



# ***BCMS Vu*<sup>™</sup> Software R2 V3**

## **Installation Guide**

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# Preface

## Introduction



In this guide, the term “DEFINITY system” refers to: DEFINITY<sup>®</sup> ProLogix<sup>™</sup>; DEFINITY<sup>®</sup> ECS Generic 3 Version 4 (G3V4), R5, or later; and DEFINITY<sup>®</sup> ONE<sup>™</sup> Communications System R2 (DEFINITY ONE).

The *BCMS Vu<sup>™</sup> Software R2 Installation Guide* tells you how to install the *BCMS Vu* R2 Server, Client, and Wallboard software. It includes procedures for installing the *BCMS Vu* software from the distribution CD-ROM, and installing a data module, hardware key, and a wallboard to be used with the *BCMS Vu* software. The final chapter provides guidelines for responding to problems that may be encountered during the installation process.

The *BCMS Vu Software Installation Guide* is intended for anyone who is installing the *BCMS Vu* software. It assumes that you are familiar with your computer and the *Microsoft<sup>®</sup> Windows<sup>®</sup> 95*, *Windows<sup>®</sup> 98*, or *Windows<sup>®</sup> NT 4.0* operating system, including standard *Windows* conventions, such as using the F1 key to activate Help.

The following sections are included in this Preface:

- Contents of this Document
- Conventions Used in this Document
- Related Documents.

# Contents of This Document

This book describes what you need to know to install the *BCMS Vu* software.

The guide is organized into the following chapters:

**Chapter 1      Introduction**

Specifies the equipment required to run the *BCMS Vu* software and outlines the steps required to install it.

**Chapter 2      Administering the DEFINITY System and  
Configuring the Network**

Tells you what to do to the DEFINITY system so it can communicate with *BCMS Vu* Server software.

**Chapter 3      Installing the Data Module, Hardware Key, and  
Remote Maintenance Line**

Tells you how to connect and configure the data module, how to connect the hardware key approved for use with *BCMS Vu* software, and set up a telephone line for remote maintenance.

**Chapter 4      Installing and Removing *BCMS Vu* Software**

Tells you how to install the Server, Client, and Wallboard software from the distribution CD-ROM, and how to delete the software from your PC when you no longer want it.

**Chapter 5      Installing a Wallboard**

Tells you how to connect and configure the wallboards that are supported by *BCMS Vu* software.

**Chapter 6****Troubleshooting Problems**

Contains guidelines for responding to problems that may occur when you install the *BCMS Vu* software, the hardware key, the data module, and the wallboard.

## Conventions Used in This Document

The following conventions are used in this document:

<b>Bold type</b>	Menu names, button names, option names, and file paths on a disk are shown in <b>bold type</b> . For example: “Select <b>Save</b> from the <b>File</b> menu.” “The file is located in <b>C:\Program Files\</b> .” Sometimes items are shown in bold type for emphasis.
<i>Italics</i>	<i>Italics</i> are used for trademarks, the exact wording of file names, and the titles of referenced documents. For example “ <i>BCMS Vu</i> software runs on <i>Microsoft Windows</i> .” “Look for the file <i>bcmsvuclient</i> .” Sometimes words are italicized for emphasis.
Mouse button	Unless the secondary mouse button is specified, use the primary mouse button whenever you are instructed to click or select an item.
Terminology	Standard call center industry terminology is used in this document, as well as terms such as split/skill, ACD, and AUX. For definitions of terms used in this document, refer to the Glossary.



## Related Documents

The *BCMS Vu Software R2 User Guide* contains instructions on how to use *BCMS Vu* software after successful installation.

### Data Module Documents

The procedures in this installation guide assume that you have some familiarity with installing data modules. If you have never installed a data module before, you should be sure you have access to the appropriate data module documentation. The *BCMS Vu* software supports the 8400B Plus and the 7400B/7400B Plus Data Modules. The available documents for these data modules are as follows:

- *8400B Plus Data Module User Guide.*
- *7400B/7400B Plus Data Module User Guide.*

Note

Data Module documents do not apply to DEFINITY ONE.

### Other Related Documents

- *BCMS Vu Wallboard Models WB1, WB2, IW1, and IW2 Installation, Programming, and Troubleshooting Instructions (555-230-706)*
- *Wallboard Models WB3 and IW3 Installation, Programming, and Troubleshooting Instructions*
- *Wallboard Model WB5 Installation, Programming, Troubleshooting Instructions*
- *BCMS Vu Software R2 User Guide*

Located on the BCMSVu CD ROM: as

\Documents\<Language>\User Guide.PDF

Substitute <Language> with a specific directory.

For example, D:\Documents\English\User Guide.PDF



# Introduction

**IMPORTANT** Before you attempt to install the *BCMS Vu* software, be sure to look at and use the appropriate checklist in the section entitled “Installation Checklist” at the end of this chapter. This checklist is critical for helping you to perform all of the steps in the correct order.

This chapter

- Gives you general information about *BCMS Vu* software
- Outlines the steps involved in installing *BCMS Vu* software
- Lists the hardware and software requirements for the PC on which you are installing the software
- Discusses the software that is required for the maintenance contract.

This chapter is organized into the following sections:

- About *BCMS Vu* Software
- Differences between Release 1 and Release 2 of *BCMS Vu*
- Differences between Release 2 Version 1, and Release 2 Version 2 of *BCMS Vu*
- Differences between Release 2 Version 2, and Release 2 Version 3 of *BCMS Vu*
- Overview of the Installation
- Checking the *BCMS Vu* Software Package Contents
- What You Need on Your PC
- Upgrading from *BCMS Vu* Release 1 to *BCMS Vu* Release 2
- Software Required for Maintenance Contracts
- Installation Checklist
- Acceptance Criteria.

## About *BCMS Vu* Software R2

Avaya *BCMS Vu* Software R2 is a graphical user interface software application for monitoring the status and performance of a call center, using data collected in the Basic Call Management System (BCMS) on a DEFINITY system. *BCMS Vu* Software R2 supports the DEFINITY Prologix, DEFINITY G3V4 (load 64 or later), ECS R5 or later, and DEFINITY ONE.

## ***BCMS Vu Software R2 and Connectivity to DEFINITY***

The type of DEFINITY system determines your connectivity.

- All DEFINITY systems provide LAN connectivity to BCMS Vu. DEFINITY ONE R2 or older also provides LAN access.
- DEFINITY Prologix, DEFINITY G3V4 (load 64 or later), ECS R5 or later, also provide Data Module connectivity to BCMS Vu.

### **BCMS Vu R2 Software Features**

Here are a some key features of BCMS Vu R2 software.

- Takes real-time data from the DEFINITY system and displays it in textual and graphical form on the monitor of a PC
- Allows the textual form of this real-time data to be printed
- Allows this real-time data to be displayed on external wallboards
- Allows posting of messages on external wallboards
- Supports several types of wallboards
- Stores data from the DEFINITY system (which retains data no longer than one week) on a PC's hard disk
- Displays this stored data in a table format and permits access to it by third-party products
- Allows this stored data to be printed
- Allows access to data from several DEFINITY systems.

## Operating Environment

*BCMS Vu* runs in the *Microsoft Windows* operating environment. The *BCMSVu* Server software runs on an *IBM*® compatible PC that is running the *Microsoft Windows* NT 4.0 Workstation or Server operating system. The *BCMS Vu* Client software runs on an *IBM* compatible PC that is running the *Microsoft Windows* 95, *Windows* 98, *Windows* 2000 Professional or Server, or *Windows* NT 4.0 Workstation or Server operating system.

Note that the *BCMS Vu* Software R2 is not supported for 486 PCs, nor is it supported for all localized *Windows* 95, 98, *Windows* 2000 Professional or Server, and *Windows* NT 4.0 operating systems.

Note
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Avaya certifies that *BCMS Vu* Software R2 has been tested and found to run co-resident with *Microsoft Office* 95, *Microsoft Office* 97, *Microsoft Office* 2000, *Intuity Message Manager*™, *CentreVu Supervisor*™, *CentreVu Agent*™, and *Symantec pcANYWHERE*™. Avaya makes no claims whatsoever as to the compatibility of *BCMS Vu* Software R2 with any other software application.

Those who attempt to run *BCMS Vu* Software R2 with any other co-resident application do so at their own risk.

## Differences Between R1 and R2 of *BCMS Vu*

Release 2 of *BCMS Vu* is the response by Avaya to requests from users for more features than exist on Release 1.

The most obvious difference between Release 1 and Release 2 is the separation of the Server application from the Client application. The Server application is installed on one PC, which is connected to a *DEFINITY* system. The Server obtains data from the *DEFINITY* system. Client applications are installed on the same PC as the Server or on other PCs, which connect to the server over a LAN, instead of connecting directly to the *DEFINITY* system.

With Release 2, users can:

- Access real-time data without each *BCMS Vu* program having a direct connection to a system management port on the DEFINITY system.
- Create real-time pie chart graphs and time-trace graphs.
- Print real-time text reports.
- Schedule the printing of historical reports.
- Send displays to wallboards connected to other PCs in the network. Wallboards need to be registered with but not physically connected to the Server PC.
- Send one report to several wallboards or send different reports to wallboards daisy-chained together.
- Alternate reports and a broadcast message to the same wallboard or wallboards.
- Define four levels of alerts and thresholds in reports.
- Manage the storage of interval and daily data separately.
- In addition to the above, *BCMS Vu* R2 is now licensed for one, five or ten Clients.
- In *BCMS Vu* R1, thresholds applied across all splits/skills or VDNs. Now you can define thresholds for each split/skill or VDN.
- The 486 processor is no longer supported.

## Differences Between R2 Version 1 and R2 Version 2 of *BCMS Vu*

R2 Version 2 *BCMS Vu* introduces the support of LAN connectivity to the DEFINITY ONE platform.

## Differences Between R2 Version 1 and R2 Version 3 of *BCMS Vu*

R2 Version 2 *BCMS Vu* introduces the support of LAN connectivity to the DEFINITY ECS and ProLogix platform. For more information, refer to the “serverreadme.txt” file on the CD-ROM.

## Overview of the Installation

The steps to complete the installation and setup of BCMS Vu Software R2 are:

1. Administer the DEFINITY system.
2. Administer the network (required for the DEFINITY system) or stand-alone PC, if any.
3. If using a data module, install the data module.
4. Install the hardware key on the Server PC.
5. Install the *BCMS Vu* Server software.
6. Install the *BCMS Vu* Client software.
7. Install the *BCMS Vu* Wallboard software if you are using wallboards.
8. Install the wallboard(s) if you are using any.
9. Configure *BCMS Vu* software.
10. Verify connectivity to the DEFINITY system.
11. Verify that acceptance criteria have been met.

The remaining chapters of the guide describe these steps.



## Checking the *BCMS Vu* Software Package Contents

To be sure you have everything you need, verify that the following items are included in the software package:

- Program disk – your *BCMS Vu* Software R2 package should contain a CD-ROM with the software program.
- Hardware Key – The hardware key must be labeled “R2.” There are three versions, which allow one, up to five, and up to ten Clients to be connected to the Server.
- *pcANYWHERE* software
- Documentation – your *BCMS Vu* Software R2 package should contain the following documents:

—*BCMS Vu Software R2 Installation Guide*,

Located on the *BCMS Vu* program disk: as

\Documents\<Language>\Intallation Guide.PDF

Substitute <Language> with a specific directory.

For example, D:\Documents\English\InstallGuide.PDF

—*BCMS Vu Software R2 User Guide*

Located on the *BCMS Vu* program disk: as

\Documents\<Language>\User Guide.PDF

Substitute <Language> with a specific directory.

For example, D:\Documents\English\UserGuide.PDF

If any of the items is missing or damaged, contact your Avaya Account team, representative, or distributor.

# What You Need on Your PC

To install *BCMS Vu* Software R2, you must have *at least* the following hardware and software:

## For the *BCMS Vu* Server PC

- A single-processor Pentium
- *Windows* NT Server or Workstation with the appropriate Service Pack installed on the PC.
- *Windows* 2000 Professional or Server.
- 64 MB of main memory
- Up to 500 MB (512,000 KB) of disk space\*
- A double-speed CD-ROM drive.



If you install the software from a remote network drive, the machine on which the software is installed (either Server, Client, or Wallboard) does not need a CD-ROM drive.

- ☐ Either of the following:
- If you are using a data module, two external serial ports. One for data module and one for pcAnywhere.
  - A Network Interface Card (NIC), for TCP/IP LAN connectivity to the DEFINITY system.

---

\*For splits/skills, agents, VDNs and trunk groups measured by BCMS, the following formula is an approximate guide to the space required in megabytes for each *day's* historical data when the interval measured is an hour. (When the interval is half-hour, use 185 instead of 370 in the formula.)

$$\frac{\# \text{ splits/skills} + \# \text{ agents} + \# \text{ trunk groups} + \# \text{ VDNs}}{(370) * \text{BCMS interval in hours}}$$

- ❑ You may need other unused serial ports:
  - One to connect to a wallboard. This serial port must be an external port.
  - One for remote maintenance if you are using an external modem.
- ❑ A parallel port to connect the hardware key. A printer may be also connected to this port.
- ❑ The *BCMS Vu* Software R2 distribution CD-ROM.
- ❑ If using a data module, either an 8400B Plus or 7400B/7400B Plus that is capable of accessing the DEFINITY system.
- ❑ A DEFINITY system login name and password for access to BCMS.
  - For DEFINITY systems other than DEFINITY ONE, a DEFINITY system telephone number (hunt group extension for Netcon channel) is required to connect via the data module.
  - For all DEFINITY systems, a DEFINITY hostname/IP address is required to connect via LAN.
- ❑ A sound card and speakers if you want to use audible alerts.
- ❑ The *pcANYWHERE* CD-ROM.
- ❑ An internal or external modem for remote maintenance using *pcANYWHERE*.
- ❑ The name of the Server PC, the names of all Client PCs on the network, and the names of all wallboards on the network that you want to use.

## For the *BCMS Vu* Client PC

- ❑ A single-processor Pentium.
- ❑ 32 MB of main memory (with *Windows 95* or *Windows 98* installed) or 64 MB of memory (with *Windows 2000 Professional* or *Server* or *Windows NT 4.0* installed).

- ☐ 5 MB (5,120 KB) of free disk space.
- ☐ A double speed CD-ROM drive.
- ☐ A serial port for each external wallboard connected to the PC, or one port if the wallboards are daisy-chained.
- ☐ *Windows 95, Windows 98, Windows 2000 Professional or Server or Windows NT 4.0 Workstation or Server* with at least Service Pack 4 installed on the PC.
- ☐ The *BCMS Vu* Software R2 distribution CD-ROM.
- ☐ Optionally, one of the wallboards supported by *BCMS Vu* software.
- ☐ The name of the Server you want to connect to.
- ☐ A sound card and speakers if you want to use audible alerts.

### **For a Wallboard PC without Client Software**

- ☐ A single-processor Pentium.
- ☐ *Windows 95, Windows 98, Windows 2000 Professional or Server, or Windows NT 4.0* installed on the PC.
- ☐ 32 MB of RAM.
- ☐ 10 MB of free disk space.
- ☐ A double-speed CD-ROM drive.
- ☐ An available serial port for each non-daisy-chained wallboard.

# Upgrading from *BCMS Vu* R1 to *BCMS Vu* R2

## Upgrading from R1 on *Windows* NT 4.0 to R2 Server

We recommend that when you upgrade from *BCMSVu* R1 on *Windows* NT 4.0 to *BCMSVu* R2 Server, you do not remove *BCMSVu* R1, because you thereby preserves historical data, saved reports, and certain configuration parameters. We also recommend that you install the R2 Server software on the R1 PC where the historical database is located, although this is not required.

**Note**

When you upgrade from R1 to an R2 Server,

- The R2 Server PC must be a Pentium.
- The R2 Server PC must have at least 64 MB of RAM.
- Historical data is copied to the R2 Server under the default Server name. For example, if you are installing the Server on the C: drive, historical data is copied to C:\Program Files\Avaya\BCMS Vu\Server\BCMSVu Server.
- Configuration information BCMS data, Server connection, and configuration information is unchanged.
- Saved reports remain where they were before the upgrade. R2 Client software can open these reports.
- Wallboard configuration is not saved. You must re-administer it.

**Note**

After you upgrade the R2 software and verify that it functions properly, you should remove the R1 software:

1. In **Control Panel**, select **Add/Remove Programs**.
2. Highlight "BCMSVu 1.0".
3. Select **Add/Remove**.
4. Return to **Add/Remove Programs**.
5. Highlight Data Access Objects (DAO) 3.0".
6. Select **Add/Remove**.
7. Exit **Add/Remove Programs** and **Control Panel**.

## Upgrading from R1 on *Windows 95* or *Windows 98* to R2 Server

When you upgrade from R1 to an R2 Server, *Windows* NT 4.0 must be the operating system on the PC before you install R2. If R1 was installed on *Windows 95* or *Windows 98*, you must install NT 4.0 on the PC before you install R2. Refer to “What you need on your PC” in this chapter.

To upgrade from R1 on *Windows 95* or *Windows 98* to R2 Server,

1. Find the file entitled “histdb.mdb”; the default location is C:\Program Files\Avaya\BCMSVu\Server\BCMSVu Server\. Copy it to a location somewhere other than the PC on which *BCMSVu* R1 is installed.
2. Search through the *Windows 95* or *Windows 98* configuration wizard and write down all the information displayed there, for example, the login and password, phone number, and download interval and start time. Save this information; you will have to manually re-enter it after you install *Windows* NT 4.0 on the PC.
3. Install *Windows* NT 4.0 on the PC.

During the NT 4.0 installation, you will be asked if you want to replace the existing *Windows 95* or *Windows 98* disk partition with an NT-compatible disk partition. We recommend that you choose to use an NT-compatible partition for best *Windows* NT operation.



Replacing the existing disk partition will delete ALL existing files and data on the disk.

4. After you have installed *Windows* NT 4.0 on the PC, install *BCMSVu* R2 Server on the PC. Refer to "Installation Checklist" in this chapter and "Installing *BCMS Vu* Server Software" in chapter 4.
5. Go through the *Windows* NT 4.0 configuration wizard and configure it using the information you wrote down in step 2.

6. If, when you configure *BCMSVu* Server, you choose to store the database in the default location, copy the file "histdb.mdb" to C:\Program Files\Avaya\BCMS Vu\Server\BCMSVuServer\. If you choose a different location, copy "histdb.mdb" to that location.

