Avaya CMS Supervisor

Installation and Getting Started

Release 16.2
November 2010

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Preface

Avaya Call Management System (CMS) is an application for businesses and organizations that use Avaya communication servers to process large volumes of telephone calls using the Automatic Call Distribution (ACD) feature. Avaya CMS supports solutions for routing and agent selection, multi-site contact centers, remote agents, reporting, interfaces to other systems, workforce management, desktop applications, system recovery, and quality monitoring.

Avaya CMS is part of the Operational Effectiveness solution of the Avaya Customer Interaction Suite.

This section includes the following topics:

- Purpose on page 9
- Intended users on page 9
- Technical support for Terminal Emulator on page 12
- Overview on page 10
- Conventions and terminology on page 10
- Reasons for reissue on page 11
- Documentation Web sites on page 11
- Support on page 11

Purpose

The purpose of this document is to describe how to install and configure Avaya CMS Supervisor.

Intended users

This document is written for anyone who wants to install Avaya CMS Supervisor Release 16.2 software for use with Avaya Call Management System (CMS).

Overview

This document includes the following topics:

- About the installation on page 13
- Installing CMS Supervisor on page 23
- Uninstalling CMS Supervisor on page 49
- Getting started with CMS Supervisor on page 51
- CMS operations on page 63
- Installing and using Terminal Emulator on page 67
- Troubleshooting on page 91

Conventions and terminology

If you see any of the following safety labels in this document, take careful note of the information presented.

CAUTION:
Caution statements call attention to situations that can result in harm to software, loss of data, or an interruption in service.

WARNING:
Warning statements call attention to situations that can result in harm to hardware or equipment.

DANGER:
Danger statements call attention to situations that can result in harm to personnel.

SECURITY ALERT:
Security alert statements call attention to situations that can increase the potential for unauthorized use of a telecommunications system.

Add additional terminology or conventions if required for your particular document.

Reasons for reissue

This document includes the following updates:

- Removal of support for Windows 2000
- Support for CMS R16.2
- Support for 64 bit Windows 7
- Support for the error messages related to the Agent Group Size restrictions and Report timeouts
- Support for Citrix XenApp 6
- Removal of support for upgrades from CMS Supervisor R12 and CMS Supervisor R13
- Removal of official support for connections to CMS R12 and CMS R13. Connections to CMS R12 and CMS R13 are permissive use only in Supervisor R16.2

Documentation Web sites

All CMS documentation can be found at http://www.avaya.com/support. New issues of CMS documentation will be placed on this Web site when available.

Use the following Web sites to view related support documentation:

- Information about Avaya products and service

  http://www.avaya.com

- Sun hardware documentation

  http://docs.sun.com

Support

Contacting Avaya technical support

Avaya provides support telephone numbers for you to report problems or ask questions about your product.

For United States support:

1- 800- 242-2121

For international support:

See the Support Directory listings on the Avaya Web site.

Escalating a technical support issue

Avaya Global Services Escalation Management provides the means to escalate urgent service issues.

Technical support for Terminal Emulator

Consult the following if you are in need of technical support:

- The Terminal Emulator online help alphabetical Index and Find feature.
- The readme.txt file in the Terminal Emulator installation directory.
- The Avaya support website at http://www.avaya.com/support.

Before contacting the Avaya Customer Care Helpline at (800) 242-2121, please gather the following information:

- The version and load number of Terminal Emulator that is installed on your PC. To find version and load information for Terminal Emulator, select the **About...** item from the **Help** menu and note the load number.
- The version of Avaya CMS server you are using.
- The type of connection you have to the Avaya CMS server (network, serial, modem, or SSH).
- The manufacturer and model of your PC as well as the amount of RAM installed.

Chapter 1: About the installation

Avaya CMS Supervisor is a graphical user interface (GUI) to the CMS software. This section provides background information about the Avaya CMS and Avaya CMS Supervisor. Also included are the hardware and software requirements.

This section includes the following topics:

- About CMS Supervisor on page 13
- Installation support on page 17
- Operating system requirements on page 17
- Hardware requirements on page 19
- Required network, serial, or modem connections on page 20

About CMS Supervisor

This section includes the following topics:

- What is CMS? on page 14
- What is CMS Supervisor? on page 14
- What is new for this release on page 14
- Number of CMS Supervisor windows allowed on page 15
- Number of simultaneous instances allowed on page 15
- Number of PCs allowed to run CMS Supervisor on page 15
- Performance on page 15
- Reliability and availability on page 16
- Security on page 16
- Languages supported on page 16

What is CMS?

The Avaya Call Management System is a software product used by customers that have Avaya Inc. telecommunication communication servers and receive a large volume of telephone calls that are processed through the Automatic Call Distribution (ACD) feature of the communication server. The CMS server collects call-traffic data, formats management reports, and provides an administrative interface to the ACD features in the switch.

CMS supports the following remote methods of interfacing with the server:

- Terminal Emulator from a Windows-based PC
- A telnet session
- Avaya CMS Supervisor

What is CMS Supervisor?

The Avaya CMS Supervisor software is a Windows-based interface to the Avaya Call Management System (CMS) server that allows nearly all of the operations available from the CMS server interface, including:

- Remotely administering most aspects of the CMS server, such as defining Dictionary entries, setting user permissions, and adjusting data storage intervals and capacities.
- Running reports to view the activity in your call center.

CMS Supervisor runs on a PC that is running any of the following Microsoft operating systems that meet its minimum requirements:

- Windows XP
- Windows Vista
- Windows 7

What is new for this release

For a description of the new features available for this release, see the *Call Management System Change Description* document.

Number of CMS Supervisor windows allowed

CMS Supervisor makes it possible for users to open as many as 12 windows simultaneously. This limit is set for each user by the CMS system administrator. Windows that do not directly use CMS data, such as the color customization data, are not included in this limit. Also, windows that are open for applications other than CMS Supervisor are not included in this limit.

CMS Supervisor can connect to a single CMS. CMS Supervisor does not provide the capability to combine data from more than one CMS.

Number of simultaneous instances allowed

With the recommended configuration listed in Hardware requirements on page 19, you can run as many as four simultaneous CMS Supervisor instances.

The ability to run several instances of CMS Supervisor and the performance of CMS Supervisor in this situation depends on the memory and speed of the PC that you use. It is also affected by any other applications that run on the PC while CMS Supervisor is in use. If simultaneous CMS Supervisor instances run in the background, the PC may require additional memory to maintain acceptable performance.

Number of PCs allowed to run CMS Supervisor

The number of PCs that can run CMS Supervisor are limited by the number of simultaneous users who are contracted for in the site-licensing agreement with Avaya. CMS counts the number of active CMS Supervisor clients that are logged in and limits the number of simultaneous users to the number of logins that were purchased by the customer.

A client may be logged in to a CMS server once per user ID on a single PC.

Performance

When you use CMS Supervisor you may experience slightly slower response times for some actions. The following are a few possible reasons for slower performance:

- The PC's configuration, processor speed, Level 2 cache, hard disk speed, and video RAM could affect the response time.
- If CMS Supervisor runs simultaneously with other applications, its performance could be affected by those other applications.
- Two or more CMS Supervisor instances that run simultaneously could result in slightly slower response time.

- If CMS Supervisor runs in a LAN environment, it generates additional network traffic. For example, if 250 CMS Supervisor instances run two real-time reports each, CMS Supervisor could require a significant portion of the LAN's capacity. Therefore, ensure that your LAN is engineered appropriately.
- In a LAN environment, network backups can cause congestion on the network and adversely affect the network performance.

Reliability and availability

If serial links or LAN connectivity drop and you are logged in with the Automatic Login capability, CMS Supervisor automatically attempts to restore the connection.

Security

When CMS Supervisor is connected to CMS, you have the same level of security as you do when you use a dedicated CMS terminal. The existing CMS permissions structure is honored. When you use CMS Supervisor on a LAN, you are able to access only the information that is available in a direct-connect environment.

CMS Supervisor also incorporates a SecureShell (SSH) feature for encrypted communications with a CMS Server. For more information on this feature, see Establish SSH settings on page 57.

Languages supported

For information about which CMS Supervisor languages are supported for which Microsoft Windows® operating system languages, see the following table (**X** indicates that the operating system language is supported).

OS Language	**CMS Supervisor Language**											
	English	Italian	French	German	Portu-guese	Spanish	Japanese	Traditional Chinese	Simplified Chinese	Korean	Dutch	Russian
English	X	X	X	X	X	X						
Italian	X	X										
French	X		X									
German	X			X								

OS Language	CMS Supervisor Language											
	English	Italian	French	German	Portu-guese	Spanish	Japanese	Traditional Chinese	Simplified Chinese	Korean	Dutch	Russian
Portuguese	X				X							
Spanish	X					X						
Japanese	X						X					
Traditional Chinese								X				
Simplified Chinese	X								X			
Korean	X									X		
Dutch	X										X	
Russian	X											X

For a list of supported operating systems, see Operating system requirements on page 17.

Installation support

If you have difficulty installing CMS Supervisor, refer to the following sources:

- Operating system requirements on page 17.
- Hardware requirements on page 19.
- The tips in the `readme.txt` file on the disc.
- Troubleshooting on page 91.

If you have further questions, contact the Avaya National Customer Care Center at 1-800-242-2121. For support outside of the United States, contact your Avaya representative or distributor.

Operating system requirements

This section includes the following topics:

- Supported operating systems on page 18.

- Using current versions on page 18.
- What about non supported operating systems? on page 18.
- About upgrades to Windows XP, Windows Vista, or Windows 7 on page 19.

Supported operating systems

Avaya CMS Supervisor R16.2 supports the following 32-bit operating systems:

- Windows XP Professional

  Note:
  Windows XP Tablet PC Edition is not supported

- Citrix XenApp 5 Enterprise Edition running on Windows 2003 R2 Enterprise SP2 32-bit.
- Windows Vista Enterprise Edition

  Note:
  Windows Vista is not supported when running on a Tablet PC.

- Windows 7

  Note:
  Windows 7 is not supported when running on a Tablet PC.

Avaya CMS Supervisor R16.2 supports the following 64-bit operating systems

- Windows 7

Using current versions

To ensure compatibility, it is recommended that you install the latest service packs for your Microsoft operating system. To ensure security, you must install the latest security patches for your supported Microsoft operating system prior to installing Avaya CMS Supervisor.

What about non supported operating systems?

If you attempt to install CMS Supervisor on a non supported operating system, the setup program will fail without displaying an error message.

About upgrades to Windows XP, Windows Vista, or Windows 7

If you upgrade any Windows operating system to Windows XP without first uninstalling CMS Supervisor, you will lose your ability to uninstall and upgrade CMS Supervisor in the future. If you upgrade any Windows operating system to Windows Vista or Windows 7 without first uninstalling CMS Supervisor you will lose your ability to uninstall, upgrade or run CMS Supervisor.

Perform an upgrade to Windows XP, Vista, or 7 as follows:

1. Uninstall CMS Supervisor
2. Upgrade to Windows XP, Vista, or 7
3. Reinstall CMS Supervisor

Hardware requirements

To install and run CMS Supervisor, your system must meet the following minimum requirements:

- A Pentium-class or compatible processor rated at the appropriate speed:
  - Windows XP: 300 MHz or faster
  - Windows Vista: 1 GHz or faster
  - Windows 2003 R2 Enterprise SP2 (running Citrix XenApp Enterprise Edition): 2 GHz or faster
  - Windows 7: 1 GHz or faster
- Free disk space (does not include free space required for CMS Supervisor to run):
  - Windows XP: 100 MB
  - Windows Vista: 100 MB
  - Windows 2003 R2 Enterprise SP2 (running Citrix XenApp Enterprise Edition): 100 MB
  - Windows 7: 100 MB

Note:
If you want to install CMS Supervisor in more than one language, you need an additional 5 MB of disk space for each language.

Note:
When using Windows 2003 R2 Enterprise SP2 running Citrix XenApp Enterprise Edition the amount of disk space, memory, and processing power required varies depending on the number of simultaneous users. For larger deployments, multiple servers will be required.

- Minimally, a CD-ROM disc drive
- RAM:
  - Windows XP: 256 MB
  - Windows Vista: 1 GB
  - Windows 7: 1 GB
  - Windows 2003 R2 Enterprise SP2 (running Citrix XenApp Enterprise Edition): 2 GB
- A color SVGA monitor and graphics adapter set to a resolution of at least 800x600 (1024x768 or greater recommended)
- A network, serial, or modem connection

Note:
If you want more than one version of CMS Supervisor to run simultaneously on a PC, you will need more memory and disk resources.

Required network, serial, or modem connections

This section includes the following topics:

- Network connections on page 20.
- Serial connections on page 21.
- Modem connections on page 21.

Network connections

To support a network connection, you will need the following:

- TCP/IP network protocol.
- An Ethernet communications board.

These requirements include SecureShell (SSH) connections.

CMS Supervisor now supports IPv6 connectivity. The following list demonstrates the interoperability of IPv6 with different Windows releases:

- IPv6 is enabled “out of the box” on Windows 7 and Windows Vista.
- On Windows XP, IPv6 must be enabled manually using the command:

  ```
  netsh int ipv6 install
  ```

Serial connections

To support a serial connection, you will need the following:

- A serial cable that is correctly wired to support hardware flow control and a 16550A UART communications port.
- An available COM port.

Modem connections

To support a modem connection, you will need at least a 19.2 Kbps modem and a 16550A UART communications port.

If the modem is external, the cable must be correctly wired to support hardware flow control.

Chapter 2: Installing CMS Supervisor

This section describes the options and procedures for installing Avaya Call Management System (CMS) Supervisor on a local PC.

This section includes the following general information:

- Local installations on page 23
- Version upgrades on page 23
- Typical and custom installations on page 24
- Installing CMS Supervisor on a local PC from a disc on page 25
- Installing CMS Supervisor on a local PC from the network on page 26
- What to do if the installation does not start automatically on page 27
- CMS Supervisor silent installation and uninstallation on page 28

Local installations

You can perform a local installation from the CMS Supervisor installation disc or from a directory on the network that has a copy of all the application files. A local installation means that you install all of the CMS Supervisor application files on each PC that will run CMS Supervisor. The application files reside on local disk space on each PC.

Version upgrades

This topic includes information about version upgrades and includes the following topics:

- Upgrading a previously-installed R16 version using a local installation on page 24
- Upgrading from R13 and earlier on page 24
- Upgrading R14 through R15 using a local installation on page 24

Related topics:

- Installing CMS Supervisor on a local PC from a disc on page 25
- Installing CMS Supervisor on a local PC from the network on page 26

- Installing CMS Supervisor with Citrix XenApp 5.0 on page 33

Upgrading a previously-installed R16 version using a local installation

The program will prompt you to install the update from the currently installed CMS Supervisor version to the new CMS Supervisor version. The program dialog will display the currently installed CMS Supervisor version and the latest version of CMS Supervisor to which you are upgrading. You will also have the option of cancelling the upgrade.

Upgrading from R13 and earlier

You cannot upgrade to R16.2 when coming from R13 or earlier installs. You must uninstall the current software and install R16.2 as a new install.

Upgrading R14 through R15 using a local installation

The program will prompt you to upgrade Avaya CMS Supervisor to R16. You will also have the option of canceling the installation. You must follow the on-screen instructions to remove the previous installation of CMS Supervisor when prompted or the upgrade will fail.

CAUTION:
During upgrades to R16, the Uninstallation wizard for the earlier version of CMS Supervisor may open a window prompting you to reboot. When prompted for a reboot, select "No, I will restart my computer later." Do not select to reboot or the upgrade will fail.

Important:
Silent upgrades are not supported, as the previous versions of CMS Supervisor do not support a silent uninstall.

Typical and custom installations

Choose a custom installation instead of a typical installation only if you want to install more languages than the typical installation will install.

This section includes the following topics:

- Typical installations on page 25
- Custom installations on page 25

Typical installations

The installation program always installs the English version of CMS Supervisor and online Help (except with Traditional Chinese). If your operating system is in a language other than English, the installation program automatically installs CMS Supervisor and online Help in English plus the language of your operating system.

Examples:

If your operating system is in ...	Then the typical installation will automatically install ...
English	English
Spanish	Spanish and English

Custom installations

You must make sure that your operating system is set to the appropriate language.

Important:
You should always check the available disk space shown at the bottom of the window if you want to add languages. Also, you must make sure that your operating system is set to the appropriate language.

You may not be allowed to install all of the languages supported by CMS Supervisor. For more information, see Languages supported on page 16.

Installing CMS Supervisor on a local PC from a disc

Important:
If you are upgrading CMS Supervisor, you must follow the instructions in Version upgrades on page 23 before installing the new CMS Supervisor version.

To install CMS Supervisor on a local PC from the disc, use the following procedure:

1. Close any programs that are running on the PC.

2. Insert the CMS Supervisor disc into the disc drive.
3. Run Setup.exe and follow the steps on the wizard screens until installation is complete.
4. Establish a connection to the CMS server. For the procedure, see Getting started with CMS Supervisor on page 51.

Related Topics:

- Local installations on page 23.
- Typical and custom installations on page 24.
- What to do if the installation does not start automatically on page 27.

Installing CMS Supervisor on a local PC from the network

If you want to install CMS Supervisor on a local PC from the network, you must first copy the CMS Supervisor installation files from the disc onto the network. Then you install CMS Supervisor onto each client PC from the network.

