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***CentreVu*TM Call Management System**
Release 3 Version 5
Open Database Connectivity

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Issue 1
October 1997

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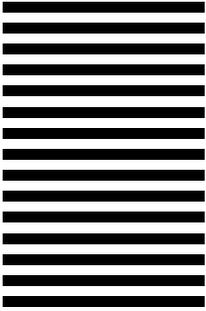


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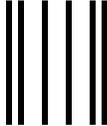
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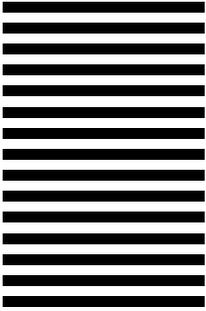


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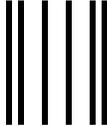
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CentreVu™ Call Management System

Open Database Connectivity

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Overview

Open Database Connectivity (ODBC) is an optional *CentreVu™* Call Management System (CMS) feature that allows you to access data in the *CentreVu* CMS database for use in other software applications such as spreadsheet programs. With ODBC, you can access the CMS data directly from your application, without needing to understand database connectivity or format.

This feature is especially useful for call centers with multiple sites. ODBC allows access to data at multiple sites for reports. ODBC uses Structured Query Language (SQL) to access data, eliminating the need to access the database in the language in which it was written.

The ODBC feature is a client/server feature; that is, the clients must be attached to a network that is fully functional to access the server. The “clients” are the computers that are accessing data through ODBC; the “server” is the CMS machine where the CMS database is located.

Chapter 1 presents an overview of the ODBC feature, its interaction with other *CentreVu* CMS features, and its performance impact. Also included is an overview of ODBC functionality and its interaction with the *CentreVu* CMS database.

Chapter 2 presents an overview of the off-the-shelf driver that will be used for the ODBC feature and its function in relation to *CentreVu* CMS data. The majority of this chapter covers basic installation, configuration, and initialization procedures for the driver on the server and the clients.

Chapter 3 describes the *CentreVu* CMS open database tables and the items in the database tables.

Audience

This document is written for *CentreVu* CMS users who need to understand open access to database items. It is also written to help users decide which database items to use in custom reports, spreadsheets, and other user applications with external data access. The database items can be exported through ODBC for use in a variety of software programs. For data extraction purposes, users will need to have a basic understanding Structured Query Language (SQL) before using this document. Users should also have a basic understanding of database logic and purpose.

Conventions Used in This Document

The following conventions are used throughout this document:

<i>Related document callouts</i>	Include the document number (if a Lucent Technologies publication) and the book title in italic. For example, see the <i>CentreVu™ CMS R3V5 Administration</i> (585-215-820) document for more information.
Courier font	Designates <i>Informix</i> * table names; for example, the <code>csplit</code> table.
Bold font	Designates something you type into the system. For example, type 60 in the Others: Row Buffer Size field.
“Chapter Names”	Are always in quotes.
<i>italic</i>	Highlights references to file names and directories. Also indicates trademarked and registered trademarked words.
Subsystem References	Are always initial capitalized. For example, set the access permissions for <i>CentreVu</i> CMS users from the User Permissions subsystem.
Window Titles	Are always capitalized.

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Open Database Connectivity

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General Information

Overview

This chapter presents an overview of the *CentreVu* Call Management System (CMS) Open Database Connectivity (ODBC) feature, its interaction with other *CentreVu* CMS features, and its performance impact. An overview of ODBC functionality and its interaction with the *CentreVu* CMS database is also included.

Terminology

The following terms are used in this chapter.

API	Application Programming Interface. For ODBC, an API is the user interface that can generate queries to a database.
CMS	Call Management System.
DBMS	Database Management System. CMS uses the <i>Informix</i> DBMS.
Driver	An implementation of an ODBC API that supports a particular DBMS; for example, <i>Informix</i> DBMS. More specifically, a driver is a dynamic link library.
Driver Manager	A driver manager loads specific drivers based on the type of data being accessed.
<i>Informix</i>	A relational database in which CMS stores much of its data, including administration and historical data. More specifically, the CMS database is an <i>Informix</i> Standard Engine (SE).
ODBC	Open Database Connectivity. ODBC is an interface that allows applications to access data from a database using SQL.
SQL	Structured Query Language.

ODBC Feature

Overview

An *OpenLink*^{*} ODBC driver will provide the ODBC communication and connectivity that will allow external data access to the *CentreVu* CMS database, and will be installed at the call center. The driver will support *Solaris*[†], *Windows 95*[‡], and *Windows NT*[§] clients. All historical CMS database tables, dictionary tables, and customer-provided tables can be accessed by ODBC clients through standard ODBC-enabled software applications. All standard Structured Query Language (SQL) queries generated by the user applications will be supported by the ODBC driver as limited by permissions. Table-level, read-only permissions restrict access to database tables. The tables accessible in the *CentreVu* CMS Release 3 Version 5 database are described in detail in Chapter 3, "Database Tables."

Queries

Queries can be generated from client to server, from user applications. The ODBC driver will be installed on the server, and the accompanying software will be installed on the clients. The extracted data can be used in workforce management packages, network routers, and blended inbound/outbound applications. Any application that supports ODBC functionality can access permissible tables, for example, the CMS Dictionary.

The same recommendations for composing queries in the CMS custom report editor also apply to ODBC queries. For example, accessing large tables such as the split/skill or agent tables, or joining tables in queries may have a negative impact on CMS performance. You should also be careful to use the exact table and database item names when querying the database. When performing calculations, keep in mind that arithmetic operations are generally performed in order from left to right. Multiplication and division operations are performed before addition and subtraction operations, unless the addition or subtraction operations are enclosed in parentheses. Operations in parentheses are always performed first. Therefore, it is very important to review your queries before sending them to the database.

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† Solaris is a trademark of Sun Microsystems, Inc.

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§ Windows NT is a registered trademark of Microsoft Corporation.

Additional Information on Queries

For more information on how to compose efficient database queries, see “Chapter 6: Edit | Queries” in the *CentreVu™ CMS R3V5 Report Designer* document (Lucent Technologies 585-215-831).

Performance Impact

The number, size, and types of queries received by the CMS will impact performance. To keep system impact at a minimum, certain types of queries, such as accessing large tables or performing table joins, should be run during a period of low agent and real-time report activity; for example, during off hours. You may want to prioritize very involved queries in the same way that you would prioritize reports during times of high business activity. The impact of complex or multiple queries on the database will be similar to the impact from running multiple reports. Another important performance impact consideration is the number of simultaneous database accesses allowed. In order to optimize system performance, you will also want to minimize the number of database connects and disconnects from an application.

Security

ODBC users will log into the CMS server with password protection. Users will have SQL access to *Informix* tables as limited by the table permissions in Chapter 3, “Database Tables.” All historical and dictionary database tables will have read-only access permission. The customer-created tables on the host (any table names beginning with “c_”) will have read and write permissions. All other tables will not be accessible through ODBC.

CMS Feature Interactions Requiring Client Support

The following CMS features require specific client administration and interaction. Most importantly, data received by the client application will be in “raw” form; that is, you will need to format it for use within your application. Dictionary names and certain time fields are most affected by this formatting. Refer to Chapter 3, “Database Tables,” for further information on data format and values.

- *Dictionary Names:* Clients can access CMS Dictionary names. The client must map the synonym to the report. Typically, underlying data is numeric; for example, different splits are stored as numbers and not by their names.

 NOTE:

To minimize performance impact when accessing synonyms, download the synonyms to your client application or database and perform the join at the client.

- *Permissions*: Applications which access *Informix* externally, such as database access scripts, may not work if the table permission script tries to access a table to which permission is denied. Note that CMS-like permissions to individual entities such as splits and vectors are not available through the ODBC interface. It is up to the client application to create and enforce permissions at this level if this is required.
- *Field Display*: The time and date data you receive from the database may not be formatted. Generally, times may be shown in seconds or in military format. You will need to review data for formatting when you import it into your software application. See your software's documentation for further information on formatting data.

ODBC Background and Functionality

Definition

Open Database Connectivity (ODBC) is an Application Programming Interface (API) that interfaces with one or many Database Management Systems (DBMSs) and allows queries to access data in the database for extraction and use in reports and other outside applications.

Data Access Through ODBC

ODBC was developed as a solution to accessing different types of data. Within one call center, users may be working with different applications such as *Microsoft Access** or *Seagate Crystal Reports*†, that must access call center data. Users may need to import CMS data into many different applications. ODBC provides a standard method of database access that shields users from the underlying functionality of network software, naming conventions, and the other complexities involved in accessing data through a DBMS. You only need to query the data through the embedded SQL query function in the *Windows* application that you are using. Refer to your specific application documentation for further information on its embedded SQL function. Figure 1-1 illustrates user data access through ODBC.

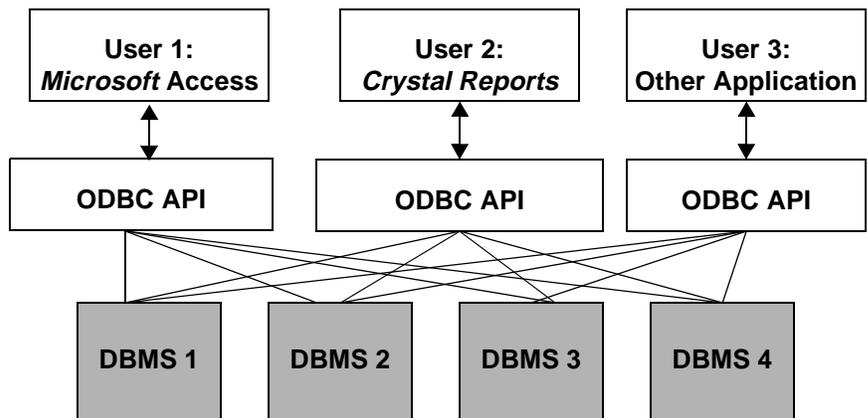


Figure 1-1: Data Access Through ODBC

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†Crystal Reports is a trademark of SeaGate Software.

Structured Query Language (SQL)

ODBC uses SQL to query and access data. Because SQL is a language, queries written in SQL can be used to access data with different formats. SQL is the basis for relational database access. The simplest description of a relational database model is the table—data is stored in rows and columns, and relationships between tables are established through data items with matching values between the tables. SQL queries access the data stored in the relational database tables and extract it for use in other applications. SQL can also be used to construct data calculations. This is particularly useful if you want to look at a sum of the data; for example, the total number of calls routed to a particular split or skill. You compose the SQL query from the *Windows* application for which you need the data. The SQL query function is embedded in the application itself.

CMS ODBC Drivers

The *CentreVu* CMS *Informix* DBMS is supported by the *OpenLink* Multi-Tier ODBC Driver. A driver is an implementation of an ODBC API that supports a particular DBMS; in this case, the *Informix* DBMS used by *CentreVu* CMS. More specifically, a driver is a dynamic link library that is specific to a type of DBMS. The driver manager provides the link between the user's applications and the DBMS itself by selecting the dynamic link library using the format of the data being queried by processing the received ODBC function calls. Figure 1-2 illustrates how drivers provide the interface between user applications and the data being accessed, assuming that driver dynamic link library 1 is the *Informix* specific library. More information on the *OpenLink* driver and its installation procedures can be found in Chapter 2, "ODBC Driver and Installation."

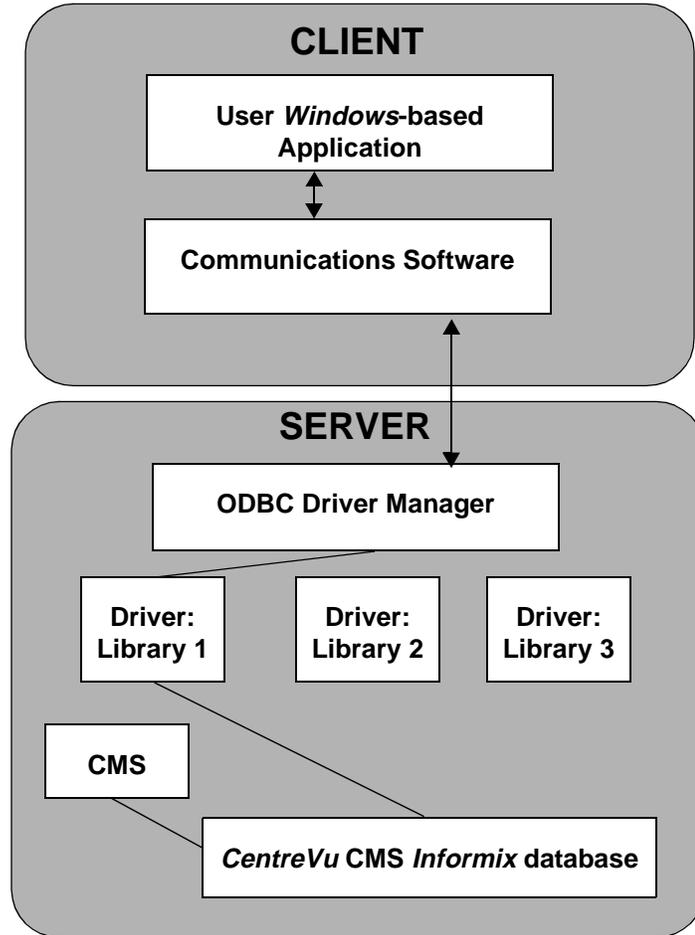


Figure 1-2: ODBC Driver Functionality

Uses for ODBC Data

Data extracted and stored by an ODBC application can be used by ODBC-enabled programs, such as workforce management packages, network routers, and blended inbound/outbound applications. Data can also be extracted for use in ODBC-enabled programs, including spreadsheets and report writers. An example of an ODBC data application is generating reports using data from multiple call center sites and their databases.

Requesting Data Using ODBC

The ODBC driver installed on the CMS is compatible with the CMS *Informix* database. All queries in ODBC must be composed to ensure continued CMS performance. The query will be invoked differently in each *Windows* application. For more information on how your application interfaces with ODBC, refer to your application's user documentation. For more information on how to compose efficient database queries, see the *CentreVu™ CMS R3V5 Custom Reports* document (Lucent Technologies 585-215-822), and "Performance Impact" and "Structured Query Language (SQL)" sections in this chapter.

Chapter 2

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General Information

Overview

This chapter presents an overview of the driver that will be used for the Open Database Connectivity (ODBC) feature and its function in relation to *CentreVu* Call Management System (CMS) data. The second half of this chapter covers basic installation, configuration, and initialization procedures for the driver. Server connection procedures for the client are given.

Procedures are included for personal computer clients, *Solaris* clients, and the *CentreVu* CMS server. Troubleshooting tips and *OpenLink* ODBC Error Messages are included at the end of the chapter.

All server and client driver components are included on the ODBC 1.0 compact disk. You will use this disk for both client and server installation.

 **CAUTION:**

If you choose to develop an application for the ODBC driver, Lucent Technologies cannot provide support for that application or for any other third party software or related mapping.

ODBC Driver

Introduction

An *OpenLink* Multi-Tier ODBC driver facilitates client querying of data for extraction from the *CentreVu* CMS database. The client driver will support client access from *Solaris*, *Windows 95*, and *Windows NT* clients. All historical CMS database tables, dictionary tables, and customer-defined tables can be accessed by ODBC clients through standard Structured Query Language (SQL) queries. All standard SQL queries will be supported by the ODBC driver as limited by permissions. Table-level permissions will restrict access to database tables. The tables accessible in *CentreVu* CMS Release 3 Version 5 are described in detail in Chapter 3, "Database Tables."

Function

OpenLink ODBC drivers are composed of two main components: a generic ODBC driver and the *OpenLink* Request Agent. The *OpenLink* Request Agent resides on the client and interfaces with the ODBC driver via proprietary protocol. ODBC drivers are controlled by an ODBC driver manager, in this case, the *OpenLink* Request Broker. The *OpenLink* Request Broker resides on the server. ODBC uses data source names as the link between the ODBC Request Broker and the relevant ODBC driver for a particular database.

The *OpenLink* ODBC driver is a multi-tier driver; that is, the driver controls both ODBC calls and the manner in which these calls are transferred to the relevant database management system (in *CentreVu* CMS, *Informix*) over the communications infrastructure. The *OpenLink* Request Broker provides the link between the user's applications and the database management system (DBMS—in CMS, *Informix*). Once it is installed and administered, the ODBC driver and its components are transparent to the client. The CMS ODBC feature allows multiple, synchronous accesses from clients, users, and/or applications.

Supported Logins

The CMS ODBC feature will support up to five or ten simultaneous logins, in increments of five, depending on your licensing agreement.

Additional Information

For additional information on the ODBC driver, see the on-line help file that is included on the ODBC 1.0 compact disk.

Installation and Configuration Procedures

Overview

You will install both server and client ODBC driver software from the CMS ODBC 1.0 compact disk. This disk contains all necessary files for server, *Solaris* client, and *Windows* client installation. *OpenLink* ODBC driver installation and configuration procedures in this chapter are presented for the *Sun Solaris/CentreVu* CMS server, *Sun*^{*} *Solaris* clients, and personal computer clients. Refer to the installation and configuration procedures that are specific to your client/server environment. Installation on your server will not impact system performance; you may install the ODBC server components at any time.

- To install and configure the ODBC driver in a *Sun Solaris/CentreVu* CMS client/server environment, see “Installation on the CMS Server” and “Solaris Client Installation” in this chapter.
- To install and configure the ODBC driver on your CMS server and on your personal computer for accessing *CentreVu* CMS data, see “Installation on the CMS Server”, “Desktop Computer Client Installation”, and “Desktop Computer Client Configuration” in this chapter.
- For additional information on installing, configuring, and operating the ODBC driver, see the on-line help file that is included on the ODBC 1.0 compact disk.
- Once installed and configured, a valid CMS login has ODBC access.

*Sun and Sun Microsystems are trademarks or registered trademarks of Sun Microsystems, Inc.

Installation on the CMS Server

Introduction

This section describes and presents step-by-step instruction for the system requirements, software installation procedures, configuration procedures, and initialization procedures for the *OpenLink* Multi-Tier ODBC driver on the *CentreVu* Call Management System server.

⇒ NOTE:

If you have purchased the ODBC feature to be installed by Lucent Technologies on your server prior to its delivery, then you may skip this procedure. Continue with client installation.

System Requirements

The following system requirements must be met in the client/server environment prior to installing the software:

- The ODBC server is on a standard *CentreVu* CMS hardware platform (*SPARCserver** 5, 10, or 20, or *Sun Ultra Enterprise 3000*†) with *Solaris* 2.4 or later running.
 - You are using CMS load R3V5ai or later for *SPARC* platforms, or CMS load R3V5uc or later for *Ultra Enterprise 3000* platforms.
 - The network communication software (TCP/IP) is correctly installed and configured, and the network is fully functional, so that the server can communicate with the clients.
-

Installation Procedure

Complete the following steps to install the server components of the *OpenLink* ODBC driver on the CMS server. You will install the software to the `</usr/openlink>` directory on the CMS server.

1. Insert the ODBC 1.0 compact disk into the compact disk drive.
 2. Log on to the CMS server as **root**.
 3. Enter **cd /usr** to change directories to the `/usr` directory.
 4. Enter **mkdir /usr/openlink** to create the *OpenLink UNIX*‡ directory.
 5. Enter **cd /usr/openlink** to change directories to `/usr/openlink`.
-

*SPARCserver is a trademark of SPARC International, Inc. and is licensed exclusively to Sun Microsystems, Inc.

†Ultra Enterprise 3000 is a trademark of Sun Microsystems Inc.

‡UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited.

6. Enter `cp /cdrom/cdrom0/server/* .` to copy the server components from the compact disk.
7. Enter `./install.sh` to run the *OpenLink* server side installation script.
8. At the prompt, enter **root** as the name of the user who will own the programs.
9. At the prompt, enter **root** as the name of the group that will own the programs.
10. Enter `/cms/dc/odbc/odbc_init` to configure and initiate the ODBC software on the server.
11. Enter `ps -ef |grep oplrqb` to verify that the ODBC Request Broker is active on the server. You should see an *oplrqb* process running.

At this point, the software is registered, installed, and running. If you do not see an *oplrqb* process running after completing step 11, check that the software was correctly installed.

Server Debug, Logging, and Run Utilities

Introduction

Once the ODBC driver is installed on the server, a CMS utility program is available for setting debug and logging levels, and activating and deactivating the ODBC feature. This program is located in the */cms/dc/odbc* directory.

Debug

To set the server ODBC debug level, complete the following steps:

1. Enter **cd /cms/dc/odbc** to change directories to */cms/dc/odbc*.
 2. Enter **./odbc_init -d 0** or **1** to run *./odbc_init -d* (**0** turns the debug utility off, and **1** turns the debug utility on).
-

Logging

To set the CMS server logging level for ODBC, complete the following steps:

1. Enter **cd /cms/dc/odbc** to change directories to */cms/dc/odbc*.
 2. Enter **./odbc_init -l 0-7** to run *./odbc_init -l* (where **0** turns CMS server logging off, and **1-7** sets the logging level, with **1** as the lowest level and **7** as the highest [**5** is the default]).
-

Run

To activate or deactivate the ODBC feature on the server, complete the following steps:

1. Enter **cd /cms/dc/odbc** to change directories to */cms/dc/odbc*.
2. Enter **./odbc_init -r 0** or **1** to run *./odbc_init -r* (where **0** deactivates the ODBC feature and **1** activates it).

Solaris Client Installation

Introduction

The *OpenLink* ODBC driver software can be installed on a *Solaris* client using the installation procedure in this section. Once the software is installed, it must also be configured using the procedure in this section. For additional information on installing and configuring the ODBC driver, see the client on-line help file that is included on the ODBC 1.0 compact disk.

System Requirements

Before installing the *OpenLink* ODBC driver software on a *Solaris* client, verify that you have met the following list of requirements.

- *The client is communicating with the CMS server over the network:* Use the network protocol's *ping* utility to ensure that communication between the client and the CMS server is functional. Do not proceed if basic communications between the client and the server cannot be established. If the client cannot recognize the network, then the ODBC driver will not function properly.
 - The ODBC clients are *SPARCserver 5*, *10*, or *20* or *Sun Ultra Enterprise 3000* with a *Solaris 2.4* (or later) operating systems installed.
 - To develop an application using the ODBC API, the complete *Solaris* distribution (which provides the libraries and headers) and the *SPARCCompiler** must be installed. The development environment on the *SPARCserver 5*, *10*, or *20* client must be a *Solaris 2.4* (or later) operating system.
-

Installation Procedure

NOTE:

If the client is on the same machine as the server, then the client software was installed with the server software. If this is your situation, go to "Configuration Procedure" in this section. If you are installing a *Solaris* client on a machine other than the CMS server, continue with the following installation procedure. Use the following procedure to install *OpenLink* ODBC software on the *Solaris* client:

*SPARCCompiler is a trademark of SPARC International, Inc. and is licensed exclusively to Sun Microsystems, Inc.

1. Insert the ODBC 1.0 compact disk into the compact disk drive.
2. Log in as **root**.
3. Enter **cd /usr** to change directories to the */usr* directory.
4. Enter **mkdir /usr/openlink** to create the */usr/openlink* directory.
5. Enter **cd /usr/openlink** to change directories to */usr/openlink*.
6. Enter **cp /cdrom/cdrom0/client/solaris/* .** to copy the Solaris client components to */usr/openlink*.
7. Enter **./install.sh** to run the Solaris client installation script.
8. At the prompt, enter **root** as the name of the user who will own the programs.
9. At the prompt, enter **root** as the name of the group that will own the programs.

The libraries and other files needed for ODBC application development are now installed. A test application to verify client/server connectivity is included. See “Test Connectivity” in this chapter for more information.

Configuration Procedure

The *cms_odbc.ini* file located in */usr/openlink* must be modified and placed in the *\$HOME* directory as *.odbc.ini* for each user that will initiate the client application. First edit the *cms_odbc.ini* file, then copy it to *\$HOME/.odbc.ini*. The *cms_odbc.ini* file resides in */usr/openlink*.

The host parameter in the sample *Informix* connection segment must be changed. If you are using a *SPARC 5, 10, or 20* server, edit the *Informix 5* segment. If you are using an *Ultra Enterprise 3000* server, edit the *Informix 7* segment. The modified *Informix* section should look like the following example, with your default host name entered in the Host parameter field:

```
[Informix x]
Driver       = /usr/openlink/client/odbcsdk/lib/oplodbc.so
Host        = YOUR DEFAULT HOST NAME
ServerType  = Informix 5 (or Informix 7 if you are using an
              Enterprise 3000 server)
ServerOptions =
Database    = /cms/db/inf/cms
Options     =
ReadOnly    =
FetchBufferSize = 60
```

⚠ CAUTION:

To correctly resolve database connectivity, the **.odbc.ini** file must exist in the **\$HOME** directory of the initiating user on the ODBC client. The client application will fail if it is initiated by a user who does not have an **.odbc.ini** file. The following steps complete the client administration:

1. Enter **cd \$HOME** to change to your home directory.
2. Enter **vi .profile** to edit your *.profile* file.
3. Enter **export LD_LIBRARY_PATH = /usr/openlink/odbcsdk/lib:\$LD_LIBRARY_PATH** to export *LD_LIBRARY_PATH*.
4. Enter **export UDBCINI = \$HOME/.odbc.ini** to export *UDBCINI*.
5. Enter **.wq** to exit your *.profile* edit.
6. Enter **. .profile** to source your *.profile*.

Once the *Solaris* client software is installed and configured, you can proceed with writing your application using the ODBC API.

Test Connectivity

On the *Solaris* client, initiate the test application to verify connectivity with the following procedure:

1. Enter **cd /usr/openlink/odbcsdk/examples** to change directories to */usr/openlink/odbcsdk/examples*.
2. Enter **./odbctest** to run *odbctest*.
3. At the “Enter ODBC connect string” prompt, enter:
DSN = Informix 5 (or **Informix 7** if you are using an *Enterprise 3000* server); **UID = Valid _UNIX_User_on_Server**;
PWD = User_password to set these parameters.
4. At *SQL >*, enter a valid SQL query, for example:
select SPLIT, ACDCALLS from hsplite where ROW_DATE = “6/27/97” and STARTTIME = 1600 to test data connection.
5. Enter **exit** to exit.

If an error occurs, an error message will be reported and the test application will close.

Possible Failure Causes

A test application error could result from one of the following causes:

- The driver is not active on the *CentreVu* CMS server. Verify that the ODBC driver is active on the server by entering **ps -ef |grep oplrqb**.

You should see an *oplrqb* process running.

- There was an error in the *ODBC.connect* string entry. Resolve this by re-entering the correct DSN, host, user ID and password at the *ODBC.connect* string prompt.
- The *.odbc.ini* file does not reside in the initiator's *\$HOME* directory.
- The *.odbc.ini* file is incorrect. Verify that the entered host is correct the database is */cms/db/inf/cms*.
- The *LD_LIBRARY_PATH* is not set. Enter **echo \$LD_LIBRARY_PATH** to ensure that *LD_LIBRARY_PATH* is included in the display (see "Test Connectivity" for more information).
- The *UDBCINI* is not set. Enter **echo \$UDBCINI** to ensure that *\$HOME/.odbc.ini* is included in the display. See "Configuration Procedure" in this section for more information.
- The data source is not consistent with the *cmsrqb_init* entry. Verify the data source you have entered (*Informix 5* or *Informix 7*).

Review the */usr/openlink/client/doc/STARTUP.DOC* file for other possible errors.

Building an ODBC Application

Provided that the development environment is installed, all necessary components to build an ODBC application exist in the */usr/openlink/client/odbcsdk* directory. Necessary headers and library routines reside in the respective */include* and */lib* directories. The actual application test code and associated *makefile* reside in */usr/openlink/client/odbcsdk/examples*. This code illustrates the use of the ODBC API. Copy the code to another directory prior to your use and development. The complete API is defined in the *Microsoft ODBC 2.0 Programmers Reference and SDK Guide*, © 1992, 1993, 1994, Microsoft Press, a division of Microsoft Corporation, ISBN 1-55615-658-8. Although this is a *Windows* reference guide, the API is portable to a *UNIX* operating system.

The ODBC application is responsible for implementing the embedded ODBC code provided by the ODBC libraries linked to the driver manager for host/database connectivity, data access, and any other necessary processing. If the test connection is successful ("Test Connectivity" in this section), the client has been properly configured and the ODBC header and libraries have been verified to be fully accessible to an application. Lucent Technologies cannot provide support for client-generated applications, or other third-party software or related mapping. See the caution in this chapter's overview, or contact your Lucent Technologies account representative.

Desktop Computer Client Installation

Introduction

The *OpenLink* ODBC Request Agent software can be installed on your desktop computer or on your network for access by each client using the procedures in this section. Once the software is installed, it must also be configured using the procedure in this section. For additional information on installing and configuring the ODBC driver, see the on-line help file that is included on the ODBC 1.0 compact disk.

System Requirements

Before installing the *OpenLink* ODBC driver software on your computer, verify that you have met the following list of requirements.

- *Client network software is installed:* Ensure that you have a “winsock”-compliant desktop TCP/IP product installed. Check for the existence of the *winsock.dll* file with the *Windows Explorer* function or through your file manager.
 - *Your computer is communicating with the CMS server over the network:* Use your desktop TCP/IP product’s PING utility to ensure that communication between your computer and the CMS server is functional. Do not proceed if basic communications between your computer and the server cannot be established.
 - You are running *Microsoft Windows 95*, *Windows NT 3.51*, or *Windows NT 4.0*.
-

Installation Procedure

Use the following procedures to install *OpenLink* ODBC client software.

Windows 95, Windows NT 4.0

1. Start *Microsoft Windows*.
2. Insert the *OpenLink* ODBC driver compact disk into the compact disk drive.
3. Open the *Windows Explorer*.
4. Select your compact disk drive.
5. Select the *Client* folder.
6. Select the *Win32* folder.
7. Double click on the *setup.exe* file to install the client software.

8. Follow the instructions on your screen.

⇒ NOTE:

It is recommended that you use the *Normal* installation option.

9. Configure your ODBC data sources using the ODBC Administrator utility resident within your *Windows* Control Panel and the procedures on the following pages.

Windows NT 3.51

1. Start *Microsoft Windows*.
2. Insert the ODBC 1.0 compact disk into the compact disk drive.
3. From the *Windows* Program Manager, choose **File (Alt+F)**, and then the **Run** command.
4. Type the compact disk drive letter, followed by **:*client*\Win32\setup**. For example, if your compact disk drive is drive *a*, then type **a:*client*\Win32\setup**.
5. Follow the instructions on your screen.

⇒ NOTE:

It is recommended that you use the *Normal* installation option.

6. Configure your ODBC data sources using the ODBC Administrator utility resident within your *Windows* Control Panel and the procedures on the following pages.

