Avaya Visual Vectors®

Version 11

User Guide

585-210-709
Issue 1.0
May 2002

Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Preventing Toll Fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya Fraud Intervention

If you *suspect that you are being victimized* by toll fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1 800 643 2353 for the United States and Canada. For additional support telephone numbers, see the Avaya web site:

http://www.avaya.com

Click on **Support**, then click on **Escalation Lists US and International**. This web site includes telephone numbers for escalation within the United States. For escalation telephone numbers outside the United States, click on **Global Escalation List**.

Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based) or asynchronous (character-, message-, or packet-based) equipment or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll-facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

Your Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - an Avaya customer's system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- your Avaya-provided telecommunications systems and their interfaces
- your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- any other equipment networked to your Avaya products.

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Comments

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Acknowledgment

This document was prepared by the CRM Development group of Avaya, Inc.

Avaya Visual Vectors
Version 11
User Guide

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Troubleshooting

About this document

This *Avaya Visual Vectors User Guide*, 585–210–709, is written primarily for the Avaya Call Management System (CMS) administrator who has access to all areas on one or more CMS servers, and secondarily, for auxiliary administrators and split/skill supervisors who have limited access to Vectors and Vector Directory Numbers.

This section includes the following topics:

Intended audience

This guide is intended for individuals who use Avaya Visual Vectors to manage and create various types of switch objects in a call center network. It assumes that you are familiar with:

- The operation of your computer and the Microsoft Windows® operating system that is installed on it. Windows versions that are compatible with Visual Vectors include Windows 95, Windows 98, Windows 2000, Windows NT 4.0, Windows ME, and Windows XP.

  Important:
  Avaya does not provide technical support for Visual Vectors on Windows 95 systems. Installation of Visual Vectors Version 11 on Windows 95 systems is *permissive*. This means that it may be possible to install and run the Visual Vectors Version 11 client software on Windows 95 systems. However, if technical problems occur, upgrade of the client operating system to a fully supported Windows platform is required.

- The operation of Definity® or Avaya MultiVantage™ switches and Avaya Call Management System.

Reason for reissue

This document is being reissued to support Avaya Visual Vectors Version 11.

Document organization

This document includes the following major topics:

Related documents

- *Avaya Call Center R3V11 Documentation CD-ROM*, 585-780-800
- *Avaya Visual Vectors Version 11 Installation and Getting Started*, 585-210-710
- *Avaya MultiVantage Call Center Software Version 11 Call Vectoring and Expert Agent Selection (EAS) Guide*, 555-230-714
- *Avaya MultiVantage Call Center Software Version 11 Call Vectoring Guide for Business Communication System (BCS) and Guestworks*, 555-230-715

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Introduction

This *Avaya Visual Vectors User Guide* gives you the information you need to use the Visual Vectors client software package.

This chapter includes the following sections:

General information

This section presents a brief overview of what the software does, who uses it, and how it works, followed by an overview of supporting hardware and software.

This section includes the following information:

What is Visual Vectors software?

Avaya Call Management System (CMS) is a software product for businesses and organizations who receive a large volume of telephone calls that are processed through the Automatic Call Distribution (ACD) and Call Vectoring features of an Avaya MultiVantage™ or Avaya Definity™ switch. CMS servers collects call-traffic data, formats management reports, and provides an administrative interface to the ACD feature on the switch.

The CMS administrator can access the CMS database, generate reports, administer ACD parameters, and also monitor call activities to determine the most efficient service possible for the customers. The CMS server supports Avaya CMS Supervisor client computers.

The Visual Vectors Server software is installed on the same server as the CMS software. The Visual Vector Server software supports Visual Vectors client software installed on PC workstations. Using the client software, administrators can change certain properties of call center entities, as well as create and edit vectors, assign Vector Directory Numbers (VDNs) to vectors, and set VDN Skill Preferences.

Supported switches and capacities

Single and multiple ACDs

Depending on which server you have and how the CMS software was installed, the CMS software can communicate with as many as eight ACDs.

Depending on how the Visual Vectors Server software was installed and configured, the Visual Vectors V11 client software can communicate with as many as 20 CMS servers.

References to multiple ACDs in this document refer to configurations with multiple switches. If you have only one switch, you can ignore the considerations for multiple ACDs.

Supported switch capacities

Visual Vectors Version 11 supports the following capacity increases introduced in Avaya MultiVantage Release 11:

- 2000 trunk groups per ACD
- 8000 trunk groups per CMS
- 3000 announcements per ACD

Prerequisite switch and CMS features

CMS includes a feature for administering automatic call distribution (ACD) and optional features for managing aspects of the system. The features required to use Visual Vectors software are described below.

ACD administration and Visual Vectors

CMS and Visual Vectors software provide an administrative interface to the switch. The CMS software supports CMS Supervisor clients. Using the Agent Administration and Call Center Administration areas, you can use Supervisor to view or change various parameters on the switch that are related to ACD, Vectoring, and Expert Agent Selection (EAS). You can also run reports that describe your call center configuration.

For example, you can:

- Add agents to or remove agents from splits or skills
- Move extensions between splits
- Change skill assignments
- Change the following assignments: trunk group-to-split, trunk group-to-VDN, VDN-to-vector
- Start an agent trace and list the agents being traced

Using Visual Vectors client software, administrators can change certain properties of call center entities, as well as create and edit vectors, assign VDNs to vectors, and set VDN Skill Preferences.

The Visual Vectors administrator should coordinate with the switch administrator to be sure that the needed ACD and CMS configurations are understood by both administrator.

Call Vectoring and Visual Vectors

The Avaya Call Vectoring feature enables you to create, copy, and edit vectors on any supported MultiVantage or Definity ECS switches. Call vectors direct calls to specified on-network or off-network destinations, to queues in ACD splits, or to treatments such as music, recorded announcements, forced disconnect, and forced busy. Visual Vectors provides an intuitive graphical user interface for the Call Vectoring feature.

Things to know before using Visual Vectors

This section describes the interactions of Visual Vectors software with other call center client software.

This section includes the following information:

Interactions with CMS Supervisor

Visual Vectors software is designed to work with CMS Supervisor Version 6 or later. If CMS Supervisor Version 6 or later is correctly installed on your client computer, the Visual Vectors Framework window displays a toolbar icon which you can use to start Supervisor. You can also select Supervisor from the Tools menu.

Although you may be able to run Supervisor from Visual Vectors, the two software programs do not interact directly. If information from the two programs does not seem to match, first try to log off the CMS server in each program, and then log back on. This will cause Supervisor to read the configuration file in Visual Vectors and respond with the correct information.

Using CMS Supervisor

Use Supervisor software to do the following:

- Generate reports on the VDNs, vectors, and skill preferences you assigned using Visual Vectors tools
- Assign names to splits or skills, trunk groups, ACDs, Vectors, and VDNs in the CMS Dictionary, so that the objects in your “My World” directory of objects.

If CMS Supervisor Version 8 or later is installed, there will be a Visual Vectors icon on the CMS Supervisor toolbar.

Interactions with CMS

Visual Vectors software is designed to work with CMS R3V6 or later.

Interactions with CMS

If information obtained from the two client software programs does not seem to match, log off the CMS server from each client software program, and then log back on. This will cause the CMS server software to read the configuration file in Visual Vectors and respond with the correct information.

Important:
Edit vectors only in Visual Vectors. If you use any other way to edit vectors, such as a CMS terminal, the vector step comments will be converted to floating comments.

Things to know about call center data

This section describes the Avaya CMS processes for storing and tracking switch data for your call center. The information is intended to give you an overview of how CMS works, where CMS stores data, and how Visual Vectors Server software accesses CMS Dictionary and User Permissions data.

This section includes the following information:

How CMS stores and tracks ACD data

Real-time and historical databases

CMS stores the ACD data that is received from the switch in the real-time and historical databases. Within each of these databases, CMS stores the specific ACD data for agents, splits or skills, trunks, trunk groups, vectors, and VDNs in separate database tables. Call work codes (CWC) also have separate database tables in the real-time and historical database.

Summarizing CMS data

As CMS collects the real-time data from the ACD, the data is stored in the current intrahour interval tables (agent, split/skill, trunk, trunk group, vector, and VDN) until the end of the interval. At the end of the current intrahour interval, data is archived to the previous intrahour interval tables and to the intrahour historical tables. At the time that you designate, the historical intrahour data is summarized into daily data. At the end of your designated week, which is specified on the System Setup subsystem Storage Intervals window, the daily data is summarized into weekly data. On the first day of a new month, monthly summaries are generated from the daily data for the previous month.

CMS Dictionary

The CMS Dictionary contains names for call center ACDs and their entities, including announcements, splits or skills, trunk groups, VDNs, and vectors. The assigned names appear on CMS reports to make them easier to interpret, as well as in Visual Vectors software to make it easier to use. You can use Visual Vectors tools to rename entities, or edit certain other properties of those entities.

User permissions

Visual Vectors software determines what users can view and modify based on CMS User Permissions. For example, if a user has read access for an ACD and/or its vectors but does not have write access, the user is not able to save or copy a vector to that ACD. Likewise, if a user does not have read or write access permissions for a certain type of entity, for example, VDNs, the folder for those entities on the ACD appears empty in Navigator.

Technical Support

If you have a problem

If you have a problem with Visual Vectors, first consult the following:

- Help Contents and alphabetical Index
- The readme.txt file that is delivered with the software

Important:
The readme.txt file includes late-breaking changes to and news about the software. Use a text editor such as Notepad to read the file.

Information to provide the system administrator

If these sources do not contain answers to your questions, contact your CMS system administrator. The system administrator may need information from you:

- The version installed on your PC (select the About... item from the Help Menu and note the load number in the upper-right corner).
- The name or IP address of your CMS server (the system administrator will know the version and load of CMS installed on your server).
- The type of connection you have to the server (serial or over a network).
- The manufacturer and model of your PC, as well as the amount of RAM installed.

Setting up the My World objects directory

This chapter explains how to set up the **My World** objects directory that is displayed in Navigator. It includes the following sections:

Introduction to the My World objects directory

This section provides an introduction to **My World** features and explains how to connect to a new CMS server or add a new CMS server to the **My World** directory.

This section includes the following information:

My World directory features

Visual Vectors handles all call center network entities as objects. An object is a set of computer instructions with properties you define. This chapter explains how to perform actions on objects in the **My World** objects directory, including how to select objects, rename objects, delete objects, and so forth.

ACD folders

Each CMS object in the **My World** directory can contain as many as eight ACD objects, each of which contains entity folders for announcements, split or skill objects, trunk groups, VDNs, and vectors.

Connecting to a CMS server

You can use the **Connect** menu item or toolbar button to log in to a CMS server.

Connection types

From the Visual Vectors Framework menu, you can connect to one or more existing CMS servers or you can add a new CMS server. You are limited to one instance of a login ID per server.

Connecting to an existing server

To establish a CMS connection when the server is already listed in the **My World** directory of objects:

1. Do one of the following:
   - Select **Connect** from the **File** menu or click the Connect icon on the toolbar.
   - Select a CMS server in the **My World** objects directory from the **Connect to server:** drop-down list.

   The **Connect to server** window appears.
2. Enter your CMS login Id and password.
3. Click **Connect**.

   The system displays a status message that indicates that the software is connecting to the CMS server.

Connecting to a new CMS server

To establish a connection with a new CMS server that is not already listed in the **My World** objects directory:

1. Do one of the following:
   - In the Visual Vectors Framework window, select **Connect** from the File menu.
   - In the Navigator window, highlight **My World** in the left-hand pane, and then select **New CMS** from the **File** menu or shortcut menu, or click **New** in the Navigator toolbar.

   The system displays the **New CMS** window.
2. Enter the following information:
   - In the **Server Network Address:** field, enter the hostname or IP address of a CMS server
   - In the **Login Id:** field, enter your CMS login ID
   - in the **Password:** field, enter your CMS password

3. Click **OK**.

   If the CMS server you entered:

   - Exists and can be connected to, a new CMS object is added to the **My World** directory and you are connected to this new server. If the connection is broken or dropped while you are working with tools, you will be prompted to save online open vectors elsewhere.
   - Does not exist or cannot be connected to, an error message is displayed showing the cause of the failure.

Managing objects in the My World directory

This section describes how to manage objects in the **My World** directory.

This section includes the following information:

Selecting objects

To perform any action on an object in the **My World** directory, you must first select the object. To select an object, choose either of the following methods:

- Click the object.
- Use the arrow keys to highlight the item and then press Enter.

Input window actions

The following table describes the features of the input window.

Feature	Action
Menu bar	Pull down a list of actions, edit options, and online Help.
Toolbar action buttons	Click a button to perform an action.
Input fields	Type in the information that is needed to complete an action.
Selection list	View a list of the content that you may enter in the input field.

Adding objects

You can add three types of objects from you call center network to the My World directory:

- CMS servers
- Vectors
- New scratchpads

Note:

New CMS servers are added to the **My World** directory whenever you make an initial connection to a CMS server. For more information, see Connecting to a new CMS server on page 18.

To add a new vector or scratchpad to the **My World** directory (for example, a new vector for an ACD in the Vector Folder), you must first select a container for the object in a Navigator window.

Note:

If you add or save a vector to the Vector Folder on a measured ACD, it is also added to the CMS database.

Procedure

To add a new vector or ScratchPad to the **My World** directory:

1. In the Navigator window, highlight a ScratchPad or Vector Folder in the left-hand pane, and then click the right mouse button. The system displays the shortcut menu.
2. Do one of the following:
   - If you selected a Vector Folder and are online select **New** from the shortcut list.
   - If you selected a Vector Folder and are offline, select a vector type from the shortcut list.
   - If you selected a ScratchPad, select **New** from the shortcut menu.

