NTBackup to restore data files/directories.

Backup testing on a monthly basis:

- On the 1st working day of each month, a directory/file from the latest backup is restored to a different location on the hard drive. The files are then tested by opening or executing.
- These tests are performed by the backup Network/Systems administrators.
- Results are emailed to the AgIT Systems Group.
- Results of all restorations are archived for one year via email.
- If a test restoration fails, the tape drive, media and software are all checked. Once a cause is determined, appropriate actions are taken to resolve the issue.

Restoring Data on the Secure Server

1. **Logon** to the file server.
2. Start the **ArcServe Manager**.
3. Go to the **Restore Manager**.
4. Select **Restore by Session** from the menu.
5. Select the session that needs to be restored. It may be necessary to merge the tape into the database. The program will notify you if a merge is needed.
6. Expand the session's directory tree to browse to the folder or file that needs to be restored.
7. Select the file or folder.
8. Specify the destination of the file or folder.
9. Start the restore.

Procedure

Campus Backup Processing and Restoration

AgIT Operations

Procedure No. S1.3.6

Restoring the Entire Secure Server

1. Reinstall Windows 2000 Server operating system from CD media.
2. Use the ArcServe Manager on the file server to restore the appropriate NTBackup file for the secure server.
3. Copy the restored file from file server to the secure server.
4. Start NTBackup on the secure server.
5. Select the backup file that was copied over in the previous step and restore all of the data and the system state.
6. Reboot the server.

Restoring from Shadow Copy

1. Open the folder on the networked drive where the file was last seen.
2. Right click in the open white space of that folder.
3. Click **Properties**.
4. Click on the tab labeled **Previous Versions**.
5. Choose the date when the file was last known to be correct.
6. Copy the file and paste it into the networked drive folder.
7. Close the previous versions window to avoid confusion.

Contact Information

If you have any questions or concerns about this topic, please contact the AgIT Help Desk at (888) 226-2438 or (765) 494-8333, or visit our website at <http://agithelp.agriculture.purdue.edu/>.