This section includes the following topics:

- Before you begin on page 26
- Prepare the network directory on page 27
- Installing CMS Supervisor on each PC on page 27

Before you begin

Do the following steps before you install CMS Supervisor:

1. If you want to upgrade CMS Supervisor, read Version upgrades on page 23.
2. Verify that every applicable PC has access to the network resource that contains the CMS Supervisor application files.

   Typically, a mapped network drive provides network access to this computer because it makes it easy to locate the CMS Supervisor application files during the installation. If the CMS Supervisor application files cannot be located, the installation will fail. For information about how to map to a network drive, see Windows Help.

Prepare the network directory

Use the following procedure to prepare the network directory:

1. At a PC that is connected to the network, close all programs that are running on the PC.
2. Insert the CMS Supervisor disc into the disc drive.
3. Open Microsoft Windows Explorer.
4. Create a directory on the network drive and record the path to the directory for later use.
5. Copy the contents of the disc to the directory that you created in Step 4. Be sure to copy *all* of the files.
6. Go to Installing CMS Supervisor on each PC on page 27.

Installing CMS Supervisor on each PC

For each PC you install from a network, do the following steps:

1. Go to Prepare the network directory on page 27 if you have not done so already.
2. Close all programs that are running on the PC.
3. Navigate to **Start** > **Run**.
4. Browse to the network drive and the directory that contains the CMS Supervisor files you copied in Step 5 of Prepare the network directory on page 27.
5. Execute the Setup.exe file that is located in the root directory.
6. Establish a connection to the CMS server. For the procedure, see Getting started with CMS Supervisor on page 51.

Related topics:

- Local installations on page 23
- Typical and custom installations on page 24

What to do if the installation does not start automatically

If the CMS Supervisor installation does not start automatically, do the following steps:

1. From the Windows interface, select **Start > Run**.

2. Do one of the following:

If you want to install from	Then
A software disc	Browse the contents of the software disc and execute the Setup.exe file.
A shared network drive	In Windows Explorer, navigate to the directory where CMS Supervisor is installed on the network and execute the Setup.exe file.

Note:
The setup.exe executable is located in the root directory.

3. Select **OK**.

   The system displays the installation wizard.

CMS Supervisor silent installation and uninstallation

You can install and uninstall CMS Supervisor R16.2 in the silent mode by using the command line interface. If not specified, the target directory for the installed software and the language shortcuts are the same as the **Typical** install option from the GUI.

For a silent install, use the following command:

```
Setup.exe /hide_progress --silent
```

For a silent uninstall, use the following command:

```
Setup.exe /hide_progress /uninst --silent
```

There are additional installation and uninstallation options provided with this build. The following table explains these additional options:

Option	Description
--Help	This option provides you with a summary of the available command line options
--Logdir=<directory>	This option allows you to save a copy of the setup.log file in the specified directory

Option	Description
--TargetDir=<directory>	This option defines the destination directory to be used when you install CMS Supervisor
--<lang>[=yes | =no | =force]	This option allows a different combination of language shortcuts to be made available. --<lang>=yes and --<lang> are equivalent. Only shortcuts for languages supported on the OS are created (see Languages supported and variable definitions on page 29). --<lang>=force forces the language shortcut to be created even if the language is not supported on the OS (see Languages supported and variable definitions on page 29). --<lang>=no removes the shortcut for the specified language. The default shortcut (for example, the English language shortcut on an English OS) cannot be removed using --<lang>=no.

Example

```
Setup.exe /hide_progress --silent --TargetDir=C:\Program Files\
  Avaya\CMSR16_1 --enu=yes --fra --rus=no --chn=yes --kor=force
```

This example command does the following:

- It installs the CMS Supervisor software in silent mode to **`C:\Program Files\Avaya\CMSR16_1.`**
- It creates shortcuts for English, French, and Korean (assuming the software was installed on an English OS).
- It removes Russian, if already installed.
- Simplified Chinese is not installed as it is not supported on an English OS and has not been forced.

Languages supported and variable definitions

The following table lists the languages supported and their variable definitions in CMS Supervisor R16 Maintenance Release 1:

LANGUAGE	Variable
Chinese (simplified)	chn
Chinese (traditional)	tch
Dutch	nld
English	enu

LANGUAGE	Variable
French	fra
German	deu
Italian	ita
Japanese	jpn
Korean	kor
Portuguese	ptb
Russian	rus
Spanish	eso

Adding, viewing and establishing connections to CMS R12/R13 servers

When adding a new entry to the list of servers, R12 and R13 are available in the pulldown list of server versions even though they are no longer officially supported. Connecting to R12 and R13 servers is permissive use only. When R12 or R13 is selected, a warning message will be displayed; however the user is permitted to still add an R12 or R13 server to the list.

When viewing the details for a server in the list of servers, a warning message will be displayed if the server is an R12 or R13 CMS server. This does not prevent the user from connecting to the server.

When establishing a connection to a CMS R12 or R13 server, a warning message will be displayed.

If you select OK to continue, the connection will be established - this is permissive use only. If the user selects Cancel, the connection will not be established and the user can select a different server to establlish a connection with.

Chapter 3: Installing CMS Supervisor with Citrix XenApp 5.0

This section describes how to install and run CMS Supervisor on a system running the Windows 2003 R2 Enterprise SP2 operating system and presenting the application to clients using Citrix XenApp 5.0. This section includes the following topics:

- Installing the software on page 33
- Launching the CMS Supervisor application on page 45
- Uninstalling the software on page 46
- Considerations when using Citrix XenApp on page 47

Installing the software

This section describes how to install the software on a PC running the Windows 2003 R2 Enterprise SP2 operating system.

This section includes the following topics:

- Prerequisites on page 33
- Admonishments on page 34
- Installing the CMS Supervisor software on page 34
- Configuring the Citrix software for CMS Supervisor on page 34
- Setting up the Isolation Environment on page 41

Prerequisites

- You must be logged on as an administrator or have administrator privileges.
- Citrix XenApp must be installed and running (this includes configuring IIS, terminal services, user accounts, and any licensing for XenApp, terminal services, and so forth)

Admonishments

Do not run consecutive installs on the same PC without uninstalling the previous installation (configuration data may be reset if the installer is rerun). For more information see Uninstalling the software on page 46.

Installing the CMS Supervisor software

1. Insert the CMS Supervisor software disc.

   Note:
   If the installer starts automatically, select **cancel**.

2. Open a command window running with Administrator privileges.
3. Run the following command at the command prompt.

   ```
   change user /install
   ```

4. From the command prompt, run the **Setup.exe** executable for the CMS Supervisor application. For example if the software disc is in the **D** drive, enter:

   ```
   D:\Setup.exe
   ```

5. Follow the steps on the wizard screens until the installation is complete. Make sure that you select Install to Local PC and install the files at either the default location or somewhere else on your hard drive.

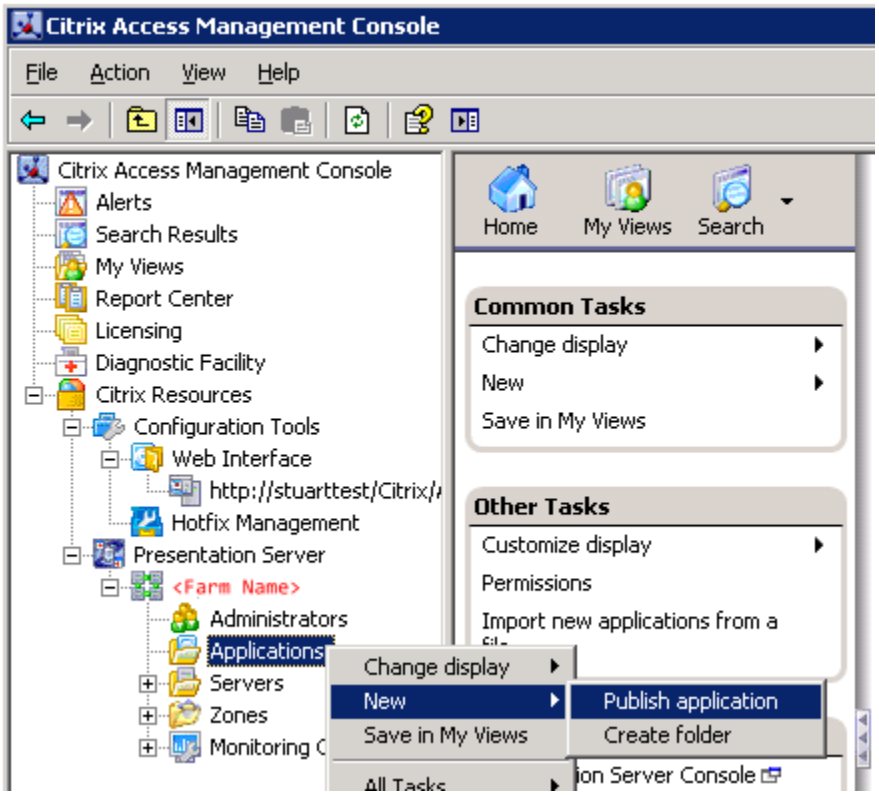
   Important:
   Post installation, you are required to enable Telephony Services. If you do not enable Telephony Services, the entire application becomes unresponsive and new CMS servers cannot be administered using CMS Supervisor.

Configuring the Citrix software for CMS Supervisor

Configure the **Citrix XenApp** software to share the CMS Supervisor application before using the CMS Supervisor application.

1. On the **Citrix Access Management Console** window, select **Citrix Resources** > **Presentation Server** > **Farm Name**.

Note:
If you have not created a Citrix XenApp farm you will have to configure one before proceeding.



2. Right-click on **Applications** and select **New** > **Publish application**.

   The system displays the **Welcome** screen.

3. Select **Next.**

   The system displays the **Name** screen.

4. Enter the **Display name** and **Application description**.

   For example, enter CMS Supervisor R16 and CMS Supervisor R16 client, respectively.

Note:
You can specify a language in the Display name or Application description.

5. Select **Next.**

   The system displays the **Type** screen.

6. Under **Application**, select **Accessed from a server**.
7. Under **Server application type**, select **Installed application**.
8. Select **Next.**

   The system displays the **Location** screen.

9. Browse to one of the following Command line locations at the **Command line** prompt:

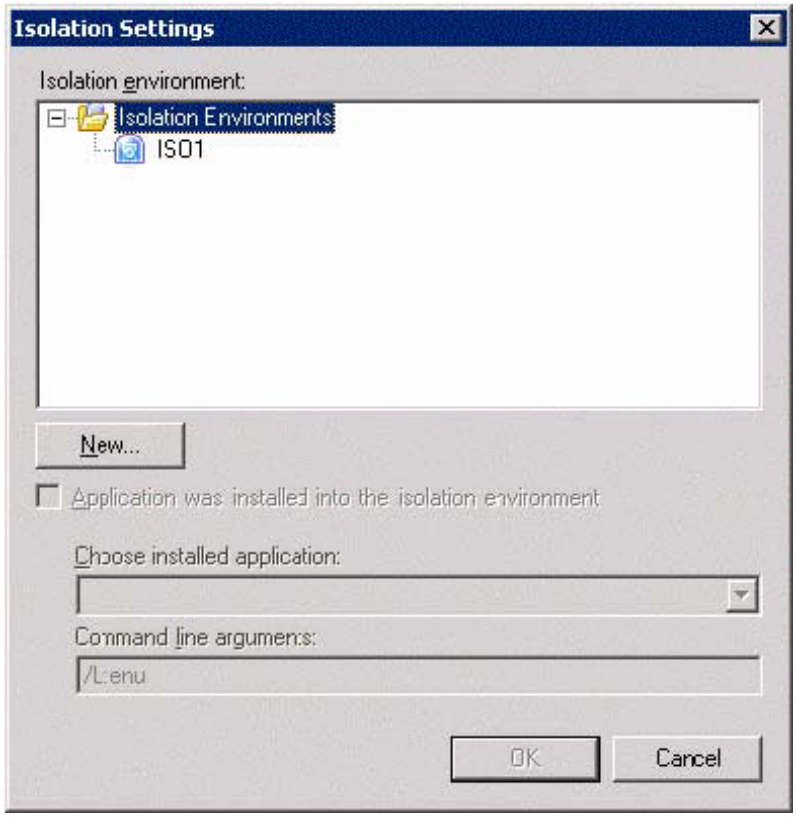
Language	Command
Chinese	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:chn
German	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:deu
English	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:enu
Spanish	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:eso
French	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:fra
Italian	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:ita
Japanese	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:jpn
Korean	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:kor
Dutch	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:nld
Portuguese	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:ptb
Russian	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:rus
Traditional Chinese	"C:\Program Files\Avaya\CMS Supervisor R16\ACSRun.exe" /L:tch

Note:
If a different target directory was chosen during installation of CMS Supervisor, the path to ACSRun.exe is different.

10. Browse to the location of CMS Supervisor at the **Working directory** prompt.

11. Select **Isolate application** and then click on **Settings** to configure an Isolation Environment.

    The system displays the **Isolation setting** screen.



12. Select **New**.

    The system displays the **New Isolation environment name** box.

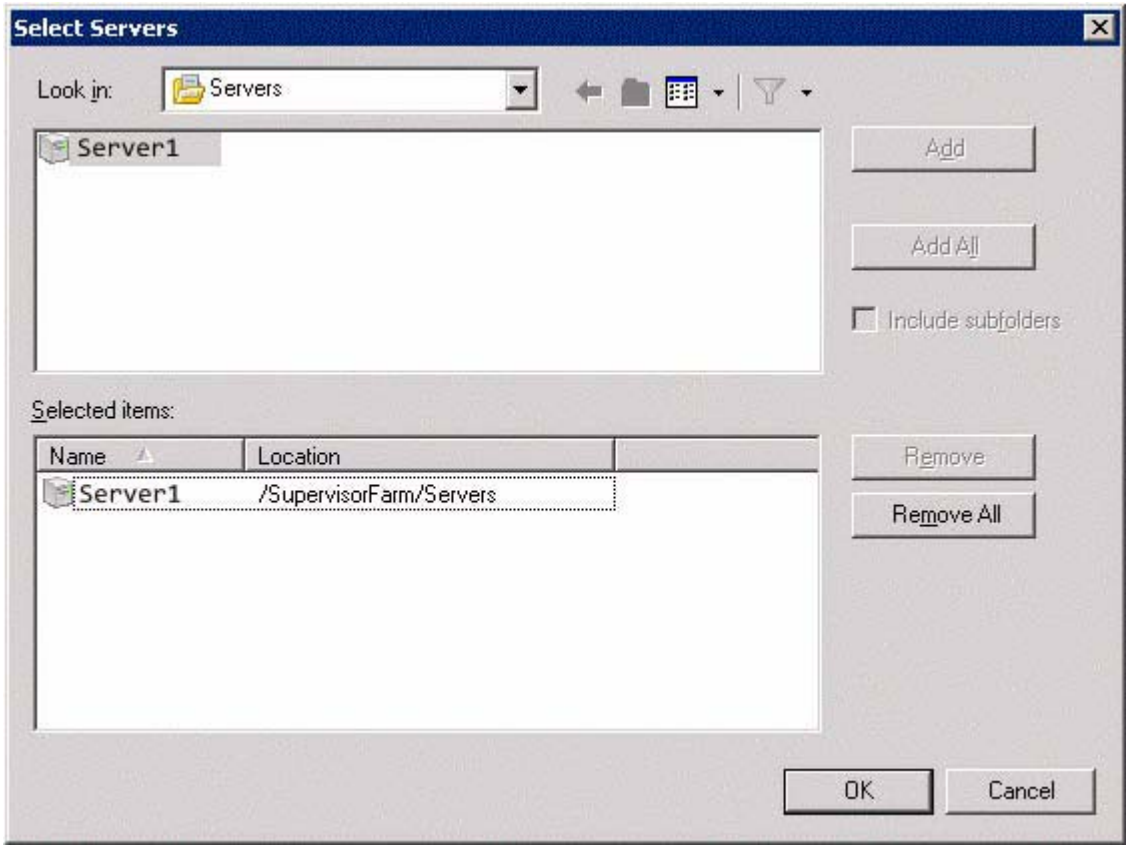
13. Provide a name for the Isolation environment, for example **SupervisorIsolationEnvironment**.

Note:
The Isolation Environment will be configured later in the process.

14. Click **OK.**

    The system displays the **Select Servers** screen.

