



## **Avaya Contact Center**

Release 9.1 and Release 3 Version 9

Call Management System

Change Description

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#### Notice

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

#### Preventing Toll Fraud

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

#### Avaya Fraud Intervention

If you *suspect that you are being victimized* by toll fraud and you need technical support or assistance, call Technical Service Center Toll Fraud Intervention Hotline at +1 800 643 2353.

#### Providing Telecommunications Security

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

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

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

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

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

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

#### Your Responsibility for Your Company's Telecommunications Security

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

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

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

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

#### Federal Communications Commission Statement

Part 15: Class A Statement. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

#### European Union Declaration of Conformity

Avaya Business Communications Systems declares that equipment specified in this document conforms to the referenced European Union (EU) Directives and Harmonized Standards listed below:

EMC Directive 89/336/EEC

Low Voltage Directive 73/23/EEC



The "CE" mark affixed to the equipment means that it conforms to the above Directives.

#### Trademarks

See the Preface of this document.

#### Ordering Information

**Call:** Avaya Publications Center  
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**Write:** Globalware Solutions  
200 Ward Hill Avenue  
Haverhill, MA 01835 USA  
Attention: Avaya Account Management

**Order:** Document No. 585-215-942, Issue 2.0,  
September 2001

You can be placed on a Standing Order list for this and other documents you may need. Standing Order will enable you to automatically receive updated versions of individual documents or document sets, billed to account information that you provide. For more information on Standing Orders, or to be put on a list to receive future issues of this document, please contact the Avaya Publications Center.

#### Avaya National Customer Care Center

Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1-800-242-2121.

#### Avaya Web Page

<http://www.avaya.com>

#### Comments

To comment on this document, return the comment card at the end of the document.

#### Acknowledgment

This document was written by the CRM Development group of Avaya University

**Avaya Contact Center  
Release 9 and Release 3 Version 9  
Call Management System  
Change Description**

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# Preface — About This Document

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## Overview

The *Avaya Contact Center Release 9.1 and Release 3 Version 9 Call Management System (CMS) Change Description*, 585-215-942, Issue 2 document is written for call center customers who are upgrading from a Avaya Call Center Release 8 to a Avaya Call Center Release 9.1.

You will use this document to understand how upgrading from a Avaya Call Center Release 8 to a Avaya Call Center Release 9.1 can impact your call center. This upgrade can include upgrading:

- From a *DEFINITY* ECS R8 or later to a *DEFINITY* ECS R9 or later
- From a CentreVu Call Management System (CMS) R3V8 to a CentreVu CMS R3V9 or later
- From CentreVu Supervisor V8 to CentreVu Supervisor V9
- From CentreVu Explorer to CentreVu Explorer II
- From CentreVu Visual Vectors V8 to CentreVu Visual Vectors V9.

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## Reasons for re-issue

The information in this document is being re-issued for the following reasons:

- General updates for the new Sun<sup>®</sup> Blade<sup>™</sup> 100 platform.
- Updates for new CMS features. See [CentreVu CMS Enhancements for loads later than r3v9ah](#) on page 55.

## Trademarks

The following trademarked names may be used in this and other call center documentation:

- *CentreVu, BCMS Vu, AUDIX, DEFINITY, Conversant, and Callmaster* are registered trademarks of Avaya.
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- *UNIX* is a registered trademark of Novell, Inc. in the United States and other countries, licensed exclusively through X/Open Corporation.
- *X Window System* is a trademark and product of the Massachusetts Institute of Technology.

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## Related Documents

This section lists sources for related information about call center products and features that changed with CMS Release 3 Version 9. To order Avaya documentation, call the Avaya Publications Center at 1-800-457-1235 or +1-317-361-5353.

**Note:**

The *Avaya Call Center Release 9 Documentation CD*, 585-215-894 includes the on-line versions of the Switch, Administration, CentreVu Supervisor, and Other documents listed in this section.

## Hardware documents

Title	Document number
<i>Sun Blade 100 Workstation Installation, Maintenance and Troubleshooting</i>	585-310-783
<i>CentreVu Call Management System Sun Enterprise 3500 Computer Hardware Installation, Maintenance, and Troubleshooting</i>	585-215-873
<i>CentreVu Call Management System Sun Ultra 5 Computer Hardware Installation, Maintenance, and Troubleshooting</i>	585-215-871
<i>CentreVu Call Management System Sun Enterprise 3000 and SPARCserver Computers Hardware Maintenance and Troubleshooting</i>	585-214-016
<i>CentreVu Call Management System Terminals, Printers, and Modems</i>	585-215-874

## CMS software documents

Title	Document number
<b>Installing Software on a CMS Computer</b>	
<i>CentreVu Call Management System Release 3 Version 9 Software Installation, Maintenance, and Troubleshooting</i>	585-215-956

## Switch documents

Title	Document number
<i>CentreVu Call Management System Switch Connections and Administration</i>	585-215-876
<i>DEFINITY - Call Vectoring and EAS Guide</i>	555-230-521
<i>DEFINITY Guide to ACD Call Centers</i>	555-233-503

## Upgrade documents

There are several upgrade paths supported with CMS. For each of these upgrades, there is a document designed to support that upgrade. Note that none of these documents are available from the publications center, but are available from the [Avaya CMS documentation](#) web site.

- Base load upgrades

A base load upgrade is used when upgrading CMS to a newer load of the same version (for example, R3V8 ak.g to R3V8 al.k). A specific set of instructions are written for the upgrade and are shipped to the customer site with the CMS software CD as part of a Quality Protection Plan Change Notice (QPPCN).

Title
<i>CentreVu Call Management System Release 3 Version 9 Base Load Upgrade Procedures</i>

- Platform upgrades and data migration

A platform upgrade is used when upgrading to a new hardware platform (for example, upgrading from a SPARCserver 5 to an Enterprise 3500). The new hardware platform ships from the Avaya factory with the latest CMS load. Therefore, as part of the upgrade, you will automatically upgrade to the latest CMS load (for example, R3V8 to R3V9, or a newer load of the same CMS version). A specific set of instructions are written for the upgrade and are shipped to the customer site with the new hardware.

Title
<i>CentreVu Call Management System Release 3 Version 9 Platform Upgrade and Data Migration Instructions</i>

- CentreVu Upgrade Express (CVUE)

CVUE is used in the following conditions:

- CMS is being upgraded from an older version (for example, R3V5u or R3V6) to the latest version (for example, R3V8 or R3V9)
- The hardware platform is not changing.

A specific set of upgrade instructions are written for the upgrade and are shipped to the customer site with the CVUE kit.

Title
<i>CentreVu Call Management System Release 3 Version 9 Sun Ultra 5 Computer CVUE Instructions</i>

Title
<i>CentreVu Call Management System Release 3 Version 9 Sun Enterprise 3000 Computer CVUE Instructions</i>
<i>CentreVu Call Management System Release 3 Version 9 Sun Enterprise 3000 Computer Mirrored System CVUE Instructions</i>
<i>CentreVu Call Management System Release 3 Version 9 Sun Enterprise 3500 Computer CVUE Instructions</i>
<i>CentreVu Call Management System Release 3 Version 9 Sun Enterprise 3500 Computer Mirrored System CVUE Instructions</i>

## Administration documents

Title	Document number
<i>CentreVu Call Management System Release 3 Version 9 Administration</i>	585-214-015
<i>CentreVu Call Center R9 - Little Instruction Book - Basic Administration</i>	585-215-954
<i>CentreVu Call Center R9 - Little Instruction Book - Advanced Administration</i>	585-215-955

## Supervisor documents

Title	Document number
<i>CentreVu Supervisor Version 9 Installation and Getting Started</i>	585-210-928
<i>CentreVu Supervisor Version 9 Reports</i>	585-210-929
<i>CentreVu Supervisor R9 Report Designer User Guide</i>	585-210-930