## Changing R2 Server from *Windows 95* or *Windows 98* to *Windows NT 4.0*

Avaya does not support the use of *BCMSVu* R2 Server on *Windows 95* or *Windows 98*. If you are presently running *BCMSVu* R2 on *Windows 95* or *Windows 98*, you must change the operating system to *Windows NT 4.0* in order to receive continued *BCMSVu* service and support.

To change R2 Server from *Windows 95* or *Windows 98* to *Windows NT 4.0*, perform the steps in "Upgrading from R1 on *Windows 95* or *Windows 98* to R2 Server" above.

## Upgrading from R1 to R2 Client

When you upgrade from an R1 to an R2 Client,

- The Client PC **must be** a Pentium; a 486 is not sufficient.
- The Client PC **must have** at least 32 MB of RAM.
- Historical data remains undisturbed where it was before the upgrade.

The Client can display historical data.

Ideally, historical data was on only one of the R1 PCs, and that is the PC on which R2 Server software is being installed. If the database is on a PC that is to become a Client, you can either a) move the database to the Server PC, or b) give the Server PC the path to the client PC's folder containing the database. The former is preferred, because otherwise the Server PC must have access to the Client PC's database in order to perform downloads.

- Saved reports remain where they were before the upgrade. The R2 Client can display them. Wallboard configuration is not saved. The first time you try to open a saved report after upgrading to *BCMS Vu* R2 Client, you are asked if you want to convert the old R1 report to an R2 report. Choose "Yes."

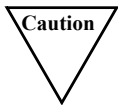
- After you install *BCMS Vu* R2 software over *BCMS Vu* R1 software, you should remove the *BCMS Vu* R1 start icon from the Windows start menu. Instructions for this are at the end of the software installation procedures in Chapter 4.

## Software Required for Maintenance Contracts

In addition to installing *BCMS Vu* software, you need to install *pcANYWHERE* software on the same PC as the Server software. The *pcANYWHERE* software enables Avaya to log into your PC remotely and perform troubleshooting procedures.

Use the installation procedures in the *pcANYWHERE* documentation to install your Server PC as a host computer.

Avaya recommends that *pcANYWHERE* software be opened only when working with Avaya personnel, to prevent unauthorized remote access to the *BCMS Vu* Server PC. Remote access is possible only when *pcANYWHERE* software is open and set up as a host PC.



Because *pcANYWHERE* software allows a remote PC to access the *BCMS Vu* Server PC, it is essential that you take the following precautions:

- While installing *pcANYWHERE* software, do not select the Autoload option. The Autoload option starts *pcANYWHERE* each time the computer is turned on.
- Do not start *pcANYWHERE* software unless you are asked to do so by Avaya, and be sure to close it immediately afterwards.
- If you must leave *pcANYWHERE* software open at all times for your own purposes, use a password that is not related in any way to the passwords you use to access the DEFINITY system or *BCMS*. Include characters in the password that are not alphabetic (use numbers, special characters). Do not make this password widely known. Refer to the *pcANYWHERE* user's guide for instructions on establishing passwords.



# Installation Checklist

## IMPORTANT

Before you attempt to install *BCMS Vu* software, be sure to look at and use the appropriate check list in this section. This checklist is critical for helping you to perform all of the steps in the correct order.

### Note

Avaya certifies that *BCMS Vu* software has been tested and found to run co-resident with *Microsoft Office 95*, *Microsoft Office 97*, *Microsoft Office 2000 Professional or Server*, *Intuity Message Manager™*, *CentreVu Supervisor™*, *CentreVu Agent™*, and *Symantec pcANYWHERE™*. Avaya makes no claims whatsoever as to the compatibility of *BCMS Vu* software with any other software application. Those who attempt to run *BCMS Vu* software with any other co-resident application do so at their own risk.

## Installing *BCMS Vu* R2

Be sure you know the following or have access to:

- ☐ The login and password for all PCs
- ☐ The *BCMS Vu* login and password administered on the DEFINITY system
- ☐ The name of the Server PC
- ☐ The IP address of the Server PC
- ☐ The Windows Login IDs of all Client users

- ☐ The names of all PCs to which you attach wallboards
- ☐ The addresses of all wallboards
- ☐ If using a data module, the COM Port used by the 7400 or 8400 data module that connects to the DEFINITY system (other than DEFINITY ONE).
- ☐ The names of PCs and associated COM Ports to which wallboards are attached
- ☐ If you are on a network, the network domain. Connecting to a DEFINITY system requires that the server PC be on the network.
- ☐ The telephone number for *BCMS Vu* to access the DEFINITY system (the hunt group extension used for Netcon channels). This is not applicable to DEFINITY ONE systems.
- ☐ Hostname/IP address of the DEFINITY system.

### On the Server PC

- ☐ Make sure you have everything listed in “Checking the BCMS Vu Software Package Contents” on page 1-7, “What You Need on Your PC” on page 1-8, and “Software Required for Maintenance Contracts” on page 1-14. If you are upgrading from R1 to R2, read “Upgrading from BCMS Vu R1 to BCMS Vu R2” on page 1-11.
- ☐ Turn off your PC.
- ☐ If using a Data Module, See “Installing the Data Module” on page 3-2.
- ☐ Install the hardware key. See “Installing a Hardware Key” on page 3-14.
- ☐ Administer the DEFINITY system. See “Administering the DEFINITY System” on page 2-2.
- ☐ Administer the network, if appropriate. See “Configuring a Network” on page 2-20.
- ☐ Administer a stand-alone PC, if appropriate. See “Configuring a Network” on page 2-20.

- ❑ Install the Server software. See “Installing BCMS Vu Server Software” on page 4-2. Reboot the PC unless you are going to install the Client software on the Server PC later.
- ❑ Install the Client software, if appropriate. See “Installing BCMS Vu Client Software” on page 4-14. (Reboot after you install the Client software.)
- ❑ Start the Server software. See “Starting *BCMS Vu* Server Software” in Chapter 2 of *BCMS Vu Software R2 User Guide*.
- ❑ Set up the DEFINITY system connection. See “DEFINITY System Connection Configuration Wizard” in Chapter 4 of *BCMS Vu Software R2 User Guide*.
- ❑ Schedule data downloads. See “Schedule Data Download Configuration Wizard” in Chapter 4 of *BCMS Vu Software R2 User Guide*.
- ❑ Configure Clients. See “Client Registration Configuration Wizard” in Chapter 4 of *BCMS Vu Software R2 User Guide*.
- ❑ Configure all wallboards that you will be using that are connected to PCs on the network. Refer to “Configuring Wallboards,” page 4-10 in *BCMS Vu Software R2 User Guide*.



You do not need to install the Wallboard software on the PC on which you have installed the Server software.

- ❑ Install *pcANYWHERE*. See “Software Required for Maintenance Contracts” on page 1-14.

## On the Client PC

- ❑ If you are going to install external wallboards on this PC, power down the PC.
- ❑ If appropriate, connect wallboards to this Client PC. Refer to “Installing the Wallboard” on page 5-3 and to your wallboard user manual. After you install the wallboards, turn on the PC.

- ❑ Install the Client software. See “Installing BCMS Vu Client Software” on page 4-14. Reboot unless you are going to install Wallboard software on the Client PC.
- ❑ If a wallboard is connected to this Client PC and *BCMSVu* Server software is **not** installed on this PC, install the Wallboard software. See “Installing BCMS Vu Wallboard Software” on page 4-26. Reboot your PC.
- ❑ Start the Client software. See “Starting *BCMS Vu* Client Software” in Chapter 3 of *BCMS Vu Software R2 User Guide*.
- ❑ Configure the Client. See “Configuring Thresholds and Maximum Values,” “Activating Alerts,” and “Color Palette Configuration” in Chapter 4 of *BCMS Vu Software R2 User Guide*.
- ❑ If you have one or more wallboards connected to this PC start the wallboard software. Refer to “Starting Wallboard Software,” page 3-14 in *BCMS Vu Software R2 User Guide*.

### **On a Wallboard PC without Client Software Installed**

- ❑ Install Wallboard software. Refer to “Installing BCMS Vu Wallboard Software” on page 4-26.
- ❑ Start the Wallboard software. Refer to “Starting Wallboard Software,” page 3-14 in *BCMS Vu Software R2 User Guide*.

### **Acceptance**

- ❑ Verify that the acceptance criteria on page 1-19 have been met.

## Acceptance Criteria

The software installation can be considered finished when the following criteria are met:

- ☐ The data module is installed (if using a data module).
- ☐ The network is configured properly.
- ☐ The DEFINITY system has been administered.
- ☐ *pcANYWHERE* is installed on the Server PC.
- ☐ *BCMS Vu* Server software is installed.
- ☐ *BCMS Vu* Client software is installed.
- ☐ The DEFINITY system is registered with the Server.
- ☐ All clients are registered with the Server.
- ☐ A historical data download has been performed from the Server.
- ☐ One real-time report has been run from each Client.
- ☐ One historical report has been run from each Client.



# Administering the DEFINITY System and Configuring the Network

This chapter explains certain administrative tasks you must do before you install *BCMS Vu* software. Specifically, it tells you how to:

- Administer the DEFINITY system
- Administer the DEFINITY system to support the data module (if appropriate)
- Configure your network or stand-alone PC.

# Administering the DEFINITY System

## Connecting the Components

**Note** The Server PC can be located in the DEFINITY system equipment room or it can be anywhere in the building that is convenient to the user.

If you are using the data module, we recommend that you administer the DEFINITY system and data module, using the instructions in this chapter, before you physically connect the data module to the PC and DEFINITY system.

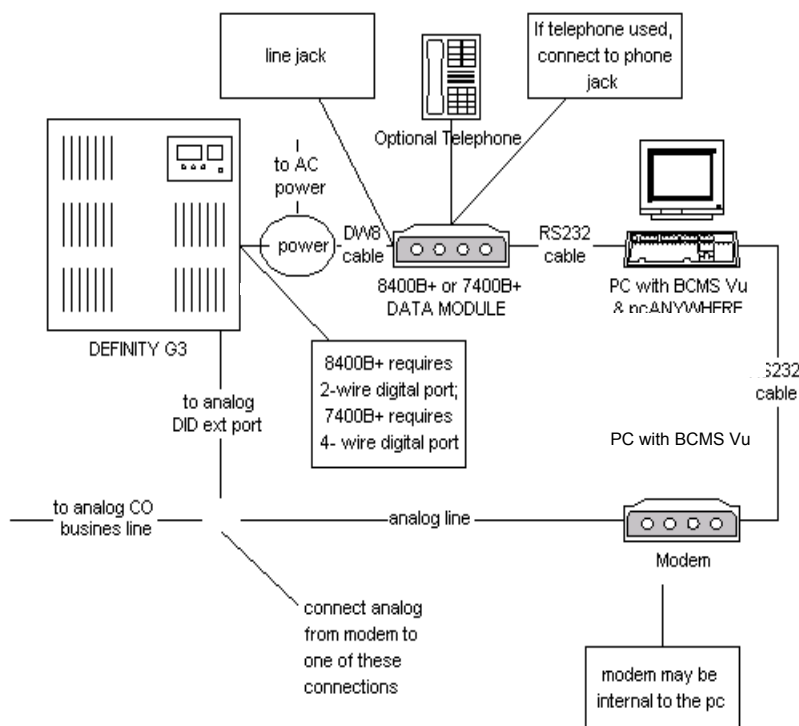
Refer to the *Data Module User Guide* for detailed instructions about connecting the power supply for the data module.

**Note** Before you begin this procedure, be sure you know your customer login and password for the DEFINITY system. The customer login and password may be case-sensitive.

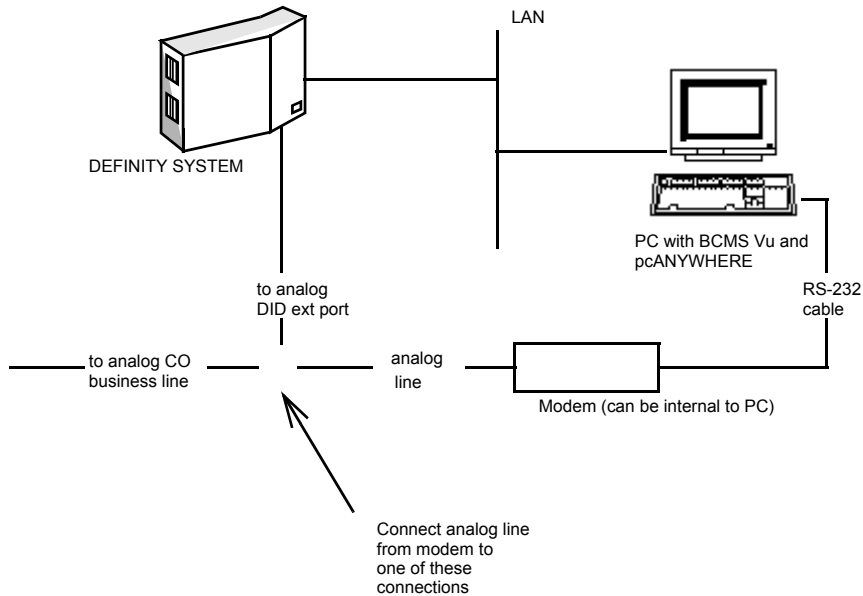


The following diagrams show the connections required for the components of *BCMS Vu*. The first diagram depicts the *BCMS Vu* server connected to the DEFINITY system via the data module, and the next diagram depicts the *BCMS Vu* server connected to the DEFINITY system via TCP/IP LAN.

### BCMS Vu server connected to the DEFINITY system via Data Module



### BCMS Vu server connecting to the DEFINITY system via TCP/IP



## Installing an Analog Line

An analog line is required for remote maintenance using *pcANYWHERE*. The analog line can be a DID extension on the DEFINITY system or a central office line. After the analog line is connected to the customer's modem and *pcANYWHERE* software is installed, have the Technical Service Center verify that remote access is operational. Mark the analog line with the telephone number for future reference.

## Administering



The examples of screens in the following procedures are taken from a V5 DEFINITY system. If you have a different DEFINITY system, you will see slightly different screens. Refer to your DEFINITY system administration manual.

## BCMS Vu Login and Password

This login and password is used by *BCMS Vu* to login to the DEFINITY system and download data. Add a new login and password in the DEFINITY system with the following command (this must be done with a customer's login):

Command: add login bcmsvu (case sensitive)

Record this login and password because you will need it when you configure *BCMS Vu*.

add login bcmsvu      Page 1 of 1

LOGIN ADMINISTRATOR

Password of Login Making Change:

LOGIN BEING ADMINISTERED

Login's Name: **bcmsvu**

Login Type: customer

Service Level: **non- super user**

LOGIN'S PASSWORD INFORMATION

Login's Password:

Reenter Login's Password:

Password Aging cycle Length (Days):

Note

Be sure the password aging cycle length is left blank.

**Note**

If

- Password aging for the *BCMS Vu* logon is in effect on the DEFINITY system and
- Aging is in effect for the login that *BCMS Vu* Server uses to access the DEFINITY system and
- The password expires,

you must change the password on the DEFINITY system *and* in *BCMS Vu* Server for that login.

To eliminate this problem altogether, you may turn off password aging on the DEFINITY system “add login” form. To do this leave the password aging field in the next screen blank.

Use the change permissions command and make sure the following fields (in bold type) are set to yes (“y”).

change permissions bcmsvuPage 1 of 1

### COMMAND PERMISSION CATEGORIES

Login Name: bcmsvu

### COMMON COMMANDS

**Display Admin. and Maint. Data?**y

**System Measurements?**y

System Mgmt Data Transfer Only?n

### ADMINISTRATION COMMANDS

Administer Stations?nAdminister Features?n

Administer Trunks?nAdminister Permissions?n

Additional Restrictions?n

### MAINTENANCE COMMANDS

## BCMS Agent Login IDs (Non-EAS)

In a traditional ACD (non-EAS) environment, BCMS/VuStats LoginIDs are USED MOSTLY when the customer has more than one agent using the same telephone set and wants to track each agent's BCMS information separately. **If the customer does not have this need, we recommend that this optional feature be set to no.** The VuStats feature (turned to **yes** on customer options) can still be used, even though this field is set to **no**; only the recommended BCMS/VuStats LoginIDs will not be used.

change system parameters customer-options

### OPTIONAL FEATURES

G3 Version: V5Maximum Ports: 2800

Logged-in ACD Agents:500

Abbreviated Dialing Enhanced List?yCall Work Codes? n

A/D Grp/Sys List Dialing Start at 01? nCAS Branch? n

ACD? yCASMain?y

AT&T Adjunct Links?nDCS (Basic)? y

Answer Supervision by Call ClassifierDCS Call Coverage

ARS? yDTMF Feedback Signals for VRU?n

ARS/AAR Partitioning?yEmergency Access to Attendant? y

ASAI Interface?nExpert Agent Selection (EAS)? n

ATMS? nExternal Device Alarm Admin? y

Audible Message Waiting?yFlexible Billing? n

#### Note

If EAS is used and you want to use BCMS Agent LoginID, the screen on page 2-9 will be different (ACD LoginID will not appear) and cannot call up the screen on page 2-12.

Set the following two options as shown when you do **not** use BCMS logins.

### FEATURE-RELATED SYSTEM PARAMETERS

#### SYSTEM PRINTER PARAMETERS

System Printer Extension: 4580  
Lines Per Page: 60  
EIA Device Bit Rate: 9600

#### SYSTEM-WIDE PARAMETERS

Switch Name: DEFINITY G3siV4

#### CALL CENTER SYSTEM PARAMETERS

Delay: Expert Agent Selection (EAS) Enabled?  
n Direct Agent Announcement  
Data2: Minimum Agent-LoginID Password Length: Converse Delay Data 1: 0  
2  
Direct Agent Announcement Extension: Converse Pulse ON: 100 OFF: 70  
Msg Waiting Lamp Indicates Status For: station Prompting Timeout (secs): 10

#### CALL MANAGEMENT SYSTEM PARAMETERS

BCMS/VuStats Measurement Interval: hour  
BCMS/VuStats Abandon Call Timer (seconds): **Validate Login IDs?**  
**ACD Login Identification Length: (see note)** Adjunct CMS Release:

#### MALICIOUS CALL TRACE PARAMETERS

Apply MCT Warning Tone? n  
MCT Voice Recorder Trunk Group:

<b>Note</b>
-------------

The customer decides the ACD Login Identification Length.