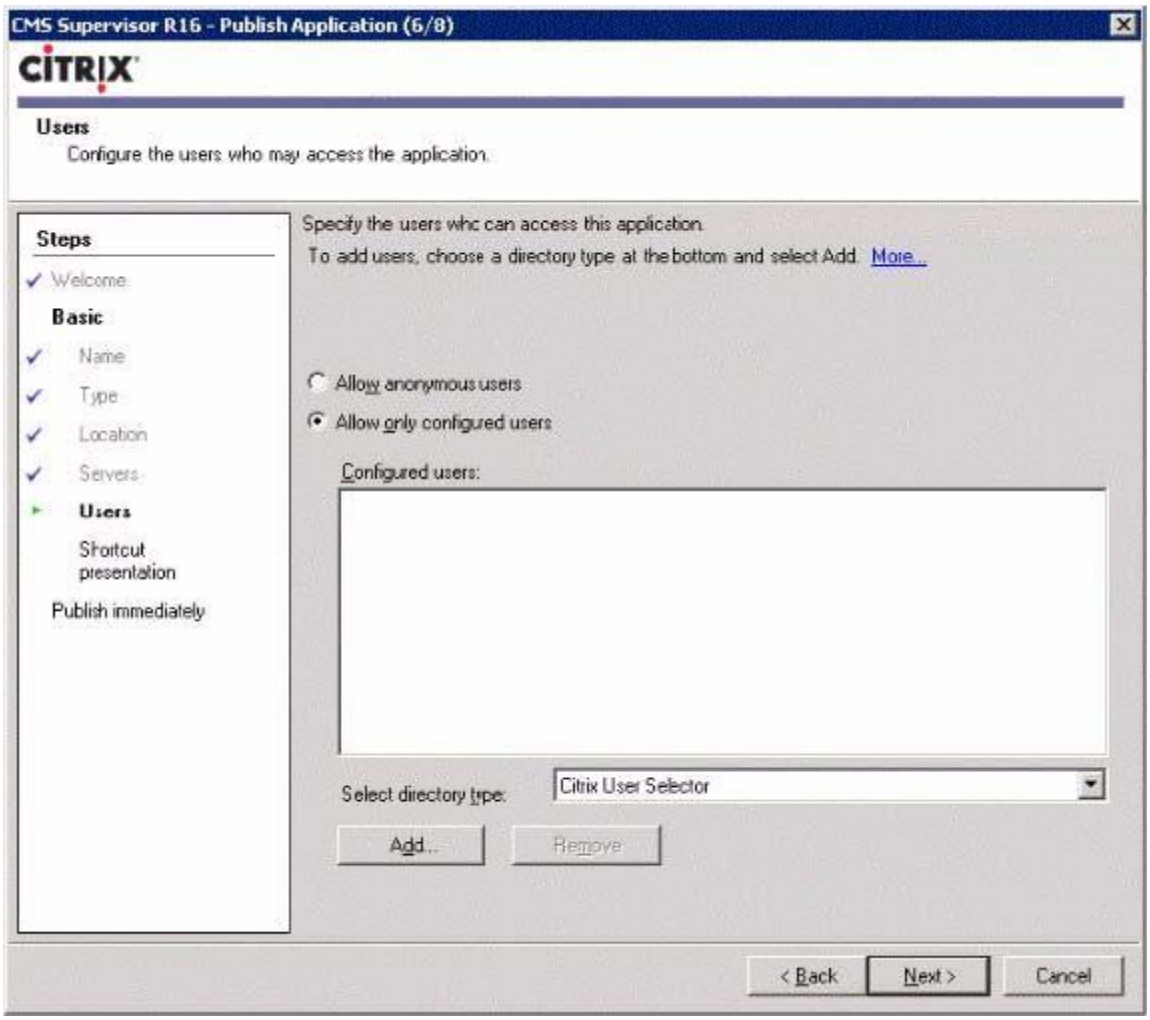
15. Select **Add** to include servers that will host the CMS Supervisor application.



16. Highlight servers to add.

17. Select **OK** once completed.

    The system displays the **Users** screen.

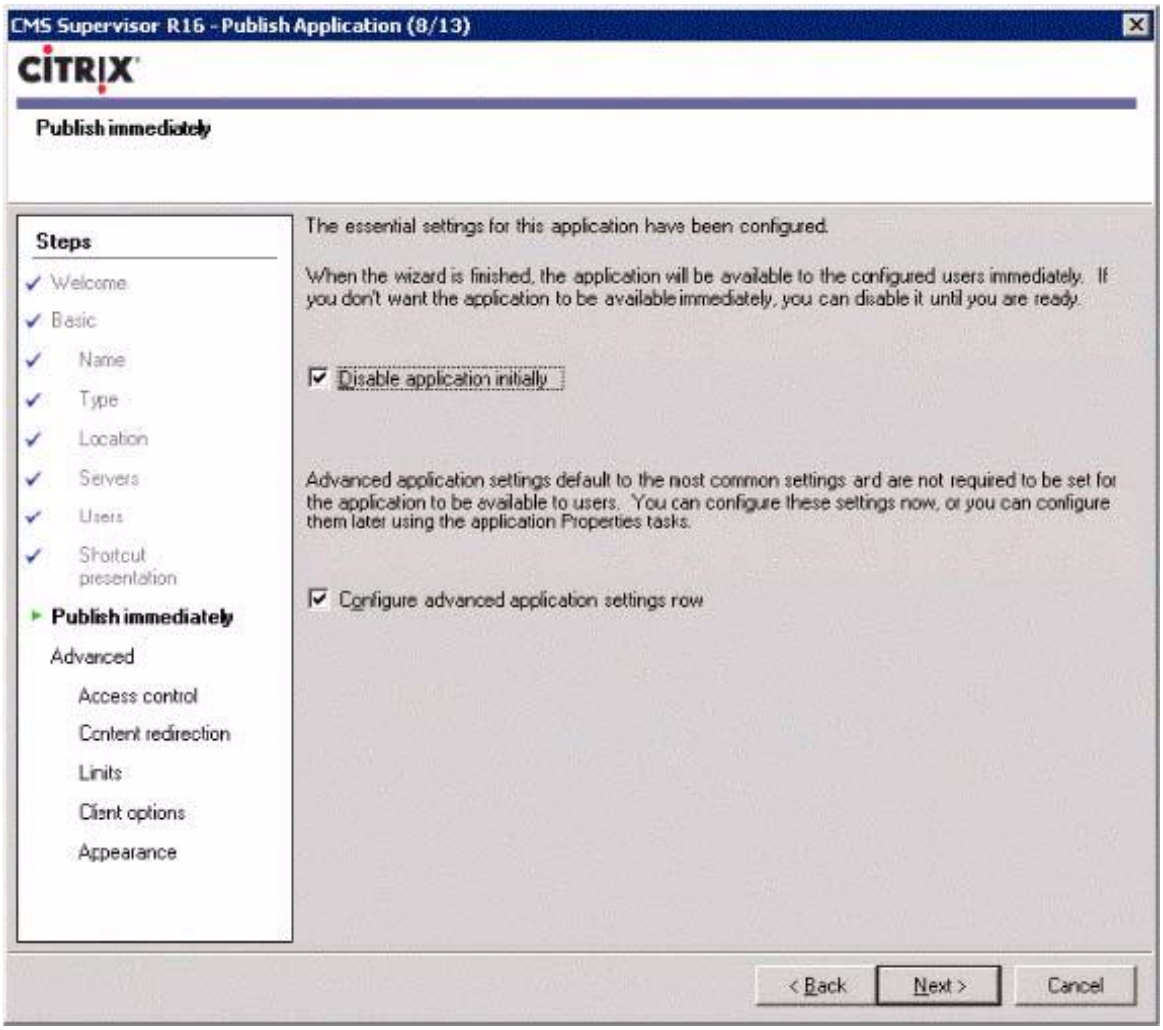


18. Select **Allow only configured users**.
19. Select the appropriate directory type in the **Select directory type** drop-down list.
20. Click **Add** and select the available users in the selected directory type.
21. Click **Next**.

    The system displays the **Shortcut presentation** screen.
22. Select the shortcut settings as needed for your Citrix applications. You can add a shortcut to your Start menu or to your desktop.

23. Select **Next.**

    The system displays the **Publish immediately** screen.



24. Select **Configure advanced application settings now**.

Note:

Under most circumstances, you should select **Disable application initially** and only make it available after the isolation environment has been configured and you are ready to make the application available to users.

25. Select **Next**.

    The system displays the **Access control** screen.

26. Select the access settings as necessary.

    The defaults for access control are **Allow connections made through Access Gateway Advanced Edition (version 4.0 or later)**, **Any connection**, and **Allow all other connections**.

27. Select **Next.**

    The system displays the **Content redirection** screen.

28. Configure appropriate application limits.

29. Select **Next**.

    The system displays the **Limits** screen.

30. Set CPU priority level to **Normal**.

31. Select **Next**.

    The system displays the **Client options** screen.

32. Select the following options:

    - **Enable legacy audio**
    - **Start this application without waiting for printers to be created**

    Note:
    Selecting **Start this application without waiting for printers to be created** will mean printing is not available immediately when CMS Supervisor starts.

33. Select **Next.**

    The system displays the **Appearance** screen.

34. It is recommended to set the Session Window size to **1024x768**. Set the number of colors to High color (16-bit).

    Important:
    Do not select the **Hide application title bar**.

35. Click **Finish** when the settings have been administered.

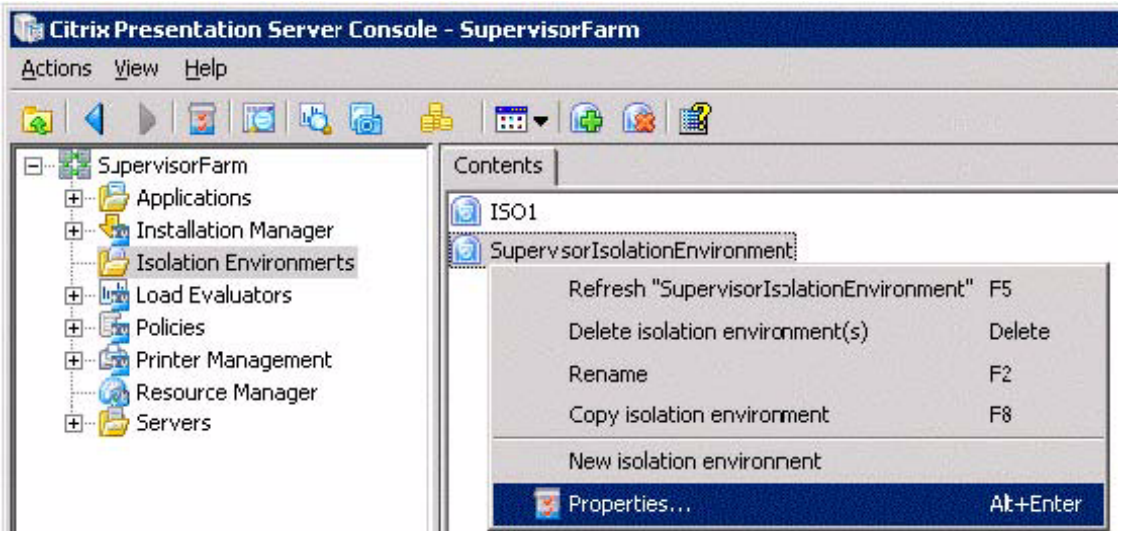
36. You have successfully configured the CMS Supervisor application. However you still need to set up the Isolation environment before enabling the application for the Citrix users.

37. Continue with Setting up the Isolation Environment on page 41.

Setting up the Isolation Environment

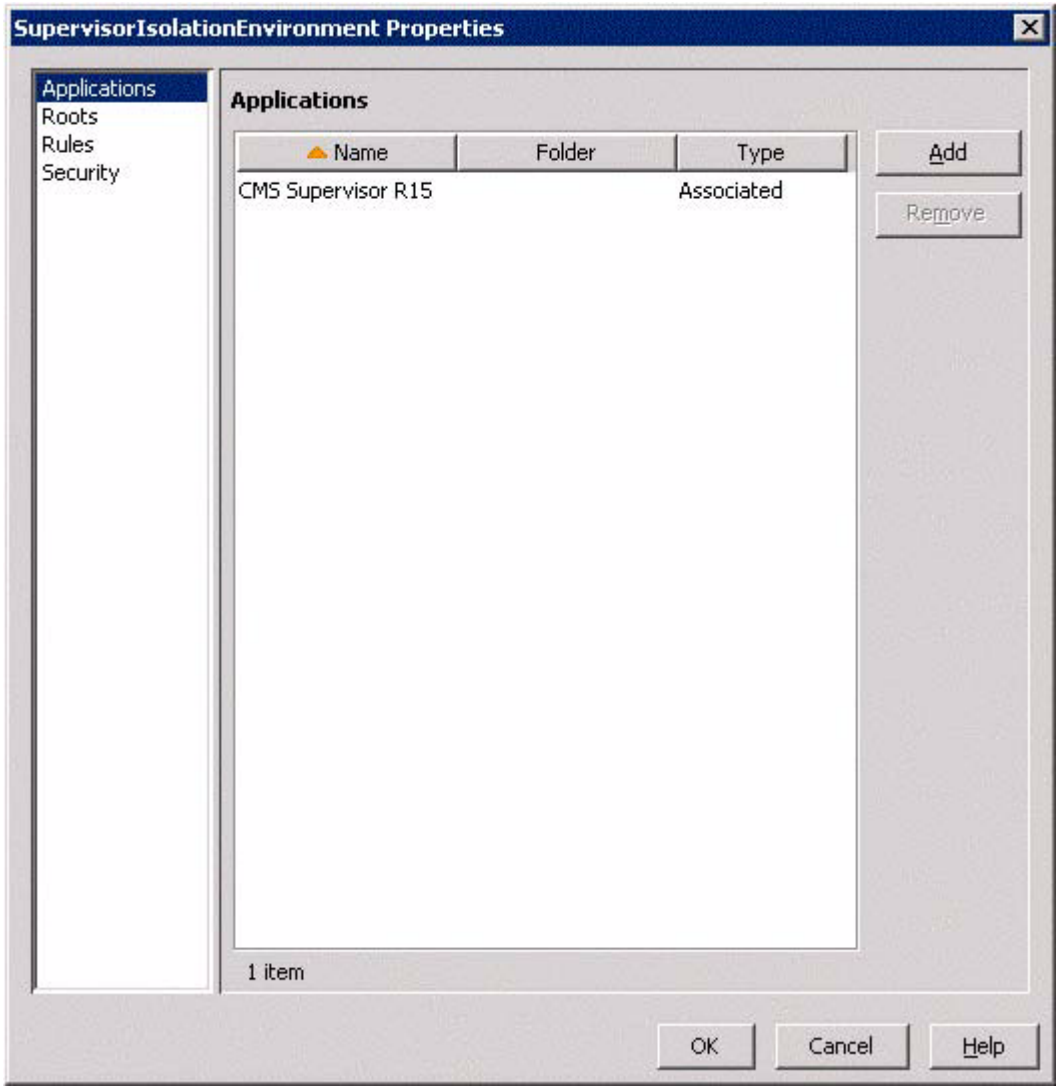
1. On **Citrix Presentation Server Console** select the name of the farm you used in the section to configure the software. In our example it is **SupervisorFarm**.

2. Select I**solation Environments**.



3. Right-click on **SupervisorIsolationEnvironment** and select **Properties.**

   The system displays the **Properties** screen.



4. Since Isolation Environment was selected while adding the CMS Supervisor R16 application, it should be displayed in the list of associated applications. If it is not displayed in the list, click **Add** to add the CMS Supervisor application to the list.
5. Select **OK**.
6. Select **Roots** from the left pane of the screen and select **Use farm settings**.
7. Select **OK**.
8. Select **Rules** from the left pane of the screen.

Note:
Do not modify the default rules.

9. Click **Add** to include a special rule for CMS Supervisor.

   The system displays the **Rule Type** screen.
10. Select the **Isolate** and **Files** options.
11. Select **Next**.

    The system displays the **Isolate Files** screen.
12. .Select **Add**.

    The system displays the **Choose path** dialog box.
13. Browse the directory where CMS Supervisor R16 is installed. For example

    C:\Program Files\Avaya\CMS Supervisor R16
14. Select **OK** to confirm the path.
15. Select **Next.**

    The system displays the **Isolation Type** screen.
16. Select **Per user**.
17. Select **Next**.

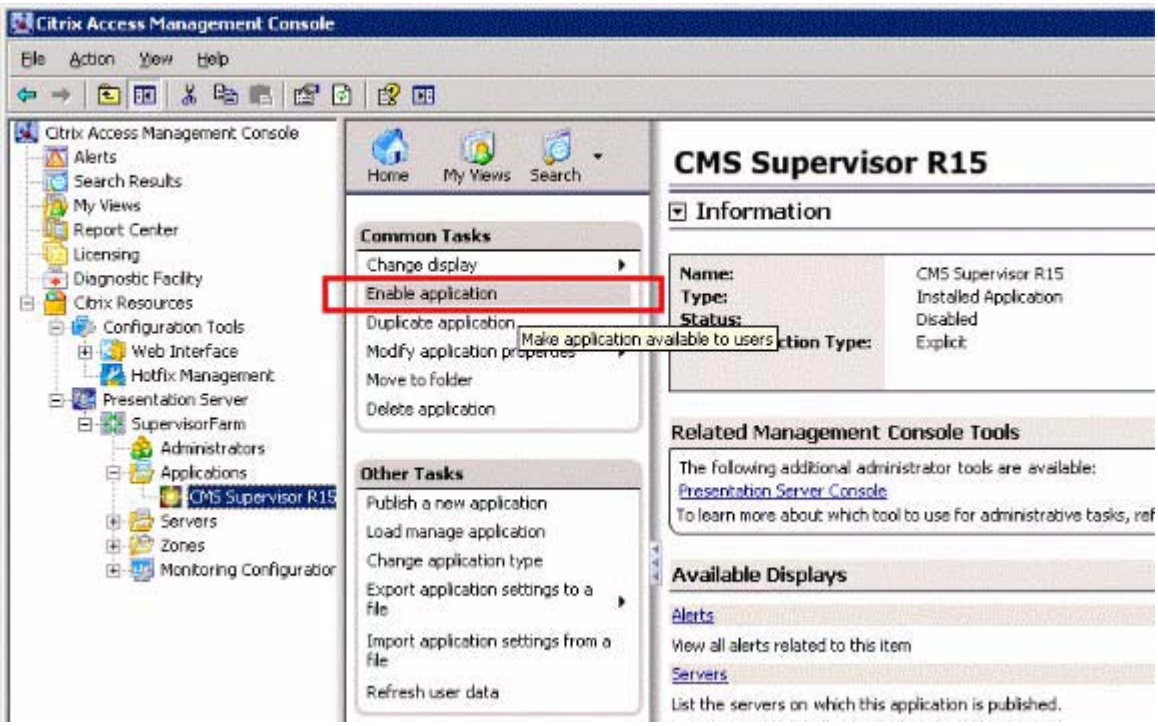
    The system displays the **Isolation Environment properties** screen.
18. Select **Security** from the left pane.

