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Bell Labs Innovations

CentreVu® Visual Vector's

Version 1.0

User Guide

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Acknowledgment

This document was prepared by the Global Learning Solutions organization, Lucent Technologies, Denver, Colorado, U.S.A.

CentreVu® Visual Vector's Version 1.0

User Guide

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Preface P

General Information

Purpose

CentreVu Visual Vectors User Guide, 585-215-868 is written primarily for the *CentreVu* Call Management System (CMS) administrator who has access to all areas on one or more *CentreVu* CMS server(s), and secondarily for auxiliary administrators and split/skill supervisors who have limited access (for example, to Vectors and Vector Directory Numbers).

This book specifically addresses the *DEFINITY* Enterprise Communications Server (ECS) functionality of *CentreVu* CMS. If you are implementing *CentreVu* CMS R3V6 server for the first time, you will have *DEFINITY* ECS R6. This call center configuration supports all of the functions accessible using *CentreVu* Visual Vectors software.

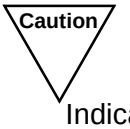
Where to begin

Read "Setting Up Your Call Center World" on page 2-1 to learn how to use the *CentreVu* Visual Vectors interface. If you are unfamiliar with the Automatic Call Distribution (ACD) feature, see "ACD Basics" in the *CentreVu CMS R3V6 Administration,* 585-215-850, document.

Safety labels

Actions or inactions that may cause difficulties are labeled as follows:

Caution



Indicates that failure to take or avoid a specified action could result in loss of data.

Warning

Indicates that failure to take or avoid a specified action could result in physical harm to the operator or the equipment.

Document organization

The following table describes the contents of each chapter and appendix in this document.

#	Title	Contents
1	Introduction	Generally describes *CentreVu* Framework and Visual Vectors and includes things you should know before using the product.
2	Setting Up Your Call Center World	Describes how to use the Navigator user interface to set up the objects in your Call Center World.
3	Using Framework and the Navigator	Describes the *CentreVu* Framework user interface, and tells you how to view objects and perform actions with the Navigator tool.
4	Using the Vector Editor	Tells you how to use the Vector Editor to create new and edit existing vectors, as well as to attach comments, display and print vectors.
5	Using the VDN Administration Wizard	Tells you how to use this wizard-based interface to assign VDNs to vectors and set Skill Preferences.
6	Troubleshooting	Presents answers to frequently asked questions about installing and using Visual Vectors software.

Conventions used in this document

The following conventions are used throughout this document.

Product release

DEFINITY Enterprise Communications Server (ECS) is referred to as "ECS." Unless otherwise noted, the term ECS refers to Release 6 or later. The functionality of earlier switch releases is noted if it differs from that of Releases 5 and 6.

Document number

Lucent publication titles are followed by their document number. For example, *See CentreVu Visual Vectors Installation & Getting Started, 585-215-869 for more information*.

Typography

`Courier font` designates *input* and *output*.

- Input is something you type into the user interface. For example, *Type* `x` *next to Printer, Terminal, or File*.
- Output is a character, word or phrase that the system generates. For example, `Please wait for initialization .....`

Italic font highlights references to file names and directories. For example, */cms*.

Related documents

There are many documents that can help you use *CentreVu* CMS to its maximum capability. The title and document number of the most important ones are listed here.

- *CentreVu Visual Vectors Installation and Getting Started,* 585-215-869
- *CentreVu CMS R3V6 Administration,* 585-215-850
- *Lucent Call Center Change Description,* 585-215-853
- *CentreVu CMS R3V6 Upgrades and Migration Issue 2,* 585-215-856
- *CentreVu CMS R3V6 Sun Ultra 5 Computers Hardware Installation,* 585-215-857
- *CentreVu CMS R3V6 Sun Ultra 5 Computers Connectivity Diagram,* 585-215-858
- *CentreVu CMS R3V6 Hardware Maintenance and Troubleshooting,* 585-215-861
- *CentreVu CMS R3V6 Sun Enterprise 3000 Computer Connectivity Diagram,* 585-215-865
- *CentreVu CMS R3V6 Sun Enterprise 3000 Computer Hardware Installation,* 585-215-867
- *CentreVu CMS R3V6 Planning, Configuration, and Implementation,* 585-215-879
- *Lucent Call Center Documentation CD-ROM,* 585-215-892.

Introduction 1

Overview

CentreVu Visual Vectors User Guide, gives you the information you need to use the client software package.

This introduction is divided into several main sections:

- “General Information” 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.
- “Things to Know Before Using Framework and Visual Vectors” describes the interactions with other call center client software.
- “Terminology” provides a list of key terms. A more extensive list of definitions appears in the glossary.
- “Things to Know About Call Center Data” describes common call center items, such as types of entities, data containers, and items.
- “Prerequisite System Administration” describes any system-level administration needed to run the client software, including permissions.

General Information

Overview

CentreVu CMS/Visual Vectors software are products used by businesses and organizations that have a Lucent Technologies telecommunications Enterprise Communications Server (ECS) or switch and receive a large volume of telephone calls that are processed through the Automatic Call Distribution (ACD) and Call Vectoring features of the switch. *CentreVu* CMS collects call-traffic data, formats management reports, and provides an administrative interface to the ACD feature on the switch. See "ACD Basics" in the *CentreVu CMS R3V6 Administration,* 585-215-850, document for more information.

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

The Visual Vectors Server software runs on the same platform as *CentreVu* CMS and supports *CentreVu* Visual Vectors clients. Using the client software, administrators can change certain properties of call center entities (such as their names), as well as create and edit vectors, assign VDNs to vectors, and set VDN Skill Preferences.

CentreVu CMS/Visual Vectors Server interfaces with the *Solaris* operating system and uses several *Solaris* system utilities to:

- communicate with CMS terminals and printers
- communicate with PCs running *CentreVu* Supervisor and *CentreVu* Visual Vectors client software
- log errors
- execute processes.

In this section

This section introduces you to:

- Supported hardware platforms
- Required software
- Supported switch releases and features.

Platforms and Required Software

Supported server hardware platforms

CentreVu CMS R3V6/Visual Vectors Server 1.0 software is certified to run on the following computers:

- *Sun Enterprise 3000*
- *Sun Enterprise 3500*
- *Sun Ultra 5*
- *Sun SPARCserver* 20
- *Sun SPARCserver* 10
- *Sun SPARCserver* 5.

CentreVu CMS running on the *Sun SPARCserver* 5 platform supports a combination of up to 128 terminals and printers. *CentreVu* CMS running on the *Sun SPARCserver* 10 or *Sun SPARCserver* 20 platforms or the *Sun Enterprise 3000* or *Sun Enterprise 3500* platforms supports a combination of up to 256 terminals and printers.

Recommended Client PC configuration

The recommended PC configuration required for *CentreVu* Visual Vectors 1.0 client software is the following:

- *Pentium* or compatible processor, running at 200 MHz or faster (the minimum supported processor speed is 133MHz, however performance may be unsatisfactory)
- A hard disk drive with 50 MB of free space before installation.
- A CD-ROM drive (not needed if you have network installation capability)
- 64 MB or more of RAM (the minimum supported amount of physical memory is 48MB). If simultaneous instances of Visual Vectors software's tool windows are running, additional memory may be required to maintain acceptable performance.
- A video monitor and adapter set to at least 800x600x256 colors
- *Windows* 95, *Windows* 98, or *Windows NT* 4.0 (with Service Pack 3 or later) operating system

  Note: The required browser for *CentreVu* Visual Vectors on-line help system is *Microsoft* Internet Explorer 3.02 or later. Before installing *CentreVu* Visual Vectors, ensure that *Microsoft* Internet Explorer 3.02 or later is correctly installed; however, it does not need to be set as your default browser or .htm application.

- A mouse or other pointing device compatible with one of the supported *Windows* operating systems
- For Network Connection:
  - WinSock 1.1 compliant TCP/IP stack
  - *Ethernet* communications board.
- For Modem Connection:
  - At least a 19.2 Kbps modem (If the modem is external, then the cable must be correctly wired to support hardware flow control.)
  - A 16550A UART communications port (or better)
  - Dial-up networking, correctly configured using PPP (point-to-point protocol) connectivity.

Required software for a *Sun* server platform

CentreVu CMS/Visual Vectors Server requires the following software packages to operate properly:

- An appropriate load of *CentreVu* CMS R3V6 (see your server documentation for the supported loads)
- An appropriate release of the Supplemental Services CD, Version 1.0
- *Solaris* 2.5.1.
- *Sun Common Desktop Environment* 1.0.2
- *SunLink* X.25 Network Interface 9.1 (if using an X.25 connection to the switch)
- 1.0 Network Terminal Server (to support CMS terminals and printers)

The *Solstice DiskSuite* software package allows the disks of a *Sun SPARCserver* system to be managed as if they were a single file system. This software is included in all new *CentreVu* CMS R3V6 installations.

Required software for a *Windows* client platform

CentreVu Visual Vectors software runs under *Windows* 95/98 or *Windows NT* 4.0. When running under *Windows NT* 4.0, *CentreVu* Visual Vectors 1.0 client software requires Service Pack 3 or later to be installed.

Note: The required browser for *CentreVu* Visual Vectors on-line help system is *Microsoft* Internet Explorer 3.02 or later. Before installing *CentreVu* Visual Vectors, ensure that *Microsoft* Internet Explorer 3.02 or later is correctly installed; however, it does not need to be set as your default browser or .htm application.

Supported Switches

Switch names and releases

CentreVu CMS/Visual Vectors Server software is certified to run with the following releases of Lucent Technologies switches:

- *DEFINITY* Enterprise Communications Server Release 6.3
- *DEFINITY* ECS Release 7.

Single and multiple ACDs

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

Depending on how the Visual Vectors Server software was installed and configured, the *CentreVu* Visual Vectors 1.0 client software can communicate with as many as 20 *CentreVu* CMS/Visual Vectors servers.

References to multiple ACDs in this document refer to multiple-switch configurations. If you have only one switch, you can ignore multiple-ACD considerations.

Prerequisite Switch and *CentreVu* CMS Features

Purpose

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

ACD Administration and Visual Vectors

CentreVu CMS/Visual Vectors software provides an administrative interface to the switch. The *CentreVu* CMS software supports *CentreVu* Supervisor clients. Using the Agent Administration and Call Center Administration areas, administrators can use *CentreVu* Supervisor to view or change various ACD-, Vectoring-, and Expert Agent Selection (EAS)-related parameters on the switch, and to 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 trunk group-to-split, trunk group-to-VDN, or VDN-to-vector assignments; start an agent trace and list the agents being traced.

The Visual Vectors Server software supports *CentreVu* Visual Vectors clients. Using the *CentreVu* 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 *CentreVu* CMS/Visual Vectors administrator should coordinate with the ECS/switch administrator to be sure that the needed ACD/CMS configuration is understood by both people.

Vectoring and Visual Vectors

The *CentreVu* CMS Call Vectoring feature enables you to create, copy, and edit vectors on any ECS. Call vectors are user-defined, call-processing programs. 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. *CentreVu* Visual Vectors provides a visually rich, intuitive graphical interface for this feature for call centers with *DEFINITY* ECS R6.3 or 7 and *CentreVu* CMS R3V6 servers.

On the ECS and *CentreVu* CMS, Call Vectoring is a separately purchased feature that is required to use Visual Vectors software. All *CentreVu* Visual Vectors windows are described in this document. A description of ECS/G3 Vectoring is in the “Call Vectoring and Related ECS/G3 Features” appendix of *CentreVu CMS R3V6 Administration,* 585-215-850. A description of Vector Contents and the allowed values for all the vectoring commands are in the “Vector Contents” appendix.

Things to Know Before Using Visual Vectors

Overview

This section describes what you should know before using the *CentreVu* Visual Vectors software.

Interactions With CentreVu Supervisor

Purpose

CentreVu Framework and Visual Vectors software is designed to work with *CentreVu* Supervisor Version 6.

Interactions With *CentreVu* Supervisor Version 6

If *CentreVu* Supervisor Version 6 or later is correctly installed on your client PC, then Visual Vectors software will display a toolbar icon and menu item in the *CentreVu* Framework window which you may use to start the *CentreVu* Supervisor Version 6 software.

Other than the ability to run it, *CentreVu* Visual Vectors 1.0 and *CentreVu* Supervisor Version 6 do not interact directly. If information from the two software programs does not seem to match, first try to log off the *CentreVu* CMS server in each program, and then log back on.

Using *CentreVu* Supervisor Version 6

Use *CentreVu* Supervisor Version 6 software to do the following:

- Generate reports on the VDNs, vectors and skill preferences you have assigned using *CentreVu* Visual Vectors tools.
- Assign names to splits/skills, trunk groups, ACDs, and Vectors/VDNs in the *CentreVu* CMS R3V6 Dictionary, so that the objects in your Call Center World will have more meaningful names.

See *CentreVu Supervisor Version 6 Installation and Getting Started,* 585-215-860 and *CentreVu Call Management System Release 3 Version 6 Administration and Operations,* 585-215-850 for more information.

Interactions With CentreVu CMS

Purpose

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

Interactions With *CentreVu* CMS R3V6

If information obtained from the two client software programs does not seem to match, log off the *CentreVu* CMS R3V6 server from each client software program, and then log back on.

Important!
Edit vectors only in Visual Vectors. If you use any other way to edit vectors, such as a CMS terminal, *comments will not be attached to vector steps*.

Using *CentreVu* Supervisor Version 6

Use *CentreVu* Supervisor Version 6 software to do the following:

- Generate reports on the VDNs, vectors and skill preferences you have assigned using *CentreVu* Visual Vectors tools.
- Assign names to entities such as splits/skills, trunk groups, ACDs, and Vectors/VDNs in the *CentreVu* CMS R3V6 Dictionary. You can use the Navigator tool in *CentreVu* Visual Vectors to give more meaningful names to these objects in your Call Center World.

See *CentreVu Supervisor Version 6 Installation and Getting Started,* 585-215-860 and *CentreVu Call Management System Release 3 Version 6 Administration and Operations,* 585-215-850 for more information.

Terminology

Overview

This section describes the terms you need to know before you begin using Visual Vectors software. These terms, as well as others, are also defined in the Glossary.

Terms You Need to Know

Terms

You need to know the following terms to understand how to use the software.

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

Automatic Call Distribution (ACD)
A switch feature using software that channels high-volume incoming and outgoing call traffic to agents grouped in splits or skills.

Also an agent state where the extension is engaged on an ACD call.

See Redirect On No Answer and Auto-Available Split.

Call Center World
A collection of objects and entities that can be viewed and administered through *CentreVu* Framework. What you can access, edit or assign depends on your permissions.

CentreVu Call Management System (CMS)
A software product used by business customers that have Lucent Technologies 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/ECS.

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

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

Dictionary
An area of CMS that can be used to assign names to various call center entities such as login IDs, splits/skills, trunk groups, VDNs and vectors. These names make call center data easier to interpret.

Entity
A generic term that refers to one of the following: Announcement, Split/Skill, Trunk Group, VDN, or Vector. Entities that *CentreVu* Visual Vectors can view or administer include Vectors and VDNs. Entity names are obtained from the *CentreVu* 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.

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

CentreVu 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.

Navigator
The window that displays after you select it from the Tools menu or toolbar in the *CentreVu* Framework window. It consists of two panes: a hierarchical “tree” view of your Call Center World on the left and a list of objects or entities on the right.

User Permissions
An area of the *CentreVu* CMS server that allows the administrator to define what each user can access.

VDN Assignment Wizard
The VDN Assignment Wizard, accessed from *CentreVu* Framework, guides you through the process of assigning a vector and skill preferences to a VDN or multiple VDNs. This tool includes access to the window that displays after you select properties from the context menu of a VDN object.

Vector Directory Number (VDN)
An extension number that enables calls to connect to a vector for processing. A VDN is not assigned an equipment location. It is assigned to a vector. A VDN can connect calls to a vector when the calls arrive over an assigned automatic-in trunk group or when calls arrive over a dial-repeating (DID) trunk group and the final digits match the VDN. The VDN by itself may be dialed to access the vector from any extension connected to the switch.

Vector Editor
This software tool, accessed from *CentreVu* Framework, allows you to create and edit vectors visually, by dragging and dropping icons representing commands from a palette and arranging them into vector steps in a work area. You can attach comments, change layout, and save and print the vectors.

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 accompanying 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 which provides a rich, graphical user interface for creating or modifying configured elements of ACDs connected to a CMS. This software can be loaded directly on the user's personal computer or downloaded from a network.

Visual Vectors Server
Server software which enables administration (changing or modifying configured elements) for ACDs connected to a CMS. This software resides on the CMS server.

Things to Know About Call Center Data

Overview

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

In this section

This section has one part:

- How *CentreVu* CMS Stores ACD Data

How *CentreVu* CMS Stores ACD Data

Real-time and historical databases

CentreVu CMS stores the ACD data received from the switch in the real-time and historical databases. Within each of these databases, *CentreVu* CMS stores the specific ACD data for agents, splits/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 *CentreVu* 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 your designated data summarizing time, the historical intrahour data is summarized into daily data. At the end of your designated week (as 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/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 them (for example, their descriptions). See *CentreVu Call Management System Release 3 Version 6 Administration and Operations,* 585-215-850 for more information about *CentreVu* CMS Dictionary.

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 no write access, the user will not be able to use Vector Editor to save, or Navigator to copy, a vector to that ACD. Likewise, if a user has no read or write access permissions for a type of entity (for example, VDNs), then the folder for those entities on the ACD will appear empty in Navigator. See *CentreVu Call Management System Release 3 Version 6 Administration and Operations,* 585-215-850 for more information about *CentreVu* CMS User Permissions.

Important!
If more than 2,000 VDNs have been authorized on a *CentreVu* CMS R3V6 server, then VDN permission checking (enabled through User Permissions' VDN Access operation) is not available.

Prerequisite System Administration

Overview

This section describes system administration required before you can run *CentreVu* Visual Vectors software.

In this section

This section consists of the following:

- Configuring the server, server performance and delay estimates.
- Obtaining technical support for Visual Vectors software
- *CentreVu* Visual Vectors Training.

Configuring Visual Vectors Server

Overview

Typically, an administrator will have installed and configured the *CentreVu* Visual Vectors Server. However, if you need to install and configure the server, first refer to Chapter 4 of *CentreVu CMS R3V6 Upgrades and Migration, Issue 2,* 585-215-856 for instructions on how to proceed. A brief outline follows of the procedures to install the *CentreVu* Visual Vectors Server software package.

How to install Visual Vectors Server software

1. Log in as `root`.

   Result
   You are ready to begin installing the software package.

2. Insert the CD-ROM and enter the following command: `/usr/sbin/pkgadd -d /cdrom/cdrom0`.

   Result
   The system displays information about the CD contents.

3. Enter option `1` or press **Return** to select Visual Vectors Server software for processing.

   Result
   The system queries if you wish to continue.

4. Enter `y` to continue installation.

   Result
   The CD package information is re-displayed.

5. After verifying this information, enter `q` at the prompt.

   Result
   The installation process ends.

How to set up your server software iitially

1. At the system prompt, enter the following command: `setupaas`
2. Select option `1` from the displayed setup menu.
3. Enter the number of allowable concurrent logins. The maximum number is the number of purchased licenses.

How to start Visual Vectors Server software

1. At the system prompt, enter the following command: `setupaas`
2. Select option `2` from the displayed setup menu.
3. Select option `1` from the turn on/stop menu to start the software.

Server performance

The following table summarizes capacity limits for CMS hardware platforms running *CentreVu* Visual Vectors Server software:

Platform	Simultaneous realtime reports	Historical, forecast, ICH, and agent trace reports per hour	ODBC reports per hour	Web hits per hour	VDNs on any single ACD
Sparc 5	200	80	80	40,000	1300
Ultra 5	300	120	120	60,000	1950
UE3000 (1 CPU)	400	160	160	80,000	2600
UE3000 (2 CPUs)	800	320	320	160,000	5200
E3500 (2 CPUs)	1200	480	480	240,000	7800
E3500 (4 CPUs)	2400	960	960	480,000	15,600

Delay estimates

The following table estimates the delay (in seconds) to navigate VDNs for some CMS hardware platforms running *CentreVu* Visual Vectors Server software:

Platform/VDNs	250	500	1000	2000	4000	8000
Sparc 5	9.0	14.1	24.4	45.0	86.2	168.6
Ultra 5	5.8	9.0	15.6	28.8	55.2	107.9
UE3000 (1 CPU)	4.5	7.1	12.2	22.5	43.1	84.3
UE3000 (2 CPUs)	2.3	3.6	6.1	11.3	21.6	43.2
E3500 (2 CPUs)	1.5	2.4	4.1	7.6	14.6	28.6
E3500 (4 CPUs)	0.8	1.2	2.1	3.8	7.3	14.3

CentreVu Visual Vectors Training

Training included with software

If you are a U.S. customer, your Lucent Technologies Project Manager should call 1-800-255-8988 to schedule the appropriate classes for you. For training outside the United States, contact your local Lucent distributor or representative.

Available courses

The available training courses are shown in this table.

Course #	PEC	Course Name	Description
BTC124H	1460-057	DEFINITY ECS with EAS	A 4-day course that provides training on the tasks required to set up a G3 switch with the EAS feature and design vectors.
BTC138H		DEFINITY ECS G3 ACD with Vectoring	A 4-day course that provides training on the tasks required to set up a *CentreVu* CMScall center application with the G2.2 switch and the EAS feature, administer *CentreVu* CMS, interpret reports on ACD activity, and use the Vectoring and Forecast features.
BTC429M	not listed	DEFINITY ACD and Vectoring	This CD-ROM course lasts approximately 1.5 hours. It provides hands-on experience administering the ACD feature with vectoring.

Course #	PEC	Course Name	Description
BTC155H	1462-031	*CentreVu* Supervisor V6 Administration with EAS	A 4.5 day class that provides training on the tasks required to administer *CentreVu* CMS using *CentreVu*Supervisor 6, interpret reports of ACD activity in the *CentreVu* Supervisor Interface and use the vectoring and forecasting features in the CMS interface.
BTC154H	1462-030	*CentreVu* Supervisor V6 Administration	A 4.5 day class that provides training on the tasks required to administer *CentreVu* CMS using *CentreVu*Supervisor 6, interpret reports of ACD activity in the *CentreVu* Supervisor Interface and use the vectoring and forecasting features in the CMS interface.
BTC447M	1472-006	*CentreVu* Supervisor V6 Administration (with and without EAS)	This CD-ROM course lasts approximately four hours. It covers the tasks required to administer CMS and how to use the *CentreVu* Supervisor tools. This course includes system simulations, hands-on exercises and supporting material.
BTC115H	1462-014	*CentreVu* CMS Custom Reports	A 3 day class that provides training on the tasks required to develop CMS custom reports.

Course #	PEC	Course Name	Description
BTC450M	1472-005	*CentreVu* Advocate: Breakthrough Solutions	This CD-ROM course lasts approximately 4 hours. It teaches how to use CentreVu Advocate to better manage their Call Center Resources. This course includes system simulations, hands-on exercises and support material.
BTC467M	not listed	*CentreVu* Visual Vectors User Training	This CD-ROM course lasts approximately 2 hours. It teaches how to uses Visual Vectors to create vectors and how to assign VDNs to vectors. The course includes system simulations, hands-on exercises and supporting material.

Course notes

Price Elements Codes (PECs) should be used only to enroll additional persons (those who are not the two persons to receive training at no additional charge).

The last lesson (the last half-day) in the Administration courses covers the Forecast feature. Also, the student can view the *CentreVu* Visual Vectors User Training CD-ROM. If you have not purchased the Forecast or Vectoring features, you do not have to attend this session.

Other training

You may benefit by taking additional courses (available at additional charges) in the following subject areas:

- *Solaris* system
- *INFORMIX*
- Traffic Theory/Data Analysis
- Host Computer Administration
- Switch Administration.

You automatically receive the following Individualized Learning Programs (booklets) after one of your call center's employees is enrolled in the *CentreVu* CMS Administration course:

- ACD Fundamentals
- Vectoring and EAS Basics.

Setting Up Your Call Center World 2

Overview

This chapter explains how to set up the Call Center World seen in the Navigator.

It is divided into the following sections:

- Call Center World Overview
- Adding and Deleting Objects in the Call Center World
- Call Center World Objects
- Object Properties.

See the overview of each section for a preview of the section's contents.

Call Center World Overview

Overview

To use *CentreVu* Framework and Visual Vectors software, you need to set up a Call Center World. A number of ACD, *CentreVu* CMS and *CentreVu* Supervisor terms must be understood to set up your Call Center World.

Terms You Need to Know

Terms

Before you begin using the software, you should know the meaning of several terms. These terms, as well as others, are also defined in the Glossary.

Accelerator Keys
Keys that provide shortcuts to actions available on the menu.

CentreVu Visual Vectors window
The window in which you are currently working (usually indicated by a highlighted title bar). Visual Vectors has a Framework window and windows for each of the tools, including Navigator, Vector Editor, and VDN Assignment.

Container
An object in your Call Center World that logically contains other entities or objects. For example, each CMS object in your Call Center World can contain as many as 8 ACD objects, each of which contains entity folders (for announcements, split or skill objects, trunk groups, VDNs, and vectors).

Context menu
A menu with specific actions for an entity or item.

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

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

Input field
An area in a window into which you enter one or more valid values. Valid values may be integers, for example, or names assigned in the *CentreVu* CMS Dictionary.

Menu bar
A menu bar is under the title bar of most windows. The menu bar shows the menu names available for that particular window (for example, File and Help). You select an item from one of these drop-down menus.

Navigator
A window that displays after you select it from the Tools menu or toolbar in the *CentreVu* Framework window. It consists of two panes: a hierarchical “tree” view of your Call Center World on the left and a list of objects or entities on the right.

Object
Any item which may appear in your Call Center World through the Navigator tool. Objects can be containers of other objects or entities (VDNs folder), or an object may be an administerable entity itself (VDN).

Status bar
A status bar is across the bottom of some windows. The status bar shows information about the current action in that window.

Title bar
A title bar is across the top of most windows. The title bar shows the name of that particular window (for example, Navigator). Titles of open tool windows will be listed on the Window menu of *CentreVu* Framework.

Toolbar
A toolbar is under the menu bar of most windows. Toolbar icons represent actions you can perform.

Tooltips
Tooltips are available in most windows by placing the mouse cursor over an item for two seconds. Tooltips usually describe the actions performed by selecting an icon. Tooltips can be disabled on the Preferences window accessed from the Tools menu of *CentreVu* Framework.

VDN Assignment
The window that displays after you select it from the Tools menu or toolbar in the *CentreVu* Framework window. It consists of several dialog boxes in sequence; for example, one filters and selects the VDNs you wish to assign, and another performs the assignment(s).

Vector Editor
This software tool, accessed from *CentreVu* Framework, allows you to create and edit vectors visually, by dragging and dropping icons representing commands from a palette and arranging them into vector steps in a work area. You can attach comments, change layout, and save and print the vectors.

Adding and Deleting Objects in the Call Center World

Overview

This section describes how you add or delete objects in your Call Center World.