Installing Clients from a Single Network Point

If you are installing on a desktop computer client that does not have a compact disk drive, or want to install from a single network point, use the following steps:

1. Install the ODBC driver on a networked machine with a compact disk drive, using the procedure for the machine's operating system (*Windows 95*, *Windows NT 4.0* or *Windows NT 3.51*) included in this section.
2. Open your computer's program manager or *Windows Explorer* and go to the directory for the networked machine.
3. **Copy** the *OpenLink* folder from the networked machine.
4. Change directories to your client computer's hard drive.
5. **Paste** the *OpenLink* folder to your hard drive.
6. Run the *setup.exe* file using the *Normal* option and configure your ODBC data sources using the procedures on the following pages.

Desktop Computer Client Configuration

Introduction

The procedures on the following pages use the *OpenLink* ODBC Driver Administration facility to administer data sources for the client(s).

 **NOTE:**

There are slight variations between the displayed ODBC dialog boxes for *Windows 95*, *Windows NT 3.51*, and *Windows NT 4.0* and *Windows NT 4.0* if the underlying *Microsoft* ODBC driver is version 3.0. If your underlying *Microsoft* ODBC driver is version 3.0, and you are running *Windows NT 4.0*, the ODBC Data Source dialog box will display with function tabs across the top instead of function buttons on the face of the dialog box. Throughout the configuration procedures, any exceptions or differences for these dialog boxes are given in parentheses and are discussed in those cases where the differences affect the procedure.

ODBC Driver Administration Utility

The ODBC Driver Administration utility is a standard utility that resides within your desktop environment's control panel. This utility is responsible for adding and removing ODBC drivers. To access the ODBC Driver Administration utility after the *OpenLink* ODBC driver software has been installed, complete the following steps:

For *Windows 95* or *Windows NT 4.0*, complete the following steps:

1. Select the **Start** button in the taskbar.
2. Select **Settings**.
3. Select **Control Panel**.
4. Select **32 Bit ODBC**.

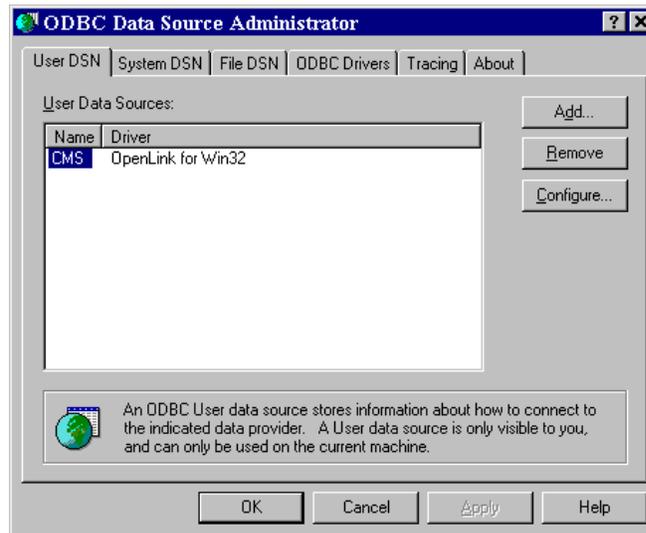
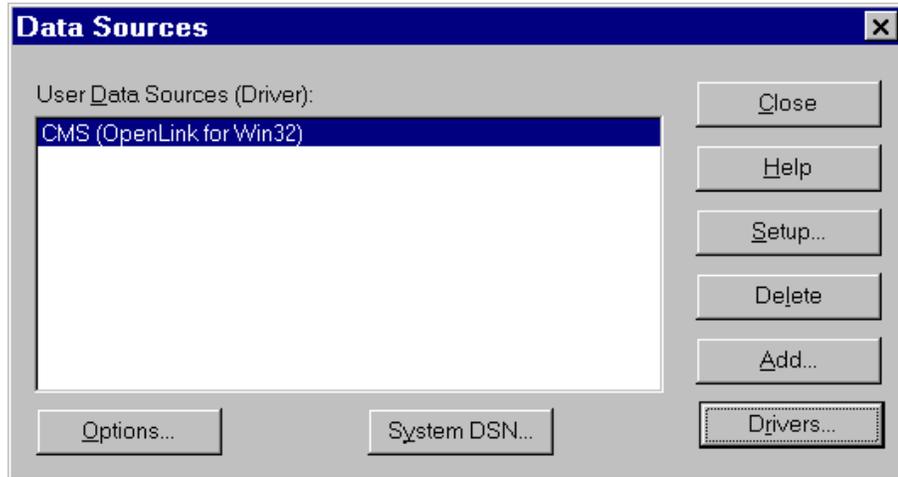
For *Windows NT 3.51*, complete the following steps:

1. Select **Main** from the **Program Manager**.
2. Select **Control Panel**.
3. Select **32 bit ODBC**.

ODBC Data Source Dialog Box

The ODBC Data Source dialog box (versions without and with an underlying version 3.0 ODBC driver are shown on the following page) will display, with available ODBC data sources listed. To access the CMS server, a data source must be administered, after it has been added and configured. See "Define Data Sources" in this section for more information. The ODBC Data Source dialog box and the Add Data

Sources dialog box (not used with the version 3.0 driver) allow you to select an ODBC driver for which you want to add a data source. In this case, you will add the *CMS (OpenLink for Win32)* driver. You will configure data sources for the driver using the *OpenLink Setup* dialog box.



Define Data Sources

You may define one or more data sources for each installed driver. The data source name should provide a unique description of the data; for example, Call Management System. The defined data sources for all of the currently installed drivers are listed in the User Data Sources (Driver) list.

ODBC Data Source Fields

Table 2-1 defines the ODBC Data Source dialog box fields (and alternate names and tabs for the version 3.0 driver).

Table 2-1: ODBC Data Source Fields

Field	Description
Close	Closes the dialog box and exits the ODBC Control Panel.
Help	Accesses the ODBC on-line Help file.
Setup (Configure)	Allows you to configure an existing data source. You should select the name of the data source you want to configure before selecting the Setup button.
Delete (Remove)	Removes an existing data source. You should select the name of the data source you want to delete from the list before selecting the Delete button.
Add	Adds a new data source. If you select this button, a dialog box prompts you for the driver for which you are adding a data source. After you select a driver, a driver-specific setup dialog box is displayed. If you select this button, a dialog box prompts you for the information required to set up a login ID-based data source. This is not recommended for CMS.
Drivers (ODBC Drivers tab)	Displays information about an ODBC driver. If you select this button, a dialog box displays a list of the types of drivers currently installed on your computer.

Table 2-1: ODBC Data Source Fields (Contd)

Field	Description
System DSN (tab with version 3.0 driver)	Allows you to add, delete, or configure data sources local to a computer, rather than dedicated to a user. If you select this button, a dialog box prompts you for the information required to set up the system data source. This is recommended for CMS.
Options (Tracing tab)	Allows you to set ODBC options. If you select this button, a dialog box will prompt you, asking if the ODBC calls should be traced, and, if so, the name of the trace file.
User DSN (version 3.0 driver only)	Allows you to add, delete, or configure data sources that are dedicated to a specific user login ID. If you select this tab, the User DSN dialog box prompts you for the information required to set up a login ID-specific data source. This is not recommended for CMS, but is presented as an option in this document.
File DSN (version 3.0 driver only)	Allows you to add, delete, or configure file-based data sources in a shared folder that is accessible by every client on the network. If you select this tab, the File DSN dialog box and accompanying wizard prompt you for the information required to set up a login ID-specific data source. This is not recommended for CMS and is not described in this document; however, you may choose this option if you have a large number of networked <i>Windows NT</i> 4.0 clients.
About (version 3.0 driver only)	Displays a dialog box with detailed information about the ODBC drivers available on your system.

Add System Data Sources

Before adding a data source, you should decide if you want to add a system-wide data source or a data source specific to a user login ID. Administering data sources on a per-user login ID basis is an optional procedure. Follow the procedure in this section to administer a system-wide data source. Follow the procedure in “Add Login ID-Based Data Sources” to administer data sources on a per-login ID basis.

⇒ NOTE:

It is recommended that you add system-wide data sources for *CentreVu* CMS, rather than having to administer data sources on a per-login ID basis.

Add System Data Sources Procedure

To add a system data source, complete the following steps:

1. On the ODBC Data Source dialog box, select the **System DSN...** button (or tab). The System Data Sources dialog box will display.
2. Select the **Add...** button. The Add Data Source dialog box will display.

If you are using the *Windows* version 3.0 ODBC driver, the Create New Data Source Wizard will display.

3. On the Add Data Source dialog box (or wizard), select *OpenLink for Win32*.
4. Select the **OK** button (or **Finish** button) to select the *OpenLink* generic ODBC driver.

Once you have selected the *OpenLink* ODBC driver, the *OpenLink* Setup dialog box will display. See “Configure a New ODBC Data Source” for data source setup procedures.

Add Login ID-Based Data Sources

As an option, you may administer data sources on a per-user login ID basis. This procedure is useful if you are providing access for a specific user; however, it is strongly recommended that you administer system data sources. To administer login ID-based data sources, complete the following steps:

1. On the ODBC Data Source dialog box, select the **Add...** button. The Add Data Source dialog box will display.

If you are using the version 3.0 driver, select the User DSN tab on the ODBC Data Source dialog box. The User DSN dialog box will display.

2. Select the generic *OpenLink* ODBC driver, *OpenLink for Win32*.
3. Select the **OK** button to select the *OpenLink* generic ODBC driver.

If you are using the version 3.0 driver, select the **Add...** button on the User DSN dialog box. The Create New Data Source wizard will display.

4. For the version 3.0 driver only, select the *OpenLink for Win32* driver and select the **Finish** button.

Once you have selected the *OpenLink* ODBC driver, the *OpenLink* Setup dialog box will display. See “Configure a New ODBC Data Source” for data source setup procedures.

If you are using the version 3.0 driver, select the **Configure** button on the User DSN dialog box to configure the data source. See “Configure a New ODBC Data Source” for data source setup procedures.

Remove a Data Source

To remove any data source, select the **Delete** button (or **Remove** button) on the appropriate ODBC Data Source dialog box and follow the prompts.

Configure a New ODBC Data Source

The CMS data source is now associated with the *OpenLink for Win32* driver. Specific server and database access must now be configured through the generic *OpenLink* Setup dialog box.

OpenLink Setup

OpenLink ODBC Version 1.15
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Datasource

Name

Comment

Database

Path

Options

User ID

Provider

Type

Protocol

Hostname

Others

Read-only connection

No login dialog box

Row buffer size

OK Cancel Help

Configure a New ODBC Data Source Procedure

To configure your ODBC driver software to access CMS data, complete the following steps:

1. In the **Datasource: Name** field, enter a descriptive name for your data source. In a multi-site call center situation, you can use this field to differentiate between call center locations.
2. In the **Datasource: Comment** field, you may optionally enter "Call Management System" (or other information related to the CMS data source).
3. In the **Provider: Type** field, enter **Informix 5** or select **Informix 5** from the pull-down list.

➤ NOTE:

If you are running the ODBC server components on the *Ultra Enterprise 3000*, enter **Informix 7** or select **Informix 7** from the pull-down list.

4. In the **Provider: Protocol** field, enter **TCP/IP**, or select **TCP/IP** from the pull-down list.
5. In the **Provider: Hostname** field, enter the name of your database host machine (CMS server).
6. In the **Database: Path** field, enter **/cms/db/inf/cms**.
7. Leave the **Database: Options** field blank.

8. in the **Database: User ID** field, you may optionally enter a valid CMS user login ID. Entering a CMS user login ID will display a default user name for each login to the data source.
9. *Do not* select the **Read-only connection** check box in the **Others** section. This allows complete ODBC access to customer-defined database tables (**c_*** tables).
10. *Do not* select the **No login dialog box** check box in the **Others** section. A login dialog box will display each time you connect to the *CentreVu* CMS database.

 **NOTE:**

You may select this check box to prevent a login dialog box from displaying with each database access; however, this is recommended only if the software through which you are accessing the database, such as *Crystal Reports*, is password-enabled.

11. In the **Others: Row Buffer Size** field, enter a row buffer size of **60**.
12. Select the **OK** button, or select the **Cancel** button to cancel the configuration.

At this point, the ODBC driver software is installed on your computer. For further configuration options, you may continue with “Administer ODBC Options” in this section.

Once the driver is configured, the *OpenLink* ODBC driver will be accessible to ODBC-enabled applications on your computer. Any queries that you send to the CMS database from client *Windows* applications, such as *Microsoft Access*, will use the ODBC feature to access data and copy it to your applications.

 **NOTE:**

You will need to format the data within your application. The data returned from your SQL queries will be formatted in the manner described in Chapter 3 “Database Tables” in this document.

OpenLink Setup Input Fields

Table 2-2 describes the input fields on the *OpenLink* Setup dialog box.

Table 2-2: *OpenLink* Setup Input Fields

Field	Description
Datasource	
Name	A representative name for the server/database you will be connecting to, such as CMS.
Comment	A description of the data source you will be connecting to, such as CMS.
Provider	
Type	The database type or user-defined logical representation of the underlying DBMS you will be establishing an ODBC session with. The <i>OpenLink</i> ODBC driver allows the creation of custom providers, which enables you to mask the identity of the underlying database to which connections are made. This provides ODBC-based client/server infrastructure management flexibility.
Protocol	The network protocol you will be using to access database data items; the default is TCP/IP.
Hostname	The network alias (or IP address) of the machine on your network hosting the database(s) to which you want to make ODBC connections.
Database	
Path	The field used to map the ODBC data source names to specific database names for a provider type. For example, the CMS <i>Informix</i> database has a path field value of /cms/db/inf/cms , identifying the CMS database to be associated with an ODBC data source name.
Options	An optional entry field used for database connections after the database environment has been initialized. These settings generally take the form of operating environment variables which cannot be entered in this field. An entry is not required or recommended in this field.

Table 2-2: *OpenLink* Setup Input Fields (Contd)

Field	Description
User ID	An optional entry field that contains a valid CMS user login ID for the database being represented by the provider type.
Others	
Read-only connection	A check box that allows you to choose if you do or do not want to enforce read-only database sessions for ODBC-compliant applications. This box should not be checked if you are accessing customer data, and should be checked if you are not accessing customer data.
No login dialog box	A check box that allows you to choose if you do or do not want to disable the pop-up login dialog box during ODBC session establishment with a selected ODBC data source.
Row buffer size	A variable-entry field that determines at ODBC run time the size of the <i>OpenLink</i> network array fetch buffer (the number of records transported from an <i>OpenLink</i> database agent to and ODBC-compliant application environment during a single network hop). This setting will affect the performance of the <i>OpenLink</i> driver. 60 is the recommended setting for the CMS database.

Administer ODBC Options

You may specify how the ODBC driver will trace ODBC function calls. Activating tracing generates a file containing the actual ODBC function calls. To set these ODBC options, complete the following steps.

1. On the ODBC Data Source dialog box, select the **Options...** button. The ODBC Options dialog box will display.

If you are using the version 3.0 ODBC driver, select the Tracing tab. The Tracing dialog box will display.

2. To trace ODBC calls or observe ODBC activity, select the **Trace ODBC Calls** check box (or the **When to Trace: One time only** check box).

 **CAUTION:**

If you select the **Trace ODBC Calls** check box, you must also select the **Stop Tracing Calls Automatically** check box to avoid compromising the client system performance.

3. To stop tracing ODBC function calls automatically, select the **Stop Tracing Automatically** check box. This will terminate the ODBC tracing upon completion of the ODBC session.

 **NOTE:**

To start tracing ODBC function calls again, you must manually reselect the **Trace ODBC Calls** check box (or the **When to Trace: One time only** check box) and restart your application.

4. To select or change the file to which the *OpenLink* Request Broker writes tracing information, select the **Select File...** button (or **Browse...** button). The default trace file is `\\SQL.LOG`. The Select ODBC Trace File dialog box will display.
5. Select the file to which you want the *OpenLink* Request Broker to write tracing information.
6. Select the **Open** button.
7. You will automatically return to the ODBC Options dialog box. The file you have chosen will display in the **Trace File:** field (or **Logfile Path** field).
8. To view the ODBC trace file, open the `SQL.LOG` file (or the file that you have designated as the trace file).

View Installed ODBC Drivers

To view a list of installed ODBC drivers, complete the following steps. This is useful for verifying if the ODBC driver has been properly installed.

1. On the ODBC Data Source dialog box, select the **Drivers...** button (or tab). The Drivers dialog box will display.

 **NOTE:**

Use the Drivers dialog box to verify installation of the *OpenLink for Win 32* driver. If the *OpenLink for Win32* driver does not display on the Drivers dialog box, return to “Desktop Computer Client Installation” in this chapter and reinstall the drivers.

2. To view detailed information about an installed driver, select the driver from the list and select the **About** button (or tab). The About dialog box will display.
3. When you have finished viewing information about the driver, select the **OK** button to exit the About dialog box.
4. Select the **Close** button (or **OK** button) to exit the Drivers dialog box. The ODBC Data Source dialog box will display again.

 **NOTE:**

If you are using the *Microsoft* version 3.0 ODBC driver (dialog box with tabs), the ODBC Driver Administration utility will close when you exit directly from any dialog box. You will need to reopen the ODBC Data Source dialog box using the procedure in “ODBC Driver Administration Utility” in this section.

Test Desktop Computer Connectivity

Introduction

Once you have installed the *OpenLink* ODBC driver software on both the client and the server, you may open a demonstration connection to a data source on the server to show connectivity and test SQL access. To connect to an administered data source, use the following procedure.

Connect to and Access Data

To connect to a data source from the client, complete the following steps.

1. Select **OpenLink** or **Applications** on your computer.
2. Select **C++ Demo 32 bit**. The ODBC SDK C++ Demo window will display.
3. From the **Environment** menu, select **Open Connection**. The SQL Data Sources dialog box will display.

 **NOTE:**

Depending on the ODBC driver version you are using, the Select Data Source dialog box may display and you will be prompted to select a file or machine data source. Select the Machine Data Source tab and select the CMS data source.

4. Select the data source that you want to use from the list or enter it in the **Select Data Source** field. The *OpenLink* ODBC login dialog box will display. This dialog box will only display if you did not check the **No Login Dialog Box** check box on the Setup dialog box.

 **NOTE:**

You should have already configured the CMS data source. If you do not see a data source on the SQL Data Sources dialog box, see “Desktop Computer Client Configuration” in this chapter.

5. Enter your CMS server user name and password (CMS server login).
6. Select **OK**. You will return to the ODBC SDK C++ Demo screen.
7. Select **SQL** to begin writing your SQL query.
8. Select **Execute SQL**. The ODBC SDK 2.0 C++ Demo SQL dialog box will display.
9. Enter the following SQL query in the text box: **select count (*) from hsplit**. The queried data will display in the ODBC SDK C++ Demo window; however, any valid SQL query may be entered.

Result

You should see a count column on the ODBC SDK 2.0 C++ Demo window. The value in this column is the number of columns in the CMS hsplrit table. This result confirms that you have successfully accessed the database from the client. Use this test as a troubleshooting tool in the future to verify connectivity and data access from the client.

Disconnect from a Data Source

Once you have completed test querying the database, you can disconnect from the data source through the ODBC driver software. To disconnect, complete the following steps.

1. From the **Environment** menu, select **Close Connection**. The ODBC SDK 2.0 C++ Demo Close Current Connection dialog box will display.
2. Select **OK** to close the connection, or **Cancel** to remain connected to the data source.

Troubleshooting

Introduction

General troubleshooting procedures and error messages on the *OpenLink* ODBC driver are included in this section. For more detailed information, see the on-line help file that is included on the ODBC 1.0 compact disk.

Server Log File

Once the ODBC driver is installed and initiated, the server log file, *odbc.log*, records the logging levels of all ODBC activities. The default logging level is **5**. See “Server Debug, Logging, and Run Utilities” in this chapter for more information. You may review the *odbc.log* file for information about an ODBC sessions. Archives of past ODBC sessions are maintained in *odbc.log.01* and *odbc.log.02*. These logging levels are set by running the *./odbc_init -l* file located in the */cms/dc/odbc* directory. The values for the *./odbc_init -l* are **0-7**, where **0** turns CMS server logging off, and **1-7** sets the logging level, with **1** as the lowest level and **7** as the highest.

Client Trace

The *OpenLink* client component configuration utility, located in the *OpenLink* group on your Windows desktop, allows you to enable or disable ODBC trace logging. Trace logging will provide you with output on your entire ODBC session, including all ODBC calls made by the ODBC-compliant application you are using. See “Administer ODBC Options” in this chapter for complete information on this utility. This file will also include native database error messages that might not have been replaced by the ODBC-compliant application you were using.

OpenLink Error Messages

The error messages that you may receive from the *OpenLink* ODBC driver are detailed in the following list. These error messages are displayed on the client and in the server log file.

Invalid Username/Password	This error message is displayed when the operating system-level username and password verification is in use (by setting the <i>OpenLink</i> Session Rules Book <i>OPSYSLOGIN</i> section key value to Y), and when you enter an invalid operating system-level username and password combination when connecting to your <i>OpenLink</i> ODBC Data Source, even though the username and password combination entered is valid at the database level.
Unable to Locate Requested Service	This error message is displayed as a result of the <i>OpenLink</i> Session Rules Book being incorrectly configured. It typically takes the form of an invalid reference to the <i>OpenLink</i> database agent executable program responsible for providing database access. This error will not occur with the default <i>cmsrqb_init</i> settings.
Unable to Load <i>OpenLink</i> Request Agent	This error message indicates a client machine problem at the network transport level, indicating the need to verify that your client machine's network software is correctly configured.
RPC Unable to Send	This indicates a corruption of the communications channel being used by the <i>OpenLink</i> Request Agent. This error typically occurs when the server Request Broker has been shut down. Verify the status of the Request Broker, then try to re-initiate the ODBC session.
RPC Timed Out	This error message is displayed when timeout settings in either the client side or server side Session Rules Books have been exceeded. This message typically occurs when communication cannot be established from client to server or server to client. Verify that the <i>oplrqb</i> is running on the server side by entering ps -ef grep oplrqb . You should see an <i>oplrqb</i> process running.

RPC Unable to Receive	This message indicates that the server Request Broker is no longer communicating with the client. This error typically occurs when the server Request Broker has been shut down or reinitiated during a session. Verify that the Request Broker is active on the server.
RPC Host Unknown	This message results from a network failure or invalid host entry in the Data Source Setup dialog box. Check the Hostname field entry in that window; if you suspect a network problem, verify this and correct it if necessary; or retry your ODBC session.
Unknown Database Agent Requested	This problem results when the client administration associated with the ODBC session does not resolve to the <i>oplrqb</i> rules in <i>cmsrqb_init</i> . To resolve this error, the Data Source Setup dialog box Type field should be set to <i>Informix 5</i> (<i>Informix 7</i> for the <i>Ultra Enterprise 3000</i> server). Retry your ODBC session.
Unable to Start the Requested Database Agent	The <i>oplrqb</i> was able to resolve to a database agent, but was unable to execute the program. To resolve this, the Type field on the Data Source Setup dialog box should be set to <i>Informix 5</i> (<i>Informix 7</i> if you are using the <i>Ultra Enterprise 3000</i> server). Alternately, the <i>generic_inf5</i> (or <i>generic_inf7</i> for the <i>Ultra Enterprise 3000</i> server) should be set to <i>inf5_sv</i> (or <i>inf7_sv</i>). Finally, the <i>inf5_sv</i> (<i>inf7_sv</i>) should exist in <i>/usr/openlink/bin/</i> as executable.
Database Errors	Database errors are displayed after failed database accesses. To resolve this, correct the database query and resubmit it.

Chapter 3

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Database Tables

This chapter defines the historical database items and tables populated by *CentreVu* CMS that can be accessed through ODBC.

The chapter is organized as follows:

- How Database Items are Presented
- Database Table Names
- Split/Skill Database Items
- Agent Database Items
- Trunk Group Database Items
- Trunk Database Items
- Vector Database Items
- VDN Database Items
- Call Work Codes Database Items
- Agent Login/Logout Database Items
- Agent Trace Database Items
- Current Day Configuration Forecast Database Items
- Current Day Forecast Report Database Items
- Call Record Database Items
- Data Collection Period Database Items
- Archiver Execution Status Database Items
- Customer Log Database Items
- Agent Group Database Items
- Synonyms Database Items
- Exceptions Historical Database Items

How Database Items are Presented

Database Item Tables

The database items are presented in a table format, according to Automatic Call Distribution (ACD) entity (split/skill, agent, vector, vector directory number (VDN), trunk, trunk group, exception, synonym, call work code, and forecast).

Sample Database Item Table

Table 3-1 is an example of how the table information is presented:

Table 3-1: Sample Database Item Table

Database Item	Description	Data Type	Column Type	Length
DATABASE ITEM	The definition of the database item is given here. Any additional information, such as other database items that are included in the sum of the database item, or the specific ECS release that to which the database item applies, is also listed.	C or A	integer, smallint, date, smallfloat, or char(n)	length in bytes

Many database items appear in more than one database table. When an item is in more than one table, the definition is probably not the same from table to table. Database items that are used in the description of another database item are in boldface type. Where applicable, Enterprise Communications Server (ECS) information has been included in the database item descriptions.

⇒ NOTE:

If you are using a G2.2 ECS without the Call Center Features (CCF = N), you should refer to information for the G2.1 ECS for functionality.

Index Database Items

The index database items in each table are marked. Indexes add structure to table rows so that *CentreVu* CMS can retrieve data faster. The row search criteria you define for custom reports should be based on indexes whenever possible. For historical custom reports, always include a “where” clause based on the **ROW_DATE** database item.

Data Types

Each database item contains one of the following types of data:

C = Cumulative data: accumulates throughout the collection interval.

A = Administrative data: administered on the ECS or on *CentreVu* CMS. For example, the database item INTRVL in the split/skill table contains the number of minutes in the intrahour interval (15, 30, 60) assigned for the specified ACD on *CentreVu* CMS.

The letter C or A appears in the Data Type column for each database item.

Cumulative and **Administrative** data items apply to historical and real-time database items.

Call-Based Data

In addition to the types of data described above, items in the *CentreVu* CMS database can be either call-based or interval-based. Most *CentreVu* CMS database items are call-based. **Call-based** data are committed to the database after a call completes. Therefore, if a call starts and ends in different collection intervals, all of the data are recorded in the interval in which the call and any After Call Work (ACW) are completed.

Interval-Based Data

Interval-based data represents the amount of time during a collection interval that is used for a particular activity. Interval-based items are updated throughout the collection interval and timing is restarted at the end of the interval. Most interval-based items start with **I_** or **TI_**. The database items **ALLINUSETIME** (trunk-group tables) and **MBUSYTIME** (trunk and trunk-group tables) are also interval-based. Each database item has a defined column type.

Column Types

The database column type indicates the format of the information within that database item. The column type definition includes either the length in bits of the database item or the *Informix* data type. The column types are included in the database item tables, along with the length or *Informix* data type. Column type and length information is included for the user's reference. Because data gathered through ODBC can be used in a variety of applications, it is helpful to know what type of data you are accessing and how long it is in bytes. Any difference or exception in the column type or length between tables in a table group; such as, between

the hsplit and msplit tables in the split/skill table group, are indicated in the **Column Type** and **Length** columns.

Informix Column Types

Table 3-2 defines the data column types in the open database.

Table 3-2: Informix Column Types

Column Type	Definition
char(<i>n</i>)	An ASCII string of <i>n</i> characters, 1 byte per character.
date	<i>Informix</i> date type, 4 bytes long. The <i>Informix</i> date format is yyyy-mm-dd. For example, May 19, 1997 would display as 1997-05-19.
integer	4 byte integer
smallint	2 byte integer
smallfloat	<i>Informix</i> floating point numerical type, 4 bytes long. The <i>Informix</i> smallfloat format is a decimal type used for percentages, and includes a comma and a plus/minus sign.

ECS Cross-Reference Tables

CentreVu CMS database items apply to specific ECS releases. Following each database item table is an ECS cross-reference table. The ECS cross-reference tables list each database item by ECS release.

Sample ECS Cross-Reference Table

Table 3-3 is an example of how the table information is presented:

⇒ NOTE:

If you are using the G2.2 ECS without the Call Center Features (CCF = N), you should refer to the G2.1 column for functionality

Table 3-3: Sample ECS Cross-Reference Table

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
DATABASE ITEM	X	X	X	X	X	X
	ECS releases that this database item applies to are marked with X's.					

Database Logic Structure

CMS historical tables store information in one record per row format. This formatting affects the way data can be accessed through ODBC. For example, in the agent tables, a record will be created for each split/skill that an agent is logged into. If an agent is logged into four splits/skills, there will be four records for that agent. Similarly, if an agent starts the day with four splits/skills, and is added to a fifth split/skill before the end of the day, the agent's fifth record will be generated only from the point at which the additional split/skill was added. The other four records will reflect the total logon time. When accessing data in the historical tables, you may need to sum the information to retrieve complete data.

Agent Tables

If an agent logged off and logged on more than once in a specified interval, another complete set of records will be created for that agent for each logon in the agent tables. If an agent logs into four split/skills, logs out, and then logs back on during a set interval, there will be two sets of four records for that agent, one set per logon.

VDN Tables

The VDN tables store one record per vector on which a VDN terminates. Therefore, if the terminating vector for a specific VDN changes in a set interval, there will be two records for that VDN—one per terminating vector. This logic also applies to the Vector, Trunk, Trunk Group, and Split/Skill tables. If information is required from these tables, a sum structured query language (SQL) query may be necessary to access complete data for each VDN, vector, trunk, and so on.

Circular Structure

The exceptions, call record, and agent trace tables are circular files. These tables will continuously populate until the table capacity plus ten percent has been reached; at which point, the oldest ten percent of the records will be deleted. For example, if an agent trace table has a capacity of 100 rows, and the total rows populated equals 110, the oldest

ten rows will automatically be deleted. Therefore, the data in that table will change continuously as the table is updated.

Terminology

For definitions of terms used in database item descriptions, see Appendix A, "Database Items and Calculations," the Glossary in the *CentreVu™ Call Management System R3V5 Real-Time and Historical Reports* (Lucent Technologies 585-215-821) document, and the Glossary in this document.

CMS Feature Interactions

- **Dictionary Names:** Clients can access CMS Dictionary names. The client must map the synonym to the report.
- **Permissions:** Applications which access *Informix* externally, such as database access scripts, may not work if the table permission script tries to access a table to which permission is denied.
- **Field Display:** The time and date data you receive from the database may not be formatted. Generally, times may be shown in seconds or in military format. You will need to review data for formatting when you import it into your software application. The data returned from your SQL queries will be formatted in the manner described in your database interface specifications. See your software's documentation for further information on formatting data.

Database Table Names

To select data for external use, you must use the names listed in Table 3-4 in your queries. Table 3-4 contains all the tables that are ODBC-accessible in *CentreVu* CMS V5, a brief description of the data in each, and the table's permission level. If a table is not listed here, it is not accessible through ODBC, but will still be accessible by **root**. All tables included in this chapter have read-only external user access. The database items are described later in this chapter.