    Do not make any other changes on this screen.

    Note:
    By default, **Enhanced security** should be selected.
19. Select **OK** to complete the changes.
20. Continue with Enabling the application for the user on page 45.

Enabling the application for the user

1. On **Citrix Access Management Console** window, select **Citrix Resources** > **Presentation Server** > **Farm Name** > **Applications.**
2. Click on **Enable Application** under the **Common Tasks** frame.



3. Click **Yes** to enable the application.

Note:
If users have to access CMS Supervisor files using Windows Explorer, you should also share the Explorer application within the same isolation environment.

Users with permissions can now see and execute the CMS Supervisor application.

Launching the CMS Supervisor application

Once the application has been configured within Citrix XenApp, log in to the Citrix server using a web browser or Citrix client software and select the CMS Supervisor application. The application can then be used normally.

Uninstalling the software

This section describes how to uninstall the CMS Supervisor software on Windows 2003 R2 Enterprise SP2. For more information see Uninstalling CMS Supervisor on page 49.

Note:
After the software is uninstalled, all software is removed from the server PC (HKCU Registry entries may persist within the Citrix XenApp environment).

This section includes the following topics:

- Prerequisites on page 46
- Admonishments on page 46
- Uninstalling the software on page 47

Prerequisites

- You must be logged in as administrator or have administrator privileges
- Stop or exit any CMS Supervisor sessions. The automated uninstaller will fail if CMS Supervisor is running.
- Remove the application from Citrix XenApp.

Admonishments

- Once the uninstall has started, do not break out of the uninstall process. Breaking out of the uninstall process may cause corruption in the Windows Registry. If corruption occurs, you may need to call Avaya technical support.
- If the uninstaller stops due to an instance of CMS Supervisor running, exit the CMS Supervisor session and rerun the uninstaller.
- Uninstalling will remove the CMS Supervisor software for all users on the PC not just the current user.
- Uninstalling the software will not remove CMS Supervisor specific data from the HKEY_CURRENT_USER area of the registry for users accessing the software via Citrix XenApp.

Uninstalling the software

- Use the Windows Control panel to uninstall the CMS Supervisor application
- After removing the CMS Supervisor application the Citrix Isolation Environment can be deleted if it is no longer being used.

Considerations when using Citrix XenApp

This section contains list of known issues of operation for CMS Supervisor on Windows 2003 R2 Enterprise SP2.

- Automatic scripts are not supported when running CMS Supervisor via Citrix XenApp.
- While running CMS Supervisor through Citrix users must use their own unique login to the CMS Server. Sharing CMS accounts may cause the connection to be rejected.
- When applying Group Policy and other restrictions on a Citrix Server, administrators should not interfere with the normal operation of CMS Supervisor.

Chapter 4: Uninstalling CMS Supervisor

This section provides procedures for uninstalling Avaya Call Management System (CMS) Supervisor.

This section includes the following topics:

- CMS Supervisor uninstall using the Microsoft Windows Add/Remove Programs wizard on page 49
- CMS Supervisor silent uninstall on page 50

CMS Supervisor uninstall using the Microsoft Windows Add/Remove Programs wizard

You can easily uninstall the Avaya Call Management System (CMS) Supervisor application with the Microsoft® Windows **Add/Remove Programs** wizard. Uninstall removes the CMS Supervisor files and directories from the PC.

To uninstall CMS Supervisor, do the following steps:

1. Close all programs that are running on the PC.
2. From the Microsoft Windows **Start** menu, select **Settings** > **Control Panel** (or simply **Control Panel** depending on your version of Windows).
3. Execute the **Add/Remove Programs** feature.

   The system displays the **Add/Remove Programs Properties** window. (**Add or Remove Programs** in XP, **Uninstall a program** or **Programs and Features** in Windows Vista and Windows 7).
4. Select the **Install/Uninstall** tab. (**Change or Remove Programs** for Windows XP, skip this step for Windows Vista and Windows 7).
5. Highlight the entry for CMS Supervisor in the list of installed software.
6. Select **Add/Remove**. For Windows XP, select the **Change/Remove** button. For Windows Vista and Windows 7, select the **Uninstall** button.

   The removal process is started.

7. Select **Yes** or **OK**.

   The system displays the **Perform Uninstall** window and a progress indicator shows what percentage of the files are uninstalled.

   CAUTION:
   If you press **Cancel** at this time, the system cancels the uninstall process. However, because some files have been deleted, CMS Supervisor will not run. Also, the system prevents you from trying to uninstall CMS Supervisor files a second time if you cancel the first attempt.

   After the uninstall is complete, the system returns you to the desktop.

CMS Supervisor silent uninstall

For information on CMS Supervisor silent uninstall, see CMS Supervisor silent installation and uninstallation on page 28.

Chapter 5: Getting started with CMS Supervisor

This section provides procedures for common operations that you will perform in Avaya Call Management System (CMS) Supervisor.

This section includes the following topics:

- About CMS server connection settings on page 51
- Open the CMS Supervisor application on page 53
- Establish the connection on page 53
- Log in to the CMS server for the first time on page 57
- Log in to the CMS server after the first time on page 58
- Log off the CMS server on page 60
- Exit CMS Supervisor on page 61
- Change connection settings on page 61
- Close CMS Supervisor windows on page 62

About CMS server connection settings

You must establish connection settings before you can connect to the Avaya Call Management System (CMS) server.

This section includes the following topics:

- Connection options on page 51
- Automatic and manual on page 52

Connection options

CMS Supervisor has the following connection options to a CMS server:

- Network
- Serial

- Modem
- SSH

Automatic and manual

There are two ways to set these options to connect to the CMS server:

- **Automatic** - This method logs in to the CMS server through the Graphical User Interface (GUI).
- **Manual** - This method logs in to the CMS server through a command line. You would use manual login for the following reasons:
  - You need to login as the `cmssvc` or `cms` user ID.
  - You are instructed to do so for troubleshooting.

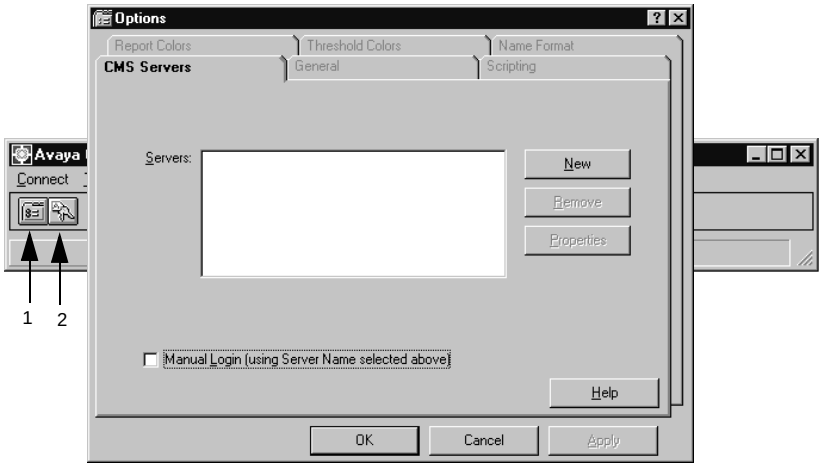
Note:
If you need information about your Solaris system for the purpose of logging in through CMS Supervisor, see your Solaris system administrator.

Open the CMS Supervisor application

To open the CMS Supervisor application, do the following steps:

1. From the Microsoft Windows **Start** Menu, select **Programs** > **Avaya** > **CMS Supervisor R16** > **CMS Supervisor R16 -- English**.

   At this point, the CMS Supervisor application is open, but you are not logged in to the CMS server. If you have not yet established connection settings to a CMS server, the system displays the CMS Supervisor Controller and an **Options** window.



1. Options icon
2. Login icon

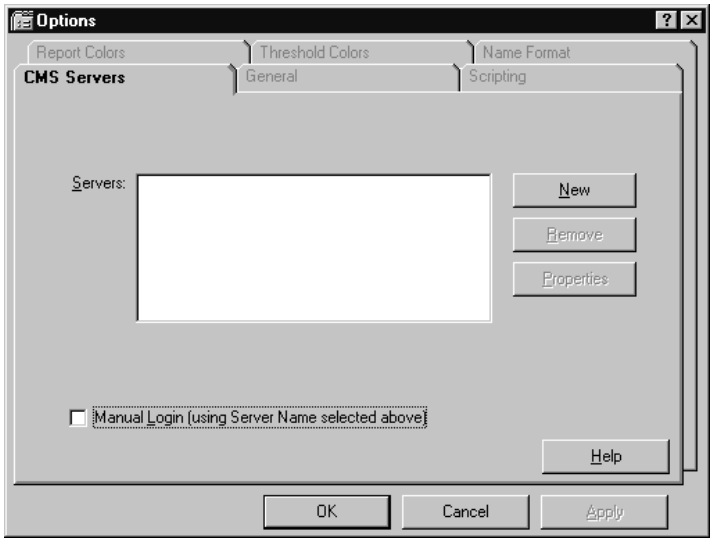
2. Continue with Establish the connection on page 53.

Establish the connection

This section includes the following topics:

- Choose settings on page 54
- Establish network settings on page 55
- Establish serial settings on page 56
- Establish modem settings on page 56
- Establish SSH settings on page 57

To establish connection settings to a CMS server, you must use the **Options** window. This window is displayed with the **CMS Servers** tab as the only active tab.



Besides **New**, the other options in the CMS Servers tab are as follows:

- **Remove -** Highlight the name of the server and select this option to remove the CMS server configuration that you entered previously. You will see a message that asks if are sure you want to delete the server configuration. Select **Yes** or **No**.
- **Properties -** Highlight the name of the server and select this option to display the **Server Properties** window, where you can view or change the CMS server configuration properties.

Choose settings

To choose the settings, do the following steps:

1. Perform one of the following actions, depending on how you want to connect to the CMS server:

If you want to connect	Then
Manually	Select the **Manual Login** check box.
Automatically	Do *not* select the **Manual Login** check box.

   For more information, see Automatic and manual on page 52.

2. Since this is a new connection, select **New**.

   The system displays the **Server Properties** window.

3. Perform one of the following actions, depending on the type of connection that you want to establish:

For	The following window is displayed	Go to
A network connection	The **Server Properties** window with network settings.	Establish network settings on page 55
A serial connection	The **Server Properties** window is displayed with serial settings.	Establish serial settings on page 56
A modem connection	The **Server Properties** window is displayed with modem settings.	Establish modem settings on page 56
A network connection using SecureShell (SSH)	The **Server Properties** window is displayed with network settings.	Establish SSH settings on page 57

Establish network settings

To establish a network connection, do the following steps:

1. In the **Connection** box, make sure **Network** is selected.
2. In the **Server Name** text box, enter the name of the server that you will use.
3. In the **Network Port** text box, use the default of 23 unless otherwise instructed by your system administrator.
4. Select **OK**.

   The system displays the **CMS Servers** tab with the options that you chose.
5. Select **OK** to accept the network settings. You must select a server from the list before you select **OK**.

   The system displays the Avaya CMS Supervisor Controller window. At this point, you are still not logged in to the CMS server, but you have established connection settings to the CMS server.
6. Continue with Log in to the CMS server for the first time on page 57.

Establish serial settings

To establish a serial connection, do the following steps:

1. In the **Connection** box, make sure **Serial** is selected.
2. In the **Server Name** text box, enter the name of the server that you will use.
3. Select the correct settings for all the fields in the **Serial Settings** box.

   See your CMS administrator for the appropriate serial settings.
4. Select **OK**.

   The system displays the **CMS Servers** tab.
5. Select **OK**.

   The system displays the Avaya CMS Supervisor Controller window. At this point, you are still not logged in to the CMS server, but you have established connection settings to the CMS server.
6. Continue with Log in to the CMS server for the first time on page 57.

Establish modem settings

To establish a modem connection, do the following steps:

1. In the **Connection** box, make sure **Modem is selected**.
2. In the **Server Name** text box, enter the name of the server that you will use.
3. In the **Phone Number** text box, enter the telephone number of the CMS server.

   If you do not know the telephone number, contact your CMS administrator.
4. In the **Modem** box, select the modem from the pull-down list of modems that are configured in Microsoft Windows.
5. Select **OK.**

   The system displays the CMS Servers tab.
6. Select **OK**.

   The system displays the Avaya CMS Supervisor Controller window. At this point, you are still not logged in to the CMS server, but you have established connection settings to the CMS server.
7. Continue with Log in to the CMS server for the first time on page 57.

Establish SSH settings

To establish a SecureShell (SSH) connection, do the following steps:

1. In the **Connection** box, make sure **SSH** is selected.
2. In the **Server Name** text box, enter the name of the server that you will use.
3. In the **Network Port** text box, use the default of 22 unless otherwise instructed by your system administrator.
4. Select **OK.**

   The system displays the **CMS Servers** tab.
5. Select **OK** to accept the network settings. You have to select a server from the list before you select **OK**.

   The system displays the Avaya CMS Supervisor Controller window. At this point, you are still not logged in to the CMS server, but you have established connection settings to the CMS server.
6. Continue with Log in to the CMS server for the first time on page 57.

Log in to the CMS server for the first time

Important:
Windows has certain words that are reserved due to MS-DOS compatibility reasons. These words cannot be used as user login ids because the OS generates an error when, as a part of the logging in procedure, Supervisor tries to create a directory with the name of the login id provided. The following are reserved words and not permitted to be used as login ids:
`con, nul, aux, com1, com2, com3, com4, com5, com6, com7, com8, com9, lpt1, lpt2, lpt3, lpt4, lpt5, lpt6, lpt7, lpt8, lpt9`

After you establish connection settings to the CMS server, you will log in to the CMS server.

To log in to the CMS server for the first time, do the following steps:

1. Use one of the following methods to log in to the CMS server:
   - Select **Login** from the **Connect** menu.
   - Select the **Login** icon .

2. Depending on how you established connection settings to the CMS server, one of two actions will occur:

For	Then	Go to
An automatic login connection	The system displays the **Login Information** window.	Step 3 in Automatic login on page 58
A manual login connection	The system displays the **Manual Login**.	Step 2 in Manual login on page 59

Note:
For SecureShell (SSH) connections, your user ID must have a corresponding password before you can log in to the CMS server. If your user ID was created through the CMS ASCII interface or through CMS Supervisor and you have not yet set a password, you will not be able to log in through an SSH connection.

Log in to the CMS server after the first time

After you log in to CMS Supervisor for the first time and establish your login ID and password, the login procedures change slightly. Follow the procedures for either an automatic or a manual login.

This section includes the following topics:

- Automatic login on page 58
- Manual login on page 59

Automatic login

If the connection settings are established for automatic login, you will log in to the CMS server through the **Automatic Login** window. Now, each time that you open CMS Supervisor, the system displays the Avaya CMS Supervisor Controller window and the **Login Information** window.

To log into the CMS server with automatic login, do the following steps:

1. Launch **CMS Supervisor** icon by executing it from its program group or from the desktop.

   The system displays the Avaya CMS Supervisor Controller window with the **Login Information** window in front of the Controller.

2. From the **CMS Server** pull-down list, select the IP address or name of the CMS server.

3. Enter your CMS login ID in the **Login ID** field, or choose it from the history list of IDs if it has been entered previously.
4. Enter your CMS password in the **Password** field.
5. Select **OK**.

   The system displays a message box that indicates that CMS Supervisor is connecting to the CMS server.

   Once you connect to the CMS server, the system displays the Avaya CMS Supervisor Controller window with the CMS operations that are available on the toolbar. The status line is active and the system displays two new menus, **Commands** and **Scripts**, in the menu bar.

Related topic

For more information on the scripting feature, refer to the Avaya Call Management System Administration guide.

Manual login

If the connection settings are established for manual login, you will log in to the CMS server through the **Manual Login** window. Now, each time that you open CMS Supervisor, the system displays the Avaya CMS Supervisor Controller window and the **Manual Login** window.

Important:
The **Manual Login** window is not recommended for standard Solaris use. For example, do not use this window to edit files. The **Manual Login** window is *not* a Terminal Emulator.

To log into the CMS server with manual login, do the following steps:

1. Launch **CMS Supervisor** icon by executing it from its program group or from the desktop.

   The system displays the Avaya CMS Supervisor Controller window with the **Manual Login** window in front of the Controller. At this time, you are *not* logged in to the CMS server.
2. At the `login` prompt, enter your CMS login ID.

   The system displays the prompts only after you enter information for the previous prompt. All prompts are shown in the example of the **Manual Login** window for convenience.
3. At the `password` prompt, enter your CMS password.

4. Perform one of the following actions, depending on which prompt that the system displays:

If the system displays	Then enter
The `Enter Terminal Type` prompt	**`cvsup`**
The Solaris system prompt	**`cms`**

The system displays the Avaya CMS Supervisor Controller window.

Once you connect to the CMS server, the system displays the Avaya CMS Supervisor Controller window with the CMS operations that are available on the toolbar. The status line is active and the system displays two new menus, **Commands** and **Scripts**, in the menu bar.

Related topics

For more information on the scripting feature, see the Avaya Call Management System Administration guide.

For more information about how to use the Avaya CMS Supervisor Controller window, see the Avaya Call Management System Administration guide.

