1. Are the backups working?

1.1 Check the SuccessfulBackup.cmd and UnSuccessfulBackup.cmd files

If the database backup completes, the database backup script executes the SuccessfulBackup.cmd script. If the database backup fails, the script executes the UnSuccessfulBackup.cmd script. In both cases, the system backups should be started. If the system backup is not started when the database backup fails, UnSuccessfulBackup.cmd file may not be set up properly.

Check that both the D:\Ora816\Creo\Util\SuccessfulBackup.cmd and UnSuccessfulBackup.cmd files contain the line:

%AraxiHome%\Lib\Python\Com\Creo\Araxi\NTBackup\StartAraxiBackup.cmd

If the line is missing, refer to the *Prinergy 2.0 Backup Guide* (03-4171B) for information about setting up the SuccessfulBackup.cmd and UnSuccessfulBackup.cmd files.

1.2 Check UADM

In Prinergy 2.0.4 patch 19, UADM was modified to display the status of the system backups. There is a new menu item: From the **Tools** menu, select **System Backup**. In the System Backup window, you can view the status of the backup as well as the start time and end time (at the top of the window). If the backup is currently running, the bottom half of the window indicates the system that is being backed up.

1.3 Check the backup log file

Check that the system state backups and file backups are working for all the Prinergy servers by checking the main backup log file.

For systems with Prinergy 2.0.4 patch 19, the main log file is AraxiSystemBackup.log and can be found in the folder %AraxiHome%\CreoAraxi\System\Log\Backup.

The %AraxiHome%\CreoAraxi\System\Log\Backup\NTBackup folder contains the NTBackup log files created during the system drive backup of each server.

For systems without patch 19, the log file is called AraxiBackup.log and is found in %AraxiHome%\Lib\Python\Com\Creo\Araxi\NTBackup.

This is the format of the main log file:

-------- REMOTE SECONDARY BACKUP --------

System state backups on the secondary servers are started.

---------- PRIMARY BACKUP ----------

The system state and system drive of the primary server is backed up to tape.

---------- SECONDARY BACKUP ----------

The system state backup file and the system drive of the secondary servers are backed up to tape via the network connection.

---------- BACKUP CONFIRMATION ----------

Summary of the backup status for the primary and secondary servers is displayed. This is added during the backup check (AraxiBackupCheck.cmd) performed eight hours after the backups.

Note: "*Remote*" backup refers to the system state backup performed on the secondary servers. "*Local*" backup refers to NTBackup run on the primary server to back up the primary servers' and secondary servers' system drives.

1.4 Check the name of the profile folder

The backup scripts check for the status of the tape backup by checking the NTBackup log files. The NTBackup log files are put in the Local Settings\Application Data\Microsoft\Windows NT\NTBackup\Data folder within the profile folder for the user that runs NTBackup. For systems that have Windows 2000 freshly installed, the profile folders are in the Documents and Settings folder at the root of the system drive. For systems that were upgraded from NT 4.0 to Windows 2000, the profile folders are in the \Winnt\Profiles folder.

Assuming a fresh Windows 2000 installation and that the AraxiBackupManager service is using the Araxi account, the backup script will check for the NTBackup log files in D:\Documents and Settings\Araxi\Local Settings\Application Data\Microsoft\Windows NT\NTBackup\Data.

Note: The Local Settings folder is a hidden folder, and can only be seen if you enable the display of hidden folders and files.

If the user account has been deleted and recreated, the current profile folder may not be the Araxi folder but may instead be Araxi.000 or Araxi.001, etc.

If the user account folder was created for a local account and the domain account is used, the domain account's profile folder may show up with the domain name appended to the account name, for example, Araxi.MYDOMAIN.

There is currently a bug in the backup scripts where the script will only check the profile folder that does not have any extension. If NTBackup writes the log files to the .000 folder, the backup scripts will not be able to find the log files and the backup will fail.

You should ensure that NTBackup is using the folder with no extension (i.e. it is not using the .000 folder) for the primary server, all secondary servers, and renderstations.

