System Administration Guide

English

Prinergy

version **2.2**

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Prinergy

version 2.2

System Administration Guide

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RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	6,541,181
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	6,545,772
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	6,564,018
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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Who Should Use This Manual

This manual is intended for anyone who administers a Prinergy® system using Prinergy software version 2.2. This includes configuring the system, archiving jobs, and backing up the system.

To use this manual, you should:

- Have a working knowledge of prepress operations
- Be familiar with using a personal computer running the Windows® 2000 and Windows NT® operating systems
- Be familiar with using a Macintosh® computer

This manual assumes that:

- All the hardware, software, and network components of your Prinergy system are installed, configured, and operating correctly.
- Files submitted to the Prinergy system are free of common errors usually dealt with during preflight, such as missing fonts and PostScript® errors.

PDF Document

This manual is also provided in PDF (Portable Document Format). The PDF file is available from the Prinergy documentation CD and from the Prinergy Administrator **Help** menu.

The PDF document can be used for online viewing and printing using Adobe Acrobat Reader. When printing the manual, please print the manual in its entirety, including the copyright and disclaimer statements.

For More Information

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What Is Prinergy?

Prinergy is a PDF-based workflow management tool that organizes prepress and plate production. Tasks such as file optimization, trapping, color management, proofing, color matching, imposition, archiving, and film/plate making are managed by the system for increased process control and productivity.

Prinergy is built around Adobe Extreme technology. Extreme provides some core software components, as well as a structure and a means of communication for custom components.

Prinergy is an expandable, multi-server, multi-user system based on a client-server architecture. The software can be distributed over multiple computers, increasing throughput and allowing for load sharing. An underlying Oracle database stores job status and history details.

Prinergy software consists of Prinergy Server and Prinergy Workshop. Prinergy Server includes the Oracle database, Adobe Extreme, daemons (software processes that perform specific tasks), and the Prinergy Administrator application to help you configure your system.

Prinergy Workshop is a cross-platform (Macintosh and Windows 2000) application that makes up the client side of Prinergy. It is the main user interface to the system and can be distributed on machines throughout the shop, creating a teamwork environment where prepress managers, customer service representatives, and prepress and plateroom operators can initiate work or obtain current production status.

Prinergy Product Family

Prinergy is a scalable system, allowing you to use only the components that you need for your workflow. You can easily add functionality by enabling various features. The following are the main products in the Prinergy family:

The Prinergy product family includes the following primary products:

- Prinergy Connect®—A full-featured Prinergy system for commercial and publications printer who need page processing, imposition, and film or plate making.
- Prinergy Powerpack™—A Prinergy system designed to meet the needs of offset, flexographic, and gravure packaging printers.
- Prinergy Direct®—An entry-level Prinergy system that accepts imposed input and outputs to a range of proofing and output devices. Prinergy Direct offers a remote plating solution for multi-site Prinergy customers that have Prinergy Connect or Prinergy Powerpack, or is an economical Prinergy solution for printers that already have an imposition solution.
- Prinergy Publish—A Prinergy system that is configured as a page preparation station. Prinergy Publish converts input files into production-ready format for use in a downstream platemaking workflow, often another Prinergy system.
- Prinergy Newsrun—A Prinergy system designed for newspaper production. Prinergy Newsrun adds newspaper-specific impositions and edition planning to a Prinergy system.

Regardless of which Prinergy product you are using, the system architecture remains the same, as do the principles of system administration. However, you may not be required to perform all of the system administration tasks—for example, you may not be required to archive your jobs if you are using a Prinergy Direct system that does not include the Prinergy Archiver system.

Related Products

Synapse® InSite—A portal that lets printers and their customers work with print jobs over the Internet. Synapse InSite helps to manage the proofing, correction, and approval process so it is more efficient. For more information about InSite, contact your sales representative.

System Administration Skills and Tasks

Prinergy is a distributed system and requires some system administration.

Skills Required

To set up and maintain Prinergy, you should have:

- A working knowledge of the general principles of client-server architecture and networking.
- A working knowledge of administering and troubleshooting the Windows 2000 operating system.
- The ability to do basic performance tuning using Windows 2000.
- A working knowledge of TCP/IP networking.
- A working knowledge of how to use Macintosh computers in a networked environment.

System Administration Tasks

System administration involves a number of tasks. Table 1 describes these tasks, the software used to perform them, and where you can find more information.

Table 1: Prinergy system administration tasks and resources

To do this...	Use this software...	Find information here...
Manage Prinergy licensing	Prinergy Administrator	*Managing Prinergy Licensing* on page 54
Manage JTP distribution	Prinergy Administrator	*Screen Licensing* on page 55
Manage user accounts and groups	Windows 2000	*Setting Up User Accounts and User Groups* on page 61
Set user rights	Prinergy Administrator	Prinergy Administrator online help
Manage the Araxi Service account	Windows 2000	*Managing the Araxi Service Account* on page 70

To do this...	Use this software...	Find information here...
Add more storage space for job files and input files	Windows 2000	*Assigning a New Volume for Job Storage* on page 82 and *Accessing Input Files on a File Server* on page 85
Set up and configure proofing devices	• Windows 2000 • Harmony® • Prinergy Workshop	*Configuring a Proofing Device* on page 88
Set up and configure output devices	• Windows 2000 • Harmony • Output device control software (for example, Print Console) • Prinergy Workshop	*Configuring an Output Device* on page 91
Archive jobs and job files	Windows 2000 Removable Storage Manager	*Chapter 4, Using the Archiver System*
Back up the system and run regular "restore" tests	• Oracle Backup Manager • Windows 2000 Backup or the backup software of your choice	*Chapter 5, Backing Up the Prinergy System*
Compress the Oracle database	Prinergy Administrator	Prinergy Administrator online help
Run Prinergy database reports	Prinergy Database Reports	Prinergy Administrator online help and Prinergy Database Reports online help

Prinergy System Administration Features

Prinergy has a number of features that are relevant to system administration:

Table 2: Prinergy features relevant to system administration

Feature	Description
Prinergy Administrator application	Software that lets you monitor and configure the system. For more information about Prinergy Administrator, see the Prinergy Administrator online help and *Screen Licensing* on page 55 of this manual.
Distributed architecture	Prinergy has a built-in system ability to distribute Prinergy operations on a number of servers and clients. This means: • Prinergy can be operated from multiple client machines. • Job ticket processors (JTPs) and jobs can be distributed from the primary server onto secondary servers for optimal load sharing. • Input files and jobs can be distributed onto tertiary servers. • Input files can be distributed onto file servers.
Process plans	A predetermined set of processing instructions that enable users to reliably and repeatedly perform pre-defined operations, such as creating a loose page proof. Process plans can be user-defined. For more information, see the Prinergy Workshop online help.
Support tools	A set of tools for diagnosing problems and maintaining the Prinergy system. These tools include: • Prinergy Workshop (for tracking job status and history and for queue management) • Prinergy Administrator (described earlier in this table) • Remote diagnostics (used by your service representative to help you maintain and troubleshoot your system)

Prinergy Architectural Concepts

This section explains some key concepts related to Prinergy's architecture:

- Prinergy's client-server architecture
- Adobe Extreme technology
- Prinergy's internal communications structure

Prinergy is a client-server system that is based on Adobe Extreme technology. In addition, Prinergy uses Common Object Request Broker Architecture (CORBA) for some internal communication.

Client-Server Architecture

Prinergy is a client-server system. In a client-server environment, client software makes a request of the server software, which initiates the requested service, and then sends relevant information back to the client software.

About Prinergy Server Software

Server software is made up of a number of software components that work together to perform tasks and maintain files.

In Prinergy, the server software is called Prinergy Server. It includes an Oracle database, Adobe Extreme (which includes JTPs, or job ticket processors), and daemons. JTPs and daemons are both software processes:

- *JTPs* deal with the manipulation of PDF files and their contents—for example, trapping and color management.
- *Daemons* deal with non-PDF processing—for example, job ticket creation, job status and history, imposition, and input file registration.

These processes work together to help Prinergy Server perform various tasks, such as trapping or normalizing files, as requested by client software. The Oracle database maintains data about your Prinergy system and related files.

Prinergy Server software also includes Prinergy Administrator, which helps you configure your system. Using Prinergy Administrator, you can distribute Prinergy Server components over a number of machines, resulting in load sharing and increased throughput. For more information about Prinergy Server, see *About Prinergy Server Software* on page 16.

About Client Software

Prinergy Workshop is Prinergy's main client software and user interface. Through Prinergy Workshop, the user can request certain services, such as trapping a file. Prinergy Workshop is available for Windows 2000 and Macintosh OS 9.2 or Mac 10.1.3 or later.

For more information about Prinergy Workshop, see *About Prinergy Workshop* on page 26 or the Prinergy Workshop online help.

Note: Prinergy Administrator is also technically client software, in that it makes requests of server software in order to perform system tasks such as starting and stopping the system. However, Prinergy Administrator is installed with and is considered part of Prinergy Server. It is available for Windows 2000 only and runs only on a Prinergy server machine.

Adobe Extreme

Prinergy's architecture is based on Adobe PostScript 3 Extreme technology. Extreme is a high-end, production-printing architecture that provides three important features:

- Support for PDF, which provides a reliable digital master
- Support for Portable Job Ticket Format (PJTF), a control mechanism for specifying the sequence of operations and parameters that are to be performed on PDF files
- A communications structure, for messaging and managing the Extreme system

Support for PDF

Adobe Extreme provides support for PDF, Prinergy's native format. All files submitted to Prinergy are converted to PDF, which provides a reliable digital master.

For more information about PDF, see *Prinergy File Formats* on page 10.

About the Portable Job Ticket Format

Adobe Extreme supports Portable Job Ticket Format (PJTF), a control mechanism built into PDF. PJTF is the glue that holds the PDF workflow together, by allowing all of a PDF document's pertinent processing information (including all prepress data) to be stored in a companion job ticket.

Within Extreme, a "job" is a task that must be performed. An Extreme job ticket is the collection of information relating to one task—it is much like an outline of processing steps that need to be performed. A job ticket processor (JTP) is a software process that performs a specific step to help process a job ticket. Prinergy contains a number of JTPs, including custom JTPs created specifically for Prinergy, such as the PDF Trapping JTP and the Archive/Retrieve JTP. Extreme's well-defined architecture makes it readily extensible, so custom JTPs are easily integrated.

For more information about JTPs, see *About Job Ticket Processors (JTPs)* on page 22.

Note: Be aware that the term "job" has dual meanings. In the Extreme context, a job is a task that must be performed within the system—hence the term job ticket. In the Prinergy context, a job is a related collection of customer files. This is the standard prepress definition of the term. Unless otherwise specified, in this and other Prinergy documentation, a job refers to a collection of customer files—NOT an Extreme task.

Extreme's Communications Structure

Like Prinergy, Extreme uses distributed architecture. It uses a TCP/IP-based communication structure to allow various Extreme components, such as JTPs, to communicate with each other.

Prinergy Communications Structure

Prinergy uses the Common Object Request Broker Architecture (CORBA) for some internal communications. CORBA was introduced in 1991 and has been adopted by many vendors because of its platform and hardware independence. In short, CORBA allows applications to communicate with one another, no matter where they are located or who designed them.

The Object Request Broker (ORB) is the middleware that brokers the communication between client and server software—for example, between Prinergy Workshop and the various Prinergy daemon processes on the server.

Prinergy uses an implementation of CORBA by IONA Technology called Orbacus and OrbacusWeb. It uses TCP/IP as the core networking protocol.

Note: Not all communication in Prinergy relies on CORBA. Adobe Extreme does not use CORBA and has its own communication structure. However, Extreme still uses TCP/IP as the underlying protocol.

Prinergy File Formats

Prinergy is a PDF-based system. Prinergy supports a number of file formats, and files in supported formats are converted—or "normalized"—to PDF after they are added to a Prinergy job.

Supported Formats

Prinergy supports the following types of input files:

- PDF 1.2, 1.3, and 1.4 (separated or composite)
- PostScript Level 1, 2, and 3 (separated or composite)
- EPS (Encapsulated PostScript)
- DCS 1 and DCS 2 (both single and multi-file versions)
- PDF Job Tickets generated by qualified applications

The following input formats are also supported if you have a licensed CEPS JTP:

- CT/LW (Brisque™ and PS/M 5 and later)—includes New, Native, and Handshake formats of CT and LW
- TIFF/IT P1

PDF: Prinergy's Internal File Format

The internal file format in Prinergy is PDF. This means that all input files are converted, or "normalized," into PDF digital masters for use in subsequent phases of the workflow. The Normalize JTP performs the conversion, and all file types are converted to PDF during this phase.

Advantages of PDF

Using PDF as Prinergy's main format offers a number of advantages:

- PDF files are small, which saves storage space, reduces CPU usage, and shortens file transfer times. File sizes are small because PDF supports both vector and image objects within a file, and images are compressed using industry standard algorithms.
- PDF files RIP reliably and predictably. Unlike PostScript files, they do not have to be interpreted to ensure that all referenced resources (for example, fonts and images) are available. Thus, rasterizing—the second phase of RIPing that occurs just before output—is a straightforward and predictable process.
- PDF is an industry standard. A variety of industry standard tools are available to create, view, and edit PDF files.
- PDF files are independent of any platform, operating system, authoring software, and output device. They are viewable in Windows, Macintosh, and UNIX® environments and printable to output devices at high resolutions.

About Prinergy Jobs

In Prinergy, a job is the unit used to organize work. A job typically (but not necessarily) corresponds to all the components related to a single publication.

A Prinergy job has a number of components:

- A job folder and subfolders
- Job system files
- Job input files (customer files)
- Database information (which contains job status and history information)

Job Folders and Subfolders

A job folder is a folder on a Prinergy server that contains all the system files for a job. In addition, a job folder may also include any input files from your customer (though input files can also be stored elsewhere on the system, as long as the location is visible from the server that holds the job folder).

Job folders are stored in a central directory. The default name for this directory is **Jobs**, but this name can be changed during the Prinergy installation. A job folder may include any number of subfolders to help organize job information.

When you create a job, you specify a home server and home volume for that job. Prinergy then creates a job folder that contains the following subfolders:

- **System**—for storing job system files
- **HotFolders**—for storing hot folders. Includes a **Processed** subfolder for storing processed files.
- **Control**—for storing files that control job processing, such as the APA (automatic page assignment) file
- **WebDownloads** and **WebUploads**—for storing files related to Synapse lnSite
- **Fonts**—for storing fonts used in the job

- **UserDefinedFolders**—can be used for storing input files. Use Prinergy Administrator to specify which default folders you want Prinergy to create inside this folder.

A server on which job folders are stored can be referred to as a "job server." A job server can be any primary, secondary, or tertiary server in the Prinergy system. The job server on which a particular job is stored is called the job's "home server."

A server can have one or many physical or logical disks. Any disk that has been designated for Prinergy use during Prinergy Server installation can be used to store Prinergy jobs.

Job System Files

Job system files are Prinergy-generated files related to a job. System files include master PDF files and thumbnails. (A thumbnail is a low-resolution rendering of a PDF page.)

Job system files are stored in the **Jobs\<jobname>\System** folder on the job's home server.



Important: Never modify your job system files in any way; doing so may affect Prinergy's ability to reference your job and its components.

Job Input Files

Input files are the files that contain the original information for a job, such as PostScript files or imposition plans. These files must be in one of the Prinergy-supported file formats. (For a list of supported formats, see *Prinergy File Formats* on page 10.)

Input files can be stored on the job's home server in **Jobs\<jobname>\UserDefinedFolders.** However, this is not mandatory. Input files can also be stored on any computer that is visible from the job's home server, regardless of whether the storage computer is running Prinergy software.

Database Information

The Oracle database stores information about a job, such as the location of input and system files and the current status of job elements, such as input files. When you create a job, Prinergy automatically creates the appropriate entries for the job in the database.

Example of a Distributed Job

Figure 1 on page 15 illustrates an example of a job that is distributed on the system. Note that job components can also be stored in different configurations—for example, the job folder may be stored on the same server as the Oracle database, and input files may be stored directly inside the job folder, instead of on a secondary server as illustrated.

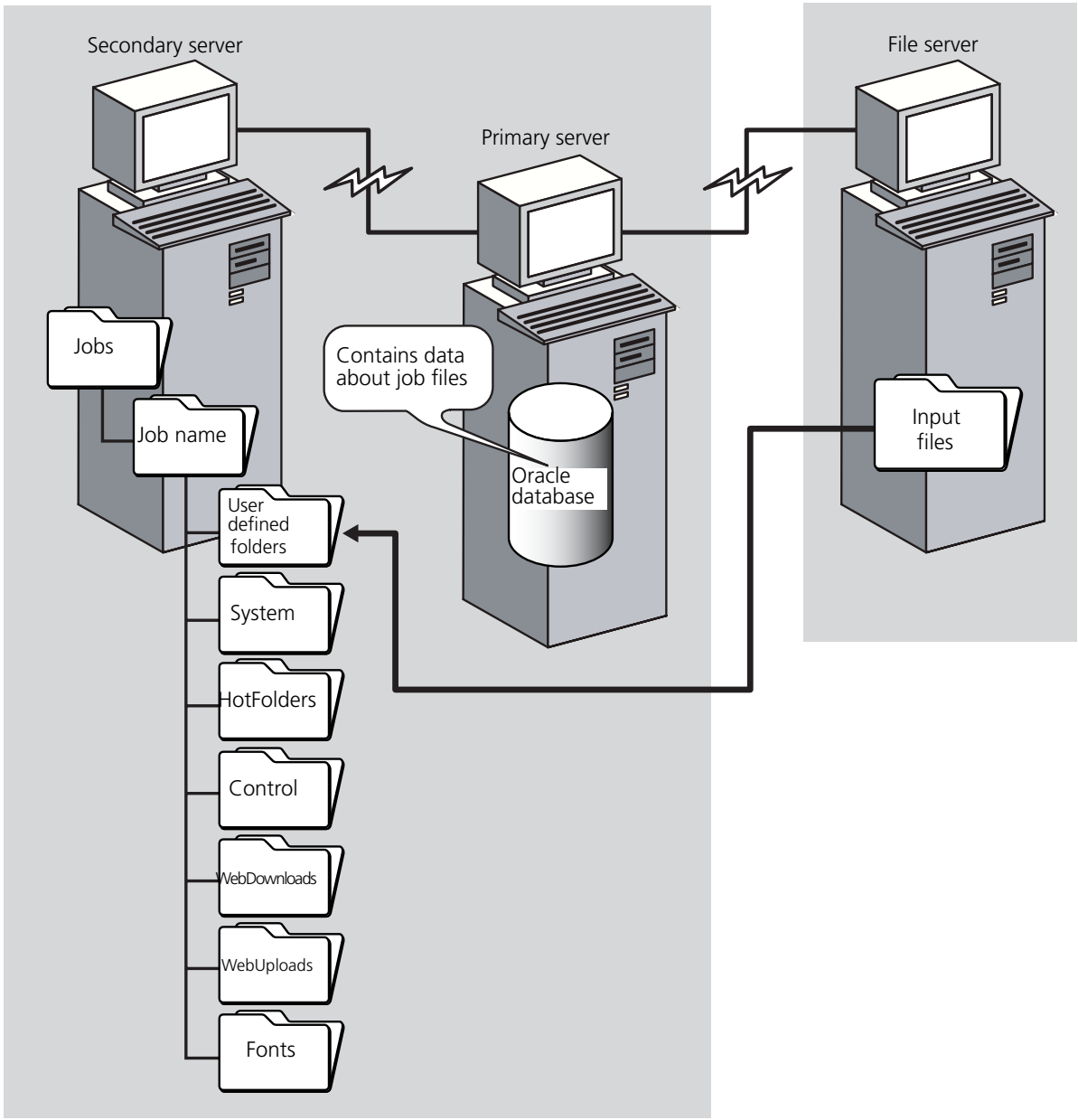


Figure 1: Job components distributed on a Prinergy system

About Prinergy Server Software

The server software side of a Prinergy system is called Prinergy Server. Prinergy Server is made up of the following components:

- Daemons
- Araxi Service (**Araxi.exe**)
- Adobe Extreme
- Oracle database
- Prinergy Administrator

Prinergy Server components can be placed on a single machine. Alternatively, because of Prinergy's distributed architecture, you may choose to run some server software components, such as certain JTPs, on other servers on the system to distribute processing and increase throughput. For more information about distribution, see *Prinergy's Distributed Architecture* on page 29.

Daemons

Daemons are processes on a server that run behind the scenes to perform specific tasks. They have no user interface, and you do not interact directly with a daemon. Instead, you make requests through Prinergy Workshop, which initiates communication with the appropriate daemons.

Each daemon plays a unique role as part of the Prinergy system. A daemon has two reference names:

- The full name, as viewed from Prinergy Administrator
- The executable name, as displayed in Windows Task Manager

For example, Process Daemon is the full name of one daemon, and **PTaskD.exe** is the corresponding executable name.

The following sections describe each daemon in detail.

Note: Daemons are also commonly referred to as servers. In Prinergy, the term daemon is always used, in order to avoid confusion between server software and server hardware.

Implementation Repository Daemon (IMR.exe)

Implementation Repository Daemon brokers requests to connect with daemons and maintains a list of daemons that are available. Requests to connect with a particular daemon may come from Prinergy Workshop or from other daemons. Implementation Repository Daemon uses TCP/IP as the core networking protocol.

Name Service Daemon (Nameserv.exe)

Name Service Daemon maintains a list of CORBA services and stores their addresses in a database file. When a service is requested, Name Service passes the address of a service to the client. The address is then passed to Implementation Repository Daemon, which starts the service.

PDF File Daemon (PPDFFileD.exe)

PDF File Daemon allows users to upload and download PDF files from digital masters, so that users can publish the digital master information elsewhere.

General File Summary Daemon (PFileSummaryD.exe)

General File Summary Daemon provides a service to retrieve summary information for imposition plans (.jt files). The summary information is displayed in Prinergy Workshop when an imposition plan is imported.

Job Launcher Daemon (PJobLauncherD.exe)

When the user opens a job in Prinergy Workshop, Job Launcher Daemon opens the appropriate Job Jacket Daemon.

System Monitor Daemon (PSystemMonD.exe)

System Monitor Daemon scans all Prinergy servers for free disk space and checks the database for free space. The daemon issues a warning when disk or database space are below a certain threshold. The daemon also scans log files for errors, and if it finds any, writes them to the Prinergy Diagnostics window.

Note: System Monitor Daemon replaces Disk Monitor Daemon. It has all the capabilities of the Disk Monitor Daemon, plus additional capabilities.

Thumbnail Daemon (PThumbnailD.exe)

Thumbnail Daemon generates thumbnails of arbitrary resolution. Thumbnail resolution is defined by the user in Prinergy Administrator (**Configuration Options>Thumbnails**). Thumbnail Daemon downsamples thumbnails to 6 dpi when sending them to Prinergy Workshop for display.

Process Daemon (PTaskD.exe)

Process Daemon is the main bridge to Adobe Extreme. It communicates with various daemons and assembles a job ticket to submit to Extreme, which then makes arrangements to carry out the job. (For more information about Adobe Extreme, see *Adobe Extreme* on page 8.)

Process Daemon provides services for creating, monitoring, logging, and controlling processes. It also logs process history.

Device and Service Daemon (PDeviceAndServiceD.exe)

Device and Service Daemon is another link to Adobe Extreme. It communicates with Prinergy Administrator to stop, start, add, and remove JTPs on your request. It also reports on JTP status.

Main Directory Daemon (PMainDirectoryD.exe)

Main Directory Daemon interacts closely with the Oracle database and is responsible for creating jobs and maintaining job history. It maintains a list of all jobs on the system and a list of the Prinergy servers available for distribution.

Main Directory Daemon is also responsible for user authentication. When someone attempts to log on to your Prinergy system through Prinergy Workshop, Main Directory Daemon verifies the user name and password against the Windows 2000 user accounts.

Note: Prinergy Server doesn't help you set up the Windows 2000 user accounts. Instead, you need to set them up in Windows 2000. Users log on to Prinergy using their Windows 2000 logon name and password. For specific information about setting up Windows 2000 accounts for Prinergy, see *Setting Up User Accounts and User Groups* on page 61. For information about setting up Windows 2000 user accounts, see the Windows 2000 documentation.

Process Plan Daemon (PTaskTemplateD.exe)

Process Plan Daemon manages access to creation and deletion of process plans according to type and group. It is responsible for reading and writing process plans from disk on the primary server.

Registered File Daemon (PRegFileD.exe)

Registered File Daemon tracks the location of disk files in the database. It also responds to requests from other daemons for information about files and their locations.

Job Jacket Daemon (PJobD.exe)

Job Jacket Daemon reads and writes job information to the database and communicates it to Prinergy Workshop, daemons, and JTPs, as needed. It also provides services for actions that modify a job.

Job Jacket Daemon is started by Job Launcher Daemon when a user opens a job in Prinergy Workshop. There is one Job Jacket Daemon for each active job. A Job Jacket Daemon fulfills requests from Prinergy Workshop and the JTPs.

After a job is inactive for a period of time, the corresponding Job Jacket Daemon stops running, but will be automatically started when the job is opened again.

Locator Daemon (PLocatorD.exe)

Locator Daemon lets you log on to the Prinergy system by responding to logon requests from Prinergy Workshop. If there is more than one Prinergy server available, you are provided with a list of choices. This feature lets you log on to different Prinergy servers, without having to know the location or exact name of the servers.

Locator Daemon is a TCP/IP multicast group member and responds to messages directed to this group from clients.

File Daemon (PFileD.exe)

File Daemon tests whether the input files being added to a job via Prinergy Workshop are actually visible to the Prinergy server machine on which the job is running.

Imposition Daemon (PImpositionD.exe)

Imposition Daemon determines how pages are positioned on the proofing media when creating loose page proofs. It creates an imposition plan on demand for loose page proofs. The imposition is determined by selections made in the **Layout** section of the loose page output process plan (in the Prinergy Workshop Process Plan Editor).

Automation Daemon (PAutomationD.exe)

Automation Daemon enables Prinergy to execute processes sequentially and automatically. It allows input files to be registered, refined, and proofed automatically.

The Automation Daemon is available only with hot folder input.

Spool Daemon (PSpoolServerD.exe)

Spool Daemon is a central repository for hot folder information and status.

Hot Folder Daemon (PHotFolderD.exe)

Hot Folder Daemon monitors any hot folders that are active on the server.

Font Installation Daemon (FINS.exe)

Font Installation Daemon lets a user add a font to a job's folder and allows the font to be converted to a RIP-ready format.

Diagnostics Log Daemon (PDiagnosticD.exe)

Diagnostics Log Daemon maintains a log of all informational warnings and errors for the other daemons. It listens on a specific TCP/IP port and then writes the information to log files. The log files are cyclic—when a log reaches the maximum size limit, Diagnostics Log Daemon starts another log. When the number of log files reaches the maximum, the daemon rolls back and overwrites the first log file. The maximum number and size of the log files are determined in the Windows 2000 registry.

Diagnostics View Daemon (diagviewd.cmd)

Diagnostics View Daemon reads and buffers the log files written by Diagnostics Log Daemon. It filters events and only sends information requested by the Diagnostics Viewer, an internal diagnostic tool.

License Key Monitor Daemon (PLicMonD.exe)

License Key Monitor Daemon monitors temporary licenses and issues a warning when a temporary license is about to expire.

Archiver Daemon (PArchiveD.exe)

Archiver Daemon manages communications between the Media Manager, Windows 2000 RSM, and the Prinergy database. The Archiver Daemon is available only if you have licensed the Prinergy Archiver system.

Araxi Service (Araxi.exe)

Araxi Service is a Windows 2000 service that is started automatically by the operating system when Windows 2000 starts on a Prinergy server. Since Prinergy runs as a Windows 2000 service, Prinergy can be configured to start up automatically after a reboot without requiring the user to log on to the server.

Araxi Service is responsible for starting daemons and a number of other processes, such as the Adobe Extreme Coordinator (**supra.exe**), when the Prinergy server is started. These may in turn trigger the start of other processes.

Araxi Service is able to start processes with a specific process priority as handled by Windows 2000. It can start and monitor Windows 2000 processes within the context of groups. For example, if a process with a particular group number terminates unexpectedly and is going to be restarted, other processes with the same group number are also stopped and restarted.

Araxi Service is able to monitor and restart processes that it did not start directly (that is, processes that were triggered by other processes). This feature ensures that a Prinergy component that terminates unexpectedly will be restarted automatically.

Adobe Extreme

Adobe Extreme technology is part of Prinergy Server. Adobe Extreme software components include JTPs for processing job tickets and Extreme Coordinator (**supra.exe**).

About Job Tickets

A job ticket is a collection of information related to one or more processing steps that must be carried out in Prinergy. It includes a map or route that specifies which JTPs to go to and in what order. A job ticket can also include information about:

- Which files to process
- Processing options
- Destinations
- Printing layouts (imposition plans)

A job ticket may also contain an audit trail. This audit trail lists which JTPs have processed the job ticket and which actions have been performed on it. Since the job ticket contains all the information related to a task, processing occurs in the background without the need for user interaction.

About Job Ticket Processors (JTPs)

A JTP is software that performs a specific processing step to help process a job ticket. Prinergy contains a number of JTPs, including custom JTPs created specifically for Prinergy.

There is a JTP for each kind of processing step that can be performed in the Prinergy system. Using Prinergy Administrator, you can distribute certain JTPs throughout the system. Some JTPs can be sequenced together within Prinergy process plans to automate Prinergy tasks, such as refining.

Table 3 describes the main types of JTPs in Prinergy, which can be divided into these groups:

- *Refine* JTPs, which perform steps related to converting files into safe, reliable PDF
- *Output* JTPs, which perform steps related to outputting proofs or plates
- *Import/export* JTPs, which perform steps related to importing and exporting Prinergy jobs
- *Archive* JTPs, which perform steps related to file storage

In addition to the JTPs described in the following table, there are a number of "generic" JTPs for performing minor steps, such as generating thumbnails. The Prinergy system manages the distribution of these JTPs; you cannot configure them with Prinergy Administrator.