Log off the CMS server

To log off the CMS server, do the following steps:

1. Use one of the following methods to log off of the CMS server:
   - Select **Logout** from the **Connect** menu.
   - Select the **Exit** icon .

     You are logged out of the CMS server and out of CMS Supervisor.
   - Select the **Logout** icon .

   The system asks you to verify whether you want to log out.
2. Select **Yes** to log off the CMS server.
   - If you selected **Exit** in Step 1, CMS Supervisor logs you out of CMS and exits.
   - If you selected **Logout** in Step 1, CMS Supervisor logs you out of CMS, but the Controller window remains open.
3. Go to Exit CMS Supervisor on page 61.

Exit CMS Supervisor

To exit the CMS Supervisor application, do the following steps:

1. From the **Connect** menu, select **Exit**.
   - If you have logged off from the CMS server, CMS Supervisor is then closed.
   - If you have *not* logged off the CMS server, the system displays the following message: "You are currently logged in. Are you sure you want to exit?"
2. Select one of the following:

If you select	Then
Yes	CMS Supervisor automatically logs you off from the CMS server and then exits.
No	You are returned to the CMS Supervisor Controller window and remain logged in to the CMS server.

Change connection settings

Important:
You *cannot* be logged in to a CMS server when you change connection settings.

To change connection settings to the CMS server, do the following steps:

1. Start CMS Supervisor.
2. Select **Cancel** from either the **Login Information** window or the **Manual Login** window.

   The system displays the Avaya CMS Supervisor Controller window.
3. Select the **Options** icon .

   The **Options** window appears with focus on the **CMS Servers** tab.
4. On the **CMS Servers** tab, select **Properties**.

   The system displays the **Server Properties** window. Notice that the server name is displayed and cannot be changed.
5. In the **Connection** box, select the type of connection you want: **Network**, **Serial**, **Modem**, or **SSH**.

6. Change any settings as needed.

   For information about how to enter serial and modem information, see Establish the connection on page 53.

7. Select **OK** to change the connection.

   The system displays the **CMS Servers** tab.

Close CMS Supervisor windows

To close CMS Supervisor windows, use any of the standard Microsoft Windows-based methods. You can also select **Exit** from the **Connect** menu to close all windows and quit the CMS Supervisor application.

If the CMS server shuts down or is changed to single-user mode, CMS Supervisor displays a warning message and then any open windows are closed.

Chapter 6: CMS operations

This section provides information about the menus that you use to perform Avaya Call Management System (CMS) operations in Avaya CMS Supervisor.

This section includes the following topics:

- About operations on page 63
- Actions menu on page 64

About operations

This section includes the following topics:

- Tasks on the Operations tab on page 63
- How to get to the Operations tab on page 63

Tasks on the Operations tab

Use the **Operations** tab to perform the following tasks:

- Add items to the database
- Find items in the database
- Modify items in the database
- Delete items from the database

Related topics

For detailed information about these tasks, see the Avaya Call Management System Administration guide.

How to get to the Operations tab

Use any of the following paths to navigate to the **Operations** tabs of each specific area:

- **Commands** > **Dictionary**

- **Commands** > **Exceptions**
- **Commands** > **Agent Administration**
- **Commands** > **Call Center Administration**
- **Tools** > **System Setup**
- **Tools** > **Maintenance**
- **Tools** > **User Permissions**

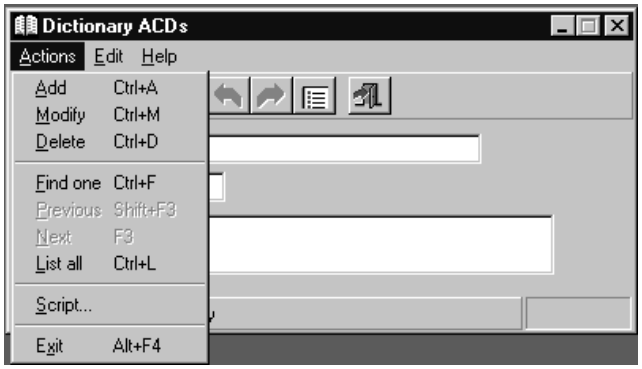
Actions menu

This section includes the following topics:

- Purpose on page 64
- Action menu items on page 65

Purpose

The **Actions** menu is found in the **Dictionary**, **Exceptions**, **Agent Administration**, **Call Center Administration**, **Maintenance**, **System Setup**, and **User Permission** operations windows. Actions are used to perform Avaya CMS-related functions.



Action menu items

The following table lists the **Actions** menu items, their associated buttons, and a definition of each action.

Note:
Some of these actions are only available at specific times under certain conditions.

Action	Button	Description
Add		Adds the data that you entered in the current window to the database.
Cancel		Cancels the operation that is in progress.
Copy Group/ Create		Creates a new group from an existing one.
Delete		Removes the entry on your current window from the Avaya CMS database.
Exit		Exits the window and other associated windows.
Find one		Searches the database for entries that match the input values in the current window.
Get contents		Provides access to the members of the agent group.
List all		Lists all of the entries that matched the current field values.
List Devices		Lists all the devices that are specified in the **Backup/ Restore Devices** window.
Modify		Changes the database entry to reflect the new values that are entered in the current window.
Next		If you have used the **Find One** function, the **Next** button displays the next match that is found. Otherwise, this button is not available.

Action	Button	Description
Previous		If you have used the **Find One** function, the **Previous** button displays the previous match that is found. Otherwise, this button is not available.
Run/Start		Starts the process for your current window.
Script...	No icon	Displays the **Save as Script - Action** window. Use this window to enter information in the appropriate fields, and then select **Add**, **Modify**, or **Delete**, and save it as a script. If **Add**, **Modify**, or **Delete** are not present, the **Save as Script** menu item is not present.
Select tables		Allows you to select specific tables to back up or restore.

Chapter 7: Installing and using Terminal Emulator

This section explains how to install Terminal Emulator and set up profiles.

This section includes the following general information:

- About Terminal Emulator on page 67
- Terminal Emulator main window on page 69
- The Terminal Emulator window on page 72
- Communications tab on page 76
- Modem tab on page 79
- Font tab on page 81
- Install Terminal Emulator on page 83
- Open Terminal Emulator on page 83
- Log in to CMS on page 83
- Exit Terminal Emulator on page 85
- Edit profiles on page 85
- Delete profiles on page 86
- Terminal Emulator messages on page 87
- Resolve Terminal Emulator font problems on page 89
- Terminal Emulator silent install and uninstall on page 89
- Terminal Emulator help on Windows VISTA, Winodws 7 on page 90

About Terminal Emulator

This section includes the following topics:

- Description of Terminal Emulator on page 68
- Installation information on page 68

Description of Terminal Emulator

Terminal Emulator is a software application that emulates a 615 Color (615C) terminal. Use Terminal Emulator to access the Avaya Call Management System (CMS) server from a PC with Microsoft Windows. You can use Terminal Emulator with any Avaya CMS server that supports 615 or 615C terminal types.

Note:
Terminal Emulator is available only with English as interface language.

This application can also be used as a telnet application to a host computer that is not running Avaya CMS.

Terminal Emulator requires the remote host computer to have a terminfo file supporting the 615C color terminal type. This file is a standard part of Avaya CMS. However, if you access a remote host computer that does not have a terminfo file supporting a 615C, Terminal Emulator may not work correctly.

Terminal Emulator is most often used to access the following CMS capabilities, which are not available through Avaya CMS Supervisor:

- ACD Administration - Vector Contents

  You can also use Visual Vectors to access vector information and edit vectors.
- cmsadm and cmssvc login capabilities
- UNIX system command capabilities
- INFORMIX database commands
- Forecasts (if purchased)
- Shortcuts
- Timetables
- Creating and Editing CMS Custom Reports
- Graphical ACD Administration for Avaya communication servers with Expert Agent Selection (EAS)
- Solaris® system command capabilities

Installation information

Terminal Emulator is packaged with CMS Supervisor, but you must install it separately. It is not automatically installed with the latest version of CMS Supervisor. For further information on installing Terminal Emulator, see Install Terminal Emulator on page 83

Terminal Emulator main window

Using the Terminal Emulator main window, you can access the CMS subsystems, view information about an open connection profile, access the terminal emulator help, and perform other functions such as the various commands available in Terminal Emulator.

CMS main menu

The CMS main menu is the window that displays on the left side of the Terminal Emulator window. You can use the CMS main menu to access all of the CMS subsystems. There are three ways you can make a menu selection:

- Press the key for the first unique letter of the menu item (for example, D for Dictionary) and then press the Enter key to select the item.
- Use the up or down arrow keys to highlight the name of the subsystem you would like to access and then press the Enter key to select the item.
- Press the Tab key to move the highlight to the next menu item (or Shift + Tab to move to the previous menu item) and then press the Enter key to select the item.

Title Bar

The top border of a window displays the title of the window. If a connection profile is open in Terminal Emulator, its name is also displayed in the title bar. Otherwise, (untitled) is displayed.

Menu Bar

The Terminal Emulator menu bar contains the following menus:

- Profile
- Edit
- Connection
- Help

Terminal Emulator Function Keys

Like a 615C terminal, there are eight function keys at the bottom of the Terminal Emulator window, which correspond to the function keys on your keyboard. If a connection is not active to a remote host computer, Terminal Emulator labels the keys F1 through F8.

If a connection is active to a remote host computer supporting the 615C terminal type, you may access the function keys using either of the following methods:

- Press the corresponding function key on the keyboard (the same way you access the function keys from the 615C terminal).
- Use the mouse to click on a function key button at the bottom of the Terminal Emulator window. Note that your mouse cannot be used to select items on the remote host computer menus that are displayed inside the emulation window.

When Terminal Emulator is connected to a CMS system, the screen labels indicate the function each key performs. Following are the function keys available in Terminal Emulator.

This section includes the following topics:

- Help Function Key (F1) on page 70
- Window Function Key (F2) on page 70
- Commands Function Key (F3) on page 70
- Keep Function Key (F4) on page 71
- Exit Function Key (F5) on page 71
- Scroll Function Key (F6) on page 71
- Current Function Key (F7) on page 72
- Main Menu Function Key (F8) on page 72

Help Function Key (F1)

The Help Function Key displays the CMS Help menu that allows access to online user information. For example, if you need help with a particular input field on a CMS screen, you can select Field Help and get information pertaining to that particular field. If you need help on the use of a window, you can select More help and get the information.

Window Function Key (F2)

The Window Function Key is used to list, move, and size windows.

Commands Function Key (F3)

The Commands Function Key (F3) allows you to perform the following actions:

- Print the current window
- Create and change passwords
- Access the UNIX/Solaris system
- Select colors
- Select a default printer
- Change your ACD (real or pseudo)
- Save your own default values
- Restore the system default values
- Set the type of exception notification you receive
- Receive a warning when you log off with open windows.

Keep Function Key (F4)

From the Keep Function Key menu, you can create, modify, view, or delete timetables and shortcuts on the CMS server.

Exit Function Key (F5)

The Exit Function Key (F5) works as follows:

- With user windows, the Exit Function Key allows you to close the current window. Focus is then placed on the previously opened window. If no other windows are open, you are returned to the Main Menu. Any secondary windows associated with the current window are closed when this key is pressed.
- With menus/submenus, pressing the Exit Function Key moves the cursor to the previous menu or submenu selection and the current submenu is closed.
- With Function Key menus, if the cursor is on the first Function Key menu (not a Function Key submenu) and you press the Exit Function Key, the cursor returns to the previous position in the current open window or to the Main Menu if there are no open windows.

Scroll Function Key (F6)

The Scroll Function Key allows you to toggle between field traversal (input mode) and paging/scrolling.

Note:
The Scroll Function Key is not necessary in output windows, since you are in scroll mode in these windows.

Current Function Key (F7)

The Current Function Key (F7) allows you to step through the open CMS windows.

Main Menu Function Key (F8)

The Main Menu Function Key displays the Avaya CMS main menu in the Terminal Emulator window but leaves the current window open. Any displayed submenus or Function Key menus disappear.

The Terminal Emulator window

This section includes the following topics:

- Profile menu on page 73
- Edit menu on page 74
- Connection menu on page 75
- Reset menu on page 75
- Help menu on page 76

Profile menu

From this menu you, can create, open, and save a connection profile. You can also exit Terminal Emulator from this menu. Profiles are used to store information that is related to how a particular user connects to the remote host. The following table lists the items on the Profile menu and describes the action that each item performs.

Menu item	Action
New	Creates a new connection profile. By default, this connection profile is named “profile 1” until you save it. This item is unavailable if a connection is already active.
Open...	Selecting this menu item displays the Open Profile dialog box allowing you select and open a previously created profile. The Open Profile dialog box allows two different methods of opening a profile: ● Open - Loads the profile and the associated configuration without connecting to the remote system. ● Connect - Loads the selected profile and the associated configuration and then connects to the remote system. Once you open a profile, it will then occupy the first position in the list of recently accessed profiles under the Profile menu. This item is disabled if an active connection currently exists.
Save	Saves the currently loaded connection profile.
Save As...	Displays the **Save Profile As** dialog. In the **Profile Name** field, enter the name under which the currently loaded profile will be saved. Alternatively, choose to overwrite an existing profile by highlighting it in the list box and selecting the **OK** button. **Note:** If you use an existing profile name, you are presented with a message asking you to confirm the overwriting of the selected profile.

Menu item	Action
1...4	Displays the four most-recently opened connection profiles. You can choose a numbered profile for quick access. The most recently selected profile that you choose becomes profile number 1, and the other items are renumbered accordingly. These items are unavailable if there is a connection already active.
Exit	Exits Terminal Emulator. If there is a connection profile that is modified but not saved, a message box asks you if you want to save the changes to the connection profile. You can also exit Terminal Emulator using any of the standard Windows methods for ending a running application. See your Microsoft Windows documentation for more information.

Edit menu

From this menu, you can copy selected text to the Microsoft Windows Clipboard, paste the contents of the Clipboard to a remote host computer, and clear the contents of the Clipboard. In this case, pasting means sending the selected text to the screen as if it were typed by the user. The capability to cut text is not supported by Terminal Emulator. The following table lists the items on the **Edit** menu and a brief description of the action each item performs. You can also use the basic Microsoft Windows keyboard shortcuts.

Menu item	Action
Copy	Copies the selected text to the Windows Clipboard. The keyboard shortcut for this action is Ctrl + Insert. See your Microsoft Windows documentation for details on how to select text.
Paste	Pastes the contents of the Microsoft Windows Clipboard to the location of your cursor on your PC as if you had entered it. Alternatively, the Shift+Insert keyboard shortcut can be used.
Clear	Clears (deletes) the contents of the Microsoft Windows clipboard.

Connection menu

From this menu, you can connect to, disconnect from, or send a break sequence to a remote host computer. This menu can also be used to set up or change Terminal Emulator options (communications, modem, and font) for the currently selected profile. The **Connection** menu contains the following items:

Menu item	Action
Connect	This menu item establishes a connection to a remote host computer as specified in the current connection profile. If a connection is already active, this menu item is disabled.
Disconnect	Disconnects the currently active connection. This menu item is disabled if a connection is not currently active.
Send Break	Sends a break sequence to the remote host computer. The keyboard shortcut for a break sequence is Ctrl + F5. A break is used to temporarily suspend an operation or transmission of information. If your connection is unresponsive and the host appears not to respond when you press keys on your keyboard, you may want to send a break sequence.
Options...	Select this item from the Connection menu to display the Options for profile dialog box. This dialog box allows you to configure the communications configuration for a new or currently open profile. For more information, see one of the following topics: ● Communications tab on page 76 ● Modem tab on page 79 ● Font tab on page 81 Once you have supplied all necessary information, select the OK button to save your changes. Otherwise, select the Cancel button to disregard any changes that have been made. For additional information, see Setting Terminal Emulator Options.

Reset menu

From this menu, you can reset the terminal for Terminal Emulator. This provides a way to log in to Audix and the communication server.

Help menu

From this menu, you can get online Help for Terminal Emulator. The following table lists the items on the Help menu and describes the action that each item performs.

Menu item	Action
Contents	Selecting the Contents item from the Help menu initializes the Terminal Emulator online help and displays the table of contents.
Technical Support	Shows how to receive Terminal Emulator technical support.
About...	Displays the Terminal Emulator **Help About** window, including version number and Avaya Inc. copyright information.

Communications tab

This section includes the following topics:

- Purpose on page 76
- Connection descriptions on page 77
- Network connection settings on page 77
- Serial and modem connection settings on page 78

Purpose

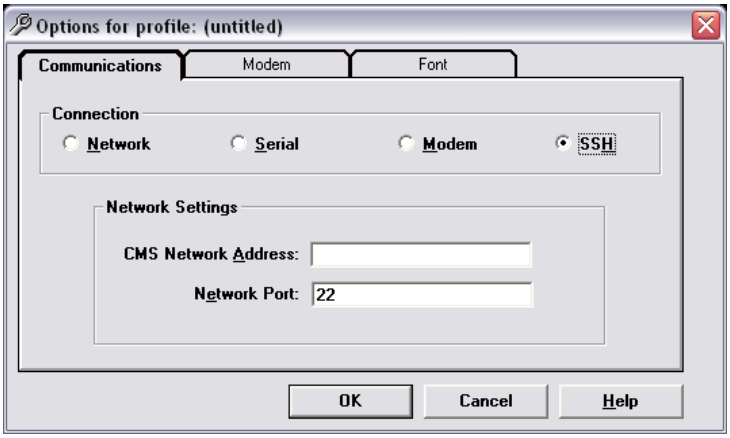
The Communications tab displays a window that lets you set up or change the connection options to a remote host computer.

