

Getting Started Using the DOS/Windows™ Client

Version 2 Release 3



IBM Configuration Management Version Control

SC09-3000-00

Getting Started Using the DOS/Windows™ Client

Version 2 Release 3

Note

Before using this document, read the general information under "Notices" on page v.

First Edition (May 1994)

This edition applies to the DOS/Windows client workstation feature for Version 2 Release 3 of the licensed program IBM Configuration Management Version Control/6000, program number 5765-207; IBM Configuration Management Version Control for Sun systems, program number 5622-063; IBM Configuration Management Version Control for HP systems, program number 5765-202; IBM Configuration Management Version Control for Solaris systems, program number 5765-397; and to all subsequent releases and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

Order publications by phone or fax. The IBM Software Manufacturing Company takes publication orders between 8:30 a.m. and 7:00 p.m. eastern standard time (EST). The phone number is (800) 879-2755. The fax number is (800) 284-4721.

You can also order publications through your IBM representative or the IBM branch office serving your locality. Publications are not stocked at the address below.

A form for comments appears at the back of this publication. If the form has been removed, address your comments to:

IBM Corporation
Department T45
PO BOX 60000
CARY NC 27511-8519
USA

You can fax comments to (919) 469-7718.

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© **Copyright International Business Machines Corporation 1994. All rights reserved.**

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

Contents

Notices	v
Trademarks	v
About This Book	vii
Who Should Read This Book	vii
What You Should Know	vii
How This Book Is Organized	vii
Highlighting Conventions	viii
CMVC Terminology	viii
Related Publications	viii
Chapter 1. CMVC Overview	1
Graphical User Interface	1
User and Administrator Roles	2
Chapter 2. Hardware and Software Requirements	3
Hardware Requirements	3
Software Requirements	3
Chapter 3. Installing the DOS/Windows Client	5
Preparing to Install	5
Using the Installation Program	6
Chapter 4. Using the DOS/Windows Client Interfaces	9
Starting the Graphical User Interface	9
Stopping the Graphical User Interface	10
Using the Settings Notebook	10
Customizing the Task List	12
Using the Command Line in the Graphical User Interface	13
Online Help Information	15
Authority Requirements	15
Chapter 5. Problem Determination	17
Recovering from Other Error Messages	17
Glossary	19
Index	23

Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of the intellectual property rights of IBM may be used instead of the IBM product, program, or service. The evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the responsibility of the user.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the IBM Director of Licensing, IBM Corporation, 208 Harbor Drive, Stamford, CT, USA 06904-2501.

IBM may change this publication, the product described herein, or both.

Trademarks

The following terms, denoted by an asterisk (*) on their first occurrence in this publication, are trademarks of the IBM Corporation in the United States or other countries:

AIX
IBM

The following terms, denoted by a double asterisk (**) on their first occurrence in this publication, are trademarks of other companies:

Hewlett-Packard	Hewlett-Packard Company
HP	Hewlett-Packard Company
Intel	Intel Corporation
Microsoft	Microsoft Corporation
Solaris	Sun Microsystems, Inc.
Sun	Sun Microsystems, Inc.
Windows	Microsoft Corporation

About This Book

This book provides support for the IBM* Configuration Management Version Control (CMVC) Version 2.3 client for Microsoft** Windows** under the Disk Operating System (DOS) workstation environment. Use this DOS/Windows client with Version 2.3 of the IBM Configuration Management Version Control/6000, IBM Configuration Management Version Control for Sun** systems, IBM Configuration Management Version Control for HP** systems, and IBM Configuration Management Version Control for Solaris** systems licensed programs.

Read this book to plan for the installation, configuration, and use of the DOS/Windows client within your development environment.

Who Should Read This Book

You should read this book if you perform any of the following tasks:

- Software development and verification
- Hardware configuration planning
- CMVC client installation

This book describes all administrative tasks required to install and configure the DOS/Windows client. It gets you started using the *graphical user interface* and briefly discusses using commands. For a detailed description of how to use the graphical user interface, refer to the online help information. For more information about using commands, refer to the *CMVC Commands Reference*.

What You Should Know

Read the *CMVC Concepts* book to learn about the basic CMVC concepts. You should be familiar with the DOS operating system and Windows environment.

How This Book Is Organized

This book describes the steps that you take to install, configure, and use the DOS/Windows client.

The information in this book is organized in the following chapters:

- Chapter 1, “CMVC Overview” introduces Configuration Management Version Control and briefly describes the network and system configurations, the user interfaces, and the three main user roles within the CMVC environment.
- Chapter 2, “Hardware and Software Requirements” summarizes the hardware and software required to run the DOS/Windows client.
- Chapter 3, “Installing the DOS/Windows Client” describes how to install the DOS/Windows client on your workstation.
- Chapter 4, “Using the DOS/Windows Client Interfaces” describes how to start and stop the DOS/Windows client user interface, describes how to set your default values, and customize the task list. Commands are also discussed briefly, as is the *authority* that is required to perform CMVC actions.

- Chapter 5, “Problem Determination” details the error messages that can appear when you first use the DOS/Windows client. This chapter also describes where to find additional information if you experience a problem that is related to your CMVC *family* or *database*.

Highlighting Conventions

The following highlighting conventions are used in this book:

Bold	Menu items, field names, push buttons, are in bold .
<i>Italic</i>	<i>Italics</i> are used for emphasis, for titles of books, and to note the first occurrence in text of terms that are in the glossary.
Monotype	Examples of specific data values, examples of text and messages that you might see displayed, and information that you should type are in monotype.
UPPERCASE	DOS commands are presented in uppercase. These commands are not case sensitive. You can type these commands in UPPERCASE, lowercase, or Mixed Case.

CMVC Terminology

In this book, *CMVC* indicates both the client and server products. *DOS/Windows client* indicates the CMVC client for the DOS/Windows workstation environment.

Related Publications

You might want to refer to the following CMVC books that contain additional information about using the product. Refer to the *CMVC Server Administration and Installation* book for a complete listing of the CMVC library.

- *CMVC Concepts*, SC09-1633, provides the basis for your understanding of CMVC. It describes in detail the concepts and processes involved in using CMVC.
- *IBM CMVC Server Administration and Installation*, SC09-1631, contains detailed information for planning, installing, customizing, operating, and maintaining the CMVC server.
- *IBM CMVC User's Reference*, SC09-1597, contains the reference lists, tables, and *state* diagrams for CMVC.
- *IBM CMVC Commands Reference*, SC09-1635, describes all CMVC commands, their syntax and use, as implemented in the command line interface.