   The system displays the **New Vector** or **New ScratchPad** window.
3. Fill in the required information in the input fields in the window. For a new vector, you need to enter a name. If you are adding a new vector to an ACD, an Id is also required.
4. Click **OK**.

   If the addition was:
   - Successful, the system displays the new object in the Navigator window.
   - Not successful, the system displays an error message showing the cause of the failure.

Deleting objects

Procedure

You may want to delete a CMS from the **My World** directory or a vector from the CMS database.

Getting information

You may want to obtain additional information before you delete an object from the **My World** directory.

To obtain information about the object before you delete it:

1. Select the object in the Navigator window and then do one of the following:
   - Select **Properties** from the **File** menu or shortcut menu.
   - Click the Properties icon on the toolbar.
   - Press Alt+Enter.

   The system displays the **Properties** window.
2. Locate and note the relevant information. For example, verify that you have permission to delete the item.

Deleting an object

To delete a CMS server or vector listed in the **My World** directory:

1. Select the object in the Navigator window.
2. Do one of the following:
   - Select **Delete** from the **File** menu or shortcut menu.
   - Click the Delete icon on the toolbar.
   - Press Delete.

   If the deletion was:
   - — Successful, the contents of the object (steps) are removed causing the vector to not appear in Navigator.
   - — Not successful, the system displays an error message showing the cause of the failure.

Renaming objects

You may want to rename an object that already exists in the **My World** directory. You may need to obtain information from the CMS database before renaming the item for future reference.

Getting information

To obtain information from the CMS database before you rename the item:

1. Select the object in the Navigator window and then do one of the following:
   - Select Properties from the File menu or shortcut menu.
   - Click Properties on the toolbar.
   - Press Alt+Enter.

   The system displays the Properties window.
2. Locate and note the relevant information. For example, verify the type of the vector you want to rename.
3. Close the Properties window.

Doing the renaming

To rename an ACD object in the CMS database:

1. Select the object in the Navigator window.
2. Do one of the following:
   - Select Rename from the File menu or shortcut menu.
   - Click Rename on the toolbar.

   The system displays the Renaming object window with the Name property field highlighted.
3. Type in the new name or edit the existing name and then click OK.

   If the object was
   - Renamed, the system displays the new name in the Navigator window.
   - Not renamed, the system displays an error message that shows the cause of the failure.

Changing other object properties

Procedure

Use this procedure to change properties of one or more objects or entities, such as a split/skills, vectors, VDNs, or trunk groups.

1. Select one or more object in the Navigator window and then do one of the following:
   - Select Properties from the File menu or shortcut menu.
   - Click Properties on the toolbar.
   - Press Alt+Enter.

   If a single object was selected, the system displays the Properties dialog. If multiple objects were selected, the system displays the Properties of Many Objects dialog.

   The window contains properties for the object or objects for which you have permissions in the CMS Dictionary.
2. Type the new values in the fields you want to change.

   The system displays a red box around any property fields with invalid values.
3. When you have made all of your changes and no red boxes are displayed, click OK.

My World objects

Objects include items on which you can perform actions in the **My World** directory. For example, the objects may be vectors, trunk groups, or ACDs.

No matter which tool you use to select an object, the way in which you perform an action on the object is the same.

This section includes the following information:

Defining My World objects

The following list includes possible objects in the **My World** directory. To perform actions on the object, click the object using the right mouse button.

My World object

The following table describes the **My World** object:

Actions	Description
Explore	Expands **My World** to show one or more CMS Servers for which you have read or read and write permission.
Disconnect All	Displays the Disconnect window with all connected CMS servers highlighted.
Navigator	Launches the Navigator window with the **My World** director as the place to start browsing.
New	If the CMS submenu is clicked, accesses the New CMS window to add a new server to your world.
Properties	Displays the properties of the **My World** directory.

ScratchPad object

The following table describes the ScratchPad object:

Actions	Description
Explore	Expands the ScratchPad.
Navigator	Launches the Navigator window with the ScratchPad as the place to start browsing.
New	Creates a new ScratchPad or new vectors.
Cut	Cuts the selected ScratchPad, to be pasted later.
Copy	Copies an object, to be pasted later.
Paste	Pastes an object that has been cut or copied.
Delete	Deletes the ScratchPad.
Rename	Places the user in edit mode for the ScratchPad name field in the Renaming ScratchPad window.
Properties	Displays the properties of the ScratchPad.

CMS object

The following describes the CMS object:

Actions	Descriptions
Explore	Expands the CMS object to show one or more ACDs for which you have read or read and write permission.
Connect	Displays the **Connect** to server window for this CMS.
Disconnect	Displays the Disconnect window with this CMS highlighted.
Navigator	Launches the Navigator window with the CMS as the place to start browsing.
Delete	Removes the CMS from the **My World** directory.
Properties	Displays the properties of the CMS.

ACD object

The following table describes the ACD object:

Actions	Descriptions
Explore	Expands the ACD object to show folders of CMS entities.
Navigator	Launches the Navigator window with the ACD as the place to start browsing.
Rename	Places you in edit mode for the “ACD name” field in the Renaming ACD window.
Properties	Displays properties of the ACD.

Announcement Folder object

The following table describes the Announcement Folder object:

Actions	Descriptions
Explore	Expands the Announcement Folder.
Navigator	Launches the Navigator window with the folder as the place to start browsing.
Properties	Displays the properties of the Announcement folder.

Announcement object

The following table describes the Announcement object:

Actions	Descriptions
Navigator	Launches the Navigator window with the announcement as the place to start browsing.
Rename	Places the user in edit mode for the “Announcement name” field in the Renaming Announcement window.
Properties	Displays the properties of the announcement.

Split/Skill Folder object

The following table describes the Split/Skill Folder object:

Actions	Descriptions
Explore	Expands the Split/Skill Folder.
Navigator	Launches the Navigator window with the folder as place to start browsing.
Properties	Displays the properties of the Split/Skill Folder.

Split/Skill object

The following table describes the Split/Skill object:

Actions	Descriptions
Navigator	Launches the Navigator window with the split/skill as the place to start browsing.
Rename	Places user in edit mode for the “Split/Skill name” field in the Renaming Split/Skill window.
Properties	Displays the properties of the Split/Skill.

Trunk Group Folder object

The following describes the Trunk Group Folder object:

Actions	Descriptions
Explore	Expands the Trunk Group Folder.
Navigator	Launches the Navigator window with the folder as the place to start browsing.
Properties	Displays the properties of the Trunk Group Folder.

Trunk Group object

The following describes the Trunk Group object:

Actions	Descriptions
Navigator	Launches Navigator window with the trunk group as place to start browsing.
Rename	Places the user in edit mode for the “Trunk Group name” field in the Renaming Trunk Group window.
Properties	Displays the properties of the Trunk Group.

Vector Folder object

The following table describes the Vector Folder object:

Actions	Descriptions
Explore	Expands the Vector Folder.
Navigator	Launches the Navigator window with the folder as place to start browsing.
New Vector	Creates a new vector with one Stop step in the folder.
Paste	Pastes a vector if there is one cut or copied.
Properties	Displays the properties of the Vector Folder.

Vector object

The following table describes the Vector object:

Actions	Descriptions
Edit	Accesses the Vector Editor tool to edit the vector.
Export	Accesses the Import Export Wizard to export the vector.
Navigator	Launches the Navigator window with the vector as the place to start browsing.
Cut	Copies a vector to memory and replaces it with a blank vector.
Copy	Copies a vector to be pasted later.
Delete	Deletes the vector from the folder for this ACD. This replaces it with a blank vector and leaves the name in the Dictionary.
Rename	Places the user in edit mode for the “Vector name” field in the Renaming... window.
Properties	Displays the properties of the vector.

VDN Folder object

The following table describes the VDN Folder object:

Actions	Descriptions
Explore	Expands the VDN folder.
Navigator	Launches the Navigator window with the folder as the place to start browsing.
Properties	Displays the properties of the VDN Folder.

VDN object

The following table describes the VDN object:

Actions	Descriptions
Navigator	Launches the Navigator window with the VDN as the place to start browsing.
Rename	Places the user in edit mode for the “VDN name” field in the Renaming VDN window.
Properties	Displays the properties of the VDN.

My World object properties

Use object properties to change certain parameters of:

- Any entities of the ACD, including announcements, splits or skills, trunk groups, VDNs, and vectors
- VDN administration, for example, the assigned vector and skill preferences

This section includes the following information:

- Defining object properties on page 30

Defining object properties

The following table describes the properties of all objects in the **My World** directory. To perform actions on the object, click the object using the right mouse button, and then select Properties.

- My World object on page 31
- ScratchPad object on page 31
- CMS object on page 31
- ACD object on page 32
- Announcement Folder object on page 32
- Announcement object on page 33
- Split/Skill Folder object on page 33
- Split/Skill object on page 33
- Trunk Group Folder object on page 34
- Trunk Group object on page 34
- Vector Folder object on page 34
- Vector object on page 35
- VDN Folder object on page 35
- VDN object on page 36

My World object

The following table describes properties of the **My World** object:

Properties	Description
Name	You cannot edit this name.
Type	Type of object (World).
Permission	Displays the permission (R for read) that you have for the **My World** directory.
Description	Description of **My World** object. You can edit this field.

ScratchPad object

The following describes properties of the ScratchPad object:

Properties	Description
Name	Name of a folder that contains offline vectors.
Type	Type of object (ScratchPad).
Permission	Displays ScratchPad permissions (R for read and W for write).
Description	Characters describing the ScratchPad object. You can edit this field.

CMS object

The following describes properties of the CMS object:

Properties	Description
Name	Name of the CMS server. You cannot edit this name.
Type	Type of object (CMS or unconnected CMS).
Permission	Displays the permissions (R for read, blank for none) that you have for the CMS server.
Version	If connected, displays CMS server software release and version numbers.
Locale	If connected, displays CMS server software locale and time zone, for example, TZ GMT – 05:00.
Containee Count	If connected, displays the number of objects (ACDs) that are contained within this object.

ACD object

The following table describes properties of the ACD object:

Properties	Description
Name	Name of the ACD in the CMS Dictionary. You can rename it if you have ACD read and write access on the CMS.
Type	Type of object (ACD).
Permission	Displays the ACD permissions (read, write, or both) that you have on the CMS.
Id	Number that identifies the ACD on the CMS.
Version	MultiVantage or Definity server software release and version numbers.
Locale	Switch software locale and time zone, for example, TZ GMT — 05:00.
Link Status	Status (Link Up, Link Down) of the link to the ACD from the CMS. The ACD icon is crossed out in the Navigator window if the link is down.
ACD Features	Features enabled on the ACD, which could be EAS, Prompting, or Vectoring.
Description	Description of the ACD in the CMS Dictionary. You can edit this field.

Announcement Folder object

The following table describes properties of the Announcement Folder object:

Properties	Description
Name	Name of the folder that contains announcements for this ACD.
Type	Type of object (folder).
Permission	Displays the announcement permissions (read, write, or both), that you have for this ACD.
Containee Count	Shows the number of announcements that are contained in the folder.

Announcement object

The following describes properties of the Announcement object:

Properties	Description
Name	Name of the announcement in the CMS Dictionary. You can rename it if you have read and write permissions.
Type	Type of object (announcement).
Permission	Displays the permissions (read, write, or both) that you have for this announcement.
Extension	Announcement extension number.
Description	Description of the announcement in the CMS Dictionary. You can edit this field.

Split/Skill Folder object

The following describes properties of the Split/Skill Folder object:

Properties	Description
Name	Name of the folder that contains measured splits or skills for this ACD.
Type	Type of object (folder).
Permission	Displays the split and skill permissions (read, write, or both) that you have for this ACD.
Containee Count	Shows the number of splits or skills that are contained in the folder.

Split/Skill object

The following table describes properties of the Split/Skill object:

Properties	Description
Name	Name of the split/skill in the CMS Dictionary.
Type	Type of object (split/skill).
Permission	Displays the permissions (read, write, or both) that you have for this split/skill.
Id	Number identifying the split/skill on the CMS.
Description	Description of the split/skill in the CMS Dictionary. You can edit this field.

Trunk Group Folder object

The following table describes properties of the Trunk Group Folder object:

Properties	Description
Name	Name of the folder that contains measured trunk groups for this ACD.
Type	Type of object (folder).
Permission	Displays the trunk group permissions (read, write, or both) that you have for this ACD.
Containee Count	Shows the number of trunk groups that are contained in the folder.

Trunk Group object

The following table describes properties of the Trunk Group object:

Properties	Description
Name	Name of the trunk group in the CMS Dictionary.
Type	Type of object (trunk group).
Permission	Displays the permissions (read, write, or both) that you have for this trunk group.
Id	Number that identifies the trunk group on the CMS.
Description	Description of the trunk group in the CMS Dictionary. You can edit this field.

Vector Folder object

The following table describes properties of the Vector Folder object:

Properties	Description
Name	Name of the folder that contains non-empty vectors for this ACD.
Type	Type of object.
Permission	Displays the vector permissions (read, write, or both) that you have for this ACD.
Containee Count	Shows the number of vectors that are contained in the folder.

Vector object

The following table describes properties of the Vector object:

Properties	Description
Name	Name of the vector in the CMS Dictionary.
Type	Type of object (vector).
Permission	Displays the permissions (read, write, or both) that you have for this vector
Description	Description of the vector in the CMS Dictionary. You can edit this field.
Id	Number that identifies the vector on the CMS.
Step Count	The number of steps that are contained in the vector.

VDN Folder object

The following table describes properties of the VDN Folder object:

Properties	Description
Name	Name of the folder that contains measured VDNs for this ACD.
Type	Type of object (folder).
Permission	Displays the VDN permissions (read, write, or both) that you have for this ACD.
Containee Count	Shows the number of VDNs that are contained in the folder.