If the customer does need the BCMS Agent Login ID feature, set the options as shown in the following window:



Verify that BCMS/VuStats LoginIDs is set to "y." If it is not, call Avaya.

display system parameters customer-optionsPage 1 of 2

### OPTIONAL FEATURES

G3 Version: V4Maximum Ports: 2800

Logged-in ACD Agents: 500

Abbreviated Dialing Enhanced List?yCall Work Codes:n

A/D Grp/Sys List Dialing Start at 01?nCAS Branch?n

ACD? yCAS Main?y

AT&T Adjunct Links?nDCS (Basic)?y

Answer Supervision by Call Classifier?nDCS Call Coverage?y

ARS? yDTMF Feedback Signals for VRU?n

ARS/AAR Partitioning?yEmergency Access to Attendant?y

ASAI Interface?nExpert Agent Selection (EAS)?n

ATMS? nExternal Device Alarm Admin?y

Audible Message Waiting?yFlexible Billing?n

Authorization Codes?yForced ACD Calls?n

BCMS (Basic)?yForced Entry of Account Codes?y

If you use the BCMS/VuStats LoginID feature, the following form must also be administered with agent Login IDs and Name. BCMS agent reports use this LoginID and name on agent reports. The Login ID does not have to match extensions on the dial plan.

change bcms-vustats loginIDsPage 1 of 2

### BCMS/VuSTATS LOGIN IDS

Assigned Members: 1 of 400 administered

Login ID	Name	Login ID	Name
1: 7701	John Smith	17:	
2:		18:	
3:		19:	
4:		20:	
5:		21:	
6:		22:	
7:		23:	
8:		24:	
9:		25:	
10:		26:	
11:		27:	
12:		28:	

# Administering the DEFINITY System to Support the Data Module

The data module can be used with DEFINITY ProLogix or DEFINITY System G3 V4, R5 or later. It cannot be used with a DEFINITY ONE System. For a DEFINITY ONE system, go to the next section, “Configuring a Network.”

## Data Module without a Telephone

The following form shows the software translation for a data module **without** a telephone. The data extension and port must be assigned by the local account team or customer.

Command:    **add data-module** <number> (case sensitive)

DATA MODULE

Data Extension:    \_\_\_\_\_

Name:BCMS VuBCC: 2

Type:   pdmCOS: 1

Remote Loop-Around Test?n

Port:    \_\_\_\_\_

COR: 1

Secondary data module?n

TN:     1

Connected to: dte

ITC:   restricted

ABBREVIATED DIALING

List 1:

SPECIAL DIALING OPTION:

ASSIGNED MEMBER (Station with a data extension button for this data module)

## Data Module with a Telephone

The following form shows the software translations for a data module with a telephone.

When you change the data module field to **yes** on the station form, an additional page is added to the station form. The station extension, port, and data extension must be assigned locally.

	Page 1
	STATION
Extension:	BCC: 0 TN:1
Type: 8411D	Lock Message? n COR: 1
<b>Port:</b>	Security Code: COS:1
Name:	Coverage Path:
FEATURE OPTIONS	
ance?	LWC Reception: msa-spaAuto Select Any Idle Appearance?
	LWC Activation?yCoverage Msg Retrieval?y
	CDR Privacy?nAuto Answer:none
	Redirect Notification?yData Restriction?n
	Per Button Ring Control?nIdle Appearance Preference? n
	Bridged Call alerting?nPersonalized Ringing Pattern: 1
	Active Station Ringing: singleRestrict Last Appearance?y
	<b>Data Module?</b> yMute Button Enabled? y
	Speakerphone: 2-way
	Audible Message Waiting? n
	Display Language: englishDisp Client Redir?n
	Message Lamp Ext:Select Last Used Appearance?n

Page 4  
STATION

DATA MODULE

**Data Extension:** BCC: 2 ITC: restricted  
Name: BCMS VuCOR: 1COS: 1  
TN: 1

ABBREVIATED DIALING

List 1:

SPECIAL DIALING OPTION:

ASSIGNED MEMBER (Station with a data extension button for this data module)

Ext  
1:

## Netcon Channels for DEFINITY G3SI or ProLogix System Ports for DEFINITY G3r

If the DEFINITY system is a G3SI or ProLogix, you must administer netcon channels. If the DEFINITY system is a G3R, you must administer system ports. The netcon channels or system ports are also administered as members of a hunt group.

To determine if a hunt group has been administered, issue the following command:

**list hunt-group**

If you find a hunt-group with the name “netcon” or “system ports,” record the group extension number being used. You will use this later to configure *BCMS Vu*. The hunt group number, extension, and members are determined locally by the account team or customer.

```
display hunt-group 20 Page 1 of 10
```

### HUNT GROUP

Group Name: netcon or system ports

Group Number: 20Group Extension: **2199**Group Type:ucd

MM Early Answer? nSkill? n ACD? n

Queue? nVector? n

Security Code: Night Service Destination:COR:1

```
display hunt-group 20 Page 3 of 10

HUNT GROUP
Group Number: 20Group Extension: 2199Group Type: ucd
Member Range Allowed: 1 - 200AdministeredMembers
(min/max): 1/4
Total Administered Members:(4 if netcon) (8 if system ports)

GROUP MEMBER ASSIGNMENTS
Ext  Name  ExtName
1    2191   14:
2:   2192   15:
3:   2193   16:
4:   2194   17:
5:           18:
6:           19:
7:           20:
8:           21:
```

If you do not find a hunt-group with the name “netcon” or “system ports,” issue the following command to find them:

**list data**

and add a hunt group with the four netcon or system port extensions. Be sure to record the hunt group extension number to use later when you configure *BCMS Vu*.



For netcon channels

list data-module

DATA MODULES				
Ext.	Port	Type	Name	COSCOR TN ISN
2191	01BXX01	netcon	1	11
2192	01BXX02	netcon	1	11
2193	01BXX03	netcon	1	11
2194	01BXX04	netcon	1	11
2195	01AXX01	netcon	1	11

You may see eight netcon channels. Four are true netcon channels and four are maintenance netcon extensions. Use the netcons that begin with the port address of '01A.'

For system ports

list data-module

DATA MODULES				
Ext.	Port	Type	Name	COSCOR TN ISN
6011	01B1501	system-port	SYSTEM PORT	1511
6012	01B1502	system-port	SYSTEM PORT	1511
6013	01B1503	system-port	SYSTEM PORT	1511
6014	01B1504	system-port	SYSTEM PORT	1511
6015	01B1505	system-port	SYSTEM PORT	1511
6016	01B1506	system-port	SYSTEM PORT	1511
6017	01B1507	system-port	SYSTEM PORT	1511

# Configuring a Network

Connecting to a DEFINITY System requires the server PC to be on a network and able to communicate with the DEFINITY using a LAN.

## Preliminary Considerations

Note	Unless otherwise noted, every item refers to PCs operating with either <i>Windows 95</i> , <i>Windows 98</i> , <i>Windows 2000</i> Professional or Server, or <i>Windows NT 4.0</i> .
------	---

- ☐ Be sure the PC on which Client software will be installed is connected to the same network as the Server PC. It is properly connected if you can locate the Server PC in *Network Neighborhood* from every Client PC, and can locate every Client PC in *Network Neighborhood* from every Server PC.
- ☐ You must have one of the following name resolution methods:
  - IA local Hosts file on the Server and Client PCs
  - IDNS
  - IWINS.
- ☐ The following must be installed:
  - ☐ TCP/IP protocol
  - ☐ (**Windows 95 or Windows 98**) A service entitled "Client for Microsoft Networks."
- ☐ Unless you are using WINS, you must have a "hosts" file containing the IP addresses of each Client PC and the Server PC, with their fully qualified domain names.
- ☐ If you are **not** using WINS, select the following settings:
  - ☐ (**Windows 95 or Windows 98**) LM Announce or (**Windows 2000 or Windows NT 4.0**) Enable LMHosts Lookup

- ☐ **(Windows 2000 or Windows NT 4.0)** Enable DNS for *Windows* Resolution.

## Configuring

- ☐ DNS is not required. However, if you decide to enable DNS, configure it correctly:
  - ☐ The name in the “Host” field on the Server PC must be the same as the name of the Server. The name in the “Host” field on the Client PCs must be the same as the name of the Client.
  - ☐ The entry in the “Domain” field should be the same throughout the network. Typically, it is a term that identifies your company or organization. If PCs are on different domains, the domains must have “trustee relationships.”
  - ☐ Be sure that the numbers in the box entitled “DNS Server Search Order” are numbers for DNS Servers.

If the domain settings are incorrect, problems may occur. You may be able to connect to the Server, but you may be quickly disconnected.
- ☐ Configure TCP/IP
  - ☐ **(Windows 2000 or Windows NT 4.0)** Select the “IP Address” tab and select the radio button next to “Specify an IP address.” Ask your network administrator which IP address, subnet mask, and default gateway to use.
  - ☐ **(Windows 95 or Windows 98)** Select the “IP Address” tab and select the radio button next to “Specify an IP address.” Ask your network administrator which IP address and subnet mask to use.
  - ☐ The Server PC must have a static IP address.
  - ☐ Be sure that TCP/IP protocol is installed on the network. To verify this, from the Server PC,
    - (Windows 2000 or Windows NT 4.0):** Open **Start/Programs/Command Prompt** and type *ipconfig /all* (note the space after *ipconfig*).
    - (Windows 95 or Windows 98):** Open **Start/Run** and type *winipcfg*

If TCP/IP is installed, a window appears describing the configuration. If TCP/IP is not installed, you receive an error message. If you receive an error message, go into **Start/Settings/Control Panel/Network** and add TCP/IP Protocol. (You may need the *Windows* installation disk.)

- ☐ In the list of installed network components, highlight “Network Adapter” and select **Properties**.

Driver Type:	Enhanced mode [32 bit and 16 bit] NDIS driver*
Bindings:	TCP/IP*
Advanced:	Maximum Transmit Value* Not Present or No*

- ☐ (*Windows 95 or Windows 98*)

Primary Network Logon	Client for Microsoft Networks**
-----------------------	---------------------------------

Note

In a multi-protocol environment, if TCP/IP is not the primary protocol in Windows 2000 or Windows NT 4.0 or is not the default protocol in *Windows 95* or *Windows 98*, then a NetBIOS connection to the VUSHARE can happen through another protocol. Therefore, be sure that TCP/IP is the primary protocol.

- ☐ Configure Client for Microsoft Networks.
  - ☐ Under “Logon Validation” leave the box unchecked and the “Windows NT domain” field blank, unless this PC is part of *Windows* NT domain.
  - ☐ Do nothing to “Network logon options.”
- ☐ (*Windows 95 or Windows 98*) On the “Identification” tab
  - ☐ You must supply the PC name. The *BCMS Vu* Server PC must be accessible under that name to the *BCMS Vu* Client. If you are using DNS, this name must be the same as the DNS Host name.

- ☐ To avoid possible problems, we suggest that the workgroup be the same for all *BCMS Vu* PCs.
- ☐ “Computer Description” is optional.
- ☐ (**Windows 95 or Windows 98**) Select Share-level access control.

- \* These are typical settings
- \*\* On a Novell Network you may set this to Novell Interware Client.

- ☐ Install Hosts files:

Unless you are using WINS for name resolution, you must create and install “hosts” files as follows:

Create a text file named “hosts” containing IP address and computer name information for every *BCMS Vu* Server, Client, and Wallboard PC. Use one line for each PC.

**Example:**   123.123.123.123       pcname.avaya.com       pcname

Install this file on every *BCMS Vu* Server, Client, and Wallboard PC. In **Windows 95 or Windows 98** install this file in the **Windows\System\** directory. In **Windows NT 4.0** install this file in the **Winnt\system32\drivers\etc\** directory.

**Note**

You must update this file on all PCs if any IP address or name information changes or if new PCs are added.

- ☐ Install LMHosts files:

If a *BCMS Vu* Client is on a different LAN segment than the *BCMS Vu* Server,

Create a text file named “LMHosts” containing IP address and computer name information for the *BCMS Vu* Server.

**Example:**   123.123.123.123   servername   #PRE

Install this file on every *BCMS Vu* Client and Wallboard PC that is on a different LAN segment than the *BCMS Vu* Server. In **Windows 95 or**

**Windows 98** install this file in the **Windows\System** directory. In **Windows NT 4.0** install this file in the **Winnt\system32\drivers\etc** directory.

**Note** You must update this file on every PC on which it is installed if *BCMS Vu* Server name information or IP address changes.

☐ Administer **Windows NT 4.0** Users:

All *BCMS Vu* Client users must also be administered as *Windows* Users on the Server (using the *Windows* NT User Manager utility). These users must be administered with the same password they use to log into the *Windows* Network.

☐ (**Novell Network**) If your network is a Novell Network and *BCMS Vu* Server is operating using domain validation, log all *BCMS Vu* Clients into either

- 1 The same domain as that of the NT 4.0 machine

or

- 1 To a domain that has a "trustee relationship" with that domain, in addition to logging into the Novell LAN.

☐ Test the network to be sure you have configured the Server correctly.

1. Try to ping the Server and Client from the Server, and to ping the Server and Client from the Client, by their fully qualified domain names, for example, *machine name.company.com*
2. Verify that in *Network Neighborhood* the Server can locate all Clients and that all Clients can locate the Server.

If you are successful, the network is configured. You may now install *BCMS Vu* software.

**Note** The user who runs the *BCMS Vu* Server must be administered as a "Power User."

3. After you install and run *BCMS Vu* Server software, verify that the *BCMS Vu* shared folder, “VuShare,” can be seen from all Clients.

If you are unsuccessful, ask your network administrator to perform the configuration

## Configuring a PC without a Network Interface Card (NIC)

If your *BCMS Vu* Server satisfies the following requirements:

- 1 Is in stand-alone mode (Server and Client software reside on the same PC)
- 1 Does **not** have a NIC

Configure it using the following settings:

**Note**

Problems may arise if the *Windows* PC has previously had NIC drivers installed even if the NIC has been removed.

For this reason, remove any previously installed NIC drivers. To do this, in **Start/Settings/Control Panel/Network/Adapters** highlight the NIC driver and select **Remove**.

## Introduction

### ☐ Identification

ComputerName

*bcmsvu*

Domain:

*WORKGROUP*

### ☐ Services:

NetBIOS Interface:

NetBT

RPC Configuration:

Name Service Provider:

Windows NT Locator

Network Address: None

Security Service Provider:

Windows NT Security Service



- ☐ Protocols:
- ☐ NetBEUI Protocol:

No properties
- ☐ TCP/IP Protocol:

☐ IP Address:

Adapter:

MS Loopback Adapter: Frame Type 802.3

Select Specify an IP address

IP Address:

123.123.123.123

Subnet Mask:

255.255.255.0

Default Gateway

123.123.123.123

Advanced:

PPTP Filtering:

Disabled

Security:

Disabled
- ☐ DNS:

Host Name:

*bcmsvu*

Domain:

*WORKGROUP*

DNS Service Search Order:

None

Domain Suffix Search Order:

None

☐ Wins Address:

Adapter:

MS Loopback Adapter: Frame Type 802.3

Primary WINS server:

123.123.123.123

Secondary WINS server:

None

DNS For Window Resolution:

Disabled

LMHosts Lookup:

Enabled

Scope ID:

None

☐ DHCP Relay:

Seconds thresholds:	4
Maximum hops:	4
DHCP Servers:	None

☐ Routing:

IP forwarding:	Disabled
----------------	----------

☐ Adapters:

MS Loopback Adapter:  
Frame Type 802.3

☐ Bindings:

Select "all services."

If you have configured your PC correctly to this point, the services should include

NetBIOS Interface

NetBEUI Protocol

MS Loopback Adapter

WINS Client (TCP/IP)

MS Loopback Adapter

Server

NetBEUI Protocol

MS Loopback Adapter

WINS Client (TCP/IP)

MS Loopback Adapter

Workstation

NetBEUI Protocol

MS Loopback Adapter

WINS Client (TCP/IP)

MS Loopback Adapter

# Installing the Data Module, Hardware Key, and Remote Maintenance Line

## Introduction

This chapter describes how to install one of the approved data modules and how to install a *BCMS Vu* hardware key.

The sections of the chapter are as follows:

- Installing a 7400B/7400B Plus Data Module
- Installing an 8400B Plus Data Module
- Installing a *BCMS Vu* hardware key
- Installing a telephone line for remote maintenance.

**Note**

The data module does not apply to DEFINITY ONE systems. For DEFINITY ONE systems, skip to “Installing the Hardware Key.”

**Note**

The data module is installed between the Server PC and the DEFINITY system.

**Note** The hardware key is connected to a parallel port on the Server PC.

## Installing the Data Module

A digital line is required to connect either the 7400B/7400B Plus (4-wire digital port only) or 8400B Plus (2-wire digital port only) data module to the DEFINITY system.

Refer to “Administering” on page 2-5 for data module translations.

When you first apply power to the 7400B/7400B Plus data module, the progress of the self-test is indicated by the sequential, left-to-right lighting of the ten front panel LEDs. If the self test finds no problems, the LEDs labeled “Power/Test” and “TR” remain on and all others go out. The operation of the LEDs described here assumes that the factory default options are still in effect.

When you first apply power to the 8400B, the green and red LED remain on while the 8400B performs a self-test. When the test is complete, the green LED goes off. If the self-test passes, the red LED remains on. If the self-test fails, the red LED flashes three times, and then remains on. This indicates a defective data module.

### Installing the 7400B/7400B Plus Data Module with a Telephone

The 7400B Plus comes with the default option set to be used with a voice terminal. Refer to *7400B/7400B Plus Data Module User Guide*.

### Installing a 7400B/7400B Plus Data Module without a Telephone

This section describes the equipment you need to install a 7400B/7400B Plus Data Module and the steps you should follow to prepare it for operation.

To install a 7400B/7400B Plus Data Module, you need the following:

- One 7400B/7400B Plus Data Module
- One EIA-232-D cable
- One D8W cord
- One 7400B/7400B Plus Data Module Power supply
- If the communications port on your PC has nine pins, you also need an M25/F9 Adapter.

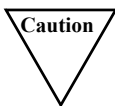
### Selecting an EIA-232-D Cable

Select an EIA-232-D cable with a male connector at one end to connect with the Port 1 connector of the 7400B/7400B Plus, and a connector of the appropriate gender at the other end to connect to the communications port of your PC.

Cables with an earlier RS-232-C designation will also work.

### Setting the 7400B/7400B Plus Data Module Configuration

Before connecting the data module, set its configuration. To do this, complete the following steps:



Disconnect all cables and telephone cords from the rear of the unit. If you do not disconnect all cables and cords at this point, you could cause permanent damage to the 7400/7400B Plus.