Chapter 1. CMVC Overview

The CMVC software consists of two products: a CMVC client and a CMVC server. Designed for use in a networked environment, the CMVC products are based on a client/server network model as shown in Figure 1.

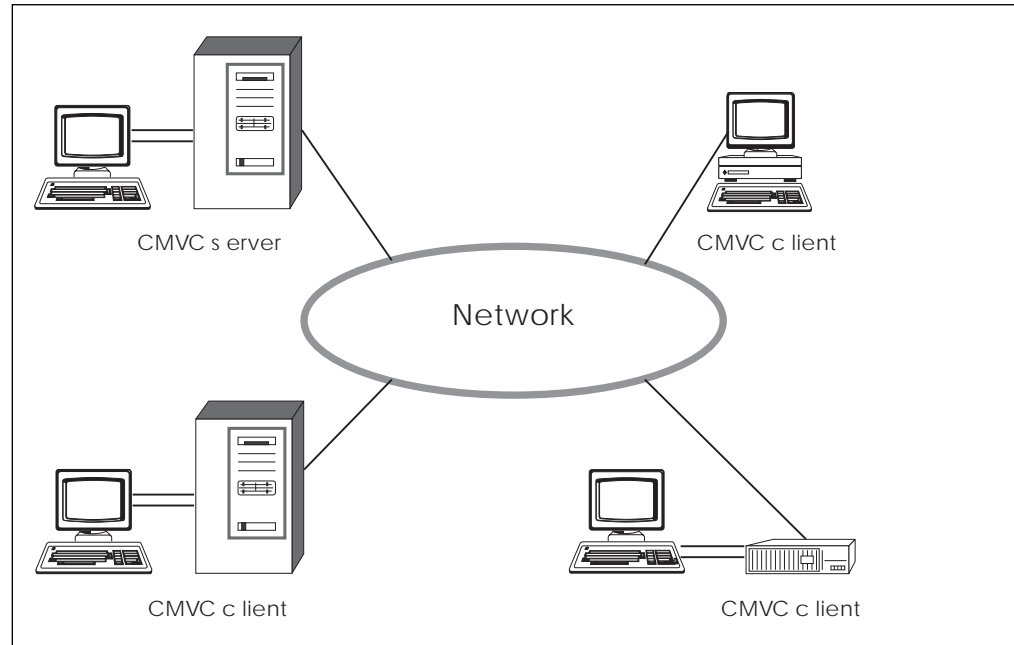


Figure 1. The CMVC Client/Server Network Model

This chapter introduces the Configuration Management Version Control (CMVC) product, and briefly describes the system configuration, the user interface, and the three primary user roles within the application environment.

A CMVC client is a workstation that uses the CMVC client software to access the information and *files* stored on the server. The CMVC server software controls all data in the application environment. Files are stored in a file system and a *version control* system manages the files. All other development data is stored in a relational database, also located on the server. This client/server architecture enables users to access files and data without having to know the physical location of network resources.

Graphical User Interface

The DOS/Windows client supports a graphical user interface that you use to access any CMVC window and to perform any CMVC action. For detailed information about how to use the CMVC interface, refer to the online help information.

You can issue CMVC commands from the graphical user interface. For more information about using commands, refer to the *CMVC Commands Reference* and "Using the Command Line in the Graphical User Interface" on page 13.

User and Administrator Roles

The 3 main tasks in the CMVC environment include:

- End use
- Family administration
- System administration

The following roles are defined in the CMVC environment:

End User

The *end user* uses the DOS/Windows client in one or more families to develop and verify software applications. For more information about the end user's role in the application environment, refer to the *CMVC Concepts* manual.

Family Administrator

The *family administrator* is responsible for:

- Planning and configuring one or more CMVC families
- Managing user access to one or more CMVC families
- Maintaining one or more CMVC families

For more information about CMVC families and the family administrator's role in the application environment, refer to the *CMVC Server Administration and Installation* manual.

System Administrator

The *system administrator* is responsible for:

- Installing, maintaining, and backing up the CMVC server
- Planning, maintaining, and configuring all client and server hardware
- Installing, maintaining, and backing up the relational database used by CMVC

For more information about the system administrator's role in the application environment, refer to the *CMVC Server Administration and Installation* manual.

Chapter 2. Hardware and Software Requirements

This chapter lists the hardware and software requirements for the DOS/Windows client. For a list of hardware and software requirements for the CMVC server, refer to the books supplied with the server software.

Hardware Requirements

The hardware requirements consist of:

- Any personal computer with Intel** 80286 and above (80x86) with:
 - 1 megabyte of available memory for DOS, Windows 3.1, and the DOS/Windows client
 - 2 megabytes of available memory for IBM TCP/IP for DOS
 - A fixed hard disk with 3 megabytes of space for the DOS/Windows client code
 - A 3.5 inch diskette drive
- Any graphics display (color or monochrome) with a minimum resolution of VGA that is supported by the above personal computer for Windows.
- Any Token-Ring or Ethernet LAN adapter card that is compatible with the above personal computer and supports TCP/IP for DOS
- Keyboard
- Mouse (optional)
- Printer (optional)

Use a personal computer mouse to take full advantage of the graphical user interface provided in the DOS/Windows client. If you do not have a mouse, you can use standard keyboard functions.

The performance of the DOS/Windows client might be affected by the total system memory, the amount of fixed-disk storage space available, and the clock speed of the CPU.

Software Requirements

The software requirements consist of:

- Microsoft Windows 3.1 or later
- DOS 3.3 or later
- IBM *Transmission Control Protocol/Internet Protocol (TCP/IP)* for DOS Version 2.1.1 or later. For information about updating TCP/IP files, refer to "Preparing to Install" on page 5.

Note: The DOS/Windows client supports the *File Allocation Table (FAT)* format. Any files in the CMVC server that have file names longer than 8 characters and extensions longer than 3 characters are not supported.

Chapter 3. Installing the DOS/Windows Client

This chapter explains what you do before installing the DOS/Windows client, and provides step-by-step instructions for installing DOS/Windows client on a workstation.

Preparing to Install

Before you install the DOS/Windows client, you must install TCP/IP for DOS. Refer to the TCP/IP for DOS *Installation and Maintenance* manual, SC31-6154, for information about installing TCP/IP.