## Other documents

Title	Document number
<i>CentreVu CMS Open Database Connectivity</i>	585-210-951
<i>CentreVu CMS Release 3 Version 9 External Call History Interface</i>	585-215-952
<i>CentreVu CMS Custom Reports</i>	585-215-822
<i>CentreVu CMS Forecast</i>	585-215-825
<i>Avaya Call Center Documentation CD</i>	585-215-894
<i>CentreVu CMS Release 3 Version 9 High Availability User Guide</i>	585-215-705
<i>CentreVu CMS Release 3 Version 9 High Availability Installation, Maintenance, and Connectivity</i>	585-215-106
<i>CentreVu CMS Release 3 Version 9 Database Items and Calculations</i>	585-210-945
<i>CMS - Explorer II User Guide</i>	585-218-200
<i>CMS - Explorer II Inst. for NT</i>	585-218-201
<i>CentreVu Advocate - R9 User Guide</i>	585-210-945
<i>CentreVu Visual Vectors Release 9.0 User Guide</i>	585-210-944
<i>Visual Vectors - Release 9.0 Installation and Getting Started</i>	585-210-947

## How to Get Help

If a problem arises that requires assistance, customers or Avaya technicians can:

- Go to the Online Services support web site
- Call the appropriate support number

### Support web site

Register for Online Services at:

<http://www.avaya.com/support>

By registering, you will be able to:

- Create new trouble tickets through the Avaya web server without having to call the 1-800-242-2121 United States helpline.
- Receive software downloads.
- View links to frequently asked questions about call center products and administration.

### Customer support for the United States

**1-800-242-2121**

Customers can report problems and generate trouble tickets by calling this number.

The customer is prompted to identify the type of problem (that is, Automatic Call Distribution, hardware, or CentreVu CMS), and is connected to the appropriate service organization.

### Technician support for the United States

**1-800-248-1234**

Avaya technicians can receive help by using this number.

## **Customer and technician support outside the United States**

For customer and technician support outside the United States, contact your Avaya representative or distributor for more information



# DEFINITY Enterprise Communications Server Release 8.3 and Later Contact Center Enhancements

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## Overview

This chapter describes the contact center-related enhancements made to DEFINITY® Enterprise Communications Server (ECS) for Release 9 (R9) and later.



### Important:

Refer to the *DEFINITY® ECS What's New for Release 9*, 555-233-766, Issue 2, and the *DEFINITY® ECS What's New for Release 9.5*, 555-233-418 Issue 1 for a description of all of the changes and enhancements made to the DEFINITY ECS for this release.

The sections of this chapter are organized in the following order:

- [DEFINITY ECS R9 and Later Capacities](#) on page 12
- [ASAI/CTI Enhancements](#) on page 13
- [BSR Available Agent Adjustments](#) on page 16
- [CentreVu Advocate Enhancements](#) on page 17
- [Duplicate Agent Login ID Administration](#) on page 21
- [Holiday Vectoring](#) on page 22
- [Network Call Redirection](#) on page 23
- [Remote Logout of Agent](#) on page 24
- [VDN Service Observing](#) on page 25

For a detailed description of the changes made in different issues (loads) of DEFINITY software, refer to the readme file on the software installation media.

## DEFINITY ECS R9 and Later Capacities

Several of the DEFINITY ECS capacities have been increased in this release. The following table shows all of the DEFINITY ECS R9 and later capacities that are specific to contact center, whether or not the capacity changed from the previous release to this release. The remaining sections of this chapter discuss specific capacity increases, as appropriate.

Refer to the *DEFINITY® ECS What's New for Release 9*, 555-233-766, Issue 2, and the *DEFINITY® ECS What's New for Release 9.5*, 555-233-418 Issue 1 for a description of all of the changes and enhancements made to the DEFINITY ECS.

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## ASAI/CTI Enhancements

The Adjunct/Switch Application Interface (ASAI) and Computer Telephony Integration (CTI) enhancements in the Avaya Contact Center Release 9.1 include:

- ASAI User-to-User Information (UUI)
- CentreVu Computer Telephony (CVCT)
- Capacity Increases for ASAI

In addition, ASAI adjunct route request limits are also reduced.

Each of these enhancements is briefly described in the following sections. Refer to the *DEFINITY® ECS R9 ASAI Overview*, 555-230-225, for additional details on each of these enhancements.

### ASAI User-to-User Information Feature

The ASAI UUI enhancement allows calls that contain user-to-user information with ASAI to be propagated to the new call during a manual transfer or conference operation.

When the feature is enabled, the ASAI UUI gets propagated to the new call during its establishment, that is, when the agent presses the transfer/conference button the first time. When this occurs, the ASAI UUI from the first call is copied into the SETUP message sent for the second call if the call is transferred to a remote switch. As a result, the alerting event message sent to an ASAI application contains the ASAI UUI information.

When the feature is not enabled, the ASAI UUI from the original call is copied to the second call at the time the two calls are merged. However, if a call is transferred to a remote location, the UUI can only be sent in a SETUP message which is generated during call establishment. When the ASAI UUI is copied from the original call to the new call upon completion of a transfer (when the agent presses the transfer/conference button a second time) is not timely enough for the UUI to be sent in the SETUP message.

For more information on the updates to CallVisor ASAI features, see *DEFINITY Enterprise Communications Server Release 9 CallVisor ASAI Documents* (CD-ROM), 545-246-801.

## CentreVu Computer Telephony

CentreVu Computer Telephony (CVCT) on a DEFINITY ECS R9 or later does the following:

- Provides a Telephony Server Security Database Option
- Authenticates CentreVu Client.
- Is compatible with Windows 2000

For more information on these updates to CVCT, see *CentreVu Computer Telephony Release 9 Version 1.1* CD-ROM (COMCODE 408461283).

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### Telephony Server Security Database Option

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With CentreVu Computer Telephony Services Release 3.30 Version 3, the Telephony Server (Tserver) treats the Security Database as an optional component. Previously it was mandatory.

The Security Database for Telephony Services option may be deselected during the setup procedure to conserve machine resources (for example, processing cycles and disk storage).

For more information, see the following documents on the *CentreVu Computer Telephony Release 9 Version 1.1* CD-ROM:

- Chapter 3 and Chapter 5 of CVCT Telephony Services and CallVisor PC Installation (INSTALL.PDF)
- Preface and Chapter 2 of CVCT Telephony Services Administration and Maintenance (NETMANGD.PDF)

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### CentreVu LAN Client Authentication

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The Call Visor LAN server with DEFINITY ECS R9 or later, which is part of the CentreVu Computer Telephony product, is enhanced to do the following:

- support client authentication.
- accept connections only from clients for link with administered IP or Host name.
- work at the product definition level.

For more information, see Chapter of the *CVCT Telephony Services and CallVisor PC Installation Guide* (INSTALL.PDF).

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**Java Telephony API  
(JTAPI) Client**

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With this release, several new interfaces and classes have been added to the JTAPI client.

For more information, see the *JAVA Telephony (JTAPI) Client Programmer's Guide Addendum*, included on the *CVCT CD-ROM* as **jcli\_r9.pdf**.

## Capacity Changes for ASAI

The capacities for ASAI active adjunct route requests are reduced. In Release 8, these numbers were 500 for R8.1csi/si and 4,000 for R8.1r. With DEFINITY ONE only one ASAI adjunct link is supported and the Adjunct Route is not supported.

Refer to the *DEFINITY® ECS What's New for Release 9*, 555-233-766, Issue 2, and the *DEFINITY® ECS What's New for Release 9.5*, 555-233-418 Issue 1 for a description of all of the changes and enhancements made to the DEFINITY ECS.

The capacities changes are shown in the table below:

## BSR Available Agent Adjustments

The BSR Available Agent Adjustments feature is available with DEFINITY ECS R9 or later when the contact center release is set to 9.1 or later. Because this enhancement requires BSR (and, therefore, Vectoring), it is only available with Category A. It is not available with Category B since Category B does not allow for Vectoring. The BSR Available Agent Adjustments are not available to customers who are using DEFINITY ECS R9 or later as a bugfix.