If NTBackup is writing to the .000 folder, do the following to remove the profile folders:

1. Stop all the services on the machine that is using the account (Araxi and AraxiBackupManager, AraxiSysStateBackup, etc).
2. Ensure no one is logged in with the account, either locally or over the network.
3. Delete the profile folders that are in conflict (for example, Araxi, Araxi.000), then log in with the same account used by the services. The system will create a new profile folder, this time with no .000 extension. You can either delete the folders through Explorer, or if you connect with pcAnywhere, you can right-click **My Computer** and select **Properties**. Click on the **User Profiles** tab, select the profiles to delete, and click **Delete**.

2. Is the AraxiBackupManager service using the same account as the Araxi service?

The AraxiBackupManager service should be using the same account that is used for the Araxi service. During the Prinergy installation, the AraxiBackupManager service on the primary server and AraxiSysStateBackup services on the secondary servers and renderstations are correctly set. However, if the startup account for the Araxi service is changed after installation, the AraxiBackupManager and AraxiSysStateBackup services must be changed as well.

To do so:

1. Select **Administrative Tools**, then **Services**.
2. Open the properties of the AraxiBackupManager service and set the account name to be the same as the Araxi account.

   If the account is a local account, enter just the account name. If the account is a domain account, enter the name as `<Domain>\<UserAccount>`.

3. Are the tapes allocated for backups?

Before the backup scripts are able to use the tapes in the Backup\Prinergy pool, the tapes must be allocated. If the status of the tape shows *Idle, Available*, the status must be changed to *Idle, Allocated*. Otherwise the backup script will not be able to detect that the tape is in the Backup\Prinergy pool.

A simple method of allocating the tapes is to start NTBackup after you've put the tape into the Backup\Prinergy pool. NTBackup will check the Backup pool (and sub-pools) and will automatically allocate any tape it finds.

4. Do any tapes show the status Loaded/Allocated?

When NTBackup is running and writing to tape, the tape status will change to *Loaded, Allocated*. If the backup script hangs for some reason, the tape will remain in this state. If this same tape is being used for the next day's backup, it will fail because the tape cannot be used unless it is in the *Idle, Allocated* state. You will see a 'Mount' request queued or waiting in the Work Queue of the RSM snap-in, and if you look at the tape drive there will be no tape activity until you change the status of the tape from *Loaded, Allocated* to *Idle, Allocated*.

The tape may also be in the *Loaded, Allocated* state if the user manually mounts the tape using the RSM interface.

In either case, to make the tape usable by NTBackup, you must 'Dismount' the tape by right-clicking the tape in the RSM and selecting **Dismount**.

5. Is the backup getting an error message that it can't find a tape to use?

If you have a stand-alone DLT tape drive, the backups may fail with the backup log files indicating that a suitable backup media cannot be found, even though a tape is in the tape drive. The RSM does not poll the tape drive; the application is responsible for polling the tape drive to detect a tape change. Once you change the tape in the drive, you should always go into the RSM snap-in and confirm that the new tape shows up as being in the drive and in a Dismountable state. You should do a refresh if it still shows the old tape.

This problem may also occur if the tape has been put into the Spanned Tapes list. The backup script gets a list of tapes that are in the Backup\Prinergy pool before it starts NTBackup. After NTBackup completes, it checks the Backup\Prinergy pool again and puts any new tapes it finds into the Spanned Tapes list. The backup scripts currently cannot tell if the tape that was added to the pool was for a multi-tape backup or whether someone just moved another tape to the pool. For this reason, you should not add a tape to the Backup\Prinergy pool while the backup script is running. Also, if any tapes in the Backup\Prinergy pool had the status *Idle, Available* before NTBackup was started, NTBackup will change the status to *Idle, Allocated*. The backup scripts will then think these tapes were added by NTBackup and will assign them to the Spanned Tapes list.

To check if a tape is in the Spanned Tapes list, run REGEDT32 and check the registry key:

```
HKLM\Software\Creo\Araxi\…\System\Backup\SpannedTapes
```

The registry key may contain a list of GUIDs of all the spanned tapes (a GUID is a 32-character hexadecimal number). Each GUID is separated by a semi-colon.

If the registry key is not empty, first determine which tape is referenced by the GUID.