Remove the top access panel of the 7400B/7400B Plus as follows:

1. While applying a gentle lifting pressure at the rear edge of the access panel, insert the tip of a ball-point pen or other suitable device into each of the two tab-lock holes in the rear panel to release the locking tabs.
2. Lift and remove the access panel.
3. If a ROM board is installed just inside the access opening of the 7400B/7400B Plus, grasp the edges of the ROM board inside the access opening and lift the board out of its socket.
4. Locate the 8-position dip-switch on the main circuit board, approximately in the center of the area exposed by the access opening.
5. Set the positions of this dip-switch as follows:

Position	State
1	ON
2	N/A (not connected)
3	N/A (not connected)
4	N/A (not connected)
5	OFF
6	OFF
7	OFF
8	OFF

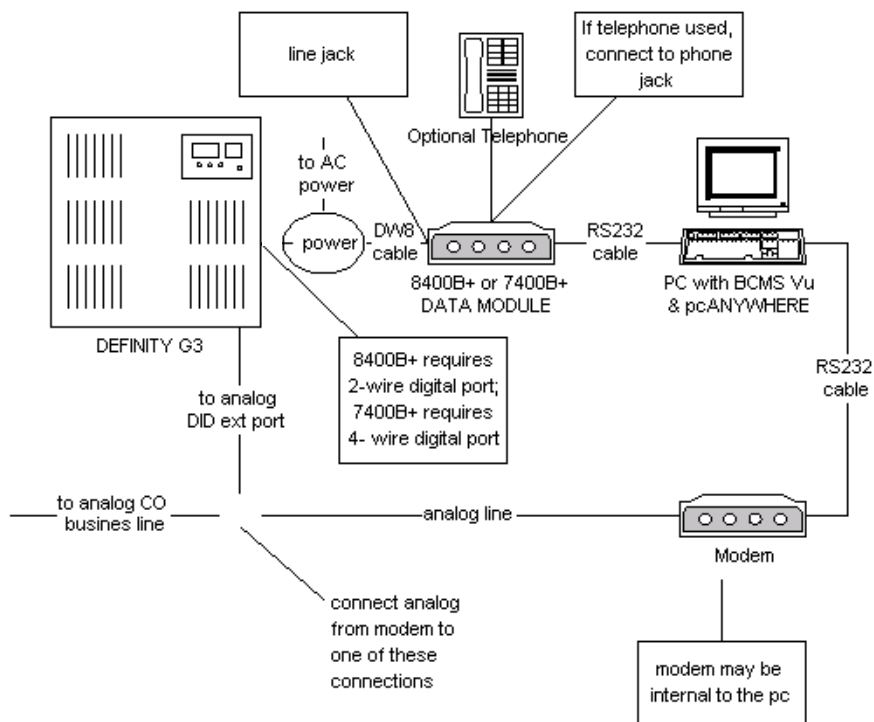
Note

The position settings listed above for switches 2 through 8 are the factory defaults.

6. If a ROM board was removed earlier, reinsert the board into its connector.
7. Replace the access panel by placing it into position and pressing down at the rear edge to engage the locking tabs.

## Connecting the EIA-232-D Cable

The cable connections to the 7400B/7400B Plus data modules are shown in the following figure.



Connect the EIA-232-D cable between the 7400B/7400B Plus and the PC as follows:

1. Insert a male connector of the EIA-232-D cable into the connector labeled "Port 1" on the rear panel of the 7400B/7400B Plus. Tighten both connector retaining screws.

2. If the communications port connector on the PC has nine pins, do the following:
  - a. Plug the remaining end of the cable into the 25-pin portion of the M25/F9 Adapter.
  - b. Plug the 9-pin portion of the M25/F9 Adapter into the EI-232--D Connector Interface on the communications port. Tighten both connector retaining screws.

If the communications port connector on the PC has 25 pins, you do not need the M25/F9 Adapter—just plug the connector cable into your PC's 25-pin port.

3. Tighten all retaining screws.

## **Connecting the DCP Type D8W Cord**

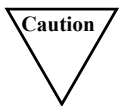
Attach the DCP type D8W telephone cord as follows:

1. Insert one end of the telephone cord into the connector on the rear panel of the 7400B/7400B Plus labeled LINE.
2. Insert the other end of the telephone cord into the DEFINITY system telephone wall jack.

## **Connecting the Power Supply**

Connect the separate power supply unit to the 7400B/7400B Plus as follows:

1. Insert the output connector of the power supply into the connector on the rear panel of the 7400B/7400B Plus labeled POWER.
2. Insert the AC connector of the power supply unit into an appropriate AC outlet.



Make certain that the AC outlet to which you connect the power supply is unswitched (not controlled by a wall switch or light dimmer).



## Power Up

When you first apply power to the 7400B/7400B Plus, the unit carries out a self-test to determine that it is in working order. The progression of the self-test is indicated by the sequential left-to-right lighting of the front-panel LEDs. When the self-test completes, the LEDs labeled POWER/TEST and TR will remain lit and all other LEDs will go out.

If the unit is not configured correctly, the POWER/TEST and DATA LEDs will flash.

See the *7400B/7400B Plus Data Module User Guide* to resolve configuration problems.

## Installing an 8400B Plus Data Module with a Telephone

This section describes the equipment you need to install an 8400B Plus Data Module with a telephone and the steps you must follow to prepare it to operate. The 8400B Plus comes with the default option set to be used with a telephone.

To install an 8400B Plus Data Module, you will need the following:

- One 8400B Plus Data Module.
- One EIA-232 cable.
- One D8W cord.
- If Data Module power is not available through the phone jack, you will also need one 8400B Plus Data Module power supply.
- If a KS-22911 power supply is used, you will need a 400B2 adapter.
- If an MSP-1 power supply is required, you will also need an extra D8W cord.
- If the communications port on the PC has nine pins, you will need an M25/F9 adapter.

### Selecting an EIA-232-D Cable

Select an EIA-232-D with a male connector at one end to connect to the Port 1 connector of the 8400B Plus, and a connector of the appropriate gender at the other end to connect to the communications port of your PC.

Cables with an earlier RS-232-C designation will also work.

## **Connecting the EIA-232-D Cable**

Connect the EIA-232-D cable between the 8400B Plus and the PC as follows:

1. Insert the male connector of the EIA-232-D cable into the connector labeled “Port 1” on the rear panel of the 8400B Plus. Tighten both connector retaining screws.
2. If the communications port connector on the PC has nine pins, do the following:
  - Plug the remaining end of the cable into the 25-pin portion of the M25/F9 Adapter.
  - Plug the 9-pin portion of the M25/F9 Adapter into the EIA Connector Interface on the communications port. Tighten both connector retaining screws.

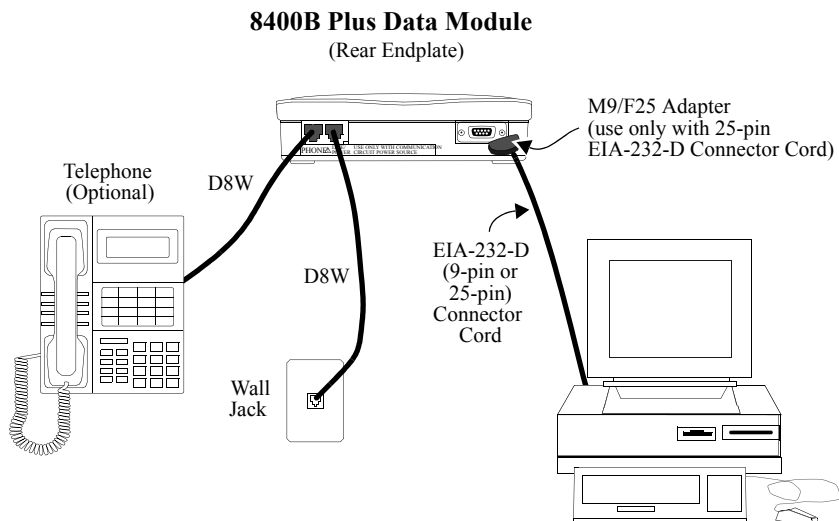
If the communications port connector on the PC has 25 pins, you do not need the M25/F9 Adapter—just plug the connector cable into your PC’s 25-pin port.

3. Tighten all retaining screws.

## Connecting the DCP Type D8W Cord

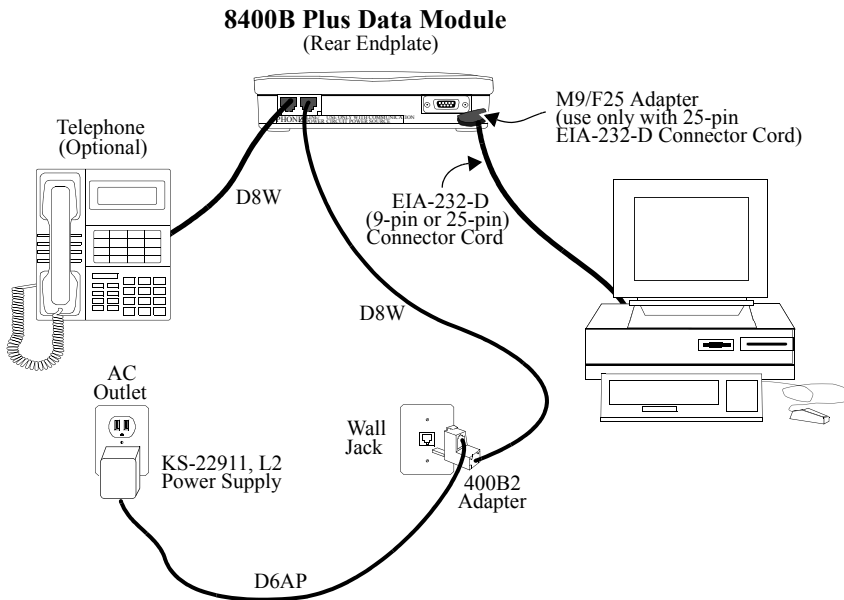
If the data module will receive power from the phone jack, do the following:

1. Insert either end of the D8W telephone cord into the connector on the rear panel of the 8400B Plus labeled LINE.
2. Insert the other end of the D8W telephone cord into the DEFINITY system telephone wall jack, as shown in the following figure.



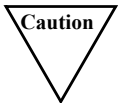
If the data module will receive power from a separate KS-22911 power supply, do the following:

1. Insert one end of the D8W telephone cord into the connector on the rear panel of the 8400B Plus labeled LINE.
2. Connect the other end of the D8W telephone cord to the lower socket of a 400B2 adapter as shown in the following figure.



Connect the power supply as follows:

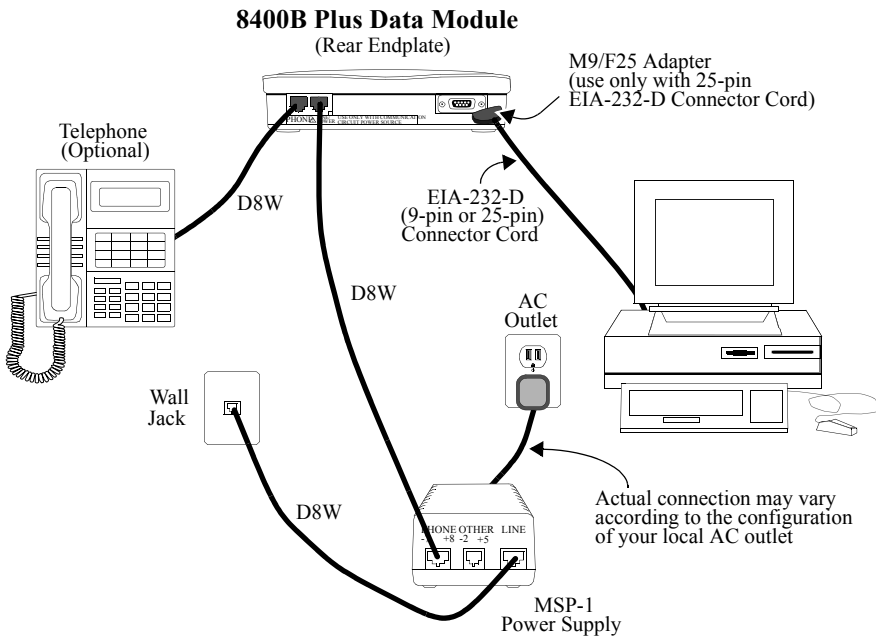
1. Insert the output connector of the power supply into the upper socket of the 400B2 adapter.
2. Insert the AC connector of the power supply unit into an appropriate AC outlet.



Make certain that the AC outlet to which you connect the power supply is unswitched (not controlled by a wall switch or light dimmer).

If the data module will receive power from a separate MSP-1 power supply, do the following:

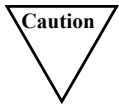
1. Insert either end of the D8W telephone cord into the connector on the rear panel of the 8400B Plus labeled LINE.
2. Connect the other end of the D8W telephone cord to the socket labeled PHONE on the MSP-1 power supply as shown in the following figure.



Connect the power supply as follows:

1. Insert one end of the extra D8W cord into the socket labeled LINE on the power supply.
2. Insert the remaining end of the extra D8W cord into the wall jack.

3. Insert the AC connector of the power supply unit into an appropriate AC outlet.



Be certain that the AC outlet to which you connect the power supply is unswitched (not controlled by a wall switch or light dimmer).

## Installing an 8400B Plus Data Module without a Telephone

The 8400B Plus options must be set with a terminal (715 BCS system administration terminal) or PC with terminal emulation.

*Windows NT 4.0* comes with *HyperTerminal*. To access it,

1. Click on **Start/Programs/Accessories/Hyperterminal/HyperTerm**.
2. Enter *test* in the “name” field.
3. Select **OK**.
4. Change “connect using” to direct to COM 1, COM 2, COM 3, and so forth, depending on which COM Port you are using to connect to the data module.
5. Select **OK** until you get a blank screen.

Issue the following commands:

Command	Response
1. at	OK (This indicates a good connection between the terminal/PC and the 8400B Plus.)
2. at&f	OK (This resets to factory default settings.)
3. ats24?	000 (Default setting.)
4. ats24=001	001 OK (This indicates that the option has been changed to “without a voice telephone.”)
5. at&w0	OK (Options are stored in profile 0.)
6. at&y0	OK (Profile 0 is designated to be used in case the 8400B Plus loses power.)

## Power Up

When you first apply power to the 8400B Plus, the unit carries out a self-test to verify that it is in working order. During the self-test, both LEDs will remain lit. When the self-test is complete, the green LED will go off.

If the self-test passed, the red LED will remain lit. This indicates that the unit is installed and ready for use.

If the self-test failed, the red LED will flash three times and then remain lit.

See the *8400B Plus Data Module User Guide* to resolve configuration problems.

**Note**

If the red and green LEDs flash alternately, the data module cannot communicate with the switch. In this case,

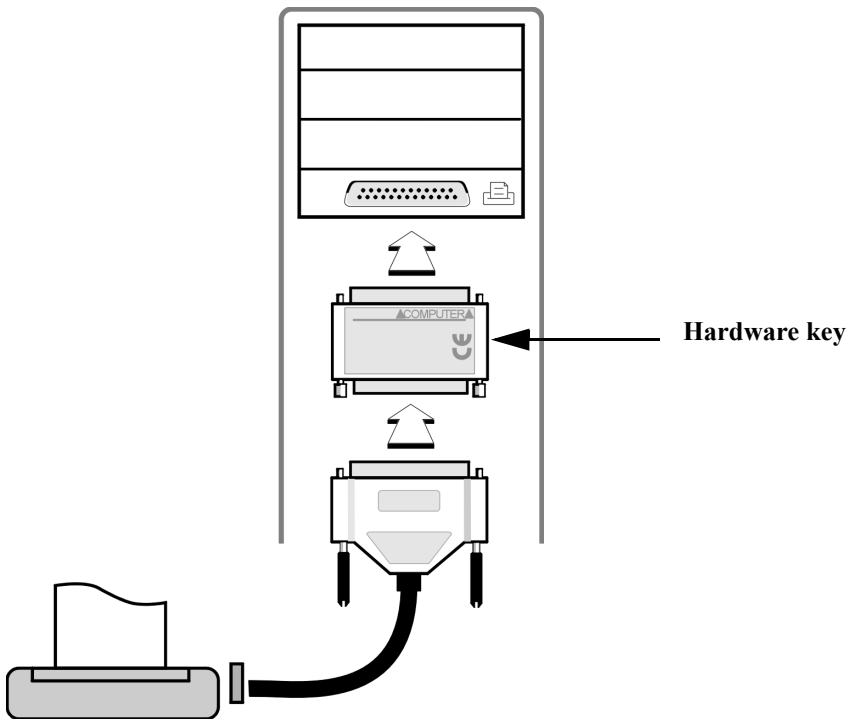
- Check the connections and wiring.
- Check the data module optioning.
- Test the data module from the DEFINITY system using the “Status Data” switch command. You must enter the data module extension number.

## Installing a Hardware Key

**Note** You must install the hardware key before you try to start *BCMS Vu* Server software.

To install a hardware key on a *BCMS Vu* Server PC,

1. Turn off the *BCMS Vu* Server PC.
2. Disconnect the printer cable from the parallel port on the PC (if one is connected).
3. Connect the hardware key to the parallel port connector on the PC. Refer to the following figure.)





# Installing and Removing *BCMS Vu* Software

## Introduction

This chapter tells you how to install and remove *BCMS Vu* software.

Topics covered are

- Installing and removing *BCMS Vu* Server software
- Installing and removing *BCMS Vu* Client software
- Installing and removing *BCMS Vu* Wallboard software.

**Note**

If the hardware key is not attached to the Server PC before you install the *BCMS Vu* Server software, the software will be loaded, but when you try to start *BCMS Vu* Server, the program will run only in simulator mode. In this case, you must attach the key, then restart *BCMS Vu* Server software.

Therefore, be sure that you have installed the hardware key before you try to start *BCMS Vu* Server.