VDN object

The following table describes properties of the VDN object:

Properties	Description
Name	Name of the VDN in the CMS Dictionary.
Type	Type of object (VDN).
Permission	Displays the permissions (read, write, or both) that you have for this VDN.
Extension	VDN extension number.
Vector Id	Shows the number or synonym that identifies the vector that is assigned to this VDN. You can change this assignment if you have VDN permissions on the CMS for the ACD.
Description	Description of the VDN in the CMS Dictionary. You can edit this field.
Skill Pref	Shows what skill preferences are assigned to this VDN. You can change this assignment if you have VDN permissions on the CMS for the ACD [Expert Agent Selection (EAS) only].

Using Visual Vectors Framework

This chapter explains how to use Visual Vectors Framework. It includes the following sections:

Introduction to Visual Vectors Framework

This section provides an introduction to Visual Vectors Framework features and explains how to use the Framework window.

This section includes the following information:

Features of Visual Vectors Framework

Framework is the starting point of Visual Vectors. Framework gives you access to all of the Visual Vectors features, which gives you the ability to manage any connections Visual Vectors has to Call Management System (CMS) servers. For example, from the Framework window, you can access Visual Vectors tools to view, modify, add, and delete ACD items in the CMS database.

You can use the Framework window to begin the following tasks and activities:

- Connect to CMS servers
- Launch Avaya CMS Supervisor
- Use Navigator to view or modify the properties of objects in the My World directory
- Use Vector Editor to create new vectors or edit existing ones
- Use VDN Assignment Wizard to assign one or more VDNs to a vector
- Use Import Export Wizard to import vectors to a public directory or other application

No matter which tool you use to select an operation, the way in which you perform the operation is the same.

Connecting to CMS servers

You can connect to an existing server or establish a connection to a new server. You are limited to one instance of a login ID per server, but you can connect to more than one server at a time.

Logging in to an existing server

Use this procedure if you have connected to a CMS server at least once.

1. Click **Connect** on the toolbar or select **Connect** from the **File** menu.

The system displays the **Connect to Server** dialog box showing the server to which you connected last.

2. If you want to connect to a different server than the one that is displayed, select a CMS server from the **Connect to server:** list.
3. Enter your CMS login Id in the Login Id: text box.
4. Enter your CMS password in the Password: text box.
5. Click **Connect**.

   If the Disconnect toolbar button in Framework is highlighted, you have successfully logged in to the CMS server.

Logging in to a new server

If you have never connected to a CMS server before, you need to establish a connection. To connect to a new server:

1. Select **Connect** from the **File** menu.

   The system displays the New CMS login dialog box.
2. Type the hostname or IP address of a CMS/Visual Vectors server in the Server Network Address: text box.
3. Enter your CMS login ID in the Login Id: text box.
4. Type your CMS password in the Password text box.
5. Click OK.

   If the CMS server you entered exists, you are connected to this new server. If the CMS server does not exist, the system displays an error message showing the cause of the failure.

Disconnecting from CMS servers

You do not have to disconnect from CMS servers before exiting Framework. The Visual Vectors program disconnects your computer automatically before it closes the Framework window.

1. To disconnect from a server or servers, do one of the following:
   - Select Disconnect from the Framework **File** menu.
   - Click Disconnect in the Framework toolbar.

   The system displays the Disconnect window.
2. Select the servers you want to disconnect from and then click Disconnect.

Framework window objects

This section introduces you to the features of the Framework window as they appear both before and after you connect to a CMS server.

Title bar

The title bar shows the name of the tool. When a vector is open in the Vector Editor, its name is shown.

Minimize, Maximize/Restore, and Close buttons

These buttons adjust the size of the current window, or close it.

Toolbar

The toolbar contains buttons for quick access to specific features of the application. When your mouse pointer is over a toolbar button for a few seconds, a brief description of the button displays. When you select a button, the status bar displays a description of the command that the particular button performs.

The following table describes buttons on the toolbar.

Button	Function
Connect	Initiates a connection to a CMS server.
Disconnect	Disabled until you are connected to a CMS server.
Navigator	Accesses the window for the Navigator.
Vector Editor	Accesses the window for the Vector Editor.
VDN Assignment Wizard	Accesses the first of a series of dialog boxes for the VDN Assignment Wizard.

Button	Function
Import Export Wizard	Accesses the first of a series of dialog boxes for the Import Export Wizard.
CMS Supervisor	Starts CMS Supervisor Version 6 or later, if that program is installed correctly. If not, this button does not appear.
Help Contents	Starts the Help application window for Visual Vectors.

Status bar

The status bar is located at the bottom of the Framework and Vector Editor windows. Framework displays a brief description of what actions are occurring. Vector Editor displays the number of steps in the current vector.

Menu bar

The menu bar lists the available drop-down menus. This section identifies the menus that are available before you log in to the CMS server: **File**, **Tools**, **Window**, and **Help**.

File menu

Select **File** from the menu bar to display the **File** menu. The **File** menu has the following items:

- **Connect** – Displays the **Connect to server** window. You can select from the drop-down list of servers to which you have previously connected, or click New CMS to identify a new server to log in to and add to your **My World** directory.
- Disconnect – Displays the Disconnect window that lists the servers to which you are connected. Highlight the server or servers from which you wish to disconnect and select Disconnect or press Enter.
- Exit – Automatically disconnects your computer from any CMS servers to which you are connected, and then closes the Framework window. The system displays a warning message if you have open tool windows.

Tools Menu

Select Tools from the menu bar to display the Tools menu. The Tools menu has the following items:

- Vector Editor – Opens the window for the Vector Editor. You can create new vectors or edit existing vectors in this window, and then save them to an ACD if you have the needed permissions or the ScratchPad on your computer.
- Navigator – Opens the window for the Navigator. You can view, add, delete, or move objects in your Call Center World using this window.

- VDN Assignment Wizard – Opens the first of a series of dialog boxes for the VDN Assignment Wizard. This tool helps you to assign VDNs to vectors and VDN skill preferences. You can also view which VDNs are assigned to which vectors and, if necessary, change those assignments.
- Import Export Wizard – Opens the first of a series of dialog boxes for the Import Export Wizard. This tool helps you to create a vector file, which can contain one or more vector objects. You can then export the vector file to a shared or public directory, where it can be imported and shared by other users.
- CMS Supervisor – Launches a separate session of CMS Supervisor. The two programs are autonomous. Supervisor appears only if you have the right version installed on your computer.
- Preferences... – Opens the Preferences window. You can view or modify settings such as Locale and indicate whether ToolTips are enabled.
- Advanced Debugging... – Used for debugging. Do not change the settings on the Advanced window unless you are instructed to do so by an Avaya administrator.

Window menu

Select Window from the menu bar to display the Window menu. The Window menu has the following items:

- Close All – Closes the windows of all open tools, but leaves the Framework window open and the Visual Vectors software running.
- VDN Assignment Wizard – Makes the VDN Assignment Wizard the current window.

Help menu

Select Help from the menu bar to display the Help menu.

Press F1 or click Help to display help on a window or tool.

Help menu items – In the Help menu, you can select from the following options:

- Help Contents – Opens the Help window, and displays the Visual Vectors table of contents.
- About… – Displays the About Visual Vectors… window, which shows the software build number.

Using Navigator

This chapter explains how to use the Visual Vectors Navigator feature. It includes the following sections:

Introduction to Navigator

This section provides an introduction to Navigator features and explains how to open and close Navigator. It also familiarizes you with the objects in the Navigator window.

This section includes the following information:

Features of Navigator

You use Navigator to view and manage call center objects using the same conventions as you use to manage Microsoft Windows Explorer. Navigator provides a means for you to:

- View and manage switch objects that are used in vectors.
- Use the offline ScratchPad to store vectors on your computer. If you have many vectors, organize them into folders.
- Copy and move vectors from ScratchPad to one or more ACDs, and between ACDs.
- Change the properties of VDNs.
- View and rename objects, depending on your permissions.

Navigator window objects

This section introduces you to various features of the Navigator window as they appear both before and after you connect to a CMS server.

Status indicators

The following table describes the indicators in Navigator. These indicators tell you about the state of a CMS server and its measured ACDs.

This indicator	Displays
Login status	The icon for the CMS object in Navigator displays a black screen if you are not connected.
ACD link status	Icons for the ACDs that are supported by the CMS. If the link to an ACD is down, the icon is crossed out. If the CMS server is connected to the ACD via a TCP/IP connection and the connection is in a transient state, the icon changes to a straight line.

Status messages

The following table describes the status messages that may display in Visual Vectors.

This message	Displays when
Starting tool...	A Visual Vectors window is opening. Framework is locked during this time.
Looking for items to Connect...	Framework is searching the My World directory for CMS servers.

Using the Vector Editor

This chapter explains how to use the Vector Editor. It includes the following sections:

Introduction to the Vector Editor

This section provides an overview of the Visual Vectors Vector Editor. It also explains how to open the Vector Editor, close windows, and exit the Vector Editor.

This section includes the following information:

Vector Editor features

Vector Editor allows you to create and edit vectors using a graphical user interface (GUI) that lets you drag and drop icons from a palette and arrange them into vector steps in a work area. Vector Editor lets you:

- Create and edit vectors by an easy, drag-and-drop method
- Annotate, that is, attach comments to vectors
- Print representations of vectors

For users who are familiar with accessing vectors from a terminal, Navigator supplies a read-only ascii text view for online vectors.

Opening and closing the Vector Editor

To open the Vector Editor:

1. Use the Framework toolbar to do one of the following:
   - Select **Vector Editor** from the **Tools** menu or click the Vector Editor icon in the toolbar, and then select a vector type from the Vector Editor menu.
   - Double-click on a vector in Navigator to start the Vector Editor.

Vector Editor window objects

Using the Vector Editor window, you can create and edit vectors visually using common Windows-based conventions. For example, you can use the drag-and-drop method to move icons that represent commands from a palette and arrange them into vector steps in a work area. You can also attach comments, change layout, and save and print the vectors.

Status indicators

The following table describes status indicators:

Indicator	Function
Vector Location	Shows New Vector or a full path to an existing vector in the My World directory (for example, /My World/CMS20/ACD8/Vector Folder/Visual Vector).
Current Visual Steps	Shows a count of the number of palette icons in the current visual vector. The initial Start icon is not counted.
Current Stored Steps	Shows a count of the number of vector steps the current vector will occupy when stored on an ACD. The limit is 32 steps. At step 29, the line stating the number of steps turns yellow. At step 33, the line turns red.

Using Vector Editor windows

This section introduces you to the features of the Vector Editor window. Follow the instructions to select menu items and enter values in input fields in Vector Editor dialog boxes.

This section includes the following information:

Accessing vectors

Methods used to access vectors

You can access vectors from the Navigator window or from the Vector Editor.

Accessing vectors from Navigator

To access vectors from the Navigator window:

1. In the Framework window, select Navigator from the Tools menu, or click the Navigator icon in the toolbar.

   The system displays the Navigator window.

2. Browse the My World directory to find the object you want.
3. When you find the object you want, such as the ScratchPad or an ACD Vector Folder in the Navigator window, double-click it. The objects contained in the folder appear in the right pane of the Navigator window.
4. Double-click the vector to open it.

   The Vector Editor opens the vector.

Accessing vectors from Vector Editor

To access a vector from the Vector Editor window:

1. Select Open... from the Vector Editor File menu.

   The system displays the Select the Vector to open window.

2. Browse the My World directory to find the vector you want to open.
3. Double-click the vector you want to open.

Saving and printing vectors

Procedure

To save a vector from the Vector Editor window:

1. Select Save As... from the File menu.

   The Vector Editor displays the Save Vector As window.

2. Browse the My World directory to find the container in which you want to save the current vector.
3. Click the name of the container (ScratchPad or Vector Folder) in which you want to save the vector.
4. If you want to give the vector a name that is different from the default name, type your preferred name in the Name text box.
5. Click Save.

   The Vector Editor does one of the following:

   - Saves a graphical representation of the selected vector to the ScratchPad
   - Converts the visual vector and stores it on the ACD containing the Vector Folder

Saving vectors in Navigator

In Navigator, you can drag and drop vectors into the container in which you want to save them.

Printing vector graphics

The print function is available only in the Vector Editor. To print a vector graphic:

1. Select Print from the File menu in the Vector Editor window.

   The system displays the Print dialog box.

2. In the Print dialog box, select the printer, print range, and number of copies.
3. If you need to specify any printer properties, click Properties and make your changes in the Document Properties window. Then click OK.
4. In the Print dialog box, click OK.

   The system displays the Printing Properties window.

5. The Printing Properties window lets you scale your printed graphic.

   Select any of the following print options:

   - 1 to 1: Your vector graphic will print as the size you see on your screen. This is the default option.
   - fit to 1 page: Your vector graphic will print on one page.
   - fit to pages wide: Your vector graphic will print on the number of pages you specify in the pages field. The printed graphic will remain height and width proportional.
   - fits to pages high: Your vector graphic will print on the number of pages you specify in the pages field. The printed graphic will remain height and width proportional.
   - scale to percent: Your vector graphic will print to the size you specify in the % field. The printed graphic will remain height and width proportional.
   - Step Labels: Click to enable the printing of step labels that are present on your vector graphic. If there are no step labels, this field is unavailable.
   - Floating Comments: Click to enable the printing of global comments that are present on your vector graphic. If there are no global comments, this field is unavailable.
   - Step Comments: Click to enable the printing of step comments that are present on your vector graphic. If there are no step comments, this field is unavailable.
   - Alignment: Allows you to determine the positioning of the vector graphic on the printout.