This feature is an enhancement to the existing Best Service Routing (BSR) capability. It provides the user with the ability to use the current consider step adjustment value to prioritize the agent resources when agents are available.

BSR Available Agent Adjustments apply to the following routing strategies:

- UCD-MIA (Universal Call Distribution-Most Idle Agent)
- EAD-MIA (Expert Agent Distribution-Most Idle Agent)
- UCD-LOA (Universal Call Distribution-Least Occupied Agent)
- EAD-LOA (Expert Agent Distribution-Least Occupied Agent)

This feature is an enhancement to the Hunt Group Call Distribution options and CentreVu Advocate feature and interacts as follows:

- Hunt Group Call Distribution Options — BSR provides comparable distribution options when selecting an available agent from local/remote resources with the BSR Available Agent Strategy set to something other than “1st-found”. When a call is interflowed to a remote site selected as best or queued to a local best split/skill, the call distribution option set on the remote or local hunt group will ultimately still apply, regardless of the BSR Available Agent Strategy set for the call on the VDN at the local switch.
- CentreVu Advocate — With CentreVu Advocate active and BSR LOA Available Agent strategy active, the best available agent found will be the agent with the lowest occupancy. In the case of “reserved agents”, there is no interaction with BSR since a “reserved agent” will never be selected as an available agent.

Refer to the *DEFINITY ECS R9.5 Call Vectoring and EAS Guide*, 555-230-521, and the *DEFINITY ECS R9.5 Guide to ACD Call Centers*, 555-233-503, for additional information on BSR Available Agent Adjustments.

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## CentreVu Advocate Enhancements

CentreVu Advocate enhancements to the DEFINITY ECS R9 or later software include:

- LOA Customer Option
- Separate Service Objective Field
- CentreVu Dynamic Advocate

For additional information on the CentreVu Advocate enhancements, refer to Chapter 2 of this document.

Complete details on the reports related to CentreVu Advocate are located in *CentreVu Supervisor V9 Reports*, 585-210-929.

Refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953, for additional detail about the CentreVu Advocate feature.

## Least Occupied Agent Customer Option

Effective with DEFINITY ECS R9 or later, the Least Occupied Agent (LOA) capability is available to all DEFINITY ECS R9 customers who purchase the Elite package.

Refer to the *DEFINITY ECS R9.5 Call Vectoring and EAS Guide*, 555-230-521, and the *DEFINITY ECS R9.5 Guide to ACD Call Centers*, 555-233-503, for additional information on LOA.

## Percent Allocation

There are three Percent Allocation enhancements: Percent Allocation Distribution, Auto Reserve Agents, and Dynamic Percentage Adjustment. Used together, they provide a means to meet predefined service level targets and to automate where multi-skilled agents spend their time.

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### Percent Allocation Distribution

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The Percent Allocation Distribution (PAD) enhancement is an agent selection method in which an agent is selected from a group of available agents based on a comparison of the agent's work time in the skill and the agent's target allocation for the skill. It is the agent selection companion to the Percent Allocation method for call selection, originally introduced in Release 6.3 of Advocate.

For more information about PAD, refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953.

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### Auto Reserve Agents

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Auto Reserve Agents intentionally leaves an agent idle even though one or more calls are in queue for one or more of the agent's assigned skills. This decision to keep an agent idle is based on a comparison of the agent's work time in the skill and the agent's target allocation for the skill. This capability allows a contact center management to exert greater control over where a multi-skilled agent spends his time.

For more information about Auto Reserve Agents, refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953.

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### Dynamic Percentage Adjustment

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The Dynamic Percentage Adjustment enhancement periodically (and automatically) adjusts an agent's target allocations based on a comparison of the level of service being achieved for the agent's assigned skills and pre-defined Service Level Targets for those skills.

Dynamic Percentage Adjustment allows contact centers to be responsive to changing call conditions by automatically adjusting agent allocations as needed to meet service levels. Dynamic Percentage Adjustment was created to help contact centers that want to schedule their agents' work be more responsive to changing contact center conditions. With this feature enabled, agent allocations are automatically adjusted as needed to meet service levels for their skills.

For more information about Dynamic Percentage Adjustment, refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953.

## New Database Items

See [R3V9 CMS Database Enhancements](#) on page 36 and *CentreVu CMS R3V9 Database Items and Calculations*, 585-210-945 for more information.

## Advocate Service Level Supervisor Enhancements

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### Dynamic Threshold Adjustment

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Dynamic Threshold Adjustment automatically adjusts overload thresholds (up or down) to activate reserve agents a bit sooner or a bit later to help meet pre-defined service level goals. The adjustments are based on a comparison of the level of service being achieved for the skill and a pre-defined target service level.

With Dynamic Threshold Adjustment, contact center managers or supervisors can determine up front the service levels they want to achieve for each skill and leave any adjustments to Advocate. This will help contact centers more consistently meet the service levels they have set for their operation, resulting in better customer service.

For more information about Dynamic Threshold Adjustment, refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953.

## Advocate Service Objective Enhancements

There are two 9.1 enhancements for Service Objective: Dynamic Queue Position and a new Service Objective field on the Hunt Group form.

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### Dynamic Queue Position

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Dynamic Queue Position allows a center to queue calls from multiple Vector Directory Numbers (VDNs) to a single skill, while maintaining different service objectives for those VDNs. As calls arrive they are placed in queue so that the ASA of the calls from each VDN are proportional to the service objectives of the VDNs. Dynamic Queue Position makes it simpler to serve a segmented customer base without adding additional skills and also prevents the problems that result from simply queuing calls at different priority levels within the same queue.

For more information about Dynamic Queue Position, refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953.

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**Service Objective  
Field**

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The new separate Service Objective field on the Hunt Group Form will be used to control call selection whenever Service Objective is being administered for a skill. The original Acceptable Service Level field, which was used to control call selection and measure percent in service level, will now be used only to measure percent in service level in BCMS and VuStats.

The new Service Objective field will eliminate reporting inaccuracies sometimes experienced with using the same field (Acceptable Service Level) for measuring percent in service level and for controlling call selection with the Service Objective feature. This enhancement will benefit customers who use VuStats or BCMS for contact center reporting.

For more information about the Service Objective field, refer to the *CentreVu Advocate Release 9 User Guide*, 585-215-953.

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# Duplicate Agent Login ID Administration

Duplicate Agent Login ID Administration is available on all EAS contact center configurations with a DEFINITY ECS Release 9 or later and Contact Center Release 9.1 or later. This feature is not available to customers using DEFINITY ECS Release 9 as a bugfix release.

The Duplicate Agent Login ID Administration feature allows an administrator to add several agents to the DEFINITY ECS at one time. The addition of the new agents is based on replicating the information that is already administered for an existing agent.

Use the **duplicate agent-loginID** DEFINITY command to specify:

- The agent loginID that will be used as the master loginID in the duplication process,
- The starting loginID, and
- The number of new IDs to be created (up to 16).

This command creates the specified loginIDs at one time, instead of the user creating each ID individually. The **duplicate agent-loginID** command increases the speed and accuracy of creating new agent login IDs.

Refer to the *DEFINITY ECS R9.5 Guide to ACD Call Centers*, 555-233-503, for additional information on Duplicate Agent Login ID Administration.

## Holiday Vectoring

The Holiday Vectoring feature is available with DEFINITY Release 9 or later for Category A and Category B switches with Vectoring (Basic) or Attendant Vectoring. Holiday Vectoring is administered on the DEFINITY ECS and supported on CentreVu CMS R3V9 or later and CentreVu Visual Vectors V9.

This feature provides the user with the capability to administer ten different Holiday Tables, then use those tables to make vectoring decisions. Each table can contain up to 15 dates or date ranges. All of this can be done in advance to ensure seamless call routing over holidays when staffing is reduced or contact centers are closed.

