

Prinergy

Workflow System

Version 4 and 5

Mac Client Protocols

English

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List of Mac client protocols and related software

Mac®client computers can connect to a Prinergy® primary server using several protocols over several types of software.

Protocols for connecting Mac client computers in Prinergy

SMB

Server Message Block protocol, which is built into the Windows® operating system. SMB is also known as CIFS and Microsoft® Windows network.

On Unix servers, SMB can be implemented with Samba software.

SMB can handle file resources in the following different ways:

- With AppleDouble—using the AppleDouble format for foreign files, which a file format that stores file resources in separate files with a **._** prefix. For example, a file named **input.pdf** has a corresponding AppleDouble file that is named **._input.pdf**.
- With ADS—storing resources in alternate data streams (ADS).

AFP

Apple®Filing Protocol, which is built into the Mac OS®.

On Windows servers, AFP can be implemented via SFM or ExtremeZ-IP. On Unix servers, AFP can be implemented with Helios, Xinet®, and many other ways.

AFP stores file resources in resource forks.

NFS

Network File System, which is built into the Unix operating system.

On Windows servers, NFS can be implemented with SFU.

Software to assist Mac client connections

SFM Microsoft Services for Macintosh®, a service that is built into the Windows operating system to provide AFP connections for Mac client computers.

ExtremeZ-IP A file server software from Group Logic that you can install on a Windows tertiary server to provide AFP connections for Mac client computers. For more information, see *Configuring a Windows Tertiary With ExtremeZ-IP File Server for Kodak® Workflow Systems*.

Samba Open-source file server software that you can install on a Unix tertiary server to provide SMB connections for the Windows Prinergy primary and secondary servers.

Helios Software that provides AFP connections on a Unix server.

Xinet	Software that provides AFP connections on a Unix server.
SFU	Services for Unix, server software you can install on a Windows server to provide NFS connections.

Qualified tertiary servers and Mac client protocols

Tertiary servers are qualified for use with Prinergy only using specific Mac client protocols. Each operating system or platform has a defined service level.

Tertiary server	Mac client protocol	Service level (described below) and comment
Windows Server®2000 and Windows Server 2003	Any of the following: • AFP with SFM • AFP with ExtremeZ-IP	Service level 1 if the server is purchased from your Prinergy supplier. Service level 3 if the server is not purchased from your Prinergy supplier. AFP with SFM does not support long filenames, does not scale well, and has many other issues.
Windows 2003 Server Cluster	AFP with ExtremeZ-IP This operating system may be qualified in the future for SMB with ADS if all Mac client computers run Mac OS X 10.5. Do not use SMB with ADS until it is qualified.	Service level 3
Windows Server 2008	Not currently qualified This operating system may be qualified in the future for SMB with ADS if all Mac client computers run Mac OS X 10.5. Do not use SMB with ADS until it is qualified.	Not currently qualified
Isilon	SMB with AppleDouble This operating system may be qualified in the future for SMB with ADS if all Mac client computers run Mac OS X 10.5. Do not use SMB with ADS until it is qualified.	Service level 1

Tertiary server	Mac client protocol	Service level (described below) and comment
Mac OS X Server 10.4	SMB with AppleDouble	Service level 2 until Mac OS X Server 10.5 is qualified. Service level 3 after Mac OS X Server 10.5 is qualified.
Mac OS X Server 10.5	Not currently qualified. Is being qualified for SMB with ADS	Service level 2 applies after this solution is qualified.
Brisque®Server, which uses SAMBA and Helios	AFP via Helios	Service level 1 Archiving is not supported.
Unix with SAMBA and an AFP server, such as Helios or Xinet	AFP via the AFP server	Service level 3 Archiving is not supported.
Unix with SAMBA and no AFP server	SMB with AppleDouble	Service level 3

Service level descriptions

Service level 1 The solution is documented, tested with every major and minor upgrade, and fully supported, which means problems are investigated.

Service level 2 The solution is documented, tested with every major upgrade, but not directly supported.