6. Click OK in the Printing Properties window to print your vector graphic.

Using vector steps

This section lists the vector steps in the Vector Editor palettes and describes all possible step properties.

This section includes the following information:

Vector step palettes

Vector steps are grouped in the following five palettes on the left side of the Vector Editor window. Note that not all the steps are available for every type of vector. For example, the collect step is not available for *nonprompting* vectors.

- Input/Output
  - Announcement
  - Timed Announcement
  - Music
  - Ringback
  - Silence
  - Reply
  - Consider
  - Collect
  - Converse
- End
  - Busy
  - Stop
  - Disconnect

- Test
  - Caller Info
  - Center Info
  - Queue Activity
  - Agent Activity
  - Time of Day
  - Holiday
- Queue
  - Queue Activity
  - Center Info
  - Agent Activity
  - Queue Unconditional
- Routing
  - Route To Number
  - Route To Digits
  - Adjunct Route
  - Messaging Skill
  - Goto Vector.

Vector step properties

When you select properties from the shortcut menu for an object, the system displays an input window. The information that is required in the input window depends on the object.

This section describes all possible properties. However, not all features automatically show. Which properties are shown, which menu items are available, and which toolbar buttons function can vary from user to user.

The following properties are described:

- Announcement (Input/Output) step properties on page 52
- Timed Announcement (Input/Output) step properties on page 53
- Music (Input/Output) step properties on page 53
- Ringback (Input/Output) step properties on page 53
- Silence (Input/Output) step properties on page 53
- Reply (Input/Output) step properties on page 54
- Consider (Input/Output) step properties on page 54

Announcement (Input/Output) step properties

Announcement (Input/Output) step includes the following properties:

Properties	Description
Announcement	Select a valid announcement for the ACD on which the step will be saved, or select Extension.
Extension	Enter a 1 to 5 digit number (R10 or earlier) or 1 to 7 digit number (R11 or later). Disabled if Announcement is not tied to an Extension.
Comment	Enter a comment that is associated with this step.

Timed Announcement (Input/Output) step properties

Timed Announcement (Input/Output) step includes the following properties:

Properties	Description
Seconds	Enter a numeric value from 0 to 999.
Announcement	Select a valid announcement for the ACD in which the step will be saved, or select Extension.
Extension	Enter a 1 to 5 digit number (R10 or earlier) or 1 to 7 digit number (R11 or later). Disabled if Announcement is not tied to an Extension.
Treatment	Select music, silence, ringback, or continue. The default is continue.
Comment	Enter a comment that is associated with this step.

Music (Input/Output) step properties

The following table describes the Music (Input/Output) step:

Properties	Description
Seconds	Enter a numeric value from 0 to 999.
Comment	Enter a comment that is associated with this step.

Ringback (Input/Output) step properties

Ringback (Input/Output) step includes the following properties:

Properties	Description
Seconds	Enter a numeric value from 0 to 999.
Comment	Enter a comment that is associated with this step.

Silence (Input/Output) step properties

Silence (Input/Output) step includes the following properties:

Properties	Description
Seconds	Enter a numeric value from 0 to 999.
I-Silent	Select to enable the I-Silent feature.
Comment	Enter a comment that is associated with this step.

Reply (Input/Output) step properties

Reply (Input/Output) step includes the following properties:

Properties	Description
Comment	Enter a comment that is associated with this step.

Consider (Input/Output) step properties

Consider (Input/Output) step includes the following properties:

Properties	Description
Measure	Split/Skill is the default value. Select a location from the drop-down list, if applicable.
Split/Skill	Select a split, skill, or ID (or First, Second, or Third if EAS) from the drop-down list. This field is disabled if the value in the Measure field is Location.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Measure field is Location or if the Split/Skill field is not Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	High is the default, or select low, medium, or top from the drop-down list. This field is disabled if the value in the Measure field is Location.
Location	Enter a numeric value from 1 to 255. This field is disabled if the value in the Measure field is Split/Skill.
Adjustment	Enter a numeric value from 0 to 100.
Comment	Enter a comment that is associated with this step.

Collect (Input/Output) step properties

Collect (Input/Output) step includes the following properties:

Properties	Description
Source	Digits is the default, or select CED or CDPD from the drop-down list, if applicable.
Number of digits	Enter a numeric value from 1 to 16. This field is disabled if the Source field is not digits.
Comment	Enter a comment that is associated with this step.

Converse (Input/Output) step properties

Converse (Input/Output) step includes the following properties:

Properties	Description
Split/Skill	Select a split/skill (First, Second, Third or Id) from the drop-down list.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not set to Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	High is the default, or select low, medium, or top from the drop-down list.
Passing	None is the default, or select vdn, ani, digits, qpos, wait, or data from the drop-down list.
Data	Enter a 1 to 6 digit number, if applicable. This field is enabled only if the value in the first Passing field is Data.
Passing	None is the default value. Select vdn, ani, digits, qpos, wait, or data from drop-down list. If the first Passing field value is None, then the only valid value for this second Passing property is None.
Data	Enter a numeric value from 0 to 100. This field is enabled if the value in the second Passing field is Data.
Comment	Enter a comment that is associated with this step.

Busy (End) step properties

The Busy (End) step includes the following properties:

Properties	Description
Comment	Enter a comment that is associated with this step.

Stop (End) step properties

Stop (End) step includes the following properties:

Properties	Description
Comment	Enter a comment that is associated with this step.

Disconnect (End) step

Disconnect (End) step includes the following properties:

Properties	Description
Comment	Enter a comment that is associated with this step.

Caller Info (Test) step properties

Caller Info (Test) step includes the following properties:

Properties	Description
Measure	ANI is the default, or select digits or ii-digits from the drop-down list, if applicable.
Comparator	Equals (=) is the default, or select <=, <>, <, >, >=, in, or not in, from the drop-down list.
Threshold	Enter a numeric value for ani or ii-digits (?, +, and # are valid in certain situations). This field is enabled only if the value in the Comparator field is in or not in.
Table	Enter a numeric value from 1 to 100. This field is disabled if the value in the Comparator field is anything except in or not in.
Comment	Enter a comment that is associated with this step.

Center Info (Test) step properties

Center Info (Test) step includes the following properties:

Properties	Description
Measure	Counted-calls to VDN is the default, or select rolling-asa or expected-wait from the drop-down list.
Split/Skill	Select a split/skill (First, Second, Third, Best, Call, or Id) from the drop-down list. This field is disabled if the value in the Measure field is not expected wait.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	High is the default, or select low, medium, or top from the drop-down list. This field is disabled if the value in the Measure field is not expected wait, or if the value in the Split/Skill field is Best or Call.
VDN	Select a VDN (or extension, active, or latest) from the drop-down list. This field is disabled if the value in the Measure field is expected wait.
Extension	Enter a 1 to 5 digit extension number (R10 or earlier) or 1 to 7 digit number (R11 or later). This field is disabled if the value in the VDN field is not an extension.
Comparator	Equals (=) is the default value. Select <=, <>, <, >, >=, from the drop-down list.

Properties	Description
Threshold	One (1) is the default value. Or enter a numeric value that depends on the Measure and the software version of your switch.
Comment	Enter a comment that is associated with this step.

Queue Activity (Test) step properties

Queue Activity (Test) step includes the following properties:

Properties	Description
Measure	Rolling-asa is the default value. Select calls-queued, interflow-qpos, oldest-call-wait, or wait-improved from the drop-down list.
Split/Skill	Select a split/skill (First, Second, Third, Id, or Best) from the drop-down list. Disabled if Measure is interflow-qpos. Best is invalid if Measure is anything but wait-improved.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	High is the default, or select low, medium, or top from the drop-down list. This field is disabled if the value in the Measure field is interflow-qpos.
Comparator	Equals (=) is the default, or select <=, <>, <, >, >=, from the drop-down list.
Threshold	One (1) is the default. Or enter a numeric value that depends on Measure and the software version of your switch.
Comment	Enter a comment associated with this step.

Agent Activity (Test) step properties

Agent Activity (Test) step includes the following properties:

Properties	Description
Measure	Available-agents is the default, or select staffed-agents from the drop-down list.
Split/Skill	Select a split/skill (First, Second, Third, or Id) from the drop-down list.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.

Properties	Description
Comparator	Equals (=) is the default, or select <=, <>, <, >, >=, from the drop-down list.
Threshold	Zero (0) is the default value. Or enter a numeric value that depends on Comparator and the software version of your switch.
Comment	Enter a comment associated with this step.

Time Of Day (Test) step properties

Time Of Day (Test) step includes the following properties:

Properties	Description
Start Day	All is the default, or select beginning day from the drop-down list. Must select All if Finish Day is All.
Start Time	Current time is the default. Or enter the beginning time of day in 24-hour format.
Finish Day	All is the default, or select the ending day from the drop-down list. Must select All if Start Day is All.
Finish Time	Current time is the default. Or enter the ending time of day in 24-hour format.
Comment	Enter a comment associated with this step.

Holiday (Test) step properties

Holiday (Test) step includes the following properties:

Properties	Description
Comparator	In is the default, or select not-in from the drop-down list.
Table	Enter a numeric value from 1 to 10.
Comment	Enter a comment associated with this step.

Queue Activity (Queue) step properties

Queue Activity (Queue) step includes the following properties:

Properties	Description
Measure	Rolling-asa is the default, or select calls-queued, oldest-call-wait, or wait-improved from the drop-down list.
Split/Skill	Select a split/skill (First, Second, Third, Id, or Best) from the drop-down list. Best is valid only if Measure is wait-improved.
Skill Id	This field is disabled if the value in the Split/Skill field is not set to Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	High is the default, or select Low, Medium, or Top from the drop-down list. This field is disabled if the value in the Split/Skill field is Best.
Comparator	Auto-selected default. This is a read-only field.
Threshold	One (1) is the default. Or enter a numeric value that depends on Measure and the software version of your switch.
Comment	Enter a comment associated with this step.

Center Info (Queue) step properties

Center Info (Queue) step includes the following properties:

Properties	Description
Measure	Expected-wait is the available value.
Split/Skill	Select a split/skill (First, Second, Third, Best, or Id) from the drop-down list.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	Low is the default, or select Medium, High, or Top from the drop-down list. This field is disabled if the value in the Split/Skill field is Best.
Comparator	Auto-selected default. This is a read-only field.
Threshold	One (1) is the default. Or enter a numeric value that depends on Measure and the software version of your switch.
Comment	Enter a comment associated with this step.

Agent Activity (Queue) step properties

The following table describes the Agent Activity (Queue) step:

Properties	Description
Measure	Available-agents is the default, or select staffed-agents from the drop-down list.
Split/Skill	Select a split/skill (First, Second, Third, or Id) from the drop-down list.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not set to Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	Low is the default, or select medium, high, or top from the drop-down list.
Comparator	Auto-selected default. This is a read-only field.
Threshold	Zero (0) is the default. Or enter a numeric value that depends on the Comparator value and your the software version of your switch.
Comment	Enter a comment associated with this step.

Queue Unconditional (Queue) step properties

Queue Unconditional (Queue) step includes the following properties:

Properties	Description
Split/Skill	Select a split/skill (First, Second, Third, Id, or Best) from the drop-down list.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not set to Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Priority	High is the default, or select low, medium, or top from the drop-down list. This field is disabled if the value in the Split/Skill field is Best.
Comment	Enter a comment associated with this step.

Route To Number (Routing) step properties

The following describes the Route To Number (Routing) step:

Properties	Description
Number	Enter a 1 to 16 digit number or other valid characters, including *, #, ~p, ~w, ~W, ~m, ~s, and ~r. The ~r character string can only be used at the beginning and has to be followed by numbers only.
Coverage	No is the default, or select yes from the drop-down list.
Comment	Enter a comment associated with this step.

Route To Digits (Routing) step properties

Route To Digits (Routing) step includes the following properties:

Properties	Description
Coverage	No is the default, or select yes from the drop-down list.
Comment	Enter a comment associated with this step.

Adjunct Route (Routing) step properties

Adjunct Route (Routing) step includes the following properties:

Properties	Description
Extension (Release 10 or earlier)	Enter a 1-5 digit number.
CTI-Link ID (Release 11 or later)	Enter a 1 to 2 digit (1-99) CTI-Link Id number.
Comment	Enter a comment associated with this step.

Messaging Skill (Routing) step properties

Messaging Skill (Routing) step includes the following properties:

Properties	Description
Split/Skill	Select a split/skill (First, Second, Third, or Id) from the drop-down list.
Skill Id	Enter a numeric value from 1 to 999. This field is disabled if the value in the Split/Skill field is not Id. If you are in working offline (for example, in a ScratchPad vector), you can also enter synonyms, but once you go online you can only use numbers.
Extension	Extension is the default, or select Active or Latest.
Number	Enter a 1 to 5 digit extension number (R10 or earlier) or 1 to 7 digit number (R11 or later). This field is disabled if the Extension field is active or latest.
Comment	Enter a comment associated with this step.

Goto Vector (Routing) step

Goto Vector (Routing) step includes the following properties:

Properties	Description
Vector	Select a valid vector from the drop-down list, or select Id.
Vector Id	Enter the numeric Id of a valid vector. This field is disabled if the value in the Vector field is not Id.
Comment	Enter a comment associated with this step.

Creating a new Goto vector

The following scenario gives an example of how to create a Goto vector.

To create a new Goto vector:

1. In the Visual Vectors Framework window, select Tools and then select Rx Vector (EAS) from the Vector Editor submenu, where Rx is the MultiVantage or Definity software release number.

   The system displays the Vector Editor window for a New Vector. The first step is an empty (grey) box.

   To start your new vector, you want processing to branch to a different vector for nighttime callers only. First, you must test for the time of day.