Table 3: Distributable job ticket processors (JTPs)

JTP type	Description	Group
CEPSConversion	Converts Brisque and TIFF/IT P1 pages to composite PDF 1.3 output.	Refine
Color Match	Generates data for color matching proofs to final output.	Refine
Copydot	Optimizes copydot files for output.	Refine
Normalize	Converts PostScript files to PDF; also does font management and font handling.	Refine
Optimize	Optimizes PDF files into digital masters suitable for print, checking conditions such as compression and downsampling.	Refine
Various trappers (specific JTPs may vary)	Handle trapping in Prinergy.	Refine
Import/Export	Exports all or part of a job to a ZIP file for import into another Prinergy system. Also used for importing imposition plans, populated job tickets, and Creo Page Assigner files.	Import/ Export
Proofing Device (low resolution or high resolution)	Creates low-resolution output, suitable for proofing.	Output

JTP type	Description	Group
PrintLink	Generates PPF files for digital ink key preset systems.	Output
Various high-resolution renderers (Actual JTP type names depend on which output devices you are using.)	Create high-resolution final output.	Output
Archive/Retrieve	Writes whole jobs or individual files onto archiving media. Also locates archived jobs or files on the archiving media and returns them to the job server.	Archive
Disk Purge	Removes selected jobs or files from the job server.	Archive

Extreme Coordinator (supra.exe)

Extreme Coordinator (**supra.exe**) is the central coordinator for the Adobe Extreme system. It routes messages between Extreme components, such as JTPs. On request, it provides information about the services and tasks on the system. Extreme Coordinator also plays a part in intercomponent communications by relaying messages to JTPs and other Prinergy components.

Extreme JTP Launcher (SupraLauncher.exe)

The Extreme JTP Launcher receives commands from the Extreme Coordinator and starts JTPs on its behalf on the secondary server. There is one Extreme JTP Launcher on each secondary server. Once a JTP is started, it communicates with the Extreme Coordinator.

Extreme Sequencer (SupraSeq.exe)

Extreme Sequencer (**SupraSeq.exe**) directs job tickets to each JTP involved in processing.

Oracle Database (Oracle.exe)

The Oracle database is where Prinergy job information is stored. Also called the Oracle Relational Database Management System (RDBMS), it contains all the Prinergy file information, including file attributes and the history log.

Note that it does not store any file content. The database contains pointers to the input files, which can be stored on any server within the Prinergy network.

Prinergy Administrator (UADM.exe)

Prinergy Administrator (**UADM.exe**) is the software that serves as the Prinergy system administration user interface. Use Prinergy Administrator to configure and monitor your Prinergy system. You can also use Prinergy Administrator to add and remove JTPs and JTP pools from a server, control licensing, and start and stop the system.

Prinergy Administrator is automatically installed on each server in a Prinergy system. Some tasks must be done in Prinergy Administrator running on the primary server.

About Prinergy Workshop

Prinergy Workshop is the main client software in a Prinergy system. It is the main user interface to the Prinergy system, enabling you to:

- Create, edit, and destroy jobs
- Create, edit, and destroy process plans
- Create, monitor, and manipulate Prinergy processes

Based on input from the user, Prinergy Workshop makes requests of Prinergy Server, which then carries out the appropriate tasks.

Prinergy Workshop is automatically installed on each server when Prinergy Server is installed. In addition, you can install Prinergy Workshop separately on any number of client machines. Client machines can be Macintosh or Windows 2000 machines.

Note: Even in a single-server Prinergy system, we recommend that you have at least one client machine to run Prinergy Workshop.

Most Prinergy Workshop code is written in Java™, a platform-independent language that enables the software to be run on both Macintosh and PC computers. Prinergy Workshop has the same look and feel on both platforms. In addition to Java, Prinergy Workshop has some native code, principally for access to the file system, which is not well supported by Java.

In order for Prinergy Workshop to run on both platforms, a Java application runs on top of a Java Virtual Machine (VM) that provides the interface to the services of the operating system.

The Java VM is like another layer that sits on top of the client operating system. Its purpose is to make the operating system appear generic, to avoid cross-platform issues.

On the Macintosh, the VM is the Apple Macintosh Runtime for Java (MRJ). On the PC, the VM is the Java Runtime Environment (JRE).

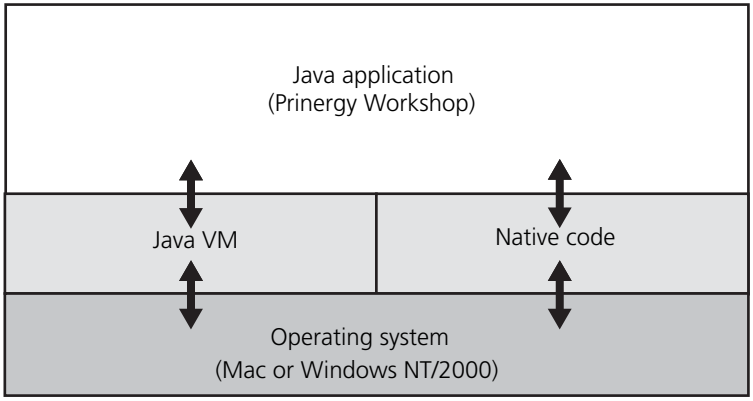


Figure 2: Prinergy Workshop software architecture

How the System Works

Prinergy Server and Prinergy Workshop work together to create and process jobs. Following is a basic overview of how Prinergy processes jobs:

1. Prinergy Server starts when the server machine is started. Araxi Service starts various daemons and Extreme Coordinator.
2. Based on input from the user, Prinergy Workshop asks Prinergy Server to perform an action on a Prinergy job—for example, to normalize PostScript input files.
3. Daemons in Prinergy Server work together to assemble a job ticket for the requested action and submit it to Extreme Coordinator.
4. Extreme Coordinator forwards the job ticket to the appropriate JTPs.
5. JTPs perform specified steps in a sequence determined by Extreme Coordinator. As the job ticket is processed, JTPs report back to Extreme Coordinator. Extreme Coordinator is always aware of the current status of the job ticket and which JTP to contact next.
6. When the job ticket has been processed, Extreme Coordinator informs the appropriate daemons in Prinergy Server.
7. Daemons update the database to reflect the current status of the job and related files, including any new system files in the job folder.

Figure 3 on page 28 illustrates this process.

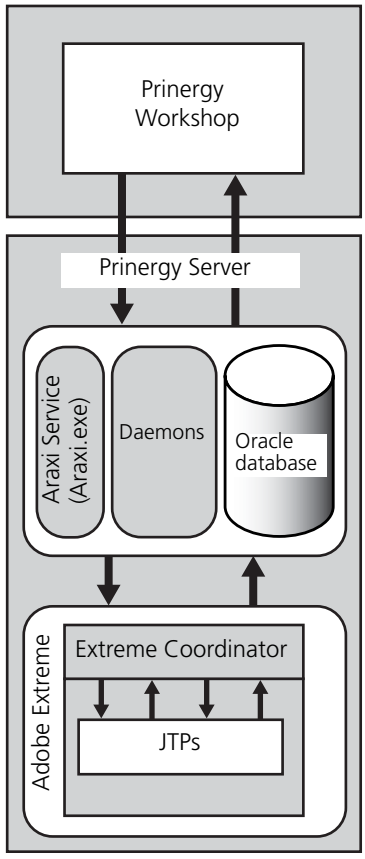


Figure 3: Overview of Prinergy's internal workflow

Prinergy's Distributed Architecture

As a client-server system, Prinergy lets you take advantage of distributed processing to increase productivity. Although Prinergy can work well as a single-server system, too much simultaneous demand can quickly overwhelm even the most powerful system. Therefore, you may want to use additional server machines so that you can distribute various Prinergy components, such as JTPs and jobs, throughout your system to increase overall performance.

Machines in a distributed Prinergy system include server machines and client machines.

Prinergy Server Machines

There are potentially three types of Prinergy server machines in a distributed Prinergy system:

- The primary server
- One or more secondary servers
- One or more tertiary servers

A Prinergy system can also include one or more file servers. A file server stores input files, but does not run any Prinergy software components or store any Prinergy job folders. A file server can be any machine visible to the Prinergy system.

About the Primary Server

The primary server is the main server machine in a Prinergy system. It contains all Prinergy Server components, including the Oracle database. The primary server coordinates requests from Prinergy Workshop and maintains the database.

There can be only one primary server in a Prinergy system. The first machine on which you install Prinergy Server must be designated the primary server when you install the software. This means the Prinergy installer automatically installs the Oracle database on this machine. Subsequent servers added to the system should be designated as secondary servers during Prinergy Server installation. In this case, the Oracle database will not be installed on them.

In a distributed system, the primary server coordinates client requests and maintains the database, but some tasks can be carried out on secondary servers to increase overall system performance.

Although you can distribute some Prinergy Server components to secondary servers, certain components run only on the primary server. Table 5 on page 33 identifies which components are specific to the primary server.

Like any server in a Prinergy system, the primary server can store jobs. However, you may want to store some or all jobs on one or more secondary or tertiary servers to increase performance on the primary server.

The primary server can also run Prinergy Workshop. A copy of this application is automatically installed when you install Prinergy Server.

About Secondary Servers

A secondary server is any server that is running Prinergy Server software, but is not the primary server—that is, it is running Prinergy Server software, but it does not store the Oracle database.

A secondary server can run some or all JTPs to facilitate distributed processing. CPU-intensive tasks, such as rendering final output, are good candidates for distribution onto secondary servers. Like all JTPs, JTPs running on secondary servers communicate with the primary server via the Adobe Extreme communication layer.

It is possible to have multiple active instances of certain JTPs, depending on your Prinergy licensing agreement. For example, a system could have multiple instances of the Normalizer JTP in order to simultaneously process multiple jobs.

You can potentially add any number of secondary servers to your Prinergy system by installing Prinergy Server on a properly configured Windows 2000 machine. A secondary server can also run Prinergy Workshop, a copy of which is automatically installed when you install Prinergy Server software.

When you install Prinergy Server on a secondary server, all Prinergy Server components are automatically installed, except the Oracle database. Each server has its own copy of Araxi Service, which is responsible for starting the Prinergy executables on that server. When processing jobs on a Prinergy system, certain daemons may be activated on one or more secondary servers in order to distribute processing.

Certain daemons run only on the primary server. Table 5 on page 33 identifies which servers daemons can be active on. You can control which JTPs run on a primary or secondary server. However, you cannot configure which daemons run on which servers; the distribution of active daemons is determined by the system.

Note: A secondary server can also store jobs.

Special Types of Secondary Servers

There are two special types of secondary servers:

- Render station
- Archiving station

A render station is a secondary server that is connected to an output device and is running a high-resolution renderer. It is generally not used to store jobs or run other types of JTPs. Instead, it is reserved for rendering files for output. For more information about configuring a render station and output devices, see *Configuring an Output Device* on page 91.

An archiving station is a secondary server that is connected to an archiving device and is running the Archive/Retrieve JTP and the PurgeDisk JTP; the archiving device and archive-related JTPs must be running on the same server. Like any other secondary server, the archiving station can also store jobs and run other JTPs, such as the Normalizer JTP. For more information about archiving, see *Chapter 4, Using the Archiver System*.

About Tertiary Servers

A tertiary server is a Windows 2000 server that is part of the Prinergy network but is not running any Prinergy Server software components. It can be used to store jobs and input files and can be configured by Prinergy Administrator.

Note: Input files can also be stored on a file server, which can be any server on the system.

Table 4: Prinergy server machines

Type of server machine	Number in a Prinergy system	Is Prinergy software running on this server?	Can job folders be stored on this server?	Can input files be stored on this server?
Primary	1	Y	Y, but storing files on a secondary or tertiary server will improve performance of the primary	Y, but it's preferable to store files on a secondary, tertiary, or file server
Secondary	Any number	Y	Y	Y
Tertiary	Any number	N	Y	Y
File server	Any number	N	N	Y

Prinergy Client Machines

A client machine is any machine that runs only Prinergy Workshop; a client machine does not execute any Prinergy Server components. Prinergy Workshop can run on both Window 2000 and Macintosh OS 9.1 or later.

How Prinergy Software Components Are Distributed

Prinergy software components can be distributed on various machines on the system. Table 5 on page 33 lists the components of a Prinergy system and the type of machine on which they can run.

Table 5: Prinergy software components and possible locations

Component	Description	Primary	Secondary	Tertiary	Client machine
Oracle database (**Oracle.exe**)	Maintains job data.	Y			
Orbacus daemons: Implementation Repository Daemon (**IMR.exe**) and Name Service Daemon (**NameServ.exe**)	Implementation Repository Daemon brokers requests to connect with daemons from Prinergy Workshop and other daemons.	Y	Y		
	Name Service maintains a list of CORBA services and passes service addresses to the client when services are requested.	Y			
PDF File Daemon (**PPDFFileD.exe**)	Lets users upload and download PDF files from digital masters so they can publish digital master information.	Y			
General File Summary Daemon (**PFileSummaryD.exe**)	Retrieves summary information for imposition plans (.jt files).	Y			
Job Launcher Daemon (**PJobLauncherD.exe**)	Opens the Job Jacket Daemon when a user opens a job in Prinergy Workshop.	Y	Y		
System Monitor Daemon (**PSystemMonD.exe**)	Checks Prinergy servers and the Oracle database for free space. Issues a warning when free space is below a certain threshold.	Y			
Thumbnail Daemon (**PThumbnailD.exe**)	Generates thumbnails of arbitrary resolution and downsamples thumbnails to 6 dpi for display in Prinergy Workshop.	Y			
Process Daemon (**PTaskD.exe**)	Is a bridge between Adobe Extreme and the rest of Prinergy.	Y			
Device and Service Daemon (**PDeviceAndServiceD.exe**)	Communicates with Prinergy Administrator to stop, start, add, and remove JTPs.	Y			

Component	Description	Primary	Secondary	Tertiary	Client machine
Main Directory Daemon (**PMainDirectoryD.exe**)	Maintains a directory of secondary servers and jobs. Is also responsible for user authentication at logon.	Y			
Process Plan Daemon (**PTaskTemplateD.exe**)	Manages access to the creation and deletion of process plans. Reads and writes process plans on disk.	Y			
Registered File Daemon (**PRegFileD.exe**)	Records files and their locations in the database.	Y			
Job Jacket Daemon (**PJobD.exe**)	Communicates job information between the database and Prinergy Workshop. Provides services for actions that modify a job.	Y	Y		
Locator Daemon (**PLocatorD.exe**)	On request from a client machine, announces the presence of primary servers on the network.	Y			
File Daemon (**PFileD.exe**)	Tests whether input files being added to a job are visible to the server on which the job is running.	Y	Y		
Imposition Daemon (**PImpositionD.exe**)	Determines how pages are positioned on the proofing media when loose page proofs are created.	Y			
Automation Daemon (**PAutomationD.exe**)	Enables Prinergy to execute processes sequentially and automatically.	Y			
Spool Daemon (**PSpoolServerD.exe**)	A central repository for hot folder information and status.	Y			
Hot Folder Daemon (**PHotFolderD.exe**)	Monitors hot folders that are active on the server.	Y	Y		

Component	Description	Primary	Secondary	Tertiary	Client machine
Font Installation Daemon (**FINS.exe**)	Lets users add a font to a job's folder, and allows the font to be converted to a RIP-ready (PDF) format.	Y			
Diagnostics Log Daemon (**PDiagnosticD.exe**)	Maintains a log of all informational warnings and errors for the other daemons.	Y	Y		
Diagnostics View Daemon (**diagviewd.cmd**)	Reads and buffers log files written by the Diagnostics Log Daemon.	Y	Y		
License Key Monitor Daemon (**PLicMonD.exe**)	Monitors temporary licenses and issues a warning when a temporary license is about to expire.	Y	Y		
Archiver Daemon (**PArchiveD.exe**)	Manages communication between the Media Manager, Windows 2000 RSM, and the Oracle database. Available only if the Prinergy Archiver is licensed on your system.	Y	Y		
Araxi Service (**Araxi.exe**)	Launches daemons and other processes when the Prinergy server is started.	Y	Y		
Extreme Coordinator (**supra.exe**)	Coordinates JTPs.	Y			
Extreme Sequencer (**SupraSeq.exe**)	Directs job tickets to each JTP involved in processing.	Y			
Extreme JTP Launcher (**SupraLauncher.exe**)	Receives commands from the Extreme Coordinator and starts JTPs on its behalf on the secondary server. There is one Extreme JTP Launcher on each secondary server. Once a JTP is started, it communicates with the Extreme Coordinator.		Y		
JTPs	Process Adobe Extreme tasks, such as normalizing or trapping.	Y	Y		

Component	Description	Primary	Secondary	Tertiary	Client machine
Prinergy Administrator (**UADM.exe**)	Enables you to configure and monitor the Prinergy system.	Y	Y		
Prinergy Workshop	Main user interface to Prinergy, enabling users to create and edit jobs.	Y	Y	Y	Y
Job folders	A collection of files related to a customer print job.	Y	Y	Y	

How It Fits Together

How do all these components work together to make up a distributed Prinergy system?

The database, Araxi Service, daemons, and Adobe Extreme Coordinator reside on the primary server. Araxi Service and daemons also reside on each secondary server (though not all daemons can be executed on a secondary server). Extreme JTPs can be stored on the primary server or secondary server(s), or both. The primary server is always aware of which JTPs exist on which server(s), and is thus able to coordinate the system.

Prinergy Workshop can reside on the primary server, secondary servers, tertiary servers, and client machines. Prinergy Workshop communicates with the primary server using TCP/IP, as brokered by CORBA.

Figure 4 on page 37 shows an example of a Prinergy distributed system.

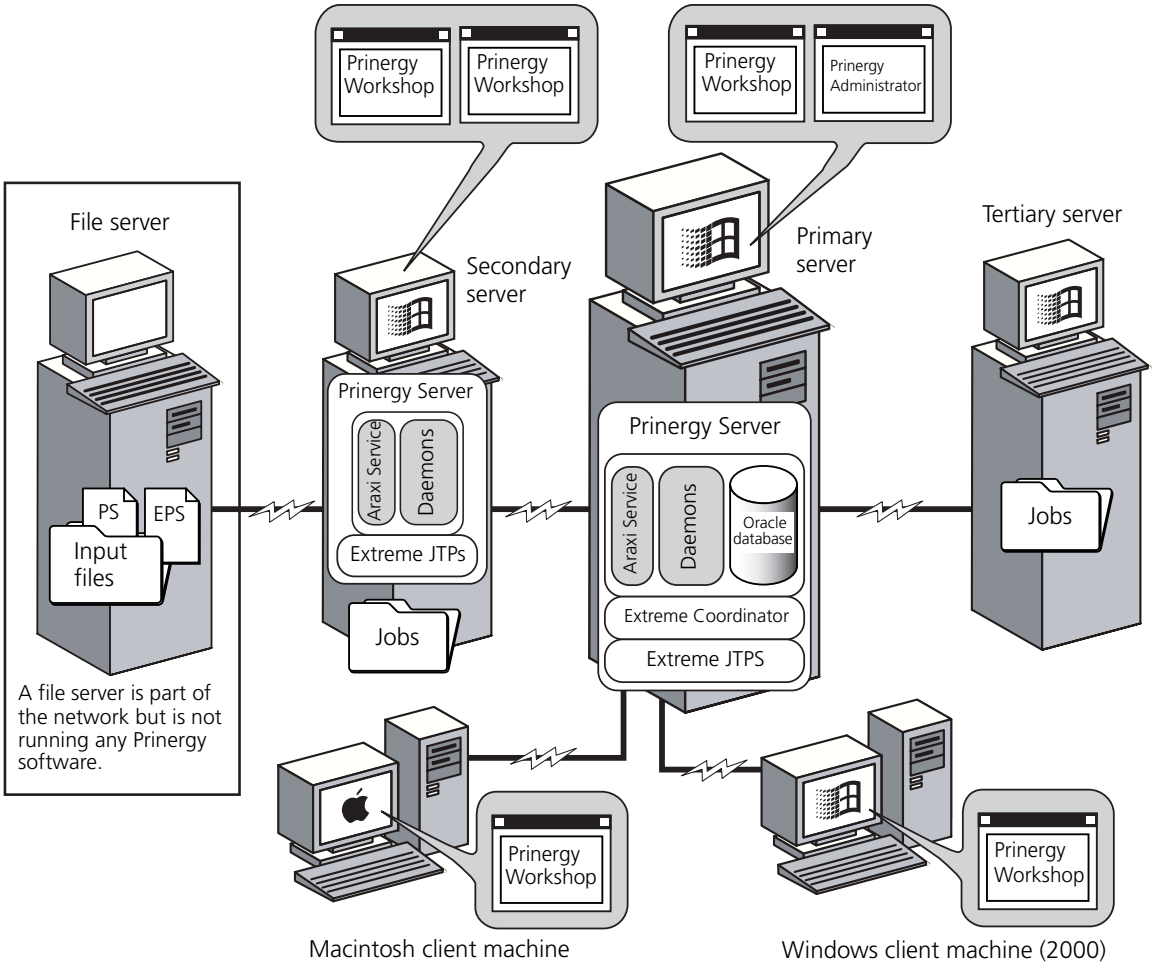


Figure 4: A sample distributed Prinergy system

Prinergy System Software Components

In addition to Prinergy Server and Prinergy Workshop, a Prinergy system includes a number of other applications that are not part of Prinergy software, but are necessary to run the system.

This section outlines the various software components that make up a Prinergy system. There are three types of software in a Prinergy system:

- *Standard software*, which is automatically shipped with your Prinergy system
- *Optional software*, which may be shipped with your Prinergy system
- *Companion software*, which is not part of the Prinergy system, but may be used in conjunction with your Prinergy system



Important: Never install unauthorized software on your Prinergy system.

Operating System and Browser Software

All servers and render stations must be running Windows 2000 with a minimum of Service Pack 3. Client machines must be running either Windows 2000 or Mac OS 9.2 or Mac 10.1.3 or later, as qualified by Creo.

You need browser software to be able to display Prinergy Workshop online help. Internet Explorer versions 5.0 and later are recommended. Internet Explorer can be downloaded free from the Internet.

Standard Software

The following software components are standard with Prinergy and are automatically shipped with your system:

- Prinergy Server (server software). This includes the Oracle database, Adobe Extreme components, daemons, and Prinergy Administrator. Windows 2000 only.
- Prinergy Workshop (client software), for managing the workflow for each job. Windows 2000 and Macintosh OS.
- Harmony, for dot gain calibration. Windows 2000 only.
- Oracle Backup Manager, for backing up the Oracle database to disk. Windows 2000 only.

- Prinergy Archiver software (Prinergy Connect and Prinergy Powerpack). This includes the archiving JTPs and the Windows 2000 Removable Storage Manager. For archiving Prinergy jobs. Windows 2000 only. Prinergy Archiver software is a licensed option for Prinergy Direct.
- Adobe Acrobat 5.05 or later, for viewing and editing PDFs. Windows NT, Windows 2000, and Macintosh OS.
- Virtual Proofing System, for creating and viewing virtual proofs. For Macintosh OS and Windows.
- pcAnywhere®, for accessing your system remotely. Windows 2000 only.
- Enfocus Pitstop, for editing PDFs, is shipped with Prinergy Powerpack. Windows NT, Windows 2000, and Macintosh OS.

Optional Software

The Prinergy Backup software is optional and may be included with your Prinergy system. Contact your service representative if you want to add this option. Windows 2000 only.

Companion Software

The following stand-alone software can be used in conjunction with Prinergy:

- Output device control software, such as Print Console or Engine Manager. Windows NT and Windows 2000.
- Imposition software, for example, Preps®

For a current list of companion software, contact your service representative.

Prinergy Software Summary

This section contains two tables that summarize Prinergy's software components:

- Table 6 on page 40 describes the various Prinergy system software components in terms of platform, type (standard or companion), and location.
- Table 7 on page 41 describes the Prinergy software that is automatically installed on a server by the Prinergy installer.

Table 6: Prinergy system software

Software	Platform	Type	Primary or secondary server	Client machine
Prinergy Server (includes Prinergy Administrator)	Windows 2000	Standard	Y	
Prinergy Workshop	• Windows 2000 • Macintosh OS	Standard	Y	Y
Harmony	Windows 2000	Standard	Y	
Oracle Backup Manager	Windows 2000	Standard	Y	
Prinergy Archiver software (includes archive-related JTPs and Windows 2000 RSM)	Windows 2000	Standard	Y	
Adobe Acrobat 5.05 or later	• Windows NT • Windows 2000 • Macintosh OS	Standard	Y	Y
Virtual Proofing System	• Macintosh OS • Windows 2000 • Windows NT	Standard	Y	Y
pcAnywhere 9.0 or later	Windows 2000	Standard	Y	

Software	Platform	Type	Primary or secondary server	Client machine
Enfocus Pitstop 4.6 or later	• Windows NT • Windows 2000 • Macintosh OS	Standard with Prinergy Powerpack	Y	Y
Prinergy Backup software	Windows 2000	Optional	Y	
Output device control software, such as Print Console or Engine Manager	• Windows 2000 • Windows NT	Companion	Y	
Imposition software, for example, Preps 4.0 or later	• Windows NT • Windows 2000 • Macintosh OS	Companion	Y	Y

Table 7: Components installed by the Prinergy installer

Prinergy software component	Installed on primary server?	Installed on secondary server?
Prinergy Server:		
• Oracle database	Y	N
• Daemons	Y	Y
• Adobe Extreme	Y	Y
• Prinergy Administrator	Y	Y
• Oracle Backup Manager	Y	Y
Prinergy Workshop	Y	Y

2

Starting and Stopping Prinergy

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Introduction

This chapter provides information on the following:

- Starting the Prinergy system
- Shutting down the Prinergy system
- Starting Prinergy Server software using Prinergy Administrator
- Stopping Prinergy Server software using Prinergy Administrator

The Prinergy System

The Prinergy system includes the primary server, secondary server(s), client machine(s), and any peripheral devices, such as proofing devices, tape devices, and output devices.

Following the proper procedures for starting and shutting down the system will help safeguard against equipment damage and data loss.

Starting the Prinergy System

Use the following procedure to start your Prinergy system.

Once the system is started, it does not need to be shut down unless problems occur or maintenance work is required. Under normal operating conditions, the system remains on at all times.

Note: Use Prinergy Administrator to stop Prinergy Server software without shutting down the system. See *Stopping Prinergy Server* on page 48.

To start the Prinergy system:

1. Turn on the UPS (uninterruptible power supply).
2. If your system has an external RAID (Redundant Array of Independent Disks), turn it on and wait for the green light to come on.

   This can take several minutes.

3. Turn on all other peripheral devices.

   These can include:

   - Removable storage devices (for archiving and/or backup)
   - Proofing device
   - Output device

4. Turn on all servers: primary servers, secondary servers, render stations, tertiary servers, and file servers.

   Wait for the operating system to start.



Important: Ensure that all servers are running and on the network before starting Prinergy on the primary server.

5. On the primary server, start Prinergy Administrator. From the **Start** menu, select **Programs>Prinergy>Prinergy Administrator**.
6. On the primary server, start Prinergy. From the **File** menu in Prinergy Administrator, select **Start Prinergy.**
7. Once Prinergy is running, turn on the client machines and monitors.

Shutting Down the Prinergy System

Use the following procedure to shut down the system. You usually do not need to shut down the system, unless problems occur or maintenance work is required. Under normal operating conditions, the system remains on at all times.

Note: Use Prinergy Administrator to stop Prinergy Server software without shutting down the system. See *Stopping Prinergy Server* on page 48.

To shut down the Prinergy system:

1. On each client machine, exit Prinergy Workshop, and then shut down the machine.
2. When prompted, turn off the power switch on each client machine.
3. On each secondary server, exit any Prinergy software, and then shut down Windows 2000.
4. Turn off the power switch on each secondary server machine.
5. On the primary server, exit any Prinergy software, and then shut down Windows 2000.

6. Turn off the power switch on the primary server.
7. Turn off the power switch on the RAID.
8. Turn off the power switch on the UPS.
9. Turn off any peripheral devices. These can include:
   - Removable storage devices (for archiving and/or backup)
   - Proofing devices
   - Output devices

Prinergy Server Software

Prinergy Server is the server software side of a Prinergy system. It is made up of a number of components, including daemons, Araxi Service, Adobe Extreme, and the Oracle database. It also includes Prinergy Administrator, the software that serves as the Prinergy system administration user interface.

For more information about Prinergy Server, see *About Prinergy Server Software* on page 16.

Starting Prinergy Server

Use Prinergy Administrator to start Prinergy Server software on various servers. Prinergy Administrator is installed as part of Prinergy Server and runs on primary and secondary servers.

To start Prinergy Server using Prinergy Administrator:

1. Log on to a Prinergy server as an administrator.

   You must have administrator privileges in order to use Prinergy Administrator. If you have not logged on to the system using an account with administrator privileges, you will be prompted to log on with an appropriate account when Prinergy Administrator starts.

2. From the Windows 2000 **Start** menu, select **Programs**>**Prinergy**>**Prinergy Administrator**.

   Prinergy Administrator appears.

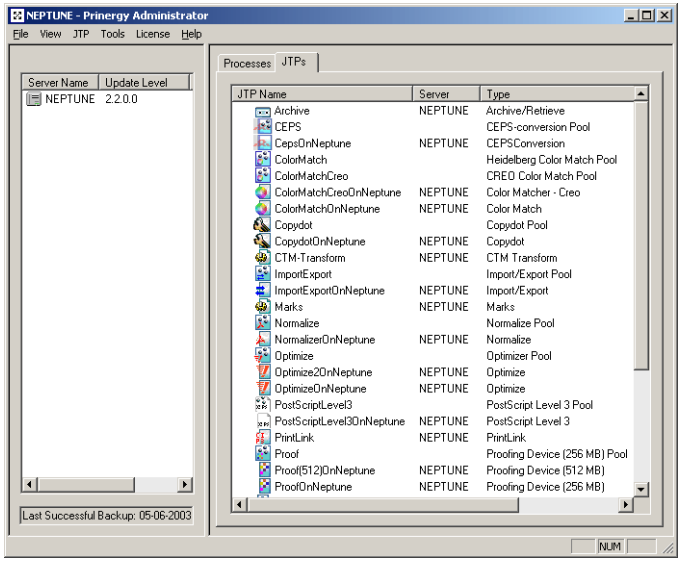


Figure 5: Prinergy Administrator

3. From the **File** menu, select **Start Prinergy**.

   The Start Prinergy dialog box appears.

4. Do one of the following:

   - To start Prinergy on the most recently selected server, select the server by name.
   - To start Prinergy on all Prinergy servers in the Prinergy system, select **All Servers**.

5. Click **Start**.

   Prinergy may take a moment to start.

   Prinergy must be running on the primary server in order to process jobs. You can start Prinergy on a secondary server even if the primary server is stopped, but you will not be able to process jobs.

For more information about using Prinergy Administrator, see the Prinergy Administrator online help.

Stopping Prinergy Server

Use Prinergy Administrator to stop Prinergy Server software on various servers without shutting down the system. You may want to do this if a job seems to be hung up or the software is not responding.