Table 3-4: Historical Table Names

Name	Data Stored
hsplit	Split/Skill data for each intrahour interval.
dsplit	Split/Skill data summarized by day.
wsplit	Split/Skill data summarized by week.
msplit	Split/Skill data summarized by month.
hagent	Agent data for each intrahour interval.
dagent	Agent data summarized by day.
wagent	Agent data summarized by week.
magent	Agent data summarized by month.
htkgrp	Trunk group data for each intrahour interval.
dtkgrp	Trunk group data summarized by day.
wtkgrp	Trunk group data summarized by week.
mtkgrp	Trunk group data summarized by month.
htrunk	Trunk data for intrahour interval.
dtrunk	Trunk data summarized by day.
wtrunk	Trunk data summarized by week.
mtrunk	Trunk data summarized by month.
hvector	Vector data for each intrahour interval.
dvector	Vector data summarized by day.
wvector	Vector data summarized by week.
mvector	Vector data summarized by month.
hvdn	VDN data for each intrahour interval.

Table 3-4: Historical Table Names (Contd)

Name	Data Stored
dvdn	VDN data summarized by day.
wvdn	VDN data summarized by week.
mvdn	VDN data summarized by month.
hcwc	Call work code data for each intrahour interval.
dcwc	Call work code data summarized by day.
wcwc	Call work code data summarized by week.
mcwc	Call work code data summarized by month.
call_rec	Call record data.
d_secs	The number of seconds in the daily data collection period.
m_secs	The number of seconds in the monthly data collection period.
w_secs	The number of seconds in the weekly data collection period.
arch_stat	The status of archiver executions.
customer_log	The customer error log data.
agroups	Agent group definitions.
synonyms	Dictionary synonyms.
f_cday	Forecast current day configuration data by split/skill.
f_cdayrep	Current day forecast data by split/skill.
haglog	Agent login and logout information.
ag_actv	Agent activity trace data.
agex	Agent exceptions.
fullex	Disk full exceptions.
spex	Split/skill exceptions.
tgex	Trunk group exceptions.
vecex	Vector exceptions.
vdnex	VDN exceptions.
linkex	Link down exceptions.
mctex	Malicious call trace exceptions.

Interactions with ECS Features and Tracking of ECS Capabilities

Some of the ECS features and capabilities have an impact on *CentreVu* CMS open database items. For more information on these features and capabilities and their relationship with the *CentreVu* CMS open database, see Appendix A, "Database Items and Calculations" in the *CentreVu™ Call Management System R3V5 Real-Time and Historical Reports* (Lucent Technologies 585-215-821) document.

Split/Skill Database Items

Overview

The Split/Skill database item descriptions (Table 3-5) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** and **Administrative (A)** data.

Historical split/skill database items apply to the Intrahour Split/Skill (`hsplit`), Daily Split/Skill (`dsplit`), Weekly Split/Skill (`wsplit`), and Monthly Split/Skill (`msplit`) tables. All items listed in Table 3-5 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four split/skill tables are also noted in the Column Type column. The historical indexes are **SPLIT** and **ROW_DATE**.

Split/Skill Database Items

Table 3-5 describes the data items in the Split/Skill CMS database tables.

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS	The number of CALLSOFFERED that were abandoned while in queue or ringing for this split/skill. This also includes calls with talk times less than the phantom-abandoned call timer value, if it is set. For Generic 2.1 and Generic 3 Version 1 ECS with the Vectoring feature, this also includes calls that were queued to the split/skill and abandoned while listening to a forced disconnect announcement.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS (contd)	<p>NOTE: When a call abandons while queued to multiple splits/skills and abandons from queue, only the primary split/skill increments ABNCALLS (calls that are ringing an agent and then abandon) count as abandons for the split/skill in which they were ringing.</p> <p>ABNCALLS = ABNCALLS1 + ABNCALLS2 + ABNCALLS3 + ABNCALLS4 + ABNCALLS5 + ABNCALLS6 + ABNCALLS7 + ABNCALLS8 + ABNCALLS9 + ABNCALLS10</p> <p>ABNCALLS includes ABNCALLS1-10, ABNRINGCALLS, O_ABNCALLS, PHANTOMABNS, SLVLABNS.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ABNCALLS1-10	<p>The number of ABNCALLS that were abandoned during the collection interval in each of the service level increments PERIOD1 through PERIOD9 (as defined on the ACD Administration: Call Profile window). ABNCALLS10 counts calls that abandoned after PERIOD9.</p> <p>NOTE: If call profiles are not set, then all abandons are stored in the first interval (ABNCALLS1).</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ABNRINGCALLS	<p>The number of ABNCALLS that abandoned while ringing at an agent position. Available for ring tracking with Generic 2 and Generic 3 ECS.</p>	C	integer	4 bytes
ABNTIME	<p>The time callers spent waiting in queue and ringing at the agent's voice terminal before abandoning the call. For phantom-abandon calls, this includes the time from when the call queues until the agent releases the call (since the actual abandon time is not known). The format is the number of seconds that have accumulated.</p>	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACCEPTABLE	The number of ACDCALLS answered by an agent within the predefined acceptable service level (SERVICELEVEL), as defined on the ACD Administration: Call Profile window.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes
ACDAUXOUT- CALLS	The number of AUXOUTCALLS agents in the split/skill made with at least one split/skill ACD call for this split/skill on hold. For agents in multiple skills with multiple call handling (Generic 3 Version 3 ECS and later), the call is recorded for the skill of the last ACD call the agent put on hold. ACDAUXOUTCALLS includes calls made to transfer or conference the ACD call. Available with Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ACDCALLS	The number of CALLSOFFERED calls that were answered by an agent in the split/skill. ACDCALLS = ACDCALLS1 + ACDCALLS2 + ACDCALLS3 + ACDCALLS4 + ACDCALLS5 + ACDCALLS6 + ACDCALLS7 + ACDCALLS8 + ACDCALLS9 + ACDCALLS10 ACDCALLS includes ACCEPTABLE, ACDCALLS1-10, BACKUPCALLS, CONFERENCE, HIGHCALLS, HOLDCALLS, LOWCALLS, MEDCALLS, O_ACDCALLS, TOPCALLS, and TRANSFERRED.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACDCALLS1-10	The number of ACDCALLS during the collection interval that were answered in each of the service level increments PERIOD1 through PERIOD9 (as defined on the ACD Administration: Call Profile window). ACDCALLS10 is the number of calls answered after the last increment PERIOD9 . NOTE: If call profiles are not set, then all ACDCALLS are recorded in the first interval (ACDCALLS1).	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ACDTIME	The talk time of all ACDCALLS (does not include HOLDTIME , but does include O_ACDTIME). The format is the number of seconds that have accumulated.	C	integer	4 bytes
ACWINCALLS	The number of inbound extension calls received by agents while in ACW for ACD calls to this split/skill or in ACW not associated with a call, if this split/skill is the oldest logon split/skill for the agent.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ACWINTIME	The talk time of all ACWINCALLS . ACWINTIME does not include hold time on Generic 2.2 and Generic 3 ECS. It does include time spent on calls received while in ACW not associated with an ACD call, if the split/skill is the oldest logon for the agent. The format is the number of seconds that have accumulated.	C	integer	4 bytes
ACWOUTADJCALLS	The number of ACWOUTCALLS that were placed by an adjunct on behalf of an agent (keyboard-dialed). If such calls are placed to off-ECS destinations, then they are also counted as ACWOUTOFFCALLS . Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the Adjunct/Switch Applications Interface (ASAI) feature.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACWOUTCALLS	The number of outbound extension calls made by agents while in ACW for ACD calls for this split/skill, or in ACW not associated with a call, if the split/skill is the agent's oldest logon split/skill. ACWOUTCALLS includes ACWOUTADJCALLS and ACWOUTOFFCALLS . DCS calls are included here.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ACWOUTOFF- CALLS	The number of ACWOUTCALLS that were made to a destination outside the ECS. If such calls are placed by an adjunct on behalf of an agent, they are also counted as ACWOUTADJCALLS . Available for external calls with Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
ACWOUTOFFTIME	The talk time of all ACWOUTOFFCALLS (does not include time on hold). The format is the number of seconds that have accumulated. Available for external calls with Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes
ACWOUTTIME	The talk time of all ACWOUTCALLS . ACWOUTTIME does not include hold time on Generic 2.2 and Generic 3 ECS. It does include time spent on calls made while in ACW not associated with an ACD call, if the split/skill is the oldest logon split/skill. The format is the number of seconds that have accumulated. ACWOUTTIME includes ACWOUTOFFTIME .	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACWTIME	The duration of all ACW associated with ACDCALLS . The format is the number of seconds that have accumulated. ACWTIME does not include time spent in ACW not associated with an ACD call (that is, the agent pressed the ACW button while not on an ACD call). However, both ACWINTIME and ACWOUTTIME do include time spent on calls made or received while in ACW not associated with an ACD call. Therefore, the sum of ACWINTIME and ACWOUTTIME may be greater than ACWTIME . ACWTIME includes ACWINTIME , ACWOUTTIME , and O_ACWTIME .	C	integer	4 bytes
ANSTIME	The time spent by callers in the split/skill's queue or ringing before being answered by an agent. The format is the number of seconds that have accumulated.	C	integer	4 bytes
ASSISTS	The number of times the supervisor was called (supervisor assists) by agents on split/skill ACD direct agent ACD calls, or in call-related ACW for this split/skill.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
AUXINCALLS	The number of inbound extension calls received by agents while in auxiliary work (AUX), AVAILABLE , or, for Generic 2.2 and Generic 3 ECS, with an ACD or AUXIN/AUXOUT call on hold. AUXINCALLS are recorded in the SPLIT that is the oldest logon for agents in multiple splits/skills.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
AUXINTIME	The talk time of all AUXINCALLS (does not include hold time on Generic 2.2 and Generic 3 ECS). The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
AUXOUTADJCALLS	The number of AUXOUTCALLS that were placed by an adjunct on behalf of an agent (keyboard-dialed). If such calls are placed to off-ECS destinations, then they are also counted as AUXOUTOFFCALLS . Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
AUXOUTCALLS	The number of outbound extension calls made by agents while in AUX, AVAILABLE , or for Generic 2.2 and Generic 3 ECS with an ACD or AUXIN/AUXOUT call on hold. AUXOUTCALLS are recorded for the SPLIT which is the oldest logon for the agent, unless the agent made the call with an ACD call on hold. In this case, they are recorded for the split/skill of the ACD call. AUXOUTCALLS includes ACDAUXOUTCALLS , AUXOUTADJCALLS , and AUXOUTOFFCALLS .	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
AUXOUTOFFCALLS	The number of AUXOUTCALLS that were made to a destination outside the ECS. If such calls are placed by an adjunct on behalf of an agent, they are also counted as AUXOUTADJCALLS . Available for external calls with Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
AUXOUTOFFTIME	The talk time of all AUXOUTOFFCALLS (does not include hold time). AUXOUTOFFTIME is included in AUXOUTTIME . The format is the number of seconds that have accumulated. Available for external calls on Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
AUXOUTTIME	The talk time of all AUXOUTCALLS . AUXOUTTIME does not include hold time on Generic 2.2 and Generic 3 ECS. The format is the number of seconds that have accumulated. AUXOUTTIME includes AUXOUTOFFTIME .	C	integer	4 bytes
BACKUPCALLS	The number of ACDCALLS that were delivered to this split/skill by a vector command other than “queue to main.” This includes calls delivered by “messaging split/skill,” “check backup,” “route to” split/skill, and “redirect on no answer” vector commands. Calls that are redirected back to the split/skill from ringing by the “redirect on no answer” feature that are subsequently answered by an agent in the split/skill are also counted as backup calls. Available on Generic 2 and Generic 3 ECS with the Vectoring feature.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
BUSYCALLS	The number of CALLSOFFERED calls that were given a busy signal by the ECS. This happens when a “busy” vector command is executed while the call is queued to this split/skill (and this is the primary split/skill the call is queued to) or if a call queued to this split/skill forwards to another split/skill whose queue is full. On Generic 3 and later ECS, a busy can be given because a non-vector controlled split has a full queue, no queue and no available agents, or no agents that are staffed.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
BUSYTIME	The time callers waited in queue until hearing a busy tone for all BUSYCALLS . The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
CALLSOFFERED	The number of calls that queued to the split/skill and that completed during the interval. This does NOT include calls on the Generic 3 ECS that could not queue to the split/skill because the queue was full or there was no queue. CALLSOFFERED = ACDCALLS + ABNCALLS + BUSYCALLS + DISCCALLS + OUTFLOWCALLS + DEQUECALLS CALLSOFFERED includes RINGCALLS , OTHERCALLS , and INFLOWCALLS .	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
CONFERENCE	The number of ACDCALLS that were conferenced at least once. Available on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
DA_ACWINCALLS	The number of inbound extension calls agents answered while in ACW mode for direct agent ACD calls that were queued through this split/skill. Requires a Generic 3 ECS with the ASAI or Expert Agent Selection (EAS) feature for direct agent calling.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
DA_ACWINTIME	The talk time of inbound extension calls agents answered while in the ACW mode for direct agent ACD calls queued through this split/skill. The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer	4 bytes
DA_ACWOCALLS	The number of outbound extension calls agents made while in the ACW mode for direct agent ACD calls queued through this split/skill. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DA_ACWOTIME	The talk time of outbound extension calls the agent made while in the ACW mode for a direct agent ACD call queued through this split/skill. The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer	4 bytes
DEQUECALLS	The number of calls that queued to this split/skill as a nonprimary split/skill, but whose disposition was recorded in another split/skill (as answered, abandoned, outflowed, busy, or forced disconnect). Requires Vectoring for multiple split/skill queueing on a Generic 2.2 ECS with EAS or a Generic 3 ECS.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
DEQUETIME	The amount of time DEQUECALLS waited in this split/skill queue before dequeuing. The format is the number of seconds that have accumulated. Requires Vectoring for multiple split/skill queueing on a Generic 2.2 ECS with EAS or a Generic 3 ECS.	C	integer	4 bytes
DISCCALLS	For Generic 2.2, Generic 3 Version 2, and later Generic 3 ECS, this is the number of CALLSOFFERED that were disconnected by the ECS via the “disconnect” vector command. For the Generic 3 Version 2 and later ECS releases, this also includes the number of CALLSOFFERED that were disconnected by the ECS when the vector disconnect timer expired.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DISCCALLS (contd)	For the Vectoring feature on Generic 2.1 and Generic 3 Version 1 ECS, this is the number of CALLSOFFERED that were given a forced disconnect announcement, where the caller had to listen to an active disconnect announcement, and then were disconnected by the ECS. If the caller hung up during the announcement, the call counts as an abandoned call.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
DISCTIME	The time all DISCCALLS spent in this split's/skill's queue. The format is the number of seconds that have accumulated. For Generic 2.2 and Generic 3 Version 2 ECS, this is the time until the trunk drops, in the case where the caller hangs up without listening to the entire announcement. For the Generic 3 Version 2 and later ECS, if the call is disconnected due to the expiration of the vector disconnect timer, this is the time until the caller is disconnected by the ECS. For the Vectoring feature on Generic 2.1 or Generic 3 Version 1 ECS, this is the time until the announcement ends and the caller is disconnected by the ECS.	C	integer	4 bytes
EVENT1-9	The number of times each event (stroke count) feature button (feature button 1 to 9) was pressed by agents on split/skill or direct agent ACD calls or in after call work associated with an ACD call for this split/skill. Available with Generic 2 and Generic 3 ECS.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
HIGHCALLS	<p>The number of ACDCALLS queued at high priority that were answered by agents in this split/skill (that is, answered calls that were queued to the split/skill with high priority by a “queue to main” or “check backup” vector command).</p> <p>For Generic 3 ECS with the Vectoring feature, this includes calls that were queued to a split/skill with priority using the “route to” or “messaging split/skill” vector commands, and calls that queued directly to a split/skill with priority. (Priority in these cases is determined by the class of restriction of the originator, which is an agent, an extension, a trunk group or a VDN.)</p> <p>Available on Generic 2 and Generic 3 ECS with the Vectoring feature.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
HOLDABNCALLS	<p>The number of times split/skill ACD callers abandoned the call while on hold.</p> <p>Available on Generic 2 and Generic 3 ECS.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
HOLDCALLS	<p>The number of split/skill ACD calls that were placed on hold at least once.</p> <p>Available on Generic 2 and Generic 3 ECS. HOLDCALLS includes HOLDABNCALLS.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
HOLDTIME	<p>The time spent by split/skill ACD callers on hold.</p> <p>Available on Generic 2 and Generic 3 ECS. The format is the number of seconds that have accumulated.</p>	C	integer	4 bytes
I_ACD AUXINTIME	<p>The time during the collection interval that POSITIONS (from the real-time table) were talking on AUXIN calls with a split/skill ACD call on hold where SPLIT is the oldest logon for the agent. The format is the number of seconds that have accumulated.</p> <p>Available on Generic 2.2 and Generic 3 ECS.</p>	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_ACD_AUX_OUTTIME	The time during the collection interval that POSITIONS (from the real-time table) spent dialing (Generic 2.2 ECS) and talking on AUXOUT calls with a split/skill ACD call for this split/skill on hold. NOTE: In a multiple call-handling environment with agents in multiple skills, the ACD call for this skill must have been the last ACD call to have been put on hold before the agent made the AUXOUT call. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes
I_ACD_OTHERTIME	The time during the collection interval that POSITIONS (from the real-time table) spent in the OTHER state (dialing an outgoing call with a Generic 3 ECS, with a ringing extension call with Generic 3 ECS, or with calls on hold and with no other state selected) with a split/skill ACD call on hold. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes
I_ACDTIME	Time during the collection interval that POSITIONS (from the real-time table) were on split/skill ACD calls for this split/skill. This includes time on O_ACD_CALLS as well as on ACDCALLS . The format is the number of seconds that have accumulated.	C	integer	4 bytes
I_ACD_WINTIME	The time during the collection interval that POSITIONS (from the real-time table) were in ACW for this split/skill, either associated with a split/skill ACD call or not associated with a call, if this split/skill is the oldest logon, and on inbound extension calls. This does not include time inbound extension calls spent on hold. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_ACWOUTTIME	The time during the collection interval that POSITIONS (from the real-time table) were in ACW for this split/skill, either associated with this split/skill ACD call or not associated with a call, if this split/skill is the oldest logon, and on outbound extension calls. This does not include time outbound extension calls spent on hold. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes
I_ACWTIME	The time during the collection interval that POSITIONS (from the real-time table) were in ACW for this split/skill, either associated with a split/skill ACD call or not associated with a call, if this split/skill is the oldest logon. This I_ACWTIME includes I_ACWINTIME and I_ACWOUTTIME . The format is the number of seconds that have accumulated.	C	integer	4 bytes
I_ARRIVED	The number of calls that queued to this split/skill during this interval.	C	integer	4 bytes
I_AUXINTIME	The time during the collection interval that POSITIONS (from the real-time table) were in AUX work, AVAILABLE or, for Generic 2.2 and Generic 3 ECS, had an ACD or AUXIN/AUXOUT call on hold and were on inbound extension calls. The format is the number of seconds that have accumulated. I_AUXINTIME includes I_ACDAUXINTIME .	C	integer	4 bytes
I_AUXOUTTIME	The time during the collection interval that POSITIONS (from the real-time table) were in AUX work, AVAILABLE or, for Generic 2.2 and Generic 3 ECS, had an ACD or AUXIN/AUXOUT call on hold and were on outbound extension calls. The format is the number of seconds that have accumulated. I_AUXOUTTIME includes I_ACDAUX_OUTTIME .	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_AUXTIME	The time during the collection interval that POSITIONS (from the real-time table) were in AUX in this split/skill. The format is the number of seconds that have accumulated. I_AUXTIME = I_AUXTIME0 + I_AUXTIME1 + I_AUXTIME2 + I_AUXTIME3 + I_AUXTIME4 + I_AUXTIME5 + I_AUXTIME6 + I_AUXTIME7 + I_AUXTIME8 + I_AUXTIME9 I_AUXTIME includes I_AUXTIME0 , I_AUXTIME1-9 , I_AUXINTIME , I_AUXOUTTIME , and I_TAUXTIME .	C	integer	4 bytes
I_AUXTIME0	The time during the collection interval that POSITIONS (from the real-time table) were in AUX for reason code 0 in this split/skill. This includes time on extension calls from this AUX state. For an ECS with AUX reason codes active, this represents time agents spent in “system” AUX. For ECS without AUX reason codes active, I_AUXTIME0 is the same as I_AUXTIME . The format is the number of seconds that have accumulated.	C	integer	4 bytes
I_AUXTIME1-9	Time during the collection interval that POSITIONS (from the real-time table) were in AUX for each reason code 1-9 in this skill. This includes time on extension calls from each AUX state. Available for Generic 3 ECS R5 and later Generic 3 ECS with EAS. The format is the number of seconds that have accumulated.	C	integer	4 bytes
I_AVAILTIME	The time during the collection interval that POSITIONS (from the real-time table) were available for calls from this split/skill. The format is the number of seconds that have accumulated. I_AVAILTIME includes I_TAVAILTIME .	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_DA_ACDTIME	The time that POSITIONS (from the real-time table) spent talking on direct agent ACD calls queued through this split/skill. I_DA_ACDTIME is a subset of I_OTHERTIME . The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer	4 bytes
I_DA_ACWTIME	The time that POSITIONS (from the real-time table) spent in after call work for direct agent ACD calls queued through this split/skill. I_DA_ACWTIME is a subset of I_OTHERTIME . The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer	4 bytes
I_OTHERTIME	The time during the collection interval that POSITIONS (from real-time table) were doing other work. The format is the number of seconds that have accumulated. For Generic 3 ECS, other work includes the following: while in Auto-In or Manual-In mode, an agent put any call on hold and performed no further action; the agent had a direct agent call ringing, was on a direct agent call or in ACW for a direct agent call; the agent dialed to place a call or activate a feature; or an extension-in call rang at the agent's voice terminal with no other activity. For Generic 2.2, agents were in Auto-in or Manual-in, put a call on hold using the Hold button or switchhook flash, and performed no further action. For Generic 2.2 with EAS and Generic 3 ECS, agents were logged into multiple splits/skills and were doing work for a split/skill other than this one (with an ACD call ringing, talking on an ACD call, or in ACW for a split/skill other than this one).	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_OTHERTIME (contd)	<p>For Generic 3 ECS with EAS and multiple call handling, agents are available in other, multiple call-handling skills, but not in this skill.</p> <p>For all ECS, I_OTHERTIME is collected for the time period after the link to the ECS comes up or after the agent logs in and before the <i>CentreVu</i> CMS receives notification of the agent's state from the ECS. I_OTHERTIME includes I_ACDOTHERTIME, I_DA_ACDTIME, and I_DA_ACWTIME.</p>	C	integer	4 bytes
I_RINGTIME	<p>The time during the collection interval that agents were in the ringing state for calls to this split/skill. If the agent changes work modes or answers/makes another call instead of answering the ringing call, I_RINGTIME will stop accumulating. RINGTIME is the time the caller spends ringing and is independent of agent activity. The format is the number of seconds that have accumulated.</p> <p>NOTE: With forced multiple call handling (Generic 3 Version 4 and later), if an ACD call rings at the agent's voice terminal while the agent is talking on another call, I_RINGTIME does not accumulate.</p> <p>Available on Generic 2 and Generic 3 ECS with ring tracking.</p>	C	integer	4 bytes
I_STAFFTIME	<p>The time during the collection interval that POSITIONS (from the real-time table) were staffed (logged in). The format is the number of seconds that have accumulated.</p> <p>I_STAFFTIME = I_AVAILTIME + I_ACDTIME + I_ACWTIME + I_AUXTIME + I_RINGTIME + I_OTHERTIME</p>	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_TAUXTIME	The time top agents in this split/skill were in AUX work. This includes time on AUXIN/AUXOUT calls received or made without an ACD call on hold. (Time on AUXIN/AUXOUT calls with an ACD call on hold is tracked in I_ACDAUXINTIME and I_ACDAUX_OUTTIME .) This skill is a top skill for some agents, and not for others. The format is the number of seconds that have accumulated. Available with a Generic 3 ECS with the EAS feature.		integer	4 bytes
I_TAVAILTIME	The time top agents in this split/skill were available to receive calls for any split/skill. Available with a Generic 3 ECS with the EAS feature for top skills. The format is the number of seconds that have accumulated.	C	integer	4 bytes
INCOMPLETE	Indicates whether or not data are complete for this collection interval. Data is incomplete whenever the link goes down and whenever tracking is aborted for calls, due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS), protocol failures with data collection active, or changing service level increments with data collection on. The value for interval tables indicates whether data are incomplete for the interval: 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month.	C	smallint	2 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INFLOWCALLS	<p>The number of calls that were redirected to the split/skill's queue from another queue. For Generic 3 with Vectoring and Generic 2.2 with EAS and multiple split/skill queueing, calls answered by an agent in a non-primary split/skill are counted as inflows to that split/skill. Calls that abandon from ringing at an agent's voice terminal in a non-primary split/skill are also counted as inflows to that split/skill.</p> <p>On Generic 3 Version 2 and later ECS, calls that ring at an agent's voice terminal and then are requeued to the same split/skill by the Redirection on No Answer feature and are counted as inflows to that split/skill.</p> <p>On Generic 2.2 ECS with EAS, calls that queue to the "zero" skill after having been queued to a "nonzero" skill are not counted as inflows to the "zero" skill. Similarly, calls that queue to a "nonzero" skill after having been queued to a "zero" skill are not counted as inflows to the "nonzero" skill. Calls that are queued to one skill group and are subsequently queued to another are not counted as inflows to the subsequent skill group.</p> <p>For Generic 2 with Vectoring, calls that queue to a split and then subsequently queue to a new split by a "queue to main" or "check backup" split vector command are counted as inflows to the new split.</p> <p>When a call leaves the VDN (for example, by routing to another VDN) or leaves vector processing, (for example, by routing to a split/skill) the next split/skill to which a call queues will not be credited with an inflow.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
INTERFLOWCALLS	<p>The number of OUTFLOWCALLS that were redirected to a destination outside the ECS. INTERFLOWCALLS includes ECS destinations.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INTRVL	The number of minutes in the intrahour interval (15, 30, 60). INTRVL only appears in the intrahour intervals table.	A	smallint; only in hsplit table	2 bytes
LOWCALLS	For ECS with Vectoring, this is the number of ACDCALLS with low priority that were answered by this split/skill. For ECS without Vectoring, this is the number of ACDCALLS with “no” priority that were answered by this split/skill.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
MAXINQUEUE	The maximum number of simultaneous calls in this split’s/skill’s queue during the collection interval.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
MAXOCWTIME	The maximum amount of time that a call, recorded during the collection interval, waited in queue and ringing before an agent answered in this split/skill, the caller abandoned, or the call was redirected, received a busy signal, or was disconnected. The format is the number of seconds that have accumulated.	C	integer	4 bytes
MAXSTAFFED	The maximum number of agent POSITIONS (from the real-time table) that were simultaneously staffed during the collection interval. MAXSTAFFED includes MAXTOP .	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
MAXTOP	Maximum number of top agents that were staffed during the collection interval in this split/skill.	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
MEDCALLS	<p>For ECS with Vectoring, the number of ACDCALLS with medium priority that were answered by agents in the split/skill, such as answered calls that were queued to the split/skill with medium priority by a “queue to main” or “check backup” vector command.</p> <p>For Generic 3 ECS with Vectoring, MEDCALLS includes calls that were queued to a split with “no” priority using the “route to” or “messaging split” vector commands and calls that queued directly to a non-vector-controlled split with “no” priority.</p> <p>For ECS without Vectoring, the number of ACDCALLS with “yes” priority that were answered by agents in the split/skill.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
NOANSREDIR	<p>The number of split/skill ACD calls that rang at agent positions in the split/skill and then were automatically redirected back to the split/skill queue or to a VDN by the Redirection on No Answer feature because they were not answered.</p> <p>Redirection On No Answer to a split/skill is available on <i>DEFINITY™</i> ECS or Generic 3 Version 2 or later ECS. Redirection On No Answer to a VDN is available only on <i>DEFINITY</i> ECS R5 and later.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
NOANSREDIR (Contd)	NOTE: When a call is requeued to the same split/skill using the Redirection on No Answer feature, it is counted as an outflow from the split/skill and an inflow to the same split/skill. This is NOT true for calls that are redirected to a VDN using the Redirection on No Answer feature, rather than redirecting the call back to the same split/skill. Such calls count as outflows from the original split or skill, but do not count as inflows to the next split/skill to which they are queued through the new VDN. They are also counted as NOANSREDIR calls and can be subtracted out from the split/skill outflows and inflows to calculate the number of outflows and inflows that were not due to requeuing the call to the same split. This does not apply to Redirection on No Answer calls to a VDN.			
O_ABNCALLS	The number of ABNCALLS that were placed by an adjunct; that is, the number of outbound predictive dialing calls that were abandoned by the far end. Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
O_ACDCALLS	The number of ACDCALLS that were placed by an adjunct (outbound predictive dialing). Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
O_ACDTIME	The talk time of all O_ACDCALLS (does not include HOLDTIME). The format is the number of seconds that have accumulated. Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature. ACDTIME includes O_ACDTIME .	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
O_ACWTIME	The duration of all after call work associated with O_ACDCALLS . The format is the number of seconds that have accumulated. Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature. ACWTIME includes O_ACWTIME .	C	integer	4 bytes
O_OTHERCALLS	The number of outbound calls queued to this split/skill that were not answered or abandoned as ACD split/skill calls. These include forced busy calls and calls with unknown dispositions. Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
OTHERCALLS	The number of calls offered to this split/skill that did not abandon and were not answered by an ACD agent for this split/skill. OTHERCALLS = BUSYCALLS + DISCCALLS + OUTFLOWCALLS + DEQUEUECALLS .	C	integer	4 bytes
OTHERTIME	The time OTHERCALLS spent waiting and ringing in this split's/skill's queue until the disposition was known. The format is the number of seconds that have accumulated. NOTE: OTHERTIME relates to time for OTHERCALLS and is not related to I_OTHERTIME , which is the time agents spent in the OTHER state. OTHERTIME = BUSYTIME + DISCTIME + OUTFLOWTIME + DEQUETIME	C	integer	4 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
OUTFLOWCALLS	<p>The number of CALLSOFFERED that were redirected to another destination while queued to this split/skill. This can happen under different circumstances, depending on the ECS release, and if Vectoring is active or non-active.</p> <p>For Generic 3 ECS without Vectoring, outflows are counted:</p> <ul style="list-style-type: none"> • if the call intraflowed or interflowed • if the split/skill call forwarding was active • if a ringing ACD call was answered using call pickup • if a ringing ACD call redirects on no answer <p>For Generic 3 ECS with Vectoring, outflows are counted:</p> <ul style="list-style-type: none"> • if a ringing ACD call redirects on no answer • if the call rang at an agent in this split/skill and was answered using call pickup • if the call was routed to another VDN • if the call routed to a number or digits • if the call queued to a messaging split/skill • if the call queued to this split/skill as the primary split/skill and was answered by an agent in another split/skill, rang at an agent in another split/skill and then abandoned, or was redirected by the Redirection on No Answer feature (for Generic 3 Version 2 and later ECS releases). 	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
OUTFLOWCALLS (contd)	<p>For Generic 2 ECS without Vectoring, outflows are counted when calls intraflow to another split or extension.</p> <p>For Generic 2 ECS with Vectoring (except for Generic 2.2 with EAS), outflows are counted:</p> <ul style="list-style-type: none"> • if the call was routed to another VDN • if the call is routed to a number • if the call queued to another split (using “queue to main” or “check backup”) <p>For Generic 2.2 with EAS, outflows are counted:</p> <ul style="list-style-type: none"> • if the call was routed to another VDN • if the call is routed to a number • if the call is queued to this skill which is a “nonzero” skill as primary, and then is queued to the “zero” skill • if a call is queued to this skill which is a “zero” skill, and then is queued to a “nonzero” skill • if a call is queued to this skill as primary in one skill tens group and then is subsequently queued to another skill tens group <p>OUTFLOWCALLS includes INTERFLOWCALLS, NOANSREDIR, and SLVLOUTFLOWS.</p>	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
OUTFLOWTIME	The time OUTFLOWCALLS waited in queue or ringing at the agent’s voice terminal before being redirected. The format is the number of seconds that have accumulated.	C	integer	4 bytes
PERIOD1-9	The length, in seconds, of each service level increment as defined in the ACD Administration: Call Profile window. Each increment represents a progressively longer wait time. <i>CentreVu</i> CMS counts answered or abandoned calls that wait beyond the last increment (PERIOD9) in either ACDCALLS10 or ABNCALLS10 .	A	smallint	2 bytes

