

Introduction

Welcome to the *Microsoft® Windows® 2000 Server Resource Kit Deployment Planning Guide*.

The *Microsoft® Windows® 2000 Server Resource Kit* consists of seven volumes and a single compact disc (CD) containing tools, additional reference materials, and an online version of the books. Supplements to the *Windows 2000 Server Resource Kit* will be released as new information becomes available, and updates and information will be available on the Web on an ongoing basis.

About the Deployment Planning Guide

The *Deployment Planning Guide* provides both rollout planning guidelines and strategies for deploying the various technologies that make up Microsoft® Windows® 2000. This guide provides decision points and technical information that help you determine the sequence and processes for your deployment. The guide also provides step-by-step procedures for automating both server and client installations. You can use the other volumes in the *Windows 2000 Server Resource Kit* for more detailed information on all Windows 2000 technologies, including how they work and how to maintain them in your organization.

Goals of This Guide

This guide is designed to assist project planning teams who are tasked with deploying Microsoft® Windows® 2000 Server and Microsoft® Windows® 2000 Professional. There is information for management, network architects, system administrators, and others in your Information Technology (IT) organization who will be involved in planning your Windows 2000 deployment.

The primary goals of this guide are to help you:

- Determine the current state of your network, where you want it to be, and how you can get there by using Windows 2000.
- Determine what you need to consider at all levels of planning, from your business goals to deploying Windows 2000 in stages to lab testing.

- Create planning documents that will pave the way to a smooth rollout of your new network infrastructure.
- Get started installing Windows 2000 to take advantage of many features.

Guide Features

The structure of this guide is designed to help organizations with varying needs easily find and focus on the content that is most relevant to their deployment goals.

Guide Structure

This guide is structured so that you can approach the content in a variety of ways. You can proceed through the chapters in a linear fashion, beginning in Part 1 with a high-level overview of all deployment planning issues and processes. Then you can go on to the next phase, presented in Part 2, to learn about preparing your current network infrastructure to make the transition to Windows 2000 as smooth as possible. You can then proceed to either Active Directory™ planning, or go to Part 4, “Windows 2000 Upgrade and Installation,” and learn step-by-step procedures for server installation. Or, you might go directly to Part 6, if client deployment is of initial interest to you. At the beginning of each part you will find an overview of the content.

Chapter Structure

You can gain the most from the chapters by reading them from beginning to end, and focusing on the chapter elements described as follows.

Chapter Goals

At the beginning of each chapter you will see “Chapter Goals.” These goals identify the planning documents the chapter help you to create. The chapters present recommendations and guidelines for gathering the information you need to create these planning documents.

Flowcharts

The first part of each chapter also presents a task flowchart. These are the recommended primary tasks you should perform to create a plan or plans for a particular phase of your deployment, such as your plan for deploying the Active Directory directory service, or building a test lab. The content of the chapter is presented in the order of the tasks in the flowchart.

Critical Decision Points

At some stages of your deployment planning, you will make critical decisions that will have significant consequences related to costs or time or both. Decisions made at these points can affect not only your Windows 2000 deployment but also future productivity for your organization and subsequently profitability. These decision points that could affect your “bottom line” are called out in various chapters.

Planning Tasks Lists

Each chapter ends with a table listing the tasks described in the chapter. You can use this as checklist to be sure you have addressed all the important issues.

Planning Worksheets

Many of the chapters also direct you to “Sample Planning Worksheets” in this book. You can use these to help you develop your planning documents, or you can use them as starting points to create your own forms. You will need some formalized way to gather and collate information for planning purposes.

Document Conventions

The following style conventions and terminology are used throughout this guide.










Element	Meaning
bold font	Characters that you type exactly as shown, including commands and switches. User interface elements are also bold.
<i>Italic font</i>	Variables for which you supply a specific value. For example, <i>Filename.ext</i> could refer to any valid file name for the case in question.
Monospace font	Code samples.
%SystemRoot%	The folder in which Windows 2000 is installed.

Reader Alert	Meaning
Tip	Alerts you to supplementary information that is not essential to the completion of the task at hand.
Note	Alerts you to supplementary information.
Important	Alerts you to supplementary information that is essential to the completion of a task.
Caution	Alerts you to possible data loss, breaches of security, or other more serious problems.
Warning	Alerts you that failure to take or avoid a specific action might result in physical harm to you or to the hardware.
Critical Decision Point	Alerts you to a decision that is difficult to reverse.

Artwork Symbols

Table I.1 contains the artwork symbols used in this volume. You can use it as a resource as you study the diagrams in this guide.


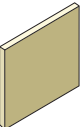




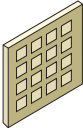




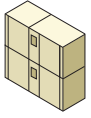






Table I.1 Artwork Symbols

Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
	<i>Access token.</i> An object that contains user information and is used for security purposes.		<i>Automated Library.</i> Tape/disk libraries that contain a collection of media and one or more drives.		<i>Client.</i> A computer that accesses shared network resources provided by another computer.
	<i>Cluster.</i> A group of independent computers that works together as a single system.		<i>Database.</i> Any collection of data organized for storage and access by computers.		<i>Document.</i> Any self-contained piece of work created with an application program and saved on a disk.
	<i>Domain.</i> In Windows 2000, a collection of computers defined by the administrator that share a common directory database.		<i>E-mail.</i> The exchange of text messages and computer files over a communications network.		<i>Failure.</i> The inability of a computer system or related device to fail gracefully over a period of time.

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- Deleted: A networked set of computers that share a Security Accounts Manager (SAM) database and that can be administered as a group.