Prinergy Administrator is installed as part of Prinergy Server and runs on primary and secondary servers.

To stop Prinergy Server using Prinergy Administrator:

1. Log on to a Prinergy server as an administrator.

   You must have administrator privileges in order to use Prinergy Administrator. If you have not logged on to the system using an account with administrator privileges, you will be prompted to log on with an appropriate account when Prinergy Administrator starts.

2. From the Windows 2000 **Start** menu, select **Programs**>**Prinergy**>**Prinergy Administrator**.

   Prinergy Administrator appears.

3. From the **File** menu, select **Stop Prinergy**.

   The Stop Prinergy dialog box appears.

4. Do one of the following:

   - To stop Prinergy on the most recently selected server, select the server by name.
   - To stop Prinergy on all Prinergy servers on the system, select **All Servers**.

5. In the **Reason for shutdown** box, type the reason for stopping Prinergy (optional).

   This information is logged in the Windows Application Event Log for troubleshooting.

6. Click **Stop Prinergy**.

   Prinergy may take a moment to shut down.

For more information about using Prinergy Administrator, see the Prinergy Administrator online help.

3

Configuring and Managing Prinergy

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Screen Licensing 55

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Assigning a New Volume for Job Storage 82

Accessing Input Files on a File Server 85

Configuring a Proofing Device 88

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Configuring Hot Folder Behavior 98

Introduction

This chapter provides information on configuring and managing your Prinergy system. It begins with an overview of the configuration steps required to get your Prinergy system up and running.

The rest of the chapter contains detailed information on each of these steps. Use these instructions if you want to make configuration changes to your Prinergy system.

About Windows 2000 and Prinergy

Many of the configuration activities in Prinergy involve Windows 2000 procedures—for example, setting up user accounts and groups. This manual does not provide detailed information on performing general Windows 2000 procedures; rather, it outlines the Prinergy-specific information that you need to know.

or detailed information about Windows 2000 procedures, see the Windows 2000 documentation.

Prinergy Configuration Tasks

Table 8 on page 51 describes the various Prinergy configuration tasks and the software used.

Table 8: Prinergy configuration tasks and the software used

Configuration task	Software used
Managing Prinergy software licensing	Prinergy Administrator
Distributing JTPs and JTP pools	Prinergy Administrator
Creating user accounts and groups	• In a workgroup: Windows 2000 Computer Management>Local groups and users • In a domain: Windows 2000 Active Directory Users and Computers
Manage the Araxi Service account	• In a workgroup: Windows 2000 Computer Management (various tools) • In a domain: Windows 2000 Active Directory Users and Computers and Windows 2000 Computer Management (various tools)
Add secondary and tertiary servers	• Prinergy Administrator
Assigning volumes for job storage	• Prinergy Administrator • Windows 2000 Computer Management
Adding input folders	• Windows 2000 Computer Management
Configuring proofing devices	• Prinergy Workshop • Preps • Harmony
Configuring output devices	• Prinergy Workshop • Harmony • Control software for output device—for example, Print Console or Engine Manager
Configuring the Prinergy Archiver system	• Microsoft's Removable Storage Manager (RSM)
Set Prinergy Workshop user rights (optional)	• Prinergy Administrator
Configure Prinergy Workshop hot folder behavior (optional)	• Prinergy Administrator

Overview of Initial Prinergy Configuration

Once you have installed Prinergy, you must configure your system before you can begin to process jobs and work with Prinergy.

To configure your Prinergy system after installation:

1. Using Prinergy Administrator, confirm that your Prinergy system is licensed to run the features and JTPs you require. If you need additional features or JTPs, obtain a new license key, and then use Prinergy Administrator to enable your system.

   For more information about licensing, see *Managing Prinergy Licensing* on page 54.

2. If you are using secondary servers, determine how you will distribute JTPs on your system, and then use Prinergy Administrator to distribute JTPs.

   Distributing JTPs includes adding and removing JTPs from Prinergy servers and creating JTP pools. For more information, see *Screen Licensing* on page 55.

3. Using the appropriate Windows 2000 management tools, create user accounts and user groups for the system.

   If you are in a domain, use Windows 2000 Active Directory Users and Computers to create accounts and groups on your domain controller. If you are in a workgroup, use Windows 2000 Computer Management to create parallel user accounts and groups on each server in your system.

   For more information, see *Setting Up User Accounts and User Groups* on page 61.

4. If desired, set user rights to determine which tasks users will be able to perform in Prinergy Workshop.

   You can prevent users from creating, editing, and deleting process plans and workshop plans and destroying history entries in Prinergy Workshop.

   For more information, see the Prinergy Administrator online help.

5. If required, use the appropriate Windows 2000 management tools to manage the Araxi Service account.

Araxi Service (**Araxi.exe**) uses a special Windows 2000 account to start processes such as daemons. In general, the Araxi Service account was configured when your system was installed; however, you may want to change the password or create a different account.

For more information, see *Managing the Araxi Service Account* on page 70.

6. Using Prinergy Administrator, add any secondary or tertiary servers that you want to use with your system.

   For more information about adding servers to your system, see the Prinergy Administrator online help.

7. If desired, using Windows 2000 Computer Management, assign a new volume for job storage.

   For more information, see *Assigning a New Volume for Job Storage* on page 82.

8. If desired, using Windows 2000 Computer Management, add a new input folder on a file server.

   For more information, see *Accessing Input Files on a File Server* on page 85.

9. On the primary server, set up RAS for remote support.

   This enables your service representative to connect directly to your system for troubleshooting.

10. On your primary server, configure any proofing devices that you plan to use with Prinergy.

    Configuring a proofing device involves creating process plans, setting up calibration curves, and creating test proofs. For more information, see *Configuring a Proofing Device* on page 88.

11. On the server(s) connected to the output device(s), configure any output devices that you plan to use with Prinergy.

    Configuring an output device involves creating process plans, creating plate types, setting up calibration curves, and creating test plates. For more information, see *Configuring an Output Device* on page 91.

12. If your system includes archiving, enable the Prinergy Archiver system.

    For more information, see *Enabling the Archiver System* on page 111 (in *Chapter 4, Using the Archiver System*).

13. If desired, configure Prinergy Workshop hot folder behavior (optional).

    For example, you can determine the number of files that will be processed together when files are dropped together into a hot folder. Grouping files reduces processing overhead and can speed up processing.

    For more information, see the Prinergy Administrator online help.

Managing Prinergy Licensing

Prinergy is a customizable, expandable system that is controlled by licensing. You can add new features or JTPs by entering a new licensing key in Prinergy Administrator. You can also check what features are enabled on your system. To find out about obtaining a new license key, contact your service representative.



Important: If you are upgrading to Prinergy 2.2 and have purchased a new license for a Prinergy feature, you must enter the license key for the new feature. You must also manually enable some licensed features, even though the feature may be listed in the Prinergy Licensed Information dialog box. For example, JTP features like screening options in output JTPs must be enabled manually. These features are enabled on a JTP-by-JTP basis in the JTP Properties window in Prinergy Administrator. For more information about manually enabling new features, see the Prinergy Administrator online help.

To access Prinergy Administrator:

1. Log on to a Prinergy server as an administrator.

   You must have administrator privileges to be able to use Prinergy Administrator.

2. From the Windows **Start** menu, select **Programs**>**Prinergy**>**Prinergy Administrator.**

   Prinergy Administrator appears.

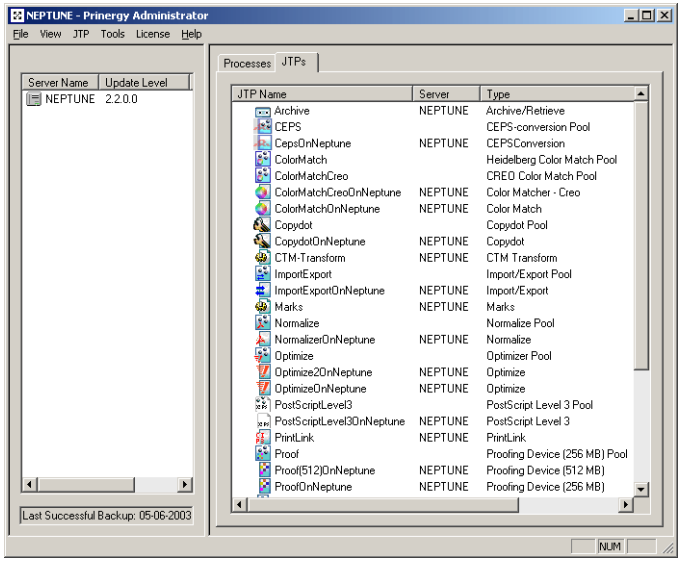


Figure 6: Prinergy Administrator

For more information about using Prinergy Administrator to manage licensing, see the Prinergy Administrator online help.

Screen Licensing

This section describes how screen licensing works.

Licenses must be purchased for some of the screen systems that you can use in Prinergy. Licenses were also required in earlier versions of Prinergy, but the requirement was not strictly enforced. In general, screen licensing enforcement is done on a JTP-by-JTP basis. In Prinergy Administrator, you select which licensed screens you want to use with a specific output JTP.

Different screen systems are available for you to select, depending on whether the output JTP is a high-resolution renderer or 512-MB proofing device, or a low-resolution 256-MB proofing device.

Some output JTPs—Copydot, PostScript Level 3, and VectorOutput—do not perform screening.

Note: Screen families that are included with a Prinergy base license and do not require an additional license are Creosettes, HQS, and RT. The HQS and RT screens are not available for 256-MB proofing devices.

For more information about screens, including descriptions of Prinergy screens, see the Prinergy Workshop online help

Screen License Enforcement in Prinergy Workshop

Licensing for most screens is enforced based on the screen names. Where licensing is enforced based on screen names, screens that are not licensed cannot be selected in the Process Plan Editor in Prinergy Workshop. This includes the following screens:

- Diamond (screen names begin with Diamond)
- IS (screen names begin with IS)
- Megadot (screen names begin with Megadot)

The licensable screen options that behave differently are Staccato-10, Staccato-20, Staccato-25, and MaxTone™ screening.

Staccato Screen Licensing

Staccato-10, Staccato-20, and Staccato-25 screens can be used without licensing for 256-MB and 512-MB proofing devices at resolutions of 1440 dpi and under.

For resolutions higher than 1440 dpi, users can select unlicensed screens, but the output task will fail with a `screen is not licensed` error message.

MaxTone Screen Licensing

Traditionally, when printing on low-quality paper or Flexographic plates or when using older offset presses, printers had to constrain images to a reduced tonal range. Otherwise, halftone dots would either get too small to hold on press or too large (shadows would get plugged).

MaxTone screening provides an alternative approach to the distribution of device pixels, to ensure that the width of every halftone dot is always at least as large as the prescribed MaxTone width settings.

The user must specify a dot width value for highlights and shadows in the **MaxTone Dot Width** box in the **Calibration & Screening** section of an output process plan. When both dot widths are set to 1 micron, MaxTone screening is not used. For all dot width values greater than 1, MaxTone screening will be used. A minimum halftone dot area in device pixels is computed internally, based on the minimum dot widths.

If a dot width value greater than 1 micron is entered for either highlights or shadows, but MaxTone screening is not licensed, the output task will fail with a `screening not licensed` error message.

Distributing JTPs

A JTP is software that performs a specific task to help process an Adobe Extreme job ticket. JTPs can be distributed on servers throughout the Prinergy system in order to facilitate load-sharing and optimize performance.

Use Prinergy Administrator to distribute JTPs on the system by "adding" and "removing" JTPs from particular servers. All JTPs are installed on each Prinergy server when you install Prinergy Server software—however, a JTP is not activated and cannot be used by the system until it has been "added" to a server. You can deactivate a JTP by using Prinergy Administrator to "remove" it from a server.

Once you have distributed your JTPs using Prinergy Administrator, use the Process Plan Editor to create Prinergy process plans. Process plans identify which JTPs on which servers should be sequenced together to automate Prinergy tasks.

For a description of each JTP, see Table 3 on page 23.

Note: Your Prinergy configuration and JTP distribution were carefully considered by your service representative. You should not need to redistribute your JTPs. Contact your service representative before redistributing JTPs.

For information about creating process plans, see the Prinergy Workshop online help.

Multiple JTPs

It is possible to have multiple instances of an active JTP in a Prinergy system. For example, a system can have multiple instances of a trapper JTP in order to simultaneously process multiple jobs.

The number of instances of a JTP that you can run on your system depends on your Prinergy hardware and licensing agreement. For more information about licensing, see *Managing Prinergy Licensing* on page 54.

About JTP Pools

A JTP pool is comprised of one or more JTPs that perform the same task and that have been grouped together to further automate your workflow. A JTP pool can include JTPs on one or more servers. For example, Figure 7 on page 58 shows three Normalize JTPs on three different Prinergy servers.

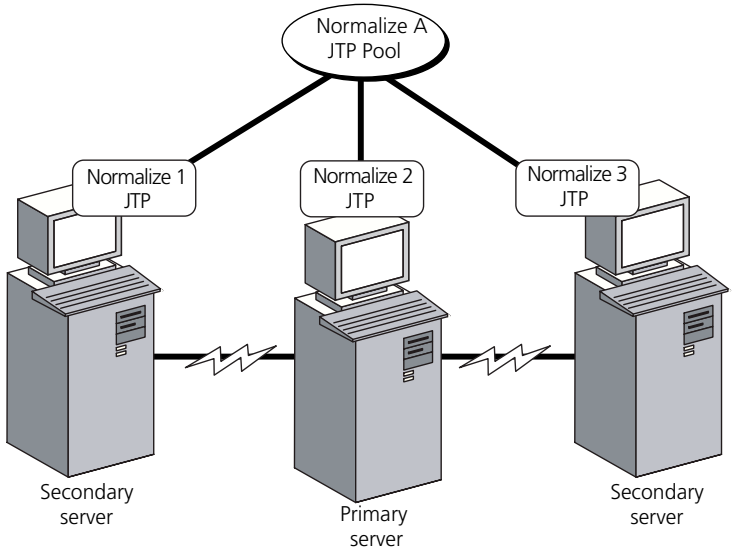


Figure 7: Normalize JTP pool

Note: A JTP pool cannot include different types of JTPs—for example, you cannot have a Color Match JTP in the same pool as a Trapping JTP.

Types of JTP Pools

Use Prinergy Administrator to create JTP pools. Once you have created a JTP pool, use the Process Plan Editor to create a process plan that uses the pool, rather than a specific JTP.

There are several types of JTP pools:

Table 9: Types of JTP pools

Type of JTP pool	Does this...
CEPSConversion	Converts Brisque CT/LW and TIFF/IT P1 pages to composite PDF 1.3 output.
Color Match	Generates data for color matching proofs to final output.
Copydot	Optimizes copydot files for output.
Import/Export	Exports all or part of a job to a ZIP file for import into another Prinergy system. Imports imposition plans. Imposition plans can have either blank pages assigned to page positions (unpopulated job ticket) or job pages assigned to page positions (populated job ticket). Imports Creo Page Assigner files.
Normalize	Converts PostScript files to PDF; also does font management and font handling.
Optimize	Optimizes PDF files into digital masters suitable for print, checking conditions such as compression and downsampling.
Proofing Device (256MB)	Creates low-resolution output, suitable for proofing.
Proofing Device (512MB)	Creates high-resolution output, suitable for proofing.
Trap	Handles trapping in Prinergy.

Advantages of a JTP Pool

By using a JTP pool, you can direct Prinergy to automatically distribute tasks to individual JTPs, rather than having to coordinate which JTP to use. Tasks are distributed sequentially, regardless of the JTP's current load. This helps you automatically process multiple jobs at the same time.

Otherwise, when you create a process plan, you direct the process plan to a specific JTP on a specific server. If you are processing multiple jobs at the same time, you may have to wait until that JTP is free for your job to continue processing.

How to Configure JTPs

Use Prinergy Administrator to configure JTPs. You can:

- Add and remove JTPs
- Create and delete JTP pools
- Monitor which JTPs are active on which servers
- Start and stop specific JTPs



Important: Your Prinergy configuration and JTP distribution were carefully considered by your service representative. You should not need to redistribute your JTPs. Contact your service representative before redistributing JTPs.

For more information about configuring JTPs, see the Prinergy Administrator online help.

To access Prinergy Administrator:

1. Log on to a Prinergy server as an administrator.

   You must have administrator privileges to be able to use Prinergy Administrator.

2. From the Windows **Start** menu, select **Programs**>**Prinergy**>**Prinergy Administrator.**

   Prinergy Administrator appears.

For more information about using Prinergy Administrator to manage JTPs, see the Prinergy Administrator online help.

Setting Up User Accounts and User Groups

As part of a networked Windows environment, Prinergy requires that you set up user accounts and groups. There are two types of networked environments—workgroups and domains. A Prinergy system can be part of either, but all servers must be in the same environment.

- A *workgroup* is a collection of computers that are grouped for sharing resources such as data and devices. In terms of networking, there is no dedicated server or hierarchy among computers. It may also be called a peer-to-peer network.
- A *domain* is a collection of computers and users that share a common database and security policy. This information is stored on a domain controller.

The procedure for setting up user groups and user accounts differs, depending on whether your Prinergy system is part of a workgroup or domain. Regardless of whether you are in a workgroup or a domain, take the time to plan your user accounts and user groups. Careful planning will help make Prinergy system administration easier to manage.

This section contains useful information about how to plan your accounts and groups for Prinergy.

For information about Windows 2000 user accounts and user groups in general, see the Windows 2000 documentation.

About User Accounts

User accounts provide each user with a unique profile with which to log on to the system and access resources. Setting up individual user accounts has a number of advantages:

- Enables you to integrate security with Windows 2000
- Provides all users with a unique profile and personalized preferences—for example, window position and sizing in Prinergy Workshop
- Lets you set Prinergy Workshop user rights for individual users
- Lets you track operations by providing a history log of which user performed which function

Add user accounts to user groups in order to give users access to resources and rights. If your Prinergy system is part of a domain, create user accounts on the domain controller. If your Prinergy system is part of a workgroup, you will have to copy each user account to each Prinergy server on the system.

For more information about Windows 2000 user accounts, see the Windows 2000 documentation.

About User Groups

A user group is a collection of user accounts. User groups let you assign permissions and rights to a group of users, as well as determine which resources the group can access.

Your security needs should determine how you organize your groups. We recommend that you set up at least two groups:

- *Users*—a group that can access Prinergy to create and process jobs—that is, use Prinergy Workshop only
- *Administrators*—a group that can also perform Prinergy system administration tasks, such as adding and removing JTPs—that is, use Prinergy Administrator and any administrative tools in Windows 2000

If your Prinergy system is part of a domain, create user groups on the domain controller. If your Prinergy system is not part of a domain, you must create parallel user groups on each Prinergy server on the system.

For more information about Windows 2000 user groups, see the Windows 2000 documentation.

About the Araxi Service Account

The Araxi account is a Windows 2000 user account used by Araxi Service (**Araxi.exe**) to start processes such as daemons. When installing Prinergy Server, you can create a default user account named **Araxi** or use an existing account.

For more information about this account, see *Managing the Araxi Service Account* on page 70. For more information about Araxi Service, see *Araxi Service (Araxi.exe)* on page 21.

Setting Up Accounts and Groups in a Domain

If you are using Prinergy in a domain, you can set up user accounts and user groups on the domain controller once you have added your Prinergy server as a member of the domain.



Important: Do not use a Prinergy server as a domain controller. For best performance results, your server should be dedicated to Prinergy.

The following procedure provides basic instructions for setting up user accounts and user groups for Prinergy in a domain.

For detailed information about the Windows 2000 procedure described next, see the Windows 2000 documentation.

To set up user groups and accounts in a domain:

1. Log on as a domain administrator.
2. On a domain controller, start **Active Directory Users and Computers**:
   a. From the **Start** menu, select **Programs>Administrative Tools>Active Directory Users and Computers**.

      The Active Directory Users and Computers window appears.
   b. On the **Tree** tab, click the domain node to expand the tree.
3. Create a user account for each user who will access Prinergy:
   a. Do one of the following:
      - If you are using custom organizational units (similar to folders), right-click the organizational unit in which you want to create accounts, and select **New User**.
      - If you are not using custom organizational units, right-click **Users**, and select **New User**.
   b. Set the following parameters:
      - In the **First name** and **Last name** boxes, type the user's first and last name.
      - In the **User logon name** box, type the name with which the user will log on.

        The user name must be unique; it must not duplicate any other user or group name on the computer. It can consist of up to 20 uppercase and lowercase characters, except for the following: "/ \ [ ] : ; | = , + * ? < >.

c. Click the **Next** button.

The New Objects – User dialog box appears.

d. Set the following parameters:

- In the **Password** and **Confirm Password** boxes, type a temporary password.

  Note: Passwords for Prinergy Workshop users should not exceed 8 characters if users plan to access Prinergy Workshop from a Macintosh computer. Macintosh computers can accept passwords of up to 8 characters only.

- Select the **User must change password at the next logon** check box.

  This forces users to change their passwords at the next logon. Encourage users to use "strong" passwords when choosing a password. For more information about passwords, see *Tips for Managing Passwords* on page 68.

e. Click **Next**, and then click **Finish**.

f. Repeat steps a to e for each user.

4. Create a group or groups to organize your users:

a. In the Active Directory Users and Computers left pane, right-click **Users** or the organizational unit where you want to create the group, and select **New Group**.

The New Object – Group dialog box appears.

b. Set the following parameters:

- In the **Group name** box, type a descriptive name for the group—for example, `Prinergy Users`.
- In the **Group scope** box, select **Global.**
- In the **Group type** box, select **Security.**

c. Click **OK**.

5. Add users to the new group. This enables you to quickly grant rights and permissions to the group, rather than individual users. To add users to the group:

a. In the Active Directory Users and Computers left pane, select **Users** or the organizational unit where you created the group **Prinergy Users**.

b. In the details pane (right pane), right-click the new group—for example, **Prinergy Users**—and select **Properties**.

   The Prinergy Users Properties dialog box appears.

c. Click the **Members** tab.

d. Click the **Add** button.

   The Select User, Contacts, or Computers dialog box appears.

e. In the **Look in** box, select **Domain**.

f. From the **Name** column, select the user account(s) that you want to add, and then click the **Add** button.



   Tip: You can select multiple accounts by holding down the CONTROL key.

g. Once you have added all the accounts that you want for this group, click **OK**.

6. Make sure the domain Araxi account is part of the local administrators' group on the Prinergy server so that it can access all resources on the network, including tertiary servers and file servers for input files.

   For more information about the Araxi account, see *About the Araxi Service Account* on page 62.

Setting Up Accounts and Groups in a Workgroup

In a workgroup environment, you must set up parallel user accounts and user groups on each Prinergy server in your system; accounts are not managed by a domain and must be maintained on all Prinergy servers.

The following procedure provides basic instructions for setting up user accounts and user groups for Prinergy in a workgroup.

For detailed information about the Windows 2000 procedures described next, see the Windows 2000 documentation.

Note: If you are interested in controlling logons on the primary server only, you do not need to duplicate the user accounts on the secondary servers.

To set up user groups and accounts in a workgroup:

1. Log on as an administrator.
2. On the desktop, right-click **My Computer**, and then select **Manage**.

   The Computer Management window appears.
3. On the **Tree** tab, click **Local Users and Groups** to expand the tree.
4. Create a user account for each user who will access Prinergy:
   a. Right-click **Users**, and then select **New>User**.

      The New User dialog box appears.
   b. Set the following parameters:
      - In the **User name** box, type the name with which the user will log on.

        The user name must be unique; it must not duplicate any other user or group name on the computer. It can consist of up to 20 uppercase and lowercase characters, except for the following: " / \ [ ] : ; | = , + * ? < >.
      - In the **Full name** box, type the user's first and last name.
      - In the **Password** and **Confirm Password** boxes, type a temporary password.

        Note: Passwords for Prinergy Workshop users should not exceed 8 characters if users plan to access Prinergy Workshop from a Macintosh computer. Macintosh computers can accept passwords of up to 8 characters only.
      - Select the **User must change password at the next logon** box.

        This forces users to change their passwords at the next logon. Encourage users to use "strong" passwords when choosing a password. For more information about passwords, see *Tips for Managing Passwords* on page 68.
   c. Click the **Create** button.
   d. Click **Close**.
   e. Repeat steps a to d for each user.
5. Create a group or groups to organize your users. Groups enable you to easily grant rights and permissions to an entire group, rather than to individual accounts. To create a group:

a. In the Computer Management left pane, right-click **Groups**, and select **New Group**.

   The New Group dialog box appears.

b. In the **Group name** box, type a name for the group—for example, **Prinergy Users**.

6. Add users to the group:

   a. Click the **Add** button.

      The Select Users or Groups dialog box appears.

   b. In the **Look in** box, select the local server name.

   c. From the **Name** column, select the user account(s) that you want to add, and then click the **Add** button.



Tip: You can select multiple accounts by holding down the CONTROL key.

7. After you add all the accounts that you want to use in this group, click **OK**.

   The New Group dialog box appears and the accounts that you just added are shown in the **Members** box.

8. Click the **Create** button, and then click **Close.**

9. Add the Araxi account to all Windows servers on your Prinergy system, including tertiary servers and file servers storing job input files.

   This gives all Prinergy Server components access to all resources on your network. For more information about the Araxi account, see *About the Araxi Service Account* on page 62.

10. Assign the same password to all Araxi accounts on the system.

    This enables the Araxi account to log on to all servers on the system and access necessary resources. For more information about passwords, see *Tips for Managing Passwords* on page 68.

Tips for Managing Passwords

Passwords are relevant to Prinergy in that a number of entities log on to the system via password-controlled accounts:

- **Araxi.exe** logs on to the system to start essential software components when a Prinergy server starts.
- Administrators log on to the system to configure the system.
- Operators log on to Prinergy Workshop to create, process, and manage jobs.

Encourage the use of "strong" passwords for all accounts used with Prinergy. This will help safeguard your system and accurately track activity. "Strong" passwords are passwords that are not easily guessed or broken.



Tip: You can configure Windows 2000 to enforce the use of strong passwords. For more information, see the Windows 2000 documentation.

Note: Prinergy passwords can be up to 14 characters in length and are case-sensitive.

Some guidelines for creating "strong" passwords:

- Passwords should contain a combination of different types of characters.
- Passwords should contain characters from all four of these classes:

Character	Examples
Uppercase letters	A, B, C...Z
Lowercase letters	a, b, c...z
Numerals	0,1,2...9
Non-alphanumeric special characters, such as punctuation and symbols	{, }, #, $, %

- Passwords should be 8 or more characters long.



Important: Passwords for Prinergy Workshop users should not exceed 8 characters if users plan to access Prinergy Workshop from a Macintosh computer. Macintosh computers can accept passwords of up to 8 characters only.

- Passwords should not be obviously associated with the account owner.
- A password should not contain any part of the user's email name, user account name, given name(s), or any other names by which the user may be known.
- Passwords should not be "common" words.
- Avoid words from the dictionary or slang in common usage.
- Passwords should be complex, but relatively easy to remember.

  A password that can't be broken is useless if the user has forgotten it.
- Passwords should be kept private.
- If a password is shared or discovered, it should be changed immediately.
- Passwords should be changed regularly, for example, every 90 days.

Setting Prinergy Workshop User Rights

You can determine which users will be allowed to create, edit, and delete process plans and workflow plans and destroy history entries in Prinergy Workshop. This is done by assigning user rights in Prinergy Administrator.

You can set default user rights and individual user rights.

If a user doesn't have the right to edit process plans or delete history, an [x] appears to the right of the **Process Plan Editor** or **Destroy History Entries** menu option in Prinergy Workshop when that user is logged on; the menu options will be dimmed and unavailable.

The user also cannot edit process plans or workflow plans by clicking the process plan or workflow plan icon in the **User Toolbar** or **Job Toolbar**. If the user clicks the **Settings** button in the Start Process dialog box, process plan settings for that process can be viewed but not edited.

For more information, see Prinergy Administrator online help.

Managing the Araxi Service Account

The section provides information about managing the Araxi Service account.

Araxi Service (**Araxi.exe**) is a Windows 2000 service that is responsible for starting daemons and a number of other processes, such as the Adobe Extreme Coordinator (**supra.exe**). The Araxi Service account is a special Windows 2000 user account used by Araxi Service to access the system.

An Araxi Service account is automatically created when your system is installed. However, you may want to:

- Change the account password
- Create a new Araxi Service account

  Note: The Araxi Service account is configured by your service representative when your Prinergy system is installed. In general, you should not have to create a new account. Please contact your service representative before creating a new Araxi Service account.

For more information about Araxi Service, see *Araxi Service (Araxi.exe)* on page 21.

About the Araxi Service Account

The Araxi Service account is used by Araxi Service (**Araxi.exe**) to start processes such as daemons. Araxi Service is a Windows 2000 service that automatically starts when a Prinergy server machine is started; it does not require a user to log on.

When Prinergy Server is installed, the installer presents an option to create a default account named **Araxi** for the Araxi Service account, or use an existing account. Usually, the default account is used—that is, the Araxi Service account is called **Araxi**.

Note: AraxiBackupManager Service uses the same account as Araxi Service. AraxiBackupManager runs the database backup. For more information about backup, see *Chapter 5, Backing Up the Prinergy System*.

Araxi Service Account Rights

The Araxi Service account must have these rights:

- **Act as part of the operating system**
- **Log on as a service**

In addition, the Araxi Service account must be part of the Windows administrators group.



Important: A user who logs on to the system using the Araxi Service account has administrative access to the system. For example, they can edit user accounts and system settings. To maintain system security, limit knowledge of the Araxi Service account and password to authorized users only.

About the Araxi Service Account and Workgroups

If your Prinergy system is in a workgroup, note the following:

- Make sure the Araxi Service account is added to all Windows servers in the workgroup, including tertiary servers and file servers storing input files. This gives all Prinergy Server components access to all necessary resources on your network.
- Assign the same password to all Araxi Service accounts on the system. This enables the Araxi account to log on to all servers on the system. For more information about passwords, see *Tips for Managing Passwords* on page 68.

Changing the Araxi Service Account Password

The Araxi Service account has administrator rights; therefore, anyone who logs on using this account can make administrative level changes to your Prinergy system.

You may want to change the password for the Araxi Service account to increase system security. For example, change the account password if an unauthorized user discovers the password.

The procedure for changing the password varies, depending on whether your Prinergy system is in a domain or a workgroup. For more information about domains and workgroups, see *Setting Up User Accounts and User Groups* on page 61.

Changing the Password in a Domain

If your Prinergy system is in a domain, change the password on the domain controller.