When vector processing encounters a *goto xxx if holiday in table #* step, it will determine if the current date/time qualifies as a holiday according to the given table. That information is then used to decide whether the goto condition is true or false, and therefore, whether to “goto” the given step/vector or not. The date/time match is done at the time the call is in vector processing. It is done just like time-of-day routing, meaning that it is checking the date/time on the PPN (not the EPN). That is, the system time — not the local port network time.

The Holiday Vectoring feature is not limited to holiday use, but can also be applied to any date-related special processing. For example, vectors can be modified or created to perform special processing during a two-week television promotion or a semi-annual sale.

Without this feature, contact center administrators had to write special vectors for each holiday or other special date-related circumstances, and make sure that these vectors were administered at the appropriate times. In some cases, administrators were required to go to work on holidays just to administer vectors. This feature was developed in response to customer needs, especially for some customers who may have as many as 30 bank holidays to administer throughout the year.

Refer to the *DEFINITY ECS R9.5 Call Vectoring and EAS Guide*, 555-230-521 for additional information on implementing and using Holiday Vectoring.

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## Network Call Redirection

The Network Call Redirection (NCR) feature is available beginning with the DEFINITY ECS R8.3. NCR does the following:

- Provides ability on DEFINITY to have the PSTN reroute an ISDN incoming call to another endpoint.
- Redirects call in network with Network Call Deflection (NCD) or Network Call Transfer (NCT).
- Activates by:
  - BSR “queue-to-best” vector step
  - “route-to-number” ~r vector step
  - Agents/stations and CTI applications (NCT only).
- Provides a cost-efficient method for interflowing calls.

The most common use of the NCR feature is with Best Service Routing.

Call redirection using NCR is accomplished by using either the public network’s Network Call Deflection (NCD) or Network Call Transfer (NCT) options. NCD “clear call upon invocation” is only offered outside of the United States. In the United States, only NCT is offered. In the future, the NCD “retain call until alerting/connect” option may be provided by public networks outside of the United States, but it is not currently available. NCR supports Information Forwarding via UUI transport to the redirected-to location.

Refer to the *DEFINITY ECS R9.5 Call Vectoring and EAS Guide*, 555-230-521, and *DEFINITY ECS R9.5 Network Call Redirection*, 555-233-759, for additional information on implementing and using Network Call Redirection.

## Remote Logout of Agent

The Remote Logout of Agent is a new capability in the DEFINITY ECS R9 or later software. Remote Logout of Agent is not available to customers using DEFINITY ECS R9 or later software as a bugfix release.

This feature allows supervisors (or other users who are appropriately authorized) to log out an agent by using a feature-access-code (FAC). Remote Logout of Agent can be used to discontinue delivery of ACD calls to a station that is no longer staffed by the agent. The user who is logging out the agent can be locally or remotely located.

The Remote Logout of Agent is similar to the Add/Remove Skills feature.

Remote Logout of Agent requires DEFINITY ECS R9 or later and Contact Center Release 9.1 or later.

Refer to the *DEFINITY ECS R9.5 Guide to ACD Call Centers*, 555-233-503 for additional information on Remote Logout of Agent.

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## VDN Service Observing

Effective with Release 9, service observing of VDNs is enhanced to (optionally) start observing of a call to the VDN when the call is delivered to the agent or station. When this VDN option is active, VDN service observing activation still associates the observer with calls to the VDN, but the observer does not hear a call during vector processing. After initial activation, the first call to be observed must first pass through vector processing before the observing is enabled. When the observing connection is completed for the first call (the call is released), the observer is bridged on a subsequent call to the VDN (which has also been through vector processing) when the call is answered by an observable agent/station. This ability saves time for the observer because, after observing of the VDN has been activated, the observer does not have to wait (and listen) for each subsequent call to go through vector processing and for the agent to answer.

Refer to the *DEFINITY ECS R9.5 Guide to ACD Call Centers*, 555-233-503 for additional information on VDN Service Observing.



# CentreVu CMS R3V9 and Related Client/Server Enhancements

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## Overview

This chapter describes the enhancements included in CentreVu Call Management System (CMS) Release 3 Version 9 (R3V9), CentreVu Supervisor Version 9 (V9), CentreVu Visual Vectors Version 9 (V9), and CentreVu Explorer II.

 **Important:**

For a detailed description of the changes made in different issues (loads) of the CentreVu CMS R3V9 software, refer to the readme file on the software installation media.

## Introduction

The sections of this chapter include:

- [R3V9 CMS Database Enhancements](#) on page 36
- [Duplicate Agent Login IDs](#) on page 38
- [Free Space Allocation](#) on page 39
- [Holiday Vectoring](#) on page 40
- [Increased Agent Trace](#) on page 41
- [Increase Supervisors to 400 on CMS](#) on page 42
- [Solaris 8](#) on page 43
- [Informix Dynamic Server](#) on page 45
- [CentreVu CMS Capacities for R3V9](#) on page 48
- [CentreVu CMS R3V9 Database Item Additions](#) on page 49
- [CentreVu Supervisor R9 and CentreVu CMS R3V9 Report Changes](#) on page 50
- [CentreVu CMS R9 Reports](#) on page 51

- [CentreVu Visual Vectors V9 Enhancement](#) on page 53
- [CentreVu CMS Enhancements for loads later than r3v9ah](#) on page 55

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## ACD Administration Log

Call center managers or administrators need to know which CMS user made changes that have an impact on call flow, they can request the CMS ACD Administration Log.

The CMS ACD Administration Log is a database table within CentreVu CMS R3V9 that displays administrative changes made by CMS Users to an ACD. These changes include those made through the CMS ASCII interface, CentreVu Supervisor, CentreVu Visual Vectors, and administrative changes made by a user through a timetable or CentreVu Supervisor script.

The CMS ACD Administration Log benefits the customer by providing an audit trail for changes that have an impact on ACD call flow. It can be used as a coaching tool to eliminate administrative errors, which impact call center efficiency.

For more information on the ACD Administration Log Report, see *CentreVu Call Management System Administration*, 585-214-015.

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# Alarm Admin Tool

The Alarm Admin tool is a new feature introduced in CMS Release 3 Version 9. Alarm Admin is used primarily by technical services personnel to administer and view product alarms and error log files. One feature (Alarm Viewer) can also be accessed in read-only mode by CMS customers.

The Alarm Admin tool is a Java-based application which provides a graphical user interface for technical services personnel to perform various administration and troubleshooting-related functions associated with the Alarm Origination Manager (AOM).

AOM is a shared component of CMS and Visual Vectors that automatically monitors CMS systems and proactively addresses certain types of system problems.

AOM recognizes a defined set of system errors as “alarmable”. For each class of alarmable errors, an incremented count of individual error events is maintained over a defined time interval (at the end of which the count is reset to zero and restarted).

For each error type, error counts are associated with defined alarm severity levels (Warning, Minor Alarm, Major Alarm). As the error count increments over the specified time interval, higher severity levels are triggered as specified threshold count values are met and exceeded.

Alarm severity classes are associated with defined actions. Valid actions include:

- “no action”
- “record error in the alarm log “
- “call”

The “call” action generates a modem-to-modem call to the Initialization and Administration System (INADS). Upon receipt of the call, INADS generates a trouble ticket to track the resolution of the alarm.

After a trouble ticket is generated, technical services personnel use Alarm Admin to perform the following functions:

- reset alarm count intervals
- run a test alarm to verify AOM functionality
- disable various alarm types
- filter and browse active alarms
- filter and browse error logs
- save error log contents (filtered or unfiltered) to a new file location

The AOM package is included as part of the CMS Supplemental Services software, and is available only for US/Canada CMS systems for which a current Maintenance Warranty Agreement is in effect. AOM is automatically launched by the link\_watch daemon whenever CMS is turned on.

**Technical Services** personnel will use Alarm Admin in initial set up of AOM on new/upgraded CMS installations and as an aid in alarm troubleshooting after a trouble ticket is generated.

**Customers** can use Alarm Admin to access the Alarm Viewer window to view a list of all the alarms that are currently active.