A problem will be investigated only if it meets the following conditions:

- The problem is caused by Prinergy.
- The problem can be replicated on a job volume on the customer's primary server. The customer must keep job volume on the primary server for this purpose.

Service level 3 The solution is documented, but not tested with every major upgrade and not supported. Support is limited to documentation.

A problem will be investigated only if it meets the following conditions:

- The problem is caused by Prinergy.
- The problem can be replicated on a job volume on the customer's primary server. The customer must keep job volume on the primary server for this purpose.

After a Prinergy upgrade, you must confirm that the solution still works to your satisfaction. Consider buying a software testing solution to test upgrades before implementing them on a production system. For information about testing solutions, contact your sales representative.

Limitations across all solutions

- **Note:** Kodak does not support, and assumes no responsibility for, problems or performance issues that may occur as a result of using third-party products. Problems related to third-party products are not covered by Kodak service contracts.
- All servers in your Prinergy system must use the same Mac client protocol. Otherwise, Mac users may unknowingly mount the wrong volume and files will lose resources.
- The Job Replication option cannot be used with any third-party tertiary server. If you want to replicate jobs, you must buy a server from your Prinergy supplier or find an alternate solution.
- A storage area network connected to a tertiary server is qualified and supported according to the operating system of the tertiary server that it is connected to.

Solutions that are permitted but not qualified

- Unix tertiary server supported by running an NFS client, such as SFU, on all Prinergy primary and secondary servers: This solution is not qualified—it is not documented, tested, or supported. Use it at your own risk.NFS has many known problems and many potential problems, because Microsoft does not test the solution on all variants of Unix. If you use this solution, use it only for input volumes, not for job volumes.
- Network attached storage other than Isilon: This solution is not qualified—it is not documented, tested, or supported.Use it at your own risk. If you use this solution, use it only for input volumes, not for job volumes.
- Storage area network directly connected to the Prinergy primary server: This solution is not qualified—it is not documented, tested, or supported.

Limitations of Mac client protocols

Many Mac client protocols have significant limitations in a Prinergy system.

SMB with ADS

SMB with alternate data streams is available when all Mac client computers run Mac OS X 10.5.

SMB with AppleDouble format

SMB with AppleDouble format has the following limitations:

- Files copy more slowly when you copy a large number of small files. The per-file overhead is greater.
- When InSite™ users upload or download files, resources are lost because InSite is not AppleDouble enabled. This issue applies to both Windows and Mac client computers. This issue is not significant because InSite primarily uses PDF files.
- If some Mac client computers use Mac OS X 10.4.7 or earlier, the operating system may leave files open, locking them from other users. To avoid this issue, upgrade all Mac client computers to Mac OS X 10.4.8 or later.
- Fonts used in Font Converter do not have file resources because Font Converter works only with font files that have resource forks stored in an alternate data streams. You must manually convert the font files' resources from AppleDouble to ADS using the Fork Translator software.
- Files restored by Microsoft Backup from Prinergy archiver tapes do not have file resources because Microsoft Backup does not create the AppleDouble files required by SMB. If you want resources for files restored by Microsoft Backup, you must manually convert the files' resources from ADS to AppleDouble using the Fork Translator software.

AFP

The main limitation of all AFP servers is that archiving is not supported on tertiary servers that use Unix or on tertiary servers that use Mac OS X 10.4 and earlier. Although the files are archived, the resource forks are lost.

AFP with ExtremeZ-IP does not have any significant limitations. In particular, AFP with ExtremeZ-IP supports long file names.

AFP with SFM has the following limitations:

- No support long file names (31 characters or longer)
- Mac client computers experience problems, such as corrupted desktops
- Limited life span. In the Windows 2003 operating system, Microsoft does not support SFM. As of Windows 2008, SFM will not exist.
- It is not scalable.
- Is slower Prinergy performance under heavy loads.
- Has indexing problems.

NFS

NFS is not qualified for use with Prinergy, so its limitations are not relevant.

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File resources

The Mac OS and the Windows operating system store file resources in different ways.