To change the Araxi Service account password in a domain:

1. Log on as a domain administrator.
2. On a domain controller, from the **Start** menu, select **Programs>Administrative Tools>Active Directory Users and Computers**.

   The Active Directory Users and Computers window appears.
3. On the **Tree** tab, click the domain node to expand the tree.
4. Select the organizational unit (folder) that contains the Araxi Service account. If you are not using organizational units to organize your accounts, the Araxi Service account is likely under **Users**.

   The default account is called **Araxi**.
5. Right-click the Araxi Service account, and select **Reset Password**.

   The Reset Password dialog box appears.
6. In the **Password** and **Confirm Password** boxes, type a password.
7. Clear the **User must change password at next logon** check box.
8. Click **OK**.

Changing the Password in a Workgroup

If your Prinergy system is in a workgroup, you must assign the same password to each Araxi Service account on the system so that all Prinergy Server components can access all resources on your network.

This means that you must change the password on each Windows server on the system, including:

- The primary server
- Secondary server(s), including any render stations
- Tertiary servers
- Windows file servers

To change the Araxi Service account password in a workgroup:

1. Log on as an administrator.
2. From the Windows **Start** menu, select **Programs>Administrative Tools>Computer Management**.

   The Computer Management window appears.
3. On **Tree** tab, click **Local Users and Groups** to expand the tree, and then select **Users**.
4. Right-click the Araxi Service account, and select **Set Password**.

   The Set Password dialog box appears.

   Note: The default account is called **Araxi**, although your system may use a different account.
5. In the **New password** and **Confirm password** boxes, type the password.
6. Click **OK**.
7. Repeat steps 1 to 6 the procedure on each Windows server on the network, including all secondary servers (including render stations), tertiary servers, and file servers.



Important: Assign the same password to each Araxi Service account on the system so that all Prinergy Server components can access all resources on your network, including tertiary servers and Windows file servers that store input files.

Creating a New Araxi Service Account

The Araxi Service account (usually called **Araxi**) is set up when your system is installed. In general, you should not have to change this account. However, you may want to create a new account for Araxi Service. For example, you may want to create a new account if:

- The account is deleted
- Unauthorized users gain access to the account and password, which enables them to make administrative level changes to the system.



Tip: If you are creating a new account for security reasons, consider changing the password instead. Creating a new account involves a multiple procedures on each server on the system.

The Araxi Service account must have these rights:

- **Act as part of the operating system**
- **Log on as a service**

In addition, the account must be part of the local administrator's group on each server.



Important: AraxiBackupManager Service uses the same account as Araxi Service. If you create a new account for Araxi Service, you must also associate this account with AraxiBackupManager Service.

The procedure for creating a new Araxi Service account varies, depending on whether your Prinergy system is part of a domain or part of a workgroup.

Creating a New Araxi Service Account in a Domain

If your Prinergy system is in a domain, delete the existing Araxi Service account, create a new account on the domain controller, and then update the Araxi Service and AraxiBackupManager Service logon properties on each primary and secondary server on the system. This will update the account throughout the network.

For detailed information about the Windows 2000 procedures described next, see the Windows 2000 documentation.

To create a new Araxi Service account in a domain:

1. Using Prinergy Administrator, stop Prinergy Server on all servers on the system.

   This stops Araxi Service (**Araxi.exe**). For more information about stopping Prinergy Server, see *Stopping Prinergy Server* on page 48.

2. On the domain controller, log on as a domain administrator.

3. From the **Start** menu, select **Programs>Administrative Tools>Active Directory Users and Computers**.

   The Active Directory Users and Computers window appears.

4. Delete the existing Araxi Service account:

   a. On the **Tree** tab, click the domain node to expand the tree, and then select the organizational unit (folder) that contains the Araxi Service account.

The default account is called **Araxi**. If you are not using custom organizational units to organize your accounts, the account should be under **Users** organizational unit.

b. Right-click the Araxi Service account, and select **Delete.**

A dialog box appears, asking you to confirm that you want to delete the account.

c. Click **Yes** to delete the account.

5. Create a new Araxi Service account:

a. Right-click the organizational unit that contains user accounts, and select **New>User**.

The New Object - User dialog box appears.

b. Set the following parameters:

- In the **User name** box, type a name for the account.
- In the **User logon name** box, type the name with which the account will log on.

The user name must be unique; it must not duplicate any user or group name on the computer. It can consist of up to 20 uppercase and lowercase characters, except for the following: "/ \ [ ] : ; | = , + * ? < >.

c. Click the **Next** button.

d. Set the following parameters:

- In the **Password** and **Confirm password** boxes, type a password.
- Select the **Password never expires** check box.

e. Click **Next**, and then click **Finish**.

6. On each Windows server on the system, add these rights to the Araxi Service account that you just created:

- **Act as part of the operating system**
- **Log on as service**

Servers include the primary server, secondary server(s), tertiary server(s), and file server(s). For more information about adding rights, see *Adding Rights to the Araxi Service Account* on page 77.

7. On each Windows server on the system, add the new account to the administrator group.

   Servers include the primary server, secondary server(s), tertiary server(s), and file server(s).

   For detailed information about adding accounts to groups, see the Windows 2000 documentation.

8. On the primary server and each secondary server on the system, set the Araxi Service and AraxiBackupManager Service logon properties to use the Araxi Service account.

   For detailed information, see *Setting the Logon Properties for Araxi Services* on page 79.

Creating an Araxi Service Account in a Workgroup

In a workgroup environment, you must create parallel Araxi Service accounts on each Prinergy server on your system; accounts are not managed by a domain controller and must be maintained on all Prinergy servers.

For detailed information about the Windows 2000 procedure described next, see the Windows 2000 documentation.

To create an Araxi Service account in a workgroup:

1. Log on as an administrator.
2. From the Windows **Start** menu, select **Programs>Administrative Tools>Computer Management**.

   The Computer Management window appears.
3. On the **Tree** tab, click **Local Users and Groups** to expand the tree.
4. Right-click **Users**, and select **New User** from the submenu.

   The New User dialog box appears.
5. Set the following parameters:

   - In the **User name** box and **Full name** boxes, type a name for the account.

     The user name must be unique; it must not duplicate any user or group name on the computer. It can consist of up to 20 uppercase and lowercase characters, except for the following:
     " / \ [ ] : ; | = , + * ? < >.

- In the **Password** and **Confirm Password** boxes, type a password.
- Select the **Password never expires** check box.

6. Click the **Create** button, and then click **Close**.
7. Add these rights to the Araxi Service account that you just created:
   - **Act as part of the operating system**
   - **Log on as a service**

   For information about adding rights, see *Adding Rights to the Araxi Service Account* on page 77.
8. Add the account to the administrators group.

   For detailed information about adding user accounts to groups, see the Windows 2000 online help.
9. If the machine is the primary server or a secondary server (including render stations), set the Araxi Service and AraxiBackupManager Service logon properties to use the Araxi Service account.

   For more information, see *Setting the Logon Properties for Araxi Services* on page 79.
10. Repeat steps 1 to 9 on each Windows server in the Prinergy system.

    This includes the primary server, secondary server(s), tertiary server(s), and file server(s).



Important: Assign the same password to each Araxi Service account on the system. This enables each Prinergy server to access all resources on the network, including tertiary servers and Windows file servers that store input files.

Adding Rights to the Araxi Service Account

On each Windows server on the Prinergy system, you must add the appropriate user rights to the Araxi Service account. This enables Araxi Service to access necessary resources on the system. These rights are:

- **Act as part of the operating system**
- **Log on as service**

Note: You can also set user rights in Prinergy Administrator to determine whether users can create and edit process plans and delete history in Prinergy Workshop. For more information about setting Prinergy Workshop user rights, see the Prinergy Administrator online help.

To add rights to the Araxi Service account:

1. Log on as an administrator.
2. From the Windows **Start** menu, select **Programs>Administrative Tools>Local Security Policy**.

   The Local Security Settings window appears.
3. On the **Tree** tab, expand **Local Policies**, and select **User Rights Assignment**.

   The right pane displays a list of user rights.

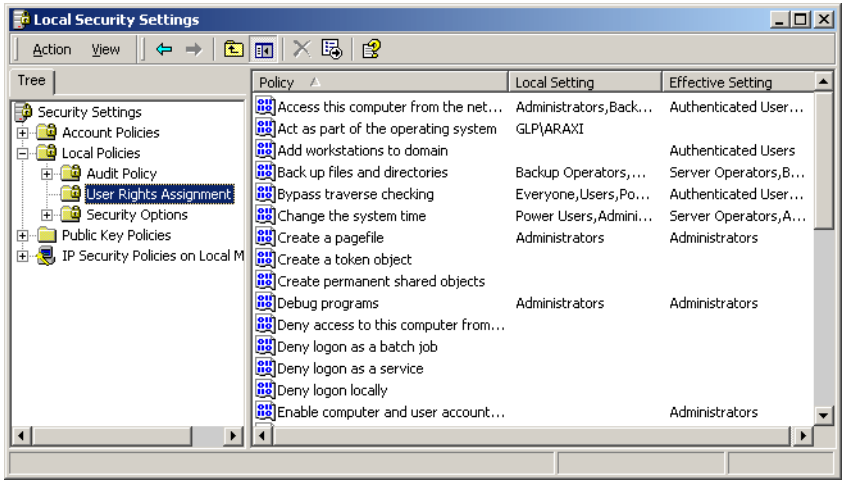


Figure 8: User rights

4. Enable the **Act as part of the operating system** right:
   a. Right-click on **Act as part of the operating system**, and select **Security** from the submenu.

      The Local Security Policy Setting dialog box appears.
   b. Click **Add**.

      The Select Users or Groups dialog box appears.
   c. From the **Name** box, select the Araxi Service account, and then click **Add**.

      The account appears in the bottom box.

d. Click **OK**.

The Local Security Policy Setting dialog box appears, and the Araxi Services account appears in the **Assigned To** box.

e. Click **OK**.

5. Enable the **Log on as a service** right:

a. In the Local Security Settings window right pane, right-click **Log on as a service**, and select **Security**.

The Local Security Policy Setting dialog box appears.

b. Click **Add**.

The Select Users or Groups dialog box appears.

c. From the **Name** box, select the Araxi Service account, and then click **Add**.

The account appears in the bottom box.

d. Click **OK**.

The Local Security Policy Setting dialog box appears, and the Araxi Services account appears in the **Assigned To** box.

e. Click **OK**.

6. Repeat steps 1 to 5 on each Windows server on the system, including the primary server, secondary server(s), tertiary server(s), and file server(s).

Setting the Logon Properties for Araxi Services

Once you have created a new Araxi Service account and added the appropriate rights, you must set the Araxi Service and AraxiBackupManager Service logon properties to use the new account. This enables these services to access the necessary resources on the system.



Important: AraxiBackupManager Service also uses the Araxi Service account to access the system. If you create a new account for Araxi Service (deleting the existing account), you must enable AraxiBackupManager Service to also use the new account, otherwise your backups will fail.

You must locally set the logon properties for each service on the primary server and each secondary server, including render stations.

To set logon properties for Araxi Services:

1. Log on as an administrator.
2. From the Windows **Start** menu, select **Programs>Administrative Tools>Services**.

   The Services window appears.
3. In the right pane, right-click the Araxi service, for example, **Araxi** or **AraxiBackupManager**, for which you want to set logon properties, and select **Properties**.

   The Properties dialog box for the service appears.
4. On the **Logon** tab, do the following:

   a. Select **This account**, and type the name of the account that you want to use as the service account. If you are using a domain account, type the full account name, including the domain prefix.

      For example, `Prinergy\Araxi`, where `Prinergy` is the domain, and `Araxi` is the account name.

   b. In the **Password** and **Confirm Password** boxes, type a password.

      Important: Ensure that you use the same password for each server on the system. This ensures that the servers can access all necessary resources on the system.

   c. Click **OK**.
5. Repeat steps 1 to 5 on each primary and secondary server on the system.

Adding a New Tertiary Server to Your Prinergy System

A tertiary server is a server that's connected to the Prinergy system, but is not running any Prinergy software components. It can be used to store jobs and input files.

To add a new tertiary server:

1. Create an Araxi Service account on the tertiary server.

   This enables Prinergy Server components to access all necessary resources.

   For instructions, see *Creating a New Araxi Service Account* on page 73.

2. Add the Araxi Service account to the local administrator group.

   This ensures that the Prinergy primary server can access the tertiary server.

   For detailed information about adding accounts to groups, see the Windows 2000 documentation.

3. Ensure that TCP/IP is configured properly.

4. Assign a new volume for job storage.

   For instructions, see *Assigning a New Volume for Job Storage* on page 82.

5. Add the tertiary server to the server list in Prinergy Administrator.

   This adds the new tertiary server to the server node list.

   Follow the instructions in the Prinergy Administrator online help.

6. Edit the SFMHOSTS file, if necessary.

   If the tertiary server is not in the same AppleTalk zone as the primary server, or if the tertiary server's Macintosh server name is not the same as its Windows name, you must modify the **SFMHOSTS** file. This ensures that Prinergy can translate the server names and locate the tertiary server on the network. The **SFMHOSTS** file is located in the **%AraxiHome%\etc** folder on the primary server.

   For instructions, see *Editing the SFMHOSTS File* on page 87.

Assigning a New Volume for Job Storage

This section describes how to assign new volumes to Prinergy for job storage.

Add a new job storage folder by creating a new Prinergy standard share on any primary, secondary, or tertiary server on your Prinergy system. For more information about the different types of Prinergy servers, see *Prinergy Server Machines* on page 29.

For information about adding a secondary server or tertiary server to the system, see the Prinergy Administrator online help.

Creating a New Standard Share

A standard share is a Windows share used by Prinergy to store jobs. In order for Prinergy to recognized the share, the share name must have the prefix **AraxiVolume**.

When Prinergy is installed, a folder is automatically created in the Prinergy standard share for job storage.

Note: The default job storage folder name is **Jobs**; however, you may have specified a different name when Prinergy was installed.

You may want to create a new standard share if:

- You have added a new volume (drive) to a Prinergy server and want to store jobs on it.
- You are running out of space on your existing job storage folder(s).

To create a new standard share for job storage:

1. On the desktop, right-click **My Computer**, and then select **Manage**.

   The Computer Management window appears.

2. In the left pane, double-click **Shared Folders** to expand the console tree.

3. Right-click **Shares**, and select **New File Share**.

   The Create Shared Folder dialog box appears.

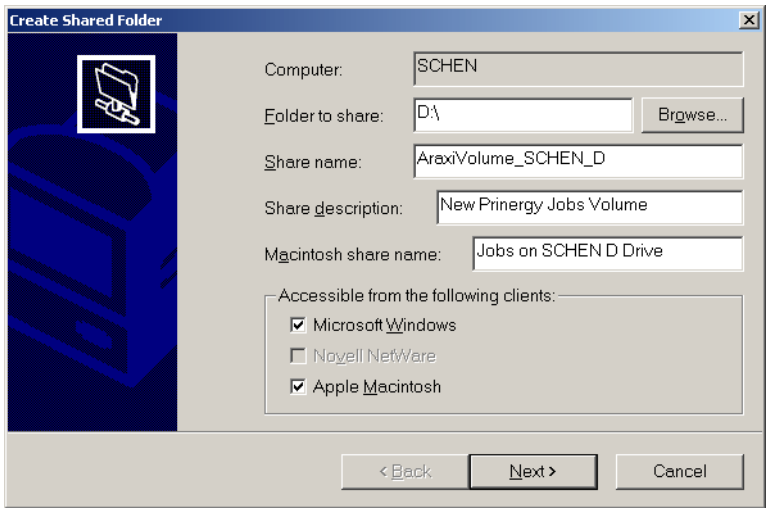


Figure 9: Create Shared Folder dialog box

4. Click the **Browse** button, and then select the folder that you want to share.

   This share should be at the root level, not within another folder. It must also reside on a NTFS volume, or an error message will appear during the share creation process.

5. In the **Accessible from the following clients** box, do the following:

   - Select the **Microsoft Windows** check box.
   - If your Prinergy system includes Macintosh clients, select the **Apple Macintosh** check box.

6. In the **Share name** box, type a name using the following convention:

   `AraxiVolume_<server name>_<drive letter>`

   For example, `AraxiVolume_SERVER1_F`.

   Note: You must use the prefix **AraxiVolume** in your share name. Also, when dealing with share names, Prinergy is case-sensitive, but Windows is not. This means that Windows will not let you create the same name using different case characters—for example **AraxiVolume_SERVER1_F** and **AraxiVolume_Server1_F** are recognized as the same name in Windows, but as different names in Prinergy.

7. In the **Share description** box, type a description for the share.

   For example, `New Prinergy Jobs Volume`.

8. In the **Macintosh share name** box, type a name using the following convention:

   `Jobs on <servername> <driveletter> Drive`

   For example, `Jobs on SERVER1 F Drive.`

9. Click **Next**, and then click **Finish**.

   A successful share confirmation message appears.

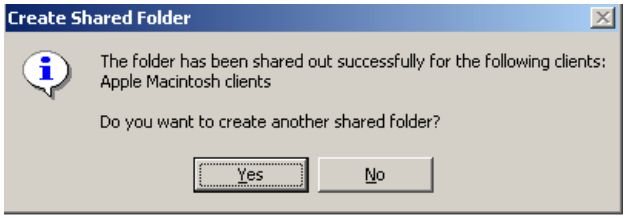


Figure 10: Successful share confirmation message

10. Click **Yes** if you want to create another shared folder, or click **No** if you are finished.

11. If the job storage folder is on a tertiary server, use Prinergy Administrator to add the server to the system.

    For information about adding a tertiary server, see the Prinergy Administrator online help.

12. Use Prinergy Administrator to add the shared folder to the system.

    For information about adding a shared folder, see the Prinergy Administrator online help.

Accessing Input Files on a File Server

This section describes how to access input files on a file server. Input files contain original information for a job, such as PostScript files. They can be stored on any server on your network; they do not have to be located on a Prinergy primary, secondary, or tertiary server.

Input files must be located on a volume that:

- Has appropriate sharing permissions
- Can be accessed by the primary server

To create a share for input files on a Windows 2000 system:

1. On the file server, log on as an administrator.
2. Check that the following prerequisites have been met:
   - The Araxi account has been added to the local administrators group.

     This ensures that the Prinergy primary server can access this server.
   - The file server is in the same AppleTalk zone as the primary server.
   - The file server's Macintosh server name is the same as the Windows name.

     If the server names differ, or if the server is in a different AppleTalk zone than the primary server, you must modify the **SFMHOSTS** file located in **%AraxiHome%\etc** on the primary server. This ensures that Prinergy can translate the server names and locate the file server on the network. For instructions, see *Editing the SFMHOSTS File* on page 87.
3. From the desktop, right-click **My Computer**, and select **Manage**.

   The Computer Management window appears.
4. In the left pane, double-click **Shared Folders** to expand the tree.
5. Right-click **Shares**, and select **New File Share**.

   The Create Shared Folder dialog box appears.

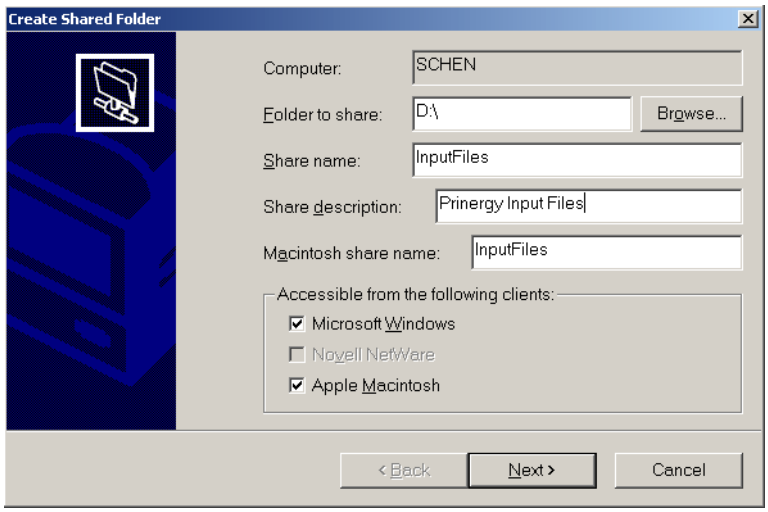


Figure 11: Create Shared Folder dialog box

6. Click the **Browse** button, and then select the folder that you want to share.

   This folder must reside on a NTFS volume or an error message will appear during the share creation process.

7. In the **Accessible from the following clients** box, do the following:

   - Select the **Microsoft Windows** check box.
   - If your Prinergy system includes Macintosh clients, select the **Apple Macintosh** check box.

8. In the **Share name** box, type a name.

   For example, `InputFiles`.

9. In the **Share description** box, type a description for the share.

   For example, `Prinergy Input Files`.

10. In the **Macintosh share name** box, type the same name that you typed in the **Share Name** box.

    For example, `InputFiles`.

11. Click **Next**, and then click **Finish**.

    A successful share confirmation message appears.

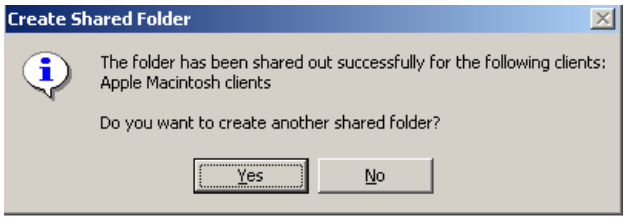


Figure 12: Successful share confirmation message

12. Click **Yes** if you want to create another shared folder, or click **No** if you are finished.
13. Use Prinergy Administrator to add the shared folder to the system.

    For information about adding a shared folder, see the Prinergy Administrator online help.

Editing the SFMHOSTS File

The **SFMHOSTS** file maps Services For Macintosh (SFM) server names to Windows server names.

The Macintosh client and the server must be able to reference the same file. The Macintosh client accesses files through AppleTalk. The server must translate the reference to a UNC path so it can access the same file.

You must add an entry to the **SFMHOSTS** file if:

- The SFM server name does not match the Windows server name.
- The tertiary or file server is not in the same zone as the Prinergy server.

This ensures that Prinergy can translate the server names and locate the file server on the network.

To modify the SFMHOSTS file:

1. Open the **%AraxiHome%\etc\SFMHOSTS** file in Notepad.
2. In the [/etc/sfmhosts] section of the file, add an entry with the following format:

   `"zone:sfmservername"="ntservername"`

   If there are no zones on your system, type "*" for the zone.

   Important: When you save the file, ensure that you do not use the .txt file name extension.
3. Restart Prinergy for the change to take effect.

Configuring a Proofing Device

You must configure your proofing device(s) before creating proofs in Prinergy. You can have multiple proofing devices on your system. Configuring a proofing device involves several procedures, as described in Table 10.

Table 10: Procedures involved in configuring a proofing device

Procedure	Use
Configure default document settings for the proofing device	Windows 2000
Create a process plan group for the proofing device	Prinergy Workshop (Process Plan Editor)
Create process plans	Prinergy Workshop (Process Plan Editor)
Calibrate color for the proofing device (optional)	*Software determined by user*
Calibrate dot gain for the proofing device	Harmony
Output test pages	Prinergy Workshop

Before You Start

Configure a proofing device only if you meet the prerequisites described in Table 11.

Table 11: Prerequisites for configuring a proofing device

Prerequisite	Details
Proofing device is connected to a Prinergy server.	For information about connecting specific proofing devices, see the manufacturer's documentation.
JTPs are distributed on the Prinergy system.	For information about distributing JTPs, see *Screen Licensing* on page 55 or the Prinergy Administrator online help.
Harmony is installed on the appropriate Prinergy servers.	Harmony is installed by your service representative when your Prinergy system is installed.

How to Configure a Proofing Device

To configure a proofing device for use with Prinergy:

1. In Windows 2000, configure the default document settings for the proofing device.

   For information about configuring document settings, see the Windows 2000 documentation.

2. Start Prinergy Workshop, and open the Process Plan Editor.

3. From the Process Plan Editor, create a process plan group for the proofing device.

   For information about creating process plan groups and process plans, see the Prinergy Workshop online help.

4. Create a process plan to output an uncalibrated loose page proof.

   Note: Calibration settings are not available in the Process Plan Editor until you set up the calibration curves in Harmony (see step 7). You do not need the calibration settings to create a process plan for an uncalibrated loose page proof.

5. Using the process plan that you just created, output a proof of your test file.

   Label this uncalibrated test proof so that you can compare it to calibrated proofs you will generate later.

   For information about how to output a proof, see the Prinergy Workshop online help.

6. If desired, calibrate color for the proofing device using color calibration software. See the documentation provided by your color calibration software manufacturer.

7. In Harmony, set up calibration curves for the proofing device that you are configuring.

   You must set up calibration curves in Harmony in order for the calibration settings to be available in the Process Plan Editor.

   For information about setting up calibration curves, see the Harmony documentation.

8. Using the Prinergy Workshop Process Plan Editor, create a process plan to output a calibrated loose page proof.

   Note that the calibration settings are now available to use in your process plan.

9. Using the process plan that you just created, output a proof of your test file.

   Label this calibrated proof so that you can compare it to other proofs to help you configure the proofing device.

10. Compare the uncalibrated proof with the calibrated proof.

    If necessary, adjust your calibration curves in Harmony and continue creating new process plans and proofs until you are satisfied with the results.

11. Repeat steps 1 to 10 to configure each proofing device that you want to use with Prinergy.

Configuring an Output Device

Before you can create plates, you must configure the output devices you want to use with Prinergy. Configuring an output device involves several procedures, as described in Table 12.

Table 12: Procedures involved in configuring an output device

Procedure	Use
Create a shared PPD storage folder	Windows 2000 Computer Management
Create plate types	Output device control software: • Print Console Or: • Engine Manager
Create PPD files and move them to the PPD storage folder	Control software for your output device (see above)
Create imposition plans	Preps or other imposition software
Create a process plan group for the output device	Prinergy Workshop (Process Plan Editor)
Create process plans	Prinergy Workshop (Process Plan Editor)
Create calibration curves	Harmony
Output test plates	Prinergy Workshop

Before You Start

Configure an output device only if you meet the prerequisites described in Table 13.

Table 13: Prerequisites for configuring an output device

Prerequisite	Details
Output device is connected.	For information about connecting the output device, see the device manufacturer's documentation.
Output device control software is installed on the server connected to the output device (for example, the render station).	The output device control software installed depends on which output device you are using. For information about installing output device control software, see the documentation provided by the software manufacturer or contact your service representative.
HiRes Render JTP has been added to the Prinergy server that is connected to the output device (for example, the render station).	For information about adding JTPs, see *Screen Licensing* on page 55 or see the Prinergy Administrator online help.
Harmony is installed on the appropriate Prinergy servers.	Harmony is installed by your service representative when your Prinergy system is installed.

How to Configure an Output Device

To configure an output device for use with Prinergy:

1. On the Prinergy server connected to the output device, create a shared folder in which to store PPD and PPX files generated by the output device control software when you create plate types.

   PPD files contain information about the device such as plate size, resolution, line screen, and screen angle. PPX files are a supplement to PPD files. These files are used by Preps when generating imposition plans.

   For instructions, see *Creating a Shared PPD Storage Folder* on page 94.

2. In the output device control software (Print Console or Engine Manager) generate plate types for Prinergy.

   You must create new plate types in order for the plate type settings to be available in the Process Plan Editor.

   For information about creating plate types, see the output device control software documentation.

3. In the output device control software, create PPD and PPX files, and then copy them to the PPD folder.

   For instructions, see *Creating PPD Files for Prinergy* on page 96.

4. In your imposition software, add the output device and set the device configuration if necessary.

   For instructions, see the imposition software documentation.

5. In your imposition software, create an imposition plan for the test plate that you want to output.

   For instructions, see the imposition software documentation.

6. In Prinergy Workshop, import the imposition plan.

   For information about importing imposition plans, see the Prinergy Workshop online help.

7. Create a process plan group for the output device.

   You must configure parameters such as resolution, media type, and screening.

   For information about creating process plan groups, see the Prinergy Workshop online help.

8. Test dot gain calibration by outputting uncalibrated and calibrated plates.

   For instructions, see *Testing Calibration* on page 97.

Creating a Shared PPD Storage Folder

You must create a shared folder in which to store PPD and PPX files generated by your output device control software (Print Console or Engine Manager).

Note: If you want these files to be available from a Macintosh computer—that is, you are using Prinergy Workshop on a Macintosh—this folder must be Macintosh-accessible.

To create a shared PPD storage folder:

1. On the desktop, right-click **My Computer**, and select **Manage**.

   The Computer Management window appears.

2. In the left pane, double-click **Shared Folders** to expand the tree.

3. Right-click **Shares**, and select **New File Share**.

   The Create Shared Folder dialog box appears.

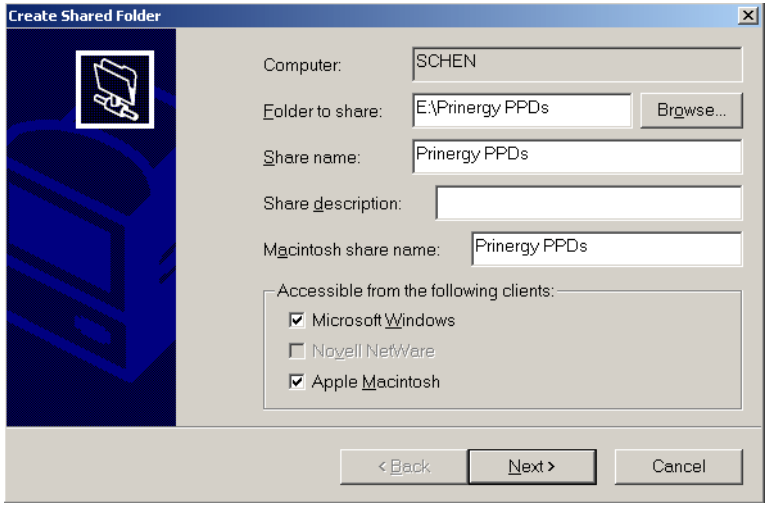


Figure 13: Create Shared Folder dialog box

4. Click the **Browse** button, and then select the folder that you want to share.

   This share must also reside on an NTFS volume, or an error message will appear when you create the share.

5. In the **Accessible from the following clients** box, do the following:

   - Select the **Microsoft Windows** check box.
   - If your Prinergy system includes Macintosh clients, select the **Apple Macintosh** check box.

6. In the **Share name** box, type a name for the share.

   For example, `Prinergy PPDs`.

7. In the **Share description** box, type a description for the share, if desired.

8. In the **Macintosh share name** box, type the same name that you typed in the **Share Name** box.

   For example, `Prinergy PPDs`.