**Note**

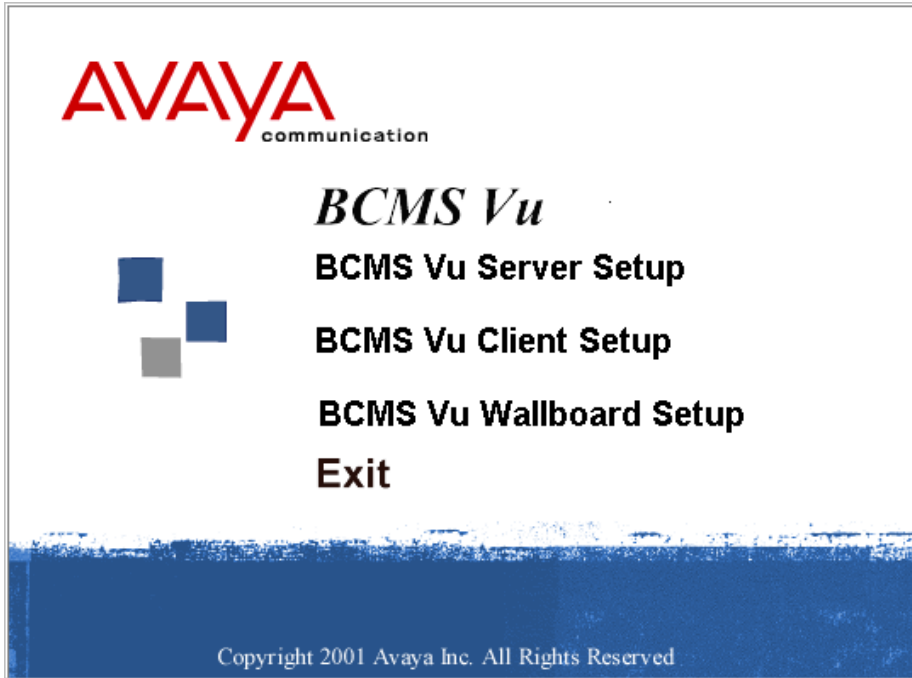
Before you start installing *BCMS Vu* software, be sure you have done everything that pertains to your system in Chapter 2, "Administering the DEFINITY System and Configuring the Network."

## Installing *BCMS Vu* Server Software

To install the *BCMS Vu* Server software,

1. Close all running programs on this PC.
2. Load the *BCMS Vu* software distribution CD-ROM into the drive.

The “*BCMS Vu* R2 Master Setup” window appears.

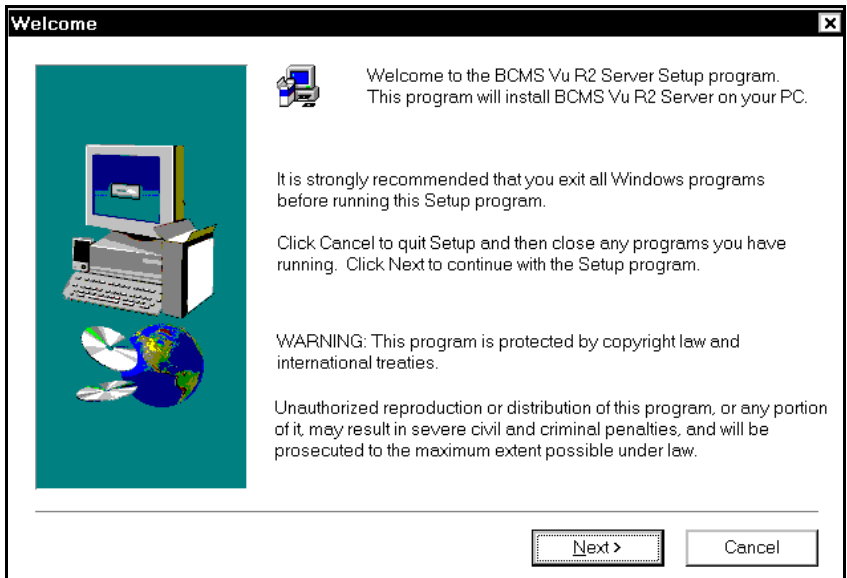


3. Select “*BCMS Vu* Server Setup” in this window.

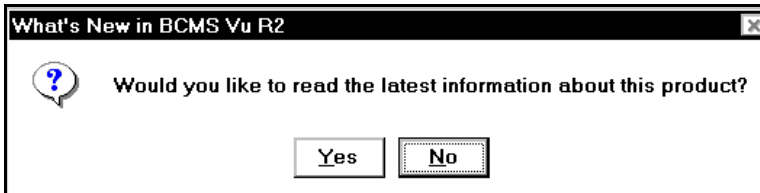
After several seconds the “Welcome” window appears.

## Welcome

The “Welcome” window gives you general information and warnings about *BCMS Vu* software.



4. a. If you want to terminate the installation at this point so that you can close any other programs that are running, select **Cancel**.
- b. To continue to the next screen, select **Next**. If you select **Next**, a window appears asking you if you want to display the latest information about this product that may not be in this manual.



5. a. If you want to display this information, select **Yes**, read the file in the “Notepad” window that appears, then exit the “Notepad” window.

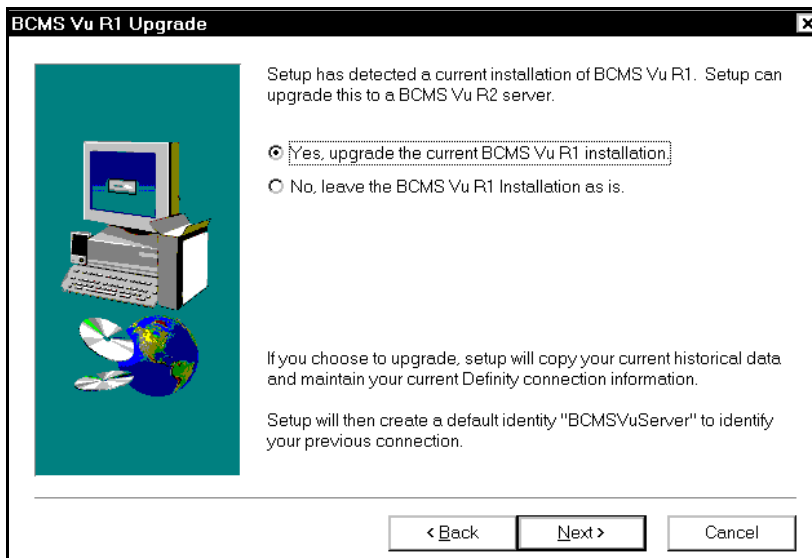
**Note**

We strongly recommend that you read the latest information. If you do not read it during the installation, you should access and read it later by opening **Start/Programs/ Avaya/Server Readme**.

- b. If you do not want to display this file, select **No**.

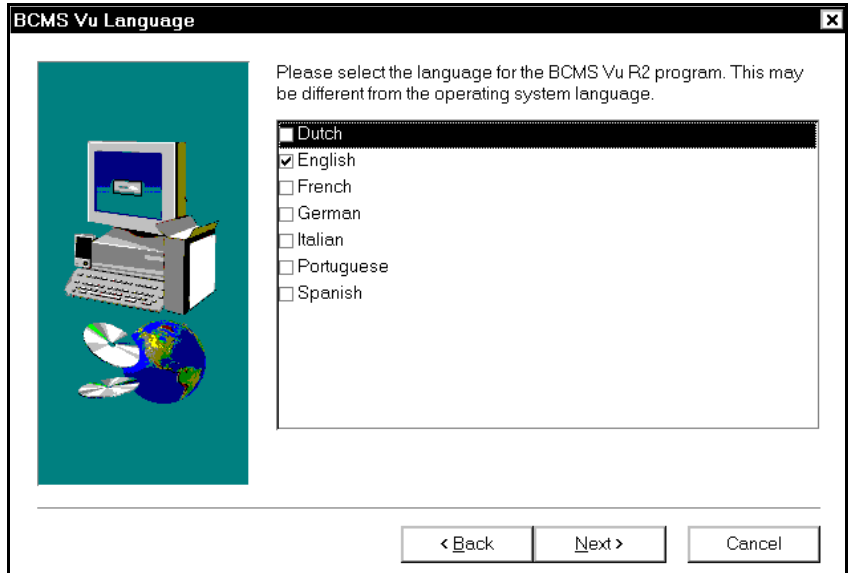
**Note**

If you are upgrading from *BCMS Vu* R1 to *BCMS Vu* R2 Server, the following window appears.



Leave the radio button next to “Yes, upgrade the current...” checked and select **Next**.

The “*BCMS Vu* Language” window appears.



6. Click in the box next to the language in which you want *BCMS Vu* to run. A check means you have selected it.
7.
  - a. Select the **Next** button if you want to accept your choice of language.
  - b. Select **Back** if you want to return to a previous window.
  - c. Select **Cancel** if you want to stop installing *BCMS Vu* Server. In this case, the “*BCMS Vu* R2 Master Setup” window reappears.

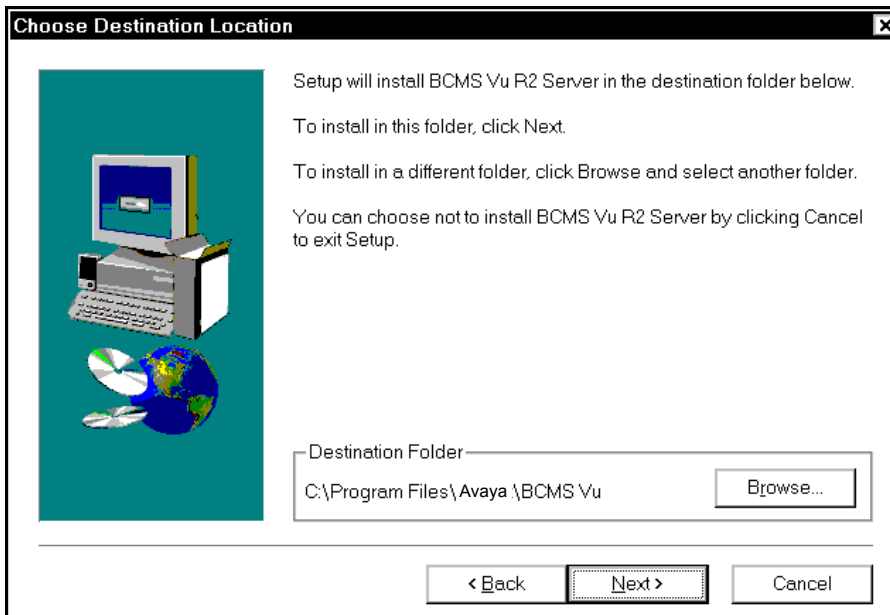
If you select **Next**, the “Choose Destination Location” window appears.

## Choose Destination Location

The “Choose Destination Location” window is where you select the directory on your PC or on the network in which the *BCMS Vu* Server software will be installed. You may install the Server software on any network drive or on any directory on your PC.

**Note**

For best performance, we strongly advise you accept the default location and install the software on the local hard drive.



8. a. To accept the default location for *BCMS Vu* program files (**C:\Program Files\Avaya\BCMS Vu\**), select **Next**.

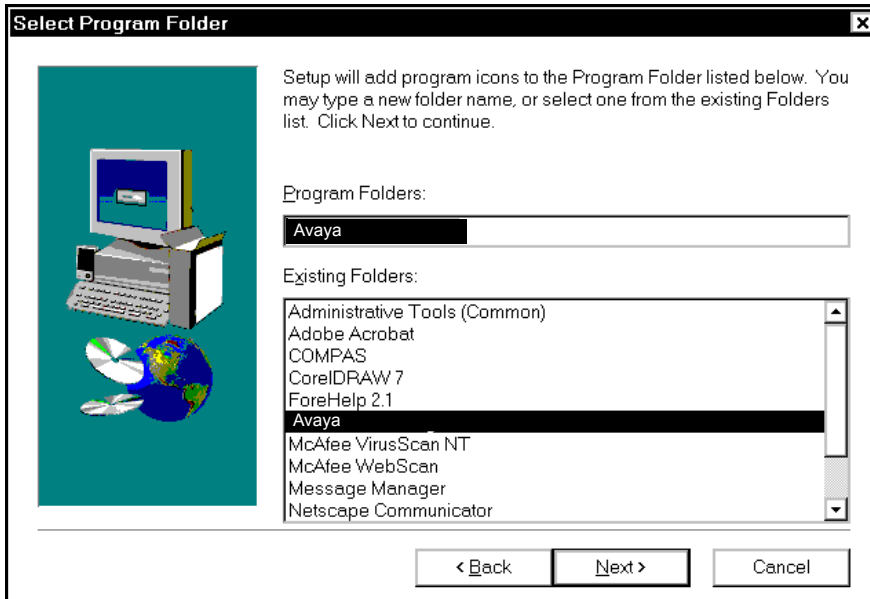
The “Select Program Folder” window appears.

- b. If you want to install the *BCMS Vu* software somewhere other than the default location, complete the following steps:

- 1) Select **Browse** to display the structure of your hard drive or the network.
- 2) Select the desired directory, or type the name of a directory that you would like to create. If you name a non-existent directory, the installation program will create it for you.
- 3) Select **OK** to make the selected directory the destination.  
The new destination location is displayed in the window.
- 4) To accept the new location in which to install the Server software, select **Next**.  
The “Select Program Folder” window appears.

## Select Program Folder

The “Select Program Folder” window lets you designate the folder in the *Windows Start/Programs* menu where the *BCMS Vu* Server icon will reside. This is where you must go to start *BCMS Vu* Server (unless you place a shortcut somewhere else).



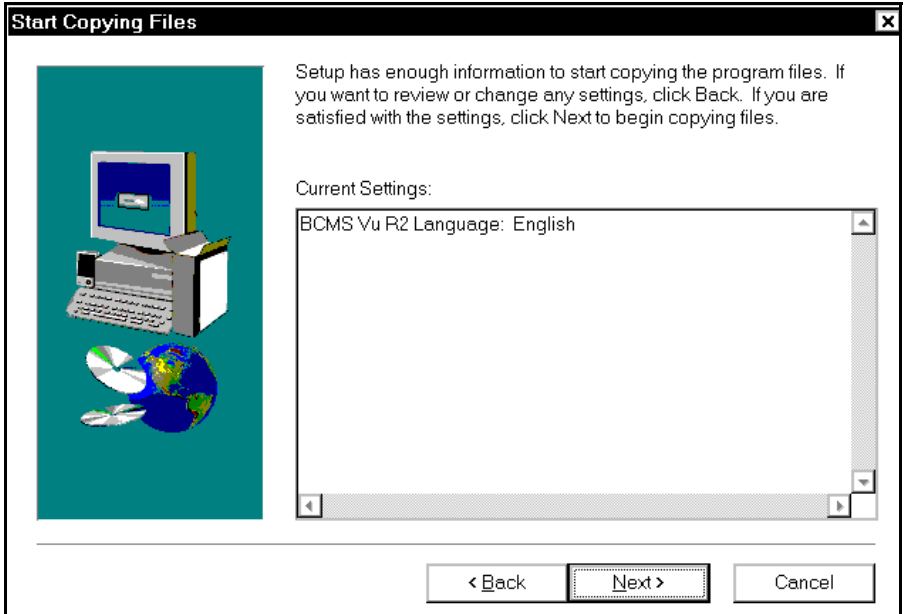
9. a. If you want the program start icon to be in the default location (**Start/Programs/Avaya/**), select **Next**.
- b. If you want the program start icon to be in another location, click on one of the folders listed in the scroll-down menu labeled “Existing Folders,” or type a new folder name in the box labeled “Program Folders,” and select **Next**.

The “Start Copying Files” window appears.



## Start Copying Files

The “Start Copying Files” window lets you review the language you have chosen, and the locations you have designated for storing the Server software and “Start Program” icon.

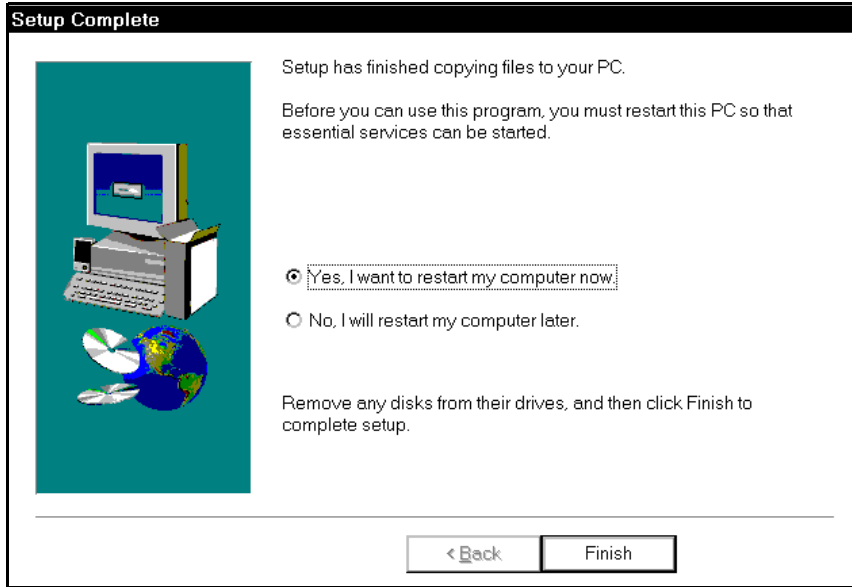


10. If you want to change a location,
  - a. Click on **Back** until you are in the appropriate window.
  - b. Make the change.
  - c. Select **Next** until you return to the “Start Copying Files” window.
11. When you are satisfied with locations you have chosen, select **Next**.

A window appears showing the progress of the installation. The installation process may take up to several minutes. When this process finishes, the “Setup Complete” window appears.

## Setup Complete

The “Setup Complete” window confirms that the setup program has successfully installed *BCMS Vu* Server software on your PC.



Although you have successfully installed *BCMS Vu* Server software, before you can run the program you must re-boot your PC. The “Setup Complete” window gives you two choices: You may re-boot the PC now, or wait and re-boot later.

12. a. To re-boot the PC now, select the radio button next to “Yes, I want to restart my computer now” and select **Finish**. *Windows* proceeds to re-boot the PC. This may take several minutes. When the PC is rebooted, the *Windows* desktop appears.  
b. To exit the install program without re-booting the computer, select the radio button next to “No, I will restart my computer later” and select **Finish**.  
The “BCMS Vu R2 Master Setup” window reappears.
13. a. To install another software component, select the name of the component and turn to the appropriate section of this chapter.

- b. To leave the installation program, select **Exit**.

**Note**


You must re-boot your computer before you can open *BCMS Vu* Server. You can do this before or after you install other *BCMS Vu* software components (Client or Wallboard).

## Removing the *BCMS Vu* R1 Start Icon

If you have upgraded from *BCMS Vu* R1 software to *BCMS Vu* R2 Server software, remove the *BCMS Vu* R1 start icon from the *Windows* start menu.

**Note**

This procedure covers the start icon that the install wizard places in the *Windows* start menu. An icon added to a personal start menu must be removed separately.