What file resources are

File resources are descriptive information about files, such as:

- File type
- Icons that appear in a file browser
- Preview images
- Originating software

What happens when you don't have file resources

Since the operating systems store file resource information in different ways, files stored in one operating system lack resources when opened in the other operating system.

If a file lacks resources:

- If you double-click the file in the Prinergy Workshop software and in a file browser, it does not open in its originating software.
- The file name extension is missing in the Workshop software and in a file browser.
- The **Kind** column is blank in the Workshop software and in a file browser.
- The file icon is missing in a file browser.
- The Get Info dialog box in the Workshop software does not display a preview image, and the **Open With** and **Kind** fields are blank.

Resources do not affect how Prinergy processes files. Prinergy processes files the same way, regardless of whether they have resources.

Storing file resources

File resources can be stored in forks, AppleDouble files, or alternate data streams.

Resource forks

Resource forks are a method of storing file resources directly in the file itself.

The Hierarchical File System (HFS) of the Mac OS uses resource forks.

AppleDouble

Unix file systems can store Mac OS-compliant resources with the AppleDouble file format, which places resources in a separate file with the same file name as the data file prefixed with "**._**". For example, a file named **input.pdf** has a corresponding AppleDouble file named **._input.pdf**.

Alternate data streams (ADS)

Alternate data streams allow files to be associated with more than one data stream. One use of ADS is to store resources.

The New Technology File System (NTFS) of Windows operating system supports alternate data streams.

SFM and ExtremeZ-IP store resources in an alternate data stream named **AFP_Resource**.

Other

Other platforms, such as EtherShare and Xinet, also store resources in separate files with special file name extensions.

Archiving and Mac client protocols

Prinergy archives, retrieves, and restores appropriately when you change protocols.

When you retrieve files that were archived under a different protocol, Prinergy converts the resource information to the appropriate format.

For example, if you archive jobs under AFP and then convert to SMB with AppleDouble, when Prinergy retrieves the files, it converts the resource information from resource forks into AppleDouble files. If files contain resource information in both AppleDouble files and resource forks, the Prinergy system uses the resource information required by the current protocol and ignores the other resource information.

5 Changing Mac client protocols

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You can change your Mac client protocol to AFP or to SMB with Apple Double and convert resources in existing files on job shares.

Limitations of protocol conversions using Prinergy Administrator

The ability of Prinergy Administrator to convert from AFP to SMB with AppleDouble or the reverse has several limitations.

Files on non-Windows servers require manual conversion

Prinergy Administrator can convert only volumes that run on the Windows operating system. Prinergy Administrator cannot convert UNIX® volumes, Xserve® volumes, or volumes with any operating system other than Windows. If you have UNIX and Xserve volumes, you must convert them manually.

Some files are not converted on Windows volumes

Prinergy Administrator does not convert the following files on Windows volumes:

- Files that are open during the conversion.
- Files with names that contain certain special characters—such as * | \ / ? < >.
- Files that are located on system volumes, in the Recycle Bin, or in Oracle® data directories.

If some files are not converted, you can manually convert them using the Fork Translator software.

Conversion is not possible when using VERITAS

Prinergy Administrator blocks protocol conversions if the VERITAS Storage Replicator™ (VSR) software is installed on the Prinergy system. To determine whether VERITAS is installed, check the **Start** menu on the primary server.

VERITAS, which is often part of a Hot Standby (EPM+) configuration of Prinergy, uses a Windows operating system service that interferes with SMB, even when the service is stopped. If you copy files from a computer running the Max OS X to a secondary server that is running the VERITAS service, the network is interrupted and Prinergy stops responding. For information about the problem, see the Microsoft Knowledge Base item "Server Randomly Drops All Connections, System Log Records Multiple Instances of Event ID 2000," which is located at *http://support.Microsoft.com/kb/288301*.

If you use VERITAS and you need to copy files to a secondary server, you must replace VERITAS with Double-Take software before you can convert protocols. After removing VERITAS, you can convert protocols.

If you use VERITAS and you do not need to copy files to a secondary server (because you store files only on tertiary servers), you can manually convert protocols.