9. Click **Next**, and then click **Finish**.

   A successful share confirmation message appears.

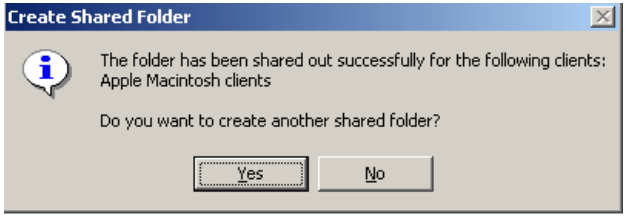


Figure 14: Successful share confirmation message

10. Click **Yes** if you want to create another shared folder, or click **No** if you are finished.

Creating PPD Files for Prinergy

Use the output device control software to create plate types for use with Prinergy and to generate PPD and PPX files. You must move these files to the appropriate folders in order for them to be accessible to the Prinergy system.

Note: Each time you modify the output device control software—for example, create a new plate type—you must regenerate the PPD and PPX files and move them to the appropriate folder.

To create PPD and PPX files for Prinergy:

1. In the output device control software (for example, Print Console), define plate types to use with Prinergy.

   For information about creating plate types, see the control software documentation.

2. In the output device control software, generate a PPD file.

   If you are using Print Console, generate this PPD file in **Landscape** mode.

   For information about generating PPD files, see the control software documentation.

3. Save the PPD file to the PPD storage folder that you created on the Prinergy server connected to the output device.

   For information about saving PPD files, see the control software documentation.

4. On the machine where you've installed Preps or Signastation, mount the PPD storage folder that you created on the Prinergy server connected to the output device.

5. Copy the PPD and PPX files from the Prinergy PPD storage folder to the Preps PPD folder.

Testing Calibration

Confirm that your output device is correctly configured by outputting uncalibrated and calibrated test plates, and then comparing the results.

To test calibration:

1. On the server connected to the output device, start Prinergy Workshop, and open the Process Plan Editor.
2. Create a process plan to output an uncalibrated plate.

   For information about creating process plans, see the Prinergy Workshop online help.

   Note: Plate types are not available in the Process Plan Editor until you set up the plate types in your output device control software.
3. Using the process plan that you just created, output an uncalibrated plate from your test file.

   For information about outputting plates, see the Prinergy Workshop online help.
4. In Harmony, create calibration curves.

   For information about using Harmony, see the Harmony documentation.
5. Create a process plan to output a calibrated plate by choosing the calibration curves that you just created in Harmony.
6. Using the process plan that you just created, output a calibrated plate from your test file.

   For information about outputting plates, see the Prinergy Workshop online help.
7. Compare the uncalibrated plate with the calibrated plate.

   If you do not have the desired results, repeat steps 4 through 7 until you are satisfied with the results.

Configuring Hot Folder Behavior

You configure Prinergy Workshop hot folder behavior in Prinergy Administrator.

For example, you can set **Group Size**, which is the number of files that will be processed together when files are dropped together into a hot folder in Prinergy Workshop.

For example, if **Group Size** is 1 and you drop 1,000 files into a hot folder, each file is processed individually. Icons representing the 1,000 processes appear in the **Active Processes** pane of the Job Manager in Prinergy Workshop; 1,000 messages appear for the job in the **History** view.

By reducing the number of active tasks, grouping files reduces processing overhead and can speed up processing. If **Group Size** is 200 and you drop 1,000 files into a hot folder, the system creates five processing groups.

For more information about configuring hot folder behavior, see Prinergy Administrator online help.

4 Using the Archiver System

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Introduction to the Archiver System

This chapter provides information about how to archive, retrieve, and purge Prinergy jobs using the Archiver system.

The Archiver system is an optional, licensed feature of Prinergy.

Main Tasks of the Archiver System

The Archiver system enables you to migrate job data between online storage (hard drives) and near-line storage (removable storage media). To accomplish this, the Archiver system is responsible for three main tasks:

- Archiving job data
- Purging job data
- Retrieving job data

The Archiver system also includes the Media Manager tool in Prinergy Workshop, which lets you view information about the media pools and media in your system. The Media Manager also lets you copy media, check media for hard-read errors, and assign media a status of complete.

Archiving Job Data

When a job is archived, all job files are copied to removable storage media. Metadata about the job—that is, information about job data and files linking together—remain in the Oracle database on the primary server.

Note: The only type of media that the Archiver system currently supports is tape. Specifically, Prinergy supports DLT (Digital Linear Tape), AIT (Advanced Intelligent Tape), and LTO (Linear Tape-Open) tapes. You should only use the Archiver with qualified devices. To find out which devices are qualified, contact your sales representative.

Purging Job Data

Once you use the Archiver to copy a job's files to removable storage media, you may want to delete the files from your server in order to free up disk space. Purging deletes selected files from the server; however, the job remains on the system because job metadata is retained in the Oracle database— including metadata that indicate which files can be found on which tapes.

The purge process verifies that files have been correctly archived before removing them from the system.

Retrieving Job Data

Retrieve archived files to restore a job to the file system. The Oracle database works with the Archiver system to retrieve the necessary files from removable storage media and restore them to the Prinergy file system.

Archiving vs. Backup: What's the Difference?

Archiving differs from backup. Although each may use similar technology and resources, they fulfill different but equally important roles.

An archive is a potentially permanent record of a set of related files—in this case, a job—that may span several file systems on one or more machines.

For example, job files in Prinergy can be stored on multiple servers: system files for the job may be stored in a job folder on the primary server, while the input files may be stored on a file server. The Archiver extracts all the necessary files on the system, regardless of which machines they are stored on, and writes them to archive media.

In backup, a duplicate image of a complete disk partition, file system, portion of a file system directory structure, Oracle database files and logs, and/or system share is saved for the purposes of disaster recovery—for example, in the event of a disk crash. Files are not saved in job context—that is, there is no relationship between backup files and the database. In fact, a system backup may not capture the file system state. Unlike an archive, which is often permanent, a backup is normally retained only until a more up-to-date record is made. For more information about backup, see *Chapter 5, Backing Up the Prinergy System*.



Important: The Archiver system does not perform system backup or back up the Oracle database.

Table 14 on page 102 describes some of the key differences between an archive and a backup.

Table 14: Archive vs. backup features

Feature	Archive	Backup
Permanent record?	Yes	No
Job context retained?	Yes	No
Intended to protect against disaster (for example, fire, disk crash, flood)?	No	Yes



Important: You should back up your Oracle database on a regular basis. Failure to do so may render your archives inaccessible in the event of a disk failure. For information about backing up your database, see *Chapter 5, Backing Up the Prinergy System*.

Archiver System Components

The Archiver system consists of:

- Archiver software, running on a single Prinergy server:
  - Microsoft Management Console (MMC)
  - Removable Storage Manager (RSM) snap-in
  - Archive/Retrieve JTP
  - Disk Purge JTP
  - Archiver daemon
- One or more removable storage devices, directly connected to the Prinergy server that MMC, RSM, Archive/Retrieve, and Disk Purge JTP are running on
- Removable storage media (for example, DLT, AIT, or LTO tapes)
- The Media Manager in Prinergy Workshop

A Prinergy server on which you are running MMC, RSM, and the Archive/Retrieve and Disk Purge JTPs can be referred to as an archiving station.

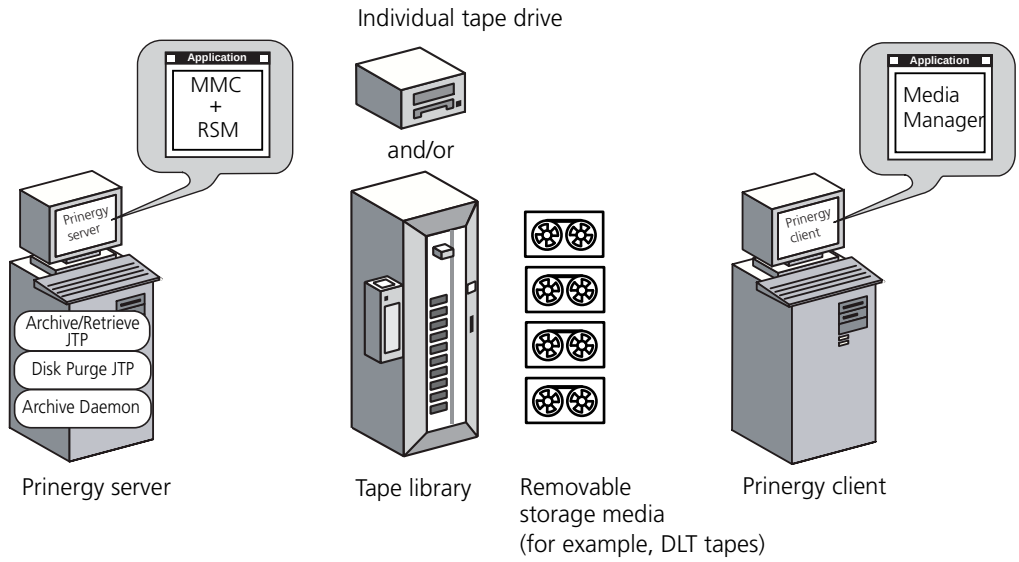


Figure 15: Archiver system software

Important: Once you set up the Archiver system on a Prinergy server, we recommend that you do not move this system. RSM stores contextual information about media and media pools within the archiving station's operating system. Moving the Archiver system to another server could result in a loss of this information, which may affect your ability to retrieve archived jobs.

Microsoft Management Console

The Microsoft Management Console (MMC) is a feature of Windows 2000 that can be used to create, save, and open administrative tools (called MMC snap-ins) that manage the hardware, software, and network components of your Windows system.

MMC does not perform administrative functions, but instead hosts tools that do. The primary type of tool you can add to a console is called a snap-in. The Removable Storage Manager is an MMC snap-in.

Removable Storage Manager (RSM)

Microsoft's Removable Storage Manager (RSM) is a Windows 2000 service that tracks removable storage media and manages removable storage devices, such as an individual tape drive or tape library. Use RSM to:

- Manage media pools (a way of logically grouping media)
- Physically manipulate media in the removable storage device(s)
- View RSM history and status
- View the status of the removable storage device(s)
- View the location and states of media

  Note: Location and states of media can also be viewed in the Media Manager in Prinergy Workshop.

RSM works in concert with data-management software—for example, it works with Prinergy to archive, purge, and retrieve job data.

About the RSM Snap-In Interface

RSM consist of two view panes:

- The left pane contains the console tree. The console tree includes the four main RSM components: **Media Pools**, **Physical Locations**, **Work Queue**, and **Operator Requests**.
- On the right, the details pane shows the contents of the current left-pane selection.

Note: Other snap-ins can be added to the console, as can an RSM snap-in for another host.

For more information about using RSM, see the RSM online help.

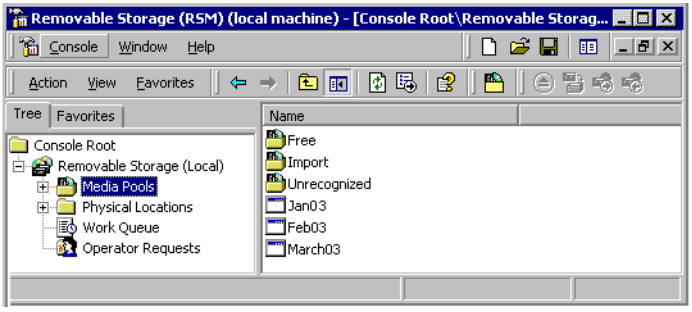


Figure 16: Removable Storage Manager

Using RSM to Share Removable Storage Devices

RSM makes it possible for multiple applications to share removable storage devices, which can reduce your costs. For example, you can use the same removable storage device for archiving and backup, provided each application uses RSM to interact with the removable storage device.

For more information about using the same removable storage device for archiving and backup, see *Using a Removable Storage Device for Archiving and Backup* on page 109.

Archive/Retrieve JTP

The Archive/Retrieve JTP writes whole jobs or selected job files to media, as directed by a process plan in Prinergy Workshop. It can also read archived jobs or selected job files from media and return them to the job's home server.

The Archive/Retrieve JTP must be active on the archiving station—that is, the Prinergy server directly connected to the removable storage device(s) being used for archiving. Use Prinergy Administrator to add the Archive/Retrieve JTP to the archiving station.

For more information about adding JTPs, see the Prinergy Administrator online help.

Disk Purge JTP

The Disk Purge JTP removes a selected job or selected files from the job's home server as directed by a process plan in Prinergy Workshop. When a job or job file is purged from the system, information about the job (job metadata) is retained in the Oracle database, which allows you to retrieve the job from your archives. A file will not be removed from the disk until the Disk/Purge JTP verifies that the file has been archived.

The Disk Purge JTP must be active on the archiving station—that is, the Prinergy server directly connected to the removable storage device(s) being used for archiving. Use Prinergy Administrator to add the Disk Purge JTP to the archiving station.

For more information about adding JTPs, see the Prinergy Administrator online help.

Archiver Daemon

The Archiver Daemon communicates with RSM and the Oracle database to support the Media Manager tool in Prinergy Workshop.

For more information about daemons, see *Daemons* on page 16.

Media Manager

The Media Manager tool in Prinergy Workshop lets users view information about removable storage media. The Media Manager displays a list of all media pools. The user can select one or more pools to display detailed information about media in those pools, including media type, location, amount of free space, and state.

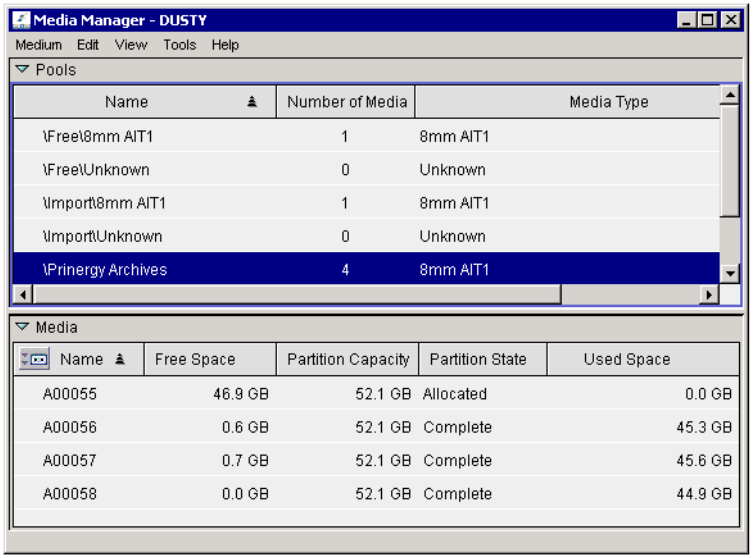


Figure 17: Media Manager window in Prinergy Workshop

In addition, the user can use the following commands in the Media Manager:

Medium Verify—Ensures that a medium can be read, that there are no hard-read errors on it, and that the format of the content is correct.

Medium Logical Copy—Copies all jobs on a given medium to other media in one or more pools. Can be used to replace a damaged medium or to copy data from one type of media to another (for example, DLT to AIT).

If any of the jobs on the source medium are already archived to a destination pool, they will not be copied to that pool again.

Medium Complete—Sets a medium to read-only. A completed medium is no longer used for new archives. You can still retrieve archives from it

For more information about the Media Manager, see the Prinergy Workshop online help.

About Removable Storage Devices

A removable storage device can be used to read and write Prinergy job data to media. It must be directly connected to the Prinergy server that is running the Prinergy Archiver software (the archiving station).

Prinergy supports individual tape drives and tape libraries. For a list of compatible devices, contact your service representative.

Note: RSM supports a wide range of devices, but the Archiver system currently supports only DLT (Digital Linear Tape), AIT (Advanced Intelligent Tape), and LTO (Linear Tape-Open) tapes. You should only use the Archiver with qualified devices. For information about qualified devices, contact your sales representative. In addition to the archiving device, additional storage devices not related to the Archiver system (for example, a CD-ROM drive) also appear in the RSM.

Individual Tape Drive

An individual tape drive is a removable storage device with a single tape drive. It may also be called a stand-alone tape drive. You must manually insert and remove media from the tape drive.

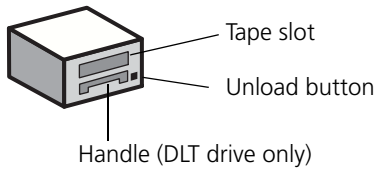


Figure 18: Individual tape drive

Tape Libraries

A tape library is a removable storage device that contains one or more tape drives. It can store numerous tapes in storage slots. Using robotics, it automatically moves media from the storage slots and loads and unloads media from its drives.

A tape library usually also includes a barcode reader that automatically reads identification information from a barcode affixed to the outside of a medium.

A tape library often has an inport and outport from which you load and unload media into the device. These can be combined into a single port or dual-purpose ports.

Note: A tape library may also be referred to as a jukebox.

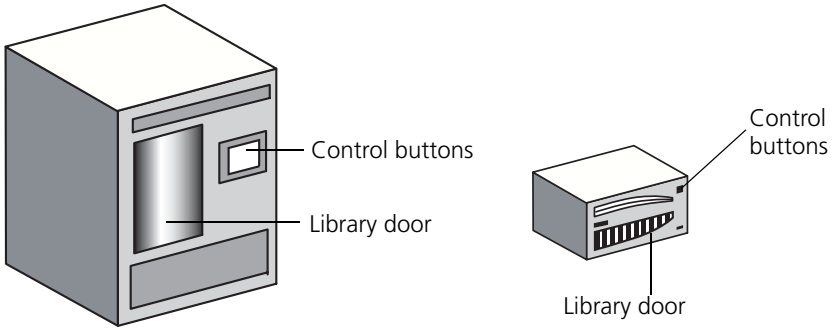


Figure 19: Tape libraries

Using Multiple Removable Storage Devices

You can use multiple removable storage devices with the Archiver system; however, all removable storage devices must be directly connected to the archiving station. Removable storage devices connected to the archiving station appear in RSM, provided an appropriate device driver is loaded.

Using a Removable Storage Device for Archiving and Backup

RSM enables you to use the same removable storage device(s) for archiving and backup. This can help reduce costs by maximizing your hardware use.

If you want to use the same removable storage device for archiving and backup, you must follow some hardware guidelines:

- If you use Prinergy Online Backup or Windows NT Backup software, the storage device must be directly connected to the primary server in order to ensure that backup is successful. This means that you must use the primary server as your archiving station.
- It is highly recommended that you use a tape library as a storage device to minimize media switching and maximize performance; using an individual tape drive is **not** recommended.

You must also ensure that you separate archiving media from backup media to avoid overwriting important data. There are a number of guidelines to follow:

- Clearly physically label your media.

  If your removable storage device includes a barcode reader, you may want to label all tapes with a barcode for easier management, especially if you are using a tape library.
- Create separate media pools for archiving and backup, with a well-defined naming convention, and keep media in their respective pools. Ensure that you do not accidently move backup media to an archive-related pool, and vice versa.
- Keep the archive and backup media separate from one another when stored outside the removable storage device.
- If your backup solution includes automatic backups, you may want to devise a workflow schedule that prevents backup and archiving from occurring simultaneously.

For more information about backup, see *Chapter 5, Backing Up the Prinergy System*.

About Archiving Media

The only type of media that the Archiver system currently supports is tape. Specifically, the Archiver system supports DLT (Digital Linear Tape), AIT (Advanced Intelligent Tape), and LTO (Linear Tape-Open) tapes.

You should only use the Archiver with qualified devices. To find out which devices are qualified, contact your sales representative.



Important: The Archiver uses the Microsoft Tape Format (MTF) as its native format. This means that you can use the Windows NT Backup application to view a catalog of the files that are on an Archiver tape or to restore files from an Archiver tape. Previously, only the Archiver could be used for these tasks.

Important: If you want to use NT Backup to read an Archiver tape, **do not** put the tape into the **Backup\Prinergy** pool unless you no longer need the data on the tape. If you leave the tape in the **Backup\Prinergy** pool, the tape may be overwritten during the Prinergy backup procedure and the archived data will be permanently lost.



Tip: You can create a new pool and call it **Backup\ArchiverTapes.** Then when you want to use NT Backup to read an Archiver tape, you can put the tape into this pool and it will not be overwritten.

You should label all tapes with a barcode for easier management. For more information about handling archiving media, see *Handling Archiving Media* on page 136.

Enabling the Archiver System

To enable the Archiver system, you need to connect the removable storage device(s) and add the Archive/Retrieve JTP and Disk Purge JTP.

To enable the Archiver system:

1. Decide which Prinergy server you want to use as an archive station.

   If you're sharing a removable storage device with backup, you must use the primary server as the archive station.

   Important: Once you've set up the Archiver system on a specific Prinergy server, you should not move the system. RSM stores contextual information about media and pools within the archive station's operating system. Moving the Archiver system to another server could result in a loss of this information, which may affect your ability to retrieve archived jobs**.**

2. Connect the removable storage device(s) to the Prinergy server that you plan to use as an archive station.

   Once you connect a device, it appears in RSM. For information about how to connect your device, see the manufacturer's documentation.

3. If required, on the archive station, install the necessary device drivers.

   Check with your service representative to find out which versions of the device drivers are required.

   For information about installing device drivers, see the manufacturer's documentation.

4. On your archive station, log on as an administrator.

5. In Prinergy Administrator, add the Archive/Retrieve JTP and the Disk Purge JTP to the archiving station.

   For information about adding JTPs, see the Prinergy Administrator online help.

6. Outline your archiving strategy and create process plans accordingly.

   For information about developing an archiving strategy, see *Chapter 4, Developing an Archiving Strategy*.

   For information about process plans, see the Prinergy Workshop online help.

Overview of Using the Archiver System

This section provides an overview of using the Archiver system. The Archiver system works with Prinergy Workshop to:

- Archive job data
- Purge job data
- Retrieve job data

Note: Archiving, purging, and retrieving job data are the main Archiver tasks. You can also copy media, verify media, and set media to complete using the Media Manager in Prinergy Workshop. For more information, see *Media Manager* on page 106 and Prinergy Workshop online help.

To use the Archiver system:

1. Develop an archiving strategy:

   a. Decide how you will organize and store media.

      It is essential that you establish an archiving strategy in order to meet your archiving requirements. For information about developing an archiving strategy, see *Developing an Archiving Strategy* on page 118.

   b. Use RSM to set up media pools according to your plan.

      Media pools are a logical way of organizing your information on media. Once created, they appear as options in the Process Plan Editor, enabling you to direct an archive to a specific set of media.

      For more information, see *About Media Pools* on page 128 and *Managing Media Pools* on page 132.

   c. In Prinergy Workshop, modify or create process plans to do the following:

      - Archive job files to specific media pools
      - Purge job files from the system
      - Retrieve job files

      Note: You will also need a process plan to be able to copy a tape using Medium Logical Copy in the Media Manager.

When creating an archive process plan, you must specify the media pools to which you want to archive. For information about media pools, see *About Media Pools* on page 128 and *Managing Media Pools* on page 132.



Important: We strongly recommend that you make a second copy of your archives. To do this, always archive to more than one media pool. Having a second copy of your archives is similar to having a backup of important information on your computer's hard disk. If an archive tape is lost or damaged, having a second copy of the archive will allow your site to retrieve jobs that were stored on the lost or damaged tape.

2. In Prinergy Workshop, run the desired process plan.

   The Archiver system will carry out the request specified by the process plan.

   You can monitor the status of the request in the Prinergy Workshop Job Manager's **Active Processes** pane or from the Queue Manager. For more information about monitoring the process, see *Monitoring the System* on page 146.

   Note: If an archive, retrieve, or purge request stops or fails, a record appears in the Active Processes pane for up to 30 minutes. For example, if you stop a purge request before it finishes and resend the request, the first request remains in the Active Processes pane, even if the second, completed request no longer appears. Entries for incomplete requests disappear after 30 minutes.

3. If prompted, complete any operator requests.

   Occasionally, you may be required to fulfill a request, such as inserting or ejecting media from the removable storage device. Prompts to complete a request appear in three ways:

   - In RSM, under **Operator Requests**
   - As a prompt message on the archive station



   - As a **Waiting for Operator Intervention** icon in Prinergy Workshop

For more information about operator requests, see *Monitoring Operator Requests* on page 144. For more information about managing media in the removable storage device, see *Managing Archiving Media* on page 138.



Important: Always use RSM to physically manage media; avoid manually inserting or ejecting media using the device's front panel, unless prompted to do so by the system. When you use RSM, the system automatically tracks media. This way, the system does not have to run a device inventory, which can be time consuming.

4. If necessary, remove the media from the removable storage device and store it according to your archiving strategy.

   For information about process plans and the Process Plan Editor, see the Prinergy Workshop online help.

5. If desired, view historical information about archive, purge, and retrieve jobs after they are complete. You can view information about:

   - Individual archive, purge, and retrieve jobs in the **History** view of the Job Manager in Prinergy Workshop
   - All archive, purge, and retrieve jobs in system history in Prinergy Workshop (**Tools**>**System History**). You can also check historical information medium logical copy and medium verify processes in the system history.

   For more information about the system history, see Prinergy Workshop online help.

Creating Copies of Your Archives

You should always create duplicate copies of your archives by using an archive process plan that writes archives to multiple media pools (and their corresponding media). This provides you with a backup of your archive media and may safeguard you against data loss, should a tape be lost or destroyed.

Note: This section describes creating copies of your archives at the time they are originally written. You can create copies of archival media using **Medium Logical Copy** in the Media Manager in Prinergy Workshop. For more information, see Prinergy Workshop online help.

If you are using a tape library, Prinergy can simultaneously write archives to two or more media pools. If you are using an individual tape drive, Prinergy will write consecutive archives to the pools specified in your process plan.



Important: If you are using an archive process plan that writes archives to multiple media pools, you must create a corresponding purge process plan. The purge process plan should specify the same pools used in the archive process plan. This ensures that before purging a job or job files, the Archiver will verify that archives were successfully written to all pools. If you don't use a purge process plan that specifies multiple pools, the Archiver will check only that each file has been archived to one media pool; you may accidentally purge a job before it has been successfully archived to multiple pools.

To create backup copies of an archive:

1. In RSM, create at least two application pools to be used as the archive destination.

   You may want to name the pools in a way that indicates they're related. For example, you could name the pools **Jan_Onsite** and **Jan_Offsite**. For more information about creating application pools, see *Creating an Application Pool* on page 133.

2. In Prinergy Workshop, modify or create an archive process plan to direct Prinergy to write to the application pools that you just created—that is, ensure that at least two pools appear in the process plan's **Archive Media Pools** box.

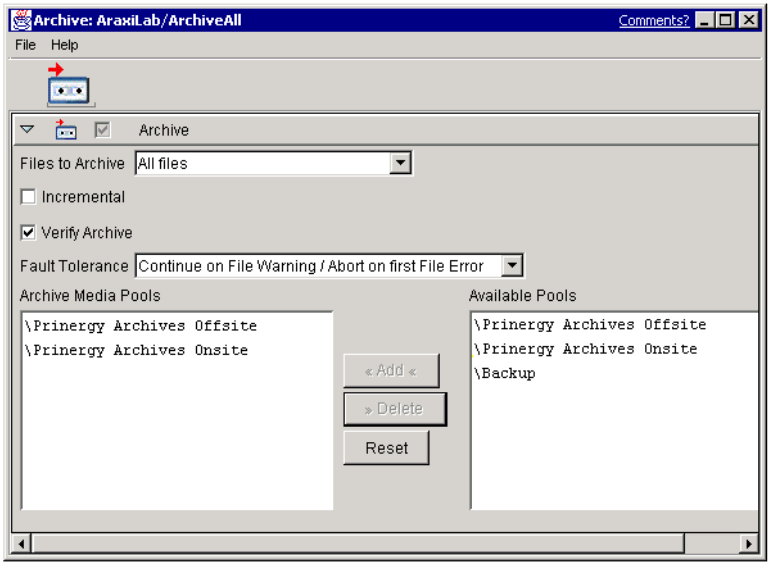


Figure 20: Archive process plan for archiving a job to multiple pools

When you use this process plan to archive, your job will automatically be written to all pools listed in the process plan and, therefore, to multiple media.

For detailed information about creating process plans, see the Prinergy Workshop online help.

3. In Prinergy Workshop, modify or create a purge process plan that includes the same pools used in step 2 in the **Archive Media Pools** box.

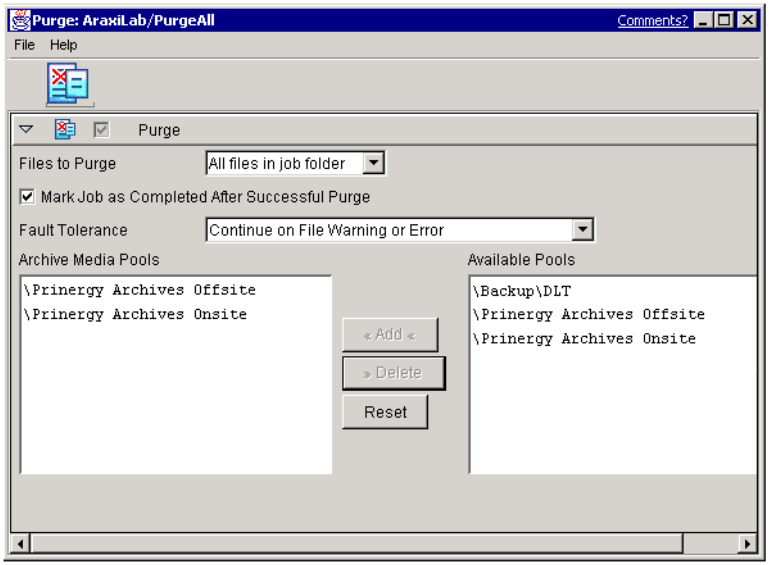


Figure 21: Purge process plan for purging a job archived to multiple pools

Before purging a job, the Archiver will verify that archives were successfully written to the specified pools. If you don't use a purge process plan that specifies multiple pools, the Archiver will check only that each file has been archived to one media pool; you may accidentally purge a job before it has been successfully archived to multiple pools.

4. When you are ready to archive, run the new archive process plan. If prompted, follow any operator requests.



Important: If you are using an individual tape drive, Prinergy will write consecutive archives, rather than simultaneous archives. The system will prompt you to insert a new medium when the first archive is complete. Prinergy will not be able to complete the second archive until you insert the requested medium.

5. Store the media according to your archiving strategy.

   For information about storing media, see *Storing Media* on page 120.

Developing an Archiving Strategy

This section describes some guidelines for developing an archiving strategy. Planning your archiving strategy in advance will help ensure that your archiving requirements are met.

There are a number of factors to consider when developing your archiving strategy:

- Have you safeguarded against media failure or loss?