1. Click with the secondary mouse button on **Start**.
2. Select **Explore**.
3. The “Exploring” window appears.
4. In the right window of the “Exploring” window double-click on the “Programs” icon.
5. Click with the secondary button on the *BCMS Vu* icon: 

The *BCMS Vu* icon may not be in the right window. If this is so, go to step 9.
6. Select **Delete**.
7. Select **Yes**.
8. Exit the “Exploring” window.
9. If the *BCMS Vu* icon is not in the right window in step 5, open **Winnt\Profiles**.
  - a. Open the Profile folder corresponding to the login under which the R1 software was installed.
  - b. Open **Start Menu\Programs**.
  - c. The *BCMS Vu* R1 icon appears in the right window.

- d. Perform steps 5 through 8.

## Removing *BCMS Vu* Server Software

To remove the *BCMS Vu* software, complete the following steps:



To ensure complete removal of the *BCMS Vu* software, make sure no applications and software programs are running when you begin to remove *BCMS Vu*.

1. Select **Control Panel** from the **Start/Settings Windows** menu.

2. Double click on the **Add/Remove Programs** icon.

The “Add/Remove Programs” window opens.

3. Select the “Install/Uninstall” tab.

4. Highlight “BCMS Vu R2 Server” on the list of installed software.

5. Select **Add/Remove**.

The “Are you sure you want to completely remove ‘BCMS Vu R2 Server’ and all of its components?” window appears.

6. Select **Yes**.

The Uninstall Shield runs and removes the *BCMS Vu* software from your computer.

As the Uninstall Shield runs, you may receive a message warning you that a shared folder will be deleted if you proceed. Proceed anyway.

7. Highlight “Data Access Objects (DAO)” and repeat steps 5 and 6.

**Note**

When the removal program is finished, you may receive a message that some elements could not be removed and that you should manually remove these items. If you receive this message,

1. Select **Details**.
2. Record the names and paths of the folders and/or files in the “Details” window.
3. Select **OK**.
4. Exit the “Install/Uninstall” wizard by selecting **OK**.
5. Delete the folders and/or files using either the Windows *My Computer* or *Explorer* application.
6. Close *My Computer* or *Explorer*.

## Installing *BCMS Vu* Client Software

**Note**

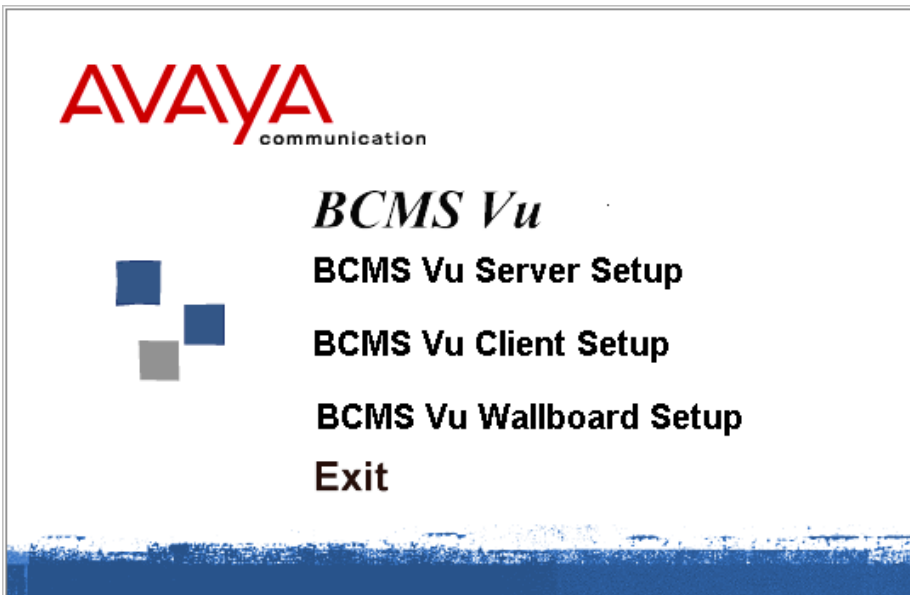
If you chose to install *BCMS Vu* Client after you installed *BCMS Vu* Server or Wallboard, and you did not re-boot your PC, but instead, selected “BCMS Vu Client Setup” in the “BCMS Vu R2 Master Setup” window, go to “Welcome” on page 4-15.

If you are installing *BCMS Vu* Client on several PCs other than the Server PC, we recommend that you place the software CD-ROM in one of the Client PCs and access it from the other PCs on which you want to install the Client software.

To start the *BCMS Vu* Client software installation setup program, do the following:

1. Close all running programs on this PC.
2. Load the *BCMS Vu* software distribution CD-ROM into the drive.

The “BCMS Vu R2 Master Setup” window of the installation wizard appears.

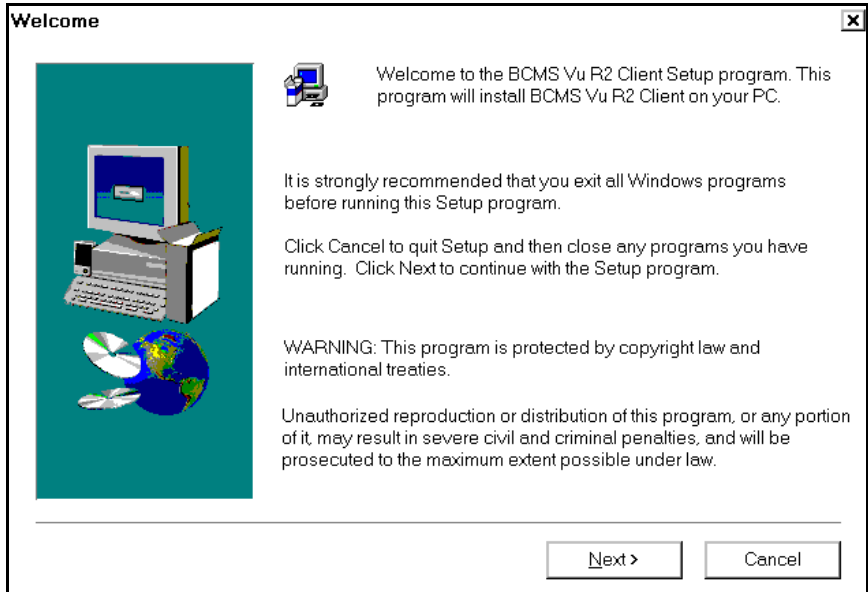


3. Select “BCMS Vu Client Setup.”

The “Welcome” window appears.

## Welcome

The “Welcome” window gives you general information and warnings about the *BCMS Vu* Client software.

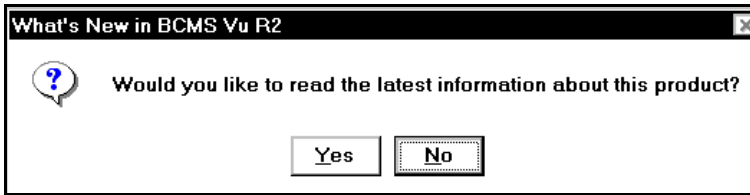


4. a. If you want to terminate the installation at this point so that you can close any other programs that are running, select **Cancel**.
- b. To continue to the next screen, select **Next**.

**Note**

If *BCMS Vu* Client or Wallboard is *running* on this PC, you will receive a notice telling you to close it. Go to the application and close it.

A window appears asking you if you want to display the latest information about this product that may not be in this manual.

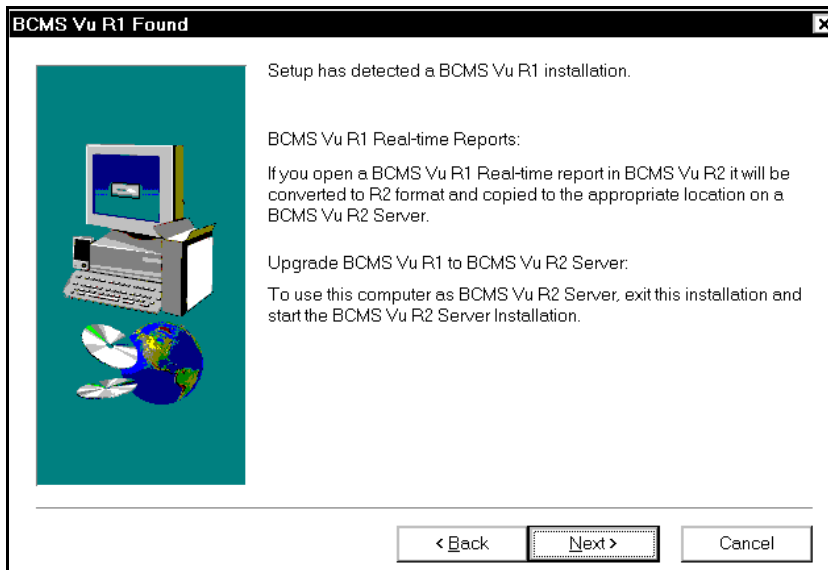


5. a. If you want to display this information, select **Yes**, read the file in the Notepad window that appears, then exit the Notepad window.

**Note**

We strongly recommend that you read the latest information. If you do not read it during the setup, you should access and read it later by opening **Start/Programs/ Avaya/Client Readme**.

- b. If you do not want to display this information, select **No**.
6. If you are upgrading from *BCMS Vu* R1 to *BCMS Vu* R2 Client, the following window appears:



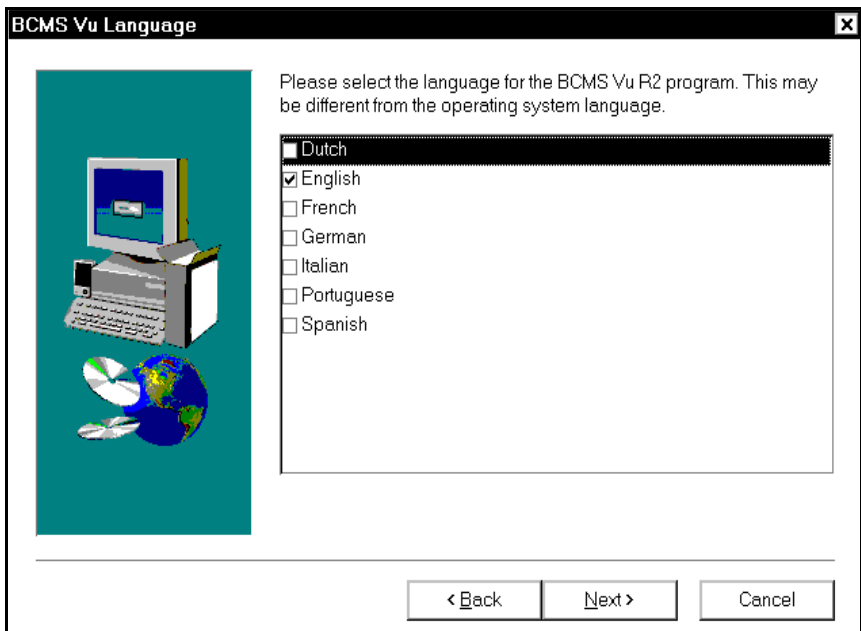


7. Select **Next**.**Note**

At this point, one of two things can occur:

- If *BCMS Vu* Server is not installed on this PC, a window appears asking you to select the language in which you want *BCMS Vu* Client to be installed. If this happens, go to step 8.
- If *BCMS Vu* Server is already installed, a window appears telling you that if you want to install Client in a different language, you must remove the Server software. If this happens, go to step 9.

8. In the following window, select the same language that you will later select for the Server. Separate languages for the Server and Client are not supported.

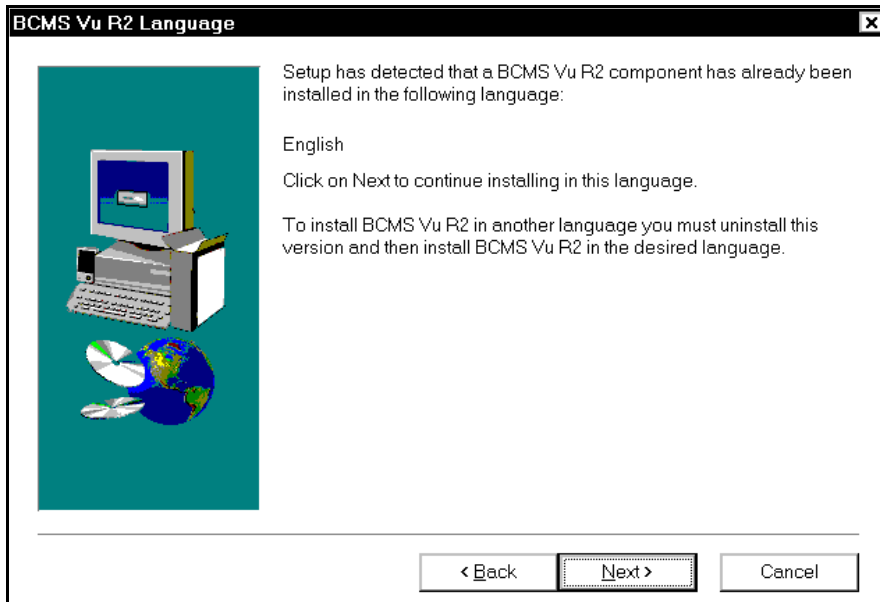


- a. Click in the box next to the language you want *BCMS Vu* Client to run in. A check means you have selected it.
- b. Select **Next** if you want to accept your choice of language.

- c. Select **Back** if you want to return to a previous window.
- d. Select **Cancel** if you want to stop installing *BCMS Vu* Client. In this case, the “BCMS Vu R2 Master Setup” window reappears.

If you select **Next**, the “Choose Destination Location” window appears. Go to “Choose Destination Location” on page 4-19.

- 9. If *BCMS Vu* Server or Wallboard is already installed on this PC, the following window appears.



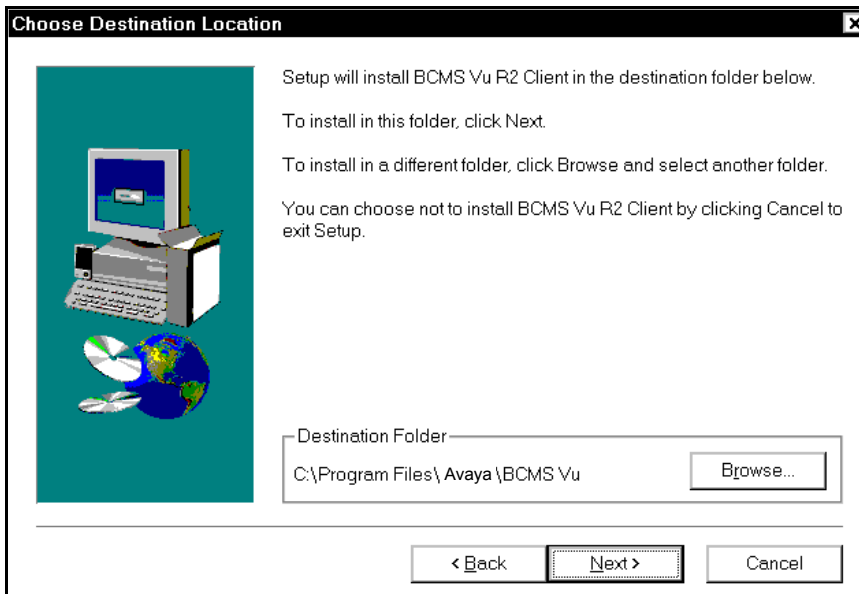
- a. Since *BCMS Vu* does not support different languages for the Server, Client, and Wallboard software, if you decide to install client in a different language from the software that is already installed, you must exit the install procedure (select **Cancel**, then **Exit**), remove the Server and/or Wallboard software (see “Removing BCMS Vu Server Software” on page 4-12, or “Removing BCMS Vu Wallboard Software” on page 4-36) and reinstall all software components in the same language.
- b. If you decide to install *BCMS Vu* Client in the same language that *BCMS Vu* Server or Wallboard is now installed, select **Next**.  
The “Choose Destination Location” window appears.

## Choose Destination Location

The “Choose Destination Location” window is where you select the directory on your PC in which the *BCMS Vu* Client software will be installed. You may install the Client software on any network drive or on any directory on your PC.

**Note**

We strongly recommend that you accept the suggested default location and install the software on the local drive where the Client will be running. This will enhance performance.

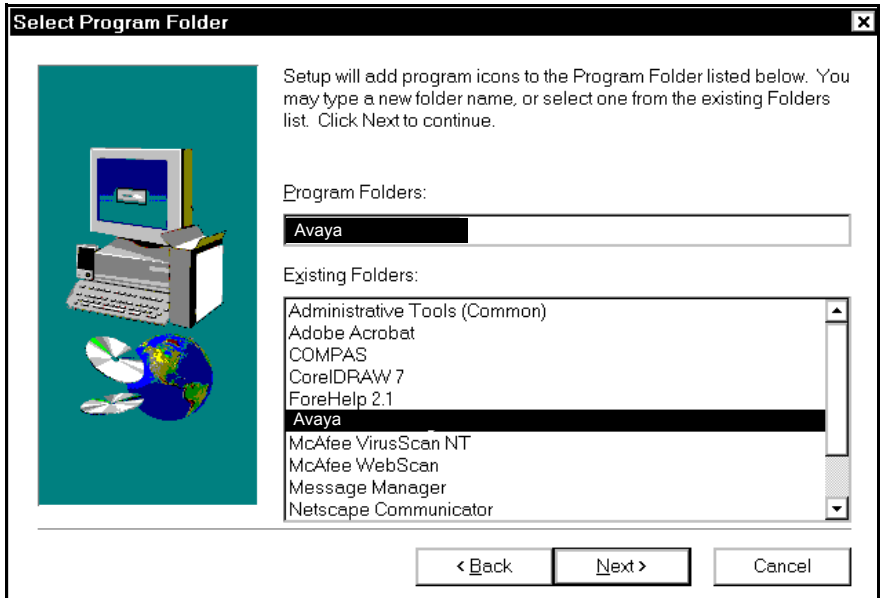


10. a. To accept the default location for *BCMS Vu* program files (**C:\Program Files\Avaya\BCMS Vu\**), select **Next**.
- b. If you want to install the *BCMS Vu* Client software somewhere other than the default location, do the following:
  - 1) Select **Browse** to display the structure of your hard drive or network.
  - 2) Select the PC and the directory you want or enter the name of a directory you would like to create. If you name a non-existent directory, the installation program creates it for you.
  - 3) Select **OK** to make the selected directory the destination.
  - 4) The new destination location is displayed in the window.
  - 5) To accept the new location for installation, select **Next**.

The “Select Program Folder” window appears.

## Select Program Folder

The “Select Program Folder” window lets you designate the folder in the *Windows Start/Programs* menu where the *BCMS Vu* Client icon will reside. This is where you must go to start *BCMS Vu* Client (unless you place a shortcut somewhere else).