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
PERIODCHG	Indicates whether or not service level increments PERIOD1-9 (as defined on the ACD Administration: Call Profile window) changed during the collection interval. Valid values for PERIODCHG are YES and NO. Row search values for PERIODCHG are: 1 = YES 2 = NO	A	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
PHANTOMABNS	The number of split/skill ACD calls with talk time less than the value of the phantom-abandoned call timer.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
RINGCALLS	The number of this split/skill's calls that rang at agent positions. Available on a Generic 2 and Generic 3 ECS with ring tracking. RINGCALLS includes ACDCALLS and NOANSREDIR .	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
RINGTIME	The time this split/skill's calls spent ringing at agent positions independent of final disposition and other agent activity. I_RINGTIME is the time the agent spends with ringing calls and is affected by other agent activity. RINGTIME is the time the caller spends ringing and is independent of agent activity. The format is the number of seconds that have accumulated. Available on a Generic 2 and Generic 3 ECS with ring tracking.	C	integer	4 bytes
ROW_DATE (index)	The date on which data were collected.	C	date	<i>Informix</i> date, 4 bytes
SERVICELVEL	The number of seconds in which calls must be answered in order to be considered acceptable for this split/skill (as defined on the ACD Administration: Call Profile window).	A	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

Table 3-5: Split/Skill Database Items (dsplit, msplit, hsplit, wsplit Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
SLVLABNS	The number of ABNCALLS for which the time to abandon was less than or equal to this split/skill's SERVICELEVEL .	C	integer	4 bytes
SLVLOUTFLOWS	The number of OUTFLOWCALLS for which the time to outflow was less than or equal to this split/skill's SERVICELEVEL .	C	integer	4 bytes
SPLIT (index)	The split/skill number for which data were collected.	A	smallint	2 bytes
STARTTIME	The start time for which the interval data were collected. Applies to the interval table only.	C	smallint; only in hsplit table	2 bytes
SVCLEVELCHG	Indicates if the service level was changed during the collection interval. Valid values for SVCLEVELCHG are YES and NO. Row search values for SVCLEVELCHG are: 1 = YES, 2 = NO	A	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
TOPCALLS	The number of ACDCALLS with top priority that were answered by agents in this split/skill. This definition is not comparable to LOWCALLS , MEDCALLS , and HIGHCALLS . Available with Generic 2 and Generic 3 ECS with Vectoring.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table
TRANSFERRED	The number of ACDCALLS that were transferred to another destination. For Generic 2.1 ECS, includes transfers to a measured VDN or split. For Generic 2.2 or Generic 3 ECS, includes all split/skill calls transferred.	C	integer; smallint in hsplit table	4 bytes, 2 bytes in hsplit table

ECS Cross-Reference

Table 3-6 lists which ECS release supports each Split/Skill database item.

⇒ NOTE:

The following is a key to the database items tables:

- Items marked “X” indicate that the database item is supported by the specified ECS release.
- Items marked “EAS” require that the EAS feature be active on the ECS for the items to be populated.
- Items marked “e” are populated for the releases shown, but the values are only meaningful for EAS releases.

Table 3-6: ECS Cross-Reference for Split/Skill Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
ABNCALLS	X	X	X	X	X	X
ABNCALLS1-10	X	X	X	X	X	X
ABNRINGCALLS	X	X	X	X	X	X
ABNTIME	X	X	X	X	X	X
ACCEPTABLE	X	X	X	X	X	X
ACD (index)	X	X	X	X	X	X
ACDAUXOUTCALLS		X	X	X	X	X
ACDCALLS	X	X	X	X	X	X
ACDCALLS1-10	X	X	X	X	X	X
ACDTIME	X	X	X	X	X	X
ACWINCALLS	X	X	X	X	X	X
ACWINTIME	X	X	X	X	X	X
ACWOUTADJCALLS		X	X	X	X	X
ACWOUTCALLS	X	X	X	X	X	X
ACWOUTOFFCALLS		X	X	X	X	X
ACWOUTOFFTIME		X	X	X	X	X

Table 3-6: ECS Cross-Reference for Split/Skill Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ACWOUTTIME	X	X	X	X	X	X
ACWTIME	X	X	X	X	X	X
ANSTIME	X	X	X	X	X	X
ASSISTS	X	X	X	X	X	X
AUXINCALLS	X	X	X	X	X	X
AUXINTIME	X	X	X	X	X	X
AUXOUTADJCALLS		X	X	X	X	X
AUXOUTCALLS	X	X	X	X	X	X
AUXOUTOFFCALLS		X	X	X	X	X
AUXOUTOFFTIME		X	X	X	X	X
AUXOUTTIME	X	X	X	X	X	X
BACKUPCALLS	X	X	X	X	X	X
BUSYCALLS	X	X	X	X	X	X
BUSYTIME	X	X	X	X	X	X
CALLSOFFERED	X	X	X	X	X	X
CONFERENCE		X	X	X	X	X
DA_ACWINCALLS			X	X	X	X
DA_ACWINTIME			X	X	X	X
DA_ACWOCALLS			X	X	X	X
DA_ACWOTIME			X	X	X	X
DEQUECALLS		EAS	X	X	X	X
DEQUETIME		EAS	X	X	X	X
DISCCALLS	X	X	X	X	X	X
DISCTIME	X	X	X	X	X	X
EVENT1-9	X	X	X	X	X	X
HIGHCALLS	X	X	X	X	X	X
HOLDABNCALLS	X	X	X	X	X	X

Table 3-6: ECS Cross-Reference for Split/Skill Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
HOLDCALLS	X	X	X	X	X	X
HOLDTIME	X	X	X	X	X	X
I_ACDAUXINTIME		X	X	X	X	X
I_ACDAUX_OUTTIME		X	X	X	X	X
I_ACDOThERTIME		X	X	X	X	X
I_ACDDTIME	X	X	X	X	X	X
I_ACWINTIME	X	X	X	X	X	X
I_ACWOUTTIME	X	X	X	X	X	X
I_ACWTIME	X	X	X	X	X	X
I_ARRIVED	X	X	X	X	X	X
I_AUXINTIME	X	X	X	X	X	X
I_AUXOUTTIME	X	X	X	X	X	X
I_AUXTIME	X	X	X	X	X	X
I_AUXTIME0	X	X	X	X	X	X
I_AUXTIME1-9						EAS
I_AVAILTIME	X	X	X	X	X	X
I_DA_ACDDTIME			X	X	X	X
I_DA_ACWTIME			X	X	X	X
I_OTHERTIME	X	X	X	X	X	X
I_RINGTIME	X	X	X	X	X	X
I_STAFFTIME	X	X	X	X	X	X
I_TAUXTIME	X	X	X	X	X	X
I_TAVAILTIME	X	X	X	X	X	X
INCOMPLETE	X	X	X	X	X	X
INFLOWCALLS	X	X	X	X	X	X
INTERFLOWCALLS	X	X	X	X	X	X
INTRVL	X	X	X	X	X	X

Table 3-6: ECS Cross-Reference for Split/Skill Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
LOWCALLS	X	X	X	X	X	X
MAXINQUEUE	X	X	X	X	X	X
MAXOCWTIME	X	X	X	X	X	X
MAXSTAFFED	X	X	X	X	X	X
MAXTOP	*	*	*	*	*	*
MEDCALLS	X	X	X	X	X	X
NOANSREDIR				X	X	X
O_ABNCALLS		X	X	X	X	X
O_ACDCALLS		X	X	X	X	X
O_ACDTIME		X	X	X	X	X
O_ACWTIME		X	X	X	X	X
O_OTHERCALLS		X	X	X	X	X
OTHERCALLS	X	X	X	X	X	X
OTHERTIME	X	X	X	X	X	X
OUTFLOWCALLS	X	X	X	X	X	X
OUTFLOWTIME	X	X	X	X	X	X
PERIOD 1-9	X	X	X	X	X	X
PERIODCHG	X	X	X	X	X	X
PHANTOMABNS			X	X	X	X
RINGCALLS	X	X	X	X	X	X
RINGTIME	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SERVICELLEVEL	X	X	X	X	X	X
SLVLABNS	X	X	X	X	X	X
SLVLOUTFLOWS	X	X	X	X	X	X
SPLIT	X	X	X	X	X	X
STARTTIME	X	X	X	X	X	X

Table 3-6: ECS Cross-Reference for Split/Skill Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
SVCLEVELCHG	X	X	X	X	X	X
TOPCALLS	X	X	X	X	X	X
TRANSFERRED	X	X	X	X	X	X

*This item is populated for this release, but the values are only meaningful if you are using a Generic 3 EAS release, with Skill Level call distribution.

Agent Database Items

Overview

The Agent database item descriptions (Table 3-7) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** or **Administrative (A)** data.

Historical agent database items apply to the Intrahour Agent (*hagent*), Daily Agent (*dagent*), Weekly Agent (*wagent*), and Monthly Agent (*magent*) tables. All items listed in Table 3-7 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four agent tables are also noted in the Column Type column. The historical indexes are **LOGID**, **SPLIT**, and **ROW_DATE**.

Agent Database Items

Table 3-7 describes the data items in the CMS Agent database tables.

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS	The number of split/skill ACD calls that were abandoned while ringing the agent's voice terminal (after being directed to the agent voice terminal, but before being answered). This includes calls considered abandoned because their talk time was less than the phantom-abandoned call timer. For Generic 3 ECS, ABNCALLS includes PHANTOMABNS . Available on Generic 2 and Generic 3 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ABNTIME	The time split/skill ACD callers waited while ringing the agent's voice terminal before being abandoned. The format is the number of seconds that have accumulated. For Generic 3 ECS, ABNTIME includes the time from when ringing starts until the agent releases the call for phantom-abandoned calls. Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes
ACD_RELEASE	The number of split/skill ACD calls that the agent released or dropped before the far end released. NOTE: Transfers and conferences are always recorded as agent-released calls. Available for Generic 3 ECS.	C	integer; not in hagent table	4 bytes
ACDAUXOUTCALLS	The number of AUXOUTCALLS the agent made with at least one split/skill or direct agent ACD call on hold. This includes calls made to transfer or conference the ACD call. Available on Generic 2.2 and Generic 3 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
ACDCALLS	The number of calls that were queued to SPLIT and answered by this agent in this SPLIT . ACDCALLS includes ACD_RELEASE and O_ACDCALLS .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
ACDTIME	The talk time of all ACDCALLS . The format is the number of seconds that have accumulated. ACDTIME includes O_ACDTIME . It does not include HOLDTIME , except for Generic 2.1 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACWINCALLS	The number of inbound extension calls received by the agent while in ACW for this split/skill. This includes ACW for split/skill and direct agent ACD calls and ACW not associated with a call, if this split/skill is the oldest logon for the agent.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
ACWINTIME	Talk time of all ACWINCALLS (does not include HOLDTIME , except on Generic 2.1 ECS). The format is the number of seconds that have accumulated. ACWINTIME includes DA_ACWINTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
ACWOUTADJCALLS	The number of ACWOUTCALLS that were placed by an adjunct on behalf of an agent (keyboard-dialed). If such calls are placed to off-ECS destinations, then they are also counted as ACWOUTOFFCALLS . Available on the Generic 2.2 ECS with the ASAI Gateway Interface feature and on the Generic 3 ECS with the ASAI feature.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
ACWOUTCALLS	The number of outbound extension calls made by the agent or on behalf of the agent while in ACW for this split/skill. This includes ACW for split/skill ACD calls and ACW not associated with a call, if this split/skill is the oldest logon for the agent. ACWOUTCALLS includes ACWOUTADJCALLS , ACWOUTOFFCALLS , and DA_ACWOCALLS .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
ACWOUTOFFCALLS	The number of ACWOUTCALLS that were made to an off-ECS location. If these calls were placed by an adjunct on behalf of the agent (keyboard-dialed), then they are also counted as ACWOUTADJCALLS . Available for external calls on Generic 2.2 and Generic 3 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACWOUTOFFTIME	The talk time of all ACWOUTOFFCALLS (does not include HOLDTIME). ACWOUTOFFTIME is included in ACWOUTTIME . The format is the number of seconds that have accumulated. Available for external calls on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
ACWOUTTIME	The talk time of all ACWOUTCALLS (does not include HOLDTIME , except on Generic 2.1). This includes time on ACWOUTADJCALLS and on ACWOUTOFFCALLS . The format is the number of seconds that have accumulated. ACWOUTTIME includes ACWOUTOFFTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
ACWTIME	The duration of all after call work associated with ACDCALLS , including ACWINTIME and ACWOUTCALLS received/made during call-associated ACW. The format is the number of seconds that have accumulated. NOTE: ACWTIME does not include the time spent in ACW not associated with an ACD call (that is, the agent pressed the ACW button while not on an ACD call). However, both ACWINTIME and ACWOUTTIME do include time spent on calls made or received while in ACW not associated with an ACD call. Therefore, the sum of ACWINTIME and ACWOUTTIME may be greater than ACWTIME . ACWTIME includes ACWINTIME , ACWOUTTIME , DA_ACWTIME , and O_ACWTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ANSRINGTIME	The time split/skill and direct agent ACD calls spent ringing at the agent's voice terminal before being answered. The format is the number of seconds that have accumulated. Available on Generic 2 and Generic 3 ECS with ring-tracking.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
ASSISTS	The number of times the split/skill supervisor was called (supervisor assists) by the agent who was on a split/skill or direct agent ACD call or in call-related after call work (ACW) for this split/skill.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
AUXINCALLS	The number of inbound extension calls the agent received while in AUX, AVAILABLE or, for Generic 2.2 and Generic 3 ECS, with an ACD or AUXIN/AUXOUT call on hold, in the split/skill that is the oldest logon for the agent.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
AUXINTIME	The talk time of all AUXINCALLS (does not include HOLDTIME , except on Generic 2.1 ECS). The format is the number of seconds that have accumulated.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
AUXOUTADJCALLS	The number of AUXOUTCALLS an adjunct processor or host computer placed on behalf of the agent (keyboard dialed). If such calls are placed to off-ECS destinations, then they are also counted as AUXOUTOFFCALLS . Available for outbound calls on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
AUXOUTCALLS	The number of outbound extension calls made by the agent or on behalf of the agent while in AUX work, AVAILABLE or, for Generic 2.2 and Generic 3 ECS, with an ACD for the oldest logon, or AUXIN/AUXOUT call on hold if the split/skill is the agent's oldest logon. NOTE: Calls the agent makes to transfer or conference an ACD call are included as AUXOUT calls. AUXOUTCALLS includes ACDAUXOUTCALLS , AUXOUTADJCALLS , and AUXOUTOFFCALLS .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
AUXOUTOFFCALLS	The number of AUXOUTCALLS that were made to an off-ECS location. If these calls were placed by an adjunct on behalf of the agent (keyboard-dialed), then they are also counted as AUXOUTADJCALLS . Available for external calls on Generic 2.2 and Generic 3 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
AUXOUTOFFTIME	The talk time of all AUXOUTOFFCALLS (does not include HOLDTIME). This time is included in AUXOUTTIME . The format is the number of seconds that have accumulated. Available for external calls on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
AUXOUTTIME	The talk time of all AUXOUTCALLS (does not include HOLDTIME , except on Generic 2.1 ECS). This includes time on AUXOUTOFFCALLS and AUXOUTADJCALLS . The format is the number of seconds that have accumulated. AUXOUTTIME includes AUXOUTOFFTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
CONFERENCE	The number of times the agent completed a conference (that is, pushed the conference key a second time). Available on Generic 3 and Generic 2.2 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
DA_ABNCALLS	The number of direct agent ACD calls that were abandoned by callers while in queue or ringing the agent's voice terminal. This includes calls considered abandoned because their talk time was less than the phantom-abandon call timer. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
DA_ABNTIME	The time DA_ABNCALLS spent queued and ringing before the caller abandoned. This includes the time until the agent releases the call for phantom-abandoned calls. The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_ACDCALLS	The number of direct agent ACD calls that the agent answered. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling. DA_ACDCALLS includes DA_RELEASE .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
DA_ACDTIME	The talk time of all DA_ACDCALLS (does not include HOLDTIME) queued through this split/skill. The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DA_ACWINCALLS	The number of inbound extension calls answered by the agent while in ACW for direct agent ACD calls. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
DA_ACWINTIME	The talk time of all DA_ACWINCALLS (does not include HOLDTIME). The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_ACWOADJCALLS	The number of DA_ACWOCALLS that were placed by an ASAI adjunct on behalf of the agent (keyboard-dialed). If these calls were placed to off-ECS destinations, they are also counted as DA_ACWOFFCALLS . Requires a Generic 3 ECS with the ASAI.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
DA_ACWOCALLS	The number of outbound extension calls made by the agent while in ACW for direct agent ACD calls. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling. DA_ACWOCALLS includes DA_ACWOADJCALLS and DA_ACWOFFCALLS .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
DA_ACWOFFCALLS	The number of DA_ACWOCALLS that were made to an off-ECS location. If these calls were placed by an adjunct on behalf of the agent (keyboard-dialed), they are also counted as DA_ACWOADJCALLS . Requires a Generic 3 ECS with ASAI.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DA_ACWOFFTIME	The talk time of all DA_ACWOFFCALLS (does not include HOLDTIME). DA_ACWOFFTIME is included in DA_ACWOTIME . The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_ACWOTIME	The talk time of all DA_ACWOCALLS (does not include HOLDTIME). The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_ACWTIME	The duration of ACW associated with DA_ACDCALLS , including time on DA_ACWINCALLS and DA_ACWOCALLS . Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling. The format is the number of seconds that have accumulated. DA_ACWTIME includes DA_ACWINTIME and DA_ACWOTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_ANSTIME	The time spent by callers in direct agent queue and ringing before being answered. The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_OTHERCALLS	The number of direct agent calls that were redirected to another destination; for example, by call pickup, coverage or Redirection on No Answer. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DA_OTHERTIME	The time spent in queue or ringing by DA_OTHERCALLS before being redirected. The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
DA_RELEASE	The number of direct agent ACD calls released or dropped by the agent before the far end released. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer	4 bytes
EVENT1-9	The number of times each event (stroke count) feature button (1 to 9) was pressed while the agent was on an ACD call or in call-related after call work for this split/skill. Available on Generic 2 and Generic 3 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
EXTENSION	The extension number for which data were collected.	A	char(6)	6 byte ASCII text string
HOLDABNCALLS	The number of times callers abandoned from hold. For Generic 3 and Generic 2.2 ECS, HOLDABNCALLS includes all calls held. For Generic 2.1 ECS, HOLDABNCALLS includes only split calls held.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
HOLDACDTIME	The time split/skill and direct agent ACD calls spent on hold at the agent's voice terminal. This includes time on AUXIN or AUXOUT calls with the ACD calls on hold. The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
HOLDCALLS	The number of calls that were placed on hold at least once. For Generic 3 and Generic 2.2 ECS, HOLDCALLS includes all calls placed on hold. For Generic 2.1 ECS, HOLDCALLS includes only split calls placed on hold. HOLDCALLS includes HOLDABNCALLS .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
HOLDTIME	The time spent by callers on hold. For Generic 3 and Generic 2.2 ECS, HOLDTIME includes time on hold for all calls. The format is the number of seconds that have accumulated. For Generic 2.1 ECS, HOLDTIME includes time on hold for split calls only. HOLDTIME includes HOLDACDTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_ACDAUXINTIME	The time during the collection interval that the agent spent talking on AUXIN calls with at least one split/skill or direct agent ACD call on hold. For agents in multiple splits/skills, this time is recorded in the record in which SPLIT is the oldest logon for this agent. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_ACDAUX_OUTTIME	The time during the collection interval that the agent spent dialing (Generic 2.2) and talking on AUXOUTCALLS with at least one split/skill or direct agent ACD call for this split/skill. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_ACDOTHERTIME	The time during the collection interval that the agent spent in the OTHER state (dialing an outgoing call, with a ringing personal call [Generic 3 ECS], or with calls on hold and with no other state selected) with at least one split/skill or direct agent ACD call on hold. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_ACDTIME	The time during the collection interval that the agent was talking on ACD calls for SPLIT . The format is the number of seconds that have accumulated. This includes time spent on O_ACDCALLS . Does not include HOLDTIME , except on Generic 2.1 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_ACWINTIME	The time during the collection interval that the agent was in ACW for the split and on inbound extension calls. This includes ACW for split/skill ACD calls (if the split/skill is the oldest logon) and ACW not associated with a call. The format is the number of seconds that have accumulated. I_ACWINTIME does not include the time inbound ACW calls spent on hold, except for Generic 2.1 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_ACWOUTTIME	The time during the collection interval that the agent was in ACW for SPLIT and on outbound extension calls. This includes ACW for split/skill ACD calls (if the split/skill is the oldest logon) and ACW not associated with a call. The format is the number of seconds that have accumulated. I_ACWOUTTIME does not include the time outbound ACW calls spent on hold, except for Generic 2.1 ECS.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_ACWTIME	<p>The time during the collection interval that the agent was in ACW for SPLIT. This includes ACW for split/skill ACD calls and ACW not associated with a call if SPLIT is the oldest logon. The format is the number of seconds that have accumulated.</p> <p>NOTE: I_ACWINTIME and I_ACWOUTTIME include time in ACW for direct agent calls, but I_ACWTIME does not include this time. Therefore, the sum of I_ACWINTIME and I_ACWOUTTIME may be greater than I_ACWTIME.</p> <p>I_ACWTIME includes I_ACWINTIME and I_ACWOUTTIME.</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_AUXINTIME	<p>The time during the collection interval that the agent was in AUX work, AVAILABLE, or for Generic 2.2 and Generic 3 ECS, had an ACD or AUXIN/AUXOUT call on hold, and was on inbound extension calls and SPLIT was the OLDEST_LOGON (from the real-time table). The format is the number of seconds that have accumulated.</p> <p>I_AUXINTIME includes I_ACDAUXINTIME. It does not include HOLDTIME, except for Generic 2.1 ECS.</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_AUXOUTTIME	The time during the collection interval that the agent was in AUX work, AVAILABLE , or, for Generic 2.2 and Generic 3 ECS, had an ACD or AUXIN/AUXOUT call on hold, and was on outbound extension calls. In the cases where the agent was in AUX work, AVAILABLE or had an AUXIN/AUXOUT call on hold, the AUXOUT time and calls are recorded for the SPLIT that is the oldest logon. In the case where the agent had an ACD call on hold, SPLIT is the split or skill associated with the last ACD call put on hold. Does not include time AUXOUT calls spent on hold, except for Generic 2.1 ECS. The format is the number of seconds that have accumulated. I_AUXOUTTIME includes I_ACDAUX_OUTTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_AUXTIME	The time the agent spent in AUX work in SPLIT . When an agent is in AUX work in multiple splits/skills, this time is recorded in each split or skill in which the agent is in AUX. The format is the number of seconds that have accumulated. I_AUXTIME includes I_AUXINTIME and I_AUXOUTTIME .	C	integer	4 bytes
I_AVAILTIME	The time during the collection interval that the agent was available for calls in this split/skill. The format is the number of seconds that have accumulated.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_DA_ACDTIME	The time during the collection interval that the agent spent talking on direct agent calls. Does not include HOLDTIME . The format is the number of seconds that have accumulated. Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_DA_ACWTIME	<p>The time during the collection interval that the agent was doing after call work associated with direct agent ACD calls. The format is the number of seconds that have accumulated.</p> <p>Requires a Generic 3 ECS with the ASAI or EAS feature for direct agent calling.</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_OTHERTIME	<p>The time during the collection interval that the agent was doing other work. The format is the number of seconds that have accumulated.</p> <p>For Generic 3 ECS, other work includes the following: while in Auto-In or Manual-In mode, an agent put any call on hold and performed no further action; the agent dialed to place a call or activate a feature; or a personal call rang at the agent with no other activity.</p> <p>For Generic 3 ECS without EAS, agents were logged into multiple splits and doing work for a split other than this one (on an ACD call, in call-related ACW, or ACD call ringing).</p> <p>For Generic 2.2, the agent pushed the Hold button or flashed the switchhook from auto-in or manual-in mode.</p> <p>For Generic 2.2 and Generic 3 ECS with EAS, the agent was logged into multiple skills and doing work for a skill other than this one (on an ACD call, in call-related ACW, or in other multiple call-handling skills).</p> <p>For all ECS, I_OTHERTIME is collected for the time period after the link to the ECS comes up or after the agent logs in and before the <i>CentreVu</i> CMS receives notification of the agent's state from the ECS.</p> <p>I_OTHERTIME includes I_ACDOTHERTIME.</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_RINGTIME	The time during the collection interval that the agent had split/skill and direct agent ACD calls ringing. If the agent changes work modes or makes/receives another call instead of answering the ringing call, I_RINGTIME will stop accumulating. RINGTIME is the time the caller spends ringing and is independent of agent activity. The format is the number of seconds that have accumulated. Available on a Generic 2 and Generic 3 ECS with ring tracking.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
I_STAFFTIME	The time during the collection interval that the agent was staffed (logged in) in this split/skill. The format is the number of seconds that have accumulated. I_STAFFTIME = I_ACDTIME + I_ACWTIME + I_AUXTIME + I_AVAILABLE + I_DA_ACDTIME + I_DA_ACWTIME + I_OTHERTIME + I_RINGTIME.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
INCOMPLETE	This indicates if data are complete for this collection interval. Data is incomplete whenever the link goes down and whenever tracking is aborted for calls, due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS), or to protocol failures. The value for interval tables indicates if data are incomplete for the interval: 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month.	C	smallint	2 bytes
INTRVL	The number of minutes in the intrahour interval (15, 30, 60). INTRVL applies to intrahour intervals only.	A	smallint; only in hagent table	2 bytes

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
LOGID (index)	The Login ID that was used to staff the EXTENSION . Agents in multiple splits/skills have one LOGID .	A	char(10)	10 byte ASCII text string
NOANSREDIR	The number of split/skill and direct agent ACD calls that rang at this agent's voice terminal and then were automatically redirected by the Redirection on No Answer feature because they were not answered. Split/skill ACD calls are requeued to the split/skill or to a VDN, direct agent ACD calls are redirected to the agent's coverage path. Redirection On No Answer to a split/skill is available on <i>DEFINITY</i> ECS or Generic 3 Version 2 or later ECS. Redirection On No Answer to a VDN is only available on <i>DEFINITY</i> ECS R5.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
O_ACDCALLS	The number of ACDCALLS and DA_ACDCALLS that were placed by an adjunct (predictive dialing). Available for outbound calling on a Generic 2.2 ECS with the ASAI Gateway Interface feature and on a Generic 3 ECS with the ASAI feature.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
O_ACDTIME	The talk time of all O_ACDCALLS (does not include HOLDTIME). This time is included in ACDTIME . The format is the number of seconds that have accumulated. Available for outbound calling on a Generic 2.2 ECS with the ASAI Gateway Interface feature and on a Generic 3 ECS with the ASAI feature.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
O_ACWTIME	The duration of all after call work associated with the O_ACDCALLS . This time is included in ACWTIME . The format is the number of seconds that have accumulated. Available for outbound calling on a Generic 2.2 ECS with the ASAI Gateway Interface feature and on a Generic 3 ECS with the ASAI feature.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
PHANTOMABNS	The number of ACD calls with talk time less than the value of the phantom-abandoned call timer. Available on Generic 3 ECS.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
RINGCALLS	The number of split/skill (Generic 2 and Generic 3 ECS) and direct agent ACD calls (Generic 3 ECS) that rang at the agent's position. Available on Generic 2 and Generic 3 ECS with ring tracking. RINGCALLS includes NOANSREDIR .	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)
RINGTIME	The time split/skill and direct agent ACD calls spent ringing at the agent's position (independent of disposition or other agent activity). I_RINGTIME is the time the agent spends in the ringing state and is affected by other agent activity. RINGTIME is the time the caller spends ringing and is independent of agent activity. The format is the number of seconds that have accumulated. Available on Generic 2 and Generic 3 ECS. RINGTIME includes ANSRINGTIME .	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
ROW_DATE (index)	The date on which data were collected.	C	date	4 byte <i>Informix</i> date

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
SPLIT (index)	The split number that this EXTENSION is assigned to or the skill number that the agent logged into.	A	smallint	2 bytes
STARTTIME	The start time for the interval for which the data were collected. The format is military time. NOTE: Applies only to the Interval table.	C	smallint; only in hagent table	2 bytes
TI_AUXTIME	Time during the collection interval that the agent was in AUX for all splits/skills or on AUXINCalls or AUXOUTCalls . "TI_" time is stored only for the split/skill the agent was logged in to the longest. "TI_" time needs to be summed across the splits/skills the agents may log in to, in case the login order changes during the collection interval. The format is the number of seconds that have accumulated. sum(TI_AUXTIME) = sum(TI_AUXTIME0 + TI_AUXTIME1 + TI_AUXTIME2 + TI_AUXTIME3 + TI_AUXTIME4 + TI_AUXTIME5 + TI_AUXTIME6 + TI_AUXTIME7 + TI_AUXTIME8 + TI_AUXTIME9) , over all splits/skills the agent was logged into. TI_AUXTIME includes TI_AUXTIME0...AUXTIME9, I_AUXINTIME, and I_AUXOUTTIME.	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
TI_AUXTIME0	The time the agent spent in AUX with reason code 0. This is time in "system" AUX for ECS with AUX reason codes active. It is the same as TI_AUXTIME for ECS without AUX reason codes active. "TI_..." time is only stored for the skill the agent was logged in to the longest. "TI_..." time needs to be summed across the skills the agents logged into, in the event that the login order changes during the collection interval. The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
TI_AUXTIME1-9	<p>The time the agent spent in AUX with reason codes 1-9. “TI_...” time is stored only for the skill the agent was logged in to the longest. “TI_...” time needs to be summed across the skills the agents logged into, in the event that the login order changes during the collection interval. The format is the number of seconds that have accumulated.</p> <p>Requires a Generic 3 R5 ECS or later with the EAS feature.</p>	C	integer	4 bytes
TI_AVAILTIME	<p>The time during the collection interval that the agent was in the available state for split/skill or direct agent ACD calls in any split/skill. TI_AVAILTIME is recorded for the split/skill that was the agent’s oldest logon. The format is the number of seconds that have accumulated.</p> <p>For non-EAS operation, if an agent logged into multiple splits and is in AUX mode in one split and is available for ACD calls in another split, the agent will accrue I_AVAILTIME for the split in which the agent is available, I_AUXTIME for the split in AUX, and TI_AVAILTIME in the split the agent was logged into the longest.</p> <p>“TI_...” time is stored only for the split/skill logged into the longest. “TI_...” time needs to be summed across the splits/skills the agents logged into, in case the login order changes during the collection interval.</p> <p>The time during the collection interval that the agent was doing other work in all splits/skills.</p> <p>For Generic 3 ECS, other work includes the following: while in Auto-In or Manual-In mode, the agent put any call on hold and performed no further action,</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
TI_OTHERTIME	<p>the agent dialed to place a call or to activate a feature, or an extension call rang with no other activity. The format is the number of seconds that have accumulated.</p> <p>For Generic 2.2 ECS, the agent pushed the Hold button or flashed the switchhook from auto-in or manual-in mode and performed no further action.</p> <p>For all ECS releases, TI_OTHERTIME is collected for the time period after the link to the ECS comes up or after the agent logs in and before the <i>CentreVu</i> CMS receives notification of the agent's state from the ECS.</p> <p>"TI_..." time is stored only for the split/skill the agent was logged into the longest.</p> <p>"TI_..." time needs to be summed across the splits/skills the agents logged into, in the event that the login order changes during the collection interval.</p> <p>TI_OTHERTIME includes I_ACDOTHERTIME.</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table
TI_STAFFTIME	<p>The time during the collection interval that the agent was staffed in any split/skill.</p> <p>"TI_..." time is stored only for the split/skill that the agent was logged into the longest.</p> <p>"TI_..." time needs to be summed across the splits/skills the agents logged into, in the event that the login order changes during the collection interval. The format is the number of seconds that have accumulated.</p> <p>sum(TI_STAFFTIME) = sum(I_ACDTIME + I_ACWTIME + I_RINGTIME + I_DA_ACDTIME + I_DA_ACWTIME + TI_AUXTIME + TI_AVAILTIME + TI_OTHERTIME), over all splits/skills the agent was logged into.</p>	C	integer; smallint in hagent table	4 bytes; 2 bytes in hagent table

Table 3-7: Agent Database Items (dagent, magent, hagent, wagent Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
TRANSFERRED	The number of times the agent completed a transfer; that is, pressed the transfer key the second time. For Generic 2.2 and Generic 3 ECS, this includes all calls transferred. For Generic 2.1 ECS, this includes transfers of calls to a measured VDN or split.	C	smallint (dagent, hagent); integer (magent, wagent)	2 bytes (dagent, hagent); 4 bytes (magent, wagent)

ECS Cross-Reference

Table 3-8 lists which ECS releases support each Agent database item.