Connection descriptions

The following is a description of each of the connection options.

Connection	Description
Network	Use this option to connect to the remote Avaya CMS through a network.
Serial	Use this option to connect to the remote Avaya CMS through a serial connection.
Modem	Use this option to connect to the remote Avaya CMS through a modem.
SSH	Use this option to connect to the remote Avaya CMS through a network connection using SecureShell (SSH).

Network connection settings

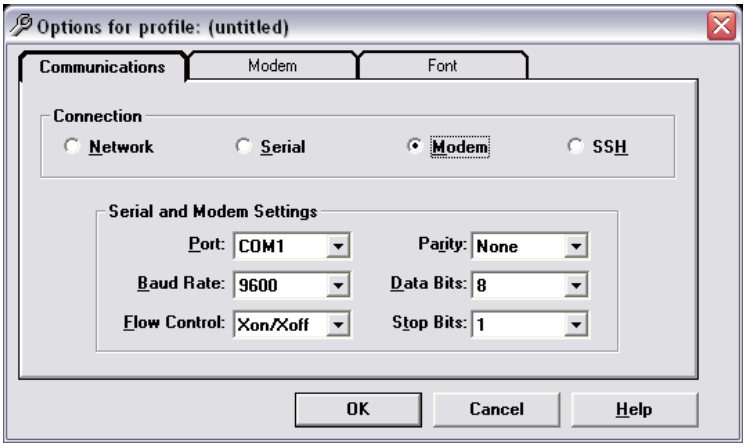


After you select **Network**, you will see the following fields.

Field	Description
Network	Select this option to connect to a remote CMS server through your local or wide-area network.
Serial	Select this option to connect to a CMS server through a serial connection via a COM port on your PC.

Field	Description
Modem	Select this option to connect to a remote CMS server through a dial-up connection via a telephone line.
SSH	Select this option to connect to a remote CMS server through your local or wide-area network using a SecureShell (SSH) connection. This connection uses encrypted communications.
Avaya CMS Network Address	Enter the name or the Internet Protocol (IP) address of the remote host. There is no default.
Network Port	Enter the network port that you want to connect. The default, except for SSH, is 23, which is the network port reserved for Telnet.

Serial and modem connection settings



After you select **Serial** or **Modem**, you will see the following fields.

Setting	Description
Port	From the drop-down list, choose the name of the communication port that you will use to connect to the remote CMS. The options are **COM1**, **COM2**, **COM3**, and **COM4**. If another application or device is using the selected port, a warning message is displayed stating that the selected port cannot be used for Terminal Emulator. **Note:** While a serial port or modem is connected to a remote host computer, the port cannot be used by any other application.
Baud Rate	Choose a Baud Rate from the drop-down list. By default, **9600** is selected. The options are: **110**, **300**, **600**, **1200**, **2400**, **4800**, **9600**, and **19.2K**.
Flow Control	Choose a Flow Control setting from the drop-down list. By default, **Xon/Xoff** is selected. The options are: **None**, **Xon/Xoff (software)**, **Rts/Cts**, or **Both (hardware)**.
Parity	Choose a Parity setting from the drop-down list. By default, **None** is selected. The options are: **None**, **Odd**, **Even**, **Mark**, and **Space**.
Data Bits	Choose a Data Bits setting from the drop-down list. By default, **8** is selected. The options are: **5**, **6**, **7**, and **8**.
Stop Bits	Choose a Stop Bits setting from the drop-down list. By default, **1** is selected. The options are: **1**, **1.5**, and **2**.

Important:
Do not change these settings unless you are instructed to do so by your network administrator.

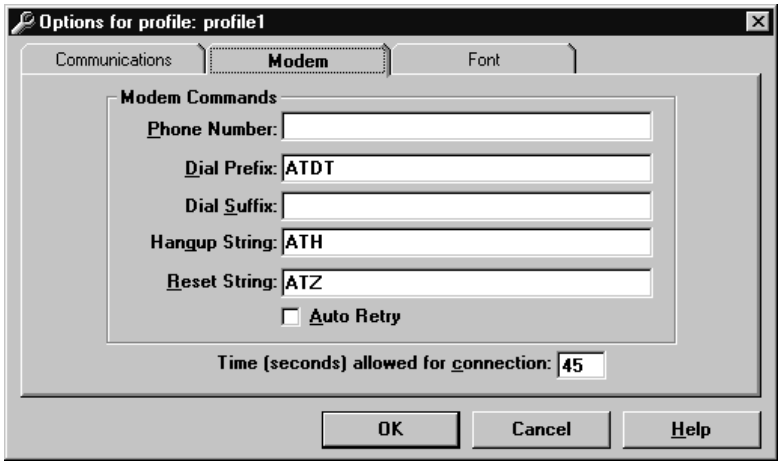
Modem tab

This section includes the following topics:

- Purpose on page 80
- Before you begin on page 80
- Modem Commands field descriptions on page 80

Purpose

Select the **Modem** tab to set up or change dial strings that connect to the remote Avaya CMS through a modem port.



Before you begin

Before you can set the modem, go back to the Communications tab and set the following fields:

- **Port**
- **Baud Rate**
- **Flow Control = Rts/Cts**

Modem Commands field descriptions

Use the following information to set up the modem connection.

Field	Description
Phone Number	Enter the telephone number of the remote host computer to which you wish to connect.
Dial Prefix	Enter the characters to send to the modem before the telephone number of the remote host. For example, if a **9** must be dialed before the telephone number, enter **9** after the phrase ATDT (**ATDT9**).

Field	Description
Dial Suffix	Enter the digits to send to the modem after the telephone number of the remote host computer is dialed. For example, if you must enter an extension to reach the host computer, enter that extension in this field.
Hangup String	Enter the characters to send to cause the modem to hang up (disconnect) the connection to the remote host computer. By default, this field contains the string ATH.
Reset String	Enter the characters to reset the modem. The default is ATZ.
Auto Retry	Enables or disables the Auto Retry option. By default, this option is turned off and the modem tries only once to establish a connection to the remote Avaya CMS server.
Time (seconds) allowed for connection	Enter the maximum time to wait for a connection to a remote host computer to be established. Valid values are 1 to 999 seconds. By default, the value is 45 seconds.

Font tab

This section includes the following topics:

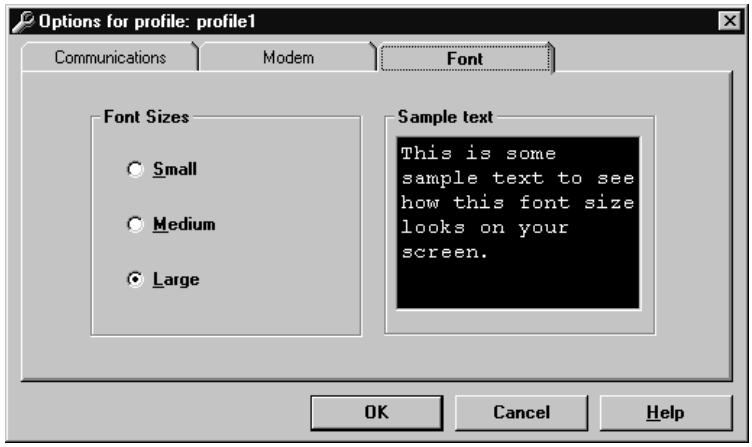
- Purpose on page 81
- Font Sizes field descriptions on page 82

Purpose

The Font tab allows you to select the size of the text that the Emulation Window displays. The default size is medium (approximately nine points).

Example

The following figure shows an example of the standard font settings for Terminal Emulator.



Font Sizes field descriptions

In the **Font Sizes** area, select one of the following:

Field	Description
Small	This font is approximately 8 points. It is appropriate for video displays that have a resolution of 640 x 480 (VGA) or less.
Medium	This font is approximately 9 points. It is appropriate for video displays that have a resolution of 800 x 600 or 1024 x 768. Medium is the default font size.
Large	This font is approximately 10 points. It is appropriate for video displays that have a resolution of 1024 x 768 or greater.
Sample text	Provides a sample of the selected font size.

Install Terminal Emulator

To install Terminal Emulator, do the following steps:

1. On the CMS Supervisor software disc, browse to the Terminal Emulator setup file, `SetupTrm.exe`.
2. Execute the `SetupTrm.exe` file to begin the installation.

   After a short wait, the system displays the **Terminal Emulator Setup Welcome**.
3. Select **Next** to proceed with the installation.
4. Follow the instructions that the system displays on the windows to install Terminal Emulator.

   When the Installation is finished, the system displays the **Installation Completed** window.
5. Select **Finish** to return to your desktop.

Open Terminal Emulator

To open Terminal Emulator, select **Programs** > **Avaya** > **Terminal Emulator R16** > **Terminal Emulator R16** from the Start Menu. The Terminal Emulator window is then displayed with no active connection.

Log in to CMS

This section includes the following topics:

- Create profiles on page 83
- To stop the login process on page 84
- Log in with more than four profiles on page 84

Create profiles

To create a profile, do the following steps:

1. Open **Terminal Emulator**.

2. From the **Profile** menu, select **New**.

   The system displays the **Options** window.

3. Set the Terminal Emulator options.

   The Terminal Emulator o**ptions** are grouped under three tabs: **Communications**, **Modem**, and **Font**. For procedures on setting the options in each tab, see Communications tab on page 76, Modem tab on page 79, and Font tab on page 81.

4. Select **Save As** from the **Profile** menu.

   The system displays the **Save Profile As** box.

5. Enter the name of the profile in the **Profile Name** text box.

6. Select **OK**.

   If you want to overwrite an existing profile with one you have just created, double-click the name in the list box.

7. Select the name of the profile you just created to login.

To stop the login process

While doing these procedures, if you want to stop the login process but keep Terminal Emulator running, select **Disconnect** from the **Connection** menu. If you want to stop the login process and close Terminal Emulator, select **Exit** from the **Profile** menu.

Log in with more than four profiles

To log in to CMS if you have more than four profiles, do the following steps:

1. From the **Profile** menu, select **Open**.

   When you select a connection profile, a connection is initiated and the system displays a status window. The system closes the status window when the connection is established.

   - If the connection is established through the network or a dedicated serial line, you see the Avaya CMS login prompt.
   - If the connection is established through a modem, the modem dials the number of the remote host and then attempts to connect.

2. At the `login` prompt, enter your CMS login ID, and press Enter**.**

3. At the `password` prompt, enter your CMS password, and press Enter.

4. At the `terminal type` prompt, enter **`cvterm`** and press Enter.

   The system displays the CMS Main Menu.

Tip:
If the system displays a prompt, such as $ or #, instead of the terminal type prompt or the CMS Main menu, enter **`cms`** and press **Enter**.

Exit Terminal Emulator

To exit Terminal Emulator, do the following steps:

1. From the CMS Main Menu, select **Logout**.

   The system displays a Terminal Emulator dialog box which indicates that the connection was broken.

   If the system displays a prompt, such as $ or #, instead of the terminal type prompt or the CMS Main menu, enter **`exit`** and press **Enter**.
2. Select **OK**.
3. From the **Profile** menu, select **Exit**.

   If you select **Exit** or try to close the Terminal Emulator window while a connection is active, the system displays a message asking if you want to exit anyway.

Edit profiles

To edit an existing profile, do the following steps:

1. From the **Profile** menu, select **Open**.
2. Choose the **name** of the profile that you want to edit.
3. Select **Open**.
4. From the **Connection** menu, select **Options**.
5. Edit the profile.
6. Select **OK**.
7. From the **Profile** menu, select **Save.**

Delete profiles

Use this procedure to delete a profile so that it does not appear in *Terminal Emulator*.

Note:
Terminal Emulator should not be running when performing this procedure.

To delete an existing profile in *Terminal Emulator*:

1. Locate the `cvterm.ini` file, which can be found at the following location:
   - Windows XP: \WINDOWS
   - Windows Vista: %APPDATA%\..\Local\VirtualStore\Windows
   - Windows 7: %APPDATA%\..\Local\VirtualStore\Windows

   Note:
   Note there is an `%APPDATA%` area for each of the users on a PC.

2. Open `cvterm.ini` in the text editor of your choice.

   The file will appear similar to the following:

```
[servername1]
font=small
connect=net
host=servername1.mycompany.com
netport= 23
commport= 1
baud= 9600
parity=n
Databits= 8
StopBits=1
FlowControl= 1
prefix=ATDT
hangup=ATH
reset=ATZ
timeout= 45
cd_timeout= 300
auto_retry= 0
[Settings]
Profiles=servername1 servername2
order=servername2 servername1
Window=11475 4380
[servername2]
font=large
connect=net
host=servername2.mycompany.com
netport= 23
commport= 1
baud= 9600
parity=n
Databits= 8
StopBits=1
```

```
FlowControl= 1
prefix=ATDT
hangup=ATH
reset=ATZ
timeout= 45
cd_timeout= 300
auto_retry= 0
```

3. Under the `[Settings]` entry, remove the profile name that you want to delete from the `Profiles=` and `order=` lines.
4. Locate the `[profile name]` that you want to delete and remove it along with the 16 lines that follow it.
5. Save the `cvterm.ini` file and close it.

   Result: The deleted profile name will no longer appear in *Terminal Emulator*.

Terminal Emulator messages

Terminal Emulator displays error messages and information messages.

This section includes the following topics:

- Description of error messages on page 88
- Description of information messages on page 89

Description of error messages

The following table describes the Terminal Emulator error messages.

Error message	Description
Unable to connect to the remote host	Terminal Emulator failed to connect to the remote host. If the reason for failure can be determined, one of the following messages is displayed: ● Busy, no answer. ● The remote host is not responding. ● The network is not responding.
The connection to the remote host was lost	Some possible causes for this message are: ● The remote host computer has stopped functioning properly. ● The network has dropped the connection. ● The modem has hung up the line.
The profile name does not exist	This message appears if you try to open a profile that does not exist.
The profile name exists, replace?	This message appears if you try to save over a profile that currently exists.
You must specify a hostname to connect to.	The profile being used does not have a remote host system specified in the CMS Network Address field.
Wrong Font Being Used	If the font in the Sample Text window of the Font tab on the Options dialog is in italics, then the Courier New font is not present on your system or is corrupted. The text font used by Terminal Emulator is the Courier New true type font. The font, CVTERM.TTF, is delivered with Terminal Emulator, but this font is only used for the graphical effects for the 615C emulation. If the wrong font is being used, you can attempt to remove and reinstall the Courier New font through the Fonts tool in the Windows Control Panel. Alternatively, you can attempt to copy over the cour.ttf file in the %windir%\Fonts directory with the same file from another PC.
Readme file not found	Ensure that the file, readme.txt, is located in the Terminal Emulator installation directory.

Description of information messages

The following table describes the Terminal Emulator information messages.

Information message	Description
The profile name exists, replace?	Displays if you try to save a profile with the specified name and it already exists.
Save changes to name?	Appears if you try to exit Terminal Emulator without saving changes to the profile with the specified name. Select the **Cancel** button to exit the Save option.
A connection is active, exit anyway?	Displays if you try to exit Terminal Emulator while a connection is active.

Resolve Terminal Emulator font problems

In rare instances, the font used by Terminal Emulator does not install properly. If this happens, you will see characters instead of straight lines surrounding the CMS menus.

To resolve any Terminal Emulator font problems, do the following steps:

1. Use the uninstall program in Windows to uninstall Terminal Emulator.
2. Run `SetupTrm.exe` again.
3. If this does not resolve the problem, uninstall Terminal Emulator again.
4. From a command prompt window, manually delete all `cvterm.*` files from the `windows\fonts` directory.
5. Run `SetupTrm.exe` again.

Terminal Emulator silent install and uninstall

You can install and uninstall Terminal Emulator R16.2 in the silent mode using the command line interface. If not specified, the target directory for the software is the same as the default install option from the GUI.

The **--silent** option is a required parameter for the install and uninstall commands.

The following table explains the other command line options:

Option	Description
--Help	This option provides a summary of the available command line options
--LogDir=<directory>	This option allows you to save a copy of the setup.log file in the specified directory.
--TargetDir=<directory>	This option defines the destination directory that you use when installing Terminal Emulator.

Examples

Use the following command to install the software to **`C:\Program Files\Avaya\TER16_1`**:

```
Setup.exe /hide_progress --silent --TargetDir=C:\Program Files\
  Avaya\TER16_1
```

Use the following command to uninstall the software:

```
Setup.exe /hide_progress /uninst --silent
```

Terminal Emulator help on Windows VISTA, Winodws 7

Microsoft no longer includes the WinHlp32.exe help system as part of the operating system. If you attempt to open help from Terminal Emulator, Windows will prompt you to install KB917607 if it has not already been installed.

Once WinHlp32.exe is installed, Terminal Emulator help will open correctly.

For more details see http://support.microsoft.com/kb/917607

This applies to the operating systems Windows Vista, Windows 7 and newer.

Chapter 8: Troubleshooting

If you have trouble with any of the procedures in this document, read this section before you call the Avaya support. The problem may be something simple that you can quickly solve yourself.

This section includes the following topics:

- Check for serial or modem connection problems on page 99 on page 91
- PC shutdowns and operating system crashes on page 93
- Resolve error messages on page 93
- Browse errors when logged into multiple CMS servers on page 98
- Find OCX and DLL incompatibilities on page 98
- Resolve TCP/IP host name on page 99
- Check for serial or modem connection problems on page 99

General troubleshooting tips

This section includes the following topics:

- Verify privileges on page 91
- Verify swap files on page 91
- Test operation of networking software on page 92
- Preserve CMS Supervisor user profiles on page 92
- View the readme file on page 92

Verify privileges

To install CMS Supervisor, verify that you have administrator privileges.