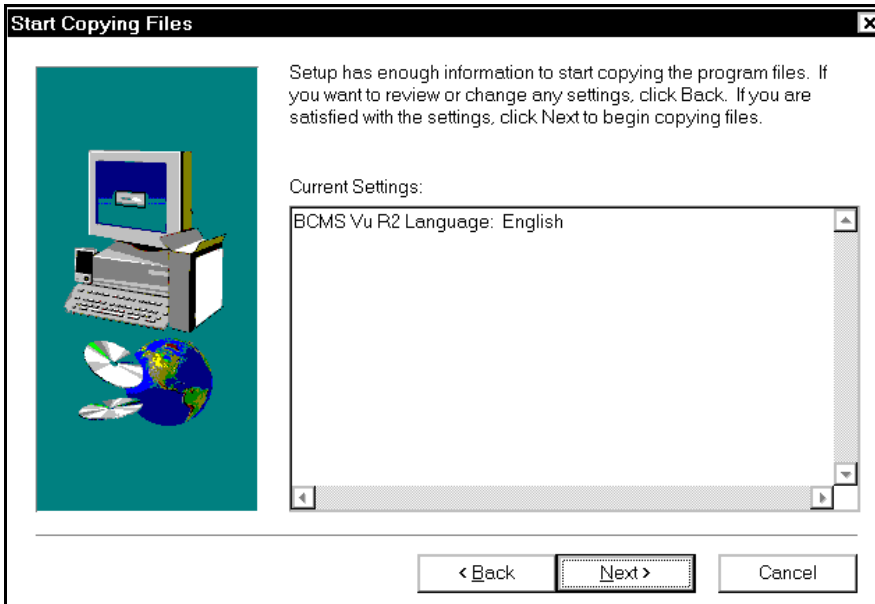


11. a. If you want the Start Program icon to be in the default location (**Start/Programs/Avaya**), select **Next**.
- b. If you want the Start Program icon to be in another location, click on one of the folders listed in the scroll-down menu labeled “Existing Folders,” or type a new folder name in the box labeled “Program Folders,” and select **Next**.

The “Start Copying Files” screen appears.

## Start Copying Files

The “Start Copying Files” screen lets you review the locations you have designated for storing the Client software and the Start Program icon.

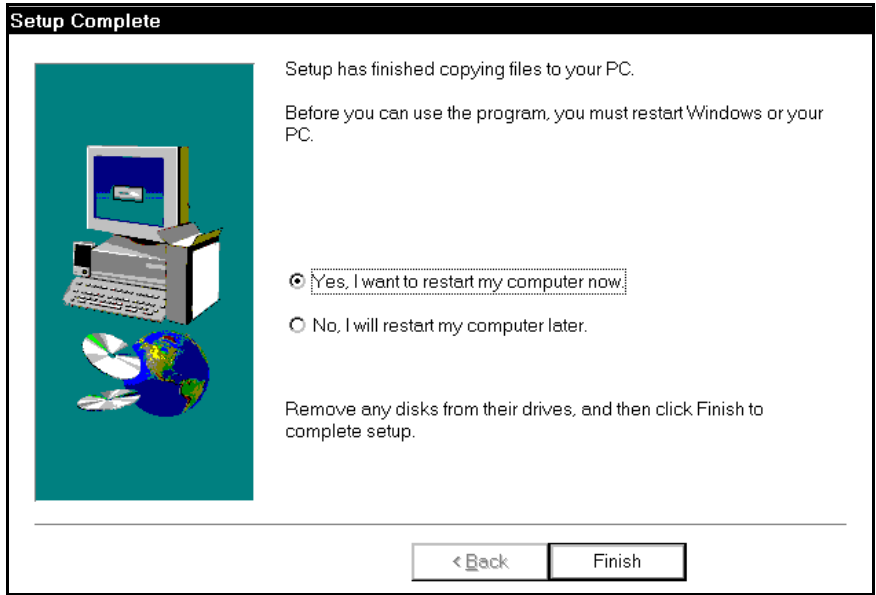


12. If you want to change a location,
  - a. Click on the **Back** button until you are in the appropriate window.
  - b. Make the change.
  - c. Select **Next** until you return to the “Start Copying Files” window.
13. When you are satisfied with locations you have chosen, select the **Next** button.

A window appears showing the progress of the installation. The process may take up to several minutes. When the process finishes, the “Setup Complete” window appears.

## Setup Complete

The “Setup Complete” window confirms that the setup program has successfully installed *BCMS Vu* Client software on your PC.



Although you have successfully installed *BCMS Vu* Client, before you can run the program you must re-boot your PC. The “Setup Complete” window gives you two choices: You may re-boot the PC now, or wait and re-boot later.

14. a. To re-boot the PC now, select the radio button next to “Yes, I want to restart my computer now” and select **Next**. *Windows* re-boots the PC. This may take several minutes. When the PC is rebooted the windows desktop appears.
- b. To exit the install program without re-booting the computer, select the radio button next to “No, I will restart my computer later” and select **Finish**.

The “BCMS Vu R2 Master Setup” window reappears.

- 1) To install another software component, select the name of the component and turn to the appropriate section of this chapter.
- 2) To leave the installation program, select **Exit**.

**Note**

You must install the wallboard software on every PC to which a wallboard is attached, unless that PC has a Server installed on it.

**Note**

You must re-boot your computer before you can open *BCMS Vu* Client. You can do this before or after you install other *BCMS Vu* software components (Server or Wallboard).

## Removing *BCMS Vu* Client Software



To ensure complete removal of the *BCMS Vu* Client software, make sure no software programs or applications are running before you start to remove the Client software.

To remove the *BCMS Vu* Client software, complete the following steps:

1. Select **Control Panel** from the **Start/Settings Windows** menu.
2. Double click on **Add/Remove Programs**.  
The “Add/Remove Programs” window opens.
3. Select the “Install/Uninstall” tab.
4. Highlight **BCMS Vu R2 Client** on the list of installed software.
5. Select **Add/Remove**.

The “Are you sure you want to completely remove ‘BCMS Vu R2’ Client and all of its components?” window appears.



6. Select **Yes**.

The Uninstall Shield runs and removes the *BCMS Vu* R2 Client software from your computer.

7. Exit the “Add/Remove Programs Properties” window and “Control Panel.”

8. In “Control Panel,” select the “ODBC” icon.

9. Browse through each tab.

a. Highlight every component related to *BCMS Vu* and select **Remove**.

b. Exit “ODBC” and “Control Panel.”

**Note**

When the removal program is finished, you may receive a message that some elements could not be removed and that you should manually remove these items. If you receive this message,

1. Select **Details**.
2. Record the names and paths of the folders and/or files in the “Details” window.
3. Select **OK**.
4. Exit the “Install/Uninstall” wizard by selecting **OK**.
5. Delete the folders and/or files using either the *My Computer* or the *Explorer* application.
6. Close *My Computer* or *Explorer*.

## Installing *BCMS Vu* Wallboard Software

**Note**

Installing Wallboard software is not the same as registering (also called “Configuring”) a wallboard. Wallboard software permits a user to send a report or message to a wallboard. Registering a wallboard involves telling *BCMS Vu* Server the location and specifications of wallboards connected to PCs on the network.

**Note**

It is not necessary to install the wallboard software on the same PC as *BCMS Vu* Server software; Server software includes Wallboard software. However, you must install Wallboard software on every other PC to which a wallboard that is registered with the Server is physically connected.

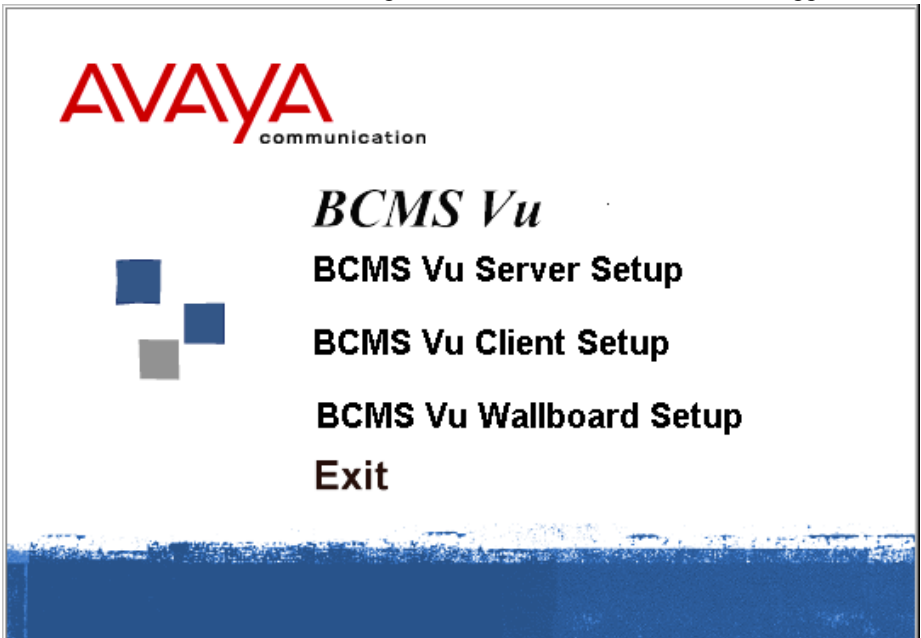
To start the *BCMS Vu* Wallboard software installation setup program, complete the following steps:

**Note**

If you choose to install *BCMS Vu* Wallboard after you installed *BCMS Vu* Client, and you did not re-boot your PC, but instead selected “Setup *BCMS Vu* Wallboard” in the “*BCMS Vu* R2 Master Setup” window, go to “Welcome” on page 4-28.

1. Close all running programs on this PC.
2. Load the *BCMS Vu* software distribution CD-ROM into the drive.

The “BCMS Vu Master Setup” window of the installation wizard appears.



3. Select “BCMS Vu Wallboard Setup.”

The “Welcome” window appears.

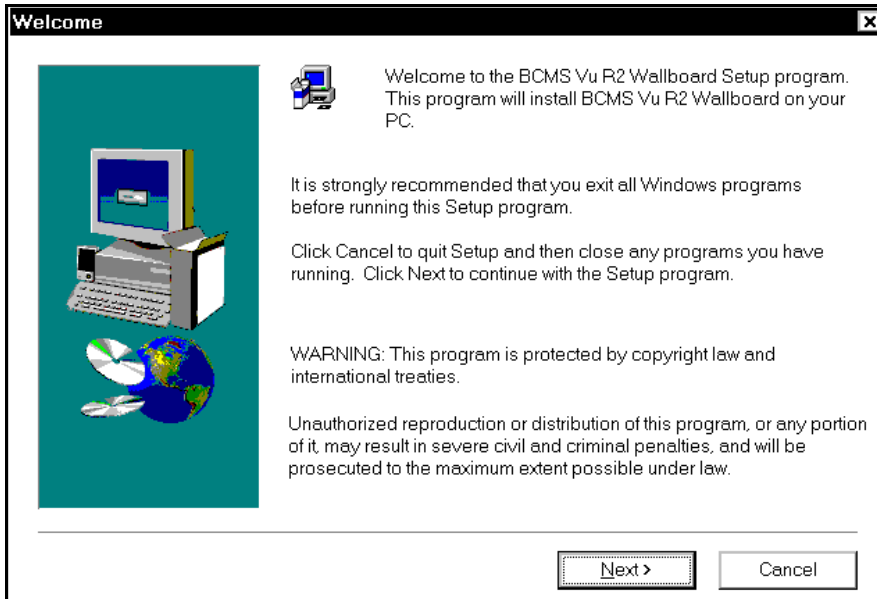
**Note**

If *BCMS Vu* Server software is already installed on this PC, a window appears reminding you of this fact and the setup program will not install the wallboard software. Your only option is to select **Finish** and return to the “*BCMS Vu* R2 Master Setup” window.

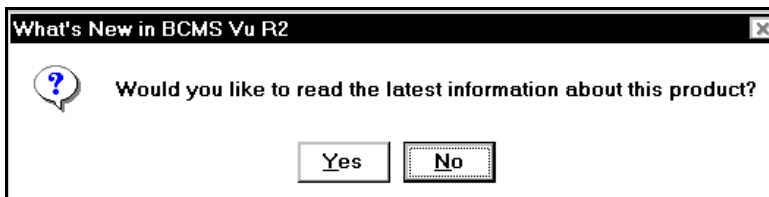
To exit the “BCMS Vu Master Setup” window, select **Exit**.

## Welcome

The “Welcome” window gives you general information and warnings about the *BCMS Vu* Wallboard software.



4. a. If you want to terminate the installation at this point so that you can close any other programs that are running, select **Cancel**.
- b. To continue with the next screen, select **Next**. If you select **Next**, a window appears asking you if you want to display the latest information about this product that may not be in this manual.



- c. If you want to display this information, select **Yes**, read the file in the Notepad window that appears, then exit the *Notepad* window.

**Note**

We strongly recommend that you read the latest information. If you do not read it during the installation, you should access and read it later by opening **Start/Programs/Avaya/Wallboard Readme**.

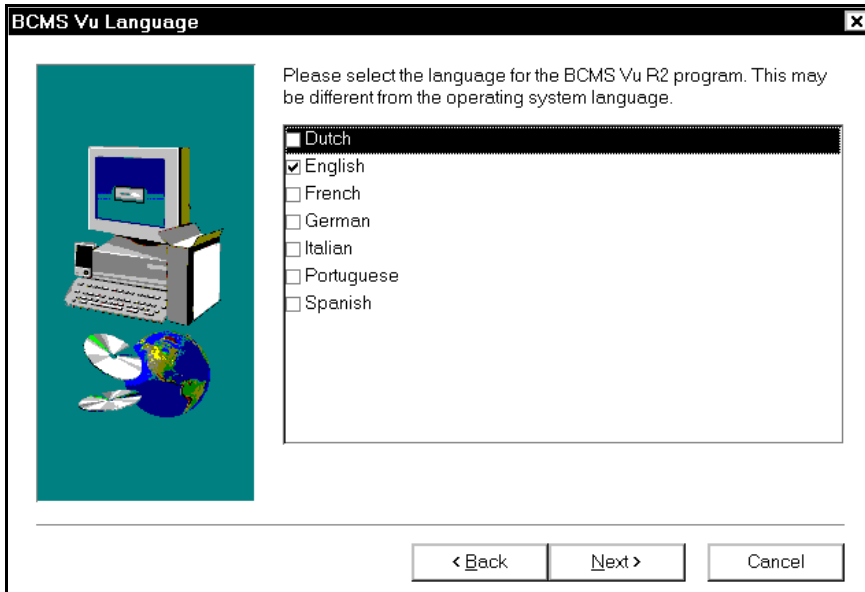
- d. If you do not want to display the “readme” file, select **No**.

**Note**

At this point, one of two things can occur:

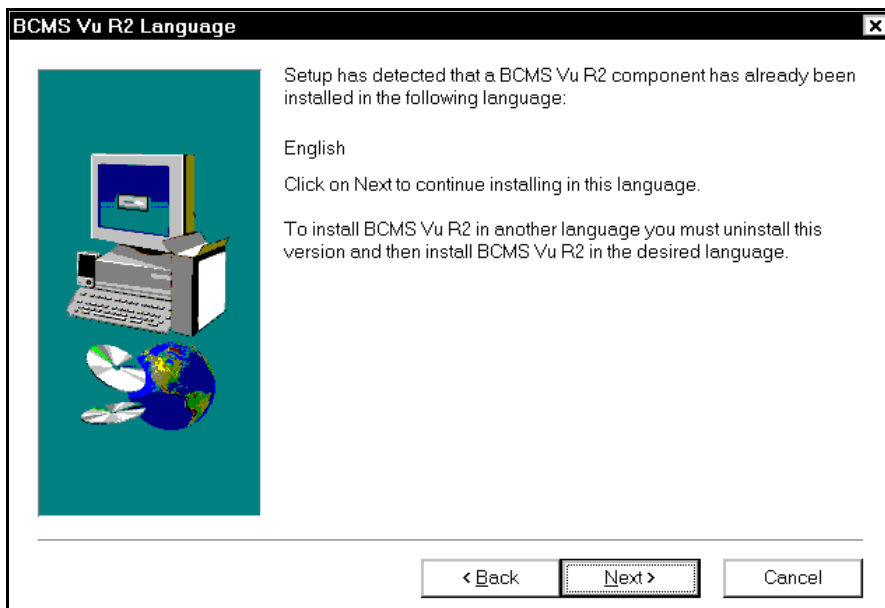
- If *BCMS Vu* Client is not yet installed, a window appears asking you to select the language in which you want *BCMS Vu* Wallboard to be installed. If this is the case, go to step 5.
- If *BCMS Vu* Client is already installed, a window appears telling you that if you want to install *BCMS Vu* Wallboard in another language, you must first remove the previously installed *BCMS Vu* software. In this case go to step 6.

5. In the following window, select the same language that you will later select for the Client, if you intend to install the Client software on this PC. Separate languages for the Wallboard and Client are not supported.



- a. Click in the box next to the language you want Wallboard to run in. A check means you have selected it.
- b. If you want to accept your choice of language, select the **Next** button.  
If you select **Next**, the "Choose Destination Location" window appears. Go to "Choose Destination Location Window" on page 4-32.
- c. If you want to return to a previous window, select **Back**.
- d. If you want to stop installing *BCMS Vu* Wallboard, select **Cancel**. In this case, the "BCMS Vu R2 Master Setup" window reappears.

6. If *BCMS Vu* Client is already installed on this PC, the following window appears:



- a. If you decide to install *BCMS Vu* Wallboard in the same language in which *BCMS Vu* Client is now installed, select **Next**.

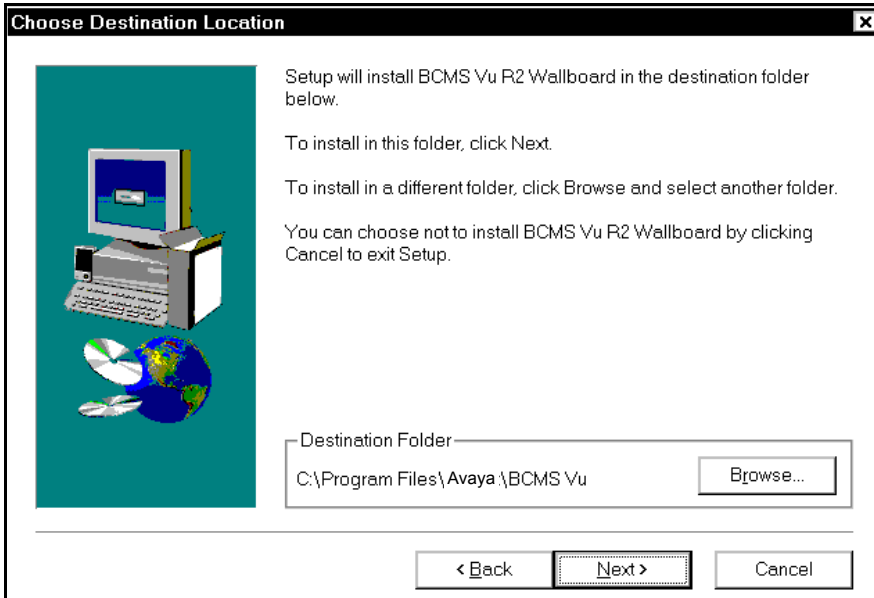
The “Choose Destination Location” window appears. Go to “Choose Destination Location Window” on page 4-32.