The following is a key to the database items tables:

- Items marked “X” indicate that the database item is supported by the specified ECS release.
- Items marked “EAS” require that the EAS feature be active on the ECS for the items to be populated.

Table 3-8: ECS Cross-Reference for Agent Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ABNCALLS	X	X	X	X	X	X
ABNTIME	X	X	X	X	X	X
ACD	X	X	X	X	X	X
ACD_RELEASE			X	X	X	X
ACDAUXOUTCALLS		X	X	X	X	X
ACDCALLS	X	X	X	X	X	X
ACDTIME	X	X	X	X	X	X
ACWINCALLS	X	X	X	X	X	X
ACWINTIME	X	X	X	X	X	X
ACWOUTADJCALLS		X	X	X	X	X

Table 3-8: ECS Cross-Reference for Agent Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ACWOUTCALLS	X	X	X	X	X	X
ACWOUTOFFCALLS		X	X	X	X	X
ACWOUTOFFTIME		X	X	X	X	X
ACWOUTTIME	X	X	X	X	X	X
ACWTIME	X	X	X	X	X	X
ANSRINGTIME	X	X	X	X	X	X
ASSISTS	X	X	X	X	X	X
AUXINCALLS	X	X	X	X	X	X
AUXINTIME	X	X	X	X	X	X
AUXOUTADJCALLS		X	X	X	X	X
AUXOUTCALLS	X	X	X	X	X	X
AUXOUTOFFCALLS		X	X	X	X	X
AUXOUTOFFTIME		X	X	X	X	X
AUXOUTTIME	X	X	X	X	X	X
CONFERENCE		X	X	X	X	X
DA_ABNCALLS			X	X	X	X
DA_ABNTIME			X	X	X	X
DA_ACDCALLS			X	X	X	X
DA_ACDTIME			X	X	X	X
DA_ACWINCALLS			X	X	X	X
DA_ACWINTIME			X	X	X	X
DA_ACWOADJCALLS			X	X	X	X
DA_ACWOCALLS			X	X	X	X
DA_ACWOFFCALLS			X	X	X	X
DA_ACWOFFTIME			X	X	X	X
DA_ACWOTIME			X	X	X	X
DA_ACWTIME			X	X	X	X

Table 3-8: ECS Cross-Reference for Agent Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
DA_ANSTIME			X	X	X	X
DA_OTHERCALLS			X	X	X	X
DA_OTHERTIME			X	X	X	X
DA_RELEASE			X	X	X	X
EVENT1-9	X	X	X	X	X	X
EXTENSION	X	X	X	X	X	X
HOLDABNCALLS	X	X	X	X	X	X
HOLDACDTIME	X	X	X	X	X	X
HOLDCALLS	X	X	X	X	X	X
HOLDTIME	X	X	X	X	X	X
I_ACDAUXINTIME		X	X	X	X	X
I_ACDAUX_OUTTIME		X	X	X	X	X
I_ACDOTHERTIME		X	X	X	X	X
I_ACDTIME	X	X	X	X	X	X
I_ACWINTIME	X	X	X	X	X	X
I_ACWOUTTIME	X	X	X	X	X	X
I_ACWTIME	X	X	X	X	X	X
I_AUXINTIME	X	X	X	X	X	X
I_AUXOUTTIME	X	X	X	X	X	X
I_AUXTIME	X	X	X	X	X	X
I_AVAILTIME	X	X	X	X	X	X
I_DA_ACDTIME			X	X	X	X
I_DA_ACWTIME			X	X	X	X
I_OTHERTIME	X	X	X	X	X	X
I_RINGTIME	X	X	X	X	X	X
I_STAFFTIME	X	X	X	X	X	X
INCOMPLETE	X	X	X	X	X	X

Table 3-8: ECS Cross-Reference for Agent Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
INTRVL	X	X	X	X	X	X
LOGID	X	X	X	X	X	X
NOANSREDIR				X	X	X
O_ACDCALLS		X	X	X	X	X
O_ACDTIME		X	X	X	X	X
O_ACWTIME		X	X	X	X	X
PHANTOMABNS			X	X	X	X
RINGCALLS	X	X	X	X	X	X
RINGTIME	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SPLIT	X	X	X	X	X	X
STARTTIME	X	X	X	X	X	X
TI_AUXTIME	X	X	X	X	X	X
TI_AUXTIME0	X	X	X	X	X	X
TI_AUXTIME1-9						EAS
TI_AVAILTIME	X	X	X	X	X	X
TI_OTHERTIME	X	X	X	X	X	X
TI_STAFFTIME	X	X	X	X	X	X
TRANSFERRED	X	X	X	X	X	X

Trunk Group Database Items

Overview

The Trunk Group database item descriptions (Table 3-9) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** or **Administrative (A)** data. Cumulative and Administrative items typically apply to both the current and previous interval real-time table.

Historical trunk group database items apply to the Intrahour Trunk Group (*htkgrp*), Daily Trunk Group (*dtkgrp*), Weekly Trunk Group (*wtkgrp*), and Monthly Trunk Group (*mtkgrp*) tables. All items listed in Table 3-9 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four trunk group tables are also noted in the Column Type column. The historical indexes are **ROW_DATE** and **TKGRP**.

Trunk Group Database Items

Table 3-9 describes the data items in the CMS Trunk Group database tables.

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS	The number of calls carried by this trunk group that were abandoned by the caller before being answered by an agent. For Generic 2.2 and Generic 3 ECS, this is all calls abandoned by the caller that were carried by this trunk group, except for calls directly to unmeasured stations that did not go through a measured VDN or split/skill. This includes ACD calls and calls that routed to an agent or extension with talk times less than the phantom-abandoned call timer value.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS (contd)	For Generic 2.1 ECS, this is ACD calls that abandon from the split queue or from ringing, and calls that abandon from vector processing. For Generic 3 Version 1 and Generic 2.1 ECS, calls that abandon while listening to a forced disconnect are also included in ABNCALLS . ABNCALLS includes ABNVECCALLS , ABNQUEUECALLS , and ABNRINGCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
ABNQUEUECALLS	The number of ABNCALLS that were abandoned while in a split/skill or direct agent queue. Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
ABNRINGCALLS	The number of split/skill ABNCALLS that use abandoned by the caller while ringing at an agent position. Available on Generic 2 and Generic 3 ECS.	C	integer	4 bytes
ABNVECCALLS	The number of ABNCALLS that abandoned while in vector processing. This includes vector calls that abandoned while in queue or while ringing at an agent position. Available on Generic 2 and Generic 3 ECS with Vectoring. ABNVECCALLS includes ABNQUEUECALLS and ABNRINGCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes
ACDCALLS	The number of INCALLS that were answered by an agent as a split/skill or direct agent ACD call. ACDCALLS includes BACKUPCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
ALLINUSETIME	The length of time during the interval that all trunks in the trunk group were in use (on calls or maintenance busy). The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
AUDIO	The number of calls for which audio difficulty problems were reported for trunks in this trunk group. Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BACKUPCALLS	The number of ACDCALLS that were delivered to and answered by agents in a split/skill by a vector command other than "queue to main." This includes calls delivered by "messaging split/skill," "check backup," and "route to split/skill" vector commands, direct agent calls, and redirect on no answer routing. Calls answered in a main split/skill can be calculated as ACDCALLS - BACKUPCALLS . Available on Generic 2 and Generic 3 ECS with Vectoring.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_ABNCALLS	The number of incoming calls carried by the trunk group that abandoned during the busy hour.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_ACDCALLS	The number of incoming ACD calls carried by this trunk group that were answered by an agent as split/skill or direct agent ACD calls and completed during the busy hour.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_ALLINUSETIME	The length of time during the busy hour that all trunks in the trunk group were in use. The format is the number of seconds that have accumulated.	C	integer	4 bytes
BH_BUSYCALLS	The number of incoming calls carried by this trunk group during the busy hour that were given a busy signal by the ECS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
BH_DISCCALLS	The number of incoming calls carried by this trunk group during the busy hour that were forced to disconnect by the ECS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_INCALLS	The number of incoming calls carried by this trunk group that completed during the busy hour. BH_INCALLS includes BH_ABNCALLS , BH_ACDCALLS , and BH_OTHERCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_INTERVAL	The defined interval length, including start time, of the busy hour.	C	integer; only in dtkgrp table	4 bytes
BH_INTIME	The trunk holding time of all incoming calls carried by this trunk group that completed during the busy hour. The format is the number of seconds that have accumulated.	C	integer	4 bytes
BH_OABNCALLS	The number of outgoing adjunct-originated calls carried by the trunk group that abandoned during the busy hour. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_OACDCALLS	The number of outgoing adjunct-originated ACD calls carried by the trunk group and answered by an agent as split/skill or direct agent ACD calls that completed during the busy hour. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
BH_OOTHERCALLS	The number of outgoing calls carried by the trunk group during the busy hour that were not answered or abandoned as ACD calls. BH_OOTHERCALLS includes extension out calls, outbound call management calls, forced busy or forced disconnect calls, short outgoing calls, and outgoing calls with unknown disposition.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_OTHERCALLS	The number of incoming calls carried by the trunk group during the busy hour that were not answered or abandoned. BH_OTHERCALLS include extension in calls, calls forced busy or disconnected, calls that outflowed off the ECS, short inbound calls, and inbound calls of unknown disposition. BH_OTHERCALLS includes BH_BUSYCALLS and BH_DISCCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_OUTCALLS	The number of outgoing calls carried by the trunk group that completed during the busy hour. BH_OUTCALLS includes BH_OABNCALLS , BH_OACDCALLS , and BH_OOTHERCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BH_OUTTIME	The trunk holding time of all outgoing calls carried by the trunk group that completed during the busy hour. The format is the number of seconds that have accumulated.	C	integer	4 bytes
BH_STARTTIME	The starting time of the hour for which busy hour data were collected. The busy hour is that set of contiguous intervals during the day totaling an hour in which the trunk holding time for the trunk group was a maximum.	C	integer	4 bytes

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
BLOCKAGE	The number of outbound call attempts that were blocked because all trunks were busy. Available on Generic 2 ECS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
BUSYCALLS	The number of INCALLS that were given a busy signal by the ECS. This can occur on all ECS releases via the "busy" vector command. BUSYCALLS can occur on Generic 3 ECS without Vectoring when a split queue is full or there are no queue slots, no busy coverage is administered and an announcement has played, or the trunk is not a CO trunk. On Generic 3 ECS, BUSYCALLS can occur if a call is routed to a split/skill with coverage set to "yes" where there are no agents available, the queue is full (or there is no queue), there is no coverage and an announcement has played, or the trunk is not a CO trunk. Also on Generic 3 ECS, BUSYCALLS can occur if a call is routed to a direct agent with coverage set to "yes," the agent is not logged in, there is no coverage path administered, and an announcement has played, or the trunk is not a CO trunk.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
COMPLETED	The number of OUTCALLS that were completed (far end answered). Available on Generic 3 ECS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
CONNECTCALLS	The number of INCALLS that were answered at a station and were not split/skill or direct agent ACD calls.	C	integer	4 bytes

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DISCCALLS	<p>With Generic 2.2 ECS, the number of INCALLS that were disconnected by the ECS by the "disconnect" vector command. With Generic 2.1 and Generic 3 Version 1 ECS releases, the number of INCALLS that were given a forced disconnect announcement by a disconnect vector command, listened to the entire announcement, and then were disconnected by the ECS.</p> <p>With Generic 3 Version 2 and later Generic 3 ECS, the number of INCALLS that executed the "disconnect" vector command. This also includes the number of INCALLS that were disconnected by the ECS when the vector disconnect timer expired or that reached the end of vector processing without being queued.</p>	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
FAILURES	<p>The number of trunk failures for this TKGRP. No time or call is recorded in any of the <i>CentreVu</i> CMS tables. Trunk failures can be due to trunk sequencing failures (usually hardware problems on the trunk or incompatible trunk types on either end of a call), or due to internal ECS errors (such as errors in call processing or Vectoring translations).</p> <p>This item does not include calls with short holding times.</p> <p>Available on Generic 2 ECS. The FAILURES database item is not populated for Generic 3 ECS because trunks that fail are automatically placed in the maintenance busy state.</p>	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_INOCC	The total time during the collection interval that trunks in the trunk group were occupied by incoming calls. If an incoming call on a measured trunk is transferred off the ECS, the incoming trunk remains in use for the call and accrues trunk holding time until the caller drops or the call is released. The format is the number of seconds that have accumulated.	C	integer	4 bytes
I_OUTOCC	The time during the collection interval that trunks in this trunk group were occupied by outgoing calls. The format is the number of seconds that have accumulated.	C	integer	4 bytes
INCALLS	The number of inbound calls that were carried by this TKGRP and that completed during the collection interval. INCALLS includes ABNCALLS , ACDCALLS , CONNECTCALLS , and TRANSFERRED . INCALLS = ACDCALLS + ABNCALLS + OTHERCALLS.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
INCOMPLETE	This indicates if data are complete for this collection interval. Data is incomplete whenever the link goes down and whenever tracking is aborted for calls, due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS), or protocol failures. The value for interval tables indicates whether data are incomplete for the interval: 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month.	C	smallint	2 bytes

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INTIME	The trunk holding time for all INCALLS carried by trunks in this trunk group that completed during the collection interval. The format is the number of seconds that have accumulated. Trunk holding time is the time from the initial trunk seizure until the trunk goes idle (that is, until the caller drops, the agent releases the call, or the ECS disconnects the call). If an incoming call on a measured trunk is transferred off the ECS, the incoming trunk remains in use for the call and accrues trunk holding time until the caller drops or the call is released.	C	integer	4 bytes
INTRVL	The number of minutes in the intrahour interval (15, 30, or 60). INTRVL applies to intrahour tables only.	A	smallint; only in htkgrp table	2 bytes
MBUSYTIME	The total time during the collection interval that trunks in the trunk group were maintenance busy. The format is the number of seconds that have accumulated.	C	integer	4 bytes
O_ABNCALLS	The number of OUTCALLS on this trunk group that were offered by an adjunct as split/skill or direct agent ACD calls and were abandoned by the far end. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
O_ACDCALLS	The number of OUTCALLS from this trunk group that were offered by an adjunct as split/skill or direct agent ACD calls and were answered by an agent. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
O_OTHERCALLS	The number of OUTCALLS on this trunk group that were not answered or abandoned as ACD split/skill calls. These include extension out calls, calls forced busy and forced disconnected, short outgoing calls, and calls with unknown dispositions. O_OTHERCALLS includes SHORTCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
OTHERCALLS	The number of INCALLS carried by this trunk group that did not abandon and were not answered by a direct agent ACD or as split/skill. These Include forced busy calls, forced disconnect calls, calls that outflowed off the switch, calls that were connected to a non-ACD destination, short inbound calls, and calls with unknown dispositions. OTHERCALLS = INCALLS - ACDCALLS - ABNCALLS .	C	Integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
OUTCALLS	The number of outbound calls that were carried by this trunk group and were completed during the collection interval. OUTCALLS includes COMPLETED , O_ABNCALLS , O_ACDCALLS , O_OTHERCALLS , and SHORTCALLS . OUTCALLS = O_ACDCALLS + O_ABNCALLS + O_OTHERCALLS .	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
OUTTIME	The trunk holding time for all OUTCALLS carried by trunks in this trunk group that completed during the collection interval. Trunk holding time is the time from the initial trunk seizure until the trunk goes idle (that is, until the far end drops, the agent releases the call, or the ECS disconnects the call). The format is the number of seconds that have accumulated. OUTTIME includes SETUPTIME .	C	integer	4 bytes
ROW_DATE (index)	The day for which data were collected.	A	date	4 byte <i>Informix</i> date

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
SETUPTIME	Amount of time from trunk seizure until OUTCALLS completed at the far end. Available on Generic 3 ECS. The format is the number of seconds that have accumulated.	C	integer	4 bytes
SHORTCALLS	The number of inbound and outbound calls that occupied a trunk in the trunk group for less than 2 seconds and that did not queue to a split/skill, forward to a split/skill, get answered by an agent, get a forced busy or forced disconnect from the ECS, or produce a trunk failure or maintenance busy. Note that SHORTCALLS includes both inbound and outbound calls. Therefore, OTHERCALLS and O_OTHERCALLS may include some SHORTCALLS .	C	integer	4 bytes
SPLIT	The split/skill to which this trunk group terminates.	A	smallint	2 bytes
TKGRP (index)	The trunk group number for which data were collected.	A	smallint	2 bytes
TRANSFERRED	The number of calls that were transferred to another destination. TRANSFERRED includes both inbound and outbound calls. Therefore, ACDCALLS and O_ACDCALLS , and OTHERCALLS and O_OTHERCALLS may each include some TRANSFERRED . For Generic 2.1 ECS, TRANSFERRED includes transfers to measured VDNs or splits/skills. For Generic 3 and Generic 2.2 ECS, TRANSFERRED includes all calls transferred.	C	integer; smallint in htkgrp table	4 bytes; 2 bytes in htkgrp table
TRUNKS	The current number of trunks assigned to this trunk group.	A	smallint	2 bytes

Table 3-9: Trunk Group Database Items (dtkgrp, mtkgrp, htkgrp, wtkgrp Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
VDN	The VDN to which the trunk group terminates. Available on Generic 2 and Generic 3 ECS with Vectoring.	A	char(6)	6 byte ASCII text string

ECS Cross-Reference

Table 3-10 lists which of the ECS releases support each of the Trunk Group database items.

Table 3-10: ECS Cross-Reference for Trunk Group Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ABNCALLS	X	X	X	X	X	X
ABNQUECALLS	X	X	X	X	X	X
ABNRINGCALLS	X	X	X	X	X	X
ABNVECCALLS	X	X	X	X	X	X
ACD (index)	X	X	X	X	X	X
ACDCALLS	X	X	X	X	X	X
ALLINUSETIME	X	X	X	X	X	X
AUDIO	X	X	X	X	X	X
BH_ABNCALLS	X	X	X	X	X	X
BH_ACDCALLS	X	X	X	X	X	X
BH_ALLINUSETIME	X	X	X	X	X	X
BH_BUSYCALLS	X	X	X	X	X	X
BH_DISCCALLS	X	X	X	X	X	X
BH_INCALLS	X	X	X	X	X	X
BH_INTERVAL	X	X	X	X	X	X
BH_INTIME	X	X	X	X	X	X
BH_OABNCALLS		X	X	X	X	X

Table 3-10: ECS Cross-Reference for Trunk Group Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
BH_OACDCALLS		X	X	X	X	X
BH_OTHERCALLS	X	X	X	X	X	X
BH_OTHERCALLS	X	X	X	X	X	X
BH_OUTCALLS	X	X	X	X	X	X
BH_OUTTIME	X	X	X	X	X	X
BH_STARTTIME	X	X	X	X	X	X
BACKUPCALLS	X	X	X	X	X	X
BLOCKAGE	X	X				
BUSYCALLS	X	X	X	X	X	X
COMPLETED			X	X	X	X
CONNECTCALLS	X	X	X	X	X	X
DISCCALLS	X	X	X	X	X	X
FAILURES	X	X				
I_INOCC	X	X	X	X	X	X
I_OUTOCC	X	X	X	X	X	X
INCALLS	X	X	X	X	X	X
INCOMPLETE	X	X	X	X	X	X
INTIME	X	X	X	X	X	X
INTRVL	X	X	X	X	X	X
MBUSYTIME	X	X	X	X	X	X
O_ABNCALLS		X	X	X	X	X
O_ACDCALLS		X	X	X	X	X
O_OTHERCALLS	X	X	X	X	X	X
OUTCALLS	X	X	X	X	X	X
OTHERCALLS	X	X	X	X	X	X
OUTTIME	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X

Table 3-10: ECS Cross-Reference for Trunk Group Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
SETUPTIME			X	X	X	X
SHORTCALLS	X	X	X	X	X	X
SPLIT	X	X	X	X	X	X
TKGRP	X	X	X	X	X	X
TRANSFERRED	X	X	X	X	X	X
TRUNKS	X	X	X	X	X	X
VDN	X	X	X	X	X	X

Trunk Database Items

Overview

The Trunk database item descriptions (Table 3-11) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** or **Administrative (A)** data.

Historical trunk database items apply to the Intrahour Trunk (*htrunk*), Daily Trunk (*dtrunk*), Weekly Trunk Group (*wtrunk*), and Monthly Trunk (*mtrunk*) tables. All items listed in Table 3-11 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four trunk tables are also noted in the Column Type column. The historical indexes are **EQLOC**, **ROW_DATE** and **TKGRP**.

Trunk Database Items

Table 3-11 describes the data items in the CMS Trunk database tables.

Table 3-11: Trunk Database Items (dtrunk, mtrunk, htrunk, wtrunk Tables)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS	<p>The number of calls carried by this trunk that were abandoned by the caller before being answered by an agent.</p> <p>For Generic 2.2 and Generic 3 ECS, this is all calls abandoned by the caller that were carried by this trunk, except for calls directly to unmeasured stations that did not go through a VDN or split/skill.</p> <p>For Generic 3 ECS, this includes ACD calls and calls that routed to an agent or extension with talk times less than the phantom-abandoned call timer value.</p>	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table

Table 3-11: Trunk Database Items (dtrunk, mtrunk, htrunk, wtrunk Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS (contd)	For Generic 2.1 ECS, this is ACD calls that abandon from the split queue or from ringing, calls that abandon from vector processing and calls that abandon after being routed to an extension (via the "route to" vector command). For Generic 3 Version 1 and Generic 2.1 ECS, calls that abandon while listening to a forced disconnect announcement are also included.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes
ACDCALLS	The number of INCALLS that were answered by an agent as a split/skill or direct agent ACD call.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
AUDIO	The number of calls for which audio difficulty problems were reported for this trunk. Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
EQLOC (index)	The physical equipment location (trunk number) for which data were collected.	A	char(9)	9 byte ASCII text string
FAILURES	The number of trunk failures for this trunk. No time or call is recorded in any of the <i>CentreVu</i> CMS tables. Trunk failures can be due to trunk sequencing failures (usually hardware problems on the trunk or incompatible trunk types on either end of a call) or due to internal ECS errors (such as errors in call processing or Vectoring translations). This item does not include calls with short holding times. Available on Generic 2 ECS. The FAILURES database item is not populated for Generic 3 ECS because trunks that fail are automatically placed in the maintenance busy state.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table

Table 3-11: Trunk Database Items (dtrunk, mtrunk, htrunk, wtrunk Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
I_INOCC	The total time during the collection interval that the trunk was occupied by inbound calls. If an incoming call on a measured trunk is transferred off the ECS, the incoming trunk remains in use for the call and accrues trunk holding time until the caller drops or the call is released. The format is the number of seconds that have accumulated.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
I_OUTOCC	The total time during the collection interval that this trunk was occupied by outbound calls. The format is the number of seconds that have accumulated.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
INCALLS	The number of inbound calls carried by this trunk that completed during the collection interval. This includes SHORTCALLS but does not include FAILURES . INCALLS = ABNCALLS + ACDCALLS + OTHERCALLS.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
INCOMPLETE	This indicates if data are complete for this collection interval. Data are incomplete whenever the link goes down and whenever tracking is aborted for calls, due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS), protocol failures, or when split/skill or VDN call profile is changed with data collection active. The value for interval tables indicates whether data are incomplete for the interval: 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month.	C	smallint	2 bytes

Table 3-11: Trunk Database Items (dtrunk, mtrunk, htrunk, wtrunk Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INTIME	The trunk holding time for all INCALLS carried by this trunk that completed during the collection interval. The format is the number of seconds that have accumulated. Trunk holding time is the time from the initial trunk seizure until the trunk goes idle (that is, until the caller drops, the agent releases the call, or the ECS disconnects the call). If an incoming call on a measured trunk is transferred off the ECS, the incoming trunk remains in use for the call and accrues trunk holding time until the caller drops or the call is released.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
INTRVL	The number of minutes in the intrahour interval (15, 30, or 60). INTRVL applies to intrahour intervals only.	A	smallint; only in htrunk table	2 bytes
MBUSYTIME	The total time during the collection interval that this trunk was maintenance busy. The format is the number of seconds that have accumulated.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
O_ABNCALLS	The number of OUTCALLS on this trunk that were offered by an adjunct as split/skill or direct agent ACD calls and were abandoned by the far end before talking to an agent. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
O_ACDCALLS	The number of OUTCALLS from this trunk that were offered by an adjunct as split/skill or direct agent ACD calls and were answered by an agent in one of those splits/skills. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table

Table 3-11: Trunk Database Items (dtrunk, mtrunk, htrunk, wtrunk Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
O_OTHERCALLS	The number of OUTCALLS on this trunk that were not answered as ACD split/skill calls or abandoned. These include extension out calls, forced busy calls, short outgoing calls, and calls with unknown dispositions. O_OTHERCALLS includes SHORTCALLS .	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
OUTCALLS	The number of outbound calls that were carried by the trunk and were completed during the collection interval. OUTCALLS = O_ACDCALLS + O_ABNCALLS + O_OTHERCALLS.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
OTHERCALLS	Number of INCALLS on this trunk that were not answered or abandoned as split/skill or direct agent ACD calls. These include forced busy calls, forced disconnect calls, calls that outflowed off the switch, calls that were connected to a non- ACD destination, short inbound calls, and calls with unknown dispositions.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
OUTTIME	The trunk holding time for all OUTCALLS carried by this trunk that completed during the collection interval. Trunk holding time is the time from the initial trunk seizure until the trunk goes idle (that is, until the far end drops, the agent releases the call, or the ECS disconnects the call). The format is the number of seconds that have accumulated.	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
ROW_DATE (index)	The day for which data were collected.	A	date	4 byte <i>Informix</i> date

Table 3-11: Trunk Database Items (dtrunk, mtrunk, htrunk, wtrunk Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
SHORTCALLS	The number of inbound and outbound calls that occupied a trunk for less than 2 seconds and that did not queue to a split/skill, forward to a split/skill, get answered by an agent, get a forced busy or forced disconnect from the ECS, or produce a trunk failure or maintenance busy. Note that SHORTCALLS includes both inbound and outbound calls. Therefore, OTHERCALLS and O_OTHERCALLS may include some SHORTCALLS .	C	integer; smallint in htrunk table	4 bytes; 2 bytes in htrunk table
TKGRP (index)	The trunk group number to which the trunk is assigned.	A	smallint	2 bytes

ECS Cross-Reference

Table 3-12 lists which of the ECS releases support each Trunk database item.