After TCP/IP is installed, you must update several TCP/IP files so that the client can communicate with the specified families in the CMVC server. If available, you can use the configuration tool provided by TCP/IP to update the files.

You must make the following changes to the TCP/IP files. Your family administrator can provide you with the specific information you need to add.

- If your TCP/IP name server does not have an alias for the CMVC server that is the same as your CMVC family name, add the following to the HOSTS file:
 - IP address
 - Server name
 - Alias name of the CMVC family server

For example:

```
9.12.345.67   cmvcsev.cary.ibm.com   cmvcfam1
```

- In the SERVICES file, include the family name and port address of the CMVC server. For example:

```
# CMVC families
cmvcfam1   7746/tcp   # port address for the CMVC family
```

Do the following to verify that you can connect to your CMVC family:

- At the DOS prompt, type `ping cmvcfam1`, where `cmvcfam1` is the family name
- Press `Ctrl+C` to end the PING command

If you received a message that is similar to the following, you can successfully connect to your CMVC family:

```
PING cmvcfam1 (ip.address): 56 data bytes
64 bytes from ip.address: icmp_seg:0 ttl=59 time=0 ms
```

After you press `Ctrl+C`, you receive a message similar to the following:

```
--- cmvcfam1 ping statistics ---
2 packets transmitted, 2 packets received, 0% packet loss
round-trip min/avg/max = 0/0/0 ms
```

The key information in the previous message is 0% packet loss. If you do not receive the above messages, verify that the data you entered in the HOSTS and SERVICES files is correct, and try the PING command again. If you still do not get the messages, contact your family administrator to solve the problem.

Do not install the DOS/Windows client until the PING command successfully completes.

Using the Installation Program

CMVC provides an installation program that does the following:

- Installs DOS/Windows client on your workstation from a diskette drive
- Optionally updates your AUTOEXEC.BAT file
- Builds a CMVC DOS/Windows group from which you can start the product

The DOS/Windows client is shipped on two licensed program diskettes. Before you install the DOS/Windows client, make a backup copy of these diskettes in case something happens to your original diskettes.

The time required for installing this program varies depending on your workstation, but installation takes approximately 10 minutes.

Step 1: Starting the Installation

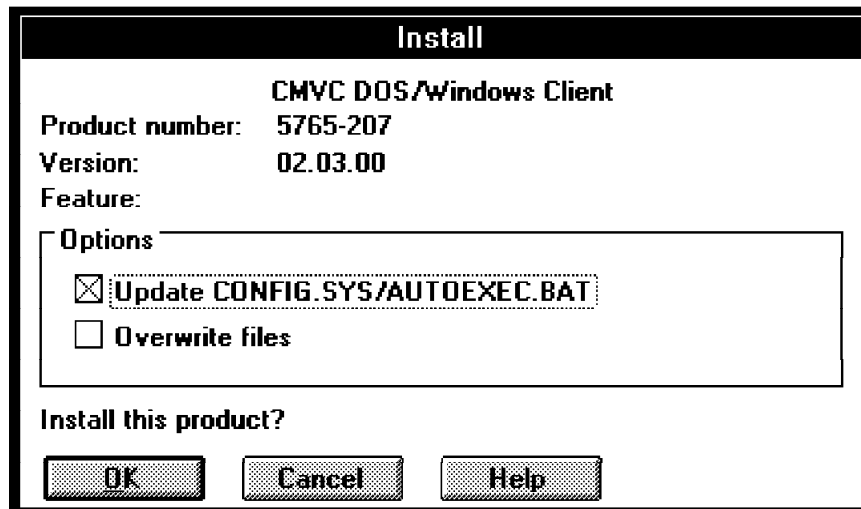
To use the installation program, do the following:

1. Insert the first licensed program diskette into a drive.
2. If the Windows environment is running on your workstation, do the following:
 - Select **Run** from the **File** pull-down menu on the Program Manager window.
 - Type A:\INSTALL in the **Command Line** field, where A is the letter of the drive.
 - Select the **OK** push button, or press Enter.

If the Windows environment is *not* running on your workstation, type WIN A:\INSTALL at the DOS prompt and press Enter, where A is the letter of the drive.

The Installation of CMVC DOS/Windows Client window appears, followed by the Product Information window.

3. Select the **Continue** push button to continue installing the product. The Install window, as shown below, appears.



Step 2: Adding Variables to the AUTOEXEC.BAT File

1. From the Install window, you can select whether to have your AUTOEXEC.BAT file updated and any existing installation files overwritten during the installation. The default is to have the AUTOEXEC.BAT file updated.

Note: CMVC does not require updates to your CONFIG.SYS file.

If you do not want CMVC to update this file, deselect the check box. You must then manually update the file before using CMVC. The installation program creates a file named AUTOEXEC.ADD that contains the necessary changes.

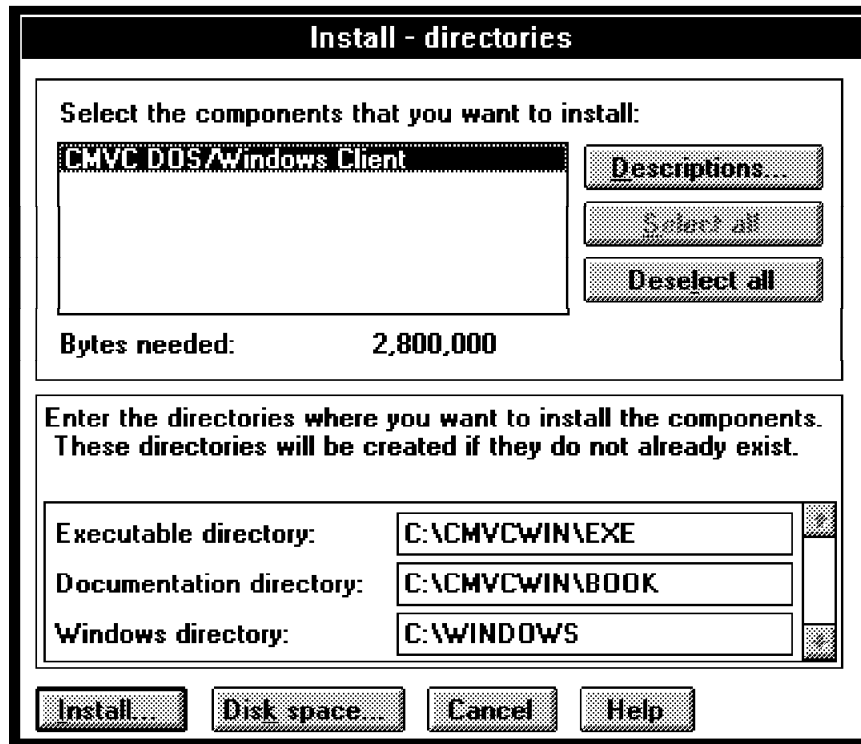
If you accept the default, CMVC adds the following to your AUTOEXEC.BAT file:

- The name of the directory that contains the executable client files is placed at the end of the PATH statement. This enables you to start CMVC from the DOS prompt by entering:

```
WIN CMVCWIN
```

- The HELP and BOOKSHELF variables, which are needed to access the help information.