Double-Take software offers several advantages over VERITAS. For information, see the *Prinergy Emergency Platemaking Plus (EPM+) With Double-Take User Guide*.

New volumes are not affected

If you add a new volume to the Prinergy system after you convert protocols, any files on that volume will not contain resource information. If you want resources for files on the new volume, you must manually convert the files' resources using the Fork Translator software.

Converting to SMB with AppleDouble

Use Prinergy Administrator to change the Mac-sharing protocol of Prinergy and files on job volumes to SMB with AppleDouble.

Requirements:

- Ensure the protocol that you want to adopt is qualified for the specific tertiary servers in your Prinergy system.
- Ensure all Prinergy server and client computers have been successfully updated to Prinergy 3.1.0.7 or later.

Use this procedure if your system includes one or more Windows job volumes. If your system has only UNIX, XServe, or Ision servers, you can convert the system manually, which does not require you to stop the Prinergy system.

1. Close all files.

   Any open files will not be converted and, therefore, will not have resources.

2. Stop all archiving, purging, and retrieving activities:

   - If you use the Prinergy Rules-Based Automation (RBA) software and an enabled rule set uses the Archive/Retrieve JTP or Purge JTP, stop Prinergy to prevent the rule sets from executing.
   - If you do not stop Prinergy, stop the Archive/Retrieve JTP and Purge JTP. They are located on either the Prinergy primary server or a secondary server.

3. If you use SFM, stop and disable the SFM services on all Windows operating system servers in the Prinergy system:
   a. Right-click **My Computer**, and select **Manage**.
   b. In the Computer Management window, expand **Services and Applications** and select **Services**.

c. In the right pane, right-click **File Server for Macintosh** and select **Properties**. Click **Stop**. In the **Startup type** list, select **Disabled**, and click **OK**.

d. In the right pane, right-click **Print Server for Macintosh** and select **Properties**. Click **Stop**. In the **Startup type** list, select **Disabled**, and click **OK**.
When SFM stops, all AFP shares are deleted, so there is no need to manually remove AFP mappings.

4. In Prinergy Administrator, from the **Tools** menu, select **File Sharing**.

   If **File Sharing** is not available, verify that Prinergy is at version 3.1.0.5 or later and that VERITAS is not installed.

   The File Sharing dialog box appears, listing the names of every server and input volume in the Prinergy system, including the volumes on all servers listed on the **Servers** and **Input Volumes** tabs.

5. In the File Sharing dialog box, select all of the Windows volumes that contain job data:

   - If a volume uses Windows and contains jobs, select it. All Windows job volumes must be converted at once. Windows job volumes typically have the prefix **AraxiVolume_.** .
   - If a volume uses Windows but does not contain jobs, you do not have to select it. Select it only if it contains files that you want to convert. For example, you do not need to convert a volume that is used only for temporary storage or a volume that contains hot folders or smart hot folders that accept input files and move them to other locations.
   - If a volume uses UNIX or Xserve, do not select it, because Prinergy cannot convert them. If you select UNIX or Xserve volumes, you create unnecessary and useless hidden files on the target volume.

6. Click **Convert to SMB**, and click **OK** when prompted to confirm.

7. Wait until the conversion is complete.

   As Prinergy counts the files on the volumes, the File Sharing dialog box displays **Converting**. While Prinergy converts files, the dialog box indicates how many files it has converted, such as **500 out of estimated 10,000**. The time that the conversion takes depends on the number of files on the volumes. For example, a volume that contains 10,000 files takes two to three minutes to convert.

   When the conversion is complete, the following changes occur:

   - Files on the selected volumes are converted to SMB.
   - The File Sharing dialog box indicates how many files were converted, such as **Processed 10,000 out of 10,000**. Files that do not contain file resources are not processed, so the number of files

processed may not match the total number of files, even if there are no errors.

- Prinergy is converted to SMB.