## Installing Alarm Admin

Alarm Admin can be locally installed on PCs and connected to a remote CMS server via telnet session running from a Citrix server (to be installed here in Denver for tech support personnel) or over a local area network (customers). Standard InstallShield scripting software is used to provide quick, error-free installation.

Alarm Admin can be installed by one of the following methods:

- from CD-ROM
- from a network drive
- installed into a shared application folder or directory on a network server

Alternately, Alarm Admin can be run directly from the server via a remote X-windows session, in which case no additional software is required for client PCs.

## System Requirements

Alarm Admin can be installed on the following operating systems:

- Windows 95
- Windows 98
- Windows NT (service pack 4.x or later)
- Windows 2000
- Windows Millennium Edition

## Hardware Requirements

Recommended system hardware requirements include:

- Pentium 133 MHz processor or greater
- 64 MB RAM
- SVGA monitor with a graphics adapter supporting 16-bit color (64K colors) or higher, with 800x600 resolution or higher
- 50 megabytes available free disk space

## Administering AOM Alarm Functions

Administration of AOM alarm functions formerly required manual revision of configuration files. Activities such as viewing and filtering active alarms, and resolving (clearing) active alarms required knowledge and use of command line interface features with various option features.

Similarly, viewing and filtering of error log files could also be performed solely from the command line.

Alarm Admin provides an easy to use, intuitive interface for performing the above-listed tasks which does not require advanced Unix skills, execution of shell commands, etc. to simplify the above-listed activities.

## Required Software

The new Citrix server system needs to be installed for support groups.

## CMS VDN Permissions Enhancement

By increasing the authorized number of VDNs the users have VDN access permissions to, the customer can monitor and manage their call center to:

- enhance security
- enhance convenience

The CMS VDN Permissions for >2K feature enhancement:

- allows VDN permission checking in the CMS system to be authorized for up to 20,000 measured VDNs.
- is transparent to other CMS, CentreVu Supervisor, CentreVu Visual Vectors and CentreVu Network Reporting users.
- provides an increase from 2,000 VDNs to 20,000 VDNs for the VDN permission capacity.
- is used when an increase in the authorized number of VDNs the users have VDN access permissions to is necessary for enhanced security and convenience to the customer.
- allows user permissions to be set for up to 20,000 VDNs was developed due to customer demand to accommodate businesses who require, or may evolve to a large and complex solution. Allowing user permissions to be set for up to 20,000 VDNs increases the level of security on VDN assignments a system administrator can set in user permissions.
- increases the capacity from 2,000 VDNs in R3V8 and previous releases of CMS to 20,000 VDNs in R3V9.

## System Requirements

CMS VDN Permissions for > 2K requires R3V9 CMS.

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### **auth\_set window**

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Prior to V9, VDNs permissions checking was turned off in CMS if a customer was measuring more than 2000 VDNs, using the *auth\_set* option in the CentreVu CMS Services menu (cmssvc). For V9, the authorization prompt “*Authorize use of more than 2000 VDNs (yes turns off VDN permission checking)?*” no longer exists when performing the *auth\_set* option.

## Restrictions

Administration of CMS VDN Permissions >2K is only supported on R3V9 CMS.

There are some performance impacting issues around increasing the VDN permissions limits. The user delay for permissions checking is a function of the number of VDN access permissions a user has administered. If a User ID has been assigned a large amount of VDN access permissions in the CMS User Permissions>VDN Access window, (i.e. 1-20,000), the system performance may be impacted when trying to query VDN data. Users with higher numbers of VDN access permissions administered will experience a longer delay in accessing a VDN report. For best performance, it is recommended that VDN user permissions be set to only those VDNs the user needs to access to and to avoid administering VDN access permissions to large blocks of VDNs (for example: VDNs 10000-11000, instead of only to VDNs 10043, 10069, ...etc ).

Read, Write, or Exceptions user permissions can be enabled or disabled for VDN access. It is recommended you do not administer VDN access permissions to a VDN if all three of these user permissions are going to be disabled. By assigning VDN access permissions to a VDN and disabling all three of these user permissions (Read, Write, or Exceptions), a record is unnecessarily created in the exceptions database table.

VDN Browse takes a long time (MR V9-93, 96). Two things happen on a VDN browse:

1. The VDN synonym information and user permissions are requested from the CMS and a resulting cache of this information is built on the local PC. Time spent waiting is a server delay and network delay and unrelated to CentreVu Supervisor of the PC.
2. The cached information is sorted according to name and user permissions, then a Visual Basic list box is built to display the information.

## Compatibility Requirements

The CMS VDN Permission for >2K feature requires:

- Vectoring (Basic)
- R3V9 CMS

There are no minimum requirements to support 20,000 VDNs. The hardware requirement on the CMS server is that the server has enough disk space for all of the permissions data. This will be calculated as usual by the configurator and design assured by the SDSC.

This feature is compatible, although transparent, to the following software applications:

- CentreVu Supervisor
- CentreVu Visual Vectors, and
- CentreVu Network Reporting

## Error Messages

**User errors:** The system performance may be negatively impacted when trying to query VDN data.

**What it means:** The User ID has been assigned a large amount of VDN access permissions.

**Where to look:** Check the CMS User Permissions>VDN Access window in CentreVu Supervisor to see if an unusually large number of VDN permissions (i.e. 1-20,000) has been assigned to the User ID encountering the system performance problem.

**How to fix:** It is recommended that VDN user permissions be set to only those VDNs the user needs to access.

## Recommended Platforms

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**CentreVu Supervisor**

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The CMS VDN Permissions for >2K feature enhancement is only available with R3V9 CMS. CentreVu Supervisor V9 is the required platform with R3V9 CMS.

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**CentreVu Visual Vectors**

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The CMS VDN Permissions for >2K feature enhancement is only available with R3V9 CMS. CentreVu Visual Vectors V9 is the required platform with R3V9 CMS.

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**CentreVu Network Reporting**

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The CMS VDN Permissions for >2K feature enhancement is only available with R3V9 CMS. CentreVu Network Reporting V9 is the required platform with R3V9 CMS.

## Hardware Requirements

There are no minimum requirements to support 20,000 VDNs. The hardware requirement on the CMS server is that the server has enough disk space for all of the permissions data. This will be calculated as usual by the configurator and design assured by the SDSC.

## Software Requirements

The CMS VDN Permission for >2K feature requires:

- Vectoring (Basic)
- R3V9 CMS

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## R3V9 CMS Database Enhancements

New database items have been added to R3V9 CMS to support the CentreVu Advocate feature. Existing database items have been modified with R3V9 CMS to support the Network Call Redirection feature.

### CentreVu Advocate database enhancements

Two completely new database items have been added to support the CentreVu Advocate feature:

- ACDCALLS\_R1
- ACDCALLS\_R2

ACDCALLS and BACKUPCALLS now include information from ACDCALLS\_R1 and ACDCALLS\_R2. In addition, ACDCALLS includes information from ACDCALLS\_R1 and ACDCALLS\_R2 in all tables.

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#### Reason for development

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With R3V9 CMS, database and reports users will be able to separately track how many calls are answered in a skill by reserve agents by creating custom or designer reports using the ACDCALLS\_R1 and ACDCALLS\_R2 database items. This allows more accurate tracking of how many ACD calls are being answered by reserve1 and/or reserve2 agents.

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#### Feature use

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CMS Custom or CentreVu Supervisor Report Designer reports can be created to use these items.

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#### Administration and compatibility requirements

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For the CentreVu Advocate enhancements, R3V9 CMS and the database must be installed and administered. R9 CentreVu Supervisor must be installed to use the new items. Customers must be using an R9 DEFINITY ECS.

- For new installations, the default value of the new database items is set to null (blank when viewed)
- For initial upgrades and migrations to R3V9, the default value of the new database items is set to 0. After that, the value of the database items will be carried forward as it is for all other database items in an upgrade or migration situation.

### For more information

See *CentreVu CMS R3V9 Database Items and Calculations* document, 585-210-945 for more information.