Table 3-12: ECS Cross-Reference for Trunk Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ABNCALLS	X	X	X	X	X	X
ACD	X	X	X	X	X	X
ACDCALLS	X	X	X	X	X	X
AUDIO	X	X	X	X	X	X
EQLOC	X	X	X	X	X	X
FAILURES	X	X				
I_INOCC	X	X	X	X	X	X
I_OUTOCC	X	X	X	X	X	X
INCALLS	X	X	X	X	X	X
INCOMPLETE	X	X	X	X	X	X
INTIME	X	X	X	X	X	X

Table 3-12: ECS Cross-Reference for Trunk Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
INTRVL	X	X	X	X	X	X
MBUSYTIME	X	X	X	X	X	X
O_ABNCALLS		X	X	X	X	X
O_ACDCALLS		X	X	X	X	X
O_OTHERCALLS	X	X	X	X	X	X
OUTCALLS	X	X	X	X	X	X
OTHERCALLS	X	X	X	X	X	X
OUTTIME	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SHORTCALLS	X	X	X	X	X	X
TKGRP	X	X	X	X	X	X

Vector Database Items

Overview

⇒ NOTE:

Vector database items are available only if the Vectoring feature has been purchased and authorized for you to use.

The Vector database item descriptions (Table 3-13) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** or **Administrative (A)** data.

Historical vector database items apply to the Intrahour Vector (*hvector*), Daily Vector (*dvector*), Weekly Vector (*wvector*), and Monthly Vector (*mvector*) tables. All items listed in Table 3-13 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four vector tables are also noted in the Column Type column. The historical indexes are **ROW_DATE** and **VECTOR**.

Vector Database Items

Table 3-13 describes the data items in the CMS Vector database tables.

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS	The number of INCALLS that were abandoned while INPROGRESS (real-time table) for this vector. This includes split/skill and direct agent ACD calls that abandon from queue or from ringing, calls that abandon from vector processing, and for the Generic 2.1 and Generic 3 Version 1 ECS, calls that hung up while listening to a forced disconnect announcement. ABNCALLS includes ABNQUECALLS , ABNRINGCALLS , and PHANTOMABNS .	C	integer; smallint in <i>hvector</i> table	4 bytes; 2 bytes in <i>hvector</i> table

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ABNQUECALLS	The number of ABNCALLS that hung up while in a split/skill or direct agent ACD queue.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
ABNRINGCALLS	The number of split/skill or direct agent ABNCALLS that were abandoned while ringing at an agent position. Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
ABNTIME	The time a caller waited while vector steps were executed, the call was queued, and ringing, before the caller hung up. The format is the number of seconds that have accumulated. For phantom-abandoned calls, this is the total time from when the call enters the vector until the agent released the call.	C	integer	4 bytes
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes
ACDCALLS	The number of split/skill and direct agent ACD calls that were answered by an agent. Includes calls from “queue to main,” “check backup,” “messaging split/skill,” “route to” split/skill or direct agent, and “adjunct routing” to a split/skill or direct agent. ACDCALLS includes BACKUPCALLS .	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
ADJATTEMPTS	The number of adjunct routing attempts for calls in this VECTOR. Available on Generic 3 ECS with the ASAI feature. ADJATTEMPTS includes ADJROUTED .	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
ADJROUTED	The number of adjunct-routing calls that were redirected by an adjunct processor or host computer. Available on Generic 3 ECS with the ASAI feature.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ANSTIME	The time that split/skill and direct agent ACD calls waited while executing steps in this vector, in queueing, and ringing before being answered by an agent. The format is the number of seconds that have accumulated. ANSTIME includes RINGTIME .	C	integer	4 bytes
BACKUPCALLS	The number of ACDCALLS that were queued to the answering split/skill using a vector command other than “queue to main.” BACKUPCALLS includes “messaging split/skill” calls, “check backup” calls, and calls that route to a split/skill or direct agent, either by the “route to” vector command or by adjunct routing. Calls that are redirected back to the split/skill using the redirection on no answer feature and are subsequently answered are also counted as BACKUPCALLS . Available on Generic 2 and Generic 3 ECS and on the ECS with the Vectoring feature.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
BUSYCALLS	The number of INCALLS that were given a busy signal by the ECS. This can occur on all ECS releases when the “busy” vector command is executed. On Generic 3 ECS, BUSYCALLS can occur if a call is routed to a split with coverage set to “yes” where there are no agents available, the queue is full (or there is no queue), there is no coverage, and an announcement has played or the trunk is not a CO trunk. Also on Generic 3 ECS, BUSYCALLS can occur if a call is routed to a direct agent with coverage set to “yes,” the agent is not logged in and there is no coverage path administered, an announcement has played, or the trunk is not a CO trunk.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
BUSYTIME	The time BUSYCALLS waited before hearing a busy signal. The format is the number of seconds that have accumulated.	C	integer	4 bytes
DISCCALLS	<p>With Generic 2.2, Generic 3 Version 2, and later Generic 3 ECS and with the ECS, the number of INCALLS that executed the "disconnect" vector command.</p> <p>With Generic 2.1 and Generic 3 Version 1 ECS, the number of INCALLS that were given a forced disconnect announcement by the "disconnect" vector command and listened to the entire announcement, then were disconnected by the ECS.</p> <p>With Generic 3 Version 2 and later Generic 3 ECS and with the ECS, DISCCALLS also includes calls disconnected due to the expiration of the vector disconnect timer and those that were disconnected because they reached the end of vector processing without being queued.</p> <p>DISCCALLS includes VDISCCALLS.</p>	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
DISCTIME	The time all DISCCALLS spent in this VECTOR . The time until the trunk drops following the forced disconnect command for those calls recorded as DISCCALLS. For Generic 2.2, Generic 3 Version 2 and later Generic 3 ECS, and for the ECS, if the caller hangs up during the forced disconnect announcement, this time is the time until the caller hung up. The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
DISCTIME (contd)	For Generic 2.1, and Generic 3 Version 1 ECS, DISCTIME is the time until the announcement ends and the caller is disconnected by the ECS. For Generic 3 Version 2 and later Generic 3 ECS, DISCTIME also includes the time until the trunk drops for calls disconnected due to the expiration of the vector disconnect timer or because they reached the end of vector processing without being queued.	C	integer	4 bytes
GOTOCALLS	The number of OUTFLOWCALLS that were redirected to another vector by way of a "go to vector" command. Available on Generic 2.2 and Generic 3 ECS.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
GOTOTIME	The time all GOTOCALLS spent in this vector before being redirected to another vector. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS.	C	integer	4 bytes
INCALLS	The number of inbound calls that were processed by this vector. INCALLS includes ABNCALLS , RINGCALLS , INFLOWCALLS , and OTHERCALLS . INCALLS = ACDCALLS + ABNCALLS + OTHERCALLS	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INCOMPLETE	This indicates if data are complete for this collection interval. Data is incomplete whenever the link goes down and whenever tracking is aborted for calls due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS and the ECS), or protocol failures. The value for interval tables indicates whether data are incomplete for the interval: 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month.	C	smallint	2 bytes
INFLOWCALLS	The number of calls that were redirected to this vector by way of a "go to vector" or a "route to" VDN command, or by redirection on no answer to a VDN.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
INTERFLOWCALLS	The number of OUTFLOWCALLS that were redirected to a destination outside the ECS. INTERFLOWCALLS includes LOOKFLOWCALLS .	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
INTIME	The time spent by INCALLS in the VECTOR executing steps. INTIME stops accruing when the "Stop" vector step is executed, when the last step in the vector is reached, when busy or disconnect is sent, when the call is abandoned, when a "go to vector" or "route to" command succeeds, when a "messaging split/skill" or "adjunct routing" command succeeds, or when the split/skill or direct agent ACD call rings at an agent position. The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INTRVL	The number of minutes in the interval (15, 30, 60). INTRVL applies to intrahour intervals only.	A	smallint; only in hvector table	2 bytes
LOOKATTEMPTS	The number of look-ahead interflow attempts for calls processed by this VECTOR . LOOKATTEMPTS includes LOOKFLOWCALLS . Available on Generic 2.2 and Generic 3 ECS with the Vectoring and Look-Ahead Interflow features.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
LOOKFLOWCALLS	The number of INTERFLOWCALLS that were redirected to another ECS by way of the Look-Ahead Interflow feature. LOOKFLOWCALLS is a subset of INTERFLOWCALLS . Available on Generic 2.2 and Generic 3 ECS with the Vectoring and Look-Ahead Interflow features.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
OTHERCALLS	The number of calls offered to this vector that did not abandon and were not answered by a direct ACD agent or by split/skill. OTHERCALLS = INCALLS - ACDCALLS - ABNCALLS .	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
OTHERTIME	The time OTHERCALLS spent in the vector until the disposition was known and the call left the vector. The format is the number of seconds that have accumulated. OTHERTIME = BUSYTIME + DISCTIME + OUTFLOWTIME .	C	integer	4 bytes

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
OUTFLOWCALLS	The number of INCALLS that were redirected to another destination by way of a "go to vector" command or by "route to" or "adjunct routing" to a destination other than a split/skill or direct agent. (Calls that route to a split/skill or direct agent by way of a "route to," "adjunct routing," or "messaging split/skill" command are still tracked in the vector.) OUTFLOWCALLS includes GOTOCALLS and INTERFLOWCALLS .	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
OUTFLOWTIME	The time all OUTFLOWCALLS spent in the VECTOR before being redirected. The format is the number of seconds that have accumulated. OUTFLOWTIME includes GOTOTIME .	C	integer	4 bytes
PHANTOMABNS	The number of ACD calls and calls that routed to an agent or extension with talk time less than the value of the phantom-abandoned call timer. Available on Generic 3 ECS.	C	integer	4 bytes
RINGCALLS	The number of split/skill and direct agent ACD calls that rang at agent positions. RINGCALLS includes ACDCALLS . Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvector table
RINGTIME	The time split/skill and direct agent ACD calls spent ringing at agent positions independent of final disposition. Available on Generic 2 and Generic 3 ECS. The format is the number of seconds that have accumulated.	C	integer	4 bytes
ROW_DATE (index)	The date for which data were collected.	A	date	4 byte <i>Informix</i> date

Table 3-13: Vector Database Items (dvector, mvector, hvector, wvector Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
VDISCCALLS	The number of calls forced to disconnect because the vector disconnect timer timed out or because the call reached a vector stop without being queued. "Vector stop" means an explicit "stop" vector command, the end of the vector, or the one-thousandth step executed. Available on Generic 3 Version 2 and later ECS releases.	C	integer; smallint in hvector table	4 bytes; 2 bytes in hvdn table
VECTOR (index)	The vector number that this row represents. Available on the Generic 2 and Generic 3 ECS and with the Vectoring feature.	A	smallint	2 bytes

ECS Cross-Reference

Table 3-14 lists which of the ECS releases support the Vector database items.

Table 3-14: ECS Cross-Reference for Vector Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ABNCALLS	X	X	X	X	X	X
ABNQUECALLS	X	X	X	X	X	X
ABNRINGCALLS	X	X	X	X	X	X
ABNTIME	X	X	X	X	X	X
ACD	X	X	X	X	X	X
ACDCALLS	X	X	X	X	X	X
ADJATTEMPTS			X	X	X	X
ADJROUTED			X	X	X	X
ANSTIME	X	X	X	X	X	X
BACKUPCALLS	X	X	X	X	X	X

Table 3-14: ECS Cross-Reference for Vector Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
BUSYCALLS	X	X	X	X	X	X
BUSYTIME	X	X	X	X	X	X
DISCCALLS	X	X	X	X	X	X
DISCTIME	X	X	X	X	X	X
GOTOCALLS		X	X	X	X	X
GOTOTIME		X	X	X	X	X
INCALLS	X	X	X	X	X	X
INCOMPLETE	X	X	X	X	X	X
INFLOWCALLS	X	X	X	X	X	X
INTERFLOWCALLS	X	X	X	X	X	X
INTIME	X	X	X	X	X	X
INTRVL	X	X	X	X	X	X
LOOKATTEMPTS		X	X	X	X	X
LOOKFLOWCALLS		X	X	X	X	X
OTHERCALLS	X	X	X	X	X	X
OTHERTIME	X	X	X	X	X	X
OUTFLOWCALLS	X	X	X	X	X	X
OUTFLOWTIME	X	X	X	X	X	X
PHANTOMABNS			X	X	X	X
RINGCALLS	X	X	X	X	X	X
RINGTIME	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
VDISCCALLS				X	X	X
VECTOR	X	X	X	X	X	X

VDN Database Items

Overview

⇒ NOTE:

VDN database items are available only if the Vectoring feature has been purchased and authorized for you to use.

The VDN Database Item descriptions (Table 3-15) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** or **Administrative (A)** data.

Historical VDN database items apply to the Intrahour VDN (*hvdn*), Daily VDN (*dvdn*), Weekly VDN (*wvdn*), and Monthly VDN (*mvdn*) tables. All items listed in Table 3-15 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four VDN tables are also noted in the Column Type column. The historical indexes are **ROW_DATE** and **VDN**.

VDN Database Items

Table 3-15 describes the data items in the CMS VDN database tables.

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS	The number of INCALLS that were abandoned while INPROGRESS (real-time table) for this VDN. This includes split/skill and direct agent ACD calls that abandon from queue or from ringing, calls that abandon from vector processing, calls that abandon after being routed to an extension via the "route to" vector command (for Generic 2.2, Generic 3 and later ECS), and calls that abandoned while listening to a forced disconnect announcement (for the Generic 2.1 and Generic 3 Version 1 ECS).	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ABNCALLS (contd)	ABNCALLS includes ACD calls and calls routed to an agent or extension with talk times less than the value of the phantom-abandoned call timer. ABNCALLS1-10, ABNQUECALLS, ABNRINGCALLS, PHANTOMABNS, and SLVLABNS are counted as ABNCALLS .	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ABNCALLS1-10	The number of INCALLS that abandoned in each of the service level increments PERIOD1 through PERIOD9 (as defined on the ACD Administration: VDN Call Profile Setup window). ABNCALLS10 counts calls that abandoned after PERIOD9 .	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ABNQUECALLS	The number of ABNCALLS that were abandoned while in a split/skill or direct agent ACD queue.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ABNRINGCALLS	The number of split/skill and direct agent ABNCALLS that were abandoned by the caller while ringing at an agent position. Available on Generic 2 and Generic 3 ECS.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ABNTIME	The length of time a caller waited before abandoning. The format is the number of seconds that have accumulated. For phantom-abandon calls, ABNTIME is the total time from entering the VDN until the agent released the call.	C	integer	4 bytes
ACCEPTABLE	The number of ACDCALLS and CONNECTCALLS that were answered within the acceptable service level (as defined on the ACD Administration: VDN Call Profile Setup window).	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACDCALLS	The number of split/skill and direct agent ACD calls that were answered by an agent. This includes calls from vector commands: “queue to main,” “check backup,” “messaging split/skill,” “route to” split/skill or direct agent, and “adjunct routing” to a split/skill or direct agent. ACDCALLS includes ACCEPTABLE , ANSCONNCALLS1-10 , BACKUPCALLS , and TRANSFERRED .	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ACDTIME	The talk time of all ACDCALLS , not including HOLDTIME . The format is the number of seconds that have accumulated. ACDTIME includes SKILLTIME1 through SKILLTIME3 .	C	integer	4 bytes
ACWTIME	The time that agents spent in ACW associated with split/skill or direct agent ACD calls. The format is the number of seconds that have accumulated. ACWTIME includes SKILLACWTIME1-3 .	C	integer	4 bytes
ADJATTEMPTS	The number of adjunct-routing attempts for calls to this VDN. ADJATTEMPTS includes ADJROUTED . Available on Generic 3 ECS with the Vectoring and ASAI features.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ADJROUTED	The number of adjunct routing calls that were redirected by the adjunct. Available on Generic 3 ECS with the Vectoring and ASAI features.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ANSCONNCALLS 1-10	The number of times that callers were answered (ACDCALLS) and connected (CONNECTCALLS) during each of the time periods (service level increments PERIOD1 through PERIOD9) set up for VDN call profiles. (ANSCONNCALLS10 counts calls answered or connected after PERIOD9 .) Answered/connected calls include split/skill and direct agent ACD calls and extension calls directed to an agent by a “route to” or “adjunct routing” vector command.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
ANSTIME	The time split/skill and direct agent ACD calls spent waiting to be answered, in vector processing, in queue, and ringing. For extension calls on Generic 2.1 ECS, ANSTIME is the time until ringing starts. The format is the number of seconds that have accumulated. ANSTIME includes RINGTIME .	C	integer	4 bytes
BACKUPCALLS	The number of ACDCALLS that were queued to the answering split/skill using a vector command other than “queue to main.” This includes calls delivered by “messaging,” “check backup,” and “route to split/skill” vector commands, and “redirect on no answer” routing. BACKUPCALLS includes “messaging split/skill” calls, “check backup” calls, and calls that route to a split/skill or direct agent, either by the “route to” vector command or by adjunct routing. Calls that are redirected back to the split/skill using the redirection on no answer feature and are subsequently answered are also counted as BACKUPCALLS . Available on Generic 2 and Generic 3 ECS and the ECS with the Vectoring feature.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
BH_ABNCALLS	The number of INCALLS that were abandoned by callers during the busy hour.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_ACDCALLS	The number of ACDCALLS that were completed during the busy hour.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_ACDTIME	The talk time of ACDCALLS that were completed during the busy hour. The format is the number of seconds that have accumulated.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_BUSYCALLS	The number of INCALLS that were given a busy signal by the ECS during the busy hour.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_DISCCALLS	The number of INCALLS that were disconnected by the ECS during the busy hour.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_INTERVAL	The defined interval length, with the start time, of the busy hour.	C	integer; only in dvdn table	4 bytes
BH_OTHERCALLS	The number of other incoming calls (OTHERCALLS) that were completed during the busy hour.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_STARTTIME	The starting time of the busy hour. The busy hour is that set of contiguous intervals comprising a total of one hour in which the number of INCALLS to the VDN reached a maximum for the day.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BH_VDNCALLS	The number of INCALLS to the VDN that completed during the busy hour.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
BUSYCALLS	<p>The number of INCALLS that were given a busy signal by the ECS. This can occur on all ECS releases through the "busy" vector command.</p> <p>On the Generic 3 ECS, BUSYCALLS can occur if a call is routed to a split/skill with coverage set to "yes" where there are no agents available, the queue is full (or there is no queue), there is no coverage, and an announcement has played or the trunk is not a CO trunk.</p> <p>Also on the Generic 3 ECS, BUSYCALLS can occur if a call is routed to a direct agent with coverage set to "yes," the agent is not logged in and there is no coverage path administered, an announcement has played, or the trunk is not a CO trunk.</p>	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
BUSYTIME	The duration of all BUSYCALLS (until the trunk goes idle). The format is the number of seconds that have accumulated.	C	integer	4 bytes
CONNECTCALLS	<p>The number of non-ACD INCALLS that were delivered to a station extension (other than a VDN or direct agent login ID) by a "route to" or "adjunct routing" vector command and were not abandoned by the callers.</p> <p>For Generic 2.1 ECS, non-ACD abandons are not tracked, so all calls that route to a station extension (other than a VDN) are included in CONNECTCALLS for that ECS release.</p> <p>CONNECTCALLS includes ANSCONNCALLS1-10.</p>	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
CONNECTTIME	The time CONNECTCALLS waited before being answered (for the Generic 3 ECS). For Generic 2 ECS, CONNECTTIME is the time before ringing starts. The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
CONNTALKTIME	The talk time for all CONNECTCALLS , not including HOLDTIME (except on Generic 2.1). The format is the number of seconds that have accumulated.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
DISCCALLS	<p>With Generic 2.2, Generic 3 Version 2 and later Generic 3 ECS releases, the number of INCALLS that executed the “disconnect” vector command.</p> <p>With Generic 2.1 and Generic 3 Version 1 ECS, the number of INCALLS that were given a forced disconnect announcement by the “disconnect” vector command and listened to the entire announcement, then were disconnected by the ECS.</p> <p>With Generic 3 Version 2 and later Generic 3 ECS and with the ECS, the number also includes calls disconnected due to the expiration of the vector disconnect timer and those that were disconnected because they reached the end of vector processing without being queued.</p> <p>DISCCALLS includes VDISCCALLS.</p>	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
DISCTIME	<p>The time all DISCCALLS spent in this VDN. The time until the trunk drops following the forced disconnect command for those calls recorded as DISCCALLS. The format is the number of seconds that have accumulated.</p> <p>For Generic 2.2, Generic 3 Version 2 and later Generic 3 ECS releases, if the caller hangs up during the forced disconnect announcement, this is the time until the caller hangs up.</p> <p>For Generic 2.1 and Generic 3 Version 1 ECS, DISCTIME is the time until the announcement ends and the caller is disconnected by the ECS.</p>	C	integer	4 bytes

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
HOLDABNCALLS	The number of times that callers abandoned while on hold. For Generic 2.2 and Generic 3 ECS, HOLDABNCALLS includes all calls abandoned from hold. For Generic 2.1 ECS, HOLDABNCALLS includes only split calls abandoned from hold.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
HOLDACDCALLS	The number of split/skill or direct agent ACD calls that were placed on hold at least one time.	C	integer	4 bytes
HOLDACDTIME	The amount of time split/skill or direct agent ACD callers spent on hold. The format is the number of seconds that have accumulated.	C	integer	4 bytes
HOLDCALLS	The number of calls that were placed on hold at least once. For Generic 2.2 and Generic 3 ECS, HOLDCALLS includes all calls placed on hold. For Generic 2.1 ECS, HOLDCALLS includes only split calls placed on hold. HOLDCALLS includes HOLDABNCALLS and HOLDACDCALLS .	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
HOLDTIME	The time that callers spent on hold. For Generic 2.2 and Generic 3 ECS and for the ECS, HOLDTIME includes the calls put on hold. For Generic 2.1 ECS, HOLDTIME includes only the split calls put on hold. The format is the number of seconds that have accumulated. HOLDTIME includes HOLDACDTIME .	C	integer	4 bytes
I_ARRIVED	The number of calls that reached the VDN during the interval.	C	integer	4 bytes

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INCALLS	The number of inbound calls that were directed to this VDN. INCALLS includes ABNCALLS , INFLOWCALLS , OTHERCALLS , RETURNCALLS , and RINGCALLS (which includes ACDCALLS). INCALLS = ACDCALLS + ABNCALLS + BUSYCALLS + DISCCALLS + OUTFLOWCALLS + OTHERCALLS	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
INCOMPLETE	This indicates if data are complete for this collection interval. Data is incomplete whenever the link goes down and whenever tracking is aborted for calls, due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS and the ECS), protocol failures, or if change VDN call profile with data collection is active. The value for interval tables indicates whether data are incomplete for the interval 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month, respectively.	C	smallint	2 bytes
INFLOWCALLS	The number of calls that were redirected into the VDN by way of a "route to" VDN command, or by Redirection on No Answer to this VDN from another VDN.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
INTERFLOWCALLS	The number of OUTFLOWCALLS that were redirected to a destination outside the ECS. INTERFLOWCALLS includes LOOKFLOWCALLS .	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
INTIME	<p>The time spent by INCALLS in this VDN. The format is the number of seconds that have accumulated.</p> <p>For Generic 2.2 and Generic 3 ECS, and for the ECS, INTIME = ACDTIME + ABNTIME + ANSTIME + HOLDTIME + OTHERTIME. However, on Generic 2.1 ECS, there are multiple call-handling scenarios in which call-based ACDTIME is stopped before the call ends. In these scenarios, INTIME does not add up to ACDTIME + ABNTIME + ANSTIME + OTHERTIME + HOLDTIME. (The scenarios occur when an agent puts an ACD call on hold using the HOLD button when another ACD call is already on hold, or when a call is dropped while an ACD call is on hold.)</p>	C	integer	4 bytes
INTRVL	The number of minutes in the interval (15, 30, 60). INTRVL applies to intrahour intervals only.	A	smallint; only in hvdn table	2 bytes
LOOKATTEMPTS	<p>The number of look-ahead interflow attempts for calls in this VDN.</p> <p>LOOKATTEMPTS includes LOOKFLOWCALLS.</p> <p>Available on Generic 2.2 and Generic 3 ECS with the Vectoring and Look-Ahead Interflow features.</p>	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
LOOKFLOWCALLS	<p>The number of INTERFLOWCALLS that were redirected by way of the look-ahead interflow feature.</p> <p>Available on Generic 2.2 and Generic 3 ECS with the Vectoring and Look-Ahead Interflow features.</p>	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
MAXOCWTIME	The maximum time during the collection interval that a caller waited in the VDN before being answered (ACD calls) or connected (non-ACD calls), abandoning, being redirected, receiving a busy signal or being disconnected. This applies only to the first disposition of the call. The format is the number of seconds that have accumulated.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
MAXWAITING	The maximum number of calls simultaneously in queue, in vector processing, and ringing simultaneously on the VDN during the collection interval. The maximum number of calls in the VDN not at agents.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
NOANSREDIR	The number of split/skill and direct agent ACD calls that rang at agent positions and then were automatically redirected by the redirection on no answer feature because they were not answered. Available on Generic 3 Version 2 and later ECS.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
OTHERCALLS	The number of calls offered to this VDN that did not abandon and were not answered by a direct ACD agent or by split/skill. OTHERCALLS includes forced busy calls, forced disconnect calls, outflowed calls, and non-ACD calls that were answered (CONNECTCALLS). OTHERCALLS = INCALLS - ACDCALLS - ABNCALLS	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
OTHERTIME	The duration of all OTHERCALLS from entering the VDN until the calls leave the VDN (the calls drop, are sent to another VDN, are transferred, or are sent outside the ECS). The format is the number of seconds that have accumulated. OTHERTIME includes BUSYTIME , CONNECTTIME , CONNTALKTIME , DISCTIME , and OUTFLOWTIME .	C	integer	4 bytes

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
OUTFLOWCALLS	The number of INCALLS that were redirected to another VDN or to a destination outside the ECS by way of a “route to” or “adjunct routing” command, or were redirected on no answer to a VDN. Note that calls are counted as outflows from the VDN only when they are redirected to another VDN or to a destination outside the ECS, not when they are routed to other destinations, such as splits/skills or extensions. OUTFLOWCALLS includes INTERFLOWCALLS and SLVLOUTFLOWS .	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
OUTFLOWTIME	The time all OUTFLOWCALLS spent in this VDN before being redirected. The format is the number of seconds that have accumulated.	C	integer	4 bytes
PERIOD1-9	The length of time, in seconds, of each service level increment that has been administered for VDN call profiles. Each increment represents a progressively longer wait time. Calls that wait a longer length of time (beyond the last of these nine increments) are counted in either ANSCONNCALLS10 or ABNCALLS10 .	A	smallint	2 bytes
PERIODCHG	This indicates if the time periods defined for call profiles were changed during the data collection interval. Valid values for PERIODCHG are YES and NO. Row search values for PERIODCHG are: 1 = YES, 2 = NO	A	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
PHANTOMABNS	The number of split/skill and direct agent ACD calls and calls that routed to an agent or extension with talk time of less than the value set for the phantom-abandoned call timer. Available on Generic 3 ECS.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
RETURNCALLS	The number of calls that reached this VDN via the VDN return destination feature. Available on Generic 3 Version 3 and later ECS releases.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
RINGCALLS	The number of split/skill and direct agent ACD calls that rang at agent positions. RINGCALLS includes ACDCALLS . Available on Generic 2 and Generic 3 ECS releases.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
RINGTIME	The time split/skill and direct agent ACD calls spent ringing at agent positions, independent of final disposition. The format is the number of seconds that have accumulated. Available on Generic 2 and Generic 3 ECS releases.	C	integer	4 bytes
ROW_DATE (index)	The date for which data were collected.	A	date	4 byte <i>Informix</i> date
SERVICELEVEL	The number of seconds in which calls must be answered/connected to be considered acceptable for this VDN.	A	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
SKILLACWTIME1-3	The ACW time spent by agents for calls answered in each VDN skill preference. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 Version 2 ECS with EAS.	C	integer	4 bytes
SKILLCALLS1-3	Number of calls answered by agents in each VDN skill preference. Available on Generic 2.2 and Generic 3 ECS with EAS.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
SKILLTIME1-3	Time agents spent talking on calls they answered in each VDN skill preference. The format is the number of seconds that have accumulated. Available on Generic 2.2 and Generic 3 ECS with EAS.	C	integer	4 bytes
SKILL1-3	First, second, and third VDN skill assigned to this VDN. Available on Generic 2.2 and Generic 3 ECS with the EAS feature.	A	smallint	2 bytes
SLVLABNS	The number of ABNCALLS whose time to abandon was less than or equal to the time increment administered as this VDN's SERVICELEVEL .	C	integer	4 bytes
SLVLOUTFLOWS	The number of OUTFLOWCALLS whose time to outflow was less than or equal to the time increment administered as this VDN's SERVICELEVEL .	C	integer	4 bytes
STARTTIME (Index)	The start time of the interval for which data were collected. (Interval table only.) The format is military time.	A	smallint; only in hvdn table	2 bytes
SVCLEVELCHG	This indicates if the service level was changed during the data collection interval. Valid values for SVCLEVELCHG are YES and NO. Row search values for SVCLEVELCHG are: 1 = YES, 2 = NO	A	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
TRANSFERRED	The number of calls that were transferred to another destination. For Generic 2.2 and Generic 3 ECS and for the ECS, TRANSFERRED includes all VDN calls that were transferred. For Generic 2.1 ECS, TRANSFERRED includes all VDN calls blind transferred to a measured VDN or split.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table

Table 3-15: VDN Database Items (dvdn, mvdn, hvdn, wvdn Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
VDISCCALLS	The number of calls forced disconnected because the vector disconnect timer timed out, or because the call reached a vector stop without being queued. (“Vector stop” means a “stop” vector command, the end of the vector, or the one-thousandth vector step executed.) Available on Generic 3 Version 2 and later ECS.	C	integer; smallint in hvdn table	4 bytes; 2 bytes in hvdn table
VDN (index)	The VDN (extension) that this row represents.	A	char(6)	6 byte ASCII text string
VECTOR (index)	The number of the vector to which this VDN is assigned.	A	smallint	2 bytes

ECS Cross-Reference

Table 3-16 lists which of the ECS releases support each VDN database item.