2. Select the **OK** push button or press Enter. The Install - directories window, as shown below, appears.



Step 3: Selecting the Components for Installation

Use the Install - directories window to select which components you want to install and where you want them installed.

1. Select the component that you are going to install: CMVC DOS/Windows Client.

2. To verify that the default drive has sufficient space, or to see what other drives are available, select the **Disk space** push button.

If you want to use a different drive, do the following from the Disk space window:

- Select the drive that you want to use.
 - Select the check box.
 - Select the **OK** push button or press Enter. The Install window appears.
3. If you want to change the default directory for any of the components, type over the current directory name in the Install window. For example, if Windows is not installed in C:\WINDOWS, type the correct directory in the **Windows directory** field.
 4. Select the **Install** push button from the Install - directories window to start the installation. The Install - progress window shows you the progress of the installation.

Step 4: Completing the Installation

1. When you are prompted, insert Disk 2. After you insert Disk 2, select the **Continue** push button from the Insert disk window or press Enter.

When the installation is complete, the Installation and Maintenance window appears with an indication that CMVC DOS/Windows successfully installed.

Select the **OK** push button or press Enter to return to the Installation of CMVC DOS/Windows Client window.

2. From the Install window, select the **Exit** push button or press F3.
3. Remove the diskette from the drive.

Verify that the installation program has created a group called **CMVC DOS/Windows Group**, which has 2 icons: CMVC DOS/Windows and CMVC Commands Reference.

4. If you did not have the installation program update your AUTOEXEC.BAT file, you must do that now. The installation program created a file named AUTOEXEC.ADD that contains the necessary changes.
5. Exit the Windows Program Manager. At the DOS prompt, type AUTOEXEC to accept the changes made to your AUTOEXEC.BAT file.

The installation program creates a file named CMVCWIN.INI in the directory where Windows is installed (C:\WINDOWS is the default directory). This file contains initial defaults that enable you to access the graphical user interface. Use the Settings window in the graphical user interface to specify any defaults that are unique to your development environment. See "Environment Page" on page 10 for more information.

Chapter 4. Using the DOS/Windows Client Interfaces

This chapter helps you to begin using the DOS/Windows client. This chapter describes the following:

- Starting and stopping the graphical user interface
- Using the Settings notebook
- Customizing the task list
- Using CMVC commands from within the graphical user interface
- Understanding *authority* requirements for performing CMVC actions
- Using the online help that is provided with CMVC

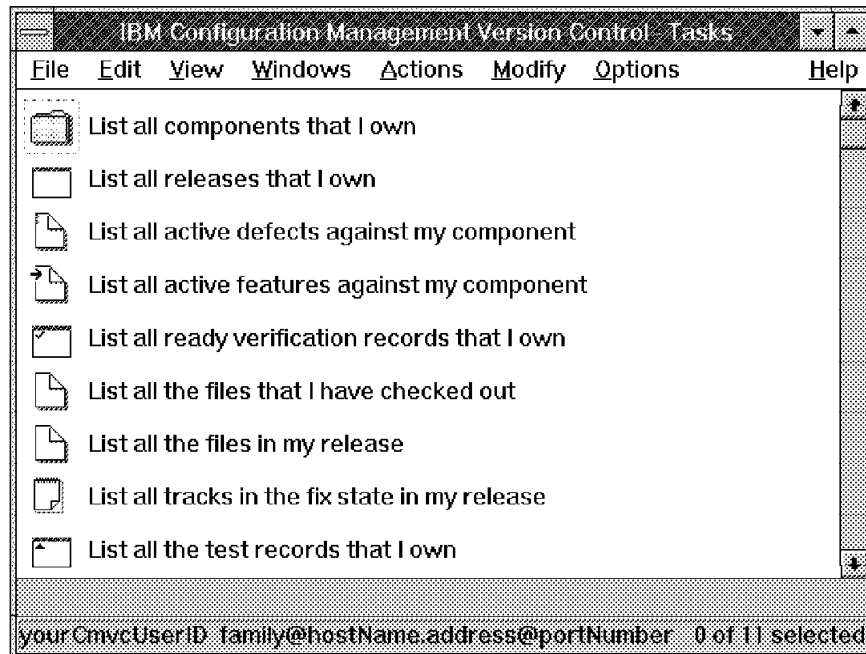
Before you can use CMVC, someone in your organization with *superuser privilege*, such as your family administrator, must create for you a unique user ID and a *host list* for the workstation where you installed the client.

Starting the Graphical User Interface

You can start the CMVC graphical user interface in one of the following ways:

- Type WIN CMVCWIN at a DOS prompt and press Enter.
- Select the CMVC group icon in the Windows Program Manager. A CMVC icon view folder appears with an icon for the CMVC DOS/Windows program. Select the CMVC DOS/Windows icon.

When you start CMVC, the Configuration Management Version Control - Tasks window (hereafter referred to as the Tasks window), as shown below, appears.



Stopping the Graphical User Interface

To stop the DOS/Windows client graphical user interface, do one of the following:

- Select **Close** from the System menu in the Tasks window.
- Select **Exit** from the **File** pull-down menu of a CMVC window.
- Select **Exit** from the **File** pull-down menu in the Windows Program Manager.

Using the Settings Notebook

Use the Settings notebook to set the default values for your working environment. To set the defaults, select **Settings** from the **Options** pull-down menu.

The Settings notebook has three pages of settings: Environment, Setup, and GUI. The following describes the settings that are on each page.