- b. Since *BCMS Vu* does not support different languages for the Client and Wallboard software, if you decide to install Wallboard in a different language from the Client software that is already installed, you must exit the install procedure (select **Cancel**, then **Exit**), remove the Client software (see “Removing *BCMS Vu* Client Software” on page 4-24 and reinstall the Wallboard software in the same language.

The “Choose Destination Location” window appears.

## Choose Destination Location Window

The “Choose Destination Location” window is where you select the directory on your PC in which the *BCMS Vu* Wallboard software will be installed. You may install the Wallboard software on any network drive or in any directory on your PC. You must install *BCMS Vu* Wallboard software on every PC in the network to which an external wallboard that is registered with the Server is physically connected.



7. a. To accept the default location for *BCMS Vu* program files (**C:\Program Files\Avaya\BCMS Vu\**), select **Next**.
- b. If you want to install the *BCMS Vu* Wallboard software somewhere other than the default location, complete the following steps:
  - 1) Select **Browse** to display the structure of your hard drive and of the network to which you are connected.
  - 2) Select the PC and desired directory, or type the name of a directory that you would like to create. If you name a non-existent directory, the installation program will create it for you.
  - 3) Select **OK** to make the selected directory the destination.



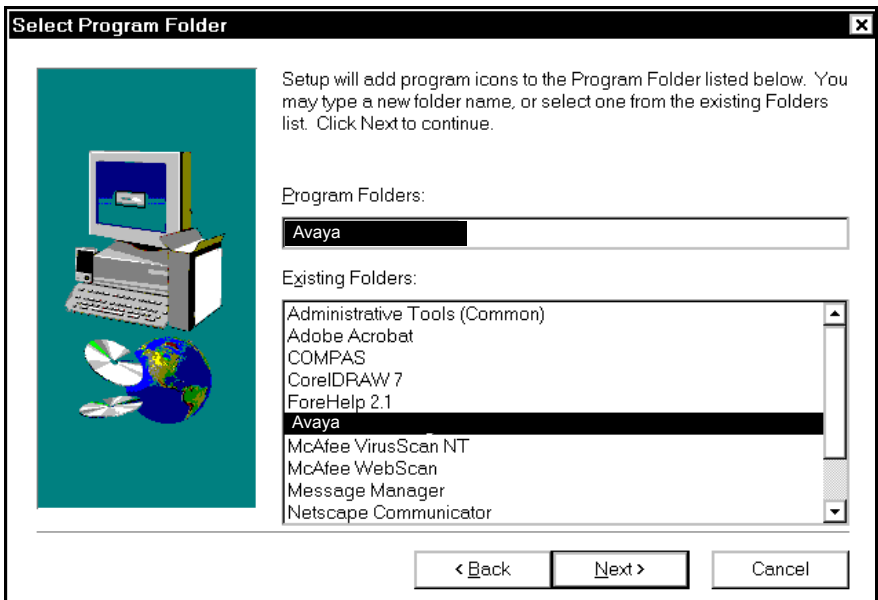
The new destination location is displayed on the window.

- 4) To accept the location displayed, select **Next**.

The “Select Program Folder” window appears.

## Select Program Folder

The “Select Program Folder” window lets you designate the folder in the *Windows Start\Programs* menu where the *BCMS Vu* Wallboard Start icon will reside, unless you create a shortcut for it and place the shortcut somewhere else.



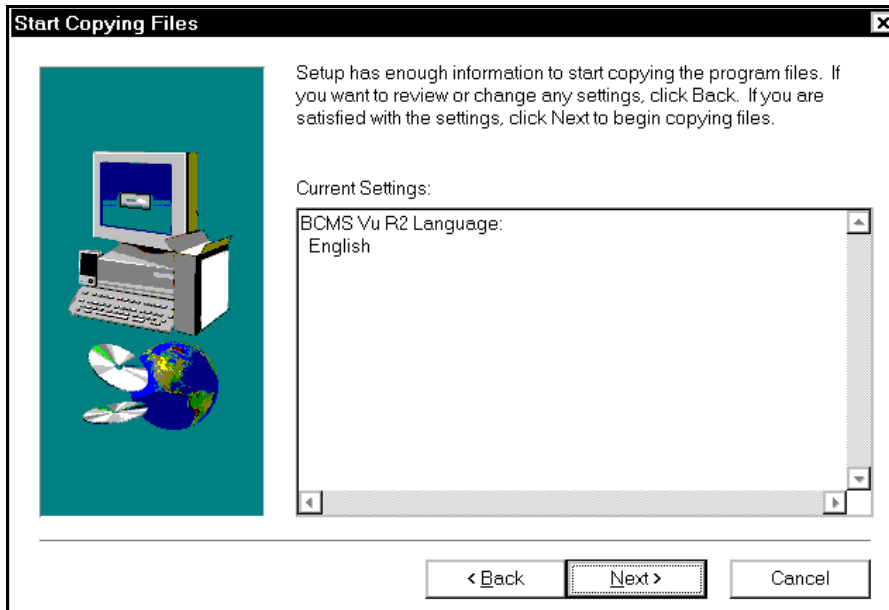
8. a. If you want the Wallboard Start icon to be in the default location (**Start/Programs/Avaya**), select **Next**.

- b. If you want the Start icon to be in another location, click on one of the folders listed in the scroll-down menu labeled “Existing Folders,” or type a new folder name in the box labeled “Program Folders,” and select **Next**.

The “Start Copying Files” window appears.

## Start Copying Files

The “Start Copying Files” window lets you review the locations you have designated for storing the wallboard software and Start Program icon, and the language you have chosen.



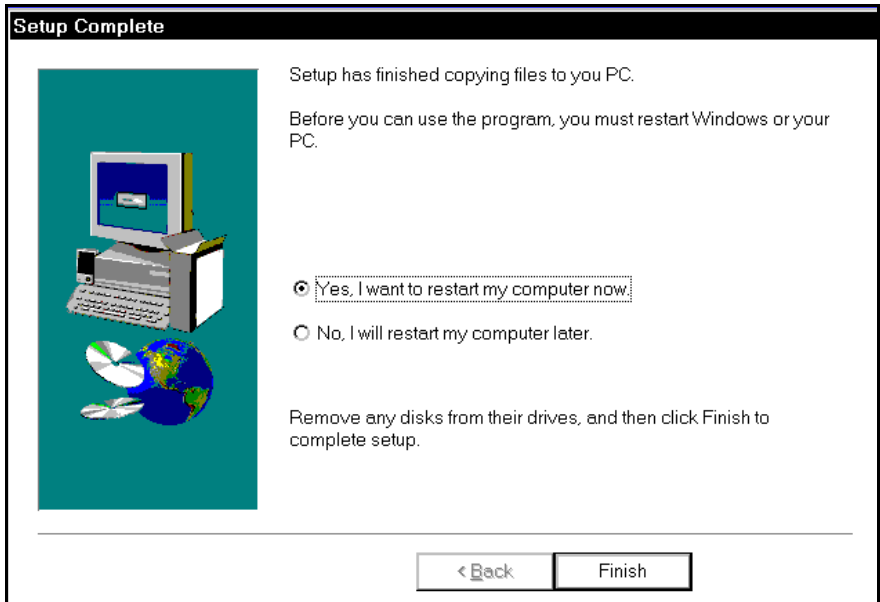
9. If you want to change a location,
  - a. Select **Back** until you are in the appropriate window.
  - b. Make the change.
  - c. Select **Next** until you return to the “Start Copying Files” window.

- d. When you are satisfied with locations you have chosen, select **Next**.

A window appears showing the progress of the installation. When the installation is complete, the “Setup Complete” window appears.

## Setup Complete

The “Setup Complete” window confirms that the setup program has successfully installed the *BCMS Vu* Wallboard software on your PC.



Although you have successfully installed *BCMS Vu* Wallboard, before you can run the program you must re-boot your PC. The “Setup Complete” window gives you two choices: You may re-boot the PC now, or wait and re-boot later.

10. a. To re-boot the PC now, select the radio button next to “Yes, I will restart my computer now” and select **Finish**. *Windows* proceeds to re-boot the PC. This may take several minutes. When the PC is rebooted, the *Windows* desktop appears on your screen.
  - b. To exit the install program without re-booting the computer, select the radio button next to “No, I will restart my computer later” and select **Finish**. The “BCMS Vu R2 Master Setup” window reappears.
11. To install *BCMS Vu* Client software,
    - a. If the “BCMS Vu R2 Master Setup” window is on your screen, select “BCMS Vu Client Setup” and go to “Welcome” on page 4-15.
    - b. If the “BCMS Vu R2 Master Setup” window is not on your screen, go to “Installing BCMS Vu Client Software” on page 4-14 and follow instructions.
  12. To leave the installation program, select **Exit**.

## Removing *BCMS Vu* Wallboard Software

To remove *BCMS Vu* Wallboard software, complete the following steps:



To ensure complete removal of the *BCMS Vu* Wallboard software, make sure the application is closed before performing the uninstall.

1. Select **Control Panel** from the **Start/Settings** menu.
2. Double click on **Add/Remove Programs**.

The “Add/Remove Programs” window opens.
3. Select the “Install/Uninstall” tab.
4. Highlight “BCMS Vu Wallboard” on the list of installed software.

5. Select **Add/Remove**.

The “Are you sure you want to entirely remove the selected application and all of its components?” window appears.

6. Select **Yes**.

The Uninstall Shield runs and removes the *BCMS Vu* Wallboard software from your computer.

**Note**

When the removal program is finished, you may receive a message that some elements could not be removed and that you should manually remove these items. If you receive this message,

1. Select **Details**.
2. Record the names and paths of the folders and/or files in the “Details” window.
3. Select **OK**.
4. Exit the Install/Uninstall Wizard by selecting **OK**.
5. Delete the folders and/or files using either the Windows *My Computer* or the *Explorer* application.
6. Close *My Computer* or *Explorer*.



# Installing a Wallboard

## Introduction

This chapter describes the equipment you will need and the steps to follow when installing a wallboard.

The sections included in this chapter are as follows:

- Wallboard Types
- Installing the Wallboard
- Registering a Wallboard.

## Related Documents

Refer to your wallboard user guide for more information.

Avaya Wallboard users can refer to

*BCMS Vu Wallboard Models WB1, WB2, IW1, and IW2 Installation, Programming, and Troubleshooting Instructions (555-230-706)*

*Wallboard Models WB3 and IW3 Installation, Programming, and Troubleshooting Instructions (585-216-100)*

*Wallboard Model WB5 Installation, Programming, Troubleshooting Instructions (585-216-102).*

# Wallboard Types

The *BCMS Vu* software supports eight types of wallboards. The following table lists the characteristics specific to each wallboard.

Wallboard Type	Manufacturer	Number of Lines	Characters per Line	Colors Supported
WB1/IW1	Spectrum	2	20	Red, green, yellow
WB2/IW2	Spectrum	2	26	Red, green, yellow
WB3/IW3	Spectrum	2	33	Red, green, yellow
WB5/IW5	Spectrum	1	20	Red, green, yellow
TCD226C	AdvaTel	1	26	Red, green, yellow
TCD426C	AdvaTel	4	26	Red, green, yellow
Japanese Wallboard	AdvaTel	2	10	Red, green, yellow
UPD 64	Ferrograph	2	30	Red, green, yellow

Note

*BCMS Vu* software does not allow you to change the color of the text that is displayed on the wallboard. In particular, the thresholds will be indicated by the display changing to yellow (caution) or red (warning) if the wallboard supports these colors.



# Installing the Wallboard

To install an external wallboard to use with *BCMS Vu* software, complete the following tasks:

- Unpack the wallboard.
- Be sure that a converter box that converts the communication protocol from RS-485 (the wallboard protocol) to RS-232 (the PC protocol) is included with the wallboard.
- Be sure that the wallboard installation document is included with the wallboard.
- Connect the communications cable from the wallboard to the PC.
  - If the serial port on the PC has 25 pins, use a DB25-to-RJ11 connection cable.
  - If the serial port on the PC has 9 pins, use a DB9-to-RJ11 connection cable.

For complete instructions on how to install Avaya wallboards, refer to the manuals listed on the first page of this document.

For instructions on how to install other types of wallboards, refer to the user's manual that accompanies the wallboard.

Note

Avaya wallboards are addressed using hexadecimal notation. You address them using the remote control unit that comes with the wallboards. Refer to the user's guide that comes with the wallboard.

However, when you enter a wallboard address in the *BCMS Vu* configuration procedure, you must use decimal notation. Furthermore, *BCMS Vu* accepts wallboard addresses only from 0 to 127 (decimal).

The table at the end of this chapter relates decimal addresses from 0 to 127 to corresponding hexadecimal addresses.

## Registering a Wallboard

Before you can use a wallboard, you must register it with the Server. Refer to Chapter 4, “Configuring and Managing the *BCMS Vu* Software,” in *BCMS Vu Software R2 User Guide*.

## Decimal - Hexadecimal Table

Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex	Dec	Hex
0	0	23	17	46	2E	69	45	92	5C	115	73
1	1	24	18	47	2F	70	46	93	5D	116	74
2	2	25	19	48	30	71	47	94	5E	117	75
3	3	26	1A	49	31	72	48	95	5F	118	76
4	4	27	1B	50	32	73	49	96	60	119	77
5	5	28	1C	51	33	74	4A	97	61	120	78
6	6	29	1D	52	34	75	4B	98	62	121	79
7	7	30	1E	53	35	76	4C	99	63	122	7A
8	8	31	1F	54	36	77	4D	100	64	123	7B
9	9	32	20	55	37	78	4E	101	65	124	7C
10	A	33	21	56	38	79	4F	102	66	125	7D
11	B	34	22	57	39	80	50	103	67	126	7E
12	C	35	23	58	3A	81	51	104	68	127	7F
13	D	36	24	59	3B	82	52	105	69		
14	E	37	25	60	3C	83	53	106	6A		
15	F	38	26	61	3D	84	54	107	6B		
16	10	39	27	62	3E	85	55	108	6C		
17	11	40	28	63	3F	86	56	109	6D		
18	12	41	29	64	40	87	57	110	6E		
19	13	42	2A	65	41	88	58	111	6F		
20	14	43	2B	66	42	89	59	112	70		
21	15	44	2C	67	43	90	5A	113	71		
22	16	45	2D	68	44	91	5B	114	72		



# Troubleshooting Problems

## Introduction

If problems occur during installation, correct them before you proceed. The following sections describe the most likely sources of error.

To resolve problems that occur while you are running the *BCMS Vu* software, refer to the “Troubleshooting” chapter of the *BCMS Vu Software User Guide*.

# Troubleshooting *BCMS Vu* Installation

This section will help you resolve problems you may encounter when you install *BCMS Vu* software.

Here are some possible problems and the actions you can take to recover when you install *BCMS Vu* software.

Problem	Probable Cause	Action
When you try to install <i>BCMS Vu</i> Server, Client, or Wallboard, the installation procedure halts, with or without error message.	Another application is running.	Close all open applications. Click on application icon in the status bar, and select <b>File/Exit</b> .
When you try to install <i>BCMS Vu</i> Server, Client, or Wallboard on a network PC other than the PC on which the install media is located, the Install Shield fails to install it, with or without an error message.	<i>Microsoft Windows</i> problem.	<ol style="list-style-type: none"><li>1. Copy the folder entitled “application” from the <i>BCMS Vu</i> CD-ROM to the network PC on which you want to install the software.</li><li>2. In the “application” folder, select “setup.exe” and begin the installation procedure.</li></ol>

Problem	Probable Cause	Action
Error # 1111: Message stating that DAO did not install correctly.	<i>Microsoft</i> DAO installation failed.	<ol style="list-style-type: none"> <li>1. Close all applications.</li> <li>2. Insert the <i>BCMS Vu</i> CD-ROM into the CD Drive.</li> <li>3. In the “BCMS Vu R2 Master Setup” window select <b>Exit</b>.</li> <li>4. In <i>My Computer</i> or <i>Explorer</i> select the CD-ROM Drive.</li> <li>5. In the folder <b>Server\dao\disk1</b> double-click on “setup.exe.”</li> </ol> <p>The program correctly installs DAO.</p>

Problem	Probable Cause	Action
<p><b>For <i>Windows</i> NT 4.0:</b></p> <p>Received a message reporting a virtual memory error or Memory Allocation error</p>	<p>Insufficient memory allocated for paging file size.</p>	<p>Always use at least the file size recommended by <i>Windows</i>.</p> <ol style="list-style-type: none"> <li>1. Select <b>Control Panel/System/Performance</b>.</li> <li>2. On the “Performance” tab, in the “Virtual Memory” box, select <b>Change</b>.</li> <li>3. In the box labeled “Total Paging File Size for all Drives,” note the number next to “Recommended.”</li> <li>4. Enter this number in the box labeled “Maximum Size (MB).”</li> <li>5. Select <b>Set</b>.</li> <li>6. Exit the “Control Panel.”</li> </ol>



Problem	Probable Cause	Action
<p><b>For Windows 95 or Windows 98:</b></p> <p>Received a message reporting a virtual memory error or Memory Allocation error.</p>	Insufficient memory allocated for paging file size.	<p>Always use at least the file size recommended by <i>Windows</i>.</p> <ol style="list-style-type: none"> <li>1. Select <b>Control Panel/System/Performance</b>.</li> <li>2. On the “Performance” tab, select <b>Virtual Memory</b>.</li> <li>3. Activate the radio button next to “Let <i>Windows</i> Manage my Virtual Memory Settings.”</li> <li>4. Select <b>OK</b>.</li> <li>5. Exit “Control Panel.”</li> </ol>
When you upgrade from one version of R2 to another version, the old error log remains unchanged.	This is normal. Old entries will remain in the error log. New entries will be added as they occur.	None.



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