Verify swap files

If you have an older PC, make sure that your systems have permanent swap files. This increases performance during swap file operations.

Test operation of networking software

To ensure that the PC networking software is loaded and functional, you should test the networking connectivity to the target CMS server before you run CMS Supervisor. To test this functionality, use the network ftp/telnet application. If this works, but CMS Supervisor still cannot establish connection, it is most likely a problem with the `WINSOCK.DLL` file.

Preserve CMS Supervisor user profiles

In the event of a failure during an upgrade, you can reinstall the old software. However, you will lose any previously-set preferences, scripts, or thresholds.

Use the following procedure to preserve user preferences before you perform an upgrade:

1. In Windows Explorer, locate the current user profiles.

   The default location for R16 (all operating systems), R15 (Windows Vista OS) and R14.1 (Windows Vista OS) is:

   `%APPDATA%\Avaya\CMS Supervisor Rxx\Profiles`

   Note:
   There is an `%APPDATA%` directory for each of the users on the PC.

2. Open the directory and copy the `Profiles` file tree to another location.
3. Run the uninstall program.

   For more information, see Uninstalling CMS Supervisor on page 49.

4. Use the procedures in this chapter to reinstall CMS Supervisor.
5. Copy the saved profiles to the default locations for each user as appropriate.

View the readme file

On the CMS Supervisor software disc or installation directory, locate and open the `readme.txt` file to view last-minute installation tips for this CMS Supervisor release. Since this file may contain valuable pre-installation information, you may want to read it now instead of waiting until the installation wizard prompts you to read it.

PC shutdowns and operating system crashes

If your PC shuts down, or your operating system crashes during an installation, Avaya Call Management System (CMS) Supervisor will attempt to clean up the installation and re-install the files the next time you attempt the installation.

Resolve error messages

Use the following information to help you with error messages encountered while installing or logging in to CMS Supervisor.

This section includes the following topics:

- Installation messages on page 93
- Login error messages on page 94

Installation messages

The following types of error messages can appear:

- Information - Indicates that the error will not affect the success of the installation. Also indicates that you do not have privileges to perform the installation.
- Warning - Indicates that the error may affect the success of the installation.
- Severe - Indicates that the installation will fail, and that Setup will exit.

Error message	Corrective action	Type
Installing to the `\WINDOWS` or `\WINDOWS\SYSTEM` directories is not permitted. Select another directory.	Select another directory.	WARNING
Invalid directory name specified.	Provide a valid directory name.	WARNING
Invalid Location. You cannot install Avaya CMS Supervisor to a floppy drive. Please select another location.	Select another drive.	WARNING

Error message	Corrective action	Type
Perform Rollback? This installation did not complete. Would you like to rollback the changes that were made during the partial installation?	Select **Yes** to delete files that were installed or to reinstate files in the registry that were changed during the partial installation.	SEVERE
The drive selected either does not exist or has insufficient space available. Enter a different destination drive.	Select another drive.	WARNING
You do not have administrative privileges. Please log on as administrator and install Avaya CMS Supervisor.	Contact your system administrator, or select a PC on which you have administrative privileges.	INFORMATION

Login error messages

Error message	Corrective action
A bad or invalid `WINSOCK.DLL` was detected on the system. Please correct this problem and try again.	Reinstall network stack.
An action cannot be completed because a component (cvsServer) is not responding. Choose **Switch To** to activate the component and correct the problem.	Select **Switch To** to correct the problem.
Could not communicate with the modem.	Make sure that the communications and modem settings are correct. Use the **Communications** and **Modem** tabs in the **Options** window to verify and change settings.
Could not connect to the server	Try again. If you still have trouble after your third attempt, contact your system administrator to see if the server is working properly.
Your Avaya CMS Supervisor software is not compatible with the Avaya CMS server software. The Avaya CMS server must be upgraded before you can log in. Contact your system administrator.	Contact your system administrator.

Error message	Corrective action
This version of Avaya CMS Supervisor is not compatible with the software on your Avaya CMS server. Please upgrade your PC with the appropriate version of Avaya CMS Supervisor. Contact your Avaya CMS system administrator.	Select a different server on which the CMS version that you selected is installed, or select a different CMS version. Contact your CMS system administrator.
Could not find the file `DALEAPP.EXE` in the Avaya CMS Supervisor directory. Please re-install this file into the Avaya CMS Supervisor directory or contact technical support.	Reinstall CMS Supervisor. If you cannot solve this problem yourself, If you continue to have this problem, you can contact support. See Support on page 11.
Could not initialize communications.	Try again. If you still have trouble after your second attempt, If you continue to have this problem, you can contact support. See Support on page 11.
Could not initialize `DALEAPP.EXE`. Please try to login again or contact technical support	1. Restart your PC. 2. Try to connect again. 3. If this does not work, reinstall CMS Supervisor and try to connect. 4. If this does not work, If you continue to have this problem, you can contact support. See Support on page 11
Could not open the specified serial port. Please check communications settings, correct any problems, and try again.	In the **Options** window, check the settings under the **Communications** tab. Check to see if any other device is connected to the port and that you have the correct port assigned.
Could not resolve the hostname <user-entered server name>. Please check communications settings, correct any problems, and try again.	The hostname was not recognized by the Domain Name Services (DNS). Try the IP address instead of the hostname. If this does not work, contact your system administrator.
The application could not be started because system memory is low. Please close some applications and try again.	Close any open applications and try again.
The application could not be started because the executable file is corrupt. Please reinstall Avaya CMS Supervisor or call Technical Support.	Remove CMS Supervisor and reinstall it. If you continue to have this problem, you can contact support. See Support on page 11.
The application could not be started because the executable was not found. Please reinstall Avaya CMS Supervisor or call Technical Support.	Reinstall CMS Supervisor or If you continue to have this problem, you can contact support. See Support on page 11

Error message	Corrective action
The application could not be started because the path to the executable was not found. Please reinstall Avaya CMS Supervisor or call Technical Support.	Reinstall CMS Supervisor or If you continue to have this problem, you can contact support. See Support on page 11
The carrier detect signal was lost.	This is a modem-related problem. Try to connect again. If the problem persists, contact your system administrator.
The connection to the server has been lost, and Avaya CMS Supervisor must exit. Please try to connect again later.	This is a network-related problem. A nonrecoverable break in the network was received. Try to log in to the Avaya CMS server again. If the problem persists, contact your system administrator.
The connection to the server was lost.	This is a network-related problem. A nonrecoverable break in the network was received. Try to log in to the Avaya CMS server again. If the problem persists, contact your system administrator.
The file, `WINSOCK.DLL`, could not be found. Please ensure that this file is on your workstation's path.	Check for proper installation of the network. Contact your system administrator for help.
The maximum number of Avaya CMS Supervisor logins on the server has been reached. Please try again later.	The number of users that have been authorized to use CMS Supervisor has been met. You will be denied login until the number of users fall below the authorized number. If you continue to have this problem, you can contact support. If you continue to have this problem, you can contact support. See Support on page 11.
The network connection to <user-entered server name> timed out.	CMS Supervisor was unable to log in to the server. This error indicates that there may be a problem on the server. Contact your Avaya CMS Administrator.
The network connection was broken.	There is possibly a problem with the network. Contact your system administrator.
The passwords you entered do not match. Please retype the passwords and try again.	Check to see if Caps Lock is on. If it is, turn it off. Then, re-enter the password and try again.
The serial connection was broken.	Try to log in to the Avaya CMS server again. If the problem persists, contact your system administrator.

Error message	Corrective action
The server did not recognize your Login ID and/or Password. Please try again.	Make sure that you entered the correct login ID and password. If you did, make sure that Caps Lock is not on.
The server did not respond to the login request. Try again?	This type of error occurs when the network is busy. Try again. If the problem persists, contact your system administrator.
The server does not support this version of Avaya CMS Supervisor. Please contact your system administrator.	There is an incompatibility problem between the server and CMS Supervisor. Upgrade the Avaya CMS server or install an older version of Supervisor.
The server is currently in single-user mode. Please try again later.	You are logging in to the Avaya CMS server when it is in single-user mode. Try again later.
The server is not set up to support Avaya CMS Supervisor. Please contact your system administrator.	Supervisor is not authorized on the server (either the number of CMS Supervisor users = 0 or the feature is not authorized). Contact your system administrator.
The server refused the connection.	In the **Options** window, check the **Network Port** number.
There was an unknown failure on the server.	Contact your Avaya CMS Administrator.
This version of Avaya CMS Supervisor is not supported by the server. Please contact your system administrator.	There is an incompatibility problem between the server and CMS Supervisor. Upgrade the Avaya CMS server or install an older version of CMS Supervisor.
You are not recognized as a valid server user. Please contact your system administrator.	Your login ID is not administered on the Avaya CMS server. Contact your system administrator.
Your new password must differ from the old by at least three character positions.	Choose another password. It must have at least three different character positions than your old password. It also must have at least two alphabetic characters, at least one numeric or special character, and must be six characters in length.
Your password may not be the same as or this similar to your login ID.	Choose another password. It must have at least three different character positions than your old password. It also must have at least two alphabetic characters, at least one numeric or special character, and must be six characters in length.
Your password must be at least six characters in length.	Choose another password. Your password must have at least two alphabetic characters, and at least one numeric or special character.

Error message	Corrective action
Your password must contain at least two alphabetic characters, and at least one numeric or special character.	Choose another password. Your password must also be at least six characters in length.
Your UNIX shell is not set to `/usr/bin/cms`, so Automatic Login will not work properly. Please select **Manual Login** in the **Options** dialog box and try again.	On the CMS Supervisor controller window, select **Tools** then **Options...** From the **Options** window, select **Manual Login** and try logging in to the Avaya CMS server manually. Call your system administrator to change your shell.

Browse errors when logged into multiple CMS servers

When operations that involve retrieving and caching large amounts of data from the CMS cause a significant amount of delay, you may experience browse errors if the operation does not finish in a predetermined amount of time. If this occurs, you can eliminate this type of error by making a Registry modification on the PC.

CAUTION:
If you use the Registry editor incorrectly, you can cause serious problems that may require you to reinstall your operating system. You can refer to the `readme.txt` file for the procedures and for more detailed information, but Avaya, Inc. recommends that you call technical support before you attempt to make any Registry modifications on the PC.

Find OCX and DLL incompatibilities

CMS Supervisor and other applications on your PC use OLE Custom Extension (OCX) and Dynamic Link Library (DLL) files. Some of the OCX and DLL files used by CMS Supervisor may already exist on the PC because they are used by other applications. Problems can occur when CMS Supervisor uses existing OCXs and DLLs that are an incompatible with what CMS Supervisor needs. These problems may appear as General Protection Faults (GPF), lockups, or other unexpected problems.

To determine if this type of problem exists, do the following steps:

1. Perform one of the following actions:
   - Remove everything from your **Startup** group.

- Hold down **Shift** and press **L** while starting.

2. Restart Microsoft Windows.
3. Run CMS Supervisor. Make sure that CMS Supervisor is the only application that is running.

   If the problem no longer persists, it means that other software loaded on your PC is using an OCX or a DLL that is not compatible with CMS Supervisor.
4. Run each software program that was in the **Startup** group, individually.

For support information, see Support on page 11. Contact Avaya for support. If you still encounter problems, then you will not be able to run this software at the same time as you run CMS Supervisor. In rare instances, other software applications cannot co-reside with CMS Supervisor on the same PC

Resolve TCP/IP host name

In the event that initial configuration of the TCP/IP server for CMS Supervisor has an error or other problem, use the following procedure to resolve host name problems:

1. To ensure that this is the problem, open a command prompt window.
2. Ping the Avaya CMS host.

   If the host cannot be found, contact your network administrator. If the host is found, the reply will contain the host's IP address.
3. Check that the Avaya CMS host entry on the Domain Name Server (DNS) is correct. If it is wrong or missing, use the IP address returned to you to correct or create the entry.
4. Edit the `LMHOSTS` file on the PC to include a line for the Avaya CMS server, which is in the following format:

   `server name IP address`

   Example:

   `myserver 123.123.123.123`

Check for serial or modem connection problems

If you have a bad serial or modem connection, you will encounter slow data transfers and frequent loss of the serial connection. CMS Supervisor will report this as a *Serial Connection Broken* error message. If automatic login was selected, CMS Supervisor will attempt to connect again.

To check for serial or modem connection problems, do the following steps:

1. Make sure that the **RTS/CTS** flow control string is selected in the **Options** window.
2. Check to see if your serial connection to the Avaya CMS server or modem is wired correctly for hardware flow control. For modem connections, make sure you have the correct cable wiring between the modem and the Avaya CMS server.
3. Your hardware flow control on the Avaya CMS server's serial ports must be on and functioning properly. Refer to the your server platform documentation for correct configuration of hardware flow control for your respective serial communications.
4. 16550A UARTS must be in use on the PC running CMS Supervisor. The following parameters in the `[386Enh]` section of the PC's `SYSTEM.INI` file should be set to:

   `COM`*`n`*`FIFO=1`

   For this parameter, substitute ***n*** for the communications port you want to use. This will ensure that the FIFO buffer capability of the communications port is used.
5. Some terminal server connections may require the addition of

   `EscAllCtrl=1`

   in the `[LINK]` section of the `Centrevu.ini` file.

Appendix A: Installed files

This section lists the files installed with CMS Supervisor and Terminal Emulator. The variable <***TARGETDIR***> represents the install location. The variable <***WINDIR***> represents the Windows directory.

CMS Supervisor files

<*TARGETDIR*>\acsAA.exe

<*TARGETDIR*>\acsApp.exe

<*TARGETDIR*>\acsCheckRegistry.exe

<*TARGETDIR*>\acsCNTRL.exe

<*TARGETDIR*>\acsCopyRegistry.exe

<*TARGETDIR*>\ACScript.exe

<*TARGETDIR*>\acsFENG.EXE

<*TARGETDIR*>\acsRep.exe

<*TARGETDIR*>\ACSRun.exe

<*TARGETDIR*>\acsRWDrv.exe

<*TARGETDIR*>\acsSRV.exe

<*TARGETDIR*>\ACSTrans.exe

<*TARGETDIR*>\acs_ssh.exe

<*TARGETDIR*>\acs_tnetd.exe

<*TARGETDIR*>\chn_cv.chm

<*TARGETDIR*>\chn_rd.cnt

<*TARGETDIR*>\CHN_RD.HLP

<*TARGETDIR*>\chn_rw.CNT

<*TARGETDIR*>\CHN_RW.HLP

<*TARGETDIR*>\comctl32.ocx

<*TARGETDIR*>\CSCMD32.OCX

<*TARGETDIR*>\CSFORM32.OCX

<*TARGETDIR*>\csp16.dat

<*TARGETDIR*>\CSPCTR32.OCX

<*TARGETDIR*>\CSPLST32.OCX

<*TARGETDIR*>\CSSPIN32.OCX

<*TARGETDIR*>\CSTEXT32.OCX

<*TARGETDIR*>\cvsBmpG.dll

<*TARGETDIR*>\CVSBR.dll

<*TARGETDIR*>\CVSCache.dll

<*TARGETDIR*>\cvschn.dll

<*TARGETDIR*>\cvsCONN.DLL

<*TARGETDIR*>\cvsCTLG.dll

<*TARGETDIR*>\CVSDaCom.dll

<*TARGETDIR*>\CVSDale.dll

<*TARGETDIR*>\cvsdeu.dll

<*TARGETDIR*>\cvsDOBJ.dll

<*TARGETDIR*>\CVSDSrv.dll

<*TARGETDIR*>\cvsenu.dll

<*TARGETDIR*>\cvsERR.dll

<*TARGETDIR*>\cvseso.dll

<*TARGETDIR*>\cvsFileSys.DLL

<*TARGETDIR*>\cvsfra.dll

<*TARGETDIR*>\cvsita.dll

<*TARGETDIR*>\cvsjpn.dll

<*TARGETDIR*>\cvskat.dll

<*TARGETDIR*>\cvskor.dll

<*TARGETDIR*>\CVSLog.dll

<*TARGETDIR*>\CVSMap.dll

<*TARGETDIR*>\cvsMB.ocx

<*TARGETDIR*>\cvsMSNGR.DLL

<*TARGETDIR*>\cvsnld.dll

<*TARGETDIR*>\CVSOS.dll

<*TARGETDIR*>\cvsptb.dll

<*TARGETDIR*>\cvsREG.dll

<*TARGETDIR*>\cvsretrb.dll

<*TARGETDIR*>\cvsrus.dll

<*TARGETDIR*>\cvsRWMn.dll

<*TARGETDIR*>\cvsSCALL.dll

<*TARGETDIR*>\cvsSCCD.dll

<*TARGETDIR*>\cvsScorg.dll

<*TARGETDIR*>\cvsSCPAX.dll

<*TARGETDIR*>\cvsSCRPT.dll

<*TARGETDIR*>\cvsSCUI.dll

<*TARGETDIR*>\CVSSM.dll

<*TARGETDIR*>\cvssnz.dll

<*TARGETDIR*>\cvsstd120.dll

<*TARGETDIR*>\cvsstd130.dll

<*TARGETDIR*>\cvsstd140.dll

<*TARGETDIR*>\cvsstd150.dll

<*TARGETDIR*>\cvsstd160.dll

<*TARGETDIR*>\cvsstd161.dll

<*TARGETDIR*>\cvsstd162.dll

<*TARGETDIR*>\cvsTAPI.DLL

<*TARGETDIR*>\cvstch.dll

<*TARGETDIR*>\CVSTHR.dll

<*TARGETDIR*>\CVSUfo.dll

<*TARGETDIR*>\cvsup32.dll

<*WINDIR*>\cvsupv16.cfg

<*TARGETDIR*>\deu_cv.chm

<*TARGETDIR*>\deu_rd.cnt

<*TARGETDIR*>\DEU_RD.HLP

<*TARGETDIR*>\deu_rw.CNT

<*TARGETDIR*>\DEU_RW.HLP

<*TARGETDIR*>\enu_cv.chm

<*TARGETDIR*>\enu_rd.cnt

<*TARGETDIR*>\enu_rd.hlp

<*TARGETDIR*>\enu_rw.cnt

<*TARGETDIR*>\enu_rw.hlp
<*TARGETDIR*>\eso_cv.chm
<*TARGETDIR*>\eso_rd.cnt
<*TARGETDIR*>\ESO_RD.HLP
<*TARGETDIR*>\eso_rw.CNT
<*TARGETDIR*>\ESO_RW.HLP
<*TARGETDIR*>\feact.bmp
<*TARGETDIR*>\feact.dat
<*TARGETDIR*>\fra_cv.chm
<*TARGETDIR*>\fra_rd.cnt
<*TARGETDIR*>\FRA_RD.HLP
<*TARGETDIR*>\fra_rw.CNT
<*TARGETDIR*>\FRA_RW.HLP
<*TARGETDIR*>\GdiPlus.dll
<*TARGETDIR*>\ita_cv.chm
<*TARGETDIR*>\ita_rd.cnt
<*TARGETDIR*>\ITA_RD.HLP
<*TARGETDIR*>\ita_rw.CNT
<*TARGETDIR*>\ITA_RW.HLP
<*TARGETDIR*>\jpn_cv.chm
<*TARGETDIR*>\Jpn_rd.cnt
<*TARGETDIR*>\JPN_RD.HLP
<*TARGETDIR*>\jpn_rw.cnt
<*TARGETDIR*>\JPN_RW.HLP
<*TARGETDIR*>\kor_cv.chm
<*TARGETDIR*>\kor_rd.cnt
<*TARGETDIR*>\kor_rd.hlp
<*TARGETDIR*>\kor_rw.CNT
<*TARGETDIR*>\KOR_RW.HLP
<*TARGETDIR*>\Locale\cvschn.dll
<*TARGETDIR*>\Locale\cvsdeu.dll
<*TARGETDIR*>\Locale\cvsenu.dll