  You should create at least two copies of your archives, to safeguard against media failure or loss. To do this, create archives using a process plan that archives to multiple media pools. For information about multiple pools, see *Creating Copies of Your Archives* on page 115.

  For information about setting up process plans, see the Prinergy Workshop online help.

- How long will you retain archives?

  It's important to plan how long you will retain archives to ensure that they are available when needed. The retention period may vary from job to job. Some jobs may need to be archived for only a very short period of time—for example, until they have gone to press. You may want to keep other jobs permanently.

- Which jobs will you archive, and which job components?

- How often will you archive—that is, at what point(s) in the workflow?

  For example, after proofing, after creating plates, or only when the job is off press.

- How will you organize your archives?

  This includes organizing archives into media pools. For information about media pools, see *Managing Media Pools* on page 132.

- How will you store your media?

  You need to determine where you will store your media—for example, onsite or at an offsite location.

Planning Which Jobs and How Often

Decide which jobs you plan to archive. For example, you may need to archive all jobs, or you may archive only some jobs. This will depend on your customers' requirements.

In addition, you need to decide when you will archive your jobs and how often. For example, you may choose to archive jobs only after a job has completed its press run, or you may want to archive a job before the press run. If you have a job that may go through a number of iterations, you may need to decide which revision(s) you want to archive.

Organizing Your Archives

Use application pools to help organize your archives.

You should determine how you will organize your application pools before you use the Archiver system. It may be difficult to reorganize the pools after jobs are archived to tape, since only media can be moved from pool to pool; you cannot move an archive from one medium to another.

We recommend that you consider the following:

- Determine which attributes are most important for grouping archives.

  For example, if you retain archives for only a limited time, you many want to organize your archives according to date. If your customers retain their own archive media, you may want to organize your archives by customer.

- Consider how long you need to retain your archives. This may affect how you choose to organize your application pools.

- Create pools according to the chosen attributes and use names that contain those attributes. For convenience, name pools in a way that allows for easy sorting in RSM.

- Create duplicate copies of your archives. For example, you may want keep one copy offsite to ensure that your data is available in the event of an emergency, such as media failure, fire, or flood. You can automatically create a duplicate copy of your data by archiving to two or more application pools. For more information, see *Creating Copies of Your Archives* on page 115.

Storing Media

Take appropriate precautions to safeguard your media and its contents. Media should be stored in a cool, dark place, away from dust and heat.

For more information about the proper storage, care, and handling of media, see the information provided by the media manufacturer.

You also need to determine how long you will store your archives. You may need to retain your archives permanently, or you may only be required to keep them only for a limited period of time (for example, a year).

We highly recommend that you create a copy of your archive data to keep offsite as an added precaution.



Tip: You can automatically create a duplicate copy of your data by archiving to two or more application pools. For more information, see *Creating Copies of Your Archives* on page 115.

Sample Archiving Scenarios

This section describes some sample archiving scenarios. Use them as guidelines to help develop an archiving strategy that suits your needs.

In order to best meet your needs, you may choose to develop a unique strategy that combines some or all of the following elements, as well as others not documented here.

Archives Grouped by Month

In this scenario, archives are grouped by month and the retention period is 18 months, after which time the archive media can be recycled.

To create archives grouped by month:

1. Create a **Prinergy Archives** master pool.

   This will help keep your Prinergy archiving media pools separate from other media pools that may by used by other applications—for example, backup.

   For information about how to use RSM to create an application pool, see the RSM online help.

2. Within the **Prinergy Archives** pool, create an application pool for the year.

   For example, **2002**, **2003**, and so on.

3. Within the year pool, create subpools for each month.

   For example, **Jan_A, Jan_B**, **Feb_A**, **Feb_B**, **March_A**, **March_B**, and so on. We highly recommend that you archive to two application pools (for example Jan_A and Jan_B) to create a duplicate copy of your data.

4. Each month, edit and update the archive process plan(s) to reference the current monthly pools.

   To ensure that the correct process plan is always used—that is, jobs are archived to the current pools—edit or delete the previous month's archive process plan.

5. Recycle media after a designated time—for example, 18 months, by moving them to the **Free** pool.



Important: Moving media to the **Free** pool ***permanently*** erases all data on the media.



Tip: Before moving a tape to the **Free** pool, run the Archive Medium Contents report to list the jobs that are on the tape. Make sure that you no longer need any of these jobs, and then destroy the jobs. If you don't destroy the jobs, once the tape is moved to the **Free** pool, the Prinergy database will still indicate that the jobs are on your system, but you will not be able to retrieve them.

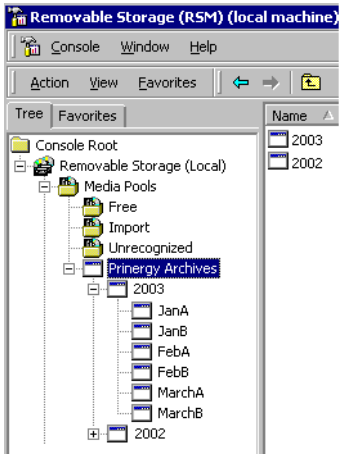


Figure 22: Application pools grouped by month

Archives Grouped by Customer

In this scenario, archives are grouped by customer. Note that because these archives are not organized by date, the archiving media cannot be easily recycled. You may want to follow this scenario if your customers plan to supply and store their archive media.

To create archives grouped by customer:

1. Create a **Prinergy Archives** master pool.

   This will help keep your Prinergy archiving media pools separate from other media pools that may by used by RSM—for example, backup.

   For information about how to use RSM to create an application pool, see the RSM online help.

2. Within the **Prinergy Archives** pool, create at least two application pools for each customer.

   For example, **Customer1A**, **Customer1B**, **Customer2A, Customer2B, Customer3A, Customer3B**, and so on.

3. Create an archive process plan for each customer.

   Edit the archive process plan to reference both A and B pools, for example, customer1A and customer1B.

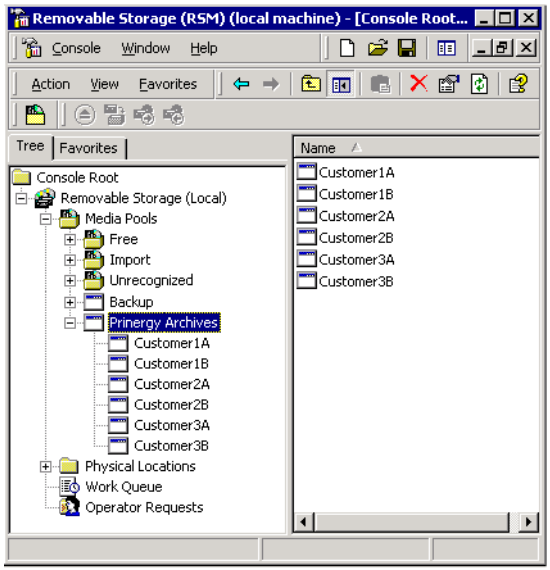


Figure 23: Application pools grouped by customer

Archives Grouped by Location (Onsite/Offsite)

In this scenario, a duplicate copy of the archive is created for offsite storage. Offsite storage safeguards your data in the event of an emergency, such as fire, theft, or media failure.

To create archives grouped by location:

1. Create a **Prinergy Archives** master pool.

   This will help keep your Prinergy archiving media pools separate from media pools that may by used by other applications—for example, backup.

   For information about how to use RSM to create an application pool, see the RSM online help.

2. Within the **Prinergy Archives** pool, create two application pools: **Onsite** and **Offsite**.

3. Create an archive process plan that archives to both pools.

4. Move archive media from the **Offsite** pool to an offsite location on a regular basis—for example, weekly, monthly, or when media are full.



Tip: If you plan to move media only when full, we recommend keeping only a small number of **Offsite** pool media in the library to ensure that these media are filled quickly. Use the Media Manager or run an Archive Medium Capacity report to check how much space is available on a medium. For more information, see the Prinergy Workshop online help or the Prinergy Database Reports online help.

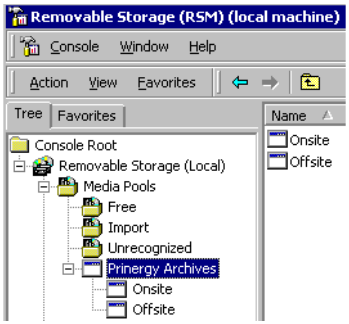


Figure 24: Application pools grouped by location

Archives Grouped by Month and Location

In this scenario, archives are grouped by month, with a duplicate copy being created for offsite storage.

To create archives grouped by month and location:

1. Create a **Prinergy Archives** master pool.

   This will help keep your Prinergy archiving media pools separate from media pools that are used by other applications—for example, backup.

   For information about how to use RSM to create an application pool, see the RSM online help.

2. Within the **Prinergy Archives** pool, create an application pool for the year.

   For example, **2002, 2003,** and so on.

3. Within the year pool, create subpools for each month, for example, **Jan**, **Feb**, **March**, and so on.

4. Within each monthly pool, create an **Onsite** pool and an **Offsite** pool.

5. Archive each job to both current monthly pools using the appropriate process plan.
6. Each month, edit and update the archive process plan(s) and purge process plan(s) to reference both subpools in the current monthly pool.

   To ensure that the correct process plan is always used—that is, jobs are archived to the current pool—edit or delete the previous month's archive and purge process plans.
7. At the end of each month, move the media from the offsite monthly pool to an offsite location.

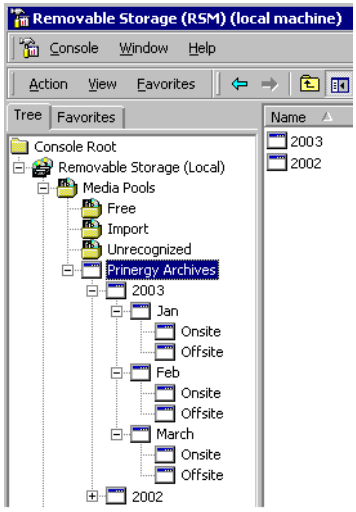


Figure 25: Application pools grouped by month and location

Overview of RSM

This section provides a basic overview of RSM as it relates to Prinergy. RSM is a built-in component of Windows 2000 and can be used by other applications, such as backup.

For detailed information about using RSM, see the RSM online help.

RSM Components

The RSM snap-in consists of two view panes and uses a directory structure similar to Windows Explorer. The left pane contains the console tree, which includes the main components of RSM. The details pane, on the right, shows the contents of the current left-pane selection.

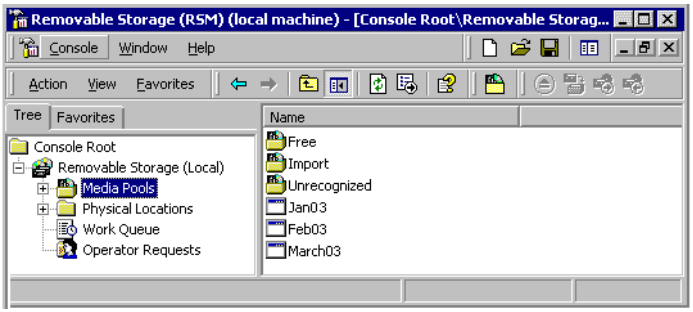


Figure 26: Windows 2000 RSM window

Table 15 on page 126 describes RSM's four main components or views.

Table 15: RSM components

Component	Description
Media Pools	A means of logically organizing removable storage media. Provides a view of media by logical grouping.
Physical Locations	A list of devices known to RSM on this system. Provides a view of media and devices by location.
Work Queue	A status and history of tasks in the RSM work queue.
Operator Requests	A status and history of requests from software using RSM, such as the Archiver.

Starting RSM

The RSM service starts automatically when Windows 2000 starts. Start the MMC with the RSM snap-in from the Windows **Start** menu on the Prinergy archiving station.

To start the RSM snap-in:

➢ On the Prinergy archiving station, from the Windows **Start** menu, select **Programs>Prinergy>Removable Storage Management.**

Note: This snap-in is for the local host. Though you can start RSM on other servers, you must start RSM on the archive station in order to view archive-related information.

About Media Pools

A media pool is a logical group of archive media. There are two types of media pools:

- *System pools*—built into RSM and a means of organizing media not yet used.
- *Application pools*—you define to organize which media are used for which purpose. A medium that has been used for archiving jobs in your Prinergy system will belong to one of the application pools created for archiving.

How RSM Identifies Media

RSM organizes all the media in your libraries into different media pools. RSM also assigns media to media pools in order to provide the near-line data storage space that your applications require. Near-line refers to media that are in the tape library, and are available to be written to or read from, but are not currently in the drive.

When a medium is inserted into a removable storage device, RSM automatically does one of the following:

- For a medium previously seen by the system, updates medium location

  If a medium has been previously seen by an application, that application will have written a unique ID in the medium's header, which RSM uses to recognize the medium.

- For a medium that is new to the system, assigns the medium to the appropriate system pool

  If the medium is not yet initialized or was initialized by an application in another system, it is assigned to one of the three system pools:

  - **Free**—for a medium containing a "free media label" header
  - **Unrecognized**—for a medium that is blank or has an unrecognized header
  - **Import**—for a medium containing a header in a recognized format (that is, a format used by a known application), but that is new to the system

The following section describes system pools in detail.

For more information about media pools, see the RSM online help.

System Pools

There are three system pools:

- **Free** pool
- **Unrecognized** pool
- **Import** pool

About the Free Pool

The **Free** pool contains blank, prepared media—that is, media that have a "free media label" header. RSM writes a "free media label" header on a medium when it is moved to the **Free** pool. Media in the **Free** pool can be used as a source of new media to write to.

A medium is not automatically assigned to the **Free** pool; you must move it to the **Free** pool from another pool.



Important: Moving media to the **Free** pool ***permanently*** erases all data on the media.

About the Unrecognized Pool

The **Unrecognized** pool contains media that do not have a header in a recognizable format, and thus are not recognized by the system.

For example, if you insert a brand new tape—that is, a medium that contains no data and no header—it is assigned to the **Unrecognized** pool. A medium that contains data but does not include a recognizable header is also assigned to the **Unrecognized** pool.

In order to make a medium from the **Unrecognized** pool available for use, you must first move it to the **Free** pool. Moving it to the **Free** pool causes RSM to write a header on the medium. Once a medium is in the **Free** pool, you can move it to an application pool, or it may be drawn to an application pool by an application when the application allocates a new medium.

A medium in the **Unrecognized** pool is not remembered by the system once it has been ejected from the removable storage device. This is because it does not have a recognizable header.

About the Import Pool

The **Import** pool contains media that are in a format recognized by RSM, but that are new to RSM.

Note: If you are also using your removable storage device for backup, your backup media are part of the RSM library.

The following types of media may appear in the **Import** pool:

- Prinergy tapes from another Prinergy system
- Windows NT Backup tapes
- PlateMaster tapes

You can move a medium in the **Import** pool to the **Free** pool, where it is available to be written to as needed.

You can also move a medium in the **Import** pool directly to an application pool; you do not need to assign it to the **Free** pool first. For example, you could do this for PlateMaster or Windows NT Backup tapes.

Note: If you assign **Import** pool media directly to an application pool, the data on the media is retained.



Important: Moving media to the **Free** pool ***permanently*** erases all data on the media.

Application Pools

Application pools are user-defined pools. They may contain media that have been used to archive jobs in your Prinergy system. They may also contain media used in system backup.

Use application pools to logically organize your media—for example, you can create application pools to organize Prinergy archive media and jobs by month or by client. When you archive a job, you must specify in the archive process plan which application pools to write to.

You can create any number of application pools in order to organize your media. Your archiving strategy determines how many application pools you create for archiving and how to organize them. For more information about developing an archiving strategy, see *Developing an Archiving Strategy* on page 118.

An application pool can contain an unlimited number of media. Media assigned to an application pool remain part of that pool, even if offline—that is, not currently in the removable storage device.



Tip: We highly recommend that you automatically create a duplicate copy of your data by archiving to two or more application pools. For more information, see *Creating Copies of Your Archives* on page 115.

Note: If you are using your removable storage device for backup, you may also need to create application pools to manage backup media.



Important: If you are using the same removable storage device for backup and archiving, organize your application pools in a way that clearly separates the two. This will help avoid accidently overwriting important data.

Managing Media Pools

This section describes some basic principles about managing media pools using RSM.

A medium can belong to only one media pool at a time. For example, a tape that belongs to the **Free** pool cannot also belong to an application pool.

Table 16 on page 135 briefly describes how to perform various media pool-related commands with RSM.

For detailed information about how to use RSM, see the RSM online help.

Moving Media to the Free Pool

You can move media to the **Free** pool from any media pool. When a medium is assigned to the **Free** pool, RSM writes an identification header on the medium.

Following are reasons why you might want to move media to the **Free** pool:

- To prepare media from the **Unrecognized** pool for archiving or other use. A medium in this pool must be moved to the **Free** pool before it can be moved to an application pool. Blank media automatically appear in the **Unrecognized** pool.
- To erase media from the **Import** pool or an application pool. The media will then be available to application pools that have been configured to automatically take a medium from the **Free** pool as needed.

Note: A medium from an application pool must be in the Available state for you to be able to move it to the **Free** pool. This means the medium is not currently allocated to an application.



Important: Moving media to the **Free** pool ***permanently*** erases all data on the media. See the procedure described next for handling tapes before moving them to the **Free** pool.

Before moving a tape to the Free pool:

1. Run the Archive Medium Contents database report to list the jobs that are on the tape.

   On the primary server, from the Windows **Start** menu, select **Programs**>**Prinergy**>**Database Reports**>**Archive Medium Contents**.

2. Ensure that you no longer need any of the jobs on the tape.

   When you move the tape to the **Free** pool, RSM will write a "free media label" header on the tape, and you will no longer be able to retrieve any jobs on the tape.

3. We recommend that you also destroy the jobs in Prinergy Workshop.

   If you move the tape to the **Free** pool but do not destroy the jobs, Prinergy Workshop will show the jobs as archived and offline, even though the data is no longer available on the tape and the job cannot be retrieved.

Creating an Application Pool

Use application pools to organize your media. You can create any number of application pools. Once you create an application pool, it is available in the Prinergy Workshop Process Plan Editor.

Use RSM to create application pools.

For information about how to use RSM to create an application pool, see the RSM online help. For information about the Process Plan Editor, see the Prinergy Workshop online help.

Before using the Archiver system, we recommend that you determine how you will set up your application pools. It may be difficult to reorganize the pools after jobs are archived to media, since only media can be moved from pool to pool; you cannot move an archive from one medium to another.

You may want to follow these guidelines:

- Determine which attributes are most important for grouping archives—for example, customer name, account/docket number, month/year, publication, and so on.
- Create pools according to the chosen attributes and use names that contain those attributes.

- Create subpools to help further organize your pools. For example, if you are also using your removable storage device for backup, you may want to create a main pool for archiving, and then create archiving subpools.
- For convenience, name pools in a manner that allows for easy sorting in RSM.

For more information about strategies for creating application pools, see *Developing an Archiving Strategy* on page 118.



Important: When creating a new media pool in RSM, we recommend that you do not select the **Return media to Free media pool** option on the **General** tab in the Create a New Media Pool Properties dialog box. When the **Return media to Free media pool** option is selected, media are automatically returned to the **Free** pool when not required by the application pool. If this option is selected and a tape is accidentally de-allocated, all the data on the tape will be permanently lost. The option makes sense for backup tapes that are continuously recycled, but you will rarely need to recycle an archiving tape. Follow the steps in *Before moving a tape to the Free pool* on page 133.

Archiving to Multiple Media Pools

We strongly recommend that you archive to multiple media pools to create copies of your data on multiple tapes, as backup copies of your archives. For more information about archiving to multiple media pools, see *Creating Copies of Your Archives* on page 115.

Media Pool Commands Quick Reference Table

This section describes how to perform some basic media pool-related tasks using RSM.

For detailed information about using RSM, see the RSM online help.

Table 16: Media pool commands quick reference table

To...	Do this...
Create an application pool	1. In the console tree, right-click **Media Pools**, and select **Create Media Pool**. 2. Set the desired properties, and then click **OK**.
Rename an application pool	1. In the console tree, double-click **Media Pools**. 2. Right-click the applicable media pool, and select **Properties**. 3. On the **General** tab, in the **Name** box, type the new name.
Set a description for an application pool	1. In the console tree, double-click **Media Pools**. 2. Right-click the applicable media pool, and select **Properties**. 3. On the **General** tab, in the **Description** box, type a relevant description.
Delete an application pool	1. In the console tree, double-click **Media Pools**. 2. Right-click the application pool that you want to delete, and select **Delete**.
Automatically **draw media from the Free pool** when no media are available in the application pool	1. In the console tree, double-click **Media Pools**. 2. Right-click the applicable media pool, and select **Properties**. 3. On the **General** tab, select the **Draw media from Free media pool** check box. **Note:** If you do not select the **Draw media from Free media pool** check box, you must manually move media from a **Free** pool whenever this media pool needs additional media**.**
Move a medium from one pool to another	1. In the console tree, select **Physical Locations>><*your device*>>Media**. 2. In the details pane, select the applicable medium. 3. Drag the medium to the applicable media pool in the console tree. **Note:** Moving media to the **Free** pool permanently erases all data on the media.
View the contents of a media pool	• In the console tree, select the media pool that you want to view. The details pane shows the contents of that pool.

Handling Archiving Media

This section contains information about the general care and handling of archiving media.

Labeling Media

To prepare a medium for use in the Archiver system, first make sure it is clearly labeled with a unique name. It should be the same name that you give the medium when you insert it in the Archiver system. This makes it easier to keep track of your archives and will help avoid accidently overwriting media.

For more information about inserting and naming media, see *Managing Archiving Media* on page 138.

Labeling Strategies

There are two ways to label media:

- By hand. This option requires you to devise your own naming strategy, and is available only for individual tape drives.
- Using printed barcode labels. If your archive device has a barcode reader, you must use a barcode system.

If you label media by hand, make sure your naming strategy:

- Is readily extensible—that is, lets you add media to the archive without running out of names
- Uses names of 64 characters or less

A barcode system involves labeling media with pre-printed barcoded labels with alphanumeric names. You can obtain barcodes from your tape manufacturer.

When ordering barcode labels, ensure that all of the barcodes used in your system are unique. To do this, specify a different range of labels each time you add media to your system.

Tape libraries come with a barcode reader that scans media loaded in the removable storage device and transmits the information to RSM. RSM then assigns a name to the media based on the barcode.

Advantages of a Barcode System

We recommend that you use a barcode system to label media, even if your archiving device does not have a barcode reader. This has a number of advantages:

- Most tape libraries have a barcode reader. This can save you the step of naming media in the Archiver system and ensures that the labels on the media match the system name.
- If you are using an individual tape device, you can easily upgrade your existing archives, should you decide later to get a tape library with a barcode reader.
- You do not have to devise your own naming strategy. Barcodes provide an unlimited expansion path.
- Using barcodes to track media is generally much faster because each tape or disc does not have to be mounted to read the on-media identifier.

Handling Media

Handle your media with care to guard against damage and data loss. Your media manufacturer provides guidelines on the safe handling of media.

Managing Archiving Media

This section describes some basic principles for using RSM to manage archiving media.

RSM provides a means of physically managing media in the removable storage device as well as a way to view an inventory of your current media library.

Table 21 on page 142 briefly describes how to perform archiving media-related commands using RSM.

For information about how to use RSM, see the RSM online help.

Viewing Physical Locations

The **Physical Locations** component of RSM lets you physically manage media in the removable storage device and view media according to the physical location.

Physical Locations is a component in the RSM console tree. These tables describe the following:

- Table 17 on page 139 describes the **Physical Locations** components.

  When you select a component, the details pane shows the selection's contents. For example, if **Off-line Media** is selected, the details pane shows all the media that are currently offline—that is, not in the removable storage device.

- Table 18 on page 139 and Table 19 on page 140 describe the **Physical Locations** information that appears in the details pane.

- Table 20 on page 140 describes different media states.

Table 17: Physical Locations components described

Component	Description
Off-line Media	Provides a view of media that are part of your archive but are not currently in a removable storage device.
Library	Provides views of media currently in the removable storage device. There are two views: • **Media**—when selected, provides a list of all media in the removable storage device • **Drives**—when selected, provides a list of drives in the removable storage device

Table 18: Details pane information for Off-line Media and Library>Media

Columns for **Off-line Media** and **Library>Media**	Description
Name	System name for medium.
Description	Description of medium status.
Location	Location of medium, for example, Slot 2 or Drive 0.
Media Pool	Name of media pool to which medium belongs.
State	There are two media state components: • Physical states—identify operations performed that involve media location or movement. For example, “loaded” or “mounted.” • Side states—identify operations performed that involve media usage rather than location or movement. For example, “Allocated” or “Available.” Table 20 on page 140 describes the different media states.

Table 19: Details pane information for Library>Drives

Drive columns	Description
Name	System name of the drive.
Description	User-defined name of the drive.
State	Physical states identify operations performed that involve media location or movement. For example, “dismountable” or “empty.” Table 20 on page 140 describes the different media states.
Loaded Media	Name of the medium in the drive.

Table 20: Media state definitions (physical and side)

Media state	Definition
Idle	Medium is in a holding slot or is offline.
In-use	Medium is in the process of being moved.
Loaded	Medium is mounted in a drive and data is available to be read or written.
Mounted	Medium is in a drive but is not available to be read or written.
Unloaded	Medium has been dismounted and is ready to be removed from a drive.
Allocated	Medium is reserved for use by an application and is not available to any other application.
Available	Medium is currently available for use by an application.
Completed	Medium is in use but cannot be used for write operations because it is full.
Decommissioned	Medium is no longer available for use, as it has reached its maximum number of allocations.
New	Medium type is recognized by the system, but the ID (header) is not recognized.
Incompatible	Medium is not compatible with the system and should be removed.
Reserved	Medium is unavailable for allocation except by a single application. This applies only to two-sided media, where one side has already been allocated.

Media state	Definition
Unprepared	Medium has been placed in the **Free** pool but does not yet have a free media label. This is a temporary state.
Unrecognized	Medium type and ID (header) are not recognized by the system.

Updating the Inventory

You may occasionally want to ask RSM to update the inventory of the removable storage device.

Perform this step if RSM does not appear to accurately reflect the contents of the removable storage device. For example, you will have to do an inventory if you use the front panel controls on the removable storage device to eject media.



Tip: In general, you should rarely have to do a manual inventory, provided you use RSM to manage media in the tape device. This way, the system is able to keep an accurate inventory of media

Note: You should avoid doing a manual inventory, particularly if you are using a large tape library, as the process can be time consuming. However, if the RSM state does not accurately reflect the actual state of the device, an inventory is likely required.

Managing Media in the Removable Storage Device

Use the right-click menus in RSM to physically manage media in the removable storage device. Table 21 on page 142 briefly describes how to perform basic commands with RSM.



Important: If your library supports it, always use RSM to physically manage media; avoid manually inserting or ejecting media using the device's front panel, unless the system prompts you to do so. When you use RSM, the system can automatically track media. The system does not have to run a device inventory, which can be time consuming.

For more information about using RSM, see the RSM online help.

Table 21: Media-related RSM commands

To...	Do this...
Inject a medium	1. In the console tree, double-click **Physical Locations**. 2. Right-click the applicable library, and select **Inject**. 3. Follow the instructions in the Media Inject wizard. **Note:** For a tape library, insert the medium using the inport/outport. For a stand-alone device, you must manually insert the medium.
Eject a medium	1. In the console tree, select **Physical Locations><*your device*>>Media**. 2. In the details pane, right-click the applicable medium that you want to eject, and select **Eject**. 3. Follow the instructions in the Media Eject wizard. **Note:** For a tape library, eject the medium using the inport/outport. For a standalone device, you must manually unload the tape.
Mount a medium in tape drive so that the medium can be analyzed **Note:** Be sure to dismount the medium afterwards.	1. In the console tree, select **Physical Locations><*your device*>>Media**. 2. In the details pane, right-click the applicable medium, and select **Mount**.
Dismount a medium	1. In the console tree, select **Physical Locations><*your device*>>Media**. 2. In the details pane, right-click the applicable medium, and select **Dismount**. Or: 1. In the console tree, select **Physical Locations><*your device*><*current drive*>**. 2. In the details pane, right-click the drive that contains the medium you want to dismount, and select **Dismount**.

To...	Do this...
Enable or **disable** a medium	1. In the console tree, select **Physical Locations>*<your device>*Media**. 2. In the details pane, right-click the applicable medium, and select **Properties**. 3. On the **Media** tab, do one of the following: • To enable a medium, verify that the **Enable media** check box is selected. • To disable the medium, clear the **Enable media** check box. **Note:** Disabling the medium makes it unavailable for use.
Move a medium from one pool to another	1. In the console tree, select **Physical Locations>*<your device>*Media**. 2. In the details pane, select the applicable medium. 3. Drag the medium to the applicable media pool in the console tree. **Note:** Moving media to the **Free** pool permanently erases all data on the media.
Prepare a medium for the **Free** pool by manually deleting all data	**Important:** Before following the instructions below, perform the *Before moving a tape to the Free pool* procedure on page 133. 1. In the console tree, select **Physical Locations>*<your device>*Media**. 2. In the details pane, right-click the applicable medium, and select **Prepare**.
Do an **inventory** of all media in a tape library	1. In the console tree, double-click **Physical Locations**. 2. Right-click the library that you want to inventory, and select **Inventory**.

Monitoring Operator Requests

This section describes how to monitor operator requests from the Archiver system. Occasionally, you may be required to carry out a request in order for the Archiver to complete a task. Table 22 describes these requests.

Table 22: Archiver operator requests

Operator request	Appears when...
Please insert tape XXXNNN into the library.	An archive/retrieve request or task requires a tape that is offline.
Please insert a cleaning cartridge into the library.	A cleaning task is required for the drive.

Where Do Operator Requests Appear?

Prompts to complete an operator request appear in three places:

- In RSM, under **Operator Requests**
- On the archiving station, as a prompt message
- In Prinergy Workshop, as a **Waiting for operator intervention** icon



If the Archiver appears to be taking a long time to complete a task, check these places to see if you must perform an operator request before the Archiver can proceed.

Requests in RSM

You can view the status and history of operator requests from the **Operator Requests** component of RSM.

To view operator requests in RSM:

➢ In the RSM console tree, select **Operator Requests**.

A list of operator requests appears in the details pane.

Requests As Prompt Messages

Operator requests from the Archiver appear as prompt messages on the archiving station; they do not appear on other Prinergy servers. When carrying out an Archiver task, you may want to occasionally check the archiving station to see if there are any operator requests to perform.