In this section

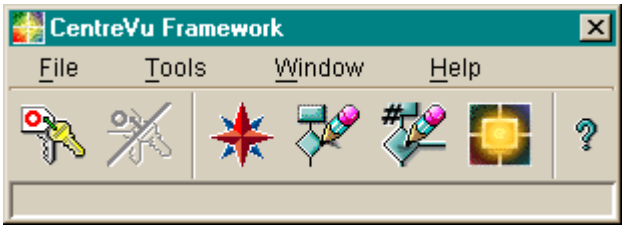
Topics in this section include:

- Basic Framework window features
- Basic Navigator features
- Using Visual Vectors window features
- Adding objects
- Selecting objects and performing actions
- Deleting objects
- Renaming objects
- Changing other object properties
- Completing input fields
- Rules for field entry

Basic Framework Window Features

Overview

This section describes the features of the CentreVu Framework window in the Visual Vectors software.



System menu box

A common convention. The system menu box enables you to perform basic operations, such as closing the current window or software program.

Title bar

A common convention. 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

A common convention. The 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 you move your cursor over a toolbar button, a tooltip displays with a brief description of what the button does. After you select a button, the status bar displays a description of the command that the particular button is performing.

These buttons appear 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 tool.
Vector Editor	Accesses the window for the Vector Editor tool.
VDN Assignment	Accesses the first of a series of windows for the VDN Assignment Wizard tool.

Button	Function
CentreVu Supervisor	Launches *CentreVu* Supervisor Version 6, if that program is installed correctly. If not, this button does not appear.
Help Contents	Launches the Help application window for Visual Vectors.

Status bar

The status bar is located at the bottom of the *CentreVu* 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

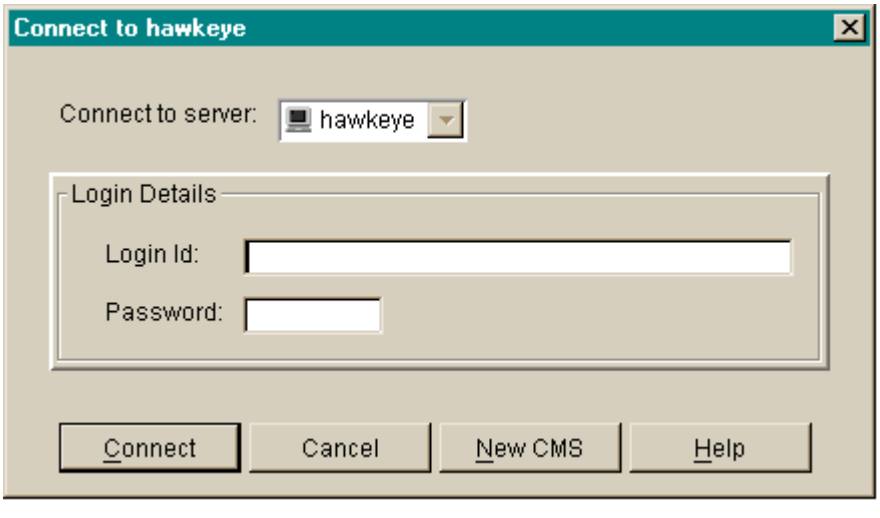
A common convention. The menu bar lists the available drop-down menus. This section identifies the menus that are available before you log into the CMS server: File, Tools, Window, and Help.

File Menu

From this menu, you can initiate or discontinue a connection to a CMS server. The menu has the following items.

Connect
Displays the Connect to server window.

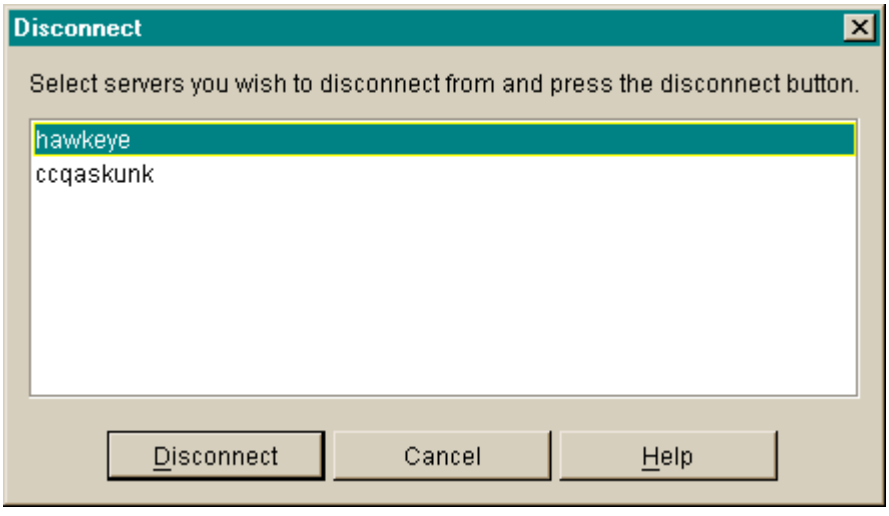
You can select from the drop-down list of servers to which you've



previously connected, or select the New CMS button to identify a new server to log into and add to your Call Center World.

Disconnect
Displays the Disconnect window listing servers to which you are connected.

Highlight the server(s) from which you wish to disconnect and select the



Disconnect button or press the **Enter** key.

Exit
Automatically disconnects from any CMS servers to which you are connected and then closes *CentreVu* Framework window. A warning message appears if you have open tool windows.

Tools Menu

Select the Tools menu to access the following items.

Navigator
Opens the window for the Navigator. You can view, add, delete, or move objects in your Call Center World using this window.

Vector Editor
Opens the window for the Vector Editor. You can create new 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 PC.

VDN Assignment Wizard
Opens the first of a series of windows for the VDN Assignment Wizard. This tool enables 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.

CentreVu Supervisor (if installed correctly)
Launches a separate session of your *CentreVu* Supervisor application software. Other than this shortcut, the two programs are autonomous.

Preferences...
Opens the Preferences window, from which you can view or modify settings such as Locale and 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 a Lucent Technologies assistant.

Window Menu

Select Window from the menu bar to choose from the following items.

Close All
Closes the windows of all open tools, but leaves the *CentreVu* Framework window open and Visual Vectors software running.

Window List
Makes the selected Visual Vectors tool the current window.

Help Menu

Press the F1 key or select the Help button to display help on a window or tool. Select Help from the menu bar to choose from the following options.

Help Contents
Opens the Help window, and displays the Visual Vectors table of contents.

About…
Displays the About CentreVu Visual Vectors… window, which shows the software build number.

Basic Navigator Window Features

Overview

Whether you are logged into a CMS server and your *CentreVu* CMS/Visual Vectors user permissions determines the objects shown in Navigator and the menu items and toolbar buttons available to you for those objects.

Navigator Toolbar

The toolbar contains buttons for quick access to specific features of the application. When you move your cursor over a toolbar button, a tooltip displays with a brief description of the command the button performs and a tooltip.

The default Navigator toolbar buttons are as follows:

Button	Function
Up One Level	Makes the parent of the current object the new current object.
New	Creates a new object (scratchpad or vector) within the current object.
Delete	Deletes the currently selected object.
Rename	Enters the edit mode on the name property of the selected object.
Properties	Displays the Property window for the current object(s).
Undo	Undoes the last action performed in this window.
Redo	Performs the last action undone in this window.
Cut	Removes the selected object(s) to be pasted later.
Copy	Copies the selected object(s) to be pasted later.
Paste	Pastes the previously cut or copied object(s) into the current folder and over the current selection (if there is one).
Details	Changes the view in the right-hand pane from a list of object icons to one row of data per object.

Button	Function
List	Changes the view in the right-hand pane from one row of data per object to a list of object icons.
Help Contents	Starts the Help system and displays the default page. This function may take several seconds.

Status indicators

These indicators in the Navigator 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.

Menu bar

This section identifies the four menus that are available after you log into a CMS server: File, Edit, View, and Help.

File Menu

The File menu has the following items.

New
Creates a new object in your Call Center World.

Delete
Removes an object from your Call Center World.

Rename
Enters the editing mode for the name property of the selected object.

Properties
Accesses the Properties window for the selected object.

Close
Closes the current window.

Edit Menu

The Edit menu has the following items.

Undo
Undoes the last action performed in this Navigator session.

Redo
Redoes the last action that was undone in this Navigator session.

Cut
Removes the selected object to be pasted later.

Copy
Copies the selected object to be pasted later.

Paste
Pastes the object that was previously cut or copied.

View Menu

The View menu has the following items.

Up One Level
Highlights the “parent” object of the selected object in the left pane, displaying the parent object's contents in the right pane.

Details
Changes the information displayed in the right pane for objects selected in the left pane. Details view is the default, showing one row for each object contained in the object selected in the left pane. Each row contains columns for the Name, Type, and your read/write Permissions of the object.

List
Changes the information displayed in the right pane for objects selected in the left pane. List view shows one named icon for each object contained in the object that is selected in the left pane.

Refresh
Refreshes and redraws the highlighted pane in the current window.

Help Menu

Press the F1 key or select the Help button to display help on a window or tool. Select Help from the menu bar to choose from the following items.

Help Contents
Opens the Help window, and displays the Visual Vectors table of contents.

About…
Displays the About CentreVu Visual Vectors… window, which shows the software build number.

Using Visual Vectors Windows

Overview

This section describes how to use features that are common to all Visual Vectors windows: the menus, toolbars, and Help system.

Visual Vectors menus

To select a menu item, choose any of the following methods:

- Click on the item.
- Use the arrow keys to highlight the item and then press the **Enter** key..
- Hold down the **Alt** key and press the underlined letter in the menu item you want to select
- Press the key or combination of keys (usually the **Alt** key or the **Ctrl** key and a letter key) assigned to the operation. For example, use **Ctrl+C** to copy.

Visual Vectors toolbars

All items available on Visual Vectors toolbars are also available within the menus. To select a toolbar item, click on the icon.

Help system

Press the **F1** key or select the Help button to display help for a window. Select Help from the menu bar to choose from the help options described in “Basic Framework Window Features” on page 2-6.

Adding New CentreVu CMS Servers

Procedure

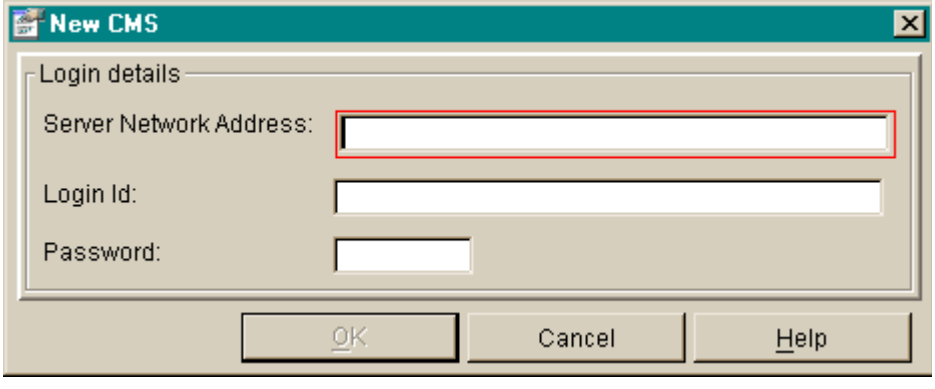
To establish a connection with a new *CentreVu* CMS server (one that is not already in your Call Center World), complete the following steps:

1. In the *CentreVu* Framework window, select Connect from the File menu or the toolbar, and then select New CMS in the Connect to server window.

   OR

   In the Navigator window, highlight Call Center World in the left-hand pane, and then select New CMS from the File or context menu.

   Result
   The New CMS window opens.



2. Type the hostname or IP address of a *CentreVu* CMS/Visual Vectors server in the Server Network Address box.
3. Enter your *CentreVu* CMS login ID in the Login ID text box.
4. Type your CMS password in the Password text box.
5. Select OK.

   Result

   If the CMS server you entered:

   - Exists and can be connected to — a new CMS object will be added to your Call Center World and you will be connected to this new server.
   - Doesn't exist or cannot be connected to — an error message will be displayed showing the cause of the failure. Go to step 2.

Adding objects

Purpose

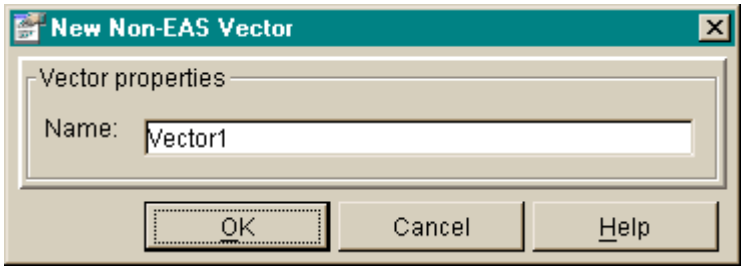
You may want to add an object (for example, a new vector for an ACD in the Vector Folder) in your Call Center World. First, select a container for the object (for example, Vector Folder) in a Navigator window.

Adding an object

Do this procedure to add an object (a new vector or scratchpad) to your Call Center World. If you add or save a vector to the Vector Folder on a measured ACD it will be added to the CMS database.

1. In the Navigator window, highlight a scratchpad or Vector Folder in the left-hand pane, and then select EAS Vector , Non-EAS Vector, EAS, Non-Prompting Vector, Non-EAS, Non-Prompting Vector and from the File or context menu. If you highlighted a scratchpad, you can also select New scratchpad from the menu.

   Result
   The New Vector, New Vector (no EAS), or New ScratchPad window opens.



2. Fill in the required information in the input field(s) on the window. For a new vector, a Name (and Id, if on an ACD) are required.
3. Select OK.

   Result

   If the addition

   - was successful, the new object will appear in the Navigator.
   - failed, an error message will be displayed showing the cause of the failure.

Selecting objects and performing actions

Overview

To perform any action on an object in your Call Center World, you must first select the object. To select an object, choose any of the following methods:

- Click on the object
- Use the arrow keys to highlight the item and then press Enter
- To select the object that contains the currently selected object, select Up One Level from the View menu or Navigator toolbar.

Input window actions

Use these input window features to do the following:

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

Deleting objects

Purpose

You may want to delete a CMS from your Call Center World or a vector from the *CentreVu* CMS database. To delete an object, first select it in a Navigator window.

Getting information

Do this procedure if you need information from the CMS database before you delete the item.

1. Select Properties from the File or context menu, select the Properties button on the toolbar, or press **Alt+Enter**.
2. Locate the information for the item you want to delete and note the relevant information.
3. Close the Properties window.

   Result
   The Navigator window displays.

Deleting an object

Do this procedure to delete an object (a CMS or vector) from your Call Center World.

1. Select the object.
2. Select Delete from the File or context menu, select the Delete button on the toolbar, or press **Delete**.

   Result

   If the deletion

   - was successful, the contents of the object will be deleted and replaced with an empty vector in the Dictionary.
   - failed, an error message will be displayed showing the cause of the failure.

Renaming objects

Purpose

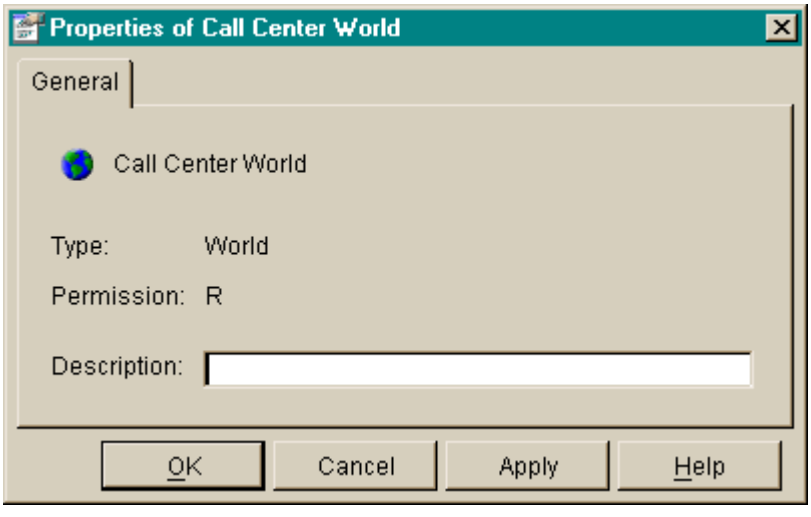
You may want to rename an object that already exists in your Call Center World. First, select the object to be renamed.

Getting information

Do this procedure if you need information from the CMS database before you rename the item.

1. Select Properties from the File or context menu, select the Properties button on the toolbar, or press **Alt+Enter**.

   Result
   The Properties of an object window appears.



2. Locate and note the relevant information. For example, verify the Id of the Vector you want to rename.
3. Close the Properties window.

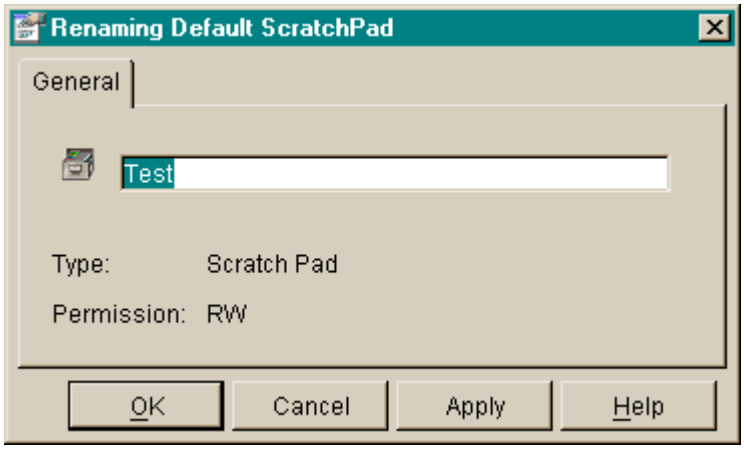
   Result
   The Navigator window displays.

Renaming an object

Do this procedure to rename an ACD object in the CMS database.

1. Select the object.
2. Select Rename from the File or context menu, or select the Rename button on the toolbar.

   Result
   The Renaming object window displays with the Name property field highlighted.



3. Type in the new name or edit the existing name and then select OK.

   Result

   If the object was

   - renamed, the new name appears in the Navigator.
   - not renamed, an error message will be displayed showing the cause of the failure.

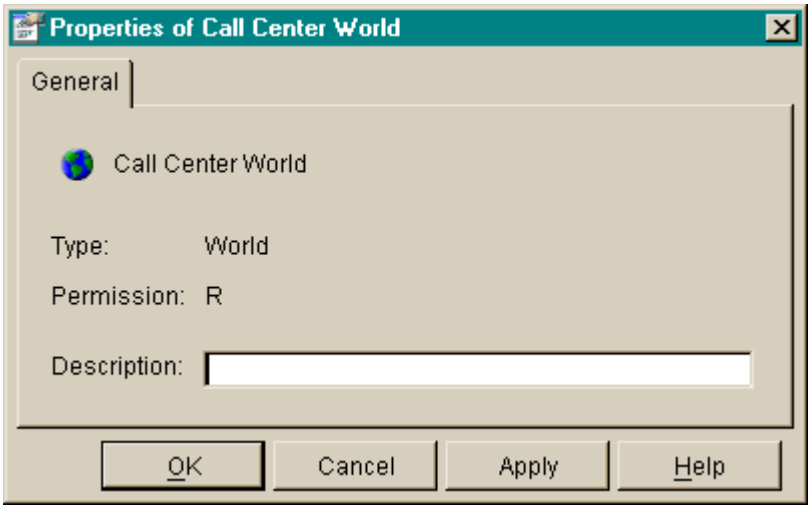
Changing other properties

Purpose

If you want to view or change the properties of one or more object(s), click on the Properties toolbar button or select the menu item in the Navigator. A Properties window will open, from which you can make your selection(s).

Single object

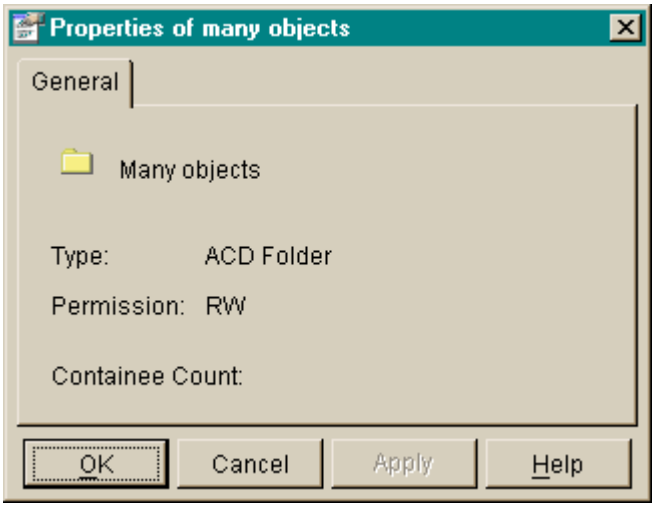
If the property window is for a single object or entity (one split/skill, vector, VDN, or trunk group), a property window appears.



For split/skill, VDN, vector, trunk group and ACD, the window contains properties for an object for which you have permissions in the CMS Dictionary.

Multiple objects

If the property window is for multiple entities such as split/skills, vectors, VDNs, or trunk groups, a multiple-object property window appears.



For split/skill, VDN, vector, trunk group and ACD, the window contains properties for the objects for which you have permissions in the CMS Dictionary.

Changing properties

1. Click on the Properties toolbar button or select the menu item in the Navigator.

   Result
   A Properties window will open, in which you can edit certain item(s).

2. Click in (or **Tab** to) the property fields you want to change and edit the value in the field(s).

   Result
   A red box will be drawn around property fields with invalid values.

3. When you have made all your changes and no red boxes appear, select OK.

Rules for Field Entry

When you change certain properties using Visual Vectors software, the *CentreVu* CMS server database is updated. CMS has three classes of input field: name (synonym), description, and number. This section describes the rules that apply to each class.

Name

A name (synonym) property field:

- Must begin with an alphabetic character. Characters are case sensitive.
- Can be 1 to 20 characters. Letters, numbers, underscores (_), blanks, commas (,), periods (.), and plus signs (+) are valid.

Description

A description property field can be 1 to 50 characters. All keyboard characters are allowed except backslash (\), grave accent (‘), tilde (~), double quotes ("), pipe symbol (|), asterisk (*), and question mark (?).

Number

A numeric entry can be a single value valid for the numeric property field

Call Center World Objects

Overview

Objects include items on which you can perform actions in your Call Center World. The objects may be vectors, for example, or trunk groups or ACDs.

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

In this section

Topics include:

- Overview
- Objects in your Call Center World.

Objects in Your Call Center World

Overview

The following describes all objects possible in your Call Center World.

- "Call Center World object" on page 2-24
- "ScratchPad object" on page 2-25
- "CMS object" on page 2-25
- "ACD object" on page 2-26
- "Announcement Folder object" on page 2-26
- "Announcement object" on page 2-26
- "Split/Skill Folder object" on page 2-27
- "Split/Skill object" on page 2-27
- "Trunk Group Folder object" on page 2-27
- "Trunk Group object" on page 2-27
- "Vector Folder object" on page 2-28
- "Vector object" on page 2-28
- "VDN Folder object" on page 2-29
- "VDN object" on page 2-29.

Call Center World object

The following describes the Call Center World object:

Actions	Description
Explore	Expands the Call Center World to show one or more CMS Servers for which you have read or read/write permission.
Disconnect All	Displays the Disconnect window with all connected CMS servers highlighted.
Navigator	Launches Navigator window with the Call Center World as place to start browsing
New CMS	Accesses the New CMS window to add a new server to your world.
Properties	Displays properties of the Call Center World.

ScratchPad object

The following describes the ScratchPad object:

Actions	Description
Explore	Expands the ScratchPad
Navigator	Launches Navigator window with the ScratchPad as place to start browsing.
New ScratchPad	Creates a new ScratchPad.
New EAS Vector	Creates a new EAS Vector
New Non-EAS Vector	Creates a new Non-EAS-Vector.
New EAS, Non-Prompting Vector	Creates a new EAS, Non-Prompting Vector.
New Non-EAS, Non-Prompting Vector	Creates a new Non-EAS, Non-Prompting Vector.
Cut	Cuts the selected ScratchPad to be pasted later.
Copy	Copies an object to be pasted later.
Paste	Pastes an object, if there is one cut or copied.
Delete	Deletes the selected object.
Rename	Places user in edit mode for the ScratchPad name field in the Renaming ScratchPad window.
Properties	Displays 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/write permission.
Connect	Displays the Connect to server window for this CMS.
Disconnect	Displays the Disconnect window with this CMS highlighted.

Actions	Descriptions
Navigator	Launches Navigator window with the CMS as the place to start browsing.
Delete	Removes the CMS from your Call Center World.
Properties	Displays properties of the CMS.

ACD object

The following describes the ACD object:

Actions	Descriptions
Explore	Expands the ACD object to show folders of CMS-measured entities.
Navigator	Launches 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 describes the Announcement Folder object:

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

Announcement object

The following describes the Announcement object:

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

Split/Skill Folder object

The following describes the Split/Skill Folder object:

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

Split/Skill object

The following describes the Split/Skill object:

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

Trunk Group Folder object

The following describes the Trunk Group Folder object:

Actions	Descriptions
Explore	Expands the Trunk Groups folder.
Navigator	Launches Navigator window with the folder as place to start browsing.
Properties	Displays properties of the Trunk Groups 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 user in edit mode for the Trunk Group name field in the Renaming trunk group window.
Properties	Displays properties of the Trunk Group.

Vector Folder object

The following describes the Vector Folder object:

Actions	Descriptions
Explore	Expands the Vector Folder.
Navigator	Launches Navigator window with the folder as place to start browsing.
New Vector	Creates a new vector with one Stop step in the folder.
Properties	Displays properties of the Vector Folder.

Vector object

The following describes the Vector object:

Actions	Descriptions
Edit	Accesses the Vector Editor tool to edit the vector.
View as ASCII	Displays the vector in a window as plain text (read-only).
Navigator	Launches Navigator window with the vector as place to start browsing.
Cut	Copies a vector and replaces it with a blank vector, and leaves the name in the Dictionary.
Copy	Copies a vector to be pasted later.
Paste	Pastes an object, if there is one cut or copied.
Delete	Deletes the vector from the folder for this ACD. This replcaes it with a blank vector, and leaves the name in the Dictionary.
Rename	Places user in edit mode for the Vector name field in the Renaming vector Id window.
Properties	Displays properties of the vector.

VDN Folder object

The following describes the VDN Folder object:

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

VDN object

The following describes the VDN object:

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

Call Center World Object Properties

Overview

Use object properties to change certain allowable parameters of:

- Any measured subsets (entities) of the ACD, including announcements, splits/skills, trunk groups, VDNs, and vectors
- VDN administration (for example, its assigned vector and skill preferences)

In this section

Topics include:

- Overview
- Properties of Call Center World Objects.

Properties of Objects

Overview

The following describes the properties of all objects in your Call Center World.

- "Call Center World object" on page 2-31
- "ScratchPad object" on page 2-32
- "CMS object" on page 2-32
- "ACD object" on page 2-33
- "Announcement Folder object" on page 2-33
- "Announcement object" on page 2-34
- "Split/Skill Folder object" on page 2-34
- "Split/Skill object" on page 2-35
- "Trunk Group Folder object" on page 2-35
- "Trunk Group object" on page 2-36
- "Vector Folder object" on page 2-36
- "Vector object" on page 2-37
- "VDN Folder object" on page 2-37
- "VDN object" on page 2-38.