## Network Call Redirection database enhancements

The following CMS database items are affected by Network Call Redirection:

- DEFLECTCALLS
- INTERFLOWCALLS
- LOOKATTEMPTS
- LOOKFLOWCALLS

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### Reason for development

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Before R3V9 CMS, the DEFLECTCALLS, INTERFLOWCALLS, LOOKATTEMPTS, and LOOKFLOWCALLS database items were available in the CMS database, but were there as placeholders or with reduced functionality until the R3V9 release, which supports the NCR feature. Starting with the R3V9 CMS database and the DEFINITY R8.3 ECS, these items will specifically track NCR information.

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### Feature use

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The NCR items appear in standard CMS and CentreVu Supervisor reports and in any existing or new custom or designer reports, but their new definitions will be used to track NCR functions. These items can now be used for both the NCR and Best Service Routing (BSR) features.

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### Administration and compatibility requirements

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No additional administration is required for the NCR database enhancements.

Customers must have DEFINITY R8.3 ECS or later and Network Call Redirection to receive meaningful NCR data. Customers must have R3V6 or later CMS and R6 or later CentreVu Supervisor to use the database items.

### For more information

See *CentreVu CMS R3V9 Database Items and Calculations*, 585-210-945 for more information.

## Duplicate Agent Login IDs

Previous to DEFINITY ECS R9, agent login IDs could only be created one at a time. With the addition of the `duplicate agent-loginID` command to the DEFINITY ECS software, administrators can now create up to 16 agent login IDs at one time. Administration is accomplished using the `duplicate agent` command, which functions similarly to the `duplicate station` command.

The addition of the new agents is based on replicating the information that is already administered for an existing agent.

The `duplicate agent-loginID` DEFINITY command is used to specify:

- the agent loginID that will be used as the master loginID in the duplication process
- the starting loginID
- the number of new IDs to be created (up to 16)

This feature is beneficial because it will increase the speed and accuracy of creating new agent loginIDs.

This command requires Call Center 9.1 or later and is available only if Expert Agent Selection (EAS) is optioned.

For more information on this feature, see *DEFINITY Guide to ACD Call Centers*, 585-233-503

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## Free Space Allocation

The Free Space Allocation screen has been redesigned because of the incorporation of the Informix Dynamic Server (IDS) as the database engine for CentreVu Call Management System (CMS) Release 3 Version 9.

The Free Space Allocation screen displays all ACD dbspaces defined on the CMS server and the total amount of free disk space available.

This screen allows IDS “chunks” to be added or removed from ACD dbspaces. This is necessary when changes to the number of entities or lengths of time for data storage are changed through the Data Storage Allocation screen.

When Free Space Allocation is run and an ACD dbspace is specified, the Data Storage Allocation settings for that ACD are queried and compared to the current usage of “chunks”. If the number of chunks requires change, the Free Space Allocation screen will prompt you if it should modify the ACD dbspace. The only action required by you is to confirm that Free Space Allocation

The Free Space Allocation feature is modified to provide more robust capabilities that are now possible with IDS and the new CMS R3V9 partitioning of the hard disks. The benefits include:

- Increased database performance, capacities, reliability, and redundancy
- The ability to fully utilize disk space

The new Free Space Allocation functionality is only available with CMS R3V9. Using CentreVu Supervisor Version 9.0 with a CMS R3V8 server will result in the previous Free Space Allocation screen being displayed.

CentreVu Supervisor Version 8.0 is not forward compatible with CMS R3V9 and therefore cannot utilize the updated Free Space Allocation screen.

For more information on the Free Space Allocation screen, see *CentreVu Call Management System Administration*, 585-214-015.

## Holiday Vectoring

The Holiday Vectoring feature simplifies the vector-writing process for customers who need to re-route or provide special handling for date-related calls on a regular basis. This feature provides the user with the capability to administer ten different holiday tables, each capable of containing 15 dates or date ranges, and then use those tables to make vectoring decisions. All of this can be done in advance to ensure seamless call routing over holidays when staffing is reduced or call centers are closed.

This feature was developed for customers who have as many as 30 holidays per year. Customers can experience simplified vector administration, increased productivity, and a higher level of profitability due to the efficiency of holiday vectoring. Without this feature, call center system administrators had to write special vectors for each holiday or other special date-related circumstances and make sure that these vectors were administered at the appropriate times. In some cases, administrators were required to go to work on holidays just to administer vectors.

The Holiday Vectoring feature can be used for special processing on holidays, but can also be applied to any date-related special processing. For example, vectors can be modified or created to perform special processing during a two-week television promotion or a semi-annual sale. Once Holiday Vectoring has been administered, it is easy to modify holiday tables to add new dates for special vector processing or change dates if a holiday is observed on a different day each year.

The feature is available on and administered through the R 9.1 DEFINITY ECS. It is supported by CentreVu CMS R3V9 and CentreVu Visual Vectors V9. This customer option can be turned on if the call center is version 9.1 or greater and either Vectoring (Basic) or Attendant Vectoring is enabled.

For more information on Holiday Vectoring and administration procedures, see the following documents:

- *DEFINITY Enterprise Communications Server Release 9 Call Vectoring/Expert Agent Selection (EAS) Guide*, 555-230-521
- *CentreVu Call Management System Administration*, 585-214-015
- *CentreVu Visual Vectors Release 9.0 User Guide*, 585-210-944

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## Increased Agent Trace

The Increased Agent Trace feature expands the agent trace capacity in both CentreVu CMS and CentreVu Supervisor from 250 to 400 agents. This feature provides the user with the capability to activate and list traces on up to 400 agents at one time.

This feature can be used by call center supervisors or managers to activate and list agent traces on large numbers of agents at one time. Agent traces enable supervisors and managers to track agent performance.

Prior to the increase for this release, supervisors had to schedule agent traces with their managers. This feature saves the customer time by consolidating the agent trace activation process to handle large groups and improves management capability by providing a performance monitoring tool. This tool is used to avoid exceeding the limit when other traces had been activated.

The system limit is still 500,000 agent records to be stored; this has not been increased. The activity on 400 agents approaches the 500,000 record limit more quickly than when the agent limit was 250. When the record limit is reached, the file storing these agent records will begin to roll over and overwrite the oldest data in the record.

For information on running an agent trace, see *CentreVu Call Management System Administration*, 585-214-015

## Increase Supervisors to 400 on CMS

The Increase of Supervisors to 400 feature is an enhancement that increases the capacity for simultaneous R3V9 CMS client logins from 250 to 400. Clients are PCs using CentreVu Supervisor or CentreVu Network Reporting to access information from the CMS server.

The capacity was expanded primarily for the CentreVu Supervisor client, but also includes the CMS client-CentreVu Network Reporting. The ASCII terminal (CentreVu Terminal Emulator) limit remains at 250.

This feature is primarily for call centers whose simultaneous access demands to CMS are expected to or have increased, due to expansions of the business and the addition of CentreVu applications that access information from the CMS server.

The Increase Supervisors to 400 feature uses the same process in setting authorizations for the number of simultaneous CentreVu Supervisor logins the customer has purchased as in previous versions of CentreVu CMS.

By increasing the authorized number of simultaneous CentreVu Supervisor logins the customer can purchase with R3V9 CMS, the customer can improve performance in the call center by allowing more CentreVu Supervisor and CentreVu Network Reporting users simultaneous access to the CMS data that they are monitoring and making changes.

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## Solaris 8

This section contains CMS R3V9 related changes for Solaris. The Solaris 8 Operating Environment is the newest version of the Solaris UNIX platform. Solaris 8 provides the core platform on which CentreVu Call Management System (CMS) and other software packages run.