2. On the left side of the Vector Editor window, click the Test palette.

   The system displays the available icons on the Test palette.

3. Using the ToolTips (if enabled), click the Time Of Day icon. Use the drag-and-drop method to move the icon to the empty step box in the workspace area.

   A yellow box appears when you can drop the icon.

4. Double-click the Time Of Day icon.

   The system displays the Properties of Time Of Day window. This window contains default values.

5. Select Start Time: and enter 23:00, and select Finish Time: and enter 5:00.

   Leading zeroes are discarded from numeric entries.

6. Type a comment for this test in the Comment: field, and then click OK.

   The Properties window closes and the label for this test icon changes to TOD *All 23:00 to All 05:00*.

   Two arrows to empty step boxes now appear in the workspace. The solid arrow points to the next step if the test is true. The broken or dotted arrow points to the next step if the test is false.

7. Click the Routing palette.

   The system displays the available icons on the Routing palette.

8. Click the Goto Vector icon. Use the drag-and-drop method to move the icon to the empty step box for TRUE in the workspace area.

   A yellow box appears when you can drop the icon.

9. Double-click the Goto Vector icon.

   The Properties of the Goto Vector window appears with the required field outlined in red.

10. Select Vector ID: and enter 2.

    The OK and Apply buttons are enabled in the Properties window.

11. Type a comment for this step in the Comment: field, and then click OK.

    The Properties window closes and the label for this step icon changes to Vector 2.

Disconnecting weekend calls

Next, you need to disconnect weekend callers after the system plays an announcement. To disconnect weekend calls:

1. To test the weekend condition, click the Test palette again.

   The system displays the available icons on the Test palette.

2. Using the ToolTips (if enabled), click the Time Of Day icon again. Use the drag-and-drop method to move the icon to the empty step box for FALSE in the workspace area.

   A second conditional branch is created, with two arrows pointing to empty step boxes.

3. Double-click the Time Of Day icon.

   The system displays the Properties of Time Of Day window. This window contains default values.

4. In the Properties of Time of Day window:

   - Select Friday from the Start Day: drop-down list.
   - Select Monday from the Finish Day: drop-down list.
   - Select Start Time: and enter 20:00.
   - Select Finish Time: and enter 5:00.

   Leading zeroes are discarded from numeric entries.

5. Type a comment for this test in the Comment: field, and then click OK.

   The Properties window closes, and the label for this test icon changes to *TOD Fri 20:00 to Mon 05:00*.

6. You want processing to branch to a different vector for weekend callers only. Click the Input/Output palette.

   The system displays the available icons on the Input/Output palette.

7. Using the ToolTips (if enabled), click the Announcement icon. Use the drag-and-drop method to move the icon to the empty step box for TRUE in the workspace area.

   A yellow box appears when you can drop the icon.

8. Double-click the Announcement icon.

   The system displays the **Properties of Announcement** window. The **Extension:** field is required.

9. Select **Extension:** and enter 84573.

   The OK and Apply buttons are enabled in the Properties window.

10. Type a comment for this test in the Comment: field, and then click OK.

    The Properties window closes and the label for this icon changes to *Ext 84573*.

11. Next, you need to disconnect weekend callers after the system plays an announcement. To test the weekend condition, click the End palette.

    The system displays the icons on the End palette.

12. Using the ToolTips (if enabled), click the Disconnect icon. Use the drag-and-drop method to move the icon to the empty step box for TRUE in the workspace area.

    A yellow box appears when you can drop the icon. The Disconnect step icon ends this conditional branch.

    Two arrows to empty step boxes now appear in the workspace. The solid arrow points to the next step if the test is true. The broken or dotted arrow points to the next step if the test is false.

13. If the weekend condition tests false, you want to queue the call. Click the Queue palette.

    The system displays the icons on the Queue palette.

14. Using the ToolTips (if enabled), click the Queue Unconditional icon. Use the drag-and-drop method to move the icon to the empty step box for FALSE in the workspace area.

    A yellow box appears when you can drop the icon.

15. Double-click the Queue Unconditional icon.

    The system displays the Properties of Queue Unconditional window.

16. Select Id from the Skill: drop-down list.

    The Skill Id: field is enabled and required.

17. Select Skill Id: and enter 1.

    The OK and Apply buttons are enabled in the Properties window.

18. Type a comment for this test in the Comment: field, and then click OK.

    The Properties window closes and the label for this icon changes to Skill 1.

Selecting ringback

Next, you want callers to wait while the system rings back. To activate ringback:

1. On the left side of the Vector Editor window, click Input/Output.

   The system displays the icons in the Input/Output window.

2. Using the ToolTips (if enabled), click the Ringback icon.

3. Use the drag-and-drop method to move the icon to the empty step box in the workspace area.

   A yellow box appears when you can drop the icon.

4. Double-click the Ringback icon.

   The system displays the Properties of Ringback window. This window contains a default value of 0 seconds.

5. Select the Seconds: field, and change the highlighted default value to 18.

   The Apply button is enabled in the Properties window.

6. Type a comment for this test in the Comment: field, and then click OK.

   The Properties window closes and the label for this step icon changes to 18 secs.

   Next, you want to collect a digit after playing an announcement for the caller.

7. Using the ToolTips (if enabled), click the Announcement icon. Use the drag-and-drop method to move the icon to the empty step box in the workspace area.

   A yellow box appears when you can drop the icon.

8. Double-click the Announcement icon.

   The system displays the Properties of Announcement window.

   The Extension: field is required.

9. Select the Extension: field and enter 72349.

   The OK and Apply buttons are enabled in the Properties window.

10. Type a comment for this test in the Comment field, and then click OK.

    The Properties window closes and the label for this icon changes to “Ext 72349.”

11. Using the ToolTips (if enabled), click the Collect icon.

12. Use the drag-and-drop method to move the icon to the empty step box in the workspace area.

    The label shows the default is to collect 1 digit, so you do not need to edit the default properties of this icon.

Routing callers

Next, you want to route callers conditionally, based on the collected digit. You can add the condition later. To route callers:

1. Click the Routing palette.

   The system displays the icons on the Routing palette.

2. Using the ToolTips (if enabled), click the Route To Number icon.

3. Use the drag-and-drop method to move the icon to the empty step box in the workspace area.

   A yellow box appears when you can drop the icon.

4. Double-click the Route To Number icon.

   The system displays the Properties of Route To Number window. This window contains default values.

5. Select the Number: field and change the highlighted default value to *93031234567*.

   The Apply button is enabled in the Properties window.

6. Type a comment for this test in the Comment: field, and then click OK.

   The Properties window closes and the label for this icon changes to *93031234567 no*.

7. You must add the conditional branch. Click the Test palette.

   The system displays the available icons on the Test palette.

8. Using the ToolTips (if enabled), click the Caller Info icon. Use the drag-and-drop method to move the icon onto the arrow BEFORE the Route To Number icon in the workspace area.

   A yellow box appears when you can drop the icon between existing icons.

9. Double-click the Caller Info icon.

   The system displays the Properties of Caller Info window. This window contains default values.

10. Select digits from the drop-down list for the Measure: field.

    The Apply button is enabled.

11. Select the Threshold: field and change the default value to 5.

    The highlighted value changes in the Properties window.

12. Type a comment for this test in the Comment: field, and then click OK.

    The Properties window closes and the label for this icon changes to *DIG = 5*.

    There are now two empty step boxes in the workspace area. The true box (solid arrow) is the next step if the collected digit was 5; otherwise, the false box is next.

13. If the collected digit was not 5, you want callers to wait while the system plays music, so click the Input/Output palette.

    The system displays the available icons on the Input/Output palette.

14. Using the ToolTips (if enabled), click the Music icon. Use the drag-and-drop method to move the icon onto the empty box for FALSE in the workspace area.

    A yellow box appears when you can drop the icon.

15. Double-click the Music icon.

    The system displays the Properties of Music window. This window contains a default value of 0 seconds.

16. Select the Seconds: field and change the highlighted default value to 30.

    The Apply button is enabled in the Properties window.

17. Type a comment for this test in the Comment: field, and then click OK.

    The Properties window closes and the label for this step icon changes to “30 secs.”

Playing an announcement

You want to play an announcement for callers every 30 seconds. To play the announcement:

1. Using the ToolTips (if enabled), click the Announcement icon. Use the drag-and-drop method to move the icon onto the empty box after the Music icon in the workspace area.

   A yellow box appears when you can drop the icon.

2. Double-click the Announcement icon.

   The system displays the Properties of Announcement window. The Extension: field is required.

3. Select the Extension: field and enter *74934*.

   The OK and Apply buttons are enabled in the Properties window.

4. Type a comment for this test in the Comment: field, and then click OK.

   The Properties window closes and the label for this icon changes to *Ext 74934*.

5. Now, to create a loop back to hearing music, drag the empty step box to the FALSE arrow immediately BEFORE the Music step icon.

   A solid line joins this arrow, showing the unconditional nature of this Goto step.

   There is still an empty step box after the Route To Number icon.

6. To finish editing your new vector, click the End palette.

   The system displays the available step icons in the End palette.

7. Using the ToolTips (if enabled), click the Music icon. Use the drag-and-drop method to move the icon onto the empty box step box in the workspace area.

   A yellow box appears when you can drop the icon. The Stop step icon ends this conditional branch.

8. If you have not already saved your work, select Save from the File menu or toolbar in the Vector Editor window.

   The first time you save, a window will appear in which you specify where to save the vector. This can be offline in a ScratchPad, or online to a permitted ACD Vector Folder.

If your vector is new on the ACD, that is, if you are not saving using an existing vector's name, the system asks you for a Name and ID. If you used the name of an existing vector while saving, the system asks you if you want to overwrite the existing vector.

Moving or copying vectors to ACDs of different types

You can move or copy vectors from one ACD to another using Navigator. You can also open or create a vector of one type and save it to an ACD of a different type, or copy and paste one or more steps between different vectors using the Vector Editor tool. In these situations, vector steps need conversion. The software guides you through the conversion process.

Procedure

To move, copy or save vectors to ACDs of different types:

1. Open an existing vector or create a new Vector (EAS). This vector must contain skill-related properties of steps such as Queue Activity, Center Info, or Agent Activity, and digit properties of steps such as Converse or Collect.
2. Copy the whole vector or set of steps described in Step 1. Do one of the following:
   - To select all steps in the vector, in the Edit menu click Select All. Then select Copy in the Edit menu to copy the steps.
   - To select a set of steps in the vector, hold down the Shift key while you click on each step you want to copy. Then select Copy in the Edit menu to copy the steps.
3. Open an existing vector, or create a new Vector (non-EAS, non-Prompting).
4. In the vector you opened or created, select Paste in the Edit menu to paste the whole vector or set of steps you previously copied.

   The system displays one or more messages explaining the necessary conversions.
5. Perform one of the following actions:
   - Select Yes to correct incompatible steps individually.
   - Select Yes to All to correct all steps of the same type in all of the vectors or steps that are currently selected.

Using the VDN Assignment Wizard

This chapter explains how to use the VDN Assignment Wizard. It includes the following sections:

Introduction to the VDN Assignment Wizard

This section provides an overview of the Visual Vectors VDN Assignment Wizard.

This section includes the following information:

Features of the VDN Assignment Wizard

When your switch receives a call, it translates objects dialed by the caller or sent to it into a VDN. The switch uses VDNs to direct those calls to the appropriate vector. When your vectors are complete and ready to use, the VDN Assignment Wizard helps you assign VDNs to your vectors so that incoming calls associated with those VDNs get treated the way your organization wants them to be treated.

Starting the VDN Assignment Wizard

Procedure

To start the VDN Assignment Wizard:

1. To open the VDN Assignment Wizard window, select VDN Assignment Wizard from the Framework Tools menu, or click the VDN Assignment Wizard icon in the Framework toolbar.

   The system displays the VDN Assignment Wizard window.

VDN Assignment Wizard window objects

This part introduces you to the features of the VDN Assignment window.

Title bar

The title bar shows the name of the application.

Minimize, maximize/restore and close buttons

These buttons in the upper right corner of the window adjust the size of the current window, or close it.

Buttons

These five buttons appear on the VDN Assignment Wizard windows:

Button	Function
Cancel	Closes the wizard without making or changing any assignments.
Back	Displays the previous window in the wizard. This button is disabled on the first window.
Next	Accesses the next window in the wizard. This button is replaced by the Edit button in the last window. See *Edit*.
Edit	Accesses the properties window for one or more selected VDNs. This is the last window of the VDN Assignment Wizard.
Help	Accesses help information about the current window.

Using VDN Assignment windows

This section explains how to use the features of the VDN Assignment window. Follow the instructions to make VDN selections, use windows, and enter values in input fields.

This section includes the following information:

Assigning VDNs

The VDN Assignment Wizard guides you through the process of assigning a VDN and skill preference to a vector. It consists of several dialog boxes in sequence, for example, one dialog box filters and selects the VDNs you wish to assign, and another dialog box performs the assignments.

Accessing the VDN Assignment Wizard

Follow these steps to use the first window of the VDN Assignment Wizard.

1. In the Framework window, do one of the following:
   - Select VDN Assignment Wizard from the Tools menu.
   - Click the VDN Assignment Wizard icon in the toolbar.

   The system displays the VDN Assignment Wizard Welcome window.
2. Browse the My World directory to find the object you want.

   Important:
   If you are not connected to a server, you need to double-click the server and complete the “Connect to (server name)” window before you can view its ACDs.
3. Click the ACD that contains the object you want to assign.
4. Click Next.

The system displays the Available for Selection window.

Using the Available for Selection window

In the Available for Selection window, you may display a list of all VDNs available for selection, or you may filter the list to display only those VDNs containing certain criteria.