Call Center World object

The following describes properties of the Call Center World object:

Properties	Description
Name	You cannot edit this name.
Type	Type of object (World).
Permission	Displays permission (R for read) you have for World.
Description	Characters describing the Call Center World. You can edit this field.

ScratchPad object

The following describes properties of the ScratchPad object:

Properties	Description
Name	Name of a folder containing off-line vectors.
Type	Type of object.
Permission	Displays scratchpad permissions (read and 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 *CentreVu* CMS server. You cannot edit this name.
Type	Type of CMS.
Permission	Displays permissions (R for read, blank for none) you have for the *CentreVu* CMS server.
Version	*CentreVu* CMS server software release and version numbers (R3V6).
Locale	*CentreVu* CMS server software locale and time zone (for example, TZ GMT – 05:00).
Containee Count	The number of objects (ACDs) contained within this object.

ACD object

The following describes properties of the ACD object:

Properties	Description
Name	Name of the ACD in the *CentreVu* CMS Dictionary. You can rename it if you have ACD read and write access on the CMS.
Type	Type of ACD
Permission	Displays ACD permissions (read, write, or both) you have on the *CentreVu* CMS.
Id	Number identifying the ACD on the *CentreVu* CMS.
Version	*DEFINITY* server software release and version numbers (ECS R6).
Locale	*DEFINITY* server 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 CMS. The ACD icon is crossed out in Navigator if the link is down.
ACD Features	Features enabled on the ACD (EAS, Prompting, Vectoring).
Description	Characters describing the ACD in the CMS Dictionary. You can edit this field.

Announcement Folder object

The following describes properties of the Announcement Folder object:

Properties	Description
Name	Name of the folder containing measured announcements for this ACD.
Type	Type of object.
Permission	Displays announcement permissions (read, write, or both) you have for this ACD.
Containee Count	Shows the number of announcements 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/write permissions.
Type	Type of object.
Permission	Displays permissions (read, write, or both) for this announcement.
Extension	Announcement extension number.
Description	Characters describing 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 containing measured splits or skills for this ACD.
Type	Type of object.
Permission	Displays split/skill permissions (read, write, or both) you have for this ACD.
Containee Count	Shows the number of splits/skills contained in the folder.

Split/Skill object

The following describes properties of the Split/Skill object:

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

Trunk Group Folder object

The following describes properties of the Trunk Group Folder object:

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

Trunk Group object

The following describes properties of the Trunk Group object:

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

Vector Folder object

The following describes properties of the Vector Folder object:

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

Vector object

The following describes properties of the Vector object:

Properties	Description
Name	Name of the vector in the *CentreVu* CMS Dictionary.
Type	Type of object.
Permission	Displays permissions (read, write, or both) you have for this vector
Description	Characters describing the vector in the CMS Dictionary. You can edit this field.
Id	Number identifying the vector on the *CentreVu* CMS.
Step Count	Shows the number of steps contained in the vector.

VDN Folder object

The following describes properties of the VDN Folder object:

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

VDN object

The following describes properties of the VDN object:

Properties	Description
Name	Name of the VDN in the *CentreVu* CMS Dictionary.
Type	Type of object.
Permission	Displays permissions (read, write, or both) you have for this VDN.
Extension	VDN extension number.
Vector Id	Shows the number or synonym identifying the vector assigned to this VDN. You can change this assignment if you have VDN permissions on the CMS for the ACD.
Description	Characters describing the VDN in the CMS Dictionary. You can edit this field.
Skill Pref	Shows what skill preference(s) is(are) assigned to this VDN. You can change this assignment if you have VDN permissions on the CMS for the ACD (EAS only).

Using Framework and Navigator 3

Overview

This chapter explains how to use *CentreVu* Framework and the Navigator tool.

It is divided into the following sections:

- Framework Software Overview
- How to Access Framework
- Selecting and Running Navigator
- Navigating Your Call Center World.

See the overview of each section for a preview of the section's contents.

Framework Software Overview

Overview

To run *CentreVu* Framework, you need to start the software and connect to at least one *CentreVu* CMSserver. You may choose additional *CentreVu* CMS servers to connect to, as well.

In this section

Information you should know before starting the software include:

- What you can do with the software
- Closing windows
- Disconnecting and exiting the software.

Framework's Features

What you do with the software

CentreVu Framework has three main functions:

- To allow access to a set of tools, including the Navigator, Vector Editor, and VDN Assignment Wizard.
- To manage one or more connections to *CentreVu* CMS servers required to perform ACD actions such as renaming entities, saving vectors, and making VDN assignments.
- To help manage multiple tool windows.

Closing windows

Procedures

To close a window, select Close from the File menu, or press **Alt**+ **F4**.

To close all windows, select the Close All item on the Window menu from the *CentreVu* Framework window.

Disconnecting and exiting the software

Procedure

To exit the software, select Exit from the File menu.

You may exit the software while connected to one or more *CentreVu* CMS server(s); Visual Vectors software disconnects you automatically before closing the *CentreVu* Framework window.

If you have open windows other than the *CentreVu* Framework window (such as the Vector Editor or Navigator tools), and you try to exit, a message displays. Select Yes to disconnect and exit.

How to Access Framework

Overview

From the *CentreVu* Framework window you can access tools to view, modify, add, and delete ACD items in the *CentreVu* CMS database. You can use the Navigator to view or modify the properties of objects in your Call Center World, including renaming some types of objects. You can use the Vector Editor to create new vectors or edit existing ones, and you can use VDN Assignment Wizard to assign one or more VDN(s) to a vector.

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

In this section

Topics include:

- Starting *CentreVu* Framework
- Accessing objects in your Call Center World
- Connecting to a *CentreVu* CMS Server.

Starting CentreVu Framework

Procedure

Use the following steps to start Framework software on *Windows* 95/98 or *Windows NT* 4.0.

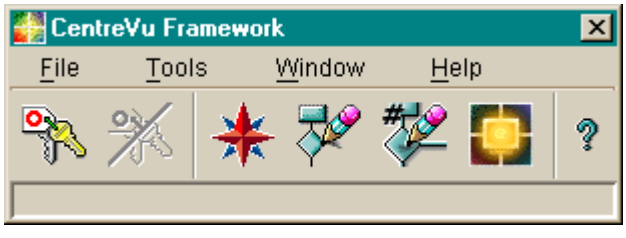
1. Select Start from the taskbar.
2. Select Programs from the Start menu.
3. Select the “Lucent *CentreVu* Visual Vectors 1.0” program group.
4. Select “*CentreVu* Visual Vectors 1.0”.

Result

The software program starts and the Framework window opens. Although Visual Vectors is running, you are not yet connected to a CMS server.

CentreVu Framework is Visual Vectors main window. You will use the toolbar buttons and pull-down menus to access measured ACD information from a CMS server.

The following figure illustrates how Framework appears before logging into a CMS server.



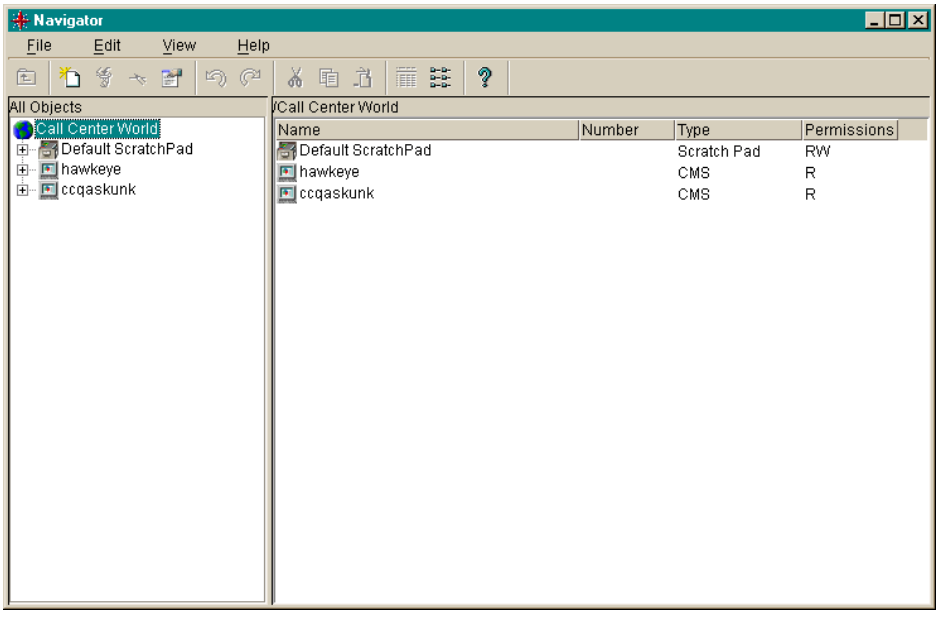
Accessing objects in your Call Center World

Procedure

To access objects in your Call Center World, complete the following steps:

1. Select Navigator from the Tools menu or Framework toolbar.

   Result
   The Navigator window opens.



2. From the File menu in Navigator, or on the Navigator toolbar, select New to add an object, Copy to copy an object to paste later, Delete to remove an object, Rename to change an object's name, or Properties to see an object's properties.

   Result

   If you selected:

   - New CMS — the New CMS Server window opens for you to specify the parameters of a new server.
   - New ScratchPad — the New ScratchPad window opens for you to specify the name of a new off-line folder.
   - New Vector — the New Vector window opens for you to specify the name. This feature can create a new online vector that contains one Stop step or an empty offline vector.
   - Copy — the selected object is copied. You may paste it into an allowable container.

- Delete — the selected object is removed.
- Rename — the Renaming object window appears with the object's name highlighted for editing.
- Properties — the Properties window for the selected object opens. Some fields may be editable; others are for display only.

3. Complete entries on the New, Rename, or Properties window (as applicable) and select OK.

Connecting to a CentreVu CMS Server

Purpose

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

Connection types

From *CentreVu* Framework, you can connect to one or more CMS server(s) in either of the following ways. Note that you are limited to one instance of a login ID per server.

Existing CMS

A valid CMS login ID and password is entered in the Connect to server window. Once you select a server and OK, the CMS connection is established automatically. If the connection is broken or dropped while you are working with tools, you will be prompted to save online open vectors elsewhere.

New CMS

To add a New CMS server to your Call Center World:

1. Access the New CMS window in one of the following ways:
   - In the *CentreVu* Framework window, select Connect from the File menu or the toolbar, and then select New CMS in the Connect to server window.
   - In the Navigator window, highlight Call Center World in the left-hand pane, and then select New CMS from the File or context menu.
2. Type the hostname or IP address of a *CentreVu* CMS/Visual Vectors server in the Server Network Address box. Type a valid Login ID and Password for the server in this window.
3. Select OK.

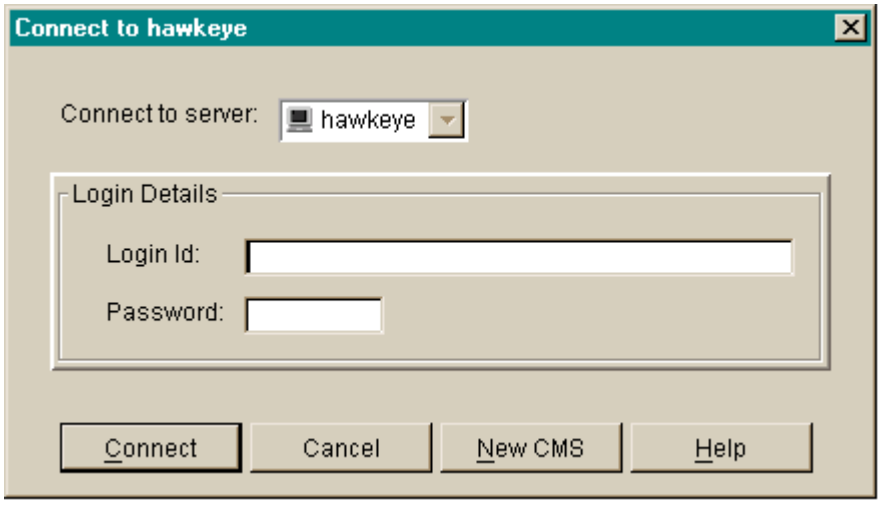
Connecting to a server in your Call Center World

To establish a CMS connection if the server exists in your Call Center World, complete the following steps:

1. Select Connect from the File menu, or click the Connect button on the toolbar.

   Result

   The Connect to server window opens.



2. Enter your *CentreVu* CMS login ID in the Login ID text box.
3. Tab to or click in the Password text box.
4. Type your CMS password in the Password text box.
5. Select a CMS server in you Call Center World from the drop-down list.
6. Select the Connect button.

   Result

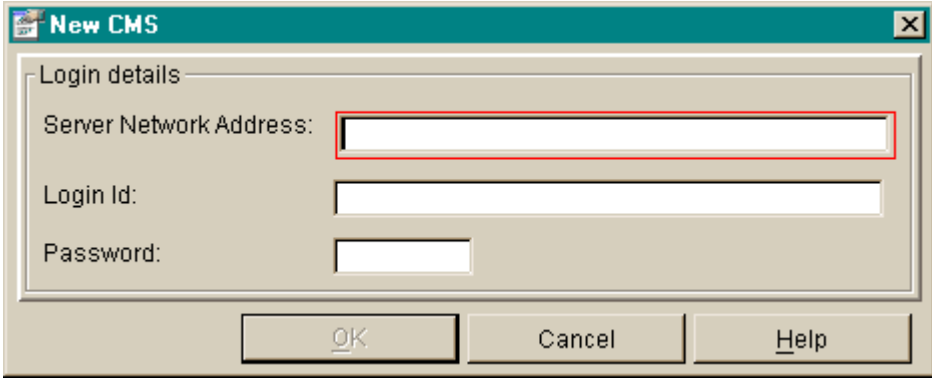
   A status message indicates that the software is connecting to the CMS server.

Connecting to a new CMS server

To establish a CMS connection if the server is not in your Call Center World, complete the following steps:

1. Select New CMS from the File menu in the *CentreVu* Framework window.

   Result
   The New CMS window opens.



2. Type the hostname or IP address of a *CentreVu* CMS/Visual Vectors server in the Server Network Address box.
3. Enter your *CentreVu* CMS login ID in the Login ID text box.
4. Type your CMS password in the Password text box.
5. Select OK.

   Result

   If the CMS server you entered:

   - Exists and can be connected to — a new CMS object will be added to your Call Center World and you will be connected to this new server.
   - Doesn't exist or cannot be connected to — an error message will be displayed showing the cause of the failure. Go to step 2.

Selecting and Running Navigator

Overview

This section introduces you to Navigator window features as they appear both before and after connecting to a *CentreVu* CMS server. Follow the instructions to — among other tasks — make menu selections, activate toolbar options, read status indicators, use windows, and enter values in input fields.

In this section

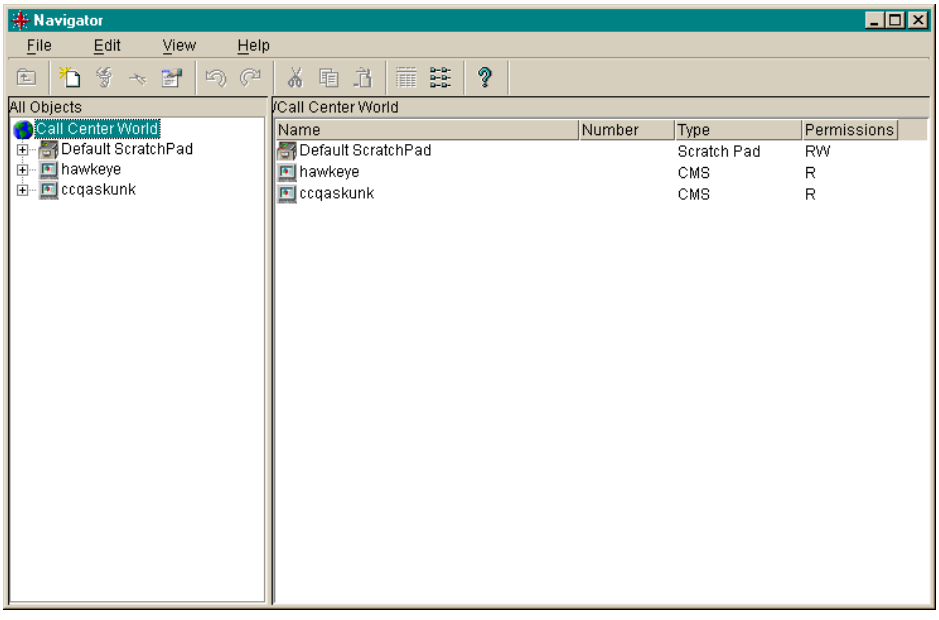
Topics in this section include:

- Basic Navigator window features
- Using Navigator window features.

Basic Navigator Window Features

Overview

This section describes the features of the Navigator window.



System menu box

A common *Windows* convention. The system menu box enables you to perform *Windows* operations, such as closing the current window or application.

Title bar

A common *Windows* convention. The title bar shows the name of the application.

Maximize, minimize and close buttons

A common *Windows* convention. The 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 you move your cursor over a toolbar button, a tooltip displays with a brief description of the command the button performs.

The default toolbar buttons are as follows:

Button	Function
Up One Level	Highlights the “parent” object of the selected object in the left pane, displaying the parent object's contents in the right pane.
New	Creates a new object on the CMS server (or your PC ScratchPad).
Delete	Removes an object from the CMS server (or your PC ScratchPad).
Rename	Shows Renaming object window and enters the editing mode for the name of the selected object.
Properties	Accesses the Properties window for the selected object.
Undo	Undoes the last action performed in this Navigator session, up to four previous actions.
Redo	Redoes the last action that was undone in this Navigator session, up to four previous actions.
Cut	Removes the selected object and saves it to be pasted later.
Copy	Makes a copy of the selected object to be pasted later.
Paste	Pastes the object that was previously cut or copied.
Details	Changes the information displayed in the right pane for objects selected in the left pane. Details view is the default, showing one row for each object contained in the object selected in the left pane. Each row contains columns for the object's Name, its Type, and your read/write Permissions for it.
List	Changes the information displayed in the right pane for objects selected in the left pane. List view shows one named icon for each object contained in the object that is selected in the left pane.
Help Contents	Opens the Help Topics window, and displays the table of contents.

Status indicators

These indicators on the status bar tell you about the state of CMS.

This indicator …	Displays the …
Login status	Icon for the CMS object in Navigator displays a black screen if you are not connected.
ACD link status	Icons for the ACDs supported by a CMS server. If the link to an ACD is down, the icon is crossed out.

Status messages

The status bar of the *CentreVu* Framework window may display any of the following messages.

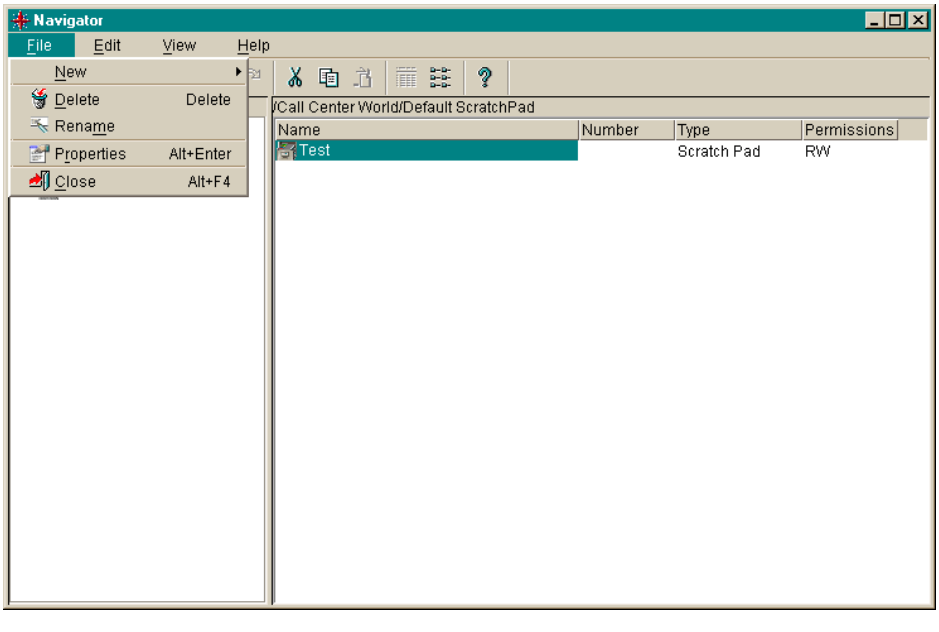
This message …	Displays when …
Starting tool...	A Visual Vectors window is opening. Framework is locked during this time.
Looking for items to Connect...	Framework is searching your Call Center World for CMS servers.

Menu bar

This section identifies the four menus that are available after you log into a CMS server: File, Edit, View, and Help.

File menu

The File menu has the following items.



New
Creates a new object on the CMS server (or your PC ScratchPad)..

Delete
Removes an object from the CMS server (or your PC ScratchPad).

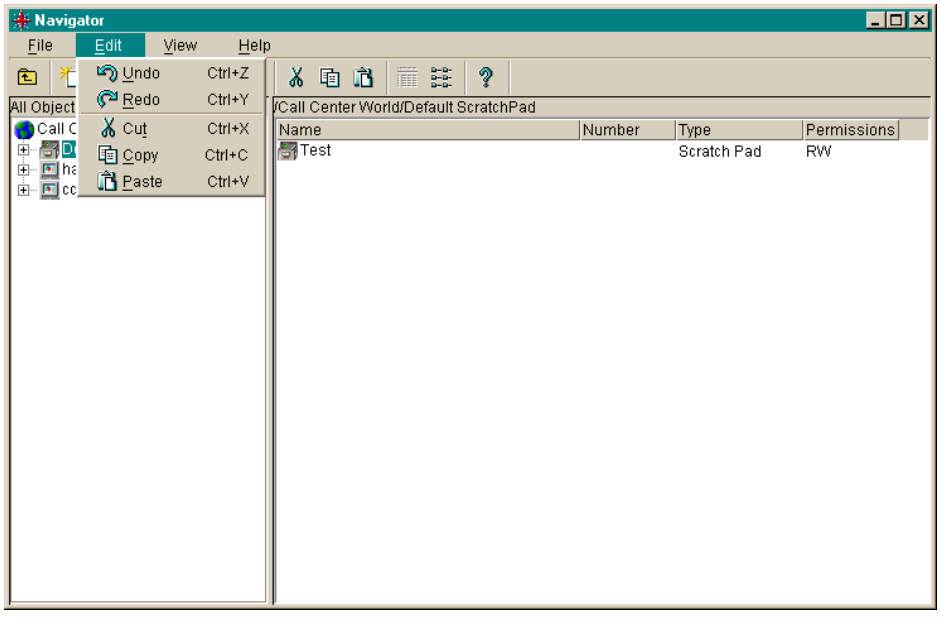
Rename
Shows Renaming object window and enters the editing mode for the name of the selected object.

Properties
Accesses the Properties window for the selected object.

Close
Closes the Navigator tool's window.

Edit menu

The Edit menu has the following items.



Undo
Undoes the last action performed in this Navigator session, up to four previous actions.

Redo
Redoes the last action that was undone in this Navigator session, up to four previous actions.

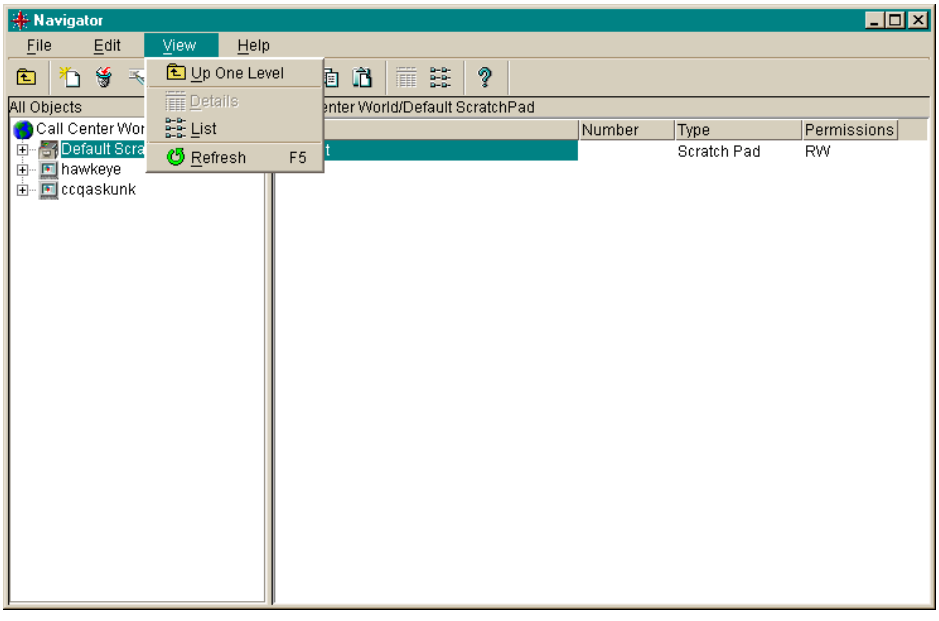
Cut
Removes the selected object and saves it to be pasted later.

Copy
Makes a copy of the selected object to be pasted later.

Paste
Pastes an object that was previously cut or copied.

View menu

The View menu has the following items.



Up One Level
Highlights the “parent” object of the selected object in the left pane, displaying the parent object's contents in the right pane.

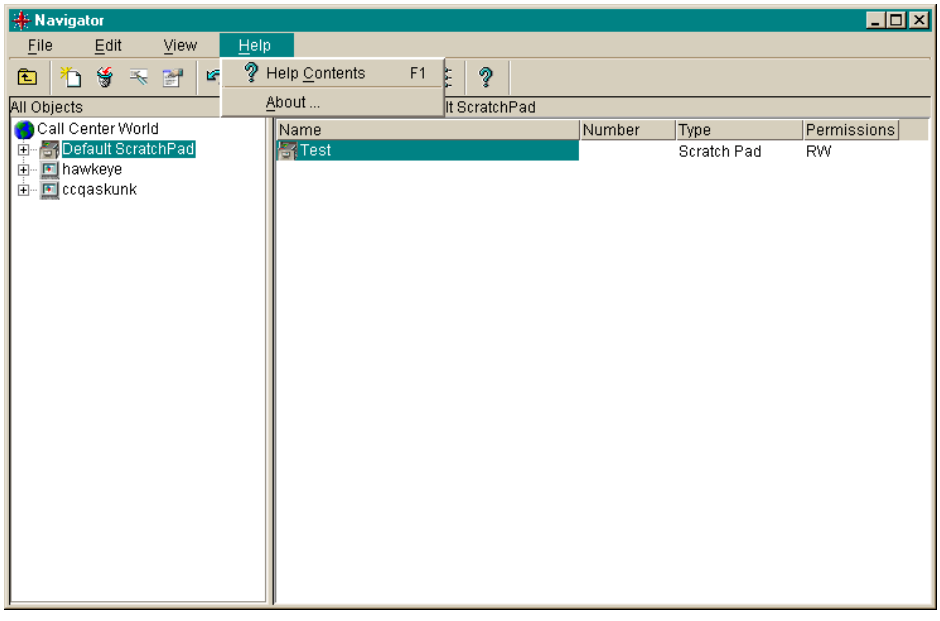
Details
Changes the information displayed in the right pane for objects selected in the left pane. Details view is the default, showing one row for each object contained in the object selected in the left pane. Each row contains columns for the object's Name, its Type, and your read/write Permissions for it.