In a command prompt window, run:

```
RSM VIEW /Tpartition /guiddisplay /cg<guid from registry>
```

This will return something like:

```
PARTITION
Prinergy Backup Tape 5 F3F88A4B4F024FF68D296A221E4E5445
The command completed successfully.
```

The output will display the Side Name of the tape along with the GUID of the partition.

To find which tape this refers to, you can open the RSM snap-in in **Computer Management** and browse the media in the Backup\Prinergy pool. Right-click each media and open its properties. For the spanned tape, the Name within the Side tab will be the same as what was displayed by the `RSM VIEW` command above.

If you're sure the tape was not used in a multi-tape backup, then you can remove the tape's GUID from the SpannedTapes registry key.

6. Are at least two tapes being used for the backups?

The backups should not be done on the same tape every day. This can limit the chances of recovery if the tape is unreadable or damaged. Ensure that the customer is using at least two tapes and cycling through those tapes regularly.

The registry key HKLM\Software\Creo\Araxi\…\System\Backup\TapeGUIDList contains a list of the GUIDs for the tapes that will be used in the tape rotation. When the backup script starts, it will take the last GUID in the list and insert it in the front of the list. This is the tape that will be used for the current backup.

7. Are the backups spanning more than one tape?

If the backup is spanning more than one tape and the customer is not using a tape library, NTBackup will be hung at the point where it is requesting that another tape be mounted to continue the backups. There is no interface to NTBackup since the Schedule service starts NTBackup as a background process. Therefore, there is no way to detect that NTBackup is requesting another tape. The system backup script will detect that NTBackup failed to complete when it checks the backup status 8 hours later.

If the customer has a tape library, spanning tapes is not an issue; NTBackup will draw a tape from the free pool if needed.

The registry key HKLM\Software\Creo\Araxi\…\System\Backup\SpannedTapes contains the GUIDs of the tapes that were used as spanned tapes.

8. Is there enough room on the Datalog drive on the secondaries for system state backups?

Starting the AraxiSysStateBackup service on the secondary servers will initiate the backup script that will run NTBackup on that server to back up the system state to the AraxiBackup folder on the drive shared out as AraxiTemp. Typically this is the E: drive. Check the drive for sufficient free space for the system state backup file SysStateBackup.bkf. The file is typically 200-300 MB in size. Ensure the drive is normally shared as AraxiTemp_<computername>_E.

9. Is Prinergy 2.0.4 patch 19 installed?

Several bug fixes and enhancements were introduced in Prinergy 2.0.4 patch 19, including:

- Backup status in UADM
- AraxiBackup log files in %AraxiHome%\CreoAraxi\System\Log\Backup and NTBackup log files in %AraxiHome%\CreoAraxi\System\Log\Backup\NTBackup
- More than two tapes can be used in the rotation.
- New tapes can be added to the tape rotation by putting them directly into the Backup\Prinergy pool.
- The backups will not fail if a different backup tape is in the drive than what it expects. If the tape in the drive is in the backup rotation list, it will use that tape.
- Secondary servers can be removed from the list of servers to be backed up.
- Local paths are used instead of UNC paths for the system state backup to prevent delayed write failures.

10. Is the system in Maintenance Mode?

Prinergy 2.0.4 patch 41 introduced the concept of Maintenance Mode for Prinergy. Maintenance Mode disables the database and tape backups for the Prinergy system. This is to prevent the files from being locked by NTBackup when a Major Update is being installed. Also, if the system was backed up at the same time that a Major Update was being installed, the image on tape would not be consistent.

Maintenance Mode can be enabled or disabled in UADM by selecting **System Configuration** from the **Tools** menu.

Note: The primary server will be rebooted when you turn on Maintenance Mode. The OracleBackupManager backup scripts will detect Maintenance Mode by checking the registry value MaintenanceMode in HKLM\Software\Creo\Araxi\2.0.4BLD69\Default\System. If the registry value is set to `On`, the database backup script will not allow a database backup to occur. The OracleBackupManager log file OracleBackupLogFile.log will also have an error indicating that the system is in Maintenance Mode.

If the server is not being updated, it must be taken out of Maintenance Mode via UADM. A reboot is not required when the primary server is taken out of Maintenance Mode.