1. To filter the list of VDNs Available for Selection, enter any of the following parameters in the Filter: text box.

   These parameters can be from 1 to 20 characters. These characters *can* include:

   - Letters
   - Numbers
   - Underscores **(_)**
   - Blanks
   - Commas **(,)**
   - Periods **(.)**
   - Plus signs **(+)**

   These characters *cannot* include:

   - Backslash **(\)**
   - Grave accent **(‘)**
   - Tilde **(~)**
   - Double quotes **(")**
   - Pipe symbol **(|)**

   These parameters *can* include pattern-matching wildcards, such as:

   - Question mark **(?)** (exactly one character)
   - Asterisk **(*)** (any number of characters, including none)

   Entering characters or characters with wildcards restricts the VDNs that are displayed in the Available for Selection (Filtered): list box to those that partially or completely match your entry. For example

   - Entering ***Sales*** matches and displays available VDNs named **Pre-Sales**, **Sales**, and **Sales Split**.
   - Entering **VDN*1** matches and displays available VDNs named **VDN1**, **VDN 201**, and **VDNSupport01**.

2. Take one of the following actions to select one or more VDNs you want to administer from the filtered list of VDNs that are available for selection:
   - Select the VDN in the Available for Selection: list box and then click the down arrowhead button.
   - Hold down the Control key while you select each one of the VDNs that you want and then click the down arrowhead button.
   - Hold down the Shift key while you select the first and last in a group of VDNs that you want and then click the down arrowhead button.
   - Click the down arrowhead button with the horizontal line under it to move *all* VDNs that are in the filtered Available for Selection: list box to the Selected: list box.

   You may deselect one or more VDNs by reversing any of these actions, for example clicking the up arrowhead button to move highlighted VDNs in the Selected: list box back to the Available for Selection: list box.
3. Click Next to go to the next window in the wizard.

   The system displays the Edit Assignment window.

Using the Edit Assignment window

To use the Edit Assignment window:

1. First, check the Selected ACD and Selected VDNs shown to confirm that the are the ones you want to assign or edit.
2. Click Edit to assign the selected VDNs to a vector or to change other VDN object properties. If you select:
   - One VDN, the property window for that VDN shows the values in its property fields that you can edit.
   - Many VDNs with different values, the property window shows blank property fields for you to complete.
   - Many VDNs with the same values, the property window shows the common values in the property fields.

   If the Selected VDN is already assigned to a common vector, the Id of that vector is the default. If the selected VDN is not already assigned to a vector, then “1” is the default.
3. Perform one of the following actions:
   - If you do not want to change the default vector Id, go to Step 5.
   - If you want to change the vector Id, click the down arrow in the Vector Id field.

   The system displays the Vector Id: drop-down list.
4. Select the vector Id you want from the drop-down list.

5. If the EAS feature has been purchased and enabled on the selected ACD, you need to select one or more skill preferences. If the Selected VDNs are already assigned common skills, those skills are the default selections.

   In the Properties of many objects window, the Selected VDNs are already assigned common skills.

6. Click the down arrow in the Skill Pref: field you want to change. If you choose [none] for:

   - Skill Preference 1, then Skill Preference 2 and Skill Preference 3 also must be [none].
   - Skill Preference 2, then Skill Preference 3 also must be [none].

   Note that choosing [none] removes existing skill preferences from those selected VDNs that have them.

7. Perform one of the following actions:

   - Click OK to commit all the VDN Assignments and any other changes to VDN properties and close the window.
   - Click Apply to commit changes but leave the VDN Properties window open for further input.

Using the Import Export Wizard

This chapter explains how to use the Visual Vectors Import Export Wizard. It includes the following sections:

Introduction to the Import Export Wizard

This section provides information about the Import Export Wizard and explains how to start and exit the Import Export tool.

This section includes the following information:

Features of the Import Export Wizard

The Visual Vectors Import Export feature lets you create a vector and export it to a public directory or other application, where the vector can be imported and shared by other users.

For example, first you create a vector file, which can contain one or more vector objects. You can then attach the vector file to email or export it to a shared or public directory. Other users can then import this vector file to their system where, using Visual Vectors tools, they can view and edit it or load it to a switch.

The Import Export Wizard provides a means for you to:

- Distribute vectors within a single site or across a multi-site environment
- Share vectors with users from other organizations
- Create a central library of vectors that other users can access
- Archive vectors to a server on a LAN for backup
- Train and mentor other users (review vectors and mail back corrections and suggestions)

Starting the Import Export Wizard

Procedure

1. To start the Import Export Wizard, do one of the following:
   - Select **Import Export Wizard** from the Framework **Tools** menu
   - Click the Import Export Wizard icon in the Framework toolbar.

Import Export Wizard objects

This section introduces you to the features of the Import Export Wizard window.

Title bar

The title bar shows the name of the application.

Minimize, maximize/restore and close buttons

These buttons in the upper right-hand corner adjust the size of the current window, or close it.

Buttons

These four buttons appear on the windows of the Import Export Wizard:

Button	Function
Cancel	Closes the wizard without making or changing any assignments.
Back	Displays the previous window in the wizard. This button is disabled on the first window.
Next	Accesses the next window in the wizard. This button is replaced by the Export button in the last window. See *Export*.
Export	Initiates the export process.
Help	Accesses help information about the current window.

Importing and exporting vectors

This section explains how to import and export vectors.

This section includes the following information:

Exporting Vectors

The Import Export Wizard guides you through the process of collecting information to export, selecting the vectors to export, and performing the export. It consists of several dialog boxes in sequence, for example, one dialog box filters and selects the vectors you wish to export, and another dialog box performs the export.

Accessing the Import Export Wizard

Follow these steps to use the first window of the Import Export Wizard.

1. Do one of the following:
   - From the Framework window Select **Import Export Wizard** from the **Tools** menu or click the Import Export Wizard icon in the toolbar. When the **Vector Import Export Wizard Welcome** window is displayed, select **Export**, and then click **Next**.
   - From Navigator, right-click on a vector and select **Export** from the shortcut menu.
2. In the next window, browse the **My World** directory and find the ACD or ScratchPad folder that contains one or more vectors that you want to export.

   Important:
   If you are not connected to a server, you need to double-click the server and complete the **Connect to *server name:*** window before you can view its ACDs.
3. Click the ScratchPad folder or ACD that contains the vectors you want to export.
4. Click **Next**.

   The system displays the **Available for Selection** window.

Using the Available for Selection window

In the Available for Selection window, you may display a list of all vectors available for export, or you may filter the list to display only those vectors containing certain criteria.

1. To filter the list of vectors available for selection, enter any of the following parameters in the Filter: text box.

   These parameters can be from 1 to 20 characters. These characters *can* include:

   - Letters
   - Numbers
   - Underscores **(_)**
   - Blanks
   - Commas **(,)**
   - Periods **(.)**
   - Plus signs **(+)**
   - These characters *cannot* include:
   - Backslash **(\)**
   - Grave accent **(‘)**
   - Tilde **(~)**
   - Double quotes **(")**
   - Pipe symbol **(|)**

   These parameters *can* include pattern-matching wildcards, such as:

   - Question mark **(?)** (exactly one character)
   - Asterisk **(*)** (any number of characters, including none)

   Entering characters or characters with wildcards restricts the vectors that are displayed in the Available for Selection (Filtered): list box to those that partially or completely match your entry. For example:

   - Entering ***Sales*** matches and displays available vectors named **Pre-Sales**, **Sales**, and **Sales Split**.
   - Entering **QFA*1** matches and displays available vectors named **QFA1**, **QFA 201**, and **QFASupport01**.

2. Take one of the following actions to select one or more vectors you want to export from the filtered list of vectors that are available for selection:

   - Select the vector in the Available for Selection: list box, and then click the down arrowhead button.
   - Hold down Control while you select each one of the vectors that you want and then click the down arrowhead button.

- Hold down Shift while you select the first and last in a group of vectors that you want and then click the down arrowhead button.
- Click the down arrowhead button with the horizontal line under it to move *all* vectors that are in the filtered Available for Selection: list box to the Selected: list box.

You may deselect one or more vectors by reversing any of these actions; for example, using the up arrowhead button to move highlighted filters in the Selected: list box back to the Available for Selection: list box.

3. Click Next to go to the next window in the wizard.

   The system displays the Export Archive File window.

Using the Archive File and Export Summary windows

The Export Archive File window lets you choose the archive file to which you want to export the vectors.

1. To use the Export Archive File window, do one of the following:
   - Enter the full path of the archive file where you want to export the vectors.
   - Click Browse if you want to browse the network to find the target folder where you want to export the vector files.

   The system displays the Select Export Archive dialog box.
2. Explore the network to find the archive file to which you want to export the vectors.
3. When you find the file, highlight it and click Open.

   The system displays the Export Archive File window, which shows the path of the file you selected.
4. Click Next. The window that appears depends on whether or not the archive file you are exporting is already present in the destination folder. For example:
   - If the archive file is already present, the system displays a window that gives you the opportunity to specify how you want to handle the files. Go to Step 5.
   - If the archive file is not present, the Vector Export Summary window appears. Go to Step 6.
5. If the archive file is already present, perform one of the following actions:
   - If you do not want to export those vectors whose names already exist in the destination file, click “Do not overwrite duplicates.”
   - If you want to overwrite those vectors whose names already exist in the destination file, click “Overwrite duplicates.”
   - If you want to create a new file to replace the old one, click “Replace the entire contents of the file.”

6. Click Next.

   The system displays the Vector Export Summary window. This window summarizes the information collected to perform the export action.

7. Perform one of the following actions:

   - If you need to modify the values on this window, click Back to go to previous windows.
   - If you are satisfied with your choices, click Export to initiate the export process.

   When the export is completed, the system displays the Export Completed message, which gives the number of vectors exported to the archive file.

Importing vectors

The Import Export Wizard guides you through the process of collecting information for importing vectors and initiating the import process. It consists of several dialog boxes in sequence, for example, one dialog box filters and selects the vectors you wish to import, and another dialog box performs the import.

Accessing the Import Export Wizard

Follow these steps to use the first window of the Import Export Wizard.

1. In the Framework window, do one of the following:

   - Select Import Export Wizard from the Tools menu.
   - Click the Import Export Wizard icon in the toolbar.

   The system displays the Vector Import Export Wizard Welcome window.

2. Select Import, and then click Next.

   The system displays the Import Archive File window.

3. To use the Import Archive File window, do one of the following:

   - Enter the full path of the archive file containing the vectors you want to import.
   - Click Browse if you want to browse the network to find the archive file containing the vectors you want to import.

   The system displays the Browse dialog box.

4. Explore the network to find the file containing the vectors you want to import
5. When you find the file, highlight it and click Open.

   The system displays the Import Archive File window, which shows the path of the file you selected.

6. Click Next.

   The system displays the Import Selection window.

Using the Available for Selection and Summary windows

In the Available for Selection window, you may display a list of all vectors available for import, or you may filter the list to display only those vectors containing certain criteria.

1. To filter the list of vectors available for selection, enter any of the following parameters in the Filter: text box.

   These parameters can be from 1 to 20 characters. These characters *can* include:

   - Letters
   - Numbers
   - Underscores **(_)**
   - Blanks
   - Commas **(,)**
   - Periods **(.)**
   - Plus signs **(+)**

   These characters can *not* include:

   - Backslash **(\)**
   - Grave accent **(‘)**
   - Tilde **(~)**
   - Double quotes **(")**
   - Pipe symbol **(|)**

   These parameters *can* include pattern-matching wildcards, such as:

   - Question mark **(?)** (exactly one character)
   - Asterisk **(*)** (any number of characters, including none)

   Entering characters or characters with wildcards restricts the vectors that are displayed in the Available for Selection (Filtered): list box to those that partially or completely match your entry. For example

   - Entering ***Sales*** matches and displays available vectors named **Pre-Sales**, **Sales**, and **Sales Split**.
   - Entering **QFA*1** matches and displays available vectors named **QFA1**, **QFA 201**, and **QFASupport01**.

2. Take one of the following actions to select one or more vectors you want to import from the filtered list of vectors that are available for selection:

   - Highlight the vector in the Available for Selection: list box, and then click the down arrowhead button.
   - Hold down Control while you highlight each one of the vectors that you want and then click the down arrowhead button.

- Hold down Shift while you highlight the first and last in a group of vectors that you want and then select the down arrowhead button.
- Click the down arrowhead button with the horizontal line under it to move *all* vectors that are in the filtered Available for Selection: list box to the Selected: list box.

You may deselect one or more vectors by reversing any of these actions; for example, using the up arrowhead button to move highlighted filters in the Selected: list box back to the Available for Selection: list box.

3. Click Next.

   The system displays the next window, which allows you to select the ACD or ScratchPad folder to which you want to import the vectors.

4. Browse the My World directory and find the ACD or ScratchPad folder to which you want to export the vectors.

   Important:
   If you are not connected to a server, you need to double-click the server and complete the “Connect to (server name)” window before you can view its ACDs.

5. Highlight the appropriate ScratchPad folder or ACD.
6. Perform one of the following:
   - If you do not want to import those vectors whose names already exist in the destination file, click “Do not overwrite duplicates.”
   - If you want to overwrite those vectors whose names already exist in the destination file, click “Overwrite duplicates.”
7. Click Next.

   The system displays the Vector Import Summary window. This window summarizes the information collected to perform the import action.

8. Perform one of the following:
   - If you need to modify the values on this window, click Back to go to previous windows.
   - If you are satisfied with your choices, click Import to initiate the import process.

   When the import is completed, the system displays the Imported Completed message, which gives the number of vectors imported to the ACD or ScratchPad.

Troubleshooting

If you are having trouble with any of the procedures mentioned in this document, please read through this section before calling Avaya for help. The problem may be something simple that you or your distributor can solve.