List
Changes the information displayed in the right pane for objects selected in the left pane. List view shows one named icon for each object contained in the object that is selected in the left pane.

Refresh
Refreshes and redraws the both panes of the Navigator windows.

Help menu

Press the F1 key or select the Help button to display context-sensitive help. Select Help from the menu bar to choose from the following items.



Help Contents
Opens the Help Topics window, and displays the table of contents.

About…
Opens the About… window, which shows the software version number.

Using Navigator Window Features

Overview

This section describes how to use three features that are common to all Navigator windows: the system tray icon, Navigator menus, and Help system.

Navigator menus

To select a Navigator menu item, choose any of the following methods:

- Click on the item
- Use the arrow keys to highlight the item and then press Enter
- Press the **Alt** key and press the underlined letter in the menu or item you want to select
- Hold down the **Ctrl** key and press the accelerator key assigned to the action. For example, use **Ctrl+C** to copy.

Help system

Press the **F1** key or select the Help button to display context-sensitive help. Select Help from the menu bar to choose from the Navigator help options described in “Basic Framework Window Features” on page 2-6.

Navigating Your Call Center World

Overview

Use Navigator to browse the following ACD entities measured by *CentreVu* CMS:

- Any measured subset of the ACD, including announcements, splits/skills, trunk groups, VDNs, and vectors
- VDN administration, including the vector and skill preference(s) assigned to one or more VDN(s)

In this section

Topics in this section include:

- Exploring an object
- Using property windows
- Completing input fields.

Exploring an Object

Actions and Properties

The objects visible in Navigator windows have sets of:

- Actions that may be performed on them (see “Objects in Your Call Center World” on page 2-24)
- Properties, some of which may be modified (see “Using Property Windows” on page 3-21).

Procedure

1. Browse your Call Center World and find the object you want.
   - Click the + icon next to an object (for example, a CMS) to expand the display and show objects contained by that object (for example, ACDs).
   - If needed to reduce clutter, click the – icon to the left of an object to collapse the display and hide the objects within that object.
2. A double-click (or highlight and then single-click) on an object performs the default function. For example, a double-click on a container allows you to explore it. However, a double-click on a vector takes you directly to editing the selected vector.

   Alternatively, you can right-click on the object and select an item from its context menu.
3. Highlight and right-click to rename the object, edit its Properties, or perform other allowable actions.

For more information

To see what actions can be performed on each possible object in your Call Center World, refer to “Call Center World Objects” on page 2-23 in “Setting Up Your Call Center World” on page 2-1.

Using Property Windows

Procedure

If you need to know...	Then refer to...
What properties an object has	“Call Center World Object Properties” on page 2-30
How to edit properties	“Completing Input Fields” on page 3-22

Completing Input Fields

Options

You can complete an input field on a window using several different methods.

- Typing the requested information in a box.
- Selecting the information from a drop-down list of valid entries. For example, the properties window for a VDN contains a drop-down list of vectors to which the VDN(s) may be assigned.
- Checking a box (or selecting one of a set of mutually exclusive options) for the input field.

Using the Vector Editor 4

Overview

This chapter explains how to use the Vector Editor.

It is divided into the following sections:

- Visual Vectors Overview
- Using the Vector Editor
- Printing Vectors.

See the overview of each section for a preview of the section's contents.

Vector Editor Overview

Overview

To run the Vector Editor tool, you need to start *CentreVu* Framework, open a vector form the Navigator tool, and then select the Vector Editor from the Tools menu or toolbar.

In this section

Starting to use visual vectors introduces a number of ACD and *CentreVu* CMS terms, including:

- Terms you need to know
- Visual Vectors' features
- Starting the Vector Editor
- Accessing vectors in your Call Center World
- Closing windows
- Disconnecting and exiting the software.

Terms You Need to Know

Terms

Before you begin using the software, you should know the meaning of several terms. These terms, as well as others, are also defined in the Glossary.

Accelerator Keys
Keys that provide shortcuts to actions available on the menu.

Automatic Call Distribution (ACD)
A switch feature using software that channels high-volume incoming and outgoing call traffic to agent groups (splits or skills).

Also an agent state where the extension is engaged on an ACD call.

See Redirect On No Answer and Auto-Available Split.

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.

CentreVu Visual Vectors window
The window in which you are currently working (usually indicated by a highlighted title bar). Visual Vectors has a Framework window and windows for each of the tools, including Navigator, Vector Editor, and VDN Assignment.

Container
An object in your Call Center World that logically contains other entities or objects. For example, each CMS object in your Call Center World can contain as many as 8 ACD objects, each of which contains entity folders (for announcements, split or skill objects, trunk groups, VDNs, and vectors).

Context menu
A menu with specific actions for an entity or item.

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.

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

CentreVu 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 (announcements, splits/skills, trunk groups, VDNs, and vectors). Folders are used to visually group all entities of a specific type for an ACD.

Input field
An area in a window into which you enter one or more valid values. Valid values may be integers, for example, or names assigned in the *CentreVu* CMS Dictionary.

Menu bar
A menu bar is under the title bar of most windows. The menu bar shows the menu names available for that particular window (for example, File and Help). You select an item from one of these drop-down menus.

Name (synonym) fields
Fields in which you may enter a name (synonym) that has been assigned in the CMS Dictionary (for example, the name of a vector).

Object
Any item which may appear in your Call Center World through the Navigator tool. Objects can be containers of other objects or entities (VDNs folder), or an object may be an administerable entity itself (VDN).

Skill
Attributes of ACD agents with the EAS feature enabled. In relationship to your call center, think of skill as a specific customer need/requirement or perhaps a business need of your call center. You will be defining your skills based on the needs of your customers and your call center.

ScratchPad
The Default ScratchPad name is a container area on your PC designed to save vectors off-line. ScratchPad is available any time. You can create a hierarchy of sub-folders under the default folder by selecting New ScratchPad from Navigator's File menu.

Status bar
A status bar is across the bottom of some windows. The status bar shows information about the current action in that window.

Switch
A private switching system providing 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.

Title bar
A title bar is across the top of most windows. The title bar shows the name of that particular window (for example, Navigator). Titles of open tool windows will be listed on the Window menu of *CentreVu* Framework.

Toolbar
A toolbar is under the menu bar of most windows. Toolbar icons represent actions you can perform.

Tools menu
A drop-down menu on the *CentreVu* Framework menu bar that gives you access to the Navigator, Vector Editor, and VDN Assignment tools.

Tooltips
Tooltips are available in most windows by placing the mouse cursor over an item for two seconds. Tooltips usually describe the actions performed by selecting an icon. Tooltips can be disabled on the Preferences window accessed from the File menu of *CentreVu* Framework.

VDN
See Vector Directory Number.

VDN Assignment
The window that displays after you select it from the Tools menu or toolbar in the *CentreVu* Framework window. It consists of several dialog boxes in sequence; for example, one filters and selects the VDNs you wish to assign, and another performs the assignment(s).

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 Skill Preference
Up to three skill(s) can be assigned to a VDN. Calls use VDN skills for routing based on your preference (as you administer it 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 may have received 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 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 connected to the switch.

Vector Editor
This software tool, accessed from *CentreVu* Framework, allows you to create and edit vectors visually, by dragging and dropping icons representing commands from a palette and arranging them into vector steps in a work area. You can attach comments, change layout, and save and print the vectors.

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 accompanying 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 Vector's Features

What you do with the software

Visual Vectors' Vector Editor has three main functions:

- To allow visual creation and editing of vectors by an easy, drag-and-drop method
- To provide an off-line PC area (a "scratchpad") for saving vectors when a switch connection is not available or at any other time.
- To annotate (by attaching comments) and to print representations of vectors.

Note that the Navigator tool supplies a read-only plain text view of vectors for users familiar with accessing vectors via a terminal.

Starting the Vector Editor

Procedure

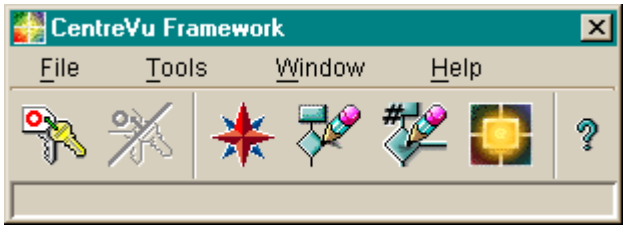
Use the steps below to start Vector Editor for *Windows* 95/98 or *Windows NT* 4.0.

1. Select Start from the taskbar.
2. Select Programs from the Start menu.
3. Select the Lucent *CentreVu* Visual Vectors 1.0 program group.
4. Select *CentreVu* Visual Vectors 1.0 from the menu.
5. Select Vector Editor from the Tools menu or toolbar in the *CentreVu* Framework window and the type of vector you want. You can also double-click on a vector in Navigator.

Results

The *CentreVu* Framework and Vector Editor tool windows are displayed. Although Framework is now running, you are not connected to a *CentreVu* CMS server.

The following figure illustrates how the main window appears before connecting to a CMS server.



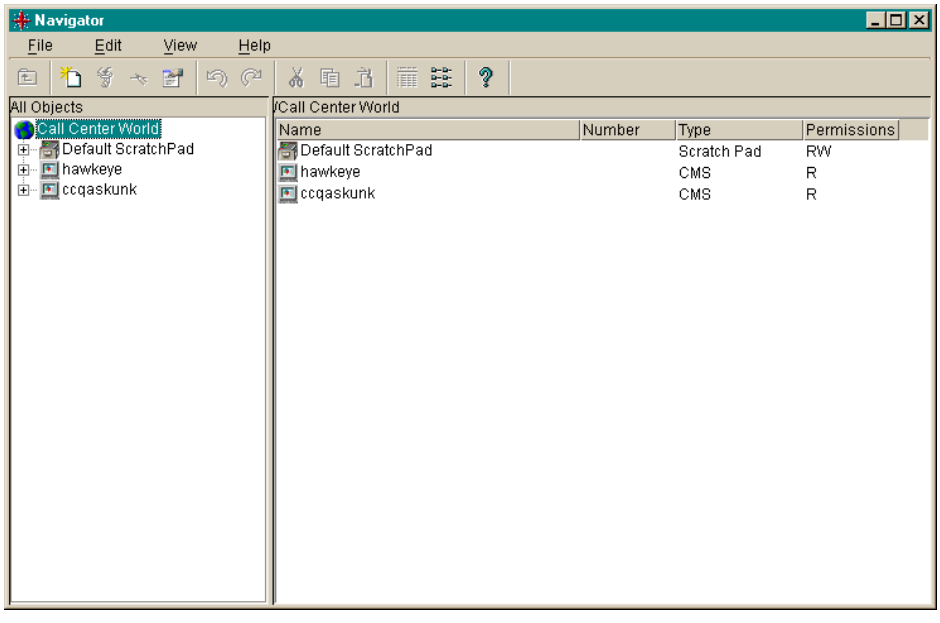
Accessing vectors in your Call Center World

Procedure

To access vectors in your Call Center World, complete the following steps:

1. Select Navigator from the Tools menu or *CentreVu* Framework toolbar.

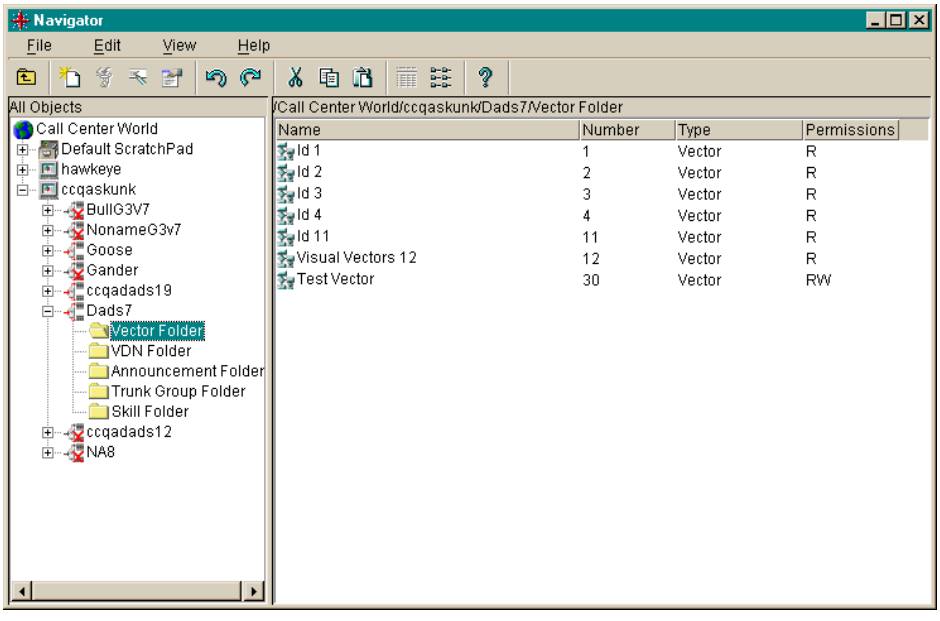
   Result
   The Navigator window opens.



2. Select an object that can contain a vector, such as the scratchpad or an ACD's Vector Folder in the Navigator window.

   Result

   The objects contained in the folder appear in the right-hand pane of the Navigator window.



3. From the File menu in Navigator, or on the Navigator toolbar, select EAS Vector, Non-EAS Vector, EAS, Non-Prompting Vector, or Non-EAS, Non-Prompting Vector to add a vector with one Stop step, Delete to remove a vector, Rename to edit the vector's name, or Properties to see a vector's properties.

   Result

   If you selected:

   - EAS Vector, Non-EAS Vector, EAS, Non-Prompting Vector, or Non-EAS, Non-Prompting Vector — the New Vector window opens for you to specify the Name and Id properties of a new vector.
   - Rename — the Renaming Vector window opens for you to edit the vector's name.
   - Delete — the selected object is replaced with a blank object. This function leaves the object's name in the dictionary.
   - Properties — the Properties window for the selected object opens.

4. Select OK.

Closing windows

Procedures

To close an open tool such as the Vector Editor window, select Close from the File menu, or press **Alt**+ **F4**. If you have unsaved changes to the current vector, you will be prompted to save them.

To close all windows, select the Close All item on the Window menu from the *CentreVu* Framework window.

Important!
If you try to close or exit the *CentreVu* Framework window and you have open tool windows, a warning message will be displayed. If you restart framework, it will attempt to restore the open windows and server connections. See “Disconnecting and exiting the software” on page 4-12

Disconnecting and exiting the software

Procedure

To exit the software, select Exit from the File menu in the *CentreVu* Framework window.

The software automatically disconnects from any CMS servers to which you are connected and then closes *CentreVu* Framework window.

A warning message appears if you have open tool windows. If you restart framework after closing it while leaving tools windows open, it will attempt to restore the open windows and server connections.

Using the Vector Editor

Overview

This section introduces you to the Vector Editor window features as they appear both before and after logging into *CentreVu* CMS. Follow the instructions to — among other tasks — create new vectors and edit existing ones and then save them in your Call Center World, use Properties windows, and enter values in input fields.

In this section

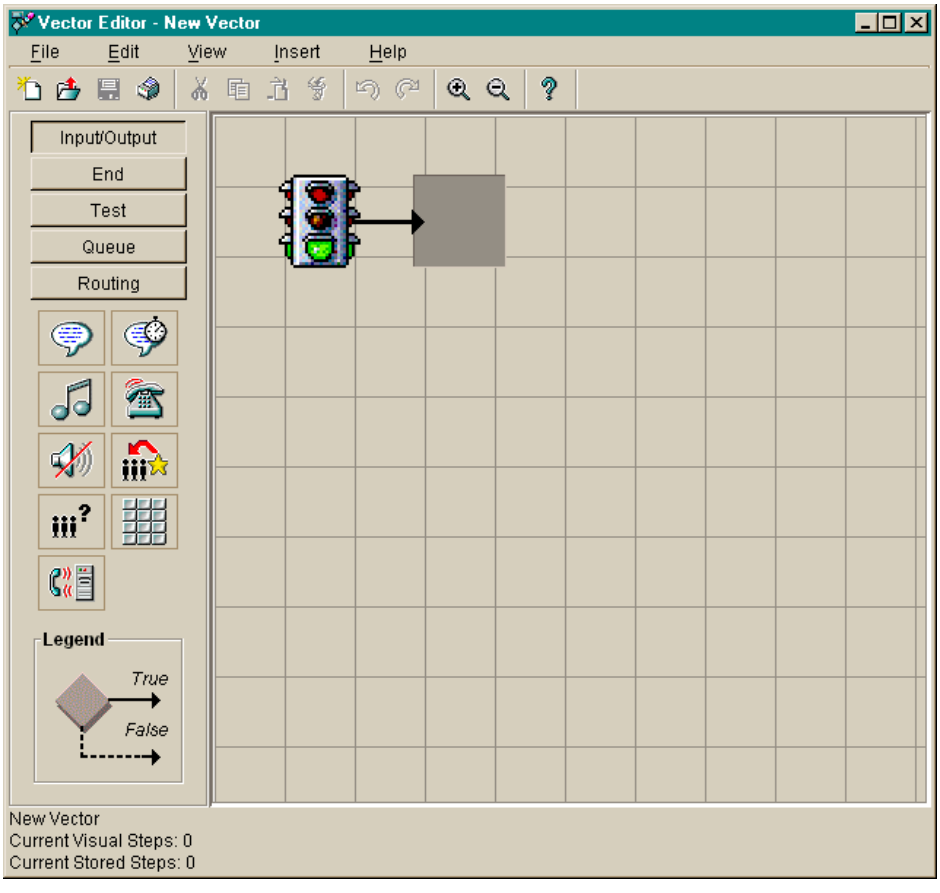
Topics in this section include:

- Basic Vector Editor window features
- Vector Editor features after connecting to a CMS Server
- Using Vector Editor window features
- Opening Vectors
- Using property windows
- Completing input fields
- Printing vectors.

Basic Vector Editor Window Features

Overview

This section describes the features of the Vector Editor window.



System menu box

A common convention. The system menu box enables you to perform *Windows* operations, such as closing the current window or application.

Title bar

A common convention. The title bar shows the name of the application.

Minimize, maximize and close buttons

A common convention. The buttons in the upper right-hand corner 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 you move your cursor over a toolbar button, a tooltip displays with a brief description of the command the button performs.

The default Vector Editor toolbar buttons are as follows:

Button	Function
New	Creates a new vector on the CMS server (or your PC ScratchPad).
Open...	Displays the Select the Vector to Open window, allowing you to browse your Call Center World to find the vector you want to work with.
Save	Saves your vector to the CMS Server (or PC ScratchPad) from which you opened it.
Print...	Displays the standard Windows Print window.
Cut	Removes the selected object and saves it to be pasted later.
Copy	Makes a copy of the selected object to be pasted later.
Paste	Pastes the object that was previously cut or copied.
Delete	Removes an vector step (or comment) from the vector.
Undo	Undoes the last action performed in this Vector Editor session.
Redo	Redoes the last action that was undone in this Vector Editor session.
Zoom In	Magnifies the vector display each time it is selected.
Zoom Out	Decreases the magnification of the vector display each time it is selected.
Help Contents	Opens the Help Topics window, and displays the table of contents.

Status indicators

These indicators on the status bar provide information about the current vector.

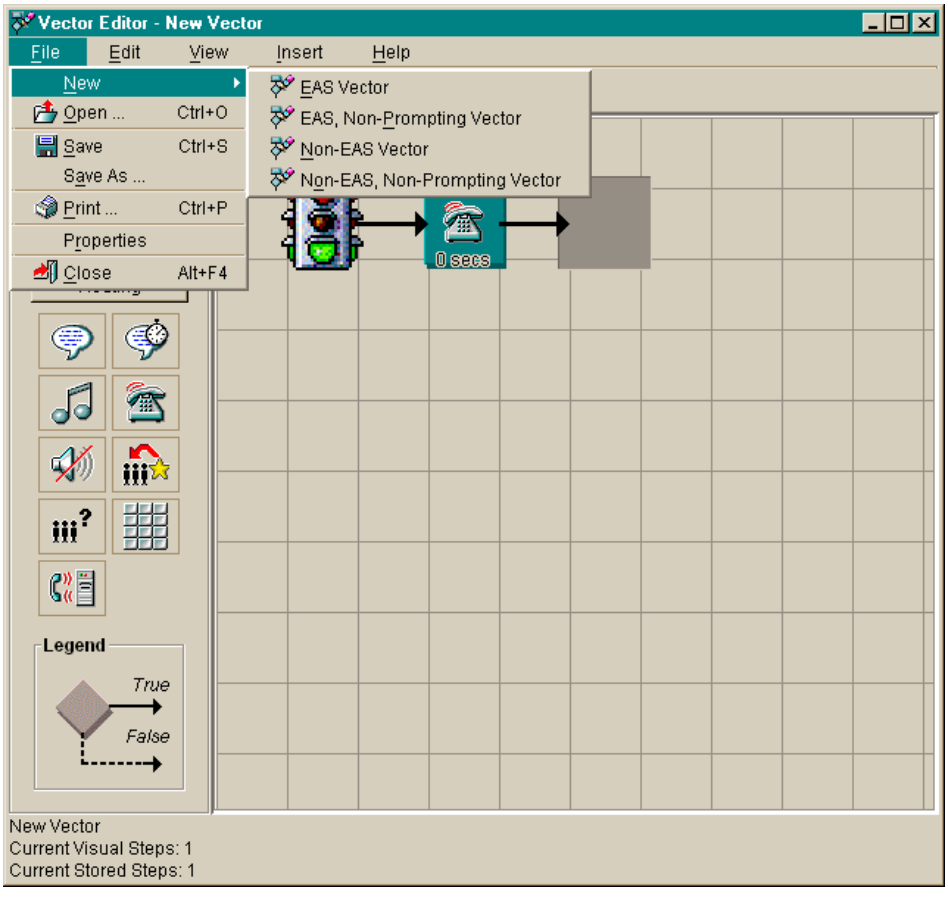
This indicator …	Displays …
Vector Location	The words `New Vector` or a full path to an existing vector in your Call Center World (for example, `/Call Center World/CMS20/ACD8/Vector Folder/Visual Vector`).
Current Visual Steps	A count of the number of palette icons in the current visual vector. The icon for the initial Start icon is not counted.
Current Stored Steps	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 steps turn yellow. At step 33, the steps turn red.

Menu bar

A common *Windows* convention. The menu bar lists the available drop-down menus. This section identifies these menus: File, Edit, View, Insert, and Help.

File menu

The File menu has the following items:



New
Creates a new EAS Vector; Non-EAS Vector; EAS, Non-Prompting Vector; or Non-EAS, Non-Prompting Vector on-line (or iyour ScratchPad).

Open...
Displays the Select the Vector to Open window, allowing you to browse your Call Center World to find the vector you want to work with.

Save
Saves your vector to the CMS (or ScratchPad) from which you opened it.

Save As...
Displays the Save Vector As window.

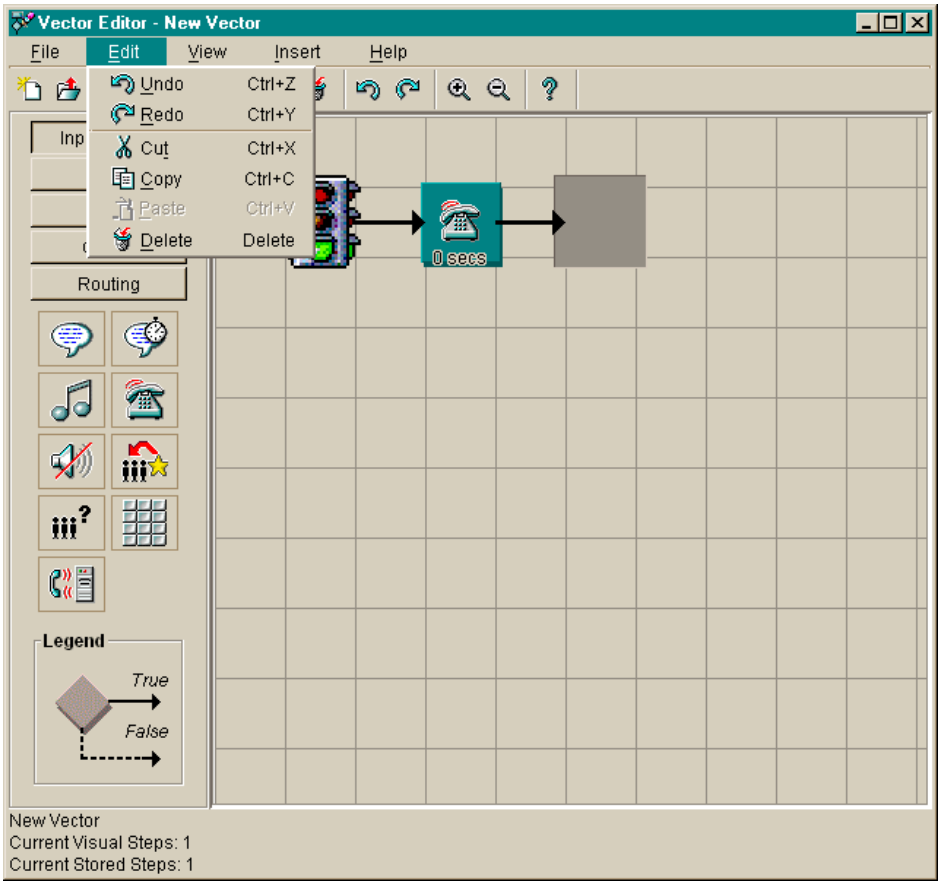
Print...
Displays the standard Windows Print window.

Properties
Accesses the Properties window for the selected object.

Close
Closes the Vector Editor tool's window.

Edit menu

The Edit menu has the following items.



Undo
Undoes the last action performed in this Vector Editor session, up to four actions.

Redo
Redoes the last action that was undone in this Vector Editor session, up to four actions.

Cut
Removes the selected object and saves it to be pasted later.