Note: After you set these default values, CMVC updates the settings in the CMVCWIN.INI file (C:\WINDOWS is the default directory for Windows). You can change the settings by editing the file directly or by using the Settings notebook. You can identify these variables because they are prefixed by CMVC_, except for NLS Path.

Environment Page

Family

The CMVC family that you want to work with. The syntax for this field is *family@server.address@portNumber*. This information is required.

You can specify the shortened form of the family name, *family*, if the name of the host is defined in the name server (ask your family administrator) and the port is defined in the TCP/IP SERVICES file.

Contact your CMVC family administrator if you do not know the information to type in this field.

Release

The release that you will work with most often. This applies to commands entered on the command line of the Tasks window or Commands window. In addition, this release name appears in the **Release** field when certain windows are displayed.

Component

The component that you will work with most often. This applies to commands entered on the command line of the Tasks window or Commands window. In addition, this component name appears in the **Component** field when certain windows are displayed.

Become

The user ID you want to issue CMVC commands from, if the user ID differs from your login ID. You assume the access authority of the User ID you specify. If you do not specify this variable, CMVC uses the value you specify for the user ID variable.

Top

The leading portion of the path name that is a subset of the current working directory on your client machine. To better understand how to use this variable, refer to the examples that are in the File chapter of the *CMVC Commands Reference* manual.

Directory

The name of the drive and directory that you will use most often when creating, copying, and updating files. This applies to commands entered on the command line of the Tasks window or Commands window. In addition, this directory name appears in the **Directory** field when certain windows are displayed.

Setup Page

User ID

The user identifier (login ID) that was assigned to you by your family administrator. This information is required.

NLS Path

The path that contains your EXE files, followed by a required parameter (%N). For example, if your path is C:\CMVCWIN\EXE, you type C:\CMVCWIN\EXE\%N in this field. This information is required.

Log File

You can specify the name of the file where you want CMVC to store commands that you issue. You might want to prune this file when it becomes excessively large. If you do not specify a log file name, CMVC does not store the commands you issue.

Case

Indicate whether you want CMVC to convert CMVC arguments to either uppercase or lowercase, or ignore the case altogether. Valid entries are upper, lower, and ignore (the default is ignore).

GUI Page

Default view

Specify how you want CMVC to display the lists in the windows. Choose one of the following:

Text Displays only list item descriptions.

Icon text Displays both list item descriptions and their corresponding icons.

Flowed icon/text
 Displays both list item descriptions and their corresponding icons in columns across the window.

Details Displays detailed information about each list item.

Command

Select one, both, or neither of the following choices:

- Select **Verbose** to receive messages that indicate successful completion of CMVC actions.
- Select **Auto refresh** to have the current window list automatically refreshed after a successful action occurs.

Font height

Specify the size of the text that is displayed in the Commands and Information windows, as well as the **Remarks** field. The default value is 10.

Customizing the Task List

Use the Tasks window to list the tasks that you perform frequently. When you select a task, CMVC queries the server for information related to your project and then displays that information.

IBM ships sample tasks that initially appear in your task list. You can modify or delete the tasks, change the order of the tasks, or add new tasks. The following tasks are shipped with CMVC:

Select this task name...	To display this window...	Using this query.
List all components that I own	Component	userLogin in ('yourCmvcUserID')
List all releases that I own	Release	userLogin in ('yourCmvcUserID')
List all active defects against my components	Defect	compName in ('yourComponent') and state not in ('closed','canceled') order by compName, name
List all active features against my components	Feature	compName in ('yourComponent') and state not in ('closed','canceled') order by compName, name
List all ready verification records that I own	Verify	userLogin in ('yourCmvcUserID') and state in ('ready')
List all the files that I have checked out	File	userLogin in ('yourCmvcUserID') order by nuPathName
List all the files in my release	File	releaseName in ('yourRelease') order by nuPathName
List all tracks in the fix state in my release	Track	releaseName in ('yourRelease') and state in ('fix') order by defectName
List all the test records that I own	Test	releaseName in ('yourRelease') and userLogin in ('yourCmvcUserID')
List all the levels in my release	Level	releaseName in ('yourRelease') order by addDate
View a report with information on all users	Commands	report -view users

Note: The file CMVCWIN.INI (C:\WINDOWS is the default directory for Windows) contains the default queries. You can edit the file to change the generic values to values that are unique to your development environment. For example, you can change userLogin in ('yourCMVCUserID') to reflect an actual user ID: userLogin in ('korn'). Only change the text within the single quotes.

Defining Tasks from the Tasks Window

To define a task in the Tasks window:

1. Select **Edit task list** from the **File** pull-down. The Edit Task List window appears.
2. Provide the following information:

Description

Type the words that indicate to you what this task does. These are the words that appear in the list on the Tasks window.

Task

Type a query or the name of a CMVC command. CMVC issues the *query* or command when you select the task.

3. Select one of the following task types:

Query

If your task issues a query.

CMVC command

If your task issues a CMVC command.

4. If you select **Query**, select the name of the window to which the task applies. Use the scroll bar to view the list of windows in the **Window** field.

If you select **CMVC command**, the **Window** field is not available. CMVC displays the information in the Commands window.

5. Select the **Add/Change** push button. If you do not select where you want the task placed in the list, the new task is inserted at the top of the task list.

Defining Tasks from the Open List Windows

To define a task in any Open List window:

1. Select a type of window from the **Windows** pull-down menu. The corresponding Open List window appears.
2. Enter search criteria in one or more entry fields, using any SQL operators to refine the query. You can also select a previous query if one is listed, or type a valid query on the query line.
3. Select the **Apply** push button to perform the query and review the results. If you are satisfied with the results, proceed to the next step. Otherwise, repeat Step 2.
4. Select the **Add to task list** push button. The Edit Task List window appears with the query text displayed in the **Task** field, the window name highlighted, and the **Query** radio button selected.
5. Type the description of the task in the **Description** field. This description is displayed in the Tasks window each time you start CMVC.
6. Select the **Add/Change** push button. The task is added to the Tasks window. If you do not select where you want the task placed in the list, the new task is inserted at the top of the task list.

Using the Command Line in the Graphical User Interface

You can issue CMVC commands from the Tasks window or from the Commands window.

To see an online example of how to issue a CMVC command from the Tasks window, select **Getting Started** from the **Help** pull-down menu. Select the hypertext link **A Command Line** to see the example.

To display the Commands window, select **Commands** from the **Windows** pull-down. The Commands window appears, and you can type a CMVC command in the command line at the bottom of the window.