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Table I.1 Artwork Symbols (continued)

Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
	<i>File Folder.</i> A directory or subdirectory.		<i>Firewall.</i> A <u>piece of a security system used to prevent unauthorized access to a network.</u>		<i>Generic Server.</i> A computer running administrative software.
	<i>Hard Disk.</i> A device used for storing data magnetically.		<i>Host.</i> The main computer in a system of computers or terminals connected by communications links.		<i>Host.</i> The main computer in a system of computers or terminals connected by communications links.
	<i>I/O Filter.</i> A series of definitions that indicate to a router the type of traffic allowed on each interface.		<i>Internet.</i> Refers to the worldwide collection of networks that communicate with each other.		<i>Laptop or Portable Computer.</i> A small, portable personal computer.
	<i>Macintosh Client.</i> A networked personal computer manufactured by Apple Computer Corporation.		<i>Mainframe Computer.</i> A high-level computer designed for the most intensive computational tasks.		<i>Mainframe Computer.</i> A high-level computer designed for the most intensive computational tasks.
	<i>Mixed mode domain.</i> <u>A mode in which Windows 2000 and Windows NT domain controllers coexist in a domain.</u>		<i>Modem.</i> A communications device that enables a computer to transmit information over a standard telephone line.		<i>Modem Bank.</i> A collection of modems connected to a single server.
	<i>Network Adapter.</i> An expansion card or other device for connecting a computer to a local area network.		<i>Organizational unit.</i> A structure within a domain.		<i>Organizational unit.</i> A logical container holding users, groups, computers, and other organizational units.

Deleted: system or combination of systems that enforces a boundary between two or more networks

Deleted: A networked set of computers running more than one operating system.

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Table I.1 Artwork Symbols (continued)

Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
	<i>Packets.</i> A network transmission unit of fixed maximum size.		<i>Printer.</i> A print device that is directly connected to your network.		<i>Remote Access connection.</i> A dial-up connection between servers, domain controllers, and sites.
" . "	<i>Root.</i> The highest or uppermost level in a hierarchically organized set of information.		<i>Router.</i> An intermediary device that directs and optimizes network traffic.		<i>Security Key.</i> A security descriptor that contains the local security policy, such as specific user rights.
	<i>Server Farm.</i> A group of servers that provides services to the network.		<i>Site.</i> One or more well-connected TCP/IP subnets.		<i>Steelhead router.</i> A computer acting as an intermediary device on a communications network.
	<i>Switch or Gateway.</i> A device connecting two networks that is capable of passing or blocking packets.		<i>Tape or Tape Backup.</i> A tape cartridge format used for data backups.		<i>Tape Drive.</i> A device for reading and writing tapes.
	<i>Terminal.</i> A device consisting of a video adapter, a monitor, and a keyboard that does little processing on its own and is connected to a computer via a communications link.		<i>Tunnel.</i> The logical path by which the encapsulated packets travel through the transit internetwork.		<i>Windows NT domain.</i> A networked set of computers that runs Windows NT 4.0, that shares a SAM database, and that can be administered as a group.
	<i>Windows 2000 Server.</i> A server that provides centralized management on the network.		<i>Uninterruptible power supply.</i> A device between a power source and a computer that ensures electrical flow is not interrupted.		

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 Deleted: on a communications network that expedites message delivery.

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Resource Kit Compact Disc

The *Windows 2000 Server Resource Kit* companion CD includes a wide variety of tools and resources to help you work more efficiently with Windows 2000.

Note The tools on the CD are designed and tested for the U.S. version of Windows 2000. Use of these programs on other versions of Windows 2000 or on versions of Microsoft® Windows NT® can cause unpredictable results.

The *Resource Kit* companion CD contains the following:

Windows 2000 Server Resource Kit Online Books An HTML Help version of the print books. Use these books to find the same detailed information about Windows 2000 as is found in the print versions. Search across all of the books to find the most pertinent information to complete the task at hand.

Windows 2000 Server Resource Kit Tools Help Over 200 software tools, tools documentation, and other resources that harness the power of Windows 2000. Use these tools to manage Active Directory™, administer security features, work with the registry, automate recurring jobs, and many other important tasks. Use Tools Help documentation to discover and learn how to use these administrative tools.

Windows 2000 Resource Kit References A set of HTML Help references:

- **Error and Event**

Messages Help contains most of the error and event messages generated by Windows 2000. With each message comes a detailed explanation and a suggested user action.

- **Technical Reference to the Registry** provides detailed descriptions of Windows 2000 registry content, such as the subtrees, keys, subkeys, and entries that advanced users want to know about, including many entries that cannot be changed by using Windows 2000 tools or programming interfaces.
- **Performance Counter Reference** describes all performance objects and counters provided for use with tools in the Performance snap-in of Windows 2000. Use this reference to learn how monitoring counter values can assist you in diagnosing problems or detecting bottlenecks in your system.
- **Group Policy Reference** provides detailed descriptions of the Group Policy settings in Windows 2000. These descriptions explain the effect of enabling, disabling, or not configuring each policy, as well as explanations of how related policies interact.

Resource Kit Support Policy

The software supplied in the *Windows 2000 Server Resource Kit* is not supported. Microsoft does not guarantee the performance of the *Windows 2000 Server Resource Kit* tools, response times for answering questions, or bug fixes to the tools. However, we do provide a way for customers who purchase the *Windows 2000 Server Resource Kit* to report bugs and receive possible fixes for their issues. You can do this by sending e-mail to rkinput@microsoft.com. This e-mail address is only for *Windows 2000 Server Resource Kit* related issues. For issues relating to the Windows 2000 operating system, please refer to the support information included with your product.