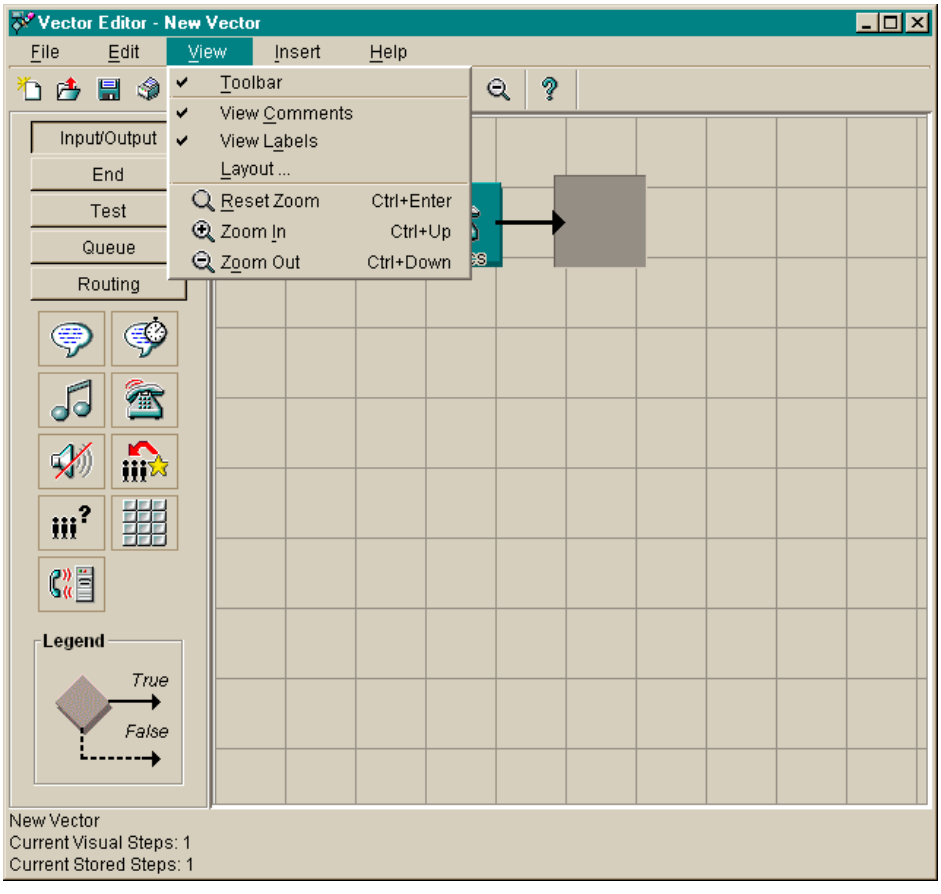
Copy
Makes a copy of the selected object to be pasted later.

Paste
Pastes the object that was previously cut or copied.

Delete
Removes an vector step (or comment) from the vector.

View menu

The View menu has the following items:



Toolbar
Toggles showing the Vector Editor toolbar.

View Comments
Toggles showing the comments for the vector steps.

View Labels
Toggles showing the labels for the vector steps.

Layout...
Displays a window allowing you to change how vectors are laid out (oriented)..

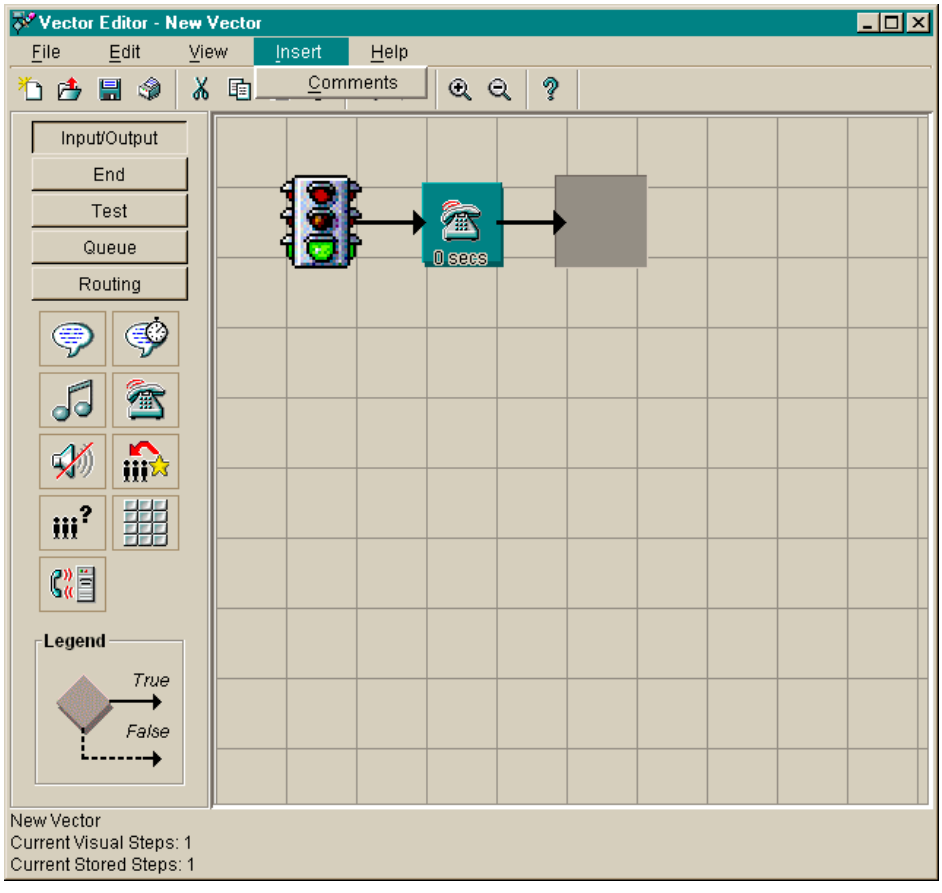
Reset Zoom
Resets the zoom magnification to the default of 100 percent.

Zoom In
Magnifies the vector display each time it is selected.

Zoom Out
Decreases the magnification of the vector display each time it is selected.

Insert menu

The Insert menu has the following items.

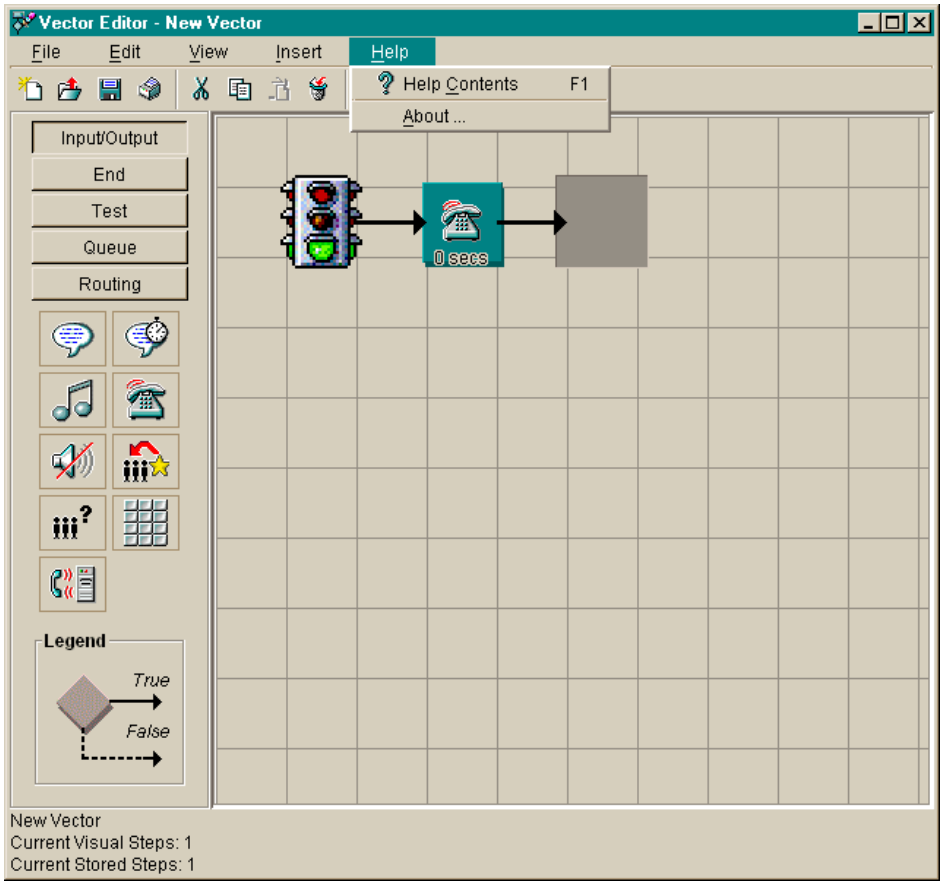


Comments

Allows you to type free-floating comments and attach them to a visual vector. If you use a tool other than the Vector Editor to edit vectors, then *your step comments will be detached from the vector steps and you will have to re-attach them*.

Help

Press the F1 key or select the Help button to display context-sensitive help. Select Help from the menu bar to choose from the following options.



Help Contents
Opens the Help Topics window, and displays the table of contents.

About…
Opens the About… window, which shows the software version number.

Using Vector Editor Menus and Palettes

Vector Editor Menus

To select a Vector Editor menu item, choose any of the following methods:

- Click on the item
- Use the arrow keys to highlight the item and then press Enter
- Hold down the **Alt** key and press the underlined letter in the menu item you want to select
- Hold down the **Ctrl** key and press the key assigned to the operation. For example, use **Ctrl+C** to copy.

Vector Step Palettes

Vector Steps are grouped in the following five palettes on the left-hand side of the Vector Editor window.

- 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

- Queue
  - — Queue Activity
  - — Center Info
  - — Agent Activity
  - — Queue Unconditional
- Routing
  - — Route To Number
  - — Route To Digits
  - — Adjunct Route
  - — Messaging Skill
  - — Goto Vector.

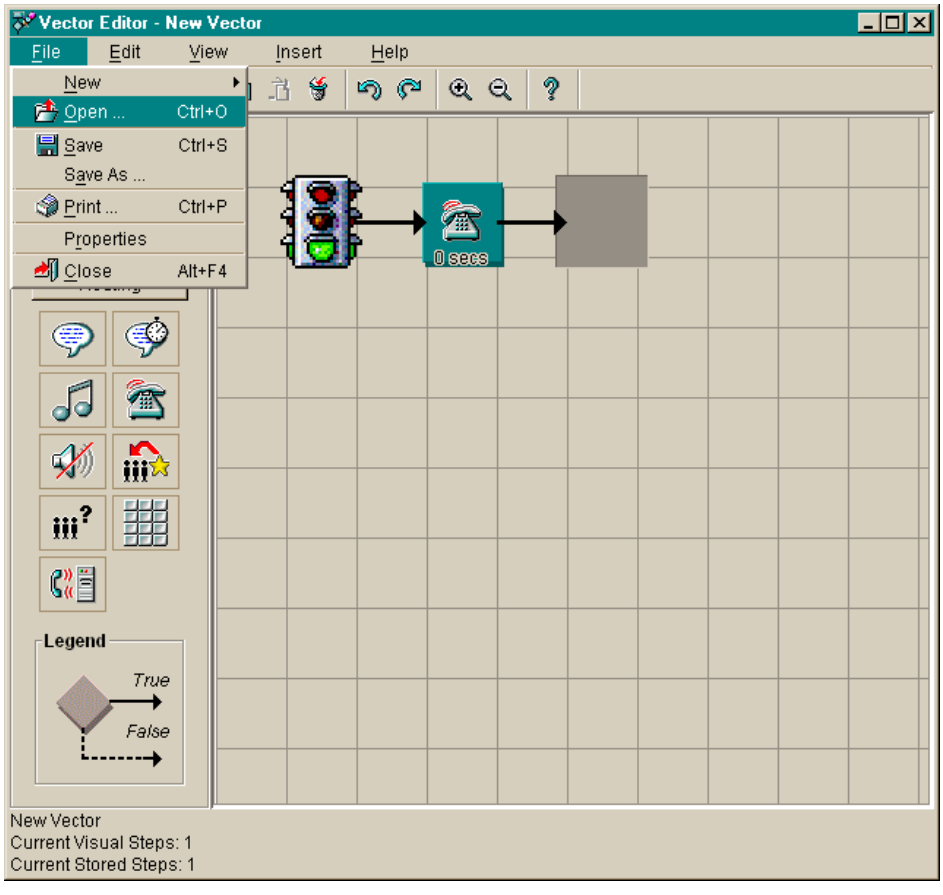
Help system

Press the **F1** key or select the Help button to display context-sensitive help. Select Help from the menu bar to choose from the help options described in “Basic Framework Window Features” on page 2-6.

Opening Vectors

Overview

Regardless of which window you use to select vectors, the actions that may be performed are the same.

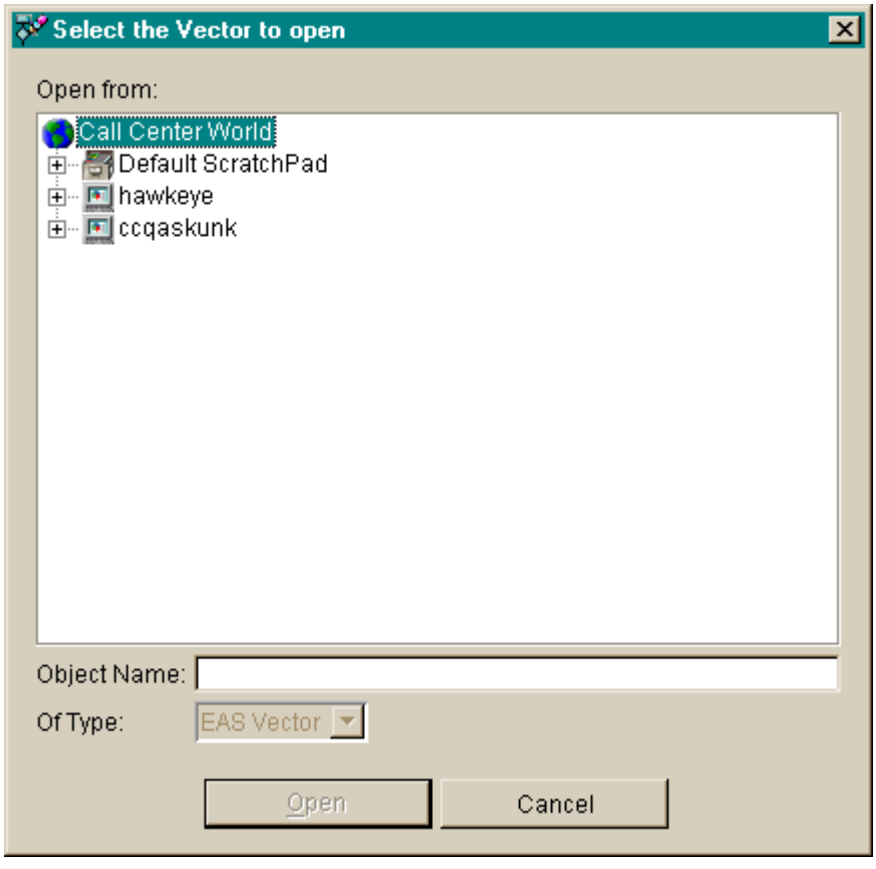


Access procedures

To open a vector from the Vector Editor window, do the following:

1. Select the Open... menu item from the File menu.

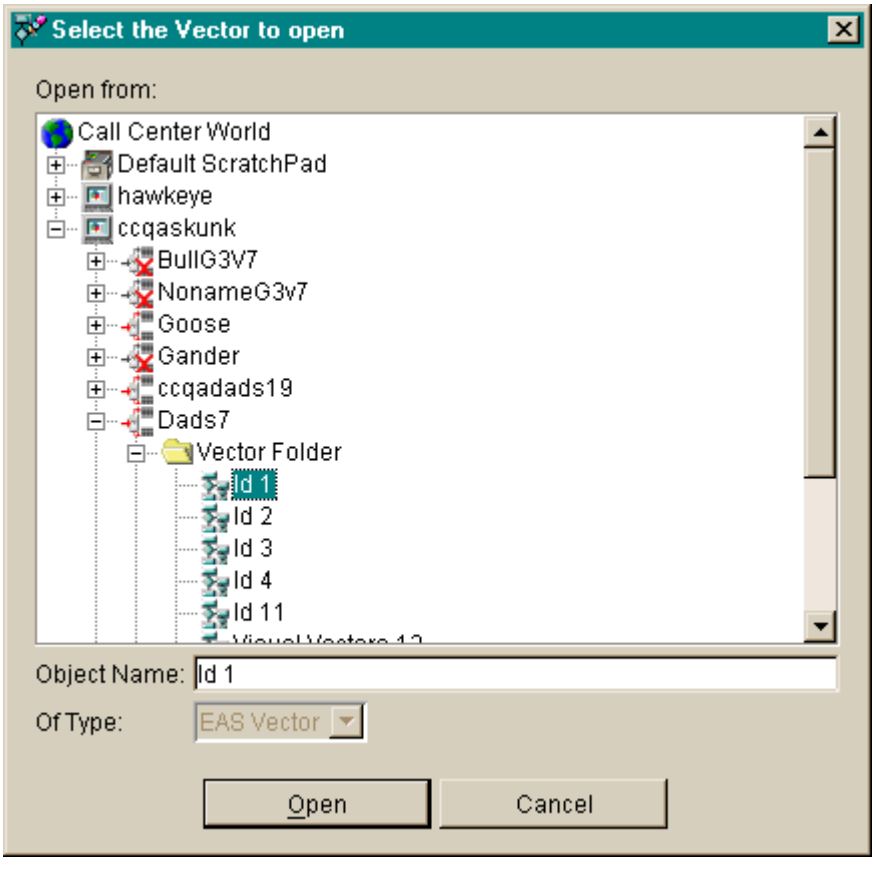
   Result
   A Select the Vector to open window displays.



2. Browse your Call Center World and find the vector you want.
   - Click the + icon next to a container (for example, a Vector Folder) to show objects contained within it (for example, vectors).
   - If needed to reduce clutter, click the – icon to the left of a container to collapse the display and hide the objects within it.
3. Highlight the name of the vector you would like to access.

4. Select the Open button.

Result



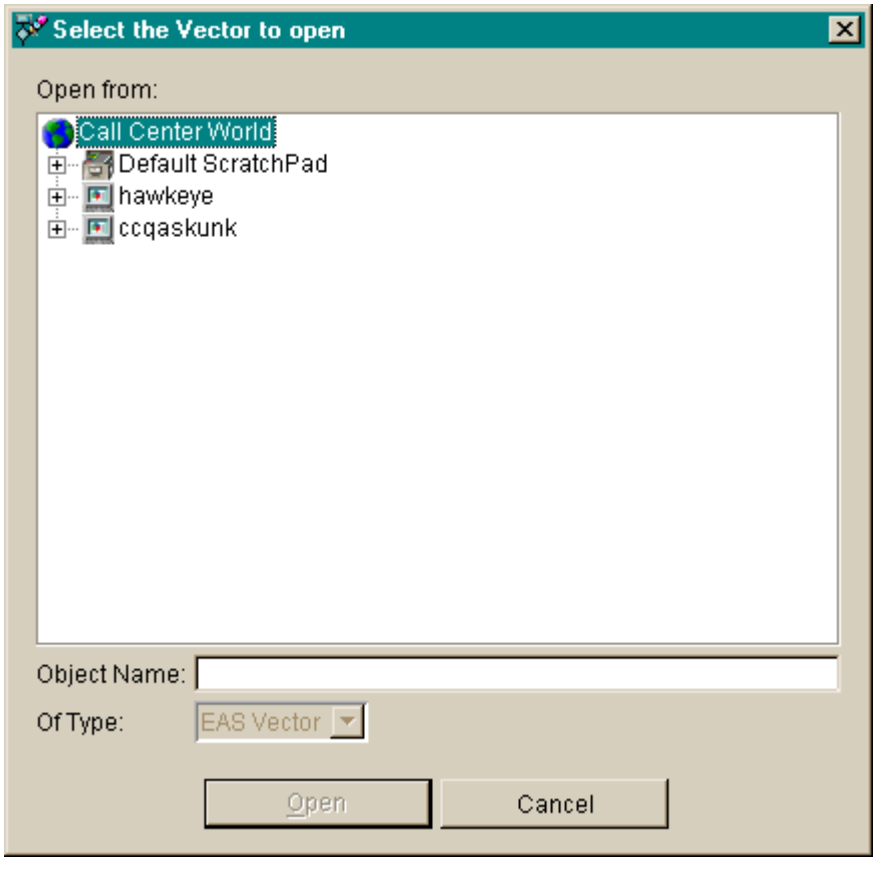
A graphical representation of the selected vector appears in the Vector Editor window.

In Navigator

Alternatively, you can double-click the vector in the Navigator tool, or right-click the vector and select Edit from the context menu.

Features of the select object window

The Select the Vector to open window has the following features.



Open from

Use this area to browse your Call Center World for the object you want.

Object Name

The name of the object you have highlighted in the Open from area.

Of Type

This drop-down list box shows the type of object that is currently selected.

Open and Cancel buttons

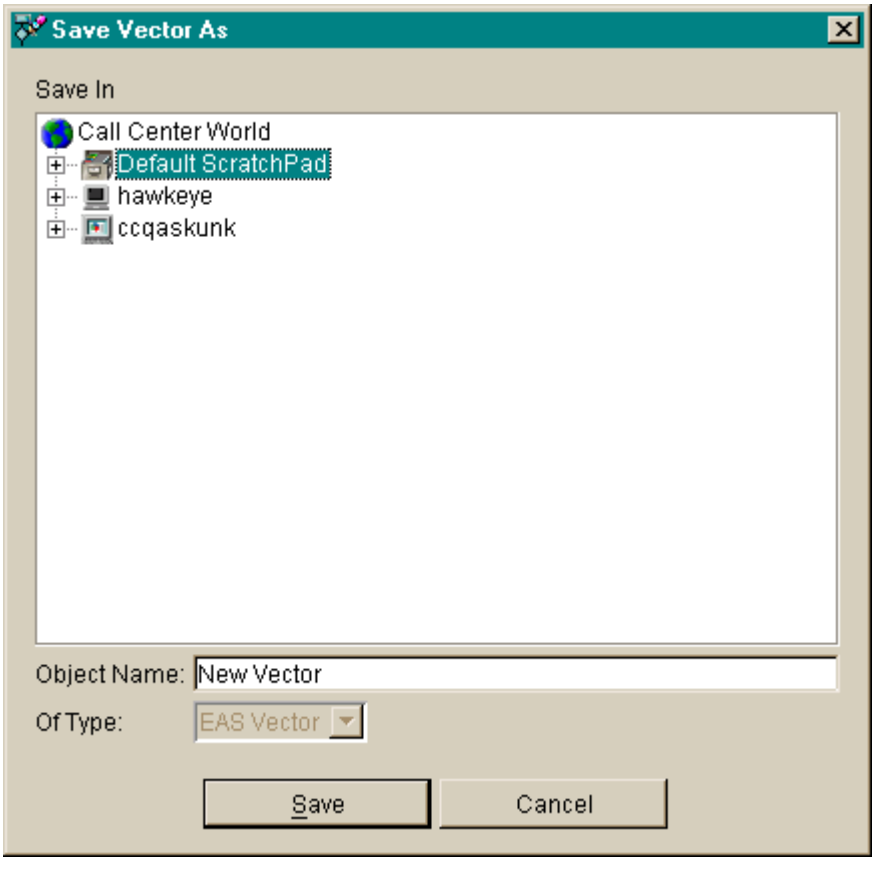
The Open and Cancel buttons you see on this windows perform standard *Windows* actions.

- Open accepts the current input and displays the next window.
- Cancel ignores the current input and returns you to the previous window.

Saving Vectors

Overview

Regardless of which window you use to select objects, the actions that may be performed are the same.

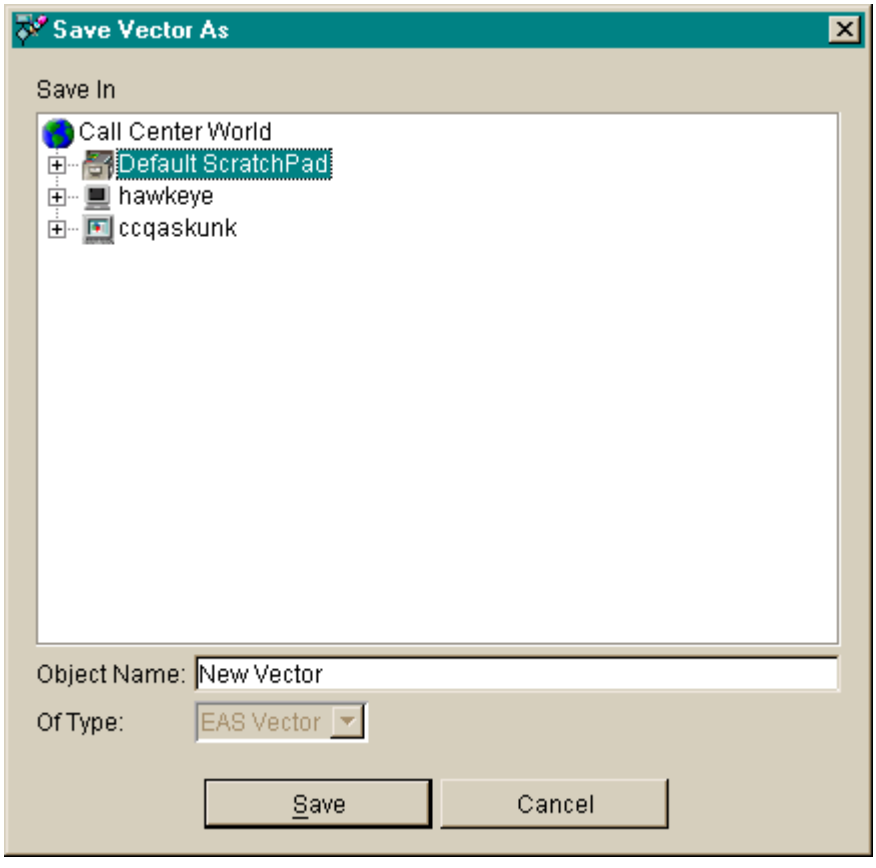


Saving procedures

To save a vector from the Vector Editor window, do the following:

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

   Result
   A Save Vector As window displays.



2. Browse your Call Center World and find the container in which you want to save the current vector.
   - Click the + icon next to a container (for example, a Vector Folder) to show objects contained within it (for example, vectors).
   - If needed to reduce clutter, click the – icon to the left of a container to collapse the display and hide the objects within it.
3. Highlight the name of the container (ScratchPad or Vector Folder) you chose.
4. Select the Save button.