8. If errors occur, a message appears, telling you to view the log file:
   a. Click **OK** to close the error message.
   b. In the **%AraxiHome%\Prinergy\CreoAraxi\System** folder, open the **forktranslator.log** file in Notepad.
   c. If the log identifies job files that were not converted, locate the original job file from a backup or other source, and copy the file to the volume. Resources are created automatically when you copy the file.
9. If you have a job volume on a UNIX server that also has an AFP server such as Xinet software or HELIOS™ software, use a Mac OS X computer to convert the files on the UNIX volume to SMB:
   a. Use a Macintosh computer running Mac OS X to connect to the UNIX volume via AFP.
   b. Copy the files from the UNIX volume to another location, such as the Mac computer.
   c. Disable the AFP server on the UNIX volume.
   d. Use a Macintosh computer running Mac OS X to connect to the UNIX volume via SMB.
   e. Copy the files back to the UNIX volume, but place them in a different folder
      If the files contain resource information, AppleDouble files are created during the copying process.
   f. Delete the original files.
10. If you have a job volume on a server running Mac OS X Server 10.4, use third-party software called Fork Server Helper to convert the Xserve volume.

    The demo version of Fork Server Helper is free to use.
    a. Contact your service representative or visit the Marcel Bresink Software-Systeme (MBS) Web site at *http://www.bresink.de/osx/ForkServerHelper.html* to get Fork Server Helper and information about it.
    b. Use Fork Server Helper to convert the files on the Xserve volume.
11. If you have a job volume on an Isilon server, disable ADS on each Isilon share:
    a. From a Windows client computer, connect to the Isilon share.
    b. In the root folder, create a file named **t.txt**.

c. Open a command-prompt window, and change drives to the Isilon share's root folder.
d. Run the following command:

```
ren t.txt .com.apple.smb.streams.off
```

If you do not disable ADS, any client computers with Mac OS X 10.5 may connect to the server via alternate data streams, not AppleDouble.

12. Verify that the AFP Mappings dialog box is accurate.

See *Identifying non-SFM servers in the AFP Mappings dialog box* on page 26.

13. Perform either of the following tasks to complete the conversion:

- If you stopped Prinergy, restart it.
- If you stopped the Archive/Retrieve JTP and Purge JTP, start them.

14. If you use integrated Preps® on Mac client computers that are not in the same domain as the primary server, avoid the error message `Could not locate the PrepsPrinergy.cfg template file` by performing

any one of the following tasks on each client computer in a different domain:

With this version of Mac OS X	Do this
Any version	Add the Mac client computer to the same domain as the Prinergy primary server.
Mac OS X 10.3 or 10.4	Add the primary server to the NetInfo™ Manager of the Mac client computer: 1. Log in with an administrator account. 2. In Finder, select **Go** > **Utilities.** 3. Double-click **NetInfo Manager**. 4. Click **machines**. 5. From the **Security** menu, select **Authenticate** and type the password of the administrator account. If **Deauthenticate** is available, you can skip this step because you are already authenticated. 6. From the **Directory** menu, click **New Subdirectory**. 7. In the lower pane, double-click **new_directory**, and type the name of the Prinergy primary server. 8. From the **Directory** menu, select **New Property**, and then replace **new_property** by typing `ip_address`. 9. Double-click **new_value**, and replace it by typing the IP address of the Prinergy primary server. 10. From the **Domain** menu, select **Save Changes**, click **Update this copy**, and then quit **NetInfo Manager**.
Mac OS X 10.5 or later	Add the primary server to the hosts file of the Mac client computer: 1. Log in with an administrator account. 2. In Finder, select **Go** > **Utilities.** 3. Double-click **Terminal.** 4. In the Terminal dialog box, type `sudo nano /etc/hosts`. 5. If you are prompted for a password, type your password. 6. Add the IP address of the Prinergy primary server. 7. Press Ctrl+X, press Y to save your changes, and press Enter to save the file in /etc folder.

Next: If you add a new volume to the Prinergy system after you convert protocols, any files on that volume will not contain resource information. If you want resources for files on the new volume, you need to manually convert the files' resources to SMB format.

Converting to AFP

Use Prinergy Administrator to change the Mac-sharing protocol of Prinergy and files on job volumes from SMB with AppleDouble to AFP.