The following list of CMVC commands provides a brief description of each command. If an alias for the command is available, the alias is noted in parentheses.

Command	Purpose
access	Identifies explicit authority for user IDs using component <i>access lists</i> .
approval	Records approvers' opinions on <i>approval records</i> for proposed changes in a release.
approver	Specifies approvers of changes for a release using <i>approver lists</i> .
component (componen)	Creates and maintains a component hierarchy for project control and management.
coreq	Identifies tracks as <i>corequisite tracks</i> to ensure that the tracks are included in the same level.
defect	Monitors the reporting, evaluation, and resolution of problems.
environment (environ)	Specifies environments and testers for a release using <i>environment lists</i> .
feature	Monitors the suggestion, evaluation, and implementation of design changes and enhancements.
file	Places files in the CMVC environment and enables users to work with files.
fix	Monitors the status of file changes (fixes) made for a component using <i>fix records</i> .
host (hostcmd)	Identifies client access on the host list for a user ID.
level	Defines and works with a <i>level</i> of file changes within a release.
levelmember (levelmem)	Identifies tracks that must be included in, or deleted from a level.
notify	Identifies notification interest for user IDs using a component <i>notification list</i> .
release	Creates and maintains releases to organize project-related files.
report	Searches database tables for information on CMVC objects.
size	Records sizing information for <i>features</i> using <i>sizing records</i> before project work starts.
test	Records testers' opinions about test results using environment <i>test records</i> .
track	Creates and maintains tracks to monitor the progress of changes to resolve <i>defects</i> or to implement features in a release.
user	Creates user IDs and maintains information about the <i>owner</i> of a CMVC object.
verifycm (verify)	Shows the outcome of defects and features using <i>verification records</i> .

To use the command line effectively, you must be familiar with the actions that you can perform with CMVC commands. Refer to one of the following to become more familiar with the CMVC commands and how to use them:

- The *CMVC Commands Reference* manual
- The online version of the *Commands Reference*. To display this information, do one of the following:

- Select **CMVC commands** from the **Help** pull-down.
 - Select the CMVC Command Reference icon from the Program Manager in Windows.
 - Type WIN VIEW CMVCCMD from the DOS prompt.
- The log file where CMVC is storing the commands that you issue. This is the file that you specified in the **Log File** field on the Settings notebook.

Online Help Information

Online help information is available from the CMVC graphical user interface. Use the online help facility when you need more information about a topic or task.

To access online help information from the graphical user interface, do one of the following:

- Select **Help** from a CMVC menu bar.
- Select the **Help** push button.
- Press F1.

You can select the following help information from the **Help** pull-down menu:

General help	Information about the current window
Getting started	Overview of new or changed features
CMVC commands	Information about CMVC commands, command syntax, and some examples of how to use the commands
Keys help	Information about how to use the keyboard

Authority Requirements

Different authority requirements are attached to each of the actions in the DOS/Windows client. Four types of authority, including *base authority*, *implicit authority*, *explicit authority*, and *superuser privilege* control the types of actions that you can perform.

Base Authority

As soon as you have a valid CMVC user ID, you can perform the following unrestricted actions:

- Open defects and features
- Modify the information for your user ID
- Display information for any user ID
- Add notes to existing defects and features
- Create reports

Implicit Authority

CMVC automatically gives you authority to perform certain actions when you are the owner of an object. For example, if a defect is opened on a component you own, you have the authority to perform certain actions, such as accepting the defect or reassigning ownership of the defect. Similarly, if you own a component, a release, or a feature, you have authority related specifically to those objects.

Explicit Authority

When you need additional authority to perform certain actions, someone in your organization, such as your family administrator, can expressly give you the authority you need.

Superuser Privilege

If you are granted the CMVC *superuser privilege* by a family administrator or another superuser, you can perform any CMVC action in your family.

For more information about authority requirements, refer to the *CMVC Concepts* manual.

Chapter 5. Problem Determination

You might encounter error messages when you first use the DOS/Windows client. This chapter explains how to respond to certain error messages and shows you where to find additional information if you have a problem with your CMVC family or the CMVC database. Problems that you might encounter when you start the CMVC graphical user interface are listed below.

If you have this problem...	Do this.
<p>You receive one of the following error messages:</p> <ul style="list-style-type: none"> • 0010-247: The host name cannot be resolved. • 0010-250: A connection cannot be established. 	<p>Do one of the following to correct the problem:</p> <ul style="list-style-type: none"> • Correct the family name in the Settings notebook. To do this: <ul style="list-style-type: none"> – Select the Options pull-down menu. – Select Settings. – Select the Environment tab. – Type the correct name in the Family field. See you family administrator if you do not know this name. • Verify that the HOSTS and SERVICES files for TCP/IP are correctly specified. See "Preparing to Install" on page 5 for more information. • Verify that TCP/IP is installed and configured correctly. • Verify that the TCP/IP network is operational.
<p>You receive error message 0010-100: User was not found.</p>	<ul style="list-style-type: none"> • Select the Options pull-down menu. • Select Settings. • Select the Environment tab. • Type your user ID in the Become field if it differs from your login ID. • Select the Setup tab. • Type the user ID (login ID) that was assigned to you in the UserID field
<p>No tasks show in the Tasks window, or all the fields in the Settings notebook are blank.</p>	<p>Verify that the CMVCWIN.INI file is stored in the directory where Windows is installed. The default directory is C:\WINDOWS.</p>
<p>You select a task from the Tasks window, and a window appears. You expected a list of objects, but there are none.</p>	<p>Do one of the following to change the generic values (surrounded by single quotes) to actual values for your development environment. For example, you will want to change 'yourRelease' to the actual name of a release that you have access to.</p> <ul style="list-style-type: none"> • From the Tasks window, select Edit task list from the File pull-down menu. • Edit the CMVCWIN.INI file that is stored in the directory where Windows is installed. The default directory is C:\WINDOWS.

If you continue to have problems after you try the corrective measures listed above, contact your family administrator.

Recovering from Other Error Messages

For an explanation of CMVC family and database errors, see your system administrator, or refer to the *CMVC Server Administration and Installation* manual.

If the problems cannot be resolved after following the recommended recovery procedures, contact your IBM representative for additional support.

Glossary

This glossary contains definitions of data processing terms that might be unfamiliar to you. It includes terms and definitions from the *IBM Dictionary of Computing*, New York: McGraw-Hill, 1994.