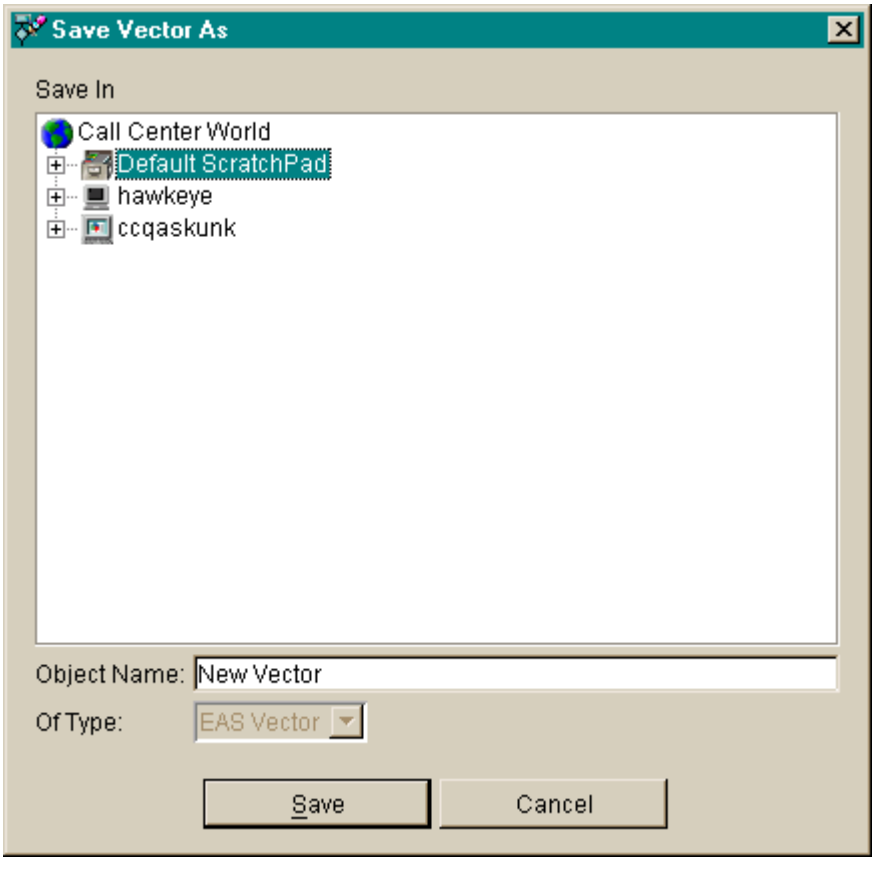
   Result
   A graphical representation of the selected vector is saved to the scratchpad, or the visual vector is converted and stored on the ACD containing the Vector Folder..

In Navigator

Alternatively, you can drag and drop one or more vectors in the Navigator tool.

Features of the Save Object window

The Save Vector As window has the following features.



Save In

Use this area to browse your Call Center World for the container you want.

Object Name

The name of the object you have highlighted in the Save In area.

Of Type

This drop-down list box shows the type of object that is currently selected.

Save and Cancel buttons

The Save and Cancel buttons you see on this windows perform standard *Windows* actions.

- Save accepts the current input and displays the next window.
- Cancel ignores the current input and returns you to the previous window.

Using Step Property Windows

Purpose

Once you have selected properties from the context menu for an object, an input window displays. The information required in the input window depends on the object.

The following are described:

- "Basic features of fields on property windows" on page 4-32
- Properties of the "Announcement (Input/Output) step" on page 4-32
- Properties of the "Timed Announcement (Input/Output) step" on page 4-32
- Properties of the "Music (Input/Output) step" on page 4-33
- Properties of the "Ringback (Input/Output) step" on page 4-33
- Properties of the "Silence (Input/Output) step" on page 4-33
- Properties of the "Reply (Input/Output) step" on page 4-33
- Properties of the "Consider (Input/Output) step" on page 4-33
- Properties of the "Collect (Input/Output) step" on page 4-34
- Properties of the "Converse (Input/Output) step" on page 4-34
- Properties of the "Busy (End) step" on page 4-35
- Properties of the "Stop (End) step" on page 4-35
- Properties of the "Disconnect (End) step" on page 4-35
- Properties of the "Caller Info (Test) step" on page 4-35
- Properties of the "Center Info (Test) step" on page 4-36
- Properties of the "Queue Activity (Test) step" on page 4-37
- Properties of the "Agent Activity (Test) step" on page 4-37
- Properties of the "Time Of Day (Test) step" on page 4-38
- Properties of the "Queue Activity (Queue) step" on page 4-38
- Properties of the "Center Info (Queue) step" on page 4-39
- Properties of the "Agent Activity (Queue) step" on page 4-39
- Properties of the "Queue Unconditional (Queue) step" on page 4-40
- Properties of the "Route To Number (Routing) step" on page 4-40
- Properties of the "Route To Digits (Routing) step" on page 4-40
- Properties of the "Adjunct Route (Routing) step" on page 4-40
- Properties of the "Messaging Skill (Routing) step" on page 4-41
- Properties of the "Goto Vector (Routing) step" on page 4-41.

Basic features of fields on property windows

Use the Property window features to enter or edit existing field values, as follows:

Feature	Action
Text boxes	Type in any characters from the keyboard for this field.
Drop-down lists	View and select from a list of the valid values available for this input field.
Numeric fields	Type in numbers (depending on ECS/switch type and software version) as the valid entries for this input field.
Check Boxes	Select the check box to toggle it on for yes or off for no.

Announcement (Input/Output) step

The following describes the Announcement (Input/Output) step:

Properties	Description
Announcement	Select a valid announcement for the ACD on which the step will be saved, or select Extension.
Extension	Enter a 1-5 digit extension number. Default is 0. Disabled if Announcement is not Extension.
Comment	A comment associated with this step.

Timed Announcement (Input/Output) step

The following describes the Timed Announcement (Input/Output) step:

Properties	Description
Seconds	Enter numeric value 0-999 (default=0).
Announcement	Select a valid announcement for the ACD on which the step will be saved, or select Extension.
Extension	Enter a 1-5 digit extension number. Default is 0. Disabled if Announcement is not Extension.
Treatment	Select music, silence, ringback, or continue. Default is continue.
Comment	A comment associated with this step.

Music (Input/Output) step

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

Properties	Description
Seconds	Enter numeric value 0-999 (default=0).
Comment	A comment associated with this step.

Ringback (Input/Output) step

The following describes the Ringback (Input/Output) step:

Properties	Description
Seconds	Enter numeric value 0-999 (default=0).
Comment	A comment associated with this step.

Silence (Input/Output) step

The following describes the Silence (Input/Output) step:

Properties	Description
Seconds	Enter numeric value 0-999 (default=0).
I-Silent	Check to enable.
Comment	A comment associated with this step.

Reply (Input/Output) step

The following describes the Reply (Input/Output) step:

Properties	Description
Comment	A comment associated with this step.

Consider (Input/Output) step

The following describes the Consider (Input/Output) step:

Properties	Description
Measure	Split/Skill is the default value. Or select location from drop-down list, if applicable.
Split/Skill	Select a split or skill (or First, Second, Third, or Id) from drop-down list. Disabled if Measure is Location.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Measure is Location or if Split/Skill is not Id.

Properties	Description
Priority	High is the default value. Or select low, medium, or top from drop-down list. Disabled if Measure is Location.
Location	Enter numeric value 1-255 (default=1). Disabled if Measure is Split/Skill.
Adjustment	Enter numeric value 0-100 (default=0).
Comment	A comment associated with this step.

Collect (Input/Output) step

The following describes the Collect (Input/Output) step:

Properties	Description
Source	Digits is the default value. Or select CED or CDPD from drop-down list, if applicable.
Number of digits	Enter numeric value 1-16 (default=1). Disabled if Source is not digits.
Comment	A comment associated with this step.

Converse (Input/Output) step

The following describes the Converse (Input/Output) step:

Properties	Description
Split/Skill	Select a split or skill (or First, Second, Third, or Id) from drop-down list. Disabled if Measure is Location.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	High is the default value. Or select low, medium, or top from drop-down list. Disabled if Measure is Location.
Passing	None is the default value. Or select vdn, ani, digits, qpos, wait, or data from drop-down list.
Data	Enter up to a 6-digit number, if applicable (default is blank). Enabled if first Passing is Data.
Passing	None is the default value. Or select vdn, ani, digits, qpos, wait, or data from drop-down list. Disabled if first Passing is none.

Properties	Description
Data	Enter up to a 6-digit number, if applicable (default is blank). Enabled if second Passing is Data.
Comment	A comment associated with this step.

Busy (End) step

The following describes the Busy (End) step:

Properties	Description
Comment	A comment associated with this step.

Stop (End) step

The following describes the Stop (End) step:

Properties	Description
Comment	A comment associated with this step.

Disconnect (End) step

The following describes the Disconnect (End) step:

Properties	Description
Comment	A comment associated with this step.

Caller Info (Test) step

The following describes the Caller Info (Test) step:

Properties	Description
Measure	ANI is the default value. Or select digits or ii-digits from drop-down list, if applicable.
Comparator	Equals (=) is the default value. Or select <=, <>, <, >, >=, in , or not in, from drop-down list.
Threshold	Zero (0) is the default value. Or enter a numeric value (1-16 characters if ani or digits, 00-99 if ii-digits). Disabled if Comparator is in or not in.

Properties	Description
Table	One (1) is the default value. Or enter a numeric value (1-100). Disabled if Comparator is not in or not in.
Comment	A comment associated with this step.

Center Info (Test) step

The following describes the Center Info (Test) step:

Properties	Description
Measure	Counted-calls to VDN is the default value. Or select rolling-asa, expected-wait from drop-down list.
Split/Skill	Select a split or skill (or First, Second, Third, Best, Call, or Id) from drop-down list. Disabled if Measure is not expected wait.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	High is the default value. Or select low, medium, or top from drop-down list. Disabled if Measure is not expected wait, or if Split/Skill is Best or Call.
VDN	Select a VDN (or extension, active, or latest) from drop-down list. Disabled if Measure is expected wait.
Extension	Enter a 1-5 digit extension number. Disabled if VDN is not unmeasured
Comparator	Equals (=) is the default value. Or select <=, <>, <, >, >=, from drop-down list.
Threshold	One (1) is the default value. Or enter a numeric value that depends on Measure and your ECS/switch software version.
Comment	A comment associated with this step.

Queue Activity (Test) step

The following describes the Queue Activity (Test) step:

Properties	Description
Measure	Rolling-asa is the default value. Or select calls-queued, interflow-qpos, oldest-call, or wait-improved from drop-down list.
Split/Skill	Select a split or skill (or First, Second, Third, Id, or Best) from drop-down list. Disabled if Measure is interflow-qpos.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	High is the default value. Or select low, medium, or top from drop-down list. Disabled if Measure is interflow-qpos or Split/Skill is Best.
Comparator	Equals (=) is the default value. Or select <=, <>, <, >, >=, from drop-down list.
Threshold	One (1) is the default value. Or enter a numeric value that depends on Measure and your ECS/switch software version.
Comment	A comment associated with this step.

Agent Activity (Test) step

The following describes the Agent Activity (Test) step:

Properties	Description
Measure	Available-agent is the default value. Or select staffed-agents from drop-down list.
Split/Skill	Select a split or skill (or First, Second, Third, or Id) from drop-down list.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Comparator	Equals (=) is the default value. Or select <=, <>, <, >, >=, from drop-down list.
Threshold	Zero (0) is the default value. Or enter a numeric value that depends on Comparator and your ECS/switch software version.
Comment	A comment associated with this step.

Time Of Day (Test) step

The following describes the Time Of Day (Test) step:

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

Queue Activity (Queue) step

The following describes the Queue Activity (Queue) step:

Properties	Description
Measure	Rolling-asa is the default value. Or select calls-queued, oldest-call, or wait-improved from drop-down list.
Split/Skill	Select a split or skill (or First, Second, Third, Id, or Best) from drop-down list. Disabled if Measure is interflow-qpos.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	High is the default value. Or select low, medium, or top from drop-down list. Disabled if Split/Skill is Best.
Comparator	Auto-selected default value. Read-only field.
Threshold	One (1) is the default value. Or enter a numeric value that depends on Measure and your ECS/switch software version.
Comment	A comment associated with this step.

Center Info (Queue) step

The following describes the Center Info (Queue)step:

Properties	Description
Measure	Expected-wait is the available value.
Split/Skill	Select a split or skill (or First, Second, Third, Best, Call, or Id) from drop-down list.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	High is the default value. Or select low, medium, or top from drop-down list.
Comparator	Auto-selected default value. Read-only field.
Threshold	One (1) is the default value. Or enter a numeric value that depends on Measure and your ECS/switch software version.
Comment	A comment associated with this step.

Agent Activity (Queue) step

The following describes the Agent Activity (Queue) step:

Properties	Description
Measure	Available-agents is the default value. Or select staffed-agents from drop-down list.
Split/Skill	Select a split or skill (or First, Second, Third, or Id) from drop-down list.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	Low is the default value. Or select medium, high, or top from drop-down list.
Comparator	Auto-selected default value. Read-only field.
Threshold	Zero (0) is the default value. Or enter a numeric value that depends on Comparator and your ECS/switch software version.
Comment	A comment associated with this step.

Queue Unconditional (Queue) step

The following describes the Queue Unconditional (Queue)step:

Properties	Description
Split/Skill	Select a split or skill (or First, Second, Third, Id, or Best) from drop-down list.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Priority	High is the default value. Or select low, medium, or top from drop-down list. Disabled if Split/Skill is Best.
Comment	A comment associated with this step.

Route To Number (Routing) step

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

Properties	Description
Number	Zero (0) is the default. Or enter a 1-16 digit number.
Coverage	No is the default value. Or select yes from the drop-down list.
Comment	A comment associated with this step.

Route To Digits (Routing) step

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

Properties	Description
Coverage	No is the default value. Or select yes from the drop-down list.
Comment	A comment associated with this step.

Adjunct Route (Routing) step

The following describes the Adjunct Route (Routing) step:

Properties	Description
Extension	Enter a 1-5 digit extension number. Default is blank.
Comment	A comment associated with this step.

Messaging Skill (Routing) step

The following describes the Messaging Skill (Routing)step:

Properties	Description
Split/Skill	Select a split or skill (or First, Second, Third, or Id,) from drop-down list.
Skill Id	Enter numeric value 1-600 (default=1). Disabled if Split/Skill is not Id.
Extension	Extension is the default. Or select active or latest.
Number	Zero (0) is the default. Or enter a 1-5 digit extension number. Disabled if Extension is active or latest.
Comment	A comment associated with this step.

Goto Vector (Routing) step

The following describes the Goto Vector (Routing) step:

Properties	Description
Vector	Select a valid vector for the ACD on which the step will be saved, or select Id.
Vector Id	Enter the numeric Id of a valid vector to goto (default=1). Disabled if Vector is not Id.
Comment	A comment associated with this step.

Completing Input Fields

Options

You can complete an input field by doing one of the following:

- Enter the requested information in the text box.
- Select the information from a drop-down list of valid entries.
- Check a box for the input field.

Vector Scenarios

Overview

There are many tasks related to call vectoring that Visual Vectors software helps you perform.

Common scenarios may include:

- “Creating a new Goto vector” on page 4-43
- “Moving/copying or saving vectors to ACDs of differing types” on page 4-51.

Creating a new Goto vector

1. Start *CentreVu* Visual Vectors.

   Result
   The *CentreVu* Framework window appears.

2. In the *CentreVu* Framework window, select Vector (EAS) from the sub-menu for Vector Editor on the Tools menu or toolbar.

   Result
   The Vector Editor window appears for a New Vector with an empty (grey) box for the first step.

3. 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. On the left-hand side of the Vector Editor window, select the Test palette.

   Result
   The available icons for the Test palette are displayed.

4. Using the tooltips (if enabled), locate and select the Time Of Day icon, then drag the icon and drop it on the empty step box in the workspace area.

   Result
   A yellow box appears when you can drop the icon.

5. Select Properties from the context (right-click) menu for the Time Of Day icon, or double-click the icon.

   Result
   The Properties of Time Of Day window appears with default values.

6. Select the Start Time: fields and enter `23`: `00` and then select the Finish Time: fields and enter `5`: `00`

   Result
   Leading zeroes are discarded from numeric entries.

7. Optionally, you may type a comment for this test in the Comment: field, and then select OK.

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

8. 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. To make a Goto Vector step, select the Routing palette.

   Result
   The available step icons change to display icons for Routing.

9. Locate and select the icon in the palette for the Goto Vector step, then drag the icon and drop it on the empty step box for TRUE in the workspace area.

   Result
   A yellow box appears when you can drop the icon.

10. Select Properties from the context (right-click) menu for the Goto Vector step icon, or double-click the icon.

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

11. Select the Vector ID: field and enter 2.

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

12. Optionally, you may type a comment for this step in the Comment: field, and then select OK.

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

13. Next, you need to disconnect weekend callers after playing an announcement. To test the weekend condition, select the Test palette again.

    Result
    The available icons for the Test palette are displayed.

14. Locate, select, and then drag and drop another Time Of Day icon onto the empty box for FALSE in the workspace area.

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

15. Select Properties from the context (right-click) menu for the Time Of Day icon, or double-click the icon.

    Result
    The Properties of Time Of Day window appears with default values.

16. Select `Friday` from the drop-down list of values for the Start Day: field, enter `20`: `00` in the Start Time: fields, then select `Monday` from the drop-down list of values for the Finish Day: field, and enter `5`: `00` in the Finish Time: fields.

    Result
    Leading zeroes are discarded from numeric entries.

17. Optionally, you may type a comment for this test in the Comment: field, and then select OK.

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

18. To specify the announcement to be played for weekend callers, select the Input/Output palette.

    Result
    The available icons for the selected palette are displayed.

19. Locate and select the Announcement icon, then drag and drop it on the empty step box for TRUE in the workspace area

    Result
    A yellow box appears when you can drop the icon.

20. Select Properties from the context (right-click) menu for the Announcement icon, or double-click the icon.

    Result
    The Properties of Announcement window appears. The Extension: field is required.

21. Select the Extension: field and enter `84573`.

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

22. Optionally, you may type a comment for this icon in the Comment: field, and then select OK.

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

23. Now you want to disconnect the weekend calls. Select the End palette.

    Result
    The available step icons change to display End icons.

24. Locate and select the Disconnect icon, then drag and drop it on the empty box for TRUE in the workspace area.

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

25. Next, if the weekend condition tests false (the broken or dotted arrow), you want to queue the call. Select the Queue palette.

    Result
    The available step icons change to display Queue icons.

26. Locate and select the Queue Unconditional icon, then drag and drop it on the empty step box for FALSE in the workspace area.

    Result
    A yellow box appears when you can drop the icon.

27. Select Properties from the context (right-click) menu for the Queue Unconditional icon, or double-click the icon.

    Result
    The Properties of Queue Unconditional window appears.

28. Select `Id` from the drop-down list of values for the Skill: field.

    Result
    The Skill Id: field is enabled and required.

29. Select the Skill Id: field and enter `1`.

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

30. Optionally, you may type a comment for this step in the Comment: field, and then select OK.

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

31. Now you want callers to wait while hearing ringback. Select the Input/Output palette again.

    Result
    The available step icons change to display icons for Input/Output.

32. Locate and select the Ringback icon, then drag and drop it on the empty step box in the workspace area.

    Result
    A yellow box appears when you can drop the icon.

33. Select Properties from the context (right-click) menu for the Ringback icon, or double-click the icon.

    Result
    The Properties of Ringback window appears with a default value of 0 seconds.

34. Change the highlighted default value to 18 in the Seconds: field.

    Result
    The Apply button is enabled in the Properties window.

35. Optionally, you may type a comment for this step in the Comment: field, and then select OK.

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

36. Next, you want to collect a digit after playing an announcement for the caller. Locate and select the Announcement icon, then drag and drop it on the empty step box in the workspace area.

    Result
    A yellow box appears when you can drop the icon.

37. Select Properties from the context (right-click) menu for the Announcement icon, or double-click the icon.

    Result
    The Properties of Announcement window appears. The Extension: field is required.

38. Select the Extension: field and enter 72349.

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

39. Optionally, you may type a comment for this icon in the Comment: field, and then select OK.

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

40. Locate and select the Collect icon, then drag and drop it on the empty step box in the workspace area.

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

41. Now you want to route callers conditionally, based on the collected digit. You can add the condition later. Select the Routing palette.

    Result
    The available icons change to display vector step icons for Routing.

42. Locate and select the Route To Number icon, then drag and drop it on the empty step box in the workspace area.

    Result
    A yellow box appears when you can drop the icon.

43. Select Properties from the context (right-click) menu for the Route To Number icon, or double-click the icon.

    Result
    The Properties of Route To Number window appears with default values.

44. Change the highlighted default value in the Number: field to `93031234567`.

    Result
    The Apply button is enabled in the Properties window.

45. Optionally, you may type a comment for this icon in the Comment: field, and then select OK.

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

46. You must add the conditional branch, so select the Test palette.

    Result
    The available icons change to display Test icons.

47. Locate and select the Caller Info icon, then drag and drop the icon onto the arrow BEFORE the Route To Number icon in the workspace area.

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

48. Select Properties from the context (right-click) menu for the Caller Info icon, or double-click the icon.

    Result
    The Properties of Caller Info window appears with default values.

49. Select `digits` from the drop-down list of values for the Measure: field.

    Result
    The Apply button is enabled.

50. Select the default value of 0 in the Threshold: field and change it to 5.

    Result
    The highlighted value changes in the Properties window.

51. Optionally, you may type a comment for this icon in the Comment: field, and then select OK.

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

52. 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. If their collected digit was not 5, you want callers to wait while hearing music, so select the Input/Output palette.

    Result
    The available icons change to display Input/Output icons.

53. Locate and select the Music icon, then drag and drop it on the empty box for FALSE in the workspace area.

    Result
    A yellow box appears when you can drop the icon.

54. Select Properties from the context (right-click) menu for the Music icon, or double-click the icon.

    Result
    The Properties of Music window appears with a default value of 0 seconds.

55. Change the highlighted default value to `30` in the Seconds: field.

    Result
    The Apply button is enabled in the Properties window.

56. Optionally, you may type a comment for this step in the Comment: field, and then select OK.

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

57. You want to play an announcement for callers every 30 seconds. Locate and select the Announcement icon, then drag and drop it on the empty box after the Music icon.

    Result
    A yellow box appears when you can drop the icon.

58. Select Properties from the context (right-click) menu for the Announcement icon, or double-click the icon.

    Result
    The Properties of Announcement window appears. The Extension: field is required.

59. Enter 74934 in the Extension: field.

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

60. Optionally, you may type a comment for this icon in the Comment: field, and then select OK.

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

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

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

62. Lastly, there is still an empty step box after the Route To Number icon. To finish editing your new vector, select the End palette.

    Result
    The available step icons change to display End icons.

63. Locate and select the Stop icon, then drag and drop it on the empty step box in the workspace area.

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

64. If you haven't already saved your work, select the Save item from the File menu or toolbar in the Vector Editor window.

    Result
    The first time you save, a window will appear in which you specify where to save the vector. This can be off-line in a scratchpad, or on-line to a permitted ACD's Vector Folder. If your vector is new on the ACD (you're not saving using an existing vector's name), you will be prompted for a Name and ID. If you saved an existing vector (or using its name), you will be prompted to overwrite it.

Moving/copying or saving vectors to ACDs of differing types

Important!
You can move or copy vectors from one ACD to another using the Navigator tool. You can also open or create a vector of one type and save it to an ACD of a differing type, or copy and paste one or more steps between differing vectors using the Vector Editor tool. In these situations, vector steps need conversion.

1. Open an existing or create a new Vector (EAS) containing 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 the preceding step.
3. Open an existing or create a new Vector (non-EAS, non-Prompting)
4. Paste the whole vector or set of steps you previously copied.
5. You will be prompted with one or more windows explaining the necessary conversion(s). You may choose Yes to rectify incompatible steps individually, or Yes to All to rectify steps of the same type in all currently selected vectors/steps.

Printing Vectors

Overview

This section describes how to print vectors and windows. Included are instructions for selecting a printer and specifiying that printer's properties. This print function is available only in the Vector Editor part of Visual Vectors.

In this section

Topics include:

- Printing a Vector
- Print Windows.

Printing a Vector

Selecting a printer

1. Select the Print item from the File menu in the Vector Editor window.
2. Select the printer, print range, and number of copies
3. Specify any printer properties, as needed.
4. Select OK.

   Result
   The printing status window displays. The time required will vary, depending on which vector you are printing.

Specifying printer properties

1. Select the Print item from the File menu in the Vector Editor window.
2. Complete the Print window by filling in the input field(s).
3. Select the Properties button next to the Printer Name field..
4. Specify or change any options in the Printer Properties window, as needed.
5. Select OK.

   Result
   The Print window displays again and the Printer fields are populated with any inputs you have previously entered.
6. Select OK.

   Result
   The print operation runs.

Print Windows

Purpose

The Print windows are provided by the *Windows* operating system. See your windows documentation or on-line help for further information.

Print window items

The following lists Print window items and a definition of each.

Window Item	Function
Copies	Specifies the number of copies to print.

VDN Assignment Wizard 5

Overview

This chapter explains how to use the VDN Assignment tool.

It is divided into the following sections:

- VDN Assignment Overview
- Using the VDN Assignment Wizard.

See the overview of each section for a preview of the section's contents.

VDN Assignment Overview

Overview

To run the VDN Assignment Wizard, you need to start *CentreVu* Framework and connect to a *CentreVu* CMS server to access VDNs for one or more ACDs linked to the CMS. You may connect by choosing Connect from the File menu or toolbar in the *CentreVu* Framework window.

In this section

Topics include:

- Terms you need to know
- Starting the VDN Assignment Wizard
- Connecting to a *CentreVu* CMS server
- Adding new CMS servers
- Closing windows
- Disconnecting from a *CentreVu* CMS server
- Exiting the wizard.

Terms You Need to Know

Terms

Before you begin using the software, you should know the meaning of several terms. These terms, as well as others, are also defined in the Glossary.

Accelerator Keys
Keys that provide shortcuts to actions available on the menu.

Automatic Call Distribution (ACD)
A switch feature using software that channels high-volume incoming and outgoing call traffic to agent groups (splits or skills).

Also an agent state where the extension is engaged on an ACD call.

See Redirect On No Answer and Auto-Available Split.

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.

Container
An object in your Call Center World that logically contains other entities or objects. For example, each CMS object in your Call Center World can contain as many as 8 ACD objects, each of which contains entity folders (for announcements, split or skill objects, trunk groups, VDNs, and vectors).

Context menu
A menu with specific actions for an entity or object.

CentreVu Visual Vectors window
The window in which you are currently working (usually indicated by a highlighted title bar). Visual Vectors has a Framework window and windows for each of the tools, including Navigator, Vector Editor, and VDN Assignment Wizard.

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

Input field
An area in a window into which you enter one or more valid values. Valid values may be integers, for example, or names assigned in the *CentreVu* CMS Dictionary.

Menu bar
A menu bar is under the title bar of most windows. The menu bar shows the menu names available for that particular window (for example, File and Help). You select an item from one of these drop-down menus.

Name (synonym) fields
Fields in which you may enter a name (synonym) that has been assigned in the CMS Dictionary (for example, the name of a vector).

Object
Any item which may appear in your Call Center World through the Navigator tool. Objects can be containers of other objects or entities (VDNs folder), or an object may be an administerable entity itself (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 which requires one of those skills. In relationship to your call center, think of skill as a specific customer need/requirement or perhaps a business need of your call center. You will be defining your skills based on the needs of your customers and your call center.

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.

Switch
A private switching system providing 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.

Title bar
A title bar is across the top of most windows. The title bar shows the name of that particular window (for example, Navigator). Titles of open tool windows will be listed on the Window menu of *CentreVu* Framework.

Toolbar
A toolbar is under the menu bar of most windows. Toolbar icons represent actions you can perform.

Tools menu
A drop-down menu on the *CentreVu* Framework menu bar that gives you access to the Navigator, Vector Editor, and VDN Assignment tools.

Tooltips
Tooltips are available in most windows by placing the mouse cursor over an item for two seconds. Tooltips usually describe the actions performed by selecting an icon. Tooltips can be disabled on the Preferences window accessed from the File menu of *CentreVu* Framework.

VDN
See Vector Directory Number.