## Hardware Requirements

The SPARCserver platform will not be supported with CMS R3V9

## Software Requirements

This section describes the new software requirements for the R3V9 software packages. The changes in the R3V9 software packages (including Informix) are:

- Solaris 8 Software; disks 1 and 2
  - also contains Solstice DiskSuite™
- Software Supplement for the Solaris 8 Operating Environment, contains:
  - Sun Online Validation Test Suite (VTS) 4.1
- CMS Hardware Drivers CD, contains:
  - High-Speed Serial Interface/Sbus (HSI/S) (required only for Sun SPARCserver or Enterprise systems that have an HSI/S card)
  - High-Speed Serial Interface/PCI (HSI/P) (required only for Sun Ultra 5 systems that have an HSI/P card)
  - Serial Asynchronous Interface/PCI (SAI/P) drivers (required only for Sun Ultra 5 systems that have an SAI/P card)
- Annex Communication Server R10.0(B) Annex Host Tools CD (required only for systems using Network Terminal Server™ [NTS])
- Solstice™ for Server Connect, Version 9.2 CD (required only on systems using an X.25 link to a switch)
- Informix® SQL Version 7.20 CD (optional)
- Informix IDS 9.21.UC4-1 CD
- Informix ESQL 9.40/2.50.UC1-2 SDK CD

## CentreVu CMS R3V9 and Related Client/Server Enhancements

- Informix ILS Version 3.0 CD
- CentreVu CMS Supplemental Services R3V9 CD
- R3V9 CentreVu Call Management System (CMS) CD, also contains:
  - Sun Solaris patches
  - CMS patches
- CentreVu CMS OPENLINK Open Database Connectivity (ODBC) Driver CD (optional)
- CentreVu Visual Vectors Server Software CD (optional)

### For more information

For more information about installation procedures, see *CentreVu Call Management System Release 3 Version 9 Software Installation, Maintenance, and Troubleshooting*, 585-215-956.

## Disk Partitioning

Partition sizes will be entered in MB instead of cylinders during the Solaris installation.

The boot disk is partitioned only to slice 4. No values are entered for the non-boot disk partitions. If the disk was previously partitioned, you will have to unpartition the disk. The non-boot disks will be configured automatically during the CMS installation.

### For more information

For more information about disk partitioning, see *CentreVu Call Management System Release 3 Version 9 Software Installation, Maintenance, and Troubleshooting*, 585-215-956.

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## Informix Dynamic Server

This section contains CMS R3V9 related changes for Informix. Informix provides the database engine for CentreVu Call Management System (CMS) and other related software packages.

Informix must be installed in order to install, setup and use the CentreVu<sup>®</sup> Call Management System (CMS) software and related software packages.

CMS is ported from Informix Standard Engine (SE) to Informix Dynamic Server (IDS) due to customer requirements for increased database performance and database tables larger than two gigabytes.

Informix IDS differs from SE by providing:

- Disk management
- Memory management
- Kernel tunables
- Database management parameters
- Greater database stability

The benefits of Informix IDS includes:

- Increased reliability of CMS databases
- Improved database performance
- Larger database tables

## Restrictions

Informix IDS is compatible only with:

- CMS R3V9
- UltraSparc SUN hardware
- Solaris 8

The following identifies cross-platform compatibility requirements in software versions and any requirements for order of installation.

## Compatibility Requirements

The Informix software packages must be installed in the following order:

1. Informix SQL 7.20
2. Dynamic Server Version 9.21 (IDS)
3. Runtime Enhanced SQL (ESQL) 9.40
4. International Language Supplement (ILS) 3.0

Older versions of the Informix software will not be compatible with IDS.

Because Informix IDS will be managing the CMS databases, DiskSuite is no longer required to be configured on non-mirrored systems. DiskSuite should be installed unconfigured on all systems for potential upgrades to a mirrored system.

## Provisioning Requirements for Informix

The Informix IDS must be **on** when CMS is installed.

## Installation and Setup of Informix Software

This section describes the differences in the installation and setup of the Informix software packages.

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### Informix Dynamic Server

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Informix Standard Engine (SE) 7.22 has been replaced with the Informix Dynamic Server (IDS) 9.21. IDS software is located on the *INFORMIX Dynamic Server Version 9.21* CD.

The installation of the IDS is similar to the SE installation. The installation has changed primarily because of a different directory structure on the CD.

The changes are:

1. Before you install the Informix IDS software you must switch user to Informix by entering:

```
su informix
```

- The command to copy the Informix IDS files from the CD to the hard drive is:

```
tar xvf /cdrom/cdrom0/ids2000.tar
```

- To begin installation of the Informix IDS package enter:

```
./installserver
```

---

## Informix Runtime Enhanced SQL

---

The ESQL software is now located on the *INFORMIX Client SDK Version 2.40* CD. The installation has changed primarily because of a different directory structure on the CD.

The changes are:

- Before you install the Informix ESQL software you must switch user to Informix by entering:

```
su informix
```

- The command to copy the Informix ESQL files from the CD to the hard drive is:

```
tar xvf clientsdkcontent.tar
```

- To begin installation of the Informix ESQL package enter:

```
./installclientsdk
```

---

## Informix International Language Supplement

---

Informix ILS version 2.11 has been replaced with Informix Int'l Language Supplement version 3.0. IDS software is located on the *INFORMIX ILS Version 3.0* CD.

The ILS installation has some minor changes due to the addition of more language and codeset options:

- The `LOCALS - LANGUAGES` screen has minor changes. To select English and Japanese, the installer would enter: `6 16`
- The `CODESET CONVERSION TABLES - CODESETS` screen has minor changes. To select `ISO 8859-1` and `UTF8`, the installer would enter: `20 23`

IDS will be automatically configured with the `postids` tool found on the CMS.

### For more information

For more information about the Informix package installation, see *CentreVu Call Management System Release 3 Version 9 Software Installation, Maintenance, and Troubleshooting*, 585-215-956.

## CentreVu CMS Capacities for R3V9

The following capacities have been increased to provide more customization and control over the call center and the ways in which calls are handled and routed.

### VDNs

The number of VDNs that can be created on a CentreVu CMS R3V9 server has been increased to 2,000 to 20,000 across all ACDs.

Previously, permission checking was disabled when more than 2,000 VDNs were activated. With CentreVu CMS R3V9, the disabling of checking permissions does not occur any longer.

### Vectors

The number of vectors that can be created on a CentreVu CMS R3V9 server has been increased from 4096 to 7992 across all ACDs. A single ACD can hold 999 vectors.

### Resources

For more information on VDNs and vectors, see *CentreVu Call Management System Administration*, 585-214-015

---

# CentreVu CMS R3V9 Database Item Additions

## CentreVu Advocate database items

New items have been added to the CentreVu CMS R3V9 database to support CentreVu Advocate. These items are:

- ACDCALLS\_R1
- ACDCALLS\_R2

## Network Call Redirection database items

The following CMS database items have been modified to support Network Call Redirection:

- DEFLECTCALLS
- INTERFLOWCALLS
- LOOKATTEMPTS
- LOOKFLOWCALLS

### **For more information**

For detailed descriptions of and information on the CentreVu CMS R3V9 database items, refer to *CentreVu® CMS R3V9 Database Items and Calculations*, 585-210-945.

## CentreVu Supervisor R9 and CentreVu CMS R3V9 Report Changes

Although there are no modified reports for either the CentreVu Advocate items or the NCR database items, there will be reports changes. This section lists the changes made to reports. The items covered include:

- changes for CentreVu Advocate
- changes for Network Call Redirection.

For more detailed information on the changes to reports, see *CentreVu® Supervisor Version 9 Reports*, 585-210-929, and the *CentreVu® Advocate Release 9 User Guide*, 585-215-953.

### CentreVu Advocate changes

There are three changes for CentreVu Advocate:

- The custom CentreVu Advocate reports are now available on R3V9 CMS and Version 9 CentreVu Supervisor.
- The new CentreVu Advocate database items can be used with CentreVu CMS custom reports and CentreVu Supervisor V9 Report Designer reports.
- Any existing report using ACDCALLS and/or BACKUPCALLS will use the new definitions of these items, which include information from ACDCALLS\_R1 and ACDCALLS\_R2 as long as R3V9 CMS is being used.