A

access list. A set of objects that controls access to development data. Each object consists of a component, a user, and the authority that the user is granted or is restricted from in that component. See also *authority*, *granted authority*, and *restricted authority*.

action. A task performed by the CMVC server and requested by a CMVC client. A CMVC action is the same as issuing one CMVC command.

approver. A user who has the authority to accept, reject, or abstain changes within a specific release.

attribute. Information contained in a field that is accessible to the user. CMVC enables family administrators to customize defect, feature, user, and file tables by adding new attributes.

authority. The right to access development objects and perform CMVC commands. See also *access list*, *base authority*, *explicit authority*, *granted authority*, *implicit authority*, *restricted authority*, and *superuser privilege*.

B

base authority. The set of actions granted to a user when a user ID is created within a CMVC family. See also *authority*. Contrast with *implicit authority* and *explicit authority*.

C

client. A functional unit that receives shared services from a server. Contrast with *server*.

CMVC server. A workstation running the CMVC server software.

command. A request to perform an operation or run a program from the command line interface. In CMVC, a command consists of the command name, one action flag, and zero or more attribute flags.

command line. An area on the Tasks window or in the CMVC Commands window where a user can type CMVC commands.

common file. A file that is shared by two or more releases, and the same version of the file is the current version for those releases. See also *shared file*.

component. A CMVC object that organizes project data into structured groups, and controls configuration management properties. Component owners can control access to development data and configure notification about CMVC actions. Components exist in a parent-child hierarchy, with descendent components inheriting access and notification information from ancestor components. See also *access list* and *notification list*.

configuration management. The process of identifying, managing, and controlling software modules as they change over time.

corequisite tracks. Two or more tracks designated as corequisites by a user so that all tracks in the corequisite group must be included as members in the same level. If a track is added to a level, all tracks that have a corequisite relationship with that track must also be included in the same level before the level is committed. See also *prerequisite tracks*.

current working directory. (1) The directory that is the starting point for relative path names. (2) The directory in which you are working.

D

database. A organized collection of data that can be accessed and operated upon by a data processing system for a specific purpose.

default. A value that is used when an alternative is not specified by the user.

default query. A database search, defined for a specific CMVC window, that is issued each time that CMVC window is opened. See also *search*.

defect. A CMVC object used to formally report a problem. The user who opens a defect is the defect originator.

delete. If you delete a development object, such as, a file or a user ID, any reference to that object is removed from CMVC. Certain objects can be deleted only if certain criteria are met. Most objects that are deleted can be re-created.

E

end user. See *user*.

environment. A user-defined testing domain for a particular release. Also used as a defect field, in which case, it is the environment where the problem occurred.

explicit authority. The ability to perform an action against a CMVC object because you have been granted the authority to perform that action. Contrast with *implicit authority* and *base authority*.

F

family. A logical organization of related development data. A single CMVC server can support multiple families. The data in one family cannot be accessed from another family.

family administrator. A user who is responsible for all nonsystem-related tasks for one or more CMVC families, such as planning, configuring, and maintaining the CMVC environment and managing user access to those families.

FAT. See *file allocation table*.

feature. A CMVC object used to formally request and record information about a functional addition or enhancement. The user who opens a feature is the feature originator.

file. A collection of data that is stored by the CMVC server and retrieved by a path name. Any text or binary file used in a development project can be created as a CMVC file. Examples include source code, executable programs, documentation, and test cases. See *common file* and *shared file*.

file allocation table (FAT). The DOS- and OS/2-compatible file system that manages input, output, and storage of files on your system. File names can be up to 8 characters long, followed by a file extension that can be up to 3 characters.

G

graphical user interface (GUI). The OSF/Motif-based CMVC graphical user interface program.

H

host. A host node, host computer, or host system.

host list. A list associated with each CMVC user ID that indicates the client hosts that can access the CMVC server and act on behalf of the CMVC user. The CMVC server uses the list to authenticate the identity of a CMVC client upon receipt of a CMVC command. Each entry consists of a login, a CMVC user ID, and a host name.

host name. The identifier associated with the host computer.

I

implicit authority. The ability to perform an action on a CMVC object without being granted explicit authority. This authority is implicitly granted through inheritance or object ownership. Contrast with *base authority* and *explicit authority*.

L

level. A collection of tracks that represent a set of changed files within a release. Levels are only associated with releases whose processes include the track and level subprocesses.

login. User identifier.

M

megabyte. 1 048 576 bytes.

N

notification list. A CMVC object allowing component owners to configure notification. A list of user ID-interest group pairs attached to a component, designating users and the corresponding notification interest they are being granted for all objects managed by this component or any of its descendants.

O

owner. The user who is responsible for a CMVC object within a CMVC family, either because the user created the object or was assigned ownership of the object.

P

path name. The name of the file under CMVC control. A path name can be a set of directory names and a base name or just a base name. It must be unique within the release that groups the files.

prerequisite tracks. If a file is changed to resolve more than one defect or feature, the track referenced by the first change is a prerequisite of the track referenced by later changes. A track is a prerequisite to another track if:

- File changes are checked in, but not committed, for the first track.
- One or more of the same files are then checked out, changed, and checked in again for the second track.

process. A combination of CMVC subprocesses, configured by the family administrator, that controls the general movement of CMVC objects (defects, features, tracks, and levels) from state to state within a component or release. See also *subprocess* and *state*.

Q

query. A structured request for information from a database, for example, a search for all defects that are in the open state. See also *default query* and *search*.

R

release. A CMVC object defined by a user that groups all the files that must be built, tested, and distributed as a single entity.

restricted authority. The restriction of a user's ability to perform certain actions at a specific component. Authority can be restricted by the superuser, the component owner, or a user with AccessRestrict authority. See also *authority*.

S

search. To scan one or more data elements of a set in a database to find elements that have certain properties.

server. A workstation that performs a service for another workstation.

shared file. A file that is shared between two or more releases. See also *common file*.

state. Tracks, levels, features, and defects move through various states during their life cycles. The state of an object determines the actions that can be performed on it. See also *process* and *subprocess*.

subprocess. CMVC subprocesses govern the state changes for CMVC objects. The design, size, review (DSR) and verify subprocesses are configured for component processes. The track, approve, fix, level, and test subprocesses are configured for release processes. See also *process* and *state*.

superuser privilege. This privilege allows a user to perform any action available in the CMVC family. **Note:** Superuser privilege is internal to CMVC and not related to operating system superuser authority.

system administrator. A user who is responsible for all system-related tasks involving the CMVC server, such as installing, maintaining, and backing up the CMVC server and the relational database it uses.