VDN Assignment
The window that displays after you select it from the Tools menu or toolbar in the *CentreVu* Framework window. It consists of several dialog

boxes in sequence; for example, one filters and selects the VDNs you wish to assign, and another performs the assignment(s).

VDN Skill Preferences
Up to three skill(s) can be assigned to a VDN. Calls use VDN skills for routing based on your preference (as you administer it in the vector). VDN skill preferences are referred to in the vector as “1st,” “2nd,” or “3rd.”

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.

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 may have received 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 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 connected to the switch.

Vector Editor
This software tool, accessed from *CentreVu* Framework, allows you to create and edit vectors visually, by dragging and dropping icons representing commands from a palette and arranging them into vector steps in a work area. You can attach comments, change layout, and save and print the vectors.

Vector Step
One processing step in a vector. A vector step consists of a command and one or more conditions or parameters (properties of visual vectors).

Vector Step Condition
A condition accompanying a vector command that defines the circumstances in which the command will be applied to a call. To visually edit the condition, access the properties for the vector step.

Starting the VDN Assignment Wizard

Procedure

Use the steps below to start VDN Assignment Wizard for *Windows* 95/98 or *Windows NT* 4.0.

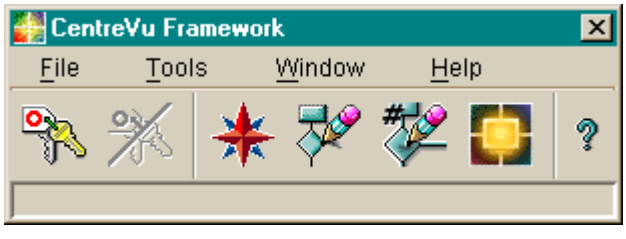
1. Select the Lucent *CentreVu* Visual Vectors program group from the Programs sub-menu of the Start menu.
2. Select the *CentreVu* Visual Vectors 1.0 item from the program group.
3. Select VDN Assignment Wizard from Framework's Tools menu or toolbar.

Results

The Visual Vectors software application opens. The *CentreVu* Framework window displays. Although the software is now running, you are not yet connected to a CMS server.

Framework is Visual Vectors' main window. You will use the toolbar buttons and pull-down menus to access tools, including Navigator, that contain information about ACD entities from the CMS server.

The following figure illustrates how the window appears before logging into the CMS server.



Disconnecting and exiting the wizard

Procedure

To exit any window in the wizard, select the Cancel button, or press **Esc** on your keyboard.

To exit the software, select Exit from the File menu in the *CentreVu* Framework main window.The software automatically disconnects from any CMS servers to which you are connected and then closes *CentreVu* Framework window. A warning message appears if you have open tool windows.

If you try to close or exit the *CentreVu* Framework window and you have open tool windows, a warning message will be displayed. If you restart framework, it will attempt to restore the open windows and server connections. See “Disconnecting and exiting the software” on page 4-12

Using the VDN Assignment Wizard

Overview

This section introduces you to VDN Assignment window features as they appear both before and after connecting to *CentreVu* CMS. Follow the instructions to — among other tasks — make VDN selections, use windows, and enter values in input fields.

In this section

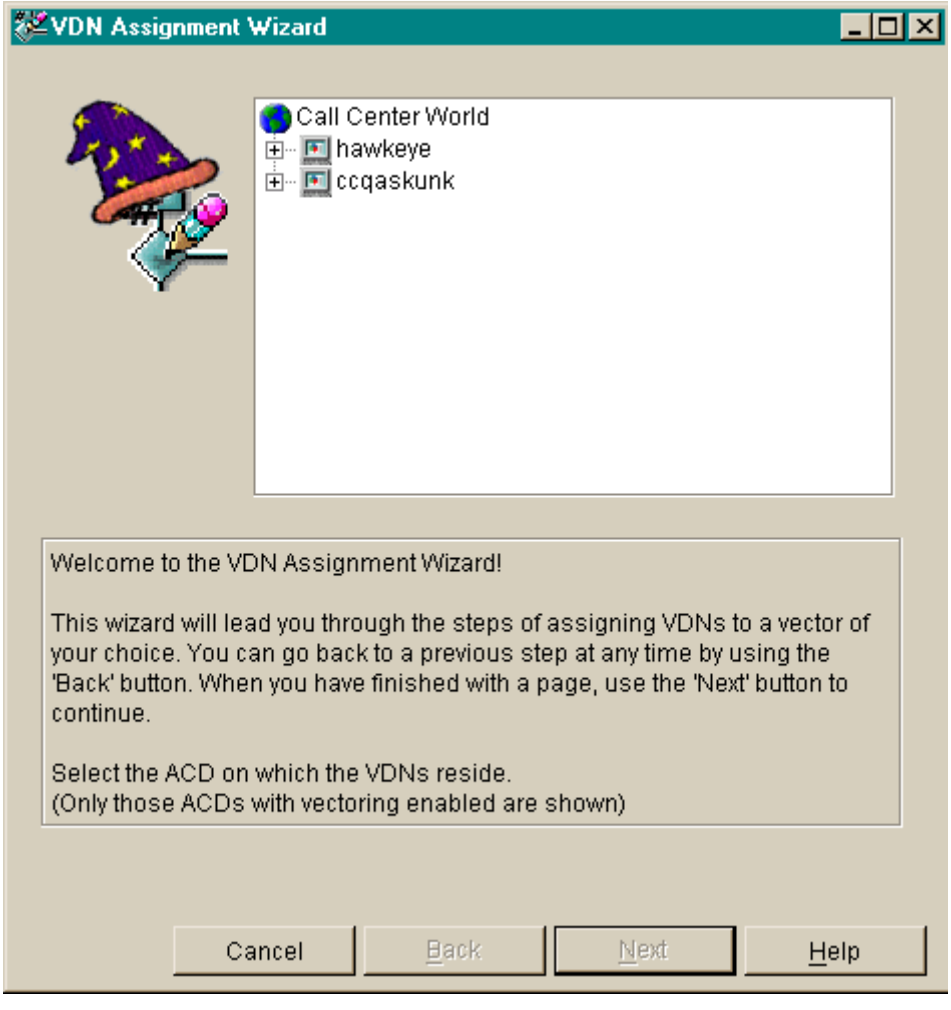
Topics in this section include:

- Basic window features
- Using window features
- Using the VDN selector window
- Completing input windows
- Completing input fields on VDN property windows.

Basic VDN Assignment Wizard Features

Overview

This section describes the VDN Assignment window as it appears before you connect to a CMS server. This figure illustrates the window.



System menu box

A common convention. The system menu box enables you to perform *Windows* operations, such as closing the current window or application.

Title bar

A common convention. The title bar shows the name of the application.

Minimize, maximize/restore and close buttons

A common convention. The buttons in the upper right-hand corner adjust the size of the current window, or close it.

Buttons

The windows contain buttons to help you complete your tasks.

These four buttons appear on the windows of the VDN Assignment Wizard:

Button	Function
Cancel	Closes the wizard without making or changing any assignments.
Back	Displays the previous window in the wizard. Disabled on the first window.
Next/Edit	Next accesses the next window in the wizard, or on the last window Edit accesses the properties window for one or more selected VDNs. Select OK to commit VDN Assignment changes for the selected ACD on CMS.
Help	Accesses a help window about the current window.

Using VDN Assignment Windows

Overview

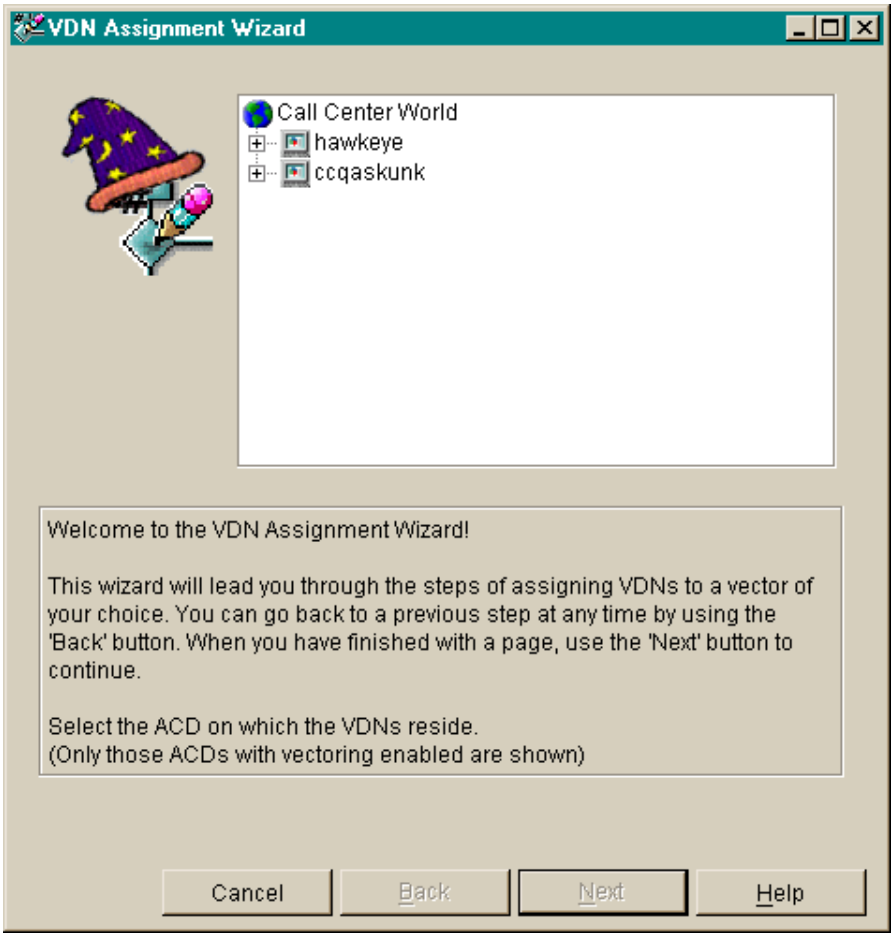
The following describes how to use the three windows that comprise the VDN Assignment Wizard.

Welcome window

To use the first window of the VDN Assignment Wizard, do the following:

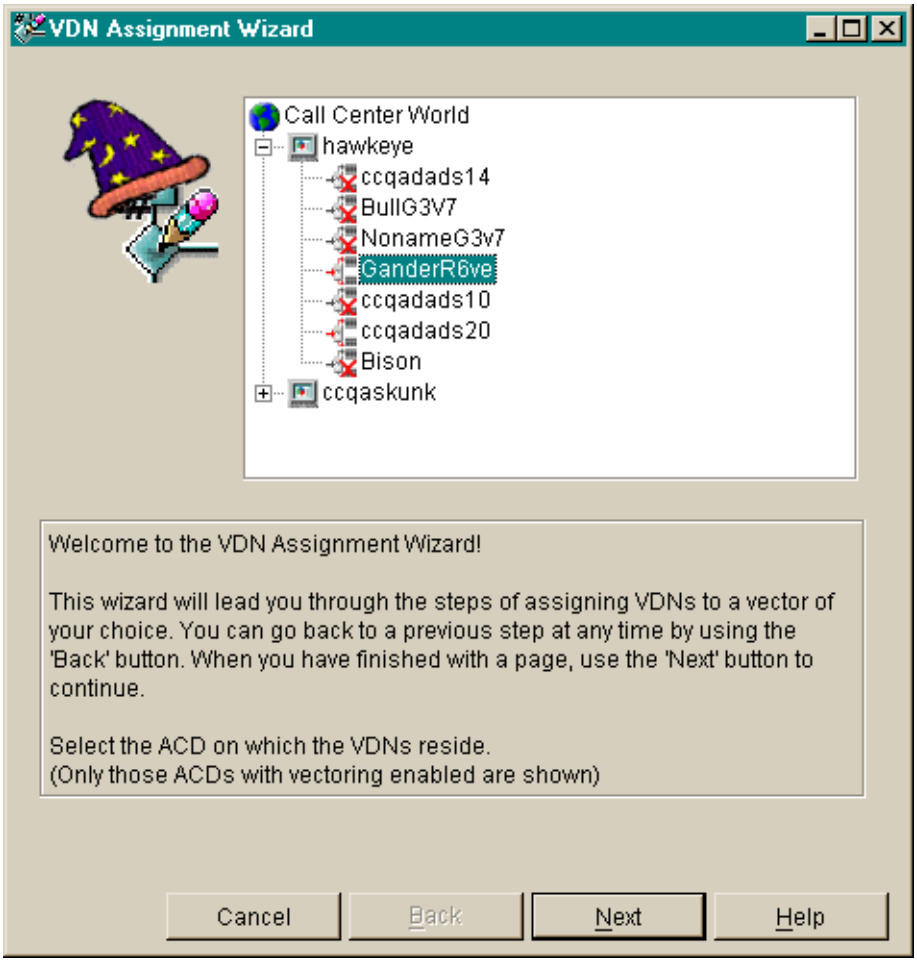
1. Browse your Call Center World and find the ACD containing the VDNs you want. For example, double-click a CMS to explore ACDs.
   - Click the + icon next to a CMS to show its ACDs. If you are not connected to a server, first double-click it and complete the Connect to server window. Then you can show its ACDs.
   - If needed to reduce clutter, click the – icon to the left of a container to hide the objects within it. Hiding ACDs does not disconnect you from their CMS.

Result



2. Select (for example, by clicking to highlight it) the ACD for which you wish to do VDN Assignment(s).

   Result



3. Select the Next button to go to the next window in the wizard.

   Result
   The Selection window appears.

VDN Selection window

To use the next window to select VDNs for which to make assignments, do the following:

1. Leave the Filter: text box blank if you want to display a list of all VDNs Available for Selection on the Selected ACD.

   Optionally, you may filter the list of VDNs Available for Selection by entering any of the following in the Filter: text box.

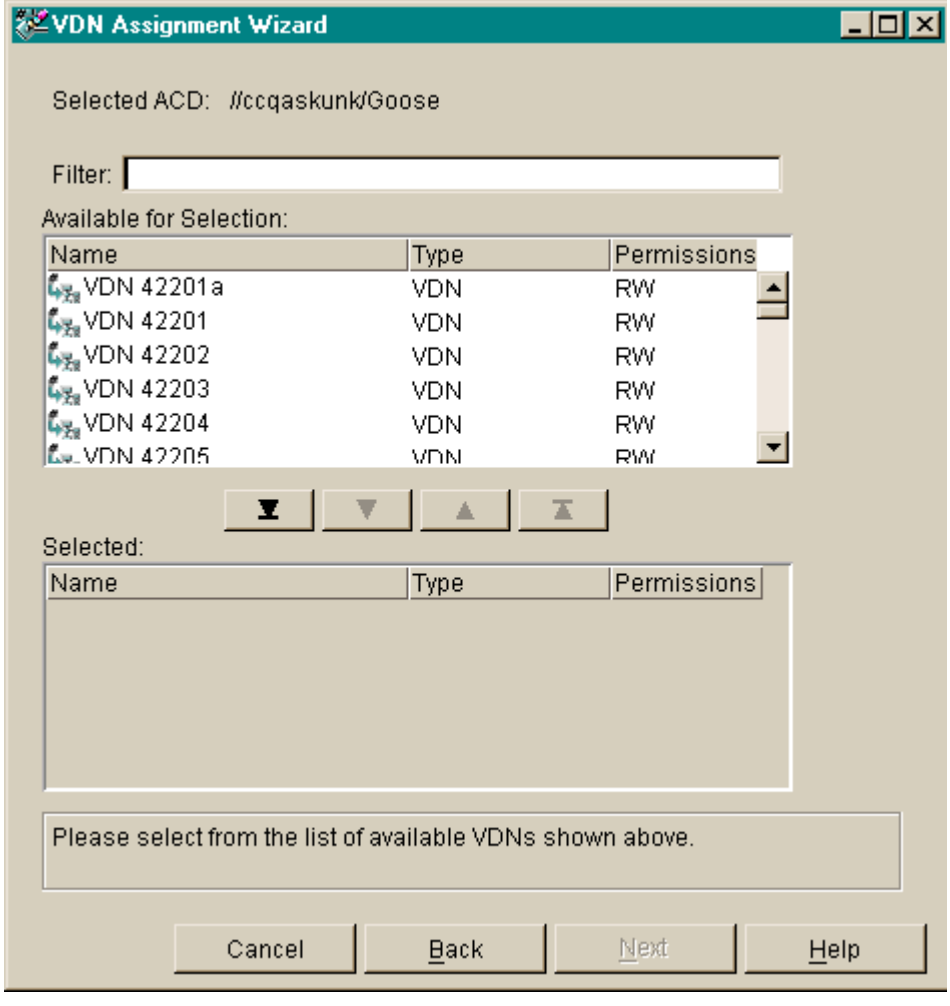
   - 1 to 20 characters. Letters, numbers, underscores (_), blanks, commas (,), periods (.), and plus signs (+) are valid.

Characters that are *not* allowed include backslash (\), grave accent (‘), tilde (~), double quotes ("), pipe symbol (|).

- pattern-matching wildcards, such as
  - — ? (exactly one character)
  - — * (any number of characters, including none).

  Entering characters or characters with wildcards restricts the VDNs displayed in the Available for Selection (Filtered): list box to those that partially or completely match your entry. For example, entering `*Sales*` would match and display available VDNs named `Pre-Sales`, `Sales`, and `Sales Split`. Entering `VDN*1` would match and display available VDNs named `VDN1`, `VDN 201`, and `VDNSupport01X`.

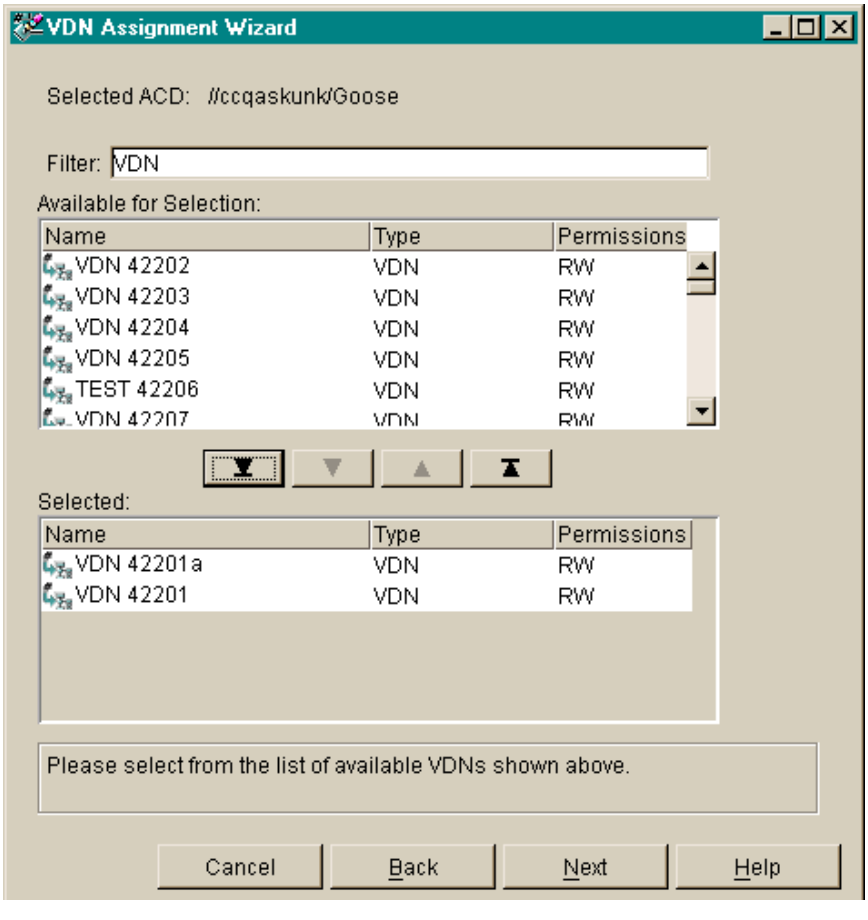
  Result



2. Select one or more VDNs you want to administer from the filtered list of VDNs Available for Selection, using any of the following methods:
   - Highlight the VDN in the Available for Selection: list box (for example, single-click it) select the down arrowhead ↓ button.
   - Hold down the **Ctrl** key while you highlight each one of the VDNs that you want and then select the down arrowhead ↓ button.
   - Hold down the **Shift** key while you highlight the first and last in a group of VDNs that you want and then select the down arrowhead ↓ button.
   - Select the down arrowhead button with the horizontal line under it to move *all* VDNs in the filtered Available for Selection: list box to the Selected: list box.

   You may deselect one or more VDN(s) by reversing any of these actions, for example using the up arrowhead button ↑ to move highlighted VDNs in the Selected: list box back to the Available for Selection: list box.

   Result



3. Select the Next button to go to the next window in the wizard.

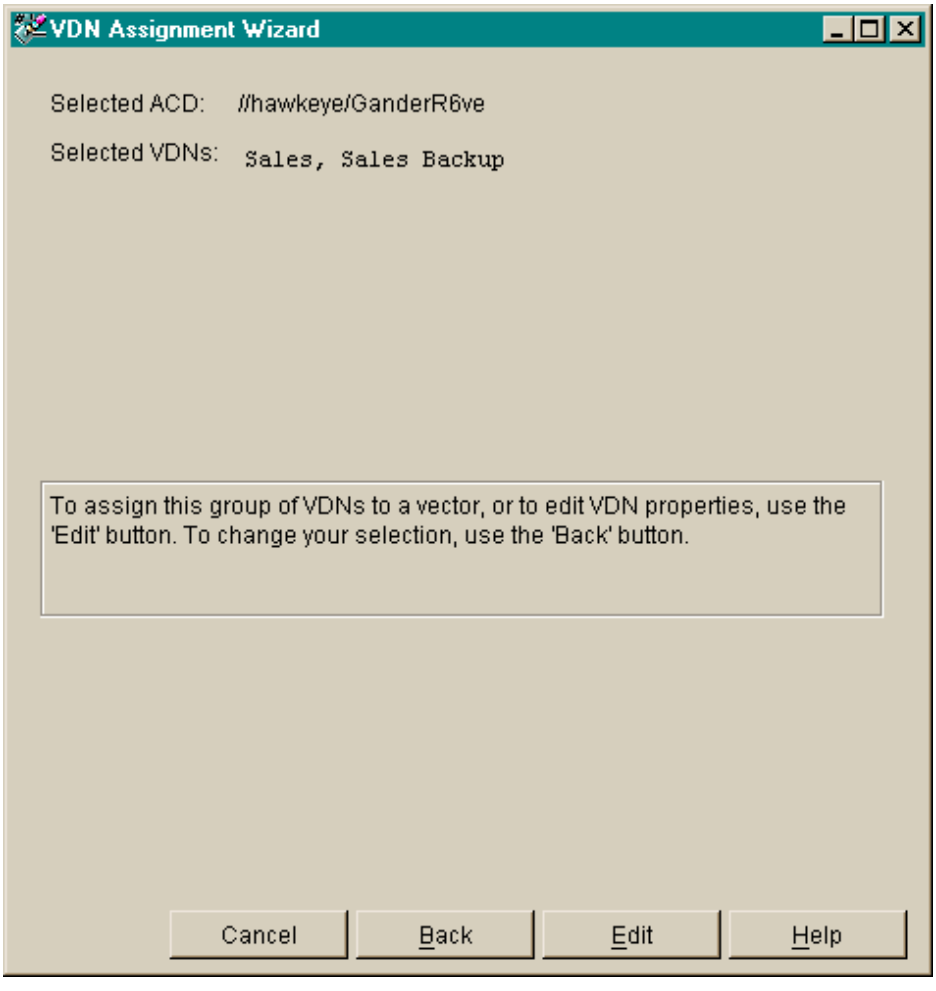
   Result
   The Edit Assignment window appears.

Edit Assignment window

To use the last window of the VDN Assignment Wizard, do the following:

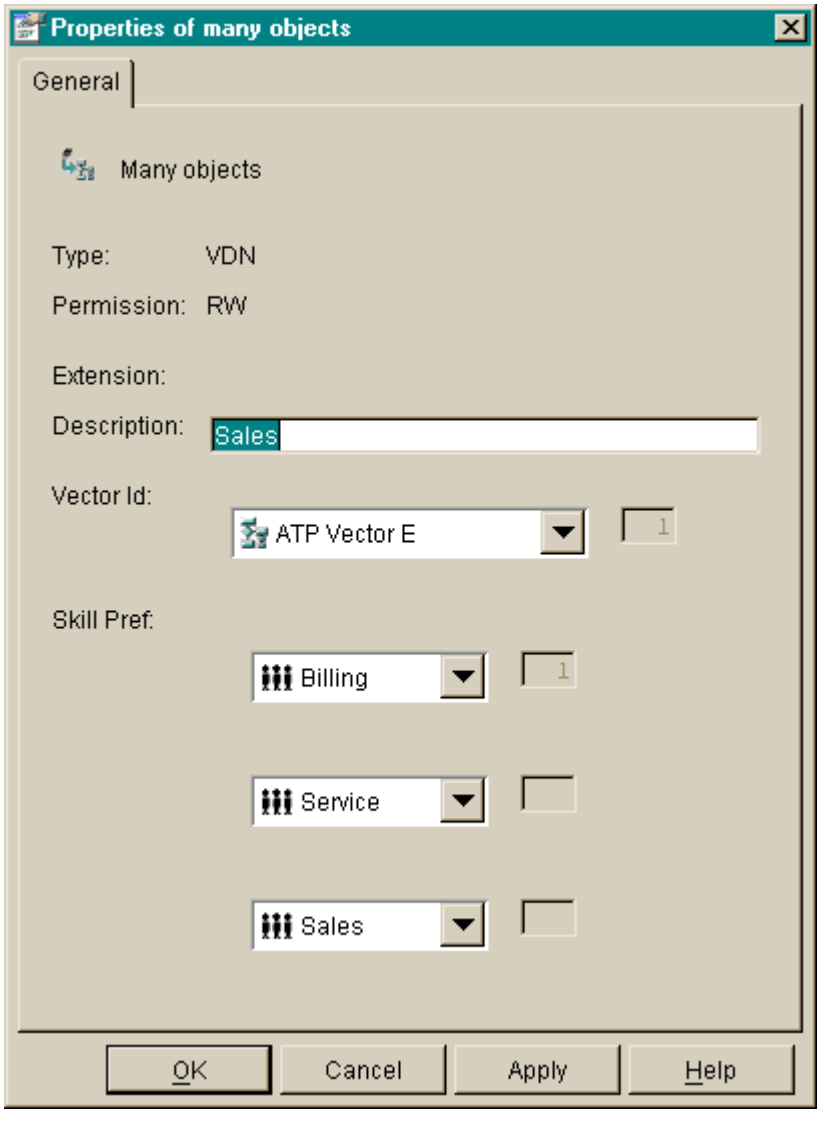
1. Confirm that the Selected ACD and Selected VDNs are correct.