Requests From Prinergy Workshop



Operator requests from the Archiver appear as the **Waiting for operator intervention** icon in Prinergy Workshop on any Prinergy server or client machine on the system.

For more information about viewing prompt icons, see the Prinergy Workshop online help.

Monitoring the System

This section describes how to monitor the status and history of tasks requested of the Archiver system with the RSM **Work Queue**. Use **Work Queue** to view the status and history of various tasks requested of the Archiver system.

To view the Work Queue:

➢ In RSM, select **Work Queue**.

The **Work Queue** displays a list of all Archiver tasks undertaken since the Archiver software last started, to a maximum of 20. This list is automatically purged after a set number of hours, as configured.

Table 23 describes the columns displayed in the **Work Queue** details pane. Table 24 describes possible column entries.

Table 23: Work Queue details pane columns

Column name	Description
State	Current state of the task—for example, "Completed." For a detailed description of possible task states, see Table 24.
Operation	Type of operation requested—for example, "Eject."
Description	The physical location where the task is being performed—for example, a library or specific medium.

Table 24: Work Queue task state descriptions

Work Queue task state	Descriptions
Queued	RSM has not yet begun the task; this is the time between when the request is issued and when RSM starts examining the request.
In Process	Task is being processed.
Completed	Task was successfully completed.

Work Queue task state	Descriptions
Failed	Task was not successfully completed. To see a description of the failure, highlight the Failed task.
Waiting	Task has stopped and is waiting for an event to happen before it can continue—for example, a mount request when a drive is already in use will pause the request until the drive is dismounted.

Viewing Archive Information

There are several ways to get information about your media and archives, including:

- Prinergy database reports, available from Prinergy Administrator

  Use the Prinergy database reports to find out where jobs are archived, which jobs are archived on a medium, size and location of archives and files, and how much room is available on a particular medium.

  See *Using the Prinergy Database Reports* on page 148.

- Media Manager, available from Prinergy Workshop

  Use the Media Manager to view a list of media pools and information about media in those pools, such as free space, used space, and state.

  See *Using the Media Manager* on page 149.

- Windows NT Backup

  You can use Windows NT Backup to view a catalog of the files that are on an MTF format tape. The Prinergy Archiver uses MTF as its native format. For information about Windows NT Backup, see the Windows NT Backup documentation.



Important: If you want to use NT Backup to read an Archiver tape, **do not** put the tape into the **Backup\Prinergy** pool unless you no longer need the data on the tape. If you leave the tape in the **Backup\Prinergy** pool, the tape may be overwritten during the Prinergy backup procedure and the archived data will be permanently lost.



Tip: You can create a new pool and call it **Backup\ArchiverTapes.** Then when you want to use NT Backup to read an Archiver tape, you can put the tape into this pool and it will not be overwritten.

Using the Prinergy Database Reports

Prinergy comes with a number of built-in Prinergy database reports that enable you to gather detailed information about various aspects of your system, such as archive media and job status. By keeping records of various reports, either in print or as digital files, you can track activity and changes over time. You can generate three types of archive reports:

- **Archive Job Locations**—to find out where jobs are archived
- **Archive Medium Capacity**—to find out how much room is available on a particular medium, how many jobs are archived on a medium, and when the first and last archives were written. The Archive Medium Capacity report includes Archives and Files subreports, which provide information about the size and location of individual archives and files on the medium.
- **Archive Medium Contents**—to find out which jobs are on a particular medium

For detailed information about how to generate and interpret database reports, see the Prinergy Database Reports online help. To access the Prinergy Database Reports online help, on the primary server, from the Windows **Start** menu, select **Programs**>**Prinergy**>**Database Reports**, and then click the **Help** icon.

Using the Media Manager

The Media Manager, available from Prinergy Workshop, lets you view information about media in your system.

To use the Media Manager:

➢ In Prinergy Workshop, from the **Tools** menu, select **Media Manager**.

The Media Manager window appears.

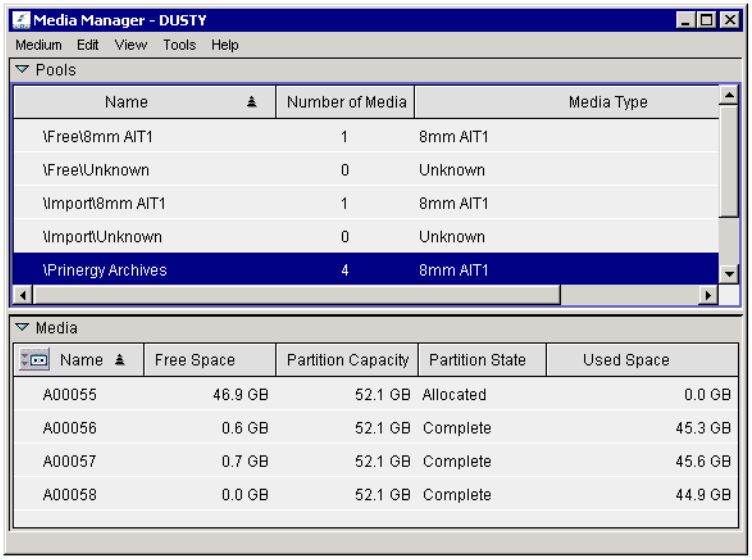


Figure 27: Media Manager window in Prinergy Workshop

For more information about the Media Manager, see the Prinergy Workshop online help.

Cleaning a Removable Storage Device Drive

You occasionally need to clean your removable storage device drive(s) in order to keep it operating at an optimal level. These scenarios may indicate that you need to clean the drive:

- The drive consistently gives read/write errors.
- You have not recently cleaned the drive.
- The drive signals that cleaning is required (rather than recommended).



Important: In general, clean a drive only if required. Cleaning a drive too often can produce unnecessary wear, shortening the drive life.

Note: The cleaning medium has a limited life; for example, a DLT cleaning medium can be used approximately 20 times before it becomes ineffective. Make sure the cleaning medium that you use is valid.

For more information about cleaning a drive, see the RSM online help and the documentation provided by the device's manufacturer. For more information about cleaning media, see the media manufacturer's documentation.

Preventing Unnecessary Drive Cleaning

Your system may occasionally request an unnecessary cleaning; for example, if a drive is unable to read a portion of the tape, the drive may recommend a cleaning, even though you recently cleaned the drive.

To prevent unnecessary drive cleaning in a tape library:

➢ Store the cleaning medium outside the tape library (offline).

If the cleaning medium is already in the tape library, RSM automatically mounts the medium and cleans the drive, once a request is made

Note: If you are using an individual tape drive, the drive will not be cleaned until you insert the cleaning medium. This gives you an opportunity to bypass the cleaning request. For more information, see *Bypassing Unnecessary Cleaning Requests* on page 151.



Important: The system cannot complete any archiving tasks in the queue until the cleaning operation is complete or you bypass the request. If the device is also being used for backup, the backup tasks will also be delayed.

Bypassing Unnecessary Cleaning Requests

Use RSM to bypass unnecessary cleaning requests.

To bypass unnecessary cleaning requests:

1. Confirm that the cleaning request is unnecessary. The request may be unnecessary if you have recently cleaned the drive (the time required between cleanings varies, depending on how often you use the drive).



Tip: To use RSM to see when the drive was last cleaned, right-click the drive in the details pane, and select **Properties**. The **General** tab displays the last-cleaned date (under **Statistics**).

2. In the RSM console tree, select **Operator Requests**.

   A list of operator requests appears in the details pane.

3. In the RSM details pane, right-click the **Inject Medium** request related to the cleaning medium, and select **Refuse**.

4. In the RSM console tree, select **Work Queue**.

   A list of RSM tasks appears in the details pane.

5. In the details pane, right-click the **Clean Drive** tasks, and select **Cancel Request**.



Important: If RSM continues to prompt you to clean the drive each time you attempt to use the removable storage device, this may be an indication that the drive actually needs cleaning. If you get repeated requests to clean the drive, you should clean the drive. If the requests continue after cleaning, contact your service representative.

5

Backing Up the Prinergy System

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Overview

This chapter describes the two backup options available with Prinergy and how to back up your system using each option.

What Is Backup?

Making a backup involves saving a copy of a complete disk partition, file system, or part of a file system directory structure for the purpose of disaster recovery.

For Prinergy, you must:

- Back up the Oracle database.

  The database is initially backed up to disk. You must also save the backup to media.

- Back up the system drives of your primary and secondary servers to preserve system configuration settings.

Backup differs from archiving. In archiving, only files related to a specific job are saved. For information about archiving, see *Chapter 4, Using the Archiver System*.

Why Is Backup Important?

It is essential that the database and system data are regularly backed up to media. This is the best way to minimize data loss or damage caused by problems such as disk failure, power outages, and virus infections. We recommend that you back up your system every day to ensure maximum data recovery in the event of a problem.

In addition, you should run regular tests to ensure that your backup files will be available in the event of an emergency.

Prinergy Backup Components

A Prinergy backup system consists of:

- Oracle Backup Manager software
- Backup software

  This can be either the Prinergy Online Backup option or your own backup software. You will use backup software to save the backup of the Oracle database to media and to back up the system drives of the primary and secondary servers.
- One or more removable storage devices such as a tape library
- Backup media (DLT, AIT, and LTO tapes are supported)
- Microsoft Management Console (MMC)
- Windows 2000 Removable Storage Manager (RSM) snap-in

About Oracle Backup Manager Software

Oracle Backup Manager is included with all Prinergy systems. It is configured to automatically backup the Oracle database on a designated local disk.



Important: Oracle Backup Manager software backs up the database to a local disk. It is essential that you save the backup of the Oracle database to media to ensure that the information is available in the event of a disaster such as disk failure.

About Backup Software

Your backup system must include software for backing up the Oracle database backup to media and for backing up the system drives of the primary and secondary servers.

If you have purchased the Prinergy Online Backup option, your system is configured to automatically back up your system. Prinergy Online Backup can back up your system drives to tape or to a file on disk (local or over the network).



Important: If you back up your system drives to a file on disk, you must subsequently save that backup file to media to ensure that the information is available in the event of a disaster such as disk failure. If you back up to a file on disk, you should subsequently back that file up to media. If your company has a corporate backup strategy, you can make the Prinergy backup file available on a server so it is backed up as part of that strategy.

If you did not purchase the Prinergy Online Backup option, you must provide your own backup software. You are responsible for configuring this software, which must be Windows 2000-compatible.

About Removable Storage Devices

A removable storage device reads and writes backup data to media. Currently, DLT, AIT, and LTO tapes are supported. You must use a removable storage device that can be used by the Windows 2000 Removable Storage Manager (RSM) and that your service representative has qualified for use.

You may be able to use the same device for backup and archiving. See *Using a Removable Storage Device for Archiving and Backup* on page 109.

Types of Removable Storage Devices

There are two basic types of removable storage device:

- Individual tape drive
- Tape library

An individual or stand-alone tape drive is a removable storage device with a single tape drive. You must manually insert and remove media from the tape drive.

A tape library is a removable storage device that contains one or more tape drives. It can store numerous tapes in holding slots. It automatically moves media from the holding slots and loads and unloads media.



Important: If you use Prinergy Online Backup and you expect backups to span more than one tape, you must use a tape library rather than an individual tape drive. When you use a tape library, Prinergy automatically writes data to the next tape in the media set. When you use an individual tape drive with the Prinergy Online Backup option, backup data must fit on a single tape or the backup will fail.

About Backup Media

If you use Prinergy Backup software (part of the Prinergy Online Backup option) to back up to media, the recommended media types are DLT, AIT, and LTO tapes.

If you use your own backup software, you can back up to the media of your choice. If you use Prinergy Backup software to back up to a file, you must then back up that file to media, and you can use the media of your choice.

About Microsoft Management Console

The Microsoft Management Console (MMC) is a built-in feature of Windows 2000 that can be used to create, save, and open administrative tools. These tools manage the hardware, software, and network components of your Windows system.

The primary type of tool that you can add to a console is called a snap-in. The Removable Storage Manager (RSM) is an MMC snap-in.

About Removable Storage Manager

Microsoft's RSM is a built-in Windows 2000 service that tracks removable storage media and manages removable storage devices such as an individual tape drive or tape library. Use RSM to:

- Manage media pools (a way of logically grouping media)
- Physically manipulate media in the removable storage device
- View RSM history and status
- View the location and states of media
- View the status of the removable storage device

RSM works in concert with data management software—for example, it can work with Prinergy Backup software (one of the components of Prinergy Online Backup) to back up data to tape. Prinergy Backup software automatically creates the necessary media pools for managing a backup.

For more information about RSM, see *Overview of RSM* on page 126 or the RSM online help.

Prinergy Backup Options

Two backup options are available for use with Prinergy:

- Basic Backup
- Prinergy Online Backup

Table 25 describes the two options.

Table 25: Features of the two Prinergy backup options

Backup option	Includes...	Does this...
Basic Backup	• Oracle Backup Manager software You must provide and configure your own backup software to save the database backup to media and to back up system drives of primary and secondary servers.	Backs up the Oracle database to a local disk.
Prinergy Online Backup	• Oracle Backup Manager software • Prinergy Backup software	• Oracle Backup Manager backs up the Oracle database to a local disk. • Prinergy Backup software writes the following to tape or to a file on disk: ❒ the backup of the Oracle database ❒ the system drives of primary and secondary servers. **Important:** If you back up to a file on disk, you must subsequently save that file to media. • Prinergy Backup software checks whether the backup was successful.

Developing a Backup Plan

If your system does not include Prinergy Online Backup, you should develop a backup plan in order to safeguard your data and minimize down time in the event of an emergency.

In developing your plan, consider the following:

- Which data will you back up?
- What backup schedule will you follow?
- How will you handle and store tapes?

Prinergy Online Backup includes a backup plan for which your system was configured at installation. You only need to consider how you will handle and store tapes.

Deciding Which Data to Back Up

If your system does not include Prinergy Online Backup, you need to decide what data to back up and to configure your backup software accordingly.

The following table describes the Prinergy data that must be backed up onto media in order to recover your system.

Table 26: Essential Prinergy data for backup

Type of server	Essential
Primary server	• Backup of the Oracle database We recommend that you back up the **BACKUP_DESTINATION** folder and the **ZIP_FILES_DESTINATION** folder. For more information, see *Oracle Backup Manager Backup Parameters* on page 172 and Table 30 on page 173. • Drive that holds Prinergy system files (generally **D**) • Windows 2000 system state • Folder that contains the major update uninstall files (generally **E\PrinergyUpdates**)
Secondary server	• Drive that holds Prinergy system files (generally **D**) • Windows 2000 system state • Folder that contains the major update uninstall files (generally **E\PrinergyUpdates**)

What Not to Back Up

We recommend that you do not back up tertiary servers, file servers, or job folders as part of your regular Prinergy backup. Here's why:

- Information stored on these machines is not required for system recovery.
- It could be very time-consuming to back up this information. This could unnecessarily tax your system and reduce productivity.
- Backing up this information—particularly job folders—could use significant media space. This increases the risk of running out of media during backup, which would cause the backup to fail.

  We recommend that you archive jobs using the Prinergy Archiver system, rather than include them in your backup plan. Archiving jobs saves job information in context and enables you to easily reconstruct a job.

If you want to back up your jobs, you may be able to use Windows Backup or other third-party software for a separate backup operation. You are responsible for configuring and maintaining this software and associated backups.

In addition, do ***not*** back up the Oracle database files listed below as part of your system backup. These files are already backed up as part of the Oracle database backup. In addition, some backup software locks files while backing them up, which may create problems within the Oracle database. Do not back up the following files:

- <datadrive:>**\Orant\Oracle\ControlFile*.***
- <datadrive:>**\Orant\Oracle\OnLineLogFiles*.***
- <datadrive:>**\Orant\Oracle\Data*.***
- <datadrive:>**\Orant\Oracle\SortSpace*.***
- **E:\Orant\Oracle\MirroredControlFile*.***
- **E:\Orant\Oracle\MirroredOnLineLogFiles*.***

Planning a Backup Schedule

If your system does not include Prinergy Online Backup, you need to determine a regular schedule for backup.

We recommend that you back up your system daily to ensure that you have the most up-to-date data in the event of an emergency.

You must decide what time of day you will perform your backup. For example, if you use an individual tape drive and your backup will likely need additional media, you will want to schedule your backup to occur when someone is on-site to insert new media.

Handling and Storing Media

No matter which backup option you use—Basic Backup or Prinergy Online Backup—you must have a strategy in place for handling and storing backup media. This will help ensure that your most recent data is always available in the event of an emergency. We recommend these guidelines:

- Clearly label media, using barcodes if available.

  Labeling media helps ensure that you use the correct media, especially if you use one removable storage device for both backup and archiving. Barcodes help automate and simplify the naming process. You may also want to maintain a written record of your barcodes. For more information, see *Labeling Media* on page 136.

- Alternate media each day.

  This prevents wear and tear, and ensures that you have alternate copies of your backup, should a medium be damaged. If you need to restore your system, use the previous day's medium to obtain the most recent data.

  For more information, see *Media Rotation Strategies* on page 164.

- Always use RSM to physically manage media in the device.

  Avoid manually inserting and ejecting media, unless the system prompts you to do so. This enables RSM to accurately track media in your system. For more information about managing media with RSM, see *Managing Media in the Removable Storage Device* on page 141.

- If you use an individual tape drive, be sure to remove your backup medium from the drive at the end of each backup and insert the next day's medium. If the correct medium is not available, your backup may fail.

  If you use a tape library, it is not necessary to remove media each day.

- If you use a tape library with Prinergy Online Backup, ensure that media are available in the **Free** pool, so Prinergy can draw additional media if required. For information about moving media to the **Free** pool, see *Moving Media to the Free Pool* on page 132 or the RSM online help.

- Clean your removable storage device as directed by the manufacturer.

Keeping your device in good working order may help prevent media damage.



Important: In general, clean a drive only when prompted by RSM. Cleaning a drive too often can produce unnecessary wear and shorten the drive life. For more information about cleaning drives, see *Cleaning a Removable Storage Device Drive* on page 150.

Media Rotation Strategies

Alternate media each day to save media wear and tear and ensure that you have alternate copies of your backup, should a medium be damaged. If you need to restore your system, use the previous day's medium to obtain the most recent data.

This section describes three possible media rotation strategies for backup:

- Rotate media every other day
- Rotate media weekly
- Rotate media bi-weekly



Important: Backup media must be prepared and allocated before running backup. If you use Prinergy Online Backup, your service representative will help you prepare and allocate backup media.

Rotate Media Every Other Day

In this strategy, you allocate two media to backup, and rotate them every other day.

This strategy is the simplest to maintain but provides the least protection, since there are only two day's worth of backup data available at any given time.

Table 27 illustrates every other day media rotation.

Table 27: Every other day media rotation

Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Tape1	**Tape2**	**Tape1**	**Tape2**	**Tape1**	**Tape2**	**Tape1**

Rotate Media Weekly

In this strategy, you allocate a different medium for each day of the week that you run backup. For example, if you run backup every day of the week, you must allocate seven media.

This strategy provides one week's worth of backup data and gives you more protection against data loss than rotating media every other day. However, media management may be more complex, especially if you are using an individual tape drive.

Table 28 illustrates weekly media rotation if you run back up every day.

Table 28: Weekly media rotation

Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Tape1	**Tape2**	**Tape3**	**Tape4**	**Tape5**	**Tape6**	**Tape7**

Note: There is no guarantee that the first tape will always be used on a Monday, the second tape on a Tuesday, and so on. Therefore, you may want to label media numerically—for example, Tape1, Tape2, and so on—rather than label media by days of the week.

Rotate Media Bi-weekly

In this strategy you allocate a different media for each day of the week that you run backup over a two-week period. For example, if you run backup every day of the week, you must allocate 14 media (twice the number of media required for the weekly media rotation strategy).

This strategy provides two weeks' worth of backup data, giving you additional protection against data loss. (You may also want to take the previous week's media offsite to further safeguard your data.) However, media management may be more complex, especially if you are using an individual tape drive.

Table 29 on page 166 illustrates bi-weekly media rotation if you run backup every day.

Table 29: Bi-weekly media rotation

Week	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Week 1, 3, 5...	**Tape1**	**Tape2**	**Tape3**	**Tape4**	**Tape5**	**Tape6**	**Tape7**
Week 2, 4, 6...	**Tape8**	**Tape9**	**Tape10**	**Tape11**	**Tape12**	**Tape13**	**Tape14**

Note: There is no guarantee that the first tape will always be used on a Monday, the second tape on a Tuesday, and so on. Therefore, you may want to label media numerically—for example, Tape1, Tape2, and so on—rather than label media by days of the week.

Using the Basic Backup Option

This section describes Basic Backup option and procedures. Basic Backup provides a means of backing up your Prinergy database to a local disk using Oracle Backup Manager software.



Important: You must provide and configure your own backup software to save the database backup to media and to back up system drives of primary and secondary servers.

Configuring Basic Backup

To configure your system for Basic Backup:

1. Develop a backup plan.

   See *Developing a Backup Plan* on page 160.

2. Configure Oracle Backup Manager to back up your database to a local disk at a regularly scheduled time, as determined in your backup plan. A service representative will help you configure the Oracle Backup Manager software.

   For more information or to configure the software yourself or change any settings, see *Using Oracle Backup Manager* on page 172.

3. Connect the removable storage device that you will use for backup.

   You must provide your own device. If you are unsure which devices are compatible with Prinergy, contact your service representative. For information about connecting your device, see the manufacturer's documentation.

4. Install and configure your backup software to automatically write the database backup from the local disk to the removable storage device, and to back up the system drives of your Prinergy servers to media.

   For information about which data to back up, see *Deciding Which Data to Back Up* on page 160.

Performing a Basic Backup

Once your Prinergy system is configured for backup, your main responsibility is to ensure that the backups are successfully completed as scheduled, and that backup media are handled and stored according to your strategy.

To perform a Basic Backup:

1. Ensure that there is enough media space available in the removable storage device to store the data that is about to be backed up.

   If there is not enough space, the backup will fail.



Tip: If your backup software uses RSM, you may want to assign additional media to the RSM **Free** pool. This enables RSM to draw additional media, should they be required.

2. Insert the new media.

   You may need to insert new media if the data you are trying to back up does not fit on the available media in the device. This is more likely if you use a stand-alone device rather than a tape library.

3. When the backup is finished, store the backup media according to your backup plan.

   If you use an individual tape drive and alternate between two media, you may want to remove media from the device when the backup is finished and insert the next day's medium. If you use a tape library, you may want to store media inside the library.

Using Prinergy Online Backup

This section describes Prinergy Online Backup option and procedures.

Prinergy Online Backup includes:

- Oracle Backup Manager software, which performs a daily backup of the Oracle database to a local disk.
- Prinergy Backup software, which writes the backup of the Oracle database to tape or disk and backs up system drives of the Prinergy primary and secondary servers to tape or disk. See *New Feature: Backing Up to a File on Disk*, next.

New Feature: Backing Up to a File on Disk

As of Prinergy version 2.2, you can use Prinergy Backup software to back up to a file on disk. The backup file can be created either locally or over the network on another server.

If you back up to a file on disk, you should subsequently back that file up to media. If your company has a corporate backup strategy, you can make the Prinergy backup file available on a server so it is backed up as part of that strategy.

About Prinergy Online Backup

Your system is backed up while Prinergy is running; the system can continue to be used as normal. However, if you run a backup while your system is online and processing jobs, the backup will take longer and Prinergy may be a bit slower processing jobs.

The system also automatically checks that the backup was successful. By default, this check is done eight hours after the backup was launched; your service representative can set this to a different time. You can get current details about backup status from Prinergy Administrator. For more information, see *Performing a Prinergy Online Backup* on page 170 and the Prinergy Administrator online help.



Important: The Prinergy Online Backup option cannot be used to back up the RAID or non-Prinergy servers. This means that job data must be archived. Alternately, you can devise a separate backup plan for backing up job data, independent of the system backup.

Configuring Prinergy Online Backup

Your service representative will help you configure your system for Prinergy Online Backup.

In Prinergy Administrator, you can add or remove servers from the list of servers to be backed up. You can add Prinergy secondary servers, render stations, and InSite web servers to the list. You cannot add tertiary servers.

Also in Prinergy Administrator, you can indicate whether you want the servers backed up to tape or to a file on disk. If you back up to a file on disk, you must subsequently save that file to media.

For more information, see the Prinergy Administrator online help.

Performing a Prinergy Online Backup

Once your system is configured for backup, your main responsibility is to ensure that the backups are successfully completed as scheduled, and that backup media are handled and stored according to your strategy.

To perform a Prinergy Online Backup:

1. Ensure that the appropriate backup medium is online—that is, the medium designated for use according to your media rotation strategy.

   If you use a tape library, you may also want to ensure that media are available in the **Free** pool. This enables RSM to draw additional media. If not enough media are available, the backup will fail.

2. In Prinergy Administrator, confirm that the backup was successful by doing one of the following:

   - Check the backup status box in the bottom-left corner of the Prinergy Administrator window.
   - From the **Tools** menu, select **System Backup** to open a dialog box that lists details about the backup status.

   For more information about monitoring backup status, see the Prinergy Administrator online help.



Important: Your system is configured to automatically confirm whether the backup was successful after a specified interval—generally eight hours. Prinergy Administrator displays the correct backup status only after the system completes the confirmation check. If you check backup status before the confirmation check is complete, the information displayed reflects the status of the previous backup.

3. If the backup was not successful, take appropriate measures.

   See *What to Do If Backup Fails* on page 171.

4. When the backup is complete, store the backup media according to your backup plan.

   If you use an individual tape drive and alternate between two media, you may want to remove the medium from the device when the backup is finished and insert the next day's medium. If you use a tape library, you may want to store media inside the library.

   If you backed up to a file on disk, you must subsequently back up the file to tape.

What to Do If Backup Fails

Monitor your system on a regular basis to ensure that backup is successful, It is essential that you have the most up-to-date backup data available, should you be required to recover your system.

Prinergy Online Backup automatically monitors the system to confirm backup success.

If backup fails:

1. If possible, find out why the backup failed. Backup may fail for a number of reasons, including:
   - Insufficient media
   - Removable storage device not ready
   - Cables disconnected between the device and the server
   - Network problems
2. If you can identify the cause of the failure, take the appropriate steps to prevent future failures, if possible.
3. If you can't identify the cause of failure or the failure persists, contact your service representative.

Using Oracle Backup Manager

This section describes how to use Oracle Backup Manager software. Oracle Backup Manager software backs up the Oracle database to a local disk.



Important: If your system includes the Prinergy Online Backup option, Oracle Backup Manager has already been configured to match your backup plan. Do not change these parameters without consulting your service representative.

Starting Oracle Backup Manager

To start Oracle Backup Manager:

1. On the primary server, from the Windows **Start** menu, select **Run**.
2. In the Run dialog box, type `cmd`, and click **OK**.

   The Command Prompt window appears.
3. Type `ORACLEBACKUPMANAGER`, and press ENTER.

   The **Araxi_OracleMgr>** prompt appears.

Exiting Oracle Backup Manager

To exit Oracle Backup Manager:

- At the **Araxi_OracleMgr>** prompt, type `exit`, and press ENTER.

  Oracle Backup Manager exits.

Oracle Backup Manager Backup Parameters

You can view the Oracle Backup Manager backup parameters in a Command Prompt window. Table 30 describes the parameters. See also *Viewing Backup Parameters* on page 175.

Items marked with an asterisk (*) can be edited using the **Alter** command in Oracle Backup Manager. For more information, see *Editing Backup Parameters* on page 176.

Unless otherwise indicated, typed commands in Oracle Backup Manager are not case-sensitive. In this document, commands are shown in uppercase letters to aid readability.

Table 30: Oracle Backup Manager backup parameters

Backup parameter	Identifies...	Recommended setting
*FULL_BACKUP_INTERVAL	Number of days between full backups of the database	Set to **0**. This means the database is backed up daily.
*BACKUP_START_HOUR	Time of day that a scheduled backup should start, with a possible value between 0 and 22:00 hours	The default setting is **3** (3 a.m.). Base your setting on: • The least busy production time • The hours that personnel are on-site if tape must be manually changed during backup. **Note:** The value **23** (11 p.m.) is not available, as this time is reserved for the Oracle Backup Manager scheduler.
*INCR_BACKUP_INTERVAL	Number of days between incremental database backups	Always set to **0**. **Note:** Incremental backups are not recommended.
*BACKUP_SUCCESS_COMMAND_WARNING	Number of seconds to wait for **BACKUP_SUCCESS_FILE** before generating a warning	The default is **3600** seconds (1 hour). Change as desired.
*SHUTDOWN_TO_BACKUP	Whether Prinergy will shut down when doing a backup of the database (**YES** or **NO**)	**NO**

Backup parameter	Identifies...	Recommended setting
* BACKUP_DESTINATION	Initial destination for the Oracle database backup files **Note:** This folder is typically empty after a database backup. The database backup files are removed from this folder after a zip file containing the database backup files is successfully created in ZIP_FILES_DESTINATION. If you are using the Basic Backup option, we recommend that you back up both the BACKUP_DESTINATION and ZIP_FILES_DESTINATION folders, if they are separate folders.	**E:\ORACLEBACKUP** The backup files can be put on the RAID if there is not enough space on the E: drive.
* ZIP_FILES_DESTINATION	Location of zip file containing database backup files. This is the final destination of the Oracle database backup files.	**E:\ORACLEBACKUP**
BACKUP_SUCCESS_COMMAND_FILE	Command file executed when the database backup is successfully completed. For example, the command file may copy the database backup to tape.	**D:\<OracleFolder>\Creo\Util\SuccessfulBackup.cmd**
ORACLE_ARCHIVEMODE	Identifies the Oracle database log mode	**ARCHIVELOG**
ORACLE_SID	Identifies the Oracle instance being backed up. There is only one instance in Prinergy.	**CREO**

Backup parameter	Identifies...	Recommended setting
BACKUP_FAILURE_COMMAND_FILE	Command file executed when the backup fails. For example, the command file may send an email notice to the backup administrator.	**D:\<OracleFolder>\Creo\Util UnSuccessfulBackup.cmd**
BACKUP_LOG_FILE	Location of the backup log file, which tracks all backup activity	**D:\<OracleFolder>\Creo\ Logs\OracleBackupLogFile. log**

Viewing Backup Parameters

To view Oracle Backup Manager backup parameters:

1. On the primary server, from the Windows **Start** menu, select **Run**.
2. In the Run dialog box, type `cmd`, and click **OK**.

   The Command Prompt window appears.
3. Type `ORACLEBACKUPMANAGER`, and press ENTER.