If you have not solved the problem after reading this section, and you are a customer within the United States, contact the Avaya National Customer Care Center at 1-800-242-2121. Customers outside the United States should contact their Avaya representative or distributor.

If you receive any error messages in the course of a failed installation, record the messages to assist the support personnel in diagnosing the problem.

Troubleshooting FAQ

This section contains the answers to frequently asked questions (FAQ) that will help you with problems you may encounter when installing Visual Vectors software, connecting to **hhupd.exe** CMS servers, or running Visual Vectors tools. It contains the following topics:

Installing and uninstalling Visual Vectors

The following questions and answers relate to installing or uninstalling Visual Vectors software:

There are several different installation programs. What are the differences? Which one should I run?

Selecting **Local** runs **setuplocal.exe** to install Visual Vectors completely on one computer. Selecting **Network** runs **setupnetwork.exe** to install Visual Vectors on a network server to be shared by one or more users. After network installation, run **setupclient.exe** in the shared network folder from each user's computer. Using AutoPlay runs **setup.exe**, which gives the options of local or network install.

Why are my previous settings and offline objects missing?

There are a few possible causes:

Corrupt user files – The user files (**user.odb** and **user.odt** in your **.cvvv folder**) are corrupt or were deleted.

Try to restore a pair of backup copies from the last time you exited successfully (**userBK1.odb** and **userBK1.odt**) or the next to last time you exited successfully (**userBK2.odb** and **userBK2.odt**). To determine where your **.cvvv folder** is, see Importance of the HOME variable on page 87. To restore, move any existing corrupt files out of **.cvvv**, and then copy the two backup files and rename them **user.odb** and **user.odt**.

Missing user files – The user files (**user.odb** and **user.odt**) have been moved.

If possible, find out where the files were moved to and update the HOME variable to reflect the new location. For details about the HOME variable, see Importance of the HOME variable on page 87.

The HOME variable has been changed.

Move the user files (**user.odb** and **user.odt**) to the new location specified by the HOME variable. For more details about the HOME variable, see Importance of the HOME variable on page 87.

Why can't I uninstall from Control Panel's Add/Remove Programs dialog box?

If Visual Vectors appears on the list of programs available for uninstallation but fails when the uninstall action takes place, it is likely that the installation log file, **install.log**, or required entries in the Windows registry, are missing, invalid, or corrupted.

If the application does not appear on the program list, it is likely that the installation program was executed from a machine other than the one where Visual Vectors software is installed. It is best to find out where the installation program was executed from and remove it from there using the Uninstall program (**Unwise.exe**). You can also try to reinstall the software to the directory where it was previously located and then uninstall it. If these do not work, or the uninstall still fails, you must remove the software manually. This latter procedure requires careful removal of entries in the Windows registry, and should be done *only* under the direction of an Avaya associate.

Importance of the HOME variable

Why do I get a warning message about not having set the HOME environment variable on Windows?

Visual Vectors software allows multiple users on Windows. By default, a HOME environment variable is not defined for each user in the Control Panel's System Properties window. A folder named **.cvvv** is created in the root folder of the drive on which Windows is installed (for example, **C:\.cvvv**). All users access the same files, often causing conflicts. If a user variable named HOME is defined, the folder storing user-specific files is created in the HOME folder (for example, **H:\myhome\.cvvv**). If each HOME environment variable is unique for each Windows user, data files will be unique.

The installer detects if the HOME variable is set. If it is not set, the system displays a page in the install wizard which lets the user set it. The user chooses the location using a Browse button. The wizard lets the user progress even if it is not set, because it can default to a location.

The default location is an operating system specific location. On Windows 95 and Windows 98, it is the root directory of the system drive. On Windows NT and Windows 2000, it is your user profile directory.

See the Windows documentation for more information about how to set the HOME environment variable.

Startup

The following questions and answers relate starting to run Visual Vectors software:

Why won't Visual Vectors start?

The following are the two most likely causes:

1. The Visual Vectors splash screen (resembling the Help About screen) does not appear and Visual Vectors does not start.

   Applications and processes can be checked by pressing CTRL+ALT+DEL in Windows 95 Windows 98 and by selecting Task Manager in Windows NT and Windows 2000. It is possible that one or more of the files, for example, **vvjars.cfg**, or **.jar files,** is missing.

   Call your Avaya support professional, representative, or distributor, who has a list of all the folder structures, file content, and distribution list. If any of these are missing, reinstall Visual Vectors. If reinstallation fails, you will have to uninstall and then reinstall Visual Vectors.

2. The process seems to start, but the system displays the following message:

   "The user database is already in use. You can have only 1 user of this database at a time."

   This is caused by two users trying to use the same user database at the same time, or the same user trying to run Visual Vectors twice. Two different users may have the same HOME environment. See the HOME environment section on Importance of the HOME variable on page 87 for more information.

   Define unique HOME variables for the users. Do not try to run one copy of Visual Vectors more than once.

Connectivity

The following questions and answers relate to connecting to a CMS server running Visual Vectors Server software:

Why can't I log into the CMS/Visual Vectors Server?

Check the following for reasons why login to the server is refused:

- The login ID and/or the password are invalid or expired.
- Someone using the same login ID is already logged in to the server. You have the option of logging the other user out.
- The maximum number of users allowed to be logged in to the CMS server has been reached.

I don’t get a login prompt at all. Why can’t I connect to a server?

If you do not get a login prompt, you should get an error message indicating what the problem is. These include:

- The client computer is not part of the network. For example, the client computer is not physically plugged into the network, or the network configuration (TCP/IP setting) is incorrect. You should receive an error message about not being able to find the server.
- The server name is invalid. Try to “ping” it from an MS-DOS Server if you are running Windows 95 or a MS-DOS Command Prompt window if you are running Windows NT.
- The CMS or Visual Vectors Server software did not start on the server. See the server documentation for more information.
- The Orbix Daemon or OrbixNames service did not start on the server. See the server documentation for more information on checking these items.

What should I do if the connection to the server is lost?

If you have tried to reconnect to the server and have been unsuccessful, verify the following:

- The CMS server hardware and software are running. If either is not running, restart it.
- The Visual Vectors Server software is still running. If it is not running, restart it. For more information, see:
  - — *Avaya Call Management System R3V11 Software Installation, Maintenance, and Troubleshooting,* 585-215-115
  - — *Avaya Visual Vectors Installation and Getting Started*, 585-210-710

  Note:

  In cases where a firewall is in place, there may be situations in which all of the available TCP/IP ports in the server are being used, even though the Visual Vectors Server software is running. If it is decided that all of the ports are being used, the Visual Vectors Server should be restarted.
- Your client machine is still part of the network; for example, the network cable is still properly connected.

Navigator

The following questions and answers relate to using Navigator in Visual Vectors Client software:

Why can’t I see or select some of the options on the context menu?

Users might not have permission to perform some operations for one or more particular objects. For example, if you do not have write permission to either an ACD or to Call Center Administration, the “New” option does not appear in the Vector Folder context menu for that ACD.

My offline objects are missing. Where are they?

See “Why are my previous settings and offline objects missing?” in the Installing and uninstalling Visual Vectors on page 86.

Why can’t I view my vector as Ascii text?

You might be looking at an offline vector. The 'View as Ascii” option exists only for vectors that are stored on an ACD, as the offline version may not be valid.

Vector Editor

The following questions and answers relate to using the Vector Editor tool in Visual Vectors Client software:

Where are the step properties and comments in my vector printout?

The vector step properties and comments are printed on a separate page. This can be turned on and off.

Why are the ASCII and graphical versions of my vector different?

This generally occurs because the vector was recently modified and not saved. Save the vector and then select “View as ASCII” again.

Why isn’t “Save” enabled in the Vector Editor?

Users might not have write permissions for the vectors. However, a “Save As” operation can be performed to copy the vector to a different location for which the user does have permission.

Why can’t I zoom in or out further?

The Vector Editor has finite zoom factors. From the default view, the user can zoom in three steps and zoom out four steps.

When I saved my vector, all the open property boxes disappeared. What happened?

When a vector is saved, all the open vector step property boxes are dismissed. Only the changes in committed property boxes, that is, those for which the Apply button was selected, are saved. Changes to property values not yet committed are discarded.

Why can’t I drag floating comments with vector steps?

When a group of vector steps and floating comments are selected and dragged, the comments cannot be dragged with the steps. However, cutting or copying the selected group is possible. This also applies to a selected group of floating comments. Only one comment at a time can be dragged.

What can I do if I am editing a vector and the connection is lost?

If the connection to a CMS goes down (for example, if the CMS server crashes), the user must save online vectors to an offline ScratchPad or to an ACD on another CMS. A message notifies the user of this. Because valid vector conversion from online to offline and from one ACD to another requires information from the CMS server, steps may be changed when saving vectors this way.

If the ACD link goes down, the user is presented with a choice of either saving the vector being edited to another location or exiting from the editor. The vector being edited can be saved to another ACD or to an offline scratch pad.

VDN Assignment Wizard

The following questions and answers relate to using the VDN Assignment Wizard in Visual Vectors Client software:

Why can’t I see my VDNs from the filtered list?

- Check to be sure that no extra spaces or dots were accidentally entered in the filter.
- Check that the user has permissions for the VDNs and the ACD containing them.

Why can’t I see the ACD that I want?

The ACD might not have Call Vectoring enabled. To be able to select an ACD, it must have Call Vectoring enabled and the user must have permission for the ACD.

Avaya Supervisor integration

The following questions and answers relate to integrating your Supervisor software into Visual Vectors Client software:

Why isn’t the Supervisor icon displayed on the Framework toolbar, when I have a local installation of Supervisor software on the same PC as the Visual Vectors software?

To diagnose the problem:

1. Check what version of Supervisor you have installed. If it is version 6 or greater, continue with Step 3. If it is an older version, upgrade your copy of Supervisor software to at least version 6 and try again.
2. Check that you can run Supervisor by itself, for example, from the Start Menu. If you can, continue with Step 3. If you cannot, reinstall Supervisor and try again.
3. When installed, Supervisor setup writes a configuration file in the Windows folder **%WINDIR%** (for example, **C:\Windows, D:\Winnt**). This file is named **cvsup.cfg** and it contains a single line of plain text that is the path to Supervisor’s executable file.

   Confirm that the file **%WINDIR%\cvsup.cfg** exists and that it contains only the path to the executable file (any text editor such as Notepad can be used to inspect the contents of **cvsup.cfg**).

   If the file exists and it contains the appropriate path, contact your Avaya support professional, representative, or distributor. If the file does not exist or it does not contain the appropriate path, install Supervisor and try again. If this fails to solve the problem, contact your Avaya support professional, representative, or distributor.

Why isn’t the Supervisor icon displayed on the Framework toolbar if I have a client installation of the Supervisor software on the same PC as the Visual Vectors software?

Follow these steps to diagnose the problem:

1. Check the version of Supervisor that you have installed. If it is version 6 or greater, continue with Step 2. If it is an older version, upgrade your copy of Supervisor software to at least version 6 and try again.
2. Check that you can run Supervisor by itself, for example, from the Start Menu. If you can, continue with Step 3. If you cannot, reinstall Supervisor and try again.

   Check that the main program files for Supervisor are installed on a networked drive. Ensure that there is network connectivity between the local and the networked drive For example, check if you can you browse to the drive using Windows Explorer.

   If the network connectivity exists, reinstall Supervisor and try again. If this fails to solve the problem, contact your Avaya support professional, representative or distributor. If the network connectivity does not exist, contact your system administrator to help restore the network connectivity.

Performance issues

The following questions and answers relate to the performance of your Visual Vectors client software:

Why isn't the application more responsive?

There are a number of possible causes:

- The computer is accessing the hard disk frequently. This indicates that the computer does not have enough memory. To review the hardware requirements see, *Avaya Visual Vectors Installation and Getting Started*, 558-210-710.
- Too many application programs are open. This makes less physical memory available to Visual Vectors, especially when memory-intensive operations are running. Close down other applications to provide more memory for Visual Vectors.
- The network link is slow. Visual Vectors might be connected to the server via a slow connection. Use a faster network link or a higher-speed modem.

Why isn't deleting an object in Navigator instantaneous?

When an object is deleted, Navigator makes a copy of it so that the delete operation can be undone.

Why isn't viewing the VDNs for an ACD in Navigator instantaneous?

The first time after you log in to a CMS server and select a VDN Folder in an ACD, permission-checking is performed if it is enabled. The delay depends on the CMS server platform and the number of measured VDNs. It can range from one second to more than a minute.

Miscellaneous issues

The following questions and answers relate to miscellaneous questions about Visual Vectors Client software:

Why does the software seem to hang, with the cursor in the wait state?

The application may not actually be hanging. Sometimes the cursor stays in the wait state even after a task is completed. If the cursor is moved, it will turn back to its normal state.

If a task takes place in the normal fashion, the progress bar should appear on the screen, showing progress on the work being done, and then disappear. If a task hangs, the progress bar should stay on the screen for some period of time with no progress reported. In this case, moving the cursor is usually not possible.

Why does Visual Vectors need Microsoft Internet Explorer 3.02 or later to work?

Help in Visual Vectors is implemented using HTML Help, which requires Internet Explorer 3.02 or later to work. Although Internet Explorer 3.02 or later must be installed on the computer, it does not have to be set as the default browser, that is, a user could use another Web browser such as NetScape Navigator.

Why doesn't Visual Vectors Help appear to work?

There are a things that can prevent help from working:

- The Help file, for example, **vv_en.chm** (the English version), is missing or corrupted. Copy this file from another working software installation or reinstall Visual Vectors.
- The Help registry entries were removed or are corrupted. Run **hhupd.exe** to set up the registry for HTML Help.
- The installation program was executed from another machine, therefore, the registry entries for Help on this computer are missing. Run **hhupd.exe** to set up the registry for HTML Help.