Table 3-16: ECS Cross-Reference for VDN Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ABNCALLS	X	X	X	X	X	X
ABNCALLS1-10	X	X	X	X	X	X
ABNQUECALLS	X	X	X	X	X	X
ABNRINGCALLS	X	X	X	X	X	X
ABNTIME	X	X	X	X	X	X
ACCEPTABLE	X	X	X	X	X	X
ACD	X	X	X	X	X	X
ACDCALLS	X	X	X	X	X	X
ACDTIME	X	X	X	X	X	X

Table 3-16: ECS Cross-Reference for VDN Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ACWTIME	X	X	X	X	X	X
ADJATTEMPTS			X	X	X	X
ADJROUTED			X	X	X	X
ANSCONNCALLS1-10	X	X	X	X	X	X
ANSTIME	X	X	X	X	X	X
BH_ABNCALLS	X	X	X	X	X	X
BH_ACDCALLS	X	X	X	X	X	X
BH_ACDTIME	X	X	X	X	X	X
BH_BUSYCALLS	X	X	X	X	X	X
BH_DISCCALLS	X	X	X	X	X	X
BH_INTERVAL	X	X	X	X	X	X
BH_OTHERCALLS	X	X	X	X	X	X
BH_STARTTIME	X	X	X	X	X	X
BH_VDNCALLS	X	X	X	X	X	X
BACKUPCALLS	X	X	X	X	X	X
BUSYCALLS	X	X	X	X	X	X
BUSYTIME	X	X	X	X	X	X
CONNECTCALLS	X	X	X	X	X	X
CONNECTTIME	X	X	X	X	X	X
CONNTALKTIME	X	X	X	X	X	X
DISCCALLS	X	X	X	X	X	X
DISCTIME	X	X	X	X	X	X
HOLDABNCALLS	X	X	X	X	X	X
HOLDACDCALLS	X	X	X	X	X	X
HOLDACDTIME	X	X	X	X	X	X
HOLDCALLS	X	X	X	X	X	X
HOLDTIME	X	X	X	X	X	X

Table 3-16: ECS Cross-Reference for VDN Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
I_ARRIVED	X	X	X	X	X	X
INCALLS	X	X	X	X	X	X
INCOMPLETE	X	X	X	X	X	X
INFLOWCALLS	X	X	X	X	X	X
INTERFLOWCALLS	X	X	X	X	X	X
INTIME	X	X	X	X	X	X
INTRVL	X	X	X	X	X	X
LOOKATTEMPTS		X	X	X	X	X
LOOKFLOWCALLS		X	X	X	X	X
MAXOCWTIME	X	X	X	X	X	X
MAXWAITING	X	X	X	X	X	X
NOANSREDIR				X	X	X
OTHERCALLS	X	X	X	X	X	X
OTHERTIME	X	X	X	X	X	X
OUTFLOWCALLS	X	X	X	X	X	X
OUTFLOWTIME	X	X	X	X	X	X
PERIOD1-9	X	X	X	X	X	X
PERIODCHG	X	X	X	X	X	X
PHANTOMABNS			X	X	X	X
RETURNCALLS				X (V3)	X	X
RINGCALLS	X	X	X	X	X	X
RINGTIME	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SERVICELEVEL	X	X	X	X	X	X
SKILL1-3		(EAS)		(EAS)	(EAS)	(EAS)
SKILLACWTIME1-3		(EAS)		(EAS)	(EAS)	(EAS)
SKILLCALLS1-3		(EAS)		(EAS)	(EAS)	(EAS)

Table 3-16: ECS Cross-Reference for VDN Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
SKILLTIME1-3		(EAS)		(EAS)	(EAS)	(EAS)
SLVLABNS	X	X	X	X	X	X
SLVLOUTFLOWS	X	X	X	X	X	X
STARTTIME	X	X	X	X	X	X
SVCLEVELCHG	X	X	X	X	X	X
TRANSFERRED	X	X	X	X	X	X
VDISCCALLS				X	X	X
VDN	X	X	X	X	X	X
VECTOR	X	X	X	X	X	X

Call Work Codes Database Items

Overview

⇒ NOTE:

Call work codes are only available with Generic 3 and Generic 2.2 ECS. The Call Work Codes database item descriptions (Table 3-17) apply to historical items.

The **Data Type** column refers to **Cumulative (C)** or **Administrative (A)** data.

Historical call work codes database items apply to the Intrahour Call Work Codes (*hcwc*), Daily Call Work Codes (*dcwc*), Weekly Call Work Codes (*wcwc*), and Monthly Call Work Codes (*mcwc*) tables. All items listed in Table 3-17 are included in all four tables, unless otherwise noted in the Column Type column. Any differences in the data format between the four call work codes tables are also noted in the Column Type column. The indexes are **ACD**, **ROW_DATE** and **CWC**.

Call Work Codes Database Items

Table 3-17 describes the data items in the CMS Call Work Codes database table.

Table 3-17: Call Work Codes Database Items (dcwc, mcwc, hcwc, wcwc Tables)

Database Item	Description	Data Type	Column Type	Length
ACD (index)	The ACD number for which data were collected.	A	smallint	2 bytes
ACDCALLS	The number of times this call work code was entered while an agent was on a split/skill or direct agent ACD call or in call-related ACW.	C	integer; smallint in hcwc table	4 bytes; 2 bytes in hcwc table
ACDTIME	The talk time of all ACDCALLS associated with this call work code. The format is the number of seconds that have accumulated.	C	integer	4 bytes

Table 3-17: Call Work Codes Database Items (dcwc, mcwc, hcwc, wcwc Tables) (Contd)

Database Item	Description	Data Type	Column Type	Length
ACWTIME	The time the agent spent in ACW for ACDCALLS that were associated with this call work code. The format is the number of seconds that have accumulated.	C	integer	4 bytes
CWC (index)	The call work code for which data were collected.	A	char(16)	16 byte ASCII text string
INCOMPLETE	This indicates if data collection is complete for this interval. Data collection is incomplete whenever the link goes down and whenever tracking is aborted for calls, due to trunk failures (Generic 2 ECS), the trunk going maintenance busy with a call active (Generic 3 ECS), or protocol failures. The value for interval tables indicates whether data collection is incomplete for the interval: 0 = data complete 1 = data incomplete The value in the daily, weekly, and monthly tables indicates the number of incomplete intervals in the day, week, or month.	C	smallint	2 bytes
INTRVL	The number of minutes in the intrahour interval (15, 30, or 60). INTRVL applies to intrahour intervals only.	A	smallint; in hcwc table only	2 bytes
ROW_DATE (index)	The day for which data were collected.	C	date	4 byte <i>Informix</i> date
STARTTIME	The start time for the interval for which data were collected. The format is military time. STARTTIME applies to the intrahour table only.	C	smallint; in hcwc table only	2 bytes

ECS Cross-Reference

Table 3-18 lists which of the ECS releases support each Call Work Code database item.

Table 3-18: ECS Cross-Reference for Call Work Codes

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
ACD		X	X	X	X	X
ACDCALLS		X	X	X	X	X
ACDTIME		X	X	X	X	X
ACWTIME		X	X	X	X	X
CWC		X	X	X	X	X
INCOMPLETE		X	X	X	X	X
INTRVL		X	X	X	X	X
ROW_DATE		X	X	X	X	X
STARTTIME		X	X	X	X	X

Agent Login/Logout Database Items

Overview

The Agent Login/Logout database item descriptions (Table 3-19) are **historical** items. They apply to the Agent Login/Logout (`haglog`) table. The indexes are **ACD**, **SEQ_NUM**, **SPLIT** and **ROW_DATE**.

Agent Login/Logout Database Items

Table 3-19 describes the data items in the CMS Agent Login/Logout database table.

Table 3-19: Agent Login/Logout Database Items (haglog Table)

Database Item	Description	Column Type	Length
ACD (index)	The ACD number for which data were collected.	smallint	2 bytes
EXTN	The extension number of the station that the agent staffed.	char(6)	6 byte ASCII text string
INFLAG	If not null, indicates that the agent was already logged in when the link came up. Values are NULL and < (not null).	char(1)	1 byte ASCII text string
LOGID	The Login ID that was used to staff the extension. Agents in multiple splits/skills have one LOGID .	char(10)	10 byte ASCII text string
LOGIN	The time at which the agent logged into this extension and split/skill with the given login ID.	integer	4 bytes
LOGONSKILL2-20	The skill number of the agent's second through twentieth skills. The number of skills per agent depends on the type of ECS. Available on Generic 2.2 and Generic 3 ECS with EAS.	smallint	2 bytes
LOGOUT	The time at which the agent logged out.	integer	4 bytes

Table 3-19: Agent Login/Logout Database Items (hagalog Table) (Contd)

Database Item	Description	Column Type	Length
LOGOUT_DATE	The date on which the agent logged out.	date	4 byte <i>Informix</i> date
LOGOUT_REASON	The reason code (0 through 9) associated with the agent's logout. For ECS releases earlier than Generic 3 R5 that do not have the EAS feature and reason codes active, this field will always contain 0 when the agent has logged out.	smallint	2 bytes
OUTFLAG	If not null, indicates that the agent logged out while the link was down. Values are NULL and < (not null).	char(1)	1 byte ASCII text string
ROW_DATE (index)	The date the agent logged in.	date	4 byte <i>Informix</i> date
SEQ_NUM (index)	The sequence number of this record.	integer	4 bytes
SKILLTYPE	The type (primary or secondary) of the first skill the agent logged into. Because skill level 1 is primary, skill level 2 is secondary, and skill levels 3 through 16 are blank on the ECS R5 and later, it is recommended that you use SKLEVEL instead of SKILLTYPE . Available on Generic 3 Version 2 and later Generic 3 ECS with EAS.	char(1)	1 byte ASCII text string
SKILLTYPE2-4	The type (primary or secondary) of the second skill the agent logged into, the third skill the agent logged into, and the fourth skill the agent logged into. Recommended only for Generic 3 Version 2 and later Generic 3 ECS. Available on Generic 3 Version 2 and later Generic 3 ECS with EAS.	char(1)	1 byte ASCII text string
SKLEVEL	The skill level (1 through 16) associated with SPLIT .	smallint	2 bytes
SKLEVEL2-20	The skill levels (1 through 16) associated with LOGONSKILL2 through LOGONSKILL20 .	smallint	2 bytes
SPLIT (index)	The split number to which the extension is assigned or first skill number that the agent logged into.	smallint	2 bytes

ECS Cross-Reference

Table 3-20 lists which of the ECS releases support each Agent Login/Logout database items.

Table 3-20: ECS Cross-Reference for Agent Login/Logout Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ACD	X	X	X	X	X	X
EXTN	X	X	X	X	X	X
INFLAG	X	X	X	X	X	X
LOGID	X	X	X	X	X	X
LOGIN	X	X	X	X	X	X
LOGONSKILL2-4		(EAS)		(EAS)	(EAS)	(EAS)
LOGONSKILL5		(EAS)				(EAS)
LOGONSKILL6-20						(EAS)
LOGOUT	X	X	X	X	X	X
LOGOUT_DATE	X	X	X	X	X	X
LOGOUTREASON						(EAS)
OUTFLAG	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SEQ_NUM	X	X	X	X	X	X
SKILLTYPE				X (EAS)	X (EAS)	*
SKILLTYPE2-4				X (EAS)	X (EAS)	*
SKLEVEL				X (EAS)	X (EAS)	X (EAS)
SKLEVEL2-4				X (EAS)	X (EAS)	X (EAS)
SKLEVEL5-20						X (EAS)
SPLIT	X	X	X	X	X	X

* Not recommended.

Agent Trace Database Items

Overview

The Agent Trace database item descriptions (Table 3-21) are **historical** items. They apply to the Agent Trace (*ag_actv*) table. The indexes are **ACD**, **LOGID**, **SEQ_NUM**, and **ROW_DATE**.

Agent Trace Database Items

Table 3-21 describes the data items in the CMS Agent Trace database table.

Table 3-21: Agent Trace Database Items (ag_actv Table)

Database Item	Description	Column Type	Length
ACD (index)	The ACD number for which data were collected.	smallint	2 bytes
AGT_RELEASED	The agent released or dropped the split/skill or direct agent ACD call. This is always true for ACD calls the agent transferred or conferenced. Available on Generic 3 and later ECS.	char(1)	1 byte ASCII text string
ASSIST_ACTV	The agent requested supervisor assistance (pressed ASSIST key).	char(1)	1 byte ASCII text string
AUXREASON	The reason code associated with the agent's change to AUX mode. For agents in AUX on ECS releases earlier than Generic 3 R5 or on ECS releases that do not have the EAS feature and reason codes active, this will be 0.	smallint	2 bytes
CALLER_HOLD	The agent put the current call on hold. For Generic 2.1 ECS, CALLER_HOLD applies to split ACD calls. For Generic 2.2 and Generic 3 ECS, CALLER_HOLD applies to all calls.	char(1)	1 byte ASCII text string
CALLING_II	The Information Indicator (II) digits associated with the call. These digits supply information about the originator location; for example, pay phone, hospital, or prison. Available on Generic 3 R5 and later ECS.	char(2)	2 byte ASCII text string

Table 3-21: Agent Trace Database Items (ag_actv Table) (Contd)

Database Item	Description	Column Type	Length
CALLING_PTY	The calling party identification. This is the Automatic Number Identification/Station Identification (ANI/SID), for Generic 2.2 and Generic 3 Version 4 and later ECS with ISDN ANI delivery. Otherwise, it is the extension or trunk equipment location identifying the originator of the call. The field is blank if the trunk is not measured or, for internal calls, if the originating extension is not measured.	char(12)	12 byte ASCII text string
CONFERENCE	The agent activated a conference. Available on Generic 3 and Generic 2.2 ECS.	char(1)	1 byte ASCII text string
DIGITS_DIALED	The digits the agent dialed to originate a call. Trunk access codes, feature access codes, account and authorization codes are not included. Available on Generic 2.2 and Generic 3 ECS.	char(16)	16 byte ASCII text string
DIRECTION	The direction of the call the agent is currently handling for any split/skill (IN, or OUT, or as defined in Dictionary). If the agent is not on a call, the value is blank (NULL).	smallint	2 bytes
DURATION	The duration of current WORKMODE and DIRECTION for this split (that is, length of time in current AGSTATE for this split).	integer	4 bytes
EVENT_TIME	The time of day (hour, minute, and second) the WORKMODE or DIRECTION changed.	integer	4 bytes
EXT_CALL_ORIG	The agent originated an external (off-ECS) call. Available on Generic 2.2 and Generic 3 ECS.	char(1)	1 byte ASCII text string
KEYBD_DIALED	The call was keyboard dialed. Available on Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.	char(1)	1 byte ASCII text string

Table 3-21: Agent Trace Database Items (ag_actv Table) (Contd)

Database Item	Description	Column Type	Length
LOGID (index)	The Login ID that was used to staff the extension. Agents in multiple splits/skills have one LOGID .	char(10)	10 byte ASCII text string
LOGOUTREASON	The reason code associated with the agent's logout. For ECS releases earlier than Generic 3 R5 or ECS releases that do not have the EAS feature and reason codes active, this field will always contain 0 when the agent has logged out.	smallint	2 bytes
MCT	The agent activated a malicious call trace. Available on Generic 2 and Generic 3 (except for Generic 3 Version 1) ECS.	char(1)	1 byte ASCII text string
RECONNECT	This event represents the agent reconnecting to the call after putting it on hold. Available on Generic 2 and Generic 3 ECS.	char(1)	1 byte ASCII text string
ROW_DATE (index)	The date the event (WORKMODE or DIRECTION change) took place.	date	4 byte <i>Informix</i> date
SEQ_NUM (index)	The sequence number of this event.	integer	4 bytes
SPLIT	The split number that the agent's extension is assigned to or skill number associated with the agent's current ACD call or ACW session.	smallint	2 bytes
STARTTIME	The time of day (hour and minute) for which the agent trace report is being ordered. This is the time of day you enter to request the report.	smallint	2 bytes
TRANSFERRED	The agent transferred the call. For Generic 2.1 ECS, TRANSFERRED includes calls transferred to a measured VDN or split. For Generic 3 and Generic 2.2 ECS, TRANSFERRED includes all calls that were transferred.	char(1)	1 byte ASCII text string
WMODE_SEQ	The sequence number for events that occur in the same second.	smallint	2 bytes

Table 3-21: Agent Trace Database Items (ag_actv Table) (Contd)

Database Item	Description	Column Type	Length
WORKCODE	The call work code the agent entered for the call. Available on Generic 3 and Generic 2.2 ECS with call work codes.	char(16)	16 byte ASCII text string
WORKMODE	The work mode in which the agent was working during the trace. Agent work modes include AVAIL, ACD, ACW, AUX, DACD, DACW, RING, UNKNOWN, OTHER, and UNSTAFF. (If the agent was not logged in, there are no trace records.)	smallint	2 bytes

ECS Cross-Reference

Table 3-22 lists which of the ECS releases support each Agent Trace database item.

Table 3-22: ECS Cross-Reference for Agent Trace Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
ACD	X	X	X	X	X	X
AGT_RELEASED			X	X	X	X
ASSIST_ACTV	X	X	X	X	X	X
AUXREASON	X	X	X	X	X	X
CALLER_HOLD	X	X	X	X	X	X
CALLING_II						X
CALLING_PTY	X	X	X	X	X	X
CONFERENCE		X	X	X	X	X
DIGITS_DIALED		X	X	X	X	X
DIRECTION	X	X	X	X	X	X
DURATION	X	X	X	X	X	X
EVENT_TIME	X	X	X	X	X	X

Table 3-22: ECS Cross-Reference for Agent Trace Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
EXT_CALL_ORIG		X	X	X	X	X
KEYBD_DIALED		X	X	X	X	X
LOGID (index)	X	X	X	X	X	X
LOGOUTREASON	X	X	X	X	X	X
MCT	X	X	X	X	X	X
RECONNECT	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SEQ_NUM	X	X	X	X	X	X
SPLIT	X	X	X	X	X	X
STARTTIME	X	X	X	X	X	X
TRANSFERRED	X	X	X	X	X	X
WMODE_SEQ	X	X	X	X	X	X
WORKCODE		X	X	X	X	X
WORKMODE	X	X	X	X	X	X

Current Day Configuration Forecast Database Items

Overview

The Current Day Configuration database item descriptions (Table 3-23) are **historical** items used to collect values entered in the Forecast: Current Day window. They apply to the Current Day (`f_cday`) table. The indexes are **ACD**, **ROW_DATE** and **SPLIT**.

Current Day Configuration Forecast Database Items

Table 3-23 describes the data items in the CMS Current Day Configuration Forecast database table.

Table 3-23: Current Day Configuration Database Items (f_cday Table)

Database Item	Description	Column Type	Length
ACD (index)	The ACD number for which data were collected.	smallint	2 bytes
CHANGE	The additional change factor percentage.	smallfloat	4 byte <i>Informix</i> floating point type
CHPROF	The number of the call handling profile to use.	smallint	2 bytes
FMETHOD	The type of trending to use for forecast. Values are: 0 = none 1 = seasonal 2 = current trending	smallint	2 bytes
HDATE1-4	The date of the first through fourth days of historical data to be used.	date	4 byte <i>Informix</i> date
ROW_DATE (index)	The date of the forecast.	date	4 byte <i>Informix</i> date

Table 3-23: Current Day Configuration Database Items (f_cday Table) (Contd)

Database Item	Description	Column Type	Length
SPLIT (index)	The split/skill number.	smallint	2 bytes
TRENDBASE	The base date for seasonal trending.	date	4 byte <i>Informix</i> date
WT1	The weight given to date 1-4 (0-10) for the historical data.	smallint	2 bytes

ECS Cross-Reference

Table 3-24 lists which of the ECS releases support each of the Current Day Configuration database items.

Table 3-24: ECS Cross-Reference for Current Day Configuration Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
ACD	X	X	X	X	X	X
CHANGE	X	X	X	X	X	X
CHPROF	X	X	X	X	X	X
FMETHOD	X	X	X	X	X	X
HDATE1-4	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
SPLIT	X	X	X	X	X	X
TRENDBASE	X	X	X	X	X	X
WT1-4	X	X	X	X	X	X

Current Day Forecast Report Database Items

Overview

The Current Day Forecast Report database item descriptions (Table 3-25) are **historical** items used to collect values displayed in the Current Day Forecast report, and they apply to the Current Day Report (`f_cdayrep`) table. The indexes are **ACD**, **ROW_DATE** and **SPLIT**.

Forecast data for a split/skill are automatically generated when the Forecast Manager runs (if you have also completed a Current Day Configuration for the split/skill).

Current Day Forecast Report Database Items

Table 3-25 describes the data items in the CMS Current Day Forecast Report database table.

Table 3-25: Current Day Forecast Report Database Items (f_cdayrep Table)

Database Item	Description	Column Type	Length
ACD (index)	The ACD number for this current day data.	smallint	2 bytes
AGOCC	The objective maximum percentage of time that an agent will be on ACD calls (agent occupancy).	smallfloat	4 byte <i>Informix</i> floating point type
AVGAGSERV	The objective average number of seconds for an agent to service a call.	smallint	2 bytes
AVGSPEEDANS	The objective average speed of answer in seconds for this type of call.	smallint	2 bytes
FCALLS	The number of forecast calls carried.	integer	4 bytes
INTRVL	The length of intrahour interval (15, 30, or 60 minutes).	smallint	2 bytes
NUMAGREQ	The number of agents required to handle FCALLS .	smallint	2 bytes

Table 3-25: Current Day Forecast Report Database Items (f_cdayrep Table) (Contd)

Database Item	Description	Column Type	Length
RAGOCC	The resulting maximum percentage of time that an agent will be on ACD calls.	smallfloat	4 byte <i>Informix</i> floating point type
RAVGSPEEDANS	The resulting average speed of answer in seconds for this type of call.	smallint	2 bytes
ROW_DATE (index)	The date of the forecast.	date	4 byte <i>Informix</i> date
RSERVLEVELP	The resulting percentage of calls to be handled within SERVLEVELT seconds.	smallfloat	4 byte <i>Informix</i> floating point type
SERVLEVELP	The objective percentage of calls to be handled within SERVLEVELT seconds.	smallfloat	4 byte <i>Informix</i> floating point type
SERVLEVELT	The number of seconds within which SERVLEVELP percent of calls are to be answered (service level time).	smallint	2 bytes
SPLIT (index)	The split/skill number.	smallint	2 bytes
STARTTIME	The start of intrahour interval (on 24-hour clock).	smallint	2 bytes

ECS Cross-Reference

Table 3-26 lists which of the ECS releases support each Current Day Report database items.

Table 3-26: ECS Cross-Reference for Current Day Report Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	<i>DEFINITY</i> R5 ECS
ACD	X	X	X	X	X	X
AGOCC	X	X	X	X	X	X
AVGAGSERV	X	X	X	X	X	X
AVGSPEEDANS	X	X	X	X	X	X
FCALLS	X	X	X	X	X	X
INTRVL	X	X	X	X	X	X
NUMAGREQ	X	X	X	X	X	X
RAGOCC	X	X	X	X	X	X
RAVGSPEEDANS	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
RSERVLEVELP	X	X	X	X	X	X
SERVLEVELP	X	X	X	X	X	X
SERVLEVELT	X	X	X	X	X	X
SPLIT	X	X	X	X	X	X
STARTTIME	X	X	X	X	X	X

Call Record Database Items

Overview

The Call Record database item descriptions (Table 3-27) are **historical** items. They apply to the Call Record (`call_rec`) table. The indexes are **ACD**, **ROW_DATE**, and **SEQ_NUM**.

Call Record Database Items

Table 3-27 describes the database items in the CMS Call Record database table.

Table 3-27: Call Record Database Items (call_rec Table)

Database Item	Description	Column Type	Length
ACD (index)	The number of the ACD that handled this call.	smallint	2 bytes
ACWTIME	The time spent, in seconds, in ACW related to this call by the answering agent in this segment.	integer	4 bytes
AGT_RELEASED	The agent released or dropped the split/skill or direct agent ACD call. This is always true for ACD calls the agent transferred or conferenced. Available on Generic 3 ECS.	smallint	2 bytes
ANSHOLDTIME	The total time in seconds the call was put on hold by the answering agent in this call segment. Note that in agent-to-agent calls, ANSHOLDTIME is accrued for the answering agent if the agent puts the call on hold, but not for the other agent (who continues to accrue talk time). For Generic 2.1 ECS, ANSHOLDTIME includes the split ACD calls held. For Generic 2.2 and Generic 3 ECS, ANSHOLDTIME includes the time all calls held.	integer	4 bytes
ANSLOGIN	The login ID of the agent who answered the call in this segment. This field is blank for unmeasured extensions when EAS is not active.	char(9)	9 byte ASCII text string

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
ANSREASON	The reason code (0-9) associated with the answering agent's mode, if the agent is in the AUX mode. For agents in AUX on ECS with releases that are earlier than the ECS R5 or that do not have EAS and reason codes active, this will only be 0.	smallint	2 bytes
ASSIST	Indicates if the answering agent in this segment requested supervisor assistance on this call (YES or NO).	smallint	2 bytes
AUDIO	Indicates if an agent in this segment reported an audio difficulty problem (YES or NO).	smallint	2 bytes
CALLID	A unique number assigned to this call and all its segments. Note that in the case of a conference or transfer, when the data for the conference/transfer is recorded, the same call ID will be recorded for all call segments of the conference/transfer. Note that in the case of "meet-me" conferences, this may result in higher-numbered segments of the call starting before the first segment on the call. Call IDs are not necessarily strictly sequential, but will be unique for calls over a day.	integer	4 bytes
CALLING_II	The Information Indicator (II) digits associated with the call. These digits supply information about the originator location; for example, pay phone, hospital, prison. Available on the ECS and later switches.	char(2)	2 byte ASCII text string
CALLING_PTY	The Automatic Number Identification (ANI)/Station Identification (SID) (Generic 2.2 or Generic 3 Version 4 or later Generic 3 ECS with ANI delivery), extension or trunk equipment location identifying the originator of the call. This field is blank if the trunk is not measured or, for internal calls, if the originating extension is not measured. (Up to 12 digits in this field.)	char(12)	12 byte ASCII string
CONFERENCE	Indicates if this call segment represents part of a conference (YES or NO). Available on Generic 3 and Generic 2.2 ECS.	smallint	2 bytes

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
CONSULTTIME	The time an agent talked on any outbound call, while in AVAILABLE, in AUX work or in ACW. This includes the time the originating agent spent talking to the destination party while establishing a conference or transferring a call. (This is the time between presses of the transfer or conference button.) It includes wait time if the agent is calling a VDN or split/skill extension, but the wait time can be subtracted out by subtracting the DISPTIME item from CONSULTTIME . The format is the amount of time in seconds.	integer	4 bytes
DA_QUEUED	Indicates if the call was queued as a direct agent call (YES or NO). Applies to Generic 3 ECS only.	smallint	2 bytes
DIALED_NUM	The number the caller dialed (up to 24 digits). This will be the VDN for inbound Vectoring calls and dialed digits for outbound calls. This will be blank for inbound calls without Vectoring.	char(24)	24 byte ASCII text string
DISPIVECTOR	The number of the first vector associated with the disposition VDN (DISPVDN).	smallint	2 bytes
DISPOSITION	This indicates if the call was answered, connected, interflowed, abandoned, forced busy, forced disconnect, or other, in the call segment. An answered call (ANS) is any split/skill or direct agent ACD call for which CMS receives an indication that the call was answered by an agent. A connected call (CONN) is a non-ACD call to a measured agent for which CMS receives an indication that the call was connected or, in the case of Generic 2.1 ECS, any call that was delivered to an extension by a "route to" vector command (CMS receives no indication if the call abandons).	smallint	2 bytes

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
DISPOSITION (contd)	<p>An interflowed call (IFLOW) is a call that was redirected to an off-ECS destination.</p> <p>An abandoned call (ABAN) is any call for which CMS receives notification that the caller abandoned. This includes calls with talk times shorter than the phantom-abandoned call timer.</p> <p>Forced busy calls (FBUSY) are calls that CMS records as BUSYCALLS for the trunk group that carried them. These calls can be VDN calls that received a forced busy from the vector command or, on Generic 3 ECS, a split/skill call that received a busy indication from the ECS because the split queue was full, or there was no queue and no available agents, or no staffed agents.</p> <p>Forced disconnect calls (FDISC) are VDN calls that are disconnected by the ECS due to the execution of a disconnect vector command (Generic 2.2, Generic 3 Version 2 and later Generic 3 ECS) or, for Generic 2.1 and Generic 3 Version 1 ECS, calls that were given a forced disconnect announcement and listened to the entire announcement, then were disconnected by the ECS. For Generic 3 Version 2 and later Generic 3 releases, disconnect calls also include calls disconnected because of the disconnect vector timer or because they reached the end of vector processing without being queued.</p> <p>Other calls (OTHER) are any other calls.</p> <p>Valid values for DISPOSITION are ANS, CONN, ABAN, IFLOW, FBUSY, FDISC, and OTHER.</p> <p>Row search values for DISPOSITION are:</p> <ul style="list-style-type: none"> 1 = CONN 2 = ANS 3 = ABAN 4 = IFLOW 5 = FBUSY 6 = FDISC 7 = OTHER 	smallint	2 bytes

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
DISPPRIORITY	The priority the call had at its disposition in this segment. Priorities can be LOW, MED, HIGH, or TOP (with Vectoring) or YES/NO (without Vectoring). For Generic 3 ECS with Vectoring, calls directed to split/skills using "route to" or "messaging split/skill" commands and calls directly to splits/skills without going through a vector will have MED (no priority) or HIGH (priority) priority, depending on the class of restriction of the originator of the call (agent, extension, trunk group, or VDN). If the call never queued to a split/skill, the priority will not be set.	smallint	2 bytes
DISPSKLEVEL	The skill level (1-16) associated with the skill for which the agent answered the call or, for calls that abandoned from ringing or from a direct agent queue, with the agent from whom the call abandoned. Available on the ECS with EAS.	smallint	2 bytes
DISPSPLIT	The number of the split or skill associated with the call at its disposition in this call segment. Calls that were not queued to a split or skill at the time of disposition will have DISPSPLIT set to null. Calls that were queued to an unmeasured split or skill at the time of disposition will have DISPSPLIT set to zero.	smallint	2 bytes
DISPTIME	The wait time (in the vector, in queue, ringing) until the disposition recorded in DISPOSITION for the call segment. For extension calls made directly to agents (not through a VDN), this will always be zero.	integer	4 bytes
DISPVDN	The number of the VDN associated with the call at its disposition for this call segment. DISPVDN will be blank for calls that are not associated with a VDN at their disposition.	char(5)	5 byte ASCII text string

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
DURATION	The total time the trunk was held. This is the overall trunk holding time from the beginning of the call segment until the caller is disconnected. For the first segment of a call, this will be the trunk holding time for the caller for the entire call (from seized until idle). With a transfer, the original trunk remains associated with both call segments until the call ends. The format is the amount of time in seconds.	integer	4 bytes
EQLOC	The physical equipment location of the trunk that carried the call. This will be blank if the trunk is not measured.	char(9)	9 byte ASCII text string
EVENT1-9	The number of times each event (stroke count) button was pressed for this call segment. Available on Generic 2 and Generic 3 ECS.	smallint	2 bytes
FIRSTVECTOR	The number of the first vector associated with the first VDN for the call segment.	smallint	2 bytes
FIRSTVDN	The number of the first VDN associated with the call segment.	char(5)	5 byte ASCII text string
HELD	The total number of times this call was placed on hold by the answering agent in this call segment. With agent-to-agent calls, this count is incremented for the agent who puts the call on hold, regardless of whether that agent answered or originated the call, but not for the other agent who is continuing to accrue talk time). (For Generic 2.1 ECS, this includes only split ACD calls held. With Generic 2.2 and Generic 3 ECS, this includes all calls the agent put on hold.)	smallint	2 bytes

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
HOLDABN	Indicates if this call abandoned from hold (YES or NO) in this call segment. With Generic 2.1 ECS, this is only for split ACD calls. With Generic 2.2 and Generic 3 ECS, this includes all calls the agent put on hold that abandoned from hold.	smallint	2 bytes
LASTCWC	The last call work code (up to 16 digits) entered by the answering agent in this segment. This database item applies to Generic 2.2 and Generic 3 ECS only.	char(16)	16 byte ASCII text string
LASTDIGITS	The last set of collected digits sent to the CMS by the ECS. These are digits the ECS sends to CMS when it executes a "Collect" vector command. The digits may be digits the caller was prompted to enter, either through the prompting feature on the ECS or through network-prompted digits ("caller-entered digits [ced]"), customer-database provided digits ("cdpd" from the network) or digits collected through a "Converse" vector command. Available on the ECS R5 and later releases.	char(16)	16 byte ASCII text string
LASTOBSERVER	The login ID of the last agent that service-observed or bridged on to this call.	char(9)	9 byte ASCII text string
MALICIOUS	This indicates if or not a malicious call trace was activated for this call segment. Valid values for MALICIOUS are YES and NO. Applies to Generic 2 and Generic 3 (except Generic 3i Version 1) ECS.	smallint	2 bytes
OBSERVINGCALL	Indicates if this call represents an agent observing or bridging on to an existing call. Valid values for OBSERVINGCALL are YES and NO.	smallint	2 bytes
ORIGLOGIN	The Login ID of the agent originating the call. This is used for calls an agent originates to another agent, to an on-ECS extension, or to an external destination.	char(9)	9 byte ASCII text string

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
ORIGREASON	The reason code (0 - 9) associated with the originating agent's mode, if the agent is in the AUX mode. For agents in AUX on ECS with releases that are earlier than the ECS R5 or that do not have EAS and reason codes active, this will only be zero.	smallint	2 bytes
ROW_DATE	The date the call started.	date	4 byte <i>Informix</i> date
ROW_TIME	The time of day that the call started. The format is military time.	smallint	2 bytes
SEQNUM (index)	The sequence number of this call record.	integer	4 bytes
SEGMENT	The number of the call segment. Segment numbers are from 1 up to the number of segments in the call.	smallint	2 bytes
SEGSTART	The time the call segment started. A new segment starts when CMS receives the first message for the call, since each call segment represents a call. (When an agent transfers or conferences a call, the agent makes another call to effect the transfer/conference.)	integer	4 bytes
SEGSTOP	The time when the call and any associated after call work ended. The call ends when all trunks and agents associated with the call segment have dropped off the call. This means that after call work time for the agent(s) is included when calculating the call segment stop time.	integer	4 bytes
SPLIT1	The first split/skill to which the call queued in the first VDN with which it was associated in the call segment.	smallint	2 bytes
SPLIT2	The second split/skill to which the call was also queued in the first VDN with which it was associated in the call segment. This only applies to Generic 2.2 with EAS and Generic 3 ECS with Vectoring.	smallint	2 bytes

Table 3-27: Call Record Database Items (call_rec Table) (Contd)

Database Item	Description	Column Type	Length
SPLIT3	The third split/skill to which the call was also queued in the first VDN with which it was associated in the call segment. This applies only to Generic 2.2 with EAS and Generic 3 ECS with Vectoring.	smallint	2 bytes
TALKTIME	The total talk time for the answering agent in this call segment. The format is the amount of time in seconds.	integer	4 bytes
TKGRP	The number of the trunk group that carried the call. This will be null if the trunk carrying the call is not measured.	smallint	2 bytes
TRANSFERRED	Indicates if the agent initiated a transfer on this call segment. Valid values for TRANSFERRED are YES and NO. For Generic 2.2 and Generic 3 ECS, TRANSFERRED is set for any call transferred. For Generic 2.1 ECS, TRANSFERRED is set for transfers to a measured VDN or split.	smallint	2 bytes

ECS Cross-Reference

Table 3-28 lists which of the ECS releases support the Call Record database items.