### Network Call Redirection changes

Revised database item definitions will be reflected in CMS R3V9 and CentreVu Supervisor R9 reports that use the DEFLECTCALLS, INTERFLOWCALLS, LOOKATTEMPTS, and LOOKFLOWCALLS items.

#### **For more information**

For more detailed information on the changes to CentreVu CMS reports, see *CentreVu® Supervisor Version 9 Reports*, 585-210-929.

---

# CentreVu CMS R9 Reports

## New CMS ACD Admin Log Report

The CMS ACD Administration Log report contains the CMS User Login of the user initiating the Administration change on a real-time or scheduled basis. Log entries also include:

- the command that was issued and the response to the command when it was issued.
- a date field
- a time field
- an ACD field
- an entity type (VDN, Vector, Agent) field
- an entity identification (VDN number, Vector number, Agent login ID) field
- a command results field (successful, pending, failed).

## Modified ACD Admin Log Reports

The modified ACD Admin Log Reports are as follows:

- ACD Admin Log Report Input window (CentreVu Terminal Emulator)
- ACD Admin Log Report (CentreVu Terminal Emulator)
- ACD Admin Log Report Input window (CentreVu Supervisor)
- ACD Admin Log Report (CentreVu Supervisor)

## Dynamic Queue Position Reports

Although no new reports have been created for this feature, it is important to note that customers would want to view reports to monitor performance. For example, they might look at VDN reports to check the ASAs for each segment of traffic sent into the single queue and review a skill report to see how the skill was performing over all.

## Dynamic Threshold Reports

On the System-Parameters Customer-Options Form, do the following:

- Set the Call Center Release to 9.1
- Set the CentreVu Advocate and CentreVu Advocate Advisor field values to "y"

On the Hunt Group Form, do the following:

- Set the Service Level Supervisor value to "y"
- Set the Dynamic Threshold Adjustment value to "y"
- Set the Service Level Target values for each skill by entering a percentage in the first field and a time in the second field.
- Set Level 1 (and Level 2, if appropriate) thresholds for each skill.

On the Agent LoginID Form for each of the agents that will be assigned as reserve agents, enter the reserve levels for the appropriate skills.

### **For more information**

For more detailed information on the changes to CentreVu CMS reports, see *CentreVu® Supervisor Version 9 Reports*, 585-210-929.

For more information on the ACD Administration Log report, see *CentreVu Call Management System Administration*, 585-214-015.

---

# CentreVu Visual Vectors V9 Enhancement

## Import/Export feature

The Import/Export feature is an enhancement to the CentreVu Visual Vectors Version 9 client application that allows importing and exporting vectors. Vectors can be shared using e-mail, shared or public directories, or other methods.

## Feature use

The user clicks the Import/Export icon in the Framework window to open the new Import Export Wizard, which displays one or more secondary dialog windows.

The window(s) allow the user to specify the contents, name, and location of the vector file to be created. After the vector file is created, the user clicks **Export** to initiate the export process to the selected export container, which can be either an ACD or scratchpad folder.

## Reason for development

Previously, when a user created a vector object, it was stored on the client computer in a scratchpad folder where it was visible only through the Visual Vectors Navigator and Vector Editor tools. User demand required a convenient way for users to share vector objects.

## When to use it

Use the Import/Export feature whenever there is a need to:

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

## Administration and compatibility

The Import/Export feature requires CentreVu Visual Vectors Version 9. Vectors can only be exported to other CentreVu Visual Vectors Version 9 client applications.

### **For more information**

For more information on the Import/Export feature, see *CentreVu Visual Vectors User Guide Version 9*, 585-210-944. For information on CentreVu Visual Vectors Version 9 Client installation and getting started, see *CentreVu Visual Vectors Version 9 Installation and Getting Started*, 585-210-947.

---

# CentreVu CMS Enhancements for loads later than r3v9ah

For a detailed description of the changes made in different issues (loads) of the CentreVu CMS R3V9 software, refer to the readme file on the software installation media. The following enhancements will be made in future loads of CMS:

- Agent/Skill Pairs Across CMS Increase
- Authorized Agents (Right-to-Use) Displayed
- Full Utilization of the Disk Space for the Equipped Hard Disk Drive
- Different Default Feature Access Permissions When Adding Normal CMS Users
- DEFINITY R10 Path Replacement Support
- Password Aging for CMS Users/Supervisors

## Agent/Skill Pairs Across CMS Increase

In CMS authorizations, the previous maximum number of simultaneously logged in agent/skill pairs is 10,000. To support larger customers, the agent/skill pairs capacity has been increased to 32,000.

For more information on the increased capacity, see *CentreVu CMS R3V9 Software Installation, Maintenance and Troubleshooting*, 585-215-956, and *CentreVu CMS R3V9 Administration*, 585-214-015.

## Authorized Agents (Right To Use) Displayed

The CMS authorizations have a parameter to track the number of authorized agents (Right To Use). The `auth_set` and `auth_display` in the CMSSVC menu are modified to set and display this parameter. This is an administered-only number and will not be enforced by CMS.

For more information on this feature, see *CentreVu CMS R3V9 Software Installation, Maintenance and Troubleshooting*, 585-215-956.

## Supported Platforms

R3V9 CMS supports the following Sun platforms:

- Sun Blade 100
- Sun Enterprise 3500
- Sun Ultra 5
- Sun Enterprise 3000

## Soft Partitioning

The Informix Dynamic Server (IDS) can only access up to 2 GB per disk partition on Solaris 8 with 2 K pages. As for the Solaris 8, the limitation on the hard disk drive partitioning is seven slices, namely partitions 0, 1, 3, 4, 5, 6, and 7 (Partition 2 represents the entire disk). This implies that only up to 14 GB (2 GB x 7 slices) of hard disk space are accessible by the CMS server. To utilize the portion beyond 14 GB, the “soft partitioning” feature will be used for reclaiming the unused space on each disk.

For more information on the this feature, see *CentreVu CMS R3V9 Software Installation, Maintenance and Troubleshooting*, 585-215-956.

## Different Default Feature Access Permissions When Adding Normal CMS Users

CentreVu CMS will include “n” in the fields for all write permissions and “n” for UNIX system access. Defaults for administrative users will not change.

For more information on the this feature, see *CentreVu CMS R3V9 Administration*, 585-214-015.

## DEFINITY R10 Path Replacement Support

CentreVu CMS will support the DEFINITY ECS R10 Path Replacement feature.

Path Replacement is the process of replacing an established call by a more efficient call over a new path. After establishing the new call, the old call is torn down. Path Replacement attempts to provide savings in trunk usage and resources for the users. CentreVu CMS allows the path replacement to take place while a call is in queue or unanswered.

The CMS SPI process will track each segment of the path replacement call in the call record. A new type is added to the NXFER message between the switch and SPI, indicating that the path replacement has occurred. This change is only noticeable in the **spi.log**. Path replacement will be considered a TRANSFER, as the RENAME type transfer is handled. In the call record, the UCID of 0 will indicate the call segment as part of the path replacement call.

## Password Aging for CMS Users/Supervisors

CentreVu CMS allows password aging for CMS users/supervisors. This feature is administered on the CMSADM menu, shown below.

```
Avaya CentreVu (R) Call Management System Administration Menu

Select a command from the list below.
1) acd_create   Define a new ACD
2) acd_remove  Remove all administration and data for an ACD
3) backup      Filesystem backup
4) pkg_install  Install a feature package
5) pkg_remove  Remove a feature package
6) run_pkg     Turn a feature package on or off
7) run_ids     Turn Informix Database on or off
8) run_cms     Turn CentreVu CMS on or off
9) port_admin  Administer Modems, Terminals, and Printers
10) passwd_age Set password aging options
Enter choice (1 - 10) or q to quit:
```

For more information on the increased capacity, see *CentreVu CMS R3V9 Software Installation, Maintenance and Troubleshooting*, 585-215-956, and *CentreVu CMS R3V9 Administration*, 585-214-015.



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# How Are We Doing?

Document Title: Contact Center Change Description

Document No.: 585-215-942

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Date: September 2001

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