Requirements:

- Ensure the protocol that you want to adopt is qualified for the specific tertiary servers in your Prinergy system.
- Ensure all Prinergy server and client computers have been successfully updated to Prinergy 3.1.0.7 or later.

Use this procedure if your system includes one or more Windows job volumes. If your system has only UNIX, XServe, or Ision servers, you can convert the system manually, which does not require you to stop the Prinergy system.

1. Close all files.

   Any open files will not be converted and, therefore, will not have resources.

2. Stop all archiving, purging, and retrieving activities:

   - If you use the Prinergy Rules-Based Automation (RBA) software and an enabled rule set uses the Archive/Retrieve JTP or Purge JTP, stop Prinergy to prevent the rule sets from executing.
   - If you do not stop Prinergy, stop the Archive/Retrieve JTP and Purge JTP. They are located on either the Prinergy primary server or a secondary server.

3. In Prinergy Administrator, from the **Tools** menu, select **File Sharing**.

   If **File Sharing** is not available, verify that Prinergy is at version 3.1.0.5 or later and that VERITAS is not installed.

   The File Sharing dialog box appears, listing the names of every server and input volume in the Prinergy system, including the volumes on all servers listed on the **Servers** and **Input Volumes** tabs.

4. In the File Sharing dialog box, select all of the Windows volumes that contain job data:

   - If a volume uses Windows and contains jobs, select it. All Windows job volumes must be converted at once. Windows job volumes typically have the prefix **AraxiVolume_.** .
   - If a volume uses Windows but does not contain jobs, you do not have to select it. Select it only if it contains files that you want to convert. For example, you do not need to convert a volume that is used only for temporary storage or a volume that contains hot

folders or smart hot folders that accept input files and move them to other locations.

- If a volume uses UNIX or Xserve, do not select it, because Prinergy cannot convert them. If you select UNIX or Xserve volumes, you create unnecessary and useless hidden files on the target volume.

5. Click **Convert to AFP**, and click **OK** when prompted to confirm.
6. Wait until the conversion is complete.

   As Prinergy counts the files on the volumes, the File Sharing dialog box displays **Converting**. While Prinergy converts files, the dialog box indicates how many files it has converted, such as **500 out of estimated 10,000**. The time that the conversion takes depends on the number of files on the volumes. For example, a volume that contains 10,000 files takes two to three minutes to convert.

   When the conversion is complete, the following changes occur:

   - Files on the selected volumes are converted to SMB.
   - The File Sharing dialog box indicates how many files were converted, such as **Processed 10,000 out of 10,000**. Files that do not contain file resources are not processed, so the number of files processed may not match the total number of files, even if there are no errors.
   - Prinergy is converted to SMB.

7. If errors occur, a message appears, telling you to view the log file:
   a. Click **OK** to close the error message.
   b. In the **%AraxiHome%\Prinergy\CreoAraxi\System** folder, open the **forktranslator.log** file in Notepad.
   c. If the log identifies job files that were not converted, locate the original job file from a backup or other source, and copy the file to the volume. Resources are created automatically when you copy the file.
8. If you have a job volume on a Unix server with an AFP server such as Xinet software or HELIOS software, use a Mac OS X computer to convert the files on the UNIX volume to AFP:
   a. Use a Macintosh computer running Mac OS X to connect to the UNIX volume via SMB.
   b. Copy the files from the UNIX volume to another location, such as the Mac computer.
   c. Enable the AFP server on the UNIX volume.
   d. Use a Macintosh computer running Mac OS X to connect to the UNIX volume via AFP.

e. Copy the files back to the UNIX volume, but place them in a different folder
If the files contain resource information, resource forks are created during the copying process.
f. Delete the original files.

9. If you have a job volume on a server running Mac OS X Server 10.4, use third-party software called Fork Server Helper to convert the Xserve volume.

The demo version of Fork Server Helper is free to use.

a. Contact your service representative or visit the Marcel Bresink Software-Systeme (MBS) Web site at *http://www.bresink.de/osx/ForkServerHelper.html* to get Fork Server Helper and information about it.
b. Use Fork Server Helper to convert the files on the Xserve volume.