   Result



2. Select the Edit button to assign the Selected VDN(s) to a vector or change other VDN object properties.

Result

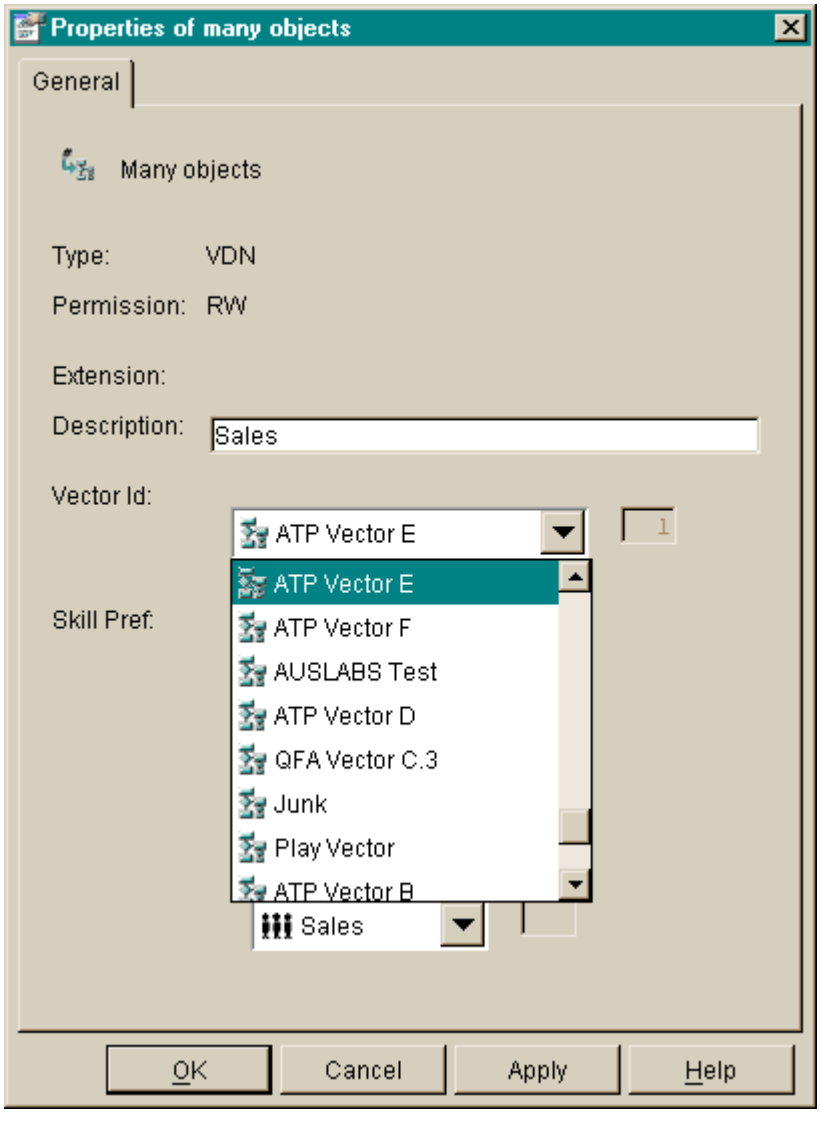


If you selected one VDN, the property window for that VDN will show editable values in its property fields. If you selected many VDNs with the same values, the property window will show the common values in the property fields. If you selected many VDNs with different values, the property window will show blank property fields for you to complete.

3. Select a Vector Id from the drop-down list of available vectors. If the Selected VDN(s) already are assigned to a vector, it is the default selection.

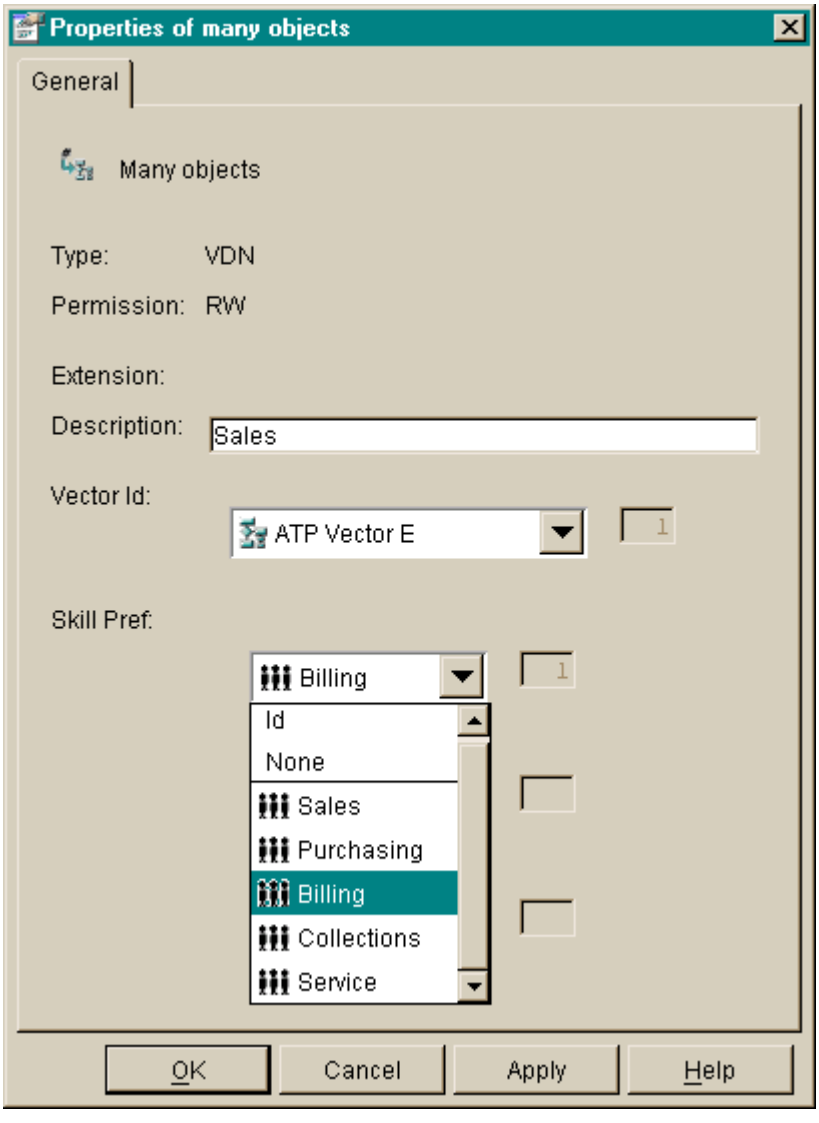
   If the selected VDN is not already assigned to a vector,, then [none] is the default. You cannont assign [none] to a vector. The [none] option unassigns VDNs.

   Result



4. Select one or more skill preferences from the drop-down lists of available skills (if the EAS feature has been purchased and enabled on the selected ACD). If the Selected VDN(s) already are assigned skill preferences, they are the default selections. If not, then [none] is the default. If you choose [none] for Skill Preference 1, then Skill Preference 2 and Skill Preference 3 also must be [none]. If you choose [none] for Skill Preference 2, then Skill Preference 3 also must be [none]. Note that choosing [none] will remove existing skill preferences from those selected VDNs that have them.

Result



5. Select the OK button to commit all the VDN Assignment(s) and any other changes to VDN properties and close the window. You may also select the Apply button to commit changes but leave the VDN Properties window open for further input.

Troubleshooting 6

Overview

If you are having trouble with any of the procedures mentioned in this document, please read through this section before calling the National Customer Care Center or your Lucent representative. The problem may be something simple that you can quickly solve yourself.

If you have not solved the problem after reading this section, and you are a U.S. customer, then contact the National Customer Care Center at 1-800-242-2121 (Lucent Technologies also offers fee-based installation consultation). Customers outside the United States should contact their Lucent Technologies representative or distributor.

If you have received an error message(s) in the course of a failed installation, then record the message(s) in order to assist National Customer Care Center personnel in diagnosing your problem.

Troubleshooting FAQ

Overview

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

It contains the following topics:

- Installation, Uninstallation and Importance of the HOME variable
- Startup
- Connectivity
- Navigator
- Vector Editor
- VDN Assignment Wizard
- CentreVu Supervisor Integration
- Performance Issues
- Miscellaneous Issues
- General PC Issues.

Installation, Uninstallation and Importance of the HOME variable

Purpose

Answers to questions about installing or uninstalling CentreVu Visual Vectors software are as follows:

There are several different installation programs. Which should I run?

Running `setup.exe` displays an Installation Type window for you to choose Local or Network. (You can run either `setuplocal.exe` or `setupnetwork.exe`.) Selecting Local runs `setuplocal.exe` to install Visual Vectors completely on one PC. 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 PC.

Why can't I re-install Visual Vectors software?

Different installation variants (for example, Local, Network and Client) and versions (for example, VV1E.01 and VV1F.04) can be installed on the same machine, but the same version of the same variant cannot.

Why are my previous settings and offline objects missing?

There are a few possible causes:

- The user files (`user.odb` and `user.odt` in your `.cvvv` folder) are corrupt or have been deleted.
  Solution: 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 (`userBK2.odb` and `userBK2.odt`). To determine where your `.cvvv` folder is, see page 6-4. To restore, move (an) existing corrupt file(s) out of .cvvv, then copy the two backup files and rename them user.odb and user.odt.
- The user files (`user.odb` and `user.odt`) have been moved.
  Solution: If possible, find out where the files have been moved to, and update the HOME variable to reflect the new location. For more details about the HOME variable, see page 6-4.
- The HOME variable has been changed.
  Solution: 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 page 6-4.

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

If CentreVu Visual Vectors appears on the list of programs available for uninstallation but fails when the uninstall 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 via the Uninstall program (`Unwise.exe`). You can also try to re-install 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 a Lucent Technologies associate.

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

CentreVu Visual Vectors software allows multiple users on *Windows NT*. By default, a HOME environment variable is not defined for each user in 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 will access the same files, often causing conflicts. If a user variable named HOME is defined, then 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 NT* user, then data files will be unique. Please see your *Windows* documentation for more information about how to set the HOME environment variable.

Startup

Overview

Answers to questions about starting to run *CentreVu* Visual Vectors software are as follows:

Why won't Visual Vectors start?

There are a number of likely causes, look for these symptoms:

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

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

   Solution: Call your Lucent Technologies 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, re-install Visual Vectors. If re-install fails, you will have to uninstall and then re-install Visual Vectors. If re-install fails, please refer to the uninstall failure section.

2. The process seems to start, but a message appears:
   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 *Centrevu* Visual Vectors twice. Two different users could have the same HOME environment. Please see the HOME environment section for more information.

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

Connectivity

Overview

Answers to questions about connecting to a *CentreVu* CMS server running *CentreVu* Visual Vectors server software are as follows:

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 has already logged into the server. You will have the option of logging the other user out.
- The maximum number of users allowed to be logged into the CMS server has been reached.

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

There are a number of possible causes to check in the following order:

1. The client machine is not part of the network, for example, not physically plugged into the network or the network configuration (PPP connectivity, TCP/IP settings) is incorrect. You should receive an error message about not being able to find the server.
2. The server name is invalid. Try to "ping" it from *MS-DOS* (*Windows* 95/98) or a Command Prompt (*Windows NT*).
3. The *CentreVu* CMS or Visual Vectors Server software has not been started. Please refer to your server documentation for more information.
4. The *Orbix Daemon* or *OrbixNames* service have not been started on the server. Please refer to your server documentation for more information on checking these items.

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

If you've tried reconnecting to it unsuccessfully, check the following:

1. The CMS server hardware/software is running. If not, restart it.
2. The Visual Vectors Server software is still running. If not, restart it. Please refer to your server documentation for more information.
3. Your client machine is still part of the network; for example, no one has kicked the network cable.

Navigator

Overview

Answers to questions about using the Navigator tool in *CentreVu* Visual Vectors Client software are as follows:

Why can't I see (or select) some of the items on the context menu?

Users may not have permission to perform some operations for (a) particular object(s). For example, if you do not have write permission to either an ACD (or to Call Center Administration), then the New option will not appear in the Vector Folder context menu for that ACD.

My off-line objects are missing, where are they?

Refer to "Why are my previous settings and offline objects missing?" located in the Installation and Unistallation section.

Why can't I view my vector as ASCII text?

You may be looking at an off-line vector. The View As ASCII option exists only for vectors that have been stored on an ACD.

Vector Editor

Overview

Answers to questions about using the Vector Editor tool in *CentreVu* Visual Vectors Client software are as follows:

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

The vector step properties and comments are not printed.

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

This generally occurs because the vector has been modified recently and not save. Save the vector and then select View As ASCII again for the vector.

Why isn't Save enabled in the Vector Editor?

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

When I save my vector, all the open property boxes disappear. What happened?

When a vector is saved, all the open vector step property windows will be dismissed. Only the changes in committed property boxes (for example, having had the Apply button selected), will be saved; other changes to property values not yet committed will be 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 fine. This also applies to a selected group of floating comments. Only one comment at a time may be dragged.

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

It depends on which connection has been dropped:

- If the connection to a CMS goes down (for example, the CMS server has crashed), then the user must save on-line vectors to an off-line scratch pad or to an ACD on another CMS. A message notifies the user of this. Because valid vector conversion from on-line to off-line and from one ACD to another require information from the CMS server, steps may be changed when saving vectors this way.
- If the ACD link goes down (for example, the Visual Vectors Server software has crashed), the user will be presented with a choice of saving the vector being edited to another location or exit from the editor. The vector being edited can be saved to another ACD or to an off-line scratchpad.

VDN Assignment Wizard

Overview

Answers to questions about using the VDN Assignment tool in *CentreVu* Visual Vectors Client software are as follows:

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

1. Check to be sure no extra spaces or dots have been accidentally entered in the filter.
2. 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 may not have Call Vectoring enabled. In order to be able to select an ACD, it must have Call Vectoring enabled and the user must have permission for the ACD.

CentreVu Supervisor Integration

Overview

Answers to questions about integrating your *CentreVu* Supervisor software into *CentreVu* Visual Vectors Client software are as follows:

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

Follow these steps in order to diagnose the problem:

1. What version of Supervisor do you have installed?
   - Version 6 (or greater)? Continue with Step 2.
   - 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).
   - Yes? Continue with Step 3.
   - No? 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`), named `cvsup.cfg` that 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 contains only the path to the executable file (any text editor such as Notepad can be used to inspect the contents of `cvsup.cfg`).
   - Yes? Contact your Lucent Technologies support professional, representative or distributor.
   - No? Reinstall Supervisor and try again. If this fails to solve the problem, contact your Lucent Technologies support professional, representative or distributor.

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

Follow these steps in order to diagnose the problem:

1. What version of Supervisor do you have installed?
   - Version 6 (or greater)? Continue with Step 2.
   - 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).
   - Yes? Continue with Step 3.
   - No? Reinstall Supervisor and try again.
3. The main program files for Supervisor are installed on a networked drive. Ensure that there is network connectivity between the local and networked drive (for example, can you browse to the drive using *Windows* Explorer?)
   - Yes? Reinstall Supervisor and try again. If this fails to solve the problem, contact your Lucent Technologies support professional, representative or distributor.
   - No? Contact your Network or System Administrator to help restore the network connectivity.

Performance Issues

Overview

Answers to questions about the performance of your *CentreVu* Visual Vectors Client software are as follows:

Why isn't the application more responsive?

There are a number of possible causes of responsiveness issues:

- The hard disk is thrashing (frequent hard disk access).

  This indicates that the machine does not have enough memory. In our experience, 64MB of memory provides optimal performance.

  Solution: Add more physical RAM.

- Too many application programs are open.

  This makes less physical memory available to Visual Vectors, especially when memory intensive operations are running.

  Solution: Close down other applications to provide more memory for Visual Vectors.

  Solution: Add more physical RAM.

- The network link is slow.

  Visual Vectors may be connected to the server via a slow connection.

  Solution: Use a faster network link or a higher-speed modem.

Why isn't deleting an object in the Navigator instantaneous?

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

Why isn't viewing some objects in Navigator instantaneous?

The first time after you log into a CMS server and Navigate any ACDs VDN Folder, permission-checking is performed (if it is enabled). The delay depends on the CMS server platform and the number of measured VDNs, but can range from one second to more than a minute. For delay estimates, see Chapter 1.

Miscellaneous Issues

Overview

Answers to miscellaneous other questions about *CentreVu* Visual Vectors Client software are as follows:

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

The application may not have actually hung; sometimes the cursor stays in the wait state even after a task has 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 screen, showing progress on 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 has been implemented using HTML Help which requires Internet Explorer 3.02 or later to work. It must be installed, but it does not have to be set as the default browser (or application for .htm files).

I have IE 3.02 or later. Why doesn't Visual Vectors Help appear to work?

There are a few causes which could prevent help from working:

- The help file, for example, `vv_en.chm` (the English version), is missing or corrupted.

  Solution: Copy this file from another working software installation or re-install Visual Vectors.

- The help registry entries have been removed or corrupted.

  Solution: Run `hhupd.exe` to setup the registry for HTML Help.

- The installation program was executed from another machine, hence the registry entries for help on this PC are missing (for more details, see page 6-3).
  Solution: Run `hhupd.exe` to setup the registry for HTML Help.

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

Something in your PC 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, do the following:

1. Move everything out of your `StartUp` group.
2. Restart *Windows*.
3. Run Visual Vectors (making sure it is the only application running).
   - *If the problem does not go away,* please provide the following to your Lucent Technologies support professional, representative or distributor: the error log (`error.log`) and trace log (`trace.log`) files, together with any useful information you can gather (for example, your operating environment and other PC 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 PC to have this problem. Continue with the next step.
4. Start running each file that was in your `StartUp` group.

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

Why has the software crashed and what should I do?

If all else fails, please send the log files (`error.log` and `trace.log`) and the user files (`user.odb` and `user.odt`) to your Lucent Technologies 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), activity when Visual Vectors crashed, and so on.

General PC Issues

Overview

Answers to questions in general about using *CentreVu* Visual Vectors Client software on your machine are as follows:

Why is accessing my hard drive so slow?

A fragmented hard disk leads to slow disk access.

Be sure to run a defragmentation utility such as DEFRAG.EXE (*Windows* 95/98 only; other optional defragmentation utilities are available for *Windows NT* 4.0), this will speed up disk access.

Important: do not run any defragmentation operation while using Visual Vectors (or any applications which require disk access), as this can lead to file corruption.

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

To determine if a problem exists, do the following:

1. Check your *Windows* swap file configuration. (For example, check Virtual Memory settings by right-clicking on the My Computer Desktop icon and selecting Properties. Click on the Performance tab and check Virtual Memory settings.)
   - *If recommended settings are selected,* continue with Step 2.
   - *If recommended settings are not selected,* then allocate more Virtual Memory and restart *Windows*.
2. Check 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 50 MB or more is free,* continue with Step 3.
   - *If less than 50 MB is free,* free more space and restart *Windows*.
3. Check your memory in *Windows*. At least 64MB of physical RAM is needed for optimal performance, although more may well be required.

Do you think I might have some kind of virus?

Viruses typically hook 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

Accelerator Keys
Keys that provide shortcuts to actions available on the menu.

Access Permissions
Permissions assigned to a user so that the user can access different areas of a server or administer specific entities (for example, splits/skills, trunk groups, vectors, and VDNs) of an ACD. Access permissions are specified as read or write permission. Read permission means the user can access and view data. Write permission means 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 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 in a vector or at an agent.

Agent
A person or VRU port that answers calls to an ACD split/skill. The agent is known to CMS by a login identification keyed into a voice terminal.

Agent Login ID
A 1- to 4-digit number (Generic 2) or a 1- to 9-digit number (Generic 3) 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. An agent can be assigned up to 20 skills. The meaning of each Agent Skill is defined by the customer. Examples of what could be considered skills are: the ability to speak a particular language or the expertise to handle a certain product.

See 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 (splits or skills).

Also an agent state where the extension is engaged on an ACD call.

See Redirect On No Answer and Auto-Available Split.

Call Center World
A collection of objects and entities that can be viewed and administered through *CentreVu* Framework. What you can access, edit or assign depends on your permissions.

Call Management System (CMS)
A software product used by business customers that have Lucent Technologies 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/ECS.

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 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.

CentreVu Advocate
A set of features designed to enhance call and agent selection within a call center. *CentreVu* Advocate requires *CentreVu* Supervisor Version 6, *DEFINITY* ECS R6, and Expert Agent Selection. See *CentreVu Advocate User Guide,* 585-215-855 for more information.

CentreVu CMS
See Call Management System.

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

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

CentreVu Visual Vectors window
The window in which you are currently working (usually indicated by a highlighted title bar). Visual Vectors has a Framework window and windows for each of the tools, including Navigator, Vector Editor, and VDN Assignment.

Container
An object in your Call Center World that logically contains other entities or objects. For example, each CMS object in your Call Center World can contain as many as 8 ACD objects, each of which contains entity folders (for announcements, split or skill objects, trunk groups, VDNs, and vectors).

Context menu
A menu with specific actions for an entity or item.

Current window
The window in which you are currently working (usually indicated by a highlighted title bar).

Data Collection Off
CMS is not collecting ACD data. If you turn off data collection, CMS will not void data on current call activity.

Data Collection On
CMS is collecting ACD data.

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

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

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).
- Separating individual data entry items using a semicolon (for example, 3/21/93;3/23/93;3/25/93)
- Entering ranges by placing a hyphen between entries (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 message No records found displays in the status line.

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

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

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

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 *CentreVu* Visual Vectors can view or administer include Vectors and VDNs. Entity names are obtained from the *CentreVu* CMS Dictionary; renaming entities using Visual Vectors results in changes to the CMS Dictionary.

Error Message
A response from a program indicating that a problem has arisen or something unexpected has happened, requiring your attention.

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.

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

CentreVu 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/skills, trunk groups, VDNs, and vectors). Folders are used to visually group all entities of a specific type for an ACD.

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

INFORMIX
A relational database management system used to organize CMS historical data.

INFORMIX SQL
The interactive interface typically used to view the INFORMIX database.

Integrated Services Digital Network (ISDN)
A digital standard for telephony that enables, among other things, telephone, television, and computer signals on the same lines. This system may someday replace our existing telephone lines.

ISDN
See Integrated Services Digital Network.

LAN
See Local Area Network.

Local Area Network
A private interactive communication network that allows computers to communicate over short distances, usually less than one mile, at high data transfer rates from 1 Mbps to as high as 100 Mbps.

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 may be treated as direct agent ACD calls, given the proper class of restriction, or may be treated as extension (personal) calls. Treating the calls as direct agent calls can be used to help distinguish business-related from personal calls.

Look Ahead Interflow (LAI)
A switch feature that can be used to balance the call load among multiple call centers. The LAI feature 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.

Menu bar
A menu bar is under the title bar of most windows. The menu bar shows the menu names available for that particular window (for example, File and Help). You select an item from one of these drop-down menus.

Message Windows
Temporary windows used only for displaying information like syntactical field errors.

Multiuser Mode
Any administered CMS user can log into CMS. Data continues to be collected if data collection is "on."

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

Navigator
A window that displays after you select it from the Tools menu or toolbar in the *CentreVu* Framework window. It consists of two panes: a hierarchical "tree" view of your Call Center World on the left and a list of objects or entities on the right.

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

Object
Any item which may appear in your Call Center World through the Navigator tool. Objects can be containers of other objects or entities (VDNs folder), or an object may be an administerable entity itself (VDN).

Primary Skill
Skills 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 you create on your CMS to place previously backed-up ACD data. A pseudo-ACD is not a live (real) ACD and does not communicate with any switch.

Queue
A holding area for calls 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. An ACD call has seized the trunk and is queued to a split/skill waiting for an agent to answer.

Read Permission
The CMS user can access and view data (for example, run reports or view the Dictionary subsystem). Read permission is granted from the User Permissions subsystem.

Real-Time Database
Consists of the current and previous intrahour data on each CMS-measured agent, split, trunk, trunk group, vector, and Vector Directory Number (VDN).

ScratchPad
The Default ScratchPad name is a container area on your PC designed to save vectors off-line when a switch/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 assigned to an agent. Secondary skills are the areas in which the agent does not have extensive expertise, or is not the agent's preference. (Used in G3V2 through G3V4 with EAS.)

See Agent Skill, Skill Level.

SEIZED
A trunk state. A call is using the trunk either incoming or outgoing.

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

Single-User Mode
Only one person can log into CMS. Data continues to be collected if data collection is "on." This mode is required to change some CMS administration.

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 which requires one of those skills. In relationship to your call center, think of skill as a specific customer need/requirement or perhaps a business need of your call center. You will be defining your skills based on the needs of your customers and your call center.

Skill Hunt Group
When EAS is enabled, calls route to specific skill hunt groups. These skill hunt groups are usually based on the needs of your customers. Agents are not assigned to a skill group (like split hunt groups), but agents are assigned specific skills that become active when they log in to their voice terminal.

Skill Level
A priority level from 1 (highest) to 16 (lowest) indicating an agent's level of expertise or ability to handle calls to the given skill. (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.

Status bar
A status bar is across the bottom of some windows. The status bar shows information about the current action in that window.

Switch
A private switching system providing 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.

Tertiary Split/Skill
Generic 3 with vectoring, Generic 2.2 with EAS only. When a call is queued to multiple splits/skills, the third split/skill the call queued to in a VDN is called the tertiary split/skill.

Time Format
The standard format for entering times on CMS reports.

Acceptable formats are:

- AM/PM format (for example, 7:30AM-5:00PM).
- Military time format (for example, 7:30-17:00).

Title bar
A title bar is across the top of most windows. The title bar shows the name of that particular window (for example, Navigator). Titles of open tool windows will be listed on the Window menu of *CentreVu* Framework.

Toolbar
A toolbar is under the menu bar of most windows. Toolbar icons represent actions you can perform.

Tooltips
Tooltips are available in most windows by placing the mouse cursor over an item for two seconds. Tooltips usually describe the actions performed by selecting an icon.

Trunk
A telephone circuit that carries calls between two switches, between a Central Office (CO) and a switch, or between a CO and a phone.

Trunk Group
A group of trunks that are assigned the same dialing digits - either a phone 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 will be a part of the records in the Call History feature of CMS.

User ID
The login ID for a CMS user.

User Permissions
An area of the CMS server that allows the CMS administrator to define what each user has access to.

VDN
See Vector Directory Number.

VDN Assignment
The VDN Assignment Wizard, accessed from *CentreVu* Framework, guides you through the process of assigning a vector and skill preference to a VDN. The windows that display after you select Vector Id or Skill Pref from the context menu of a VDN object are part of this tool.

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
Up to three skill(s) can be assigned to a VDN. Calls use VDN skills for routing based on your preference (as you administer it in the vector). VDN skill preferences are referred to in the vector as “1st,” “2nd,” or “3rd.”

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.

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 may have received 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 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 connected to the switch.

Vector Editor
This software tool, accessed from *CentreVu* Framework, allows you to create and edit vectors visually, by dragging and dropping icons representing commands from a palette and arranging them into vector steps in a work area. You can attach comments, change layout, and save and print the vectors.

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 accompanying 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.

VOA
See VDN of Origin Announcement.

Visual Vectors Client
Client software which provides a rich, graphical user interface for creating or modifying configured elements of ACDs connected to a CMS.

Visual Vectors Server
Server software which enables administration (changing or modifying configured elements) for ACDs connected to a CMS.

Voice Terminal
A telephone set, usually with buttons, that gives an agent some control over the way calls are handled.

Write Permission
The CMS user can add, modify, or delete data and execute processes. Write permission is granted from the User Permissions subsystem.

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