T

task list. The list of tasks displayed in the CMVC-Tasks window. The user can customize this list to issue requests for information from the server. Tasks can be added, modified, or deleted from the lists.

TCP/IP. A set of communications protocols that support peer-to-peer connectivity functions for both local and wide area networks.

track. A CMVC object created to monitor the progress of changes made to files within a release to resolve a specific defect or to implement a specific feature.

Transmission Control Protocol/Internet Protocol. See *TCP/IP*.

U

user. A person with an active CMVC user ID and access to one or more CMVC families.

user ID. The identifier assigned by the system administrator to each CMVC user.

V

version control. The storage of multiple versions of a single file along with information about each version.

view. An alternative and temporary representation of data from one or more tables.

Index

A

- about this book vii
- access command 14
- approver command 14
- authority requirements 15
- AUTOEXEC.BAT
 - changes made to 7
 - manually updating 8

B

- base authority description 15
- become, setting default value 10

C

- case sensitivity, setting 11
- client
 - error messages 17
 - function 1
 - hardware requirements 3
 - software requirements 3
- client/server
 - architecture 1
 - network diagram 1
- CMVC
 - error messages 17
 - overview 1
 - products 1
- CMVCWIN.INI 8, 10
- command line, using 13
- commands
 - description of 14
 - storing issued commands 11
 - window, displaying of 13
- Commands Reference, displaying online 14
- component
 - command 14
 - setting default value 10
- configuration
 - client/server model 1
 - CMVC product 1
 - network 1
- Configuration Management Version Control
 - See CMVC
- corequisite command 14
- customizing the task list
 - from Open List windows 13
 - from the Tasks window 12
 - sample tasks 12

D

- default values, setting 10
- defect command 14
- directory, setting default value 11
- disk space, checking for 8
- DOS software requirement 3

E

- end user
 - See user
- environment command 14
- error messages 17
- Ethernet LAN adapter requirement 3
- explicit authority 15

F

- family administrator
 - creating user ID 9
 - role 2
- family, setting default value 10
- FAT requirement 3
- feature command 14
- file
 - command 14
 - storage 1
- file allocation table requirement 3
- files
 - AUTOEXEC.ADD 7
 - AUTOEXEC.BAT, changes to 7
 - CMVCWIN.INI 8, 10
 - updating HOSTS 5
 - updating SERVICES 5
- fix command 14

G

- graphical user interface
 - function 1
 - starting 9
 - stopping 10

H

- hardware requirements 3
- help
 - accessing 15
 - types of 15
- highlighting conventions viii
- host command 14

HOSTS file, updating 5

I

implicit authority 15
installation
 how to start 6
 instructions for 6
 preparing for 5

L

level command 14
levelmember command 14
log file, identifying 11

M

memory requirements 3

N

network, configuration of 1
notify command 14

O

online
 Commands Reference, displaying 14
 help, accessing 15
open list windows, defining tasks 13
overview of product 1

P

ping command 5
publications, related viii

R

refreshing lists automatically 11
release, setting default value 10
report command 14
requirements
 hardware 3
 software 3

S

server
 database 1
 function 1
SERVICES file, updating 5
settings notebook
 environment page 10
 GUI page 11
 setup page 11
 using 10

size command 14
software requirements 3
starting the user interface 9
state diagrams viii
stopping the user interface 10
superuser authority 16
system administrator role 2

T

task list
 customizing 12
 defining new tasks 12, 13
TCP/IP
 requirement 3
 updating files 5
test command 14
token-ring adapter requirement 3
top, setting default value 10
track command 14
Transmission Control Protocol/Internet Protocol
 See TCP/IP

U

user
 command 14
 role 2
user ID
 how to get 9
 identifying client access 14
 setting default value 11

V

verify command 14
view, setting default 11

Please Tell Us What You Think!

IBM Configuration Management Version Control
Getting Started Using the DOS/Windows™ Client
Version 2 Release 3

Publication No. SC09-3000-00

We hope you found this book useful and informative. If you like what we've done, please let us know; if not, please tell us why. We'll use your comments to make the book better.

Please use one of the methods listed below to send your comments to IBM. Whichever method you choose, make sure you send your name, address, and telephone number to receive a reply.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate, without obligation.

- To send comments by mail or fax, use the form titled "What Do You Think?" on the following page.

If you're mailing from a country other than the United States, you can give the form to the local IBM branch office or IBM representative for postage-paid handling.

To fax the form, use this number: (919) 469-7718.

- To send comments electronically, use one of the following network IDs:

IBM Mail Exchange USIB5DNQ at IBMMAIL
Internet KFRYE@CARVM3.VNET.IBM.COM

Thank you! Your comments help us make the information more useful for you.


What Do You Think?

**IBM Configuration Management Version Control
Getting Started Using the DOS/Windows™ Client
Version 2 Release 3**

Publication No. SC09-3000-00

We're in business to satisfy you. If we're succeeding, please tell us; if not, let us know how we can do better.

Overall, how satisfied are you with this book?

						
	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	No Opinion
Overall satisfaction						

How satisfied are you that the information in this book is:

Accurate						
Complete						
Easy to find						
Easy to understand						
Well organized						
Applicable to your tasks						

Please tell us how we can improve this book:

May we contact you to discuss your responses? Yes No ☎ _____

Fax _____

Note that IBM may use or distribute the responses to this form without obligation.

Name

Address

Company or Organization

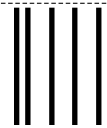
Phone No.



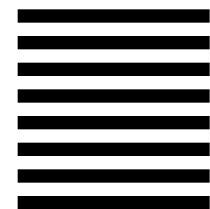
Fold and Tape

Please do not staple

Fold and Tape



NO POSTAGE
NECESSARY
IF MAILED IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 40 ARMONK, NEW YORK

POSTAGE WILL BE PAID BY ADDRESSEE

International Business Machines Corporation
Information Development
Department T45
PO Box 60000
Cary, NC 27511-8519



Fold and Tape

Please do not staple

Fold and Tape



Program Number: 5622-063
5765-202
5765-207
5765-397

Printed in U.S.A.

SC09-3000-00