10. (Optional) If your system has a tertiary server that requires SFM, configure SFM on all Windows servers in the Prinergy system:

a. Right-click **My Computer** and select **Manage**.
b. In the Computer Management window, expand **Services and Applications** and select **Services**.
c. In the right pane, right-click **File Server for Macintosh** and select **Properties**. Click **Start**. In the **Startup type** list, select **Automatic**, and click **OK**.
d. In the right pane, right-click **Print Server for Macintosh** and select **Properties**. Click **Start**. In the **Startup type** list, select **Automatic**, and click **OK**.

11. (Optional) If you have a tertiary server that requires ExtremeZ-IP, install and configure ExtremeZ-IP on all Windows servers in the Prinergy system.

For more information, see *Configuring a Windows Tertiary With ExtremeZ-IP File Server for Kodak Workflow Systems*.

12. Verify that the AFP Mappings dialog box is accurate.

See *Identifying non-SFM servers in the AFP Mappings dialog box* on page 26.

13. Perform either of the following tasks to complete the conversion:

- If you stopped Prinergy, restart it.
- If you stopped the Archive/Retrieve JTP and Purge JTP, start them.

Next: If you add a new volume to the Prinergy system after you convert protocols, any files on that volume will not contain resource information. If you want resources for files on the new volume, you need to manually convert the files' resources to SMB format.

Manually converting protocols

Manually change the Mac-sharing protocol of Prinergy and files on job volumes to AFP or to SMB with AppleDouble.

Requirements:

- Ensure the protocol that you want to adopt is qualified for the specific tertiary servers in your Prinergy system.
- Ensure all Prinergy server and client computers have been successfully updated to Prinergy 3.1.0.7 or later.

Use this procedure only if *one* of the following conditions apply:

- Your system includes the VERITAS Storage Replicator (VSR) software or the VERITAS Replication Exec software, You are not able to replace VERITAS with Double-Take software, and you do not need to copy files to the secondary server (because you store jobs only on tertiary servers).
- Your system does not include any Windows job volumes, you want to convert to SMB without stopping the Prinergy system, and you are converting between AFP and SMB with AppleDouble.

1. Close all files.

   Any open files will not be converted and, therefore, will not have resources.

2. Change a registry setting that switches Prinergy between SMB and AFP:

   Important: If you are not familiar with using Registry Editor, contact your service representative for help with editing the registry key. If you use Registry Editor incorrectly, you can cause serious problems that may require you to reinstall your operating system. Kodak does not guarantee that problems caused by incorrect use of Registry Editor can be resolved. Use Registry Editor at your own risk.

   a. In the registry of the Prinergy primary server, locate the **HKEY_LOCAL_MACHINE\SOFTWARE\Creo\Araxi\Settings\Default\System** subkey.
   b. Change the **FileSystemConnectivityForOSXClient** value. For SMB, set it to **1.** For AFP, set it to **2**.

3. If you have a job volume on a Windows server, convert the files on it with the Fork Translator software.
   See *Converting files with Fork Translator* on page 25.

4. If you have a job volume on a UNIX server that also has an AFP server such as Xinet software or HELIOS software, use a Mac OS X computer to convert the files on the UNIX volume to SMB:
   a. Use a Macintosh computer running Mac OS X to connect to the UNIX volume via AFP.
   b. Copy the files from the UNIX volume to another location, such as the Mac computer.
   c. Disable the AFP server on the UNIX volume.
   d. Use a Macintosh computer running Mac OS X to connect to the UNIX volume via SMB.
   e. Copy the files back to the UNIX volume, but place them in a different folder
      If the files contain resource information, AppleDouble files are created during the copying process.
   f. Delete the original files.
5. If you have a job volume on a server running Mac OS X Server 10.4, use third-party software called Fork Server Helper to convert the Xserve volume.