Why does the application fail to repaint the screen or respond to any input?

This should not normally happen. However, something in your computer environment could be causing this symptom. These problems may occur as general protection faults (GPFs), lockups, or other mixed behavior.

To determine if this type of problem exists:

1. Move everything out of your StartUp group.
2. Restart Windows.
3. Run Visual Vectors, making sure that it is the only application running.

   If the problem does not go away, provide your Avaya support professional, representative, or distributor with the error log (**error.log**) and trace log (**trace.log**) files. Also include any useful information you can gather, for example, your operating environment and other computer applications, Visual Vectors installation type (Local or Network/Client), activity when Visual Vectors stopped responding, and so on.

   If the problem goes away, then another software application is causing your computer to have this problem. Continue with Step 4.
4. Start running each file that was in your StartUp group.

   If you still encounter problems, you will not be able to run this software at the same time that you are running Visual Vectors. You should speak with the manufacturer of this package to determine why it is causing a problem in your environment.

Why did the software crash and what should I do?

Send the log files (**error.log** and **trace.log**) and the user files (**user.odb** and **user.odt**) to your Avaya support professional, representative, or distributor, together with any useful information you can gather. This information might include, for example, your operating environment and other PC applications, Visual Vectors installation type (Local or Network/Client), the software version or load number, activity when Visual Vectors crashed, and so on.

General computer issues

The following questions and answers relate to general issues about using Visual Vectors Client software on your computer:

Why is accessing my hard drive so slow?

A fragmented hard disk leads to slow disk access. Be sure to run a defragmentation utility to speed up disk access, such as the DEFRAG.EXE that is available with Windows 95. Defragmentation utilities are also available for Windows NT 4.0. **Important:** Do not run any defragmentation operation while using Visual Vectors or any applications that require disk access. This can lead to file corruption.

Why is it necessary to access my hard drive so much?

To determine if a problem exists:

1. Check your Windows swap file configuration.
2. Check Virtual Memory settings by right-clicking the My Computer Desktop icon and selecting Properties. Click the Performance tab and check Virtual Memory settings.

   If the recommended settings are selected, continue with Step 3.

   If the recommended settings are not selected, allocate more Virtual Memory and restart Windows.
3. Check the free space of the drive on which Windows is installed. A full hard disk can create a bottleneck because there may not be sufficient space to generate an optimal swap file.

   If there is 50 MB or more of free space, continue with Step 4.

   If there is less than 50 MB of free space, create more space and restart Windows.
4. Check the computer memory in Windows. Optimal performance is attained by 64MB or more of physical RAM.

Do you think I might have some kind of virus?

Viruses typically affect disk and memory access routines. This can cause performance problems. Use a good virus-checking package to scan for and remove viruses. Run it regularly. However, for best performance, do not run it at the same time that you are using Visual Vectors software.

Glossary

Access permissions

Permissions that are assigned to a user so that the user can gain access to different areas of a server or administer specific entities of an ACD, for example, splits or skills, trunk groups, vectors, and VDNs. Access permissions are specified as read or write permission. Read permission means that the user can access and view data. Write permission means that the user can add, modify, or delete data and execute processes.

ACD

See *Automatic Call Distribution*.

Active VDN calls

Also known as counted-calls to VDN. A Call Vectoring capability available with G3V4 or later switches. Counted-calls to VDN is a parameter of the “go to step” and “go to vector” commands. It provides conditional branching to a different step in the same vector or to a different vector based on the number of incoming trunk calls a VDN is currently processing in a vector or at an agent.

Agent

A person that answers calls to an ACD split/skill. The agent is known to CMS by a login identification that is entered on the telephone keypad.

Agent login ID

A number that is entered by an ACD agent from a voice terminal to activate the agent position. Agent logins are required for all CMS-measured ACD agents.

Agent skill

An attribute that is associated with 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 a set of skills. The meaning of each Agent Skill is defined by the customer. Examples of skills are the ability to speak a particular language or the expertise to handle a certain product.
See also *Primary skill*, *Secondary skill*, and *Skill level*.

Announcement

A recorded voice message that normally tells the caller what destination the call has reached. The announcement also often tries to persuade the caller to stay on the line. With Call Vectoring, announcements can be part of a vector's call processing. An announcement is assigned to a vector by entering an announcement number.

Automatic Call Distribution (ACD)

A switch feature using software that channels high-volume incoming and outgoing call traffic to agent groups that are known as *splits* or *skills*. Also an agent state where the extension is engaged on an ACD call.
See also *Redirect On No Answer* and *Auto-Available Split*.

Call Management System (CMS)

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

Call prompting

A switch feature that routes incoming calls based on information entered by the calling party, such as an account number. The caller receives an announcement and is prompted to select an option from those that are listed in the announcement.

Call Vectoring

A switch feature that provides a highly flexible method for processing ACD calls using VDNs and vectors as processing points between trunk groups and splits. Call vectoring permits treatment of calls that is independent of splits. Similar to a computer program, a call vector is a set of instructions that control the routing of incoming calls based on conditions that occur in a call center environment. Examples of call vector conditions include time of day and the number of calls in queue.

CMS

See *Call Management System*.

CMS Supervisor

The Call Management System client application for the Microsoft Windows operating environment.

Database tables

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

Date format

The standard format for entering dates on Supervisor reports.

Acceptable formats are:

Month/day/year (for example, 3/21/93).

A “-” offset based on today's date (for example, -1 for yesterday). You can also enter a range of numbers (for example, 0 through -7).

Individual data entry items that are separated by a semicolon, for example, 3/21/93;3/23/93;3/25/93.

Ranges that are separated by a hyphen, for example, 3/21/93-3/25/93.

When you specify a date for a weekly report, that date or range of dates must correspond to the week start day selected in the System Setup-Storage Intervals window. If the date and day do not match, the system displays the message “No records found” in the status line.

The month start date must be the first day of the month.

Dictionary

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

EAS

See *Expert Agent Selection*.

Entity

A generic term that refers to one of the following: Announcement, Split/Skill, Trunk Group, VDN, or Vector. Entities that Visual Vectors can view or administer include Vectors and VDNs. Entity names are obtained from the CMS Dictionary; renaming entities using Visual Vectors results in changes to the CMS Dictionary.

Expert Agent Selection (EAS)

Expert Agent Selection (EAS) is an optional switch feature that builds on the power of the Call Vectoring and ACD features of the switch to match the skills required to handle a particular call to an agent who has at least one of the skills that a caller requires. The ACD queuing and the Queue and Check Vector commands are used to route a call to an agent with the appropriate skill to handle that call. With EAS, call distribution is based on skill.

CMS collects data on skills in the same manner as it collects data on splits.

CMS also reports VDN data by VDN skill preference, so that customers can assess the call center performance relative to calls requiring particular skills. CMS reports how many calls were handled, how long these calls waited for service, and the average talk time for calls queued to a particular skill preference in a particular VDN.

Folder

An object in the Navigator tool that contains entities (splits or skills, trunk groups, VDNs, and vectors). Folders are used to visually group all entities of a specific type for an ACD.

Framework

The Visual Vectors software window from which you access tools such as Navigator, Vector Editor, and VDN Assignment. You can also use the File menu in this window to Connect to or Disconnect from CMS servers.

Historical database

Contains intrahour records for up to 62 days, daily records for up to 5 years, and weekly and monthly records for up to 10 years for each CMS-measured agent, split/skill, trunk, trunk group, vector, and VDN.

Logical agent

An EAS feature that associates the agent's login ID with the physical extension when the agent logs in. Properties such as the assigned skills, class of restriction, and coverage path are associated with the login ID rather than the physical extension. This allows agents to log in at any available set.

Agents are assigned a single set of work mode buttons, rather than one set per skill. This simplifies the agent's interface to the work mode buttons. When the "MI" or "AI" button is lit, the agent is available to take a call in any assigned skills.

The Logical Agent capability allows calling agents to connect by dialing into their login Ids. Calls to login Ids can be treated as direct agent ACD calls, given the proper class of restriction, or they can be treated as extension (personal) calls. Treating the calls as direct agent calls can be used to help distinguish business-related calls from personal calls.

Look Ahead Interflow (LAI)

A switch feature that can be used to balance the call load among multiple call centers. LAI works with Call Vectoring and ISDN PRI trunks to intelligently route calls between call centers. This allows multiple call centers to share work loads, expands hours of coverage, and allows calls to be transparently handled by call centers in different time zones.

Measured

A term that means an ACD entity (agent, split/skill, trunk, trunk group, vector, VDN) has been identified to CMS for collection of data. If the ACD element is not measured, no data is collected.

My World

A collection of objects and entities that can be viewed and administered through Visual Vectors Framework. What you can access, edit, or assign depends on your permissions.

Nonprimary split/skill

When a call is queued to multiple splits or skills, the second and third splits or skills to which the call queues in a VDN are called nonprimary splits or skills. They are also referred to as secondary and tertiary splits or skills, respectively.

Primary skill

Skills that are assigned to an agent. Primary skills are the areas in which the agent has the most expertise.

See also Agent Skill.

Pseudo-ACD

An area that you create on your CMS to place previously backed-up ACD data. A pseudo-ACD is not a live or real ACD and does not communicate with any switch.

Queue

A holding area for calls that are waiting to be answered in the order in which they were received. Calls in a queue may have different priority levels, in which case, calls with a higher priority are answered first.

Queued

A trunk state in which an ACD call has seized the trunk and is queued to a split/skill waiting for an agent to answer.

Real-time database Consists of the current and previous intrahour data on each CMS-measured agent, split, trunk, trunk group, vector, and VDN.

ScratchPad The Default ScratchPad name is a container area on your PC that is designed to save vectors offline when a switch or ECS link or CMS connection is not available. You can create a hierarchy of sub-folders under the default folder by selecting New ScratchPad from Navigator's File menu.

Secondary skill Skills that are assigned to an agent. Secondary skills are the areas in which the agent does not have extensive expertise or are not the agent's preference. Secondary skills a used in G3V2 through G3V4 with EAS.

See also *Agent skill*, *Skill level*.

Seized A trunk state in which a call is using the trunk either incoming or outgoing.

Service observing-VDNs A feature available with G3V4 or later switches that gives a telephone user the ability to monitor the treatment a call receives as it is processed by a VDN.

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. Also, a skill can be defined as a specific customer need or requirement, or perhaps a business need of a call center.

Skill hunt group When EAS is enabled, calls are routed to specific skill hunt groups. These skill hunt groups are usually based on the needs of the customers. Agents are not assigned to a skill group, but they are assigned specific skills that become active when they log in to their telephones.

Skill level A priority level from 1 (highest) to 16 (lowest) that indicates an agent's level of expertise or ability to handle calls to the given skill. Skill levels are used with ECS Version 5 and later.

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.

Staffed agent An agent who is currently logged in to the switch.

Station An unmeasured extension. An extension that is not currently staffed by an agent or that is a member of an unmeasured split/skill or hunt group.

Switch A private switching system that provides voice-only or voice and data communications services including access to public and private networks for a group of terminals within a customer's premises.

Trunk	A telephone circuit that carries calls between two switches, between a Central Office (CO) and a switch, or between a CO and a telephone.
Trunk group	A group of trunks that are assigned the same dialing digits. These digits are either a telephone number or a Direct Inward Dialed (DID) prefix.
Universal Call Identifier (UCID)	A number that uniquely identifies a call in a network of nodes that support UCID. This number is a part of the records in the Call History feature of CMS.
VDN	See *Vector Directory Number*.
VDN calls-counted	Also known as counted-calls to VDN and active VDN calls. A Call Vectoring capability available with G3V4 or later switches. Counted-calls to VDN is a parameter of the “go to step” and “go to vector” commands that provides conditional branching (to a different step in the same vector or to a different vector) based on the number of incoming trunk calls a VDN is currently processing.
VDN of Origin Announcement (VOA)	A short announcement that is assigned to a VDN through switch administration. The VOA identifies the origin or purpose of a call for the call center agent who answers the call.
VDN skill preference	A prioritized list of agent skills administered for a VDN that are required or preferred for the answering agent. VDN Skill Preferences represent the requirement that a call be routed to an ACD agent with a particular ability or set of abilities. |For EAS only, up to three skills can be assigned to a VDN. Calls use VDN skills for routing based on the preference that you administer in the vector. VDN skill preferences are referred to in the vector as “1st,” “2nd,” or “3rd.”
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. Calls enter vector processing via VDNs, which can receive calls from assigned trunk groups, from other vectors, or from extensions connected to the switch.
Vector command	A vector step that describes the action to be executed for a call, for example, Queue, Check, Disconnect.
Vector Directory Number (VDN)	An extension number that enables calls to connect to a vector for processing. A VDN is not assigned to 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. The VDN by itself may be dialed to access the vector from any extension that is connected to the switch.
Vector file	The Windows accessible file that is created by the Export operation. An exported vector file can contain one or more vector objects.

Vector object	A term that defines a vector that is accessible to the Visual Vectors application. Vector objects include vectors in a switch, vectors stored in the Visual Vectors ScratchPad folder, and vectors within a vector file.
Vector step	One processing step in a vector. A vector step consists of a command and one or more conditions or parameters. These conditions or parameters are found on a step's Properties window in Visual Vectors client software.
Vector step condition	A condition that accompanies a vector command that defines the circumstances in which the command will be applied to a call. These conditions are found on a step's properties window in Visual Vectors client software.
Visual Vectors Client	Client software that provides a graphical user interface for creating or modifying configured elements of ACDs that are connected to a CMS.
VOA	See *VDN of Origin Announcement*.

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