<TARGETDIR>\Locale\cvseso.dll

<TARGETDIR>\Locale\cvsfra.dll

<TARGETDIR>\Locale\cvsita.dll

<TARGETDIR>\Locale\cvsjpn.dll

<TARGETDIR>\Locale\cvskat.dll

<TARGETDIR>\Locale\cvskor.dll

<TARGETDIR>\Locale\cvsnld.dll

<TARGETDIR>\Locale\cvsptb.dll

<TARGETDIR>\Locale\cvsrus.dll

<TARGETDIR>\Locale\cvstch.dll

<TARGETDIR>\MFC30.DLL

<TARGETDIR>\MFCANS32.DLL

<TARGETDIR>\MFCUIA32.DLL

<TARGETDIR>\MFCUIW32.DLL

<TARGETDIR>\msvbvm60.dll

<TARGETDIR>\nld_cv.chm

<TARGETDIR>\nld_rd.cnt

<TARGETDIR>\NLD_RD.HLP

<TARGETDIR>\nld_rw.CNT

<TARGETDIR>\NLD_RW.HLP

<TARGETDIR>\OC30.DLL

<TARGETDIR>\PICCLP32.OCX

<TARGETDIR>\ptb_cv.chm

<TARGETDIR>\ptb_rd.cnt

<TARGETDIR>\PTB_RD.HLP

<TARGETDIR>\ptb_rw.CNT

<TARGETDIR>\PTB_RW.HLP

<TARGETDIR>\QPRO32.DLL

<TARGETDIR>\readme.txt

<TARGETDIR>\RegistryDefaults.bat

<TARGETDIR>\rus_cv.chm

<TARGETDIR>\rus_rd.cnt

<*TARGETDIR*>\RUS_RD.HLP

<*TARGETDIR*>\rus_rw.CNT

<*TARGETDIR*>\RUS_RW.HLP

<*TARGETDIR*>\setup.CNT

<*TARGETDIR*>\SETUP.HLP

<*TARGETDIR*>\setup.log

<*TARGETDIR*>\sReg.bat

<*TARGETDIR*>\Ss32x25.ocx

<*TARGETDIR*>\SSCALA32.OCX

<*TARGETDIR*>\ssdock32.ocx

<*TARGETDIR*>\stdbtns.dat

<*TARGETDIR*>\supervsr.ico

<*TARGETDIR*>\TAB32X20.OCX

<*TARGETDIR*>\TABCTL32.OCX

<*TARGETDIR*>\tch_cv.chm

<*TARGETDIR*>\tch_rd.cnt

<*TARGETDIR*>\tch_rd.hlp

<*TARGETDIR*>\tch_rw.cnt

<*TARGETDIR*>\tch_rw.hlp

<*TARGETDIR*>\Threed32.ocx

<*TARGETDIR*>\TimeZone

<*TARGETDIR*>\TimeZoneFullList

<*TARGETDIR*>\USRDEF.CTL

<*TARGETDIR*>\Vcfi32.ocx

<*TARGETDIR*>\Vsocx32.OCX

<*TARGETDIR*>\Vsview2.lic

<*TARGETDIR*>\VSVIEW2.OCX

<*TARGETDIR*>\wlangdet.dll

Terminal Emulator files

<*TARGETDIR*>\acsterm.exe

<*TARGETDIR*>\acs_ssh.exe

<*TARGETDIR*>\acs_tnetd.exe

<*TARGETDIR*>\ATL.DLL

<*TARGETDIR*>\CSCMD32.OCX

<*TARGETDIR*>\cvsMB.ocx

<*TARGETDIR*>\CVTERM.TTF

<*TARGETDIR*>\cvtermj.ttf

<*TARGETDIR*>\enu_te.CNT

<*TARGETDIR*>\ENU_TE.HLP

<*TARGETDIR*>\mfc40.dll

<*TARGETDIR*>\mfc42.dll

<*TARGETDIR*>\MFCANS32.DLL

<*TARGETDIR*>\MSCOMM32.OCX

<*TARGETDIR*>\MSVBVM50.DLL

<*TARGETDIR*>\msvcrt.dll

<*TARGETDIR*>\msvcrt40.dll

<*TARGETDIR*>\MSWINSCK.OCX

<*TARGETDIR*>\OC30.DLL

<*TARGETDIR*>\OLE32.DLL

<*TARGETDIR*>\OLEAUT32.DLL

<*TARGETDIR*>\readme.txt

<*TARGETDIR*>\REGSVR32.EXE

<*TARGETDIR*>\RPCRT4.DLL

<*TARGETDIR*>\TAB32X20.OCX

<*TARGETDIR*>\TEsetup.log

<*TARGETDIR*>\tmspl16.dat

Glossary

ACD	See *Automatic Call Distribution*.
Actions menu	A menu in the upper-left corner of the Avaya CMS Supervisor Operations windows. The menu lists the actions available for that particular user window (for example, add, modify, and delete). You select an action after you enter the necessary data in the user window.
Add	An Avaya CMS Supervisor action that adds the data entered in the given window to the Avaya CMS database.
Add/Remove Programs wizard	A Microsoft Windows® feature that guides you through a series of steps in order to remove programs that have been installed on your computer. The Add/Remove icon is found in the Control Panel dialog box.
Administrator privileges	Permissions assigned to an Avaya CMS Supervisor user in order to administer specific elements, such as installing Avaya CMS Supervisor on a network. Access permissions are specified as read or write permission. Read permission means the user can only access and view Avaya CMS Supervisor data. Write permission means the Avaya CMS Supervisor user can add, modify, or delete Avaya CMS Supervisor data.
Agent	A person who answers calls to an extension in an ACD split/skill. The agent is known to Avaya CMS by a login identification keyed into a voice terminal.
Agent reports	A group of reports that give the status of agents in an agent group, selected splits or skills, or real-time information and statistics.
Agent skill	An attribute that is associated with an A agent. Agent Skills can be thought of as the ability for an agent with a particular set of skills to handle a call that requires one of a set of skills. An agent can be assigned up to four skills.
Application directory	A directory on the network server that holds the Avaya CMS Supervisor application software - executables and components.
Automatic Call Distribution (ACD)	A communication server feature using software that channels high-volume incoming and outgoing call traffic to agent groups (splits or skills). Also an agent state where the extension is engaged on an ACD call.
Automatic Script	An Avaya CMS Supervisor feature that launches a new Avaya CMS Supervisor session that logs into Avaya CMS and runs the requested tasks in the background. Actions do not display on the PC. See also *Interactive Script* and *Script*.
Avaya Business Advocate	A collection of ECS features that provide new flexibility in the way a call is selected for an agent in a call surplus situation and in the way that an agent is selected for a call.

Avaya Call Management System (CMS) A software product used by business customers that have Avaya telecommunications communication servers and receive a large volume of telephone calls that are processed through the Automatic Call Distribution (ACD) feature of the communication server. The Avaya CMS collects call-traffic data, formats management reports, and provides an administrative interface to the ACD feature in the communication server.

Avaya CMS See *Avaya Call Management System*.

Client A single PC that uses Avaya CMS Supervisor.

Controller An Avaya CMS Supervisor feature that allows the user to access Avaya CMS reports and operations. The Controller includes a toolbar, a menu bar, a status bar, tooltips, and indicators.

Custom reports Real-time or historical reports that have been customized from standard reports or created from scratch.

Database A group of tables that store ACD data according to a specific time frame: current and previous intrahour real-time data and intrahour, daily, weekly, and monthly historical data.

Database item A name for a specific type of data stored in one of the Avaya CMS databases. A database item may store ACD identifiers (split numbers or names, login IDs, VDNs, and so forth) or statistical data on ACD performance (number of ACD calls, wait time for calls in queue, current states of individual agents, and so forth).

Database table Avaya CMS uses these tables to collect, store, and retrieve A data. Standard Avaya CMS items (database items) are names of columns in the Avaya CMS database tables.

Data points Points of historical data. A data point should include data for each interval of the working day.

Delete An Avaya CMS Supervisor action that removes the entry on the window from the Avaya CMS database.

Designer reports Customized reports that can be created with Avaya CMS Supervisor Report Designer. Designer Reports are run from Avaya CMS Supervisor.

Dialog box A small on-screen window that conveys or requests information from the user. This window can contain list boxes, text boxes, tabbed pages, and so forth.

Dictionary An Avaya CMS subsystem that can be used to assign names to various call center elements such as login IDs, splits/skills, trunk groups, VDNs and vectors. These names appear on reports, making them easier to interpret.

Edit menu A menu on the Avaya CMS Supervisor Operations windows. The menu lists the actions available for that particular user window (for example, cut, copy, and paste).

Exception	A type of activity on the ACD which falls outside of the limits you have defined. An exceptional condition is defined in the Avaya CMS Exceptions subsystem, and usually indicates abnormal or unacceptable performance on the ACD (by agents, splits/skills, VDNs, vectors, trunks, or trunk groups).
Exceptions reports	Display occurrences of unusual call-handling events.
Find One	An Avaya CMS action that searches the database for entries that match the input value.
Graphics	An Avaya CMS reporting option that allows you to view some reports in bar graph format.
Historical reports	Display past ACD data for various agent, split/skill, trunk, trunk group, vector, or VDN activities. A report summary of call data into daily, weekly, or monthly totals
HTML	See *HyperText Markup Language.*
Hypertext	A linkage between related text. For example, if you select a word in a sentence, information about that word is retrieved if it exists, or the next occurrence of the word is found.
HyperText Markup Language	A standard for defining documents with hypertext links. See also *Hypertext*.
Input field	An area on window where you specify information that you would like to view, add, modify, or delete.
Installation directory	A directory on the network that holds all of the Avaya CMS Supervisor files. `Setup.exe` is run from this directory to install Avaya CMS Supervisor on each client computer.
Integrated reports	Integrated reports compile call center information from any starting point in the last 24 hours up to and including the current interval.
Interactive Script	An Avaya CMS Supervisor feature that runs the requested tasks in the current Avaya CMS Supervisor session and displays the actions on the PC. You can input requested information while the script is running. See also *Automatic Script* and *Script*.
LAN	See *Local Area Network*.
List All	An Avaya CMS action that lists all the entries that matched the current field values.
Local Area Network (LAN)	Two or more computers connected by cable and using a suitable operating system and application software so they can directly share hard disks, printers, and other peripherals, and files.
Local installation	With this type of installation, you install all of the Avaya CMS Supervisor software to disk space on each local computer from a software disc or from the network.
Log	A file that contains a record of computer activity as well as backup and recovery data.

Maintenance An Avaya CMS subsystem that is used for doing routine maintenance of the Avaya CMS, such as backing up data, checking on the status of the connection to the communication server, and scanning the error log.

Name fields Fields in which you may enter a name (synonym) that has been entered in the Dictionary subsystem (for example, names of agents, splits/skills, agent groups, trunk groups, vectors, VDNs).

Network server A computer in a network shared by multiple users.

Pop-up A small window containing information that is displayed over a Help window.

Queue/Agent reports A group of reports that give the status of all top agents in a skill and queue status, or skill status for a selected skill.

Readme file A file that provides up-to-the-minute information on a newly released product; in this case, Avaya CMS Supervisor.

Read-Only A directory or file that can be read, but not updated or erased.

Real-Time reports Display current ACD call activity on agents, splits/skills, trunks, trunk groups, vectors, and VDNs for the current or previous intrahour interval. Current intrahour interval real-time reports are constantly updated as data changes during the interval. Previous intrahour interval real-time reports show data totals for activity that occurred in the previous intrahour interval.

Registry The system-wide depository of information supported by Microsoft Windows. The registry contains information about the system and its applications, including clients and servers.

Report Designer An Avaya CMS Supervisor feature that enables users to design their own reports.

Report Wizard An Avaya CMS Supervisor feature that delivers user assistance, by way of a wizard, to quickly and easily generate new customized reports. The wizard provides instructional help that guides the user through a series of tasks that create a new customized report. Report Wizard is a supplement to Report Designer.

Run A Microsoft Windows command that lets you execute a program, such as Avaya CMS Supervisor installation.

Scripting An Avaya CMS feature that lets you automate actions such as changing an agent's skills, running reports, exporting report data, and many other Avaya CMS functions. For example, you can create a script to run a specified report and export the data on schedule.

Scroll To use the bar on the side of the report window to move forward, backward, up, or down within a window.

SecureShell (SSH) This is a method of securing communications and operations over a network by using multiple encryption algorithms.

Setup program A program that configures a system for a particular environment; for example, it informs the system of a new device or interface, such as Avaya Call Management System Framework.

Shared installation With this type of installation, the Avaya CMS Supervisor application software is installed to a shared application directory on the network server, but user-specific files and logs are stored in an Avaya CMS Supervisor directory on each user's PC or on their own network drive.

Shortcut An icon on your computer screen that enables you to select and run an application (for example, Avaya CMS Supervisor) quickly and easily.

Skill An attribute that is assigned to an ACD Agent. Agent Skills can be thought of as the ability for an Agent with a particular set of skills to handle a call that requires one of those skills.

Solaris system A multi-user operating system developed by Sun Microsystems. The operating system on which Avaya CMS runs.

Split A group of extensions that receives special-purpose calls in an efficient, cost-effective manner. Normally, calls to a split arrive primarily over one or a few trunk groups.

Standard reports The set of reports that are delivered with the CMS or Avaya CMS Supervisor software.

Start menu The menu that appears when you select Start in the Microsoft Windows taskbar. This menu contains programs and other Microsoft Windows applications.

Taskbar The bar that appears by default at the bottom of the Microsoft Windows desktop. You can select buttons that appear on this bar to alternate between running programs.

Terminal A combination of monitor (video display) and keyboard used to communicate with a remote computer to enter and display information.

Terminal Emulator An Avaya CMS Supervisor software application that emulates a 615 Color (615C) terminal.

Toolbar A row of Controller buttons used to activate various functions of the Avaya CMS Supervisor application.

Tooltips Brief descriptions that display when the mouse pointer is over a toolbar button.

Trunk group report Displays the status of each trunk in a selected trunk group.

User ID The login ID for an Avaya CMS user.

VDN See *Vector Directory Numbe*r.

VDN reports A group of reports that show profiles of current VDN performance, call handling information for a specific VDN based on skill preference, and how calls to specific VDNs have been handled.

Vector A list of steps that process calls in a user-defined manner. The steps in a vector can send calls to splits, play announcements and music, disconnect calls, give calls a busy signal, or route calls to other destinations.

Vector Directory Number (VDN)	An extension number that enables calls to connect to a vector for processing. A VDN is not assigned an equipment location. It is assigned to a vector. A VDN can connect calls to a vector when the calls arrive over an assigned automatic-in trunk group or when calls arrive over a dial-repeating (DID) trunk group and the final digits match the VDN.
Vector report	A report that lists the number of calls to specific vectors.
Window	A rectangular, on-screen frame through which you can view a menu, data entry fields, reports, or messages.
Wizard	A tutor built into the software that guides you through procedures.

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