   The demo version of Fork Server Helper is free to use.
   a. Contact your service representative or visit the Marcel Bresink Software-Systeme (MBS) Web site at *http://www.bresink.de/osx/ForkServerHelper.html* to get Fork Server Helper and information about it.
   b. Use Fork Server Helper to convert the files on the Xserve volume.
6. If you have a job volume on an Isilon server, disable ADS on each Isilon share:
   a. From a Windows client computer, connect to the Isilon share.
   b. In the root folder, create a file named **t.txt**.
   c. Open a command-prompt window, and change drives to the Isilon share's root folder.
   d. Run the following command:
      ```
      ren t.txt .com.apple.smb.streams.off
      ```

   If you do not disable ADS, any client computers with Mac OS X 10.5 may connect to the server via alternate data streams, not AppleDouble.
7. Verify that the AFP Mappings dialog box is accurate.

   See *Identifying non-SFM servers in the AFP Mappings dialog box* on page 26.

Converting files with Fork Translator

Manually run the Fork Translator utility to change resource information for specific files or folders.

Requirements: Ensure all Prinergy server and client computers have been successfully updated to Prinergy 3.1.0.7 or later.

Use Fork Translator to convert file resources in the following situations:

- You use special fonts, which are not converted by Prinergy Administrator.
- Files were not converted by Prinergy Administrator because they were open, had special characters, or other reasons.
- You must convert files manually, for example, because you use VERITAS software or you have an all-Unix system.
- You want to restore files that were archived using NT Backup with a different Mac client protocol.

1. Close all of the files that you want to convert.
2. On the Prinergy primary server or another Windows computer, open a command-prompt window.
3. Enter one of the following commands:
   - To convert resources to ADS (which also applies to AFP), type this command:
     ```
     forktranslator -a -I -o path
     ```
   - To convert resources to AppleDouble files or SMB, type this command:
     ```
     forktranslator -s -I -o path
     ```

   The complete syntax for the command is:
   ```
   forktranslator {-a|-s|-h} [-I] [-n|-o] [-v] pathname...
   ```

   where

-a	Copies resource forks from AppleDouble to ADS (which also applies to AFP)
-s	Copies resource forks from ADS to AppleDouble files for SMB
-h	Prints this usage information
-I	Ignores errors and keeps processing other files
-n	Does not execute. Lists file names only.
-o	Overwrites any existing resources

-v	Writes to converted standard output (stdout) files. Implied by **-n**
pathname...	One or more files and/or folders to operate on, separated by spaces. Folders are treated recursively.

4. Close the command-prompt window.

Identifying non-SFM servers in the AFP Mappings dialog box

Ensure that the AFP Mapping dialog box identifies all servers in the system that do not run Windows 2000 with SFM or Windows 2003 with SFM.

Use this dialog box no matter what Mac client protocol you are using, including SMB with AppleDouble, AFP, and SMB with ADS

Unless the server appears in this dialog box, Prinergy automatically makes RPC calls to the SFM service on the server. These calls occur every time a page is refined. Although the calls will time out, Prinergy performance suffers.

1. In Prinergy Administrator, from the **Tools** menu, select **AFP Mapping**. The AFP Mapping dialog box automiatically displays every non-Windows volume that has been added to Prinergy. You can work with each row, but cannot add or remove rows.
2. If a row contains empty columns, select the server, click **Add AFP Mapping**, and set the boxes in the Add AFP Mapping dialog box:

In This Box	Type This
AFP Zone	The Macintosh zone name—for example, TestLab
AFP Server	The Macintosh volume server name—for example, MacServer
AFP Share	The Macintosh volume name— for example, TestVolume.1.0

   Note: All three boxes are required.

3. If a row contains incorrect information, do either of the following steps:
   - Highlight the server and volume. Click **Modify AFP Mapping**, and click **Yes** to confirm that you want to modify the mapping

information. In the AFP Mapping dialog box, enter your changes, and click **Modify**.

- Highlight the server and mapping information that you want to remove. Click **Remove AFP Mapping**, and click **Yes** to confirm that you want to remove the mapping.

4. Stop and restart Prinergy for the new AFP mappings to take effect.

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