   The **Araxi_OracleMgr>** prompt appears.
4. Type `SHOW BACKUPCONFIG`, and press ENTER.

   The current Oracle Backup Manager backup parameters appear.

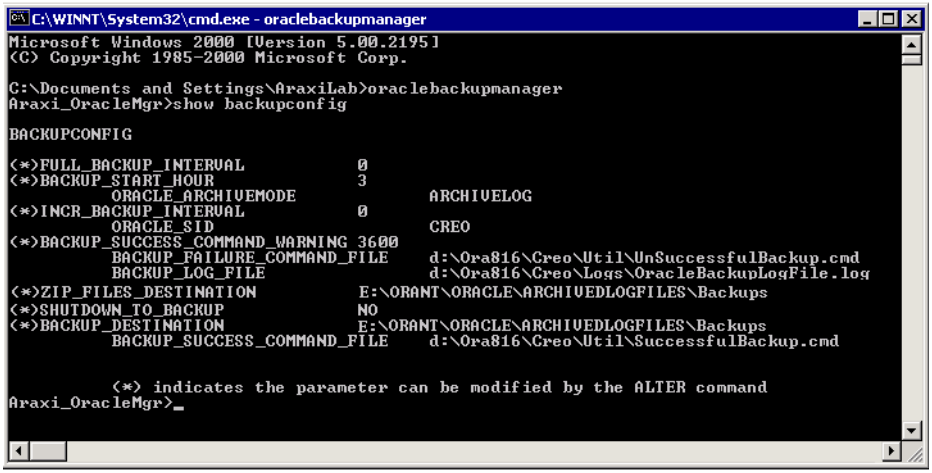


Figure 28: Oracle Backup Manager parameters

Editing Backup Parameters

Use the **Alter** command in Oracle Backup Manager to specify backup parameters according to your backup plan.

Table 30 on page 173 lists editable parameters and recommended settings. Editable parameters are marked with an asterisk..



Important: If your system includes the Prinergy Online Backup option, Oracle Backup Manager has already been configured to match your backup plan. Do not change these parameters without consulting your service representative.

To edit backup parameters:

1. On the primary server, from the Windows **Start** menu, select **Run**.
2. In the Run dialog box, type `cmd`, and click **OK**.

   The Command Prompt window appears.
3. Type `ORACLEBACKUPMANAGER`, and press ENTER.

   The **Araxi_OracleMgr>** prompt appears.
4. To edit a backup setting, type:

   `ALTER <BACKUP SETTING> = <NEW VALUE>`, and press ENTER.

   Important: You must type spaces exactly as shown. For example, `ALTER BACKUP_START_HOUR = 3` (to schedule backup to start at 3 a.m.).

Backing Up the Database on Request

You can perform a full backup of the database on request.

To back up the database on request:

1. On the primary server, from the Windows **Start** menu, select **Run**.
2. In the Run dialog box, type `cmd`, and click **OK**.

   The Command Prompt window appears.
3. Type `ORACLEBACKUPMANAGER`, and press ENTER.

   The **Araxi_OracleMgr>** prompt appears.
4. Type `BACKUP DATABASE`, and press ENTER.

   Oracle Backup Manager does a full backup of the database. If you are using the Prinergy Online Backup option, it also triggers the system backup.

Starting and Stopping the Oracle Backup Manager Scheduler

You can start or stop the Oracle Backup Manager scheduler. The Oracle Backup Manager scheduler automatically starts each time Prinergy is started.

By default, the Oracle Backup Manager scheduler runs each night at 23:00 hours to determine the backup requirements, and then schedules the backup to start at the time specified under **BACKUP_START_HOUR**.

You can change the time that the backup starts. For more information, see *Editing Backup Parameters* on page 176.

To start or stop the Oracle Backup Manager scheduler:

1. On the primary server, from the Windows **Start** menu, select **Run**.
2. In the Run dialog box, type `cmd`, and click **OK**.

   The Command Prompt window appears.
3. Type `ORACLEBACKUPMANAGER`, and press ENTER.

   The **Araxi_OracleMgr>** prompt appears.
4. Do one of the following:
   - To stop the Oracle Backup Manager scheduler, type `BACKUP STOP`.
   - To start the Oracle Backup Manager scheduler, type `BACKUP START`.
5. Press ENTER.

Viewing Backup History

To view the backup history:

1. On the primary server, from the Windows **Start** menu, select **Run**.
2. In the Run dialog box, type `cmd`, and click **OK**.

   The Command Prompt window appears.
3. Type `ORACLEBACKUPMANAGER`, and press ENTER.

   The **Araxi_OracleMgr>** prompt appears.

4. Type `SHOW BACKUPTIMES`, and press ENTER.

   Oracle Backup Manager displays the start and finish times for the last full and incremental backups.

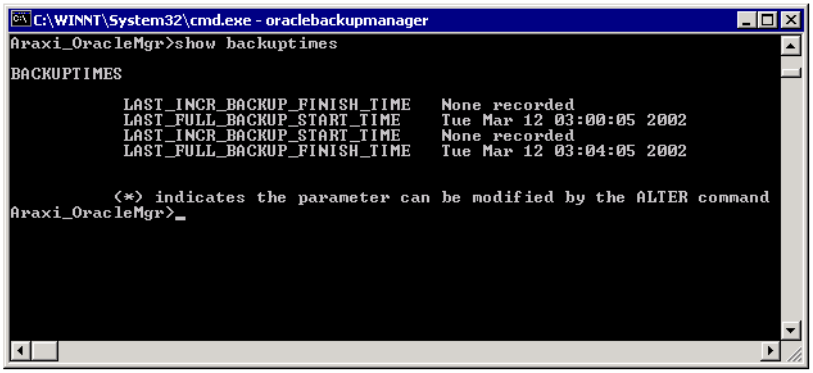


Figure 29: Oracle Backup Manager backup history

Oracle Backup Manager Quick Reference Table

Table 31: Oracle Backup Manager quick reference table

To...	Do this...
Start Oracle Backup Manager	In the Windows Command prompt, type `ORACLEBACKUPMANAGER`, and press ENTER.
View backup history and Oracle Backup Manager parameters	At the **Araxi_OracleMgr>** prompt, type `SHOW`, and press ENTER.
View backup history	At the **Araxi_OracleMgr>** prompt, type `SHOW BACKUPTIMES`, and press ENTER.
View Oracle Backup Manager parameters	At the **Araxi_OracleMgr>** prompt, type `SHOW BACKUPCONFIG`, and press ENTER.
Set the days between full backups	At the **Araxi_OracleMgr>** prompt, type `ALTER FULL_BACKUP_INTERVAL = <number of days>`, and press ENTER.
Set the backup start hour	At the **Araxi_OracleMgr>** prompt, type `ALTER BACKUP_START_HOUR = <numeric value between 0 - 22 hrs>`, and press ENTER.
Set the days between incremental backups	At the **Araxi_OracleMgr>** prompt, type `ALTER INCR_BACKUP_INTERVAL = <number of days>`, and press ENTER.
Set the number of seconds to wait for **BACKUP_SUCCESS_FILE** before generating warning	At the **Araxi_OracleMgr>** prompt, type `ALTER BACKUP_SUCCESS_COMMAND_WARNING = <number of seconds>, and` press ENTER.
Set Prinergy to shut down during backup	At the **Araxi_OracleMgr>** prompt, type `ALTER SHUTDOWN_TO_BACKUP = <YES or NO>, and` press ENTER.
Set the destination for the Oracle database backup	At the **Araxi_OracleMgr>** prompt, type `ALTER BACKUP_DESTINATION = <path, e.g. E:\ORACLEBACKUP>, and` press ENTER.
Set the destination for the zip file of the Oracle database backup	At the **Araxi_OracleMgr>** prompt, type `ALTER ZIP_FILES_DESTINATION = <path, e.g. E:\ORACLEBACKUP>`, and press ENTER.

To...	Do this...
Manually perform a full backup of the Oracle database	At the **Araxi_OracleMgr>** prompt, type `BACKUP DATABASE`, and press ENTER.
Start the Oracle Backup Manager scheduler	At the **Araxi_OracleMgr>** prompt, type `BACKUP START`, and press ENTER.
Stop the Oracle Backup Manager scheduler	At the **Araxi_OracleMgr>** prompt, type `BACKUP STOP`, and press ENTER.
Exit Oracle Backup Manager	At the **Araxi_OracleMgr>** prompt, type `EXIT`, and press ENTER.

Glossary

add a JTP

To activate or enable a JTP on a particular server, using Prinergy Administrator. A JTP cannot be used by the system unless it is added to one or more servers. See also *remove a JTP*.

administrator privileges

A level of Windows privileges that enables a user to set up and manage user and group accounts, assign passwords and permissions, and use Windows administrative tools. Administrator privileges can be associated with the Administrator user or a member of the Administrators group.

Adobe Acrobat

Desktop software that lets you create and edit documents in Adobe's Portable Document Format (PDF).

Adobe Extreme

A high-end production-printing architecture that provides some of the core technology for Prinergy. This includes support for PDF and Portable Job Ticket Format (PJTF) and an underlying communications structure.

Adobe Extreme components include Job Ticket Processors (JTPs) and the Extreme Coordinator (supra.exe).

Adobe Extreme Coordinator

See *Extreme Coordinator (supra.exe)*.

AIT

Advanced Intelligent Tape. AIT is one of the tape technologies supported by the Prinergy Archiver. Other tape technologies supported by the Archiver are DLT and LTO.

The Prinergy Backup system supports DLT, AIT, and LTO tape technologies.

application pool

In RSM, a user-defined media pool used to organize which data is written to which media. Media that have been used to archive Prinergy jobs will belong to one or more application pools. See also, *Removable Storage Manager (RSM)*.

Araxi Service	A Windows service started automatically by the operating system when Windows starts. It is responsible for starting daemons and other processes, such as Adobe Extreme Coordinator (supra.exe) when Prinergy is started. It can also monitor and restart processes it did not start directly (that is, processes that were started by other processes).
archive (noun)	A potentially permanent record of a set of related files—in this case, a job—that may span several file systems on one or more machines. Compare to *backup (noun)*.
archive (verb)	To write a job or related files to media for permanent storage. Files are saved in context, while job metadata is retained in the Prinergy database, enabling you to retrieve the job to the system. See also *retrieve* and *purge*. Compare to *back up (verb)*.
Archiver software	See *Prinergy Archiver software*.
Archiver system	See *Archiver system*.
archiving device	A device that reads and writes Prinergy job data to archiving media, for example, tapes. Prinergy supports individual tape drives and tape libraries.
archiving station	The Prinergy server that is running Archiver software and is connected directly to the archiving device.
back up (verb)	To save a copy of a complete disk partition, file system, or portion of a file system directory structure for the purpose of disaster recovery—for example, in the event of a disk crash. Compare to *archive (verb)*.
backup (noun)	A copy of a complete disk partition, file system, or portion of a file system directory structure saved for the purpose of disaster recovery—for example, in the event of a disk crash. Compare to *archive (noun)*.
barcode system	A system for labeling archiving and backup media using preprinted barcode labels with alphanumeric names. Tape libraries come equipped with a barcode reader that scans a medium when it is loaded into the library, and then transmits information to the RSM. Barcode labels can be obtained from the media manufacturer.

Basic Backup

The default backup option for Prinergy. Through Oracle Backup Manager software, it provides a means of performing scheduled backups of your Prinergy database to a local disk. It does not provide a means of backing up system drives.

You must provide your own backup software in order to copy the backup of the Oracle database to media and to back up the system drives.

calibration curve

A curve that graphically represents the percentage at which to adjust an original PostScript tint during screening to produce the target output.

Harmony software, which is included with Prinergy, derives calibration curves based on the target and initial curves that you build. You can edit calibration curves in Harmony.

client machine

See *Prinergy workstation*.

client software

Software that makes a request of server software in order to complete a task. In Prinergy, the main client software is Prinergy Workshop. See also *server software*.

client-server architecture

A software environment in which client software (such as Prinergy Workshop) makes a request of server software (such as Prinergy Server). The server software initiates the requested service, and then sends the relevant information to the client software.

color match (verb)

To keep color consistency when converting one color space to another—for example, from RGB to CMYK. Prinergy uses ICC profiles to map to L*a*b, a device-independent color space. An ICC target is used to map to a device space when a file is ready for output. This maintains color consistency between the color model and output devices.

companion software

Stand-alone software that can be used in conjunction with Prinergy—for example, Preps, Print Console, and Signastation. See also *optional software* and *standard software*.

Connect

See *Prinergy Connect*.

CORBA	Common Object Request Broker Architecture. CORBA is platform- and hardware-independent and allows applications to communicate with one another, regardless of where they are located or who designed them. Prinergy uses CORBA for some internal communications.
CT/LW	A file format where contone images (CT) are separated from the line work (LW). A third file (called the layout file) is used to position the CT images within the linework.
daemon	A software process on a server machine that runs behind the scenes to perform specific tasks. It has no user interface, and you do not interact directly with a daemon. Instead, you can make requests through Prinergy Workshop.
destroy	To permanently delete a job and all references to it from the Prinergy system. Compare to *purge*.
digital master	A PDF file created by Prinergy is a digital master because it is a complete, reliable entity. Only page description information is contained in the PDF page. Proofs, films, or plates are made from the same PDF file by selecting the appropriate output process plan.
Direct	See *Prinergy Direct*.
disaster recovery	The process of restoring the Windows operating system, application software (Prinergy), and user data (Oracle database) after a system component failure, such as a disk failure.
disk partition	A portion of a physical disk that functions as though it were a physically separate unit.
dismount	To remove a medium (tape) from the current drive when using a tape library for archiving or backup.
distributed system	A system in which software processing is performed on several different computers to distribute the workload. Prinergy is a distributed system.
DLT	Digital Linear Tape. DLT is one of the tape technologies supported by the Prinergy Archiver. Other tape technologies supported by the Archiver are AIT and LTO. The Prinergy Backup system supports DLT, AIT, and LTO tape technologies.

domain	A collection of computers and users that share a common database and security policy, which are stored on a domain controller. Compare to *workgroup*.
domain controller	In a Windows 2000 domain, a computer running Windows 2000 that authenticates domain logons and maintains a directory database for a domain. The domain controller tracks changes made to accounts of all computers on a domain.
eject	To remove a selected medium from an archiving device.
Encapsulated PostScript (EPS)	EPS is a subset of the PostScript language. It describes images in a format that can be imported into other documents.
EPS file	Encapsulated PostScript file. EPS files are used to describe a graphic image using PostScript language.
Extreme	See *Adobe Extreme*.
Extreme Coordinator (supra.exe)	The central coordinator for the Adobe Extreme system. It routes messages between Extreme components, such as JTPs, and provides information about services and tasks on the system.
file optimization	The process of checking and optimizing resources in PDF files. It optimizes the PDF to create a predictable digital master. Processing is done by the Optimizer JTP (a generic JTP).
file server	A computer that is connected to the Prinergy system via the network, but is not running any Prinergy software components. It is used to store input files for Prinergy jobs and can be a UNIX, Windows 2000, or Windows NT machine.
firewall	A system designed to prevent unauthorized access to or from a private network. Firewalls can be implemented in both hardware and software or a combination of both.
Free pool	In RSM, a media pool that contains blank, unprepared archiving media. Media in the **Free** pool can be used as a source of new media to write to. The **Free** pool is a system pool and cannot be deleted or renamed. See also *Removable Storage Manager (RSM)*.

generic JTP	A JTP that performs a minor task, such as generating thumbnails. The Prinergy system manages the distribution of these JTPs; you cannot configure them with Prinergy Administrator.
Harmony	Calibration software that creates dot gain calibration curves by matching the characteristics of the press sheet to a proof or printed sample. It is standard Prinergy software.
home server	The job server for a particular Prinergy job. When you create a job, you must select a job server on which to store the job.
hot folder	A file that is monitored for incoming files as a trigger for an automatic operation. The application that processes the files checks the folder location on a regular basis, and automatically processes any files found there.
Import pool	In RSM, a media pool containing media that are recognized by the system, but are not part of the Prinergy system's current archive—for example, Prinergy archive tapes from another Prinergy system or Platemaster tapes. Media from the **Import** pool can be moved to the **Free** pool or to an application pool. The **Import** pool is a system pool and cannot be deleted or renamed. See also *Removable Storage Manager (RSM)*.
imposition	A means of arranging a number of pages on the front and back of a press sheet to ensure correct order after the printed sheet is folded.
individual tape drive	An archiving device with a single tape drive. It may also be called a stand-alone tape drive. You must manually insert and remove media from the tape drive. Compare to *tape library*.
input file	A file that contains page content. For example, a file that is created by printing a customer's source file, such as a QuarkXPress file, to a PostScript file.
Insert	To load a medium into an archiving or backup device. If using an individual tape device, the medium is loaded directly into the drive. If using a tape library, the medium is loaded into a holding slot, where it is available to be mounted.
InSite	See Synapse InSite.
InSite Administrator	See Synapse InSite Administrator.

Java	A platform-independent programming language developed by Sun Microsystems.
job	The unit used to organize work. A job typically, but not necessarily, corresponds to all the components of one publication. When you create a job, Prinergy creates a job folder and entries in the database for tracking of the job.
job folder	A folder (or directory) on a Prinergy server that stores all the system files for a job. In addition, the job folder may include any input files from your customer. Job folders are stored in a central directory and may include any number of subfolders to help organize job information.
job metadata	Information about job data (content).
job server	A Prinergy server on which job folders are stored. See also *home server*.
job ticket	In Adobe Extreme, a collection of information related to one or more processing steps that must be carried out in Prinergy. It includes a map or route that specifies which JTPs to go to and in what order. It can also include information about which files to process, processing options, destinations, and imposition plans.
job ticket processor (JTP)	Software that performs a specific task to help process an Extreme job ticket. Configure JTPs using Prinergy Administrator.
JTP pool	One or more similar JTPs that have been grouped together to further automate the Prinergy workflow. A JTP pool lets you direct Prinergy to automatically distribute tasks to individual JTPs, so you don't have to manually coordinate which JTP to use. This helps you automatically process multiple jobs at the same time.
loose page proof	The output of a refined page or pages to a proofer (for example, a laser printer or color copier), or to Virtual Proofing System.
LTO	Linear Tape-Open. LTO is one of the tape technologies supported by the Prinergy Archiver. Others tape technologies supported by the Archiver are AIT and DLT. The Prinergy Backup system supports DLT, AIT, and LTO tape technologies.

Macintosh-accessible volume — Storage space on a server used for folders and files of Macintosh users. A Macintosh-accessible volume is equivalent to a shared directory for Windows users.

media — Materials, such as paper or film, that are used to produce hard copy, or objects such as tapes that are used to back up or archive information.

Media Manager — A Prinergy Workshop tool that lets you see information about media pools and media in your system. In addition, the Media Manager lets you start the Medium Complete, Medium Logical Copy, and Medium Verify tasks on Prinergy media. See also *Medium Complete*, *Medium Logical Copy*, and *Medium Verify*.

media pool — In RSM, a logical group of archive media. The RSM has two types of media pools: system pools and application pools. See also *system pool, application pool,* and *Removable Storage Manager (RSM)*.

Medium Complete — A command in the Media Manager that lets you set an almost-full or damaged medium to read-only. This menu command sets the state of the medium to complete in RSM. A completed medium will no longer be used for new archives; it is still available for retrieve tasks. See also *Media Manager*.

Medium Logical Copy — A command in the Media Manager that lets you copy all jobs on a given medium to other media in one or more pools. Use Medium Logical Copy to replace a damaged medium, to copy data from one type of media to another (for example, DLT to AIT), or to make a second copy of data for which only a single copy was made originally. If any jobs on the source medium are already archived to a destination pool, they will not be copied to that pool again. See also *Media Manager*.

Medium Verify — A command in the Media Manager that lets you check that a medium can be read, that there are no hard-read errors on it, and that the format of the content is correct. See also *Media Manager*.

Microsoft Management Console (MMC)	A feature of Windows 2000 that can be used to create, save, and open administrative tools (called MMC snap-ins). These tools manage the hardware, software, and network components of your Windows system. MMC does not perform administrative functions, but instead hosts tools that do. The primary type of tool that you can add to a console is called a snap-in. The Removable Storage Manager is an MMC snap-in. See also *Removable Storage Manager (RSM)*.
middleware	Software that is used as a subcomponent to tie other software together.
MMC	See *Microsoft Management Console*.
mount	In the Archiver system, to load a medium into the tape drive of a tape library so it can be analyzed.
multicast	Communication between a single sender and multiple receivers on a network.
normalize	A step in the refining process that creates PDF pages from input files. The resulting PDF files contain refined pages. Options in the normalize process are: OPI, image optimization, and font handling.
offline media	Archiving or backup media that are not currently in the removable storage device.
optional software	Software that is optional and may be included with your Prinergy system—for example, Prinergy Backup software. See also *standard software* and *companion software*.
Oracle Backup Manager	Software used to configure and schedule backups of the Oracle database to disk or tape. It is included with the Prinergy system.
Oracle database	Located on the primary server, the Oracle database stores Prinergy job information. It contains all Prinergy file information, including file attributes and the history log; it does not store any content. The database is installed when Prinergy Server is installed on the primary server. There is only one Oracle database per Prinergy system.
Orbacus	An implementation of CORBA. It is part of Prinergy's internal communications structure.

PDF Portable Document Format. PDF is a reliable file format for storing line art, images, and text (including all required fonts) for pages. PDF files do not contain device-specific settings such as imaging resolution or duplex options.

peer-to-peer network See *workgroup*.

Portable Document Format See *PDF*.

Portable Job Ticket Format (PJTF) Adobe's Portable Job Ticket Format (PJTF) contains descriptions of device-specific settings and describes the desired output style for one or more pages from PDF files. See also *job ticket*.

PostScript A page description language developed by Adobe Systems. It is used to describe type and visual elements so that they can be output on devices with PostScript interpreters.

PostScript file A file written in the PostScript page description language and created by a native application.

Powerpack See *Prinergy Powerpack*.

PPD file A file that contains information about an output device, such as plate size, resolution, line screen, and screen angle. A PPD file is generated by output device control software, such as Print Console. It is used by imposition software, such as Preps, when generating imposition plans. See also *PPX file*.

PPX file A supplement to a PPD file.

Preps Imposition software created by ScenicSoft.

primary server The main server machine in a Prinergy system. It contains all Prinergy Server components, including the Oracle database. The primary server coordinates requests from Prinergy Workshop and maintains the database.

In a distributed system, the primary server coordinates client requests and maintains the database, but some tasks can be carried out on secondary servers to increase overall system performance. There is only one primary server in a Prinergy system.

Prinergy Administrator	(UADM.exe) Software that serves as the Prinergy system administration user interface. Use it to configure JTPs, add and remove servers, start and stop the Prinergy Server, and monitor the system. It is installed as part of Prinergy Server and runs on primary and secondary servers. Available for Windows 2000 only.
Prinergy Archiver software	Software that coordinates the archiving functions of Prinergy. It consists of the Windows 2000 RSM service, the Archive/Retrieve JTP, and the Disk Purge JTP.
Prinergy Archiver system	Consists of Archiver software (running on a single Prinergy server) and an archiving device (which is directly connected to that server).
Prinergy Connect	A full-featured Prinergy system.
Prinergy Direct	An entry-level Prinergy system that accepts imposed input and outputs to a range of proofing devices and output devices.
Prinergy Online Backup option	Provides a means of performing online backups of your Prinergy system onto disk and DLT, AIT, or LTO tapes. Your system is backed up while Prinergy is running; the system can continue to be used as normal and the backup is not affected by open files. This option includes Oracle Backup Manager and Prinergy Backup software.
Prinergy Powerpack	A Prinergy system designed for offset and flexographic packaging printers.
Prinergy Satellite for iMPAct	A Prinergy system that has been configured as a page preparation station for use with an iMPAct 2.0 workflow.
Prinergy server (hardware)	A Windows 2000 server machine running Prinergy Server software or hosting a job storage folder. May be a primary, secondary or tertiary server. Compare to *Prinergy Server (software)*. Note that a tertiary server can also be a Windows NT machine.
Prinergy Server (software)	The server software side of a Prinergy system. It is made up of a number of components, including daemons, Araxi Service, Adobe Extreme, Oracle database, and Prinergy Administrator. These components can be distributed on multiple server machines. Compare to *Prinergy server machine (hardware)*.

Prinergy system

A system of networked computers that includes at least one Windows 2000 server machine that is running Prinergy Server (the primary server), as well as one Macintosh, Windows NT, or 2000 workstation that is running Prinergy Workshop (the client machine). A Prinergy system may also include any number of secondary servers and additional client machines.

A site can have multiple Prinergy systems.

Prinergy Update Wizard

A wizard installed on the primary server and each secondary server that can download software updates from the Internet, install software updates, check which updates are already installed, and uninstall software updates.

Prinergy Workshop

Client software that is the main user interface to the Prinergy system. From Prinergy Workshop, you can manage the workflow for each job. Within Prinergy Workshop, you can access the Job Finder, Job Manager, Queue Manager, Process Plan Editor, Global and Per-Job Font Converters, Adobe Acrobat, and Global and Per-Job Color Space Editors. If the Prinergy Archiver is licensed on your system, you can also access the Media Manager.

Prinergy workstation

A computer that is running Prinergy Workshop; it is not running any Prinergy Server components. It can also be called a client machine.

A Prinergy workstation can be a Windows NT, Windows 2000, or Macintosh computer.

process plan

A file containing a collection of options and parameters that tell Prinergy how to perform a task. Because settings are predefined, using process plans provides consistent results. Process plans are created using the Process Plan Editor.

Process Plan Editor

The tool used to create, modify, and manage process plans. The Process Plan Editor can be accessed from the **Tools** menu in the Job Finder and Job Manager in Prinergy Workshop.

purge

To delete selected job files from a Prinergy server; however, the job remains on the system because job metadata is retained in the Oracle database. Purging is done after a job has been successfully archived. Compare to *destroy.* See also *archive (verb)* and *retrieve.*

RAID	Redundant Array of Independent (or Inexpensive) Disks. A category of disk drives that employ two or more drives in combination for fault tolerance and performance.
Removable Storage Manager (RSM)	A Windows 2000 service that tracks removable storage media and manages removable storage devices, such as an individual tape drive or tape library. It is part of the Archiver system and the Prinergy backup system.
remove a JTP	To disable or deactivate a JTP on a particular server, using Prinergy Administrator. See also *add a JTP*.
render station	A secondary server that is connected to an output device and is running a high-resolution renderer JTP. It is generally not used to store jobs or run other types of JTPs. Instead, it is reserved for rendering files for output.
renderer	The software component that rasterizes and screens PDF input files.
retrieve	To bring back to the Prinergy system files that were previously archived to media. In Prinergy, retrieving instructions are set in the retrieve process plan. See also *archive* and *purge*.
RIP	Raster image processor. Software that converts PostScript data into raster (bitmap) data. The PDF workflow, as it is applied in Prinergy, utilizes a two-phase RIP process: interpretation and rendering. Interpretation happens as part of the refine process when the input file is normalized to PDF. Rendering, which converts the PDF file to raster data, happens as part of the output process.
secondary server	Any Prinergy server in a Prinergy system that is not the primary server—that is, it is running Prinergy Server software but does not store the Oracle database. Secondary servers can run some JTPs to facilitate distributed processing. A Prinergy system can include multiple secondary servers. See also *render station* and *archiving station*.
server (hardware)	See *server machine*.

server (software)	In a client-server architecture, such as Prinergy, server software (such as Prinergy Server) carries out requests made by client software (such as Prinergy Workshop), and sends relevant information back to the client software.
server machine	A computer that provides some service for other computers connected to it via a network. In Prinergy, there are four types of servers: the primary server, secondary server(s), and tertiary server(s)—which, collectively, are referred to as Prinergy servers—and file servers. See also *primary server, secondary server, tertiary server, Prinergy server,* and *file server.*
Signastation	Imposition software created by Heidelberg.
software process (Prinergy)	A Prinergy Server software component that performs a specific task. You can monitor the status of Prinergy processes in the Processes window of Prinergy Administrator. Software processes include daemons, JTPs, and Araxi Service.
stand-alone tape drive	See *individual tape drive.*
standard share	In Windows, a share is any resource on a server that is available to network users. A standard share is a share created automatically by Prinergy when it is installed—for example, a job storage folders.
standard software	Software components that are standard with Prinergy and are automatically shipped with each Prinergy system. This includes Prinergy Server, Prinergy Workshop, and Adobe Acrobat. See also *companion software* and *optional software.*
strong password	A password that is not easily guessed or broken. Strong passwords generally combine uppercase and lowercase characters, are at least 8 characters long, and include numerals and special characters.
Synapse InSite	Web-based software that enables your customers to check the status of Prinergy print jobs, transfer files, and remotely proof PDF files via the Internet. lnSite is an additional option for Prinergy Connect, Prinergy Powerpack, and Prinergy Satellite for iMPAct.
Synapse InSite Administrator	Software used to configure the Synapse InSite system and manage InSite customer listings and associated user accounts.
system	See *Prinergy system.*

system pool

A media pool that is built into RSM and is a means of organizing which media are available to write to. There are three system pools: *Free pool*, *Import pool*, and *Unrecognized pool*.

You cannot rename or delete a system pool.

tape library

An archiving device that contains one or more tape drives. It can store numerous tapes in holding slots and uses robotics to move tapes between holding slots and drives.

tertiary server

A Windows NT or Windows 2000 server that is connected to the Prinergy system via the network, but is not running any Prinergy software components. It is used to store job folders and/or input files for Prinergy jobs.

thumbnail

A low-resolution sample image of a page or signature displayed in Prinergy Workshop.

trap (verb)

To overlap adjacent printed colors slightly to ensure that white space does not appear between the colors. Trapping parameters can be specified in the original application or in the refine process plan.

Unrecognized pool

In RSM, a media pool containing media that do not have a recognizable header and thus are not recognized by the system—for example, a brand new tape. Media in the **Unrecognized** pool must be moved to the **Free** pool before they are available for archiving.

The **Unrecognized** pool is a system pool and cannot be deleted or renamed.

user account

In Windows, an account that provides a user with a unique profile with which to log on to the system and access resources.

user group

In Windows, a collection of user accounts. User groups let you assign permissions and rights to a group of users, and determine which resources the group can access.

volume

A partition or collection of partitions that are formatted for use by a file system. See also *Macintosh-accessible volume*.

workgroup

A collection of computers that are grouped for sharing resources such as data and devices. In terms of networking, there is no dedicated server or hierarchy among computers. May also be called a peer-to-peer network. Compare to *domain*.

Workshop See *Prinergy Workshop*.

workstation See *Prinergy Workstation*.

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