Table 3-28: ECS Cross-Reference for Call Record Database Items

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
ACD	X	X	X	X	X	X
ACWTIME	X	X	X	X	X	X
AGT_RELEASED			X	X	X	X
ANSHOLDTIME	X	X	X	X	X	X
ANSLOGIN	X	X	X	X	X	X
ANSREASON	X	X	X	X	X	X
ASSIST	X	X	X	X	X	X
AUDIO	X	X	X	X	X	X
CALLID	X	X	X	X	X	X
CALLING_II						X
CALLING_PTY	X	X	X	X	X	X
CONFERENCE		X	X	X	X	X
CONSULTTIME	X	X	X	X	X	X
DA_QUEUED			X	X	X	X
DIALED_NUM	X	X	X	X	X	X
DISPIVECTOR	X	X	X	X	X	X
DISPOSITION	X	X	X	X	X	X
DISPPRIORITY	X	X	X	X	X	X
DISPSKLEVEL						X (EAS)
DISPSPLIT	X	X	X	X	X	X
DISPTIME	X	X	X	X	X	X
DISPVDN	X	X	X	X	X	X
DURATION	X	X	X	X	X	X

Table 3-28: ECS Cross-Reference for Call Record Database Items (Contd)

Database Item	G2.1	G2.2	G3V1	G3V2/ G3V3	G3V4	DEFINITY R5 ECS
EQLOC	X	X	X	X	X	X
EVENT1-9	X	X	X	X	X	X
FIRSTVECTOR	X	X	X	X	X	X
FIRSTVDN	X	X	X	X	X	X
HELD	X	X	X	X	X	X
HOLDABN	X	X	X	X	X	X
LASTCWC		X	X	X	X	X
LASTDIGITS						X
LASTOBSERVER			X	X	X	X
MALICIOUS	X	X	X (not G3iV1)	X	X	X
OBSERVINGCALL			X	X	X	X
ORIGLOGIN	X	X	X	X	X	X
ORIGREASON	X	X	X	X	X	X
ROW_DATE	X	X	X	X	X	X
ROW_TIME	X	X	X	X	X	X
SEGMENT	X	X	X	X	X	X
SEGSTART	X	X	X	X	X	X
SEGSTOP	X	X	X	X	X	X
SEQNUM	X	X	X	X	X	X
SPLIT1	X	X	X	X	X	X
SPLIT2		X (EAS)	X	X	X	X
SPLIT3		X (EAS)	X	X	X	X
TALKTIME	X	X	X	X	X	X
TKGRP	X	X	X	X	X	X
TRANSFERRED	X	X	X	X	X	X

Data Collection Period Database Items

Overview

Administrative data collection period database items (Table 3-29) apply to the Daily Data Collection Period (*d_secs*), Weekly Data Collection Period (*w_secs*), and Monthly Data Collection Period (*m_secs*) tables. All items listed in Table 3-29 are included in all three tables, unless otherwise noted in the Column Type column. Any differences in the data format between the three data collection period tables are also noted in the Column Type column. The indexes are **ROW_DATE** and **ACD**. The tables indicate the number of seconds in the data collection period (daily, weekly, monthly).

Because the data contained in the Data Collection periods tables are administrative, the table does not rely on ECS releases.

Data Collection Period Database Items

Table 3-29 describes the data items in the CMS Data Collection Periods database tables.

Table 3-29: Data Collection Period Database Items (dsecs, msecs, wsecs Tables)

Database Item	Description	Data Type	Column Type	Length
ACD (index)	The number of the ACD using the data collection period.	A	smallint	2 bytes
ROW_DATE	The date of the administrative values.	A	date	4 byte <i>Informix</i> date
SECSPERDAY	The number of seconds in the daily data collection period	A	integer; only in <i>d_secs</i> table	4 bytes
SECSPERMN	The number of seconds in the monthly data collection period.	A	integer; only in <i>m_secs</i> table	4 bytes

Table 3-29: Data Collection Period Database Items (dsecs, msec, wsecs Tables)

Database Item	Description	Data Type	Column Type	Length
SECSPERWK	The number of seconds in the weekly data collection period.	A	integer; only in w_secs table	4 bytes

Archiver Execution Status Database Items

Overview

The Archiver Execution Status database item descriptions (Table 3-30) apply to items in the `arch_stat` table. The table contains status information on recent archiver executions, and displays status and the next run scheduled. The indexes are **ACD** and **ARCH_TYPE**. Because the data contained in the `arch_stat` table are administrative, the table is not dependent on ECS releases.

Archiver Execution Status Database Items

Table 3-30 describes the data items in the CMS Archiver Execution Status database table.

Table 3-30: Archiver Execution Status Database Items (arch_stat Table)

Database Item	Description	Data Type	Column Type	Length
ACD (index)	The ACD number for the archiver execution	A	smallint	2 bytes
ARCH_TYPE (index)	The type of archiver executions being run. Values are: 1 = interval, 2 = daily, 3 = weekly, 4 = monthly.	A	char(20)	20 byte ASCII text string

Table 3-30: Archiver Execution Status Database Items (arch_stat Table) (Contd)

Database Item	Description	Data Type	Column Type	Length
LAST_TIME	The last time the archiver execution was run.	A	char(20)	20 byte ASCII text string
STATUS	<p>The status of the archiver execution. This field indicates if the execution was not run, is currently running, or has finished.</p> <p>Values are:</p> <p>1 = not run</p> <p>2 = finished, the archive was successful</p> <p>3 = finished, the archive had a failure</p> <p>4 = running.</p> <p>If the status field displays 3, for finished, but had a failure, then the user should consult the error log (customer_log table) and the archive log for the reason prior to troubleshooting.</p>	A	char(9)	9 byte ASCII text string

Customer Log Database Items

Overview

The Customer Log database item descriptions (Table 3-31) apply to items in the `customer_log` table. The table contains customer error log information on recent archiver executions. The information includes the error code, the date the error occurred, the severity, the associated event, and a description of the error. Because the data contained in the `customer_log` table are administrative, the table is not dependent on ECS releases. The `customer_log` table is not backed up by the CMS Maintenance backup.

Customer Log Database Items

Table 3-31 describes the data items in the CMS Customer Log database table.

Table 3-31: Customer Log Database Items

Database Item	Description	Data Type	Column Type	Length
ACD_ID	The number of the ACD on which the error occurred.	A	integer	4 bytes
COUNTS	The number of occurrences of the error.	A	integer	4 bytes
DATE_OCCURRED	The date that the error occurred.	A	date	4 byte <i>Informix</i> date
DESCRIPTION	A textual description of the error.	A	char(256)	256 byte ASCII text string
ERROR_CODE	The error code number.	A	integer	4 bytes
LAST_TIME	The last time the error occurred.	A	integer	4 bytes
SEVERITY	The level of severity of the error.	A	char(10)	10 byte ASCII text string

Agent Group Database Items

Overview

The Agent Group database item descriptions (Table 3-32) apply to items in the `agroups` table. The table contains dictionary information on agent groups. The indexes are **ACD_NO**, **ITEM_TYPE**, **ITEM_NAME**, and **VALUE**. Because the data contained in the `agroups` table are administrative, and are used to define agent groups, the table is not dependent on ECS releases.

Agent Group Database Items

Table 3-32 describes the data items in the CMS Agent Group database dictionary table.

Table 3-32: Agent Group Database Items (agroups Table)

Database Item	Description	Data Type	Column Type	Length
ACD_NO (index)	The ACD number for the agent group.	A	smallint	2 bytes
ITEM_TYPE (index)	The type "agent group."	A	char(20)	20 byte ASCII text string
ITEM_NAME (index)	The name of the agent group.	A	char(20)	20 byte ASCII text string
VALUE (index)	An agent login ID belonging to the agent group.	A	char(9)	9 byte ASCII text string

Synonyms Database Items

Overview

The Synonyms database item descriptions (Table 3-33) apply to items in the `synonyms` table. The table contains dictionary synonyms. The indexes are **ACD_NO**, **ITEM_TYPE**, **ITEM_NAME**, and **VALUE**. Because the data contained in the `synonyms` table are administrative, and are used to define dictionary entries, the table is not dependent on ECS releases.

Synonyms Database Items

Table 3-33 describes the data items in the CMS Synonyms database dictionary table.

Table 3-33: Synonyms Database Items (synonyms Table)

Database Item	Description	Data Type	Column Type	Length												
ACD_NO (index)	The ACD number for the synonym.	A	smallint	2 bytes												
DESCR	The description, or definition, of the dictionary synonym.	A	char(5)	5 byte ASCII text string												
ITEM_TYPE (index)	The type of synonym. The following synonyms are used in reports: <table border="0"> <tr> <td>Type</td> <td>Database Item:</td> </tr> <tr> <td>acd</td> <td>ACD</td> </tr> <tr> <td>agname</td> <td>LOGID (login ID)</td> </tr> <tr> <td>tkgrp</td> <td>TKGRP (trunk group)</td> </tr> <tr> <td>split</td> <td>SPLIT</td> </tr> <tr> <td>vdn</td> <td>VDN (vector directory number)</td> </tr> </table>	Type	Database Item:	acd	ACD	agname	LOGID (login ID)	tkgrp	TKGRP (trunk group)	split	SPLIT	vdn	VDN (vector directory number)	A	char(20)	20 byte ASCII text string
Type	Database Item:															
acd	ACD															
agname	LOGID (login ID)															
tkgrp	TKGRP (trunk group)															
split	SPLIT															
vdn	VDN (vector directory number)															

Table 3-33: Synonyms Database Items (synonyms Table) (Contd)

Database Item	Description	Data Type	Column Type	Length
ITEM_TYPE (index) (contd)	vector VECTOR aux_rsn AUXREASON (AUX work state reason) logout_rsn LOGOUTREASON (agent logout reason) cwc CWC (call work code) workmode WORKMODE (agent work mode in both Agent and Agent Trace tables) ag_origin ORIGIN ag_dir DIRECTION ag_dest DESTINATION ag_pref PREFERENCE tkstate TKSTATE (trunk state) tk_pri PRIORITY tk_queue QUETYPE (AUX work state reason) tk_vpri PRIORITY (only available with vectoring) tk_dir DIRECTION all_busy ALLINUSE slvl_chg SVCLEVELCHG per_chg PERIODCHG	A	char(20)	20 byte ASCII text string
ITEM_NAME (index)	The name of the synonym. There can be many ITEM_NAME s for a specific ITEM_TYPE .	A	char(20)	20 byte ASCII text string
STANDARD	Indicates if the item is a standard or a custom synonym; Values are: 1 = standard, not 1 = custom.	A	smallint	2 bytes
VALUE (index)	The item name's corresponding value. Because each ITEM_TYPE can have many different ITEM_NAME s, a discrete value is assigned to each synonym ITEM_NAME .	A	char(9)	9 byte ASCII text string

Exceptions Historical Database Items

Overview

In Table 3-34 through Table 3-40, the database item **EXTYPE** lists numerical values associated with exception types. The database item **REASON** in Table 3-41 lists numerical values associated with exception types.

CentreVu CMS stores exception types using the numerical values, then translates the numbers into the text you see in standard exception reports.

To select specific exception types for a custom report, you must enter the numerical value(s) in the `Select rows where:` statement.

Agent Exceptions Database Items

The Agent Exceptions database item descriptions (Table 3-34) are **historical** items. They apply to the Agent Exceptions (`agex`) table.

Table 3-34: Agent Exceptions Database Items (agex Table)

Database Item	Description	Column Type	Length																																																		
ACD	The ACD the agent was logged into.	smallint	2 bytes																																																		
EXTYPE	<p>The type of exception that occurred:</p> <table border="1"> <thead> <tr> <th>Numerical Value</th> <th>Type</th> </tr> </thead> <tbody> <tr><td>1</td><td>Time Available</td></tr> <tr><td>2</td><td>Time on inbound ACD call (min)</td></tr> <tr><td>3</td><td>Time on inbound ACD call (max)</td></tr> <tr><td>4</td><td>Time in after call work</td></tr> <tr><td>5</td><td>Time on outbound ACW call</td></tr> <tr><td>6</td><td>Time on inbound ACW call</td></tr> <tr><td>7</td><td>Time in AUX work</td></tr> <tr><td>8</td><td>Time on outbound AUX call</td></tr> <tr><td>9</td><td>Time on inbound AUX call</td></tr> <tr><td>10</td><td>Number of outbound ACW calls/agent</td></tr> <tr><td>11</td><td>Number of inbound ACW calls/agent</td></tr> <tr><td>12</td><td>Number of outbound AUX calls/agent</td></tr> <tr><td>13</td><td>Number of inbound AUX calls/agent</td></tr> <tr><td>14</td><td>Login not in dictionary</td></tr> <tr><td>15</td><td>Time ACD call spent on hold*</td></tr> <tr><td>16</td><td>Number ACD calls placed on hold*</td></tr> <tr><td>17</td><td>Number ACD calls abandoned while on hold*</td></tr> <tr><td>18</td><td>Time on outbound ACD call (min)</td></tr> <tr><td>19</td><td>Time on outbound ACD call (max)[†]</td></tr> <tr><td>20</td><td>Number calls transferred**</td></tr> <tr><td>21</td><td>Time on external outbound ACW call[†]</td></tr> <tr><td>22</td><td>Time on external outbound AUX call[†]</td></tr> <tr><td>23</td><td>Time on direct agent call[†]</td></tr> <tr><td>24</td><td>Number external outbound ACW calls/agent**</td></tr> </tbody> </table>	Numerical Value	Type	1	Time Available	2	Time on inbound ACD call (min)	3	Time on inbound ACD call (max)	4	Time in after call work	5	Time on outbound ACW call	6	Time on inbound ACW call	7	Time in AUX work	8	Time on outbound AUX call	9	Time on inbound AUX call	10	Number of outbound ACW calls/agent	11	Number of inbound ACW calls/agent	12	Number of outbound AUX calls/agent	13	Number of inbound AUX calls/agent	14	Login not in dictionary	15	Time ACD call spent on hold*	16	Number ACD calls placed on hold*	17	Number ACD calls abandoned while on hold*	18	Time on outbound ACD call (min)	19	Time on outbound ACD call (max) [†]	20	Number calls transferred**	21	Time on external outbound ACW call [†]	22	Time on external outbound AUX call [†]	23	Time on direct agent call [†]	24	Number external outbound ACW calls/agent**	smallint	2 bytes
Numerical Value	Type																																																				
1	Time Available																																																				
2	Time on inbound ACD call (min)																																																				
3	Time on inbound ACD call (max)																																																				
4	Time in after call work																																																				
5	Time on outbound ACW call																																																				
6	Time on inbound ACW call																																																				
7	Time in AUX work																																																				
8	Time on outbound AUX call																																																				
9	Time on inbound AUX call																																																				
10	Number of outbound ACW calls/agent																																																				
11	Number of inbound ACW calls/agent																																																				
12	Number of outbound AUX calls/agent																																																				
13	Number of inbound AUX calls/agent																																																				
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16	Number ACD calls placed on hold*																																																				
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19	Time on outbound ACD call (max) [†]																																																				
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21	Time on external outbound ACW call [†]																																																				
22	Time on external outbound AUX call [†]																																																				
23	Time on direct agent call [†]																																																				
24	Number external outbound ACW calls/agent**																																																				

Table 3-34: Agent Exceptions Database Items (agex Table) (Contd)

Database Item	Description	Column Type	Length
EXTYPE (contd)	25 Number external outbound AUX calls/agent** 26 Time ACD call spends ringing** 27 Different logins on same extension 28 Ringing call automatically redirected from agent 29 Agent logged out with active/held calls 30 Number of calls waiting in direct agent queue [‡] 31 Time oldest call has waited in direct agent queue [‡] 32 Number of calls abandoned from direct agent queue [‡] 34 Number of calls outflowed from direct agent queue [‡] 38 Number calls transferred 48 Logout attempt without valid reason code 49 Could not be logged in 59 AUX attempt without valid reason code 60 Time in AUX with reason code 0 (default) 61 Time in AUX with reason code 1 62 Time in AUX with reason code 2 63 Time in AUX with reason code 3 64 Time in AUX with reason code 4 65 Time in AUX with reason code 5 66 Time in AUX with reason code 6 67 Time in AUX with reason code 7 68 Time in AUX with reason code 8 69 Time in AUX with reason code 9 98 Agent denied login to some skills 99 Invalid call work code		
LOGID	The Login ID of the agent who had the exception.	char(10)	10 byte ASCII text string
REASON_CODE	The reason code for the exception.	smallint	2 bytes
ROW_DATE (index)	The date on which the exception occurred.	date	4 byte <i>Informix</i> date
ROW_TIME	The time at which the exception occurred.	smallint	2 bytes
SEQNO	The sequence number of this exception record.	integer	4 bytes
SPLIT	The split or skill in which the agent was doing work when the exception occurred.	smallint	2 bytes

Table 3-34: Agent Exceptions Database Items (agex Table) (Contd)

Database Item	Description	Column Type	Length
THRESHOLD	The limit, as a number of occurrences, administered for the exception type. An exception occurs when the agent's activity falls outside of that limit.	smallint	2 bytes
TIME	The limit, as a number of seconds, administered for timed exceptions types. An occurrence is logged against the threshold when the agent's activity falls outside of that limit.	smallint	2 bytes

*Available only on Generic 2 and Generic 3 ECS.

†Available only with Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.

** Available only with Generic 2.1 or later and Generic 3 ECS.

‡ Available only with Generic 3 ECS with the ASAI or EAS feature.

Disk Full Exceptions Database Items

The Disk Full Exceptions database item descriptions (Table 3-35) are **historical** items. They apply to the Disk Full Exceptions (*fullex*) table.

Table 3-35: Disk Full Exceptions Database Items (fullex Table)

Database Item	Description	Column Type	Length
PROC_NAME	The name of the process that failed because the disk was full.	char(30)	30 byte ASCII text string
ROW_DATE	The date at which the disk was full.	date	4 byte <i>Informix</i> date
ROW_TIME	The time at which the disk was full.	smallint	2 bytes
SEQNO	The sequence number of this record.	smallint	2 bytes
TASK_GRP	The activity that failed because the disk was full.	char(2)	2 byte ASCII text string

Split/Skill Exceptions Database Items

The Split/Skill Exceptions database item descriptions (Table 3-36) are **historical** items. They apply to the Split/Skill Exceptions (*spex*) table.

Table 3-36: Split/Skill Exceptions Database Items (spex Table)

Database Item	Description	Column Type	Length																																
ACD	The ACD of the split or skill.	smallint	2 bytes																																
EXTYPE	The type of exception that occurred: <table border="0"> <thead> <tr> <th>Numerical Value</th> <th>Type</th> </tr> </thead> <tbody> <tr><td>30</td><td>Number calls waiting</td></tr> <tr><td>31</td><td>Time call has waited in queue</td></tr> <tr><td>32</td><td>Number calls abandoned</td></tr> <tr><td>33</td><td>Number intraflowed-in calls</td></tr> <tr><td>34</td><td>Number intraflowed-out calls</td></tr> <tr><td>35</td><td>Number interflowed-out calls</td></tr> <tr><td>36</td><td>Number calls offered while queue full*</td></tr> <tr><td>37</td><td>Number calls handled as backup[†]</td></tr> <tr><td>38</td><td>Number calls transferred**</td></tr> <tr><td>39</td><td>Average speed of answer (seconds)</td></tr> <tr><td>40</td><td>Rolling average speed of answer (seconds)</td></tr> <tr><td>41</td><td>Expected wait time (pri top)</td></tr> <tr><td>42</td><td>Expected wait time (pri high)</td></tr> <tr><td>43</td><td>Expected wait time (pri medium)</td></tr> <tr><td>44</td><td>Expected wait time (pri low)</td></tr> </tbody> </table>	Numerical Value	Type	30	Number calls waiting	31	Time call has waited in queue	32	Number calls abandoned	33	Number intraflowed-in calls	34	Number intraflowed-out calls	35	Number interflowed-out calls	36	Number calls offered while queue full*	37	Number calls handled as backup [†]	38	Number calls transferred**	39	Average speed of answer (seconds)	40	Rolling average speed of answer (seconds)	41	Expected wait time (pri top)	42	Expected wait time (pri high)	43	Expected wait time (pri medium)	44	Expected wait time (pri low)	smallint	2 bytes
Numerical Value	Type																																		
30	Number calls waiting																																		
31	Time call has waited in queue																																		
32	Number calls abandoned																																		
33	Number intraflowed-in calls																																		
34	Number intraflowed-out calls																																		
35	Number interflowed-out calls																																		
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42	Expected wait time (pri high)																																		
43	Expected wait time (pri medium)																																		
44	Expected wait time (pri low)																																		
ROW_DATE (index)	The date on which the exception occurred.	date	4 byte <i>Informix</i> date																																
ROW_TIME	The time at which the exception occurred.	smallint	2 bytes																																
SEQNO	The sequence number of this exception record.	integer	4 bytes																																
SPLIT	The split or skill in which the exception occurred.	smallint	2 bytes																																
THRESHOLD	The limit, as a number of occurrences, administered for the exception type. An exception occurs when the split's/skill's activity falls outside of that limit.	smallint	2 bytes																																

Table 3-36: Split/Skill Exceptions Database Items (spex Table) (Contd)

Database Item	Description	Column Type	Length
TIME	The limit, as a number of seconds, administered for timed exceptions types. An occurrence is logged against the threshold when the split's/skill's activity falls outside of that limit.	smallint	2 bytes

*Available only on Generic 2 and Generic 3 ECS

†Available only with Generic 2.2 ECS with the ASAI Gateway Interface feature and Generic 3 ECS with the ASAI feature.

** Available only with Generic 2.1 or later and Generic 3 ECS.

Trunk Group Exceptions Database Items

The Trunk Group Exceptions database item descriptions (Table 3-37) are **historical** items. They apply to the Trunk Group Exceptions (*tgex*) table.

Table 3-37: Trunk Group Exceptions Database Items (tgex Table)

Database Item	Description	Column Type	Length																				
ACD (index)	The ACD of the trunk group.	smallint	2 bytes																				
EXTYPE	The type of exception that occurred: <table border="0"> <thead> <tr> <th>Numerical Value</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>50</td> <td>Time trunk in use (min)</td> </tr> <tr> <td>51</td> <td>Time trunk in use (max)</td> </tr> <tr> <td>52</td> <td>Number trunks in use</td> </tr> <tr> <td>53</td> <td>Total time trunks maintenance busy</td> </tr> <tr> <td>54</td> <td>Number trunks maintenance busy</td> </tr> <tr> <td>55</td> <td>Length of time all trunks busy</td> </tr> <tr> <td>56</td> <td>Number trunk failures in group</td> </tr> <tr> <td>57</td> <td>Number failures on any single trunk</td> </tr> <tr> <td>58</td> <td>Audio difficulty</td> </tr> </tbody> </table>	Numerical Value	Type	50	Time trunk in use (min)	51	Time trunk in use (max)	52	Number trunks in use	53	Total time trunks maintenance busy	54	Number trunks maintenance busy	55	Length of time all trunks busy	56	Number trunk failures in group	57	Number failures on any single trunk	58	Audio difficulty	smallint	2 bytes
Numerical Value	Type																						
50	Time trunk in use (min)																						
51	Time trunk in use (max)																						
52	Number trunks in use																						
53	Total time trunks maintenance busy																						
54	Number trunks maintenance busy																						
55	Length of time all trunks busy																						
56	Number trunk failures in group																						
57	Number failures on any single trunk																						
58	Audio difficulty																						
EQLOC	The trunk location where the exception occurred.	char(9)	9 byte ASCII text string																				

Table 3-37: Trunk Group Exceptions Database Items (tgex Table) (Contd)

Database Item	Description	Column Type	Length
LOGID	The Login ID of the agent reporting audio difficulty.	char(10)	10 byte ASCII text string
ROW_DATE	The date on which the exception occurred.	date	4 byte <i>Informix</i> date
ROW_TIME	The time at which the exception occurred.	smallint	2 bytes
SEQNO	The sequence number of this exception record.	integer	4 bytes
THRESHOLD	The limit, as a number of occurrences, administered for the exception type. An exception occurs when the trunk group's activity falls outside of that limit.	smallint	2 bytes
TIME	The limit, as a number of seconds, administered for timed exceptions types. An occurrence is logged against the threshold when the trunk group's activity falls outside of that limit.	smallint	2 bytes
TKGRP	The number of the trunk group where the exception occurred.	smallint	2 bytes

VDN Exceptions Database Items

The VDN Exceptions database item descriptions (Table 3-38) are **historical** items. They apply to the VDN Exceptions (`vdnex`) table. VDN exceptions are available only with the Vectoring feature.

Table 3-38: VDN Exceptions Database Items (vdnex Table)

Database Item	Description	Column Type	Length																														
ACD (index)	The ACD of the VDN.	smallint	2 bytes																														
EXTYPE	The type of exception that occurred: <table border="0"> <thead> <tr> <th>Numerical Value</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Time at agent (min)</td> </tr> <tr> <td>3</td> <td>Time at agent (max)</td> </tr> <tr> <td>30</td> <td>Number calls in an ACD split queue</td> </tr> <tr> <td>32</td> <td>Number calls abandoned while in vector</td> </tr> <tr> <td>33</td> <td>Number calls flowed into VDN</td> </tr> <tr> <td>34</td> <td>Number calls flowed out of VDN</td> </tr> <tr> <td>35</td> <td>Number calls interflowed out of VDN</td> </tr> <tr> <td>37</td> <td>Number calls handled by backup split</td> </tr> <tr> <td>71</td> <td>Time in vector (max)</td> </tr> <tr> <td>72</td> <td>Number calls forced busy</td> </tr> <tr> <td>73</td> <td>Number calls disconnected</td> </tr> <tr> <td>74</td> <td>Number unsuccessful lookahead attempts</td> </tr> <tr> <td>75</td> <td>Number unsuccessful adjunct routing attempts</td> </tr> <tr> <td>76</td> <td>Rolling average speed of answer</td> </tr> </tbody> </table>	Numerical Value	Type	2	Time at agent (min)	3	Time at agent (max)	30	Number calls in an ACD split queue	32	Number calls abandoned while in vector	33	Number calls flowed into VDN	34	Number calls flowed out of VDN	35	Number calls interflowed out of VDN	37	Number calls handled by backup split	71	Time in vector (max)	72	Number calls forced busy	73	Number calls disconnected	74	Number unsuccessful lookahead attempts	75	Number unsuccessful adjunct routing attempts	76	Rolling average speed of answer	smallint	2 bytes
Numerical Value	Type																																
2	Time at agent (min)																																
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30	Number calls in an ACD split queue																																
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71	Time in vector (max)																																
72	Number calls forced busy																																
73	Number calls disconnected																																
74	Number unsuccessful lookahead attempts																																
75	Number unsuccessful adjunct routing attempts																																
76	Rolling average speed of answer																																
ROW_DATE	The date on which the exception occurred.	date	4 byte <i>Informix</i> date																														
ROW_TIME	The time at which the exception occurred.	smallint	2 bytes																														
SEQNO	The sequence number of this exception record.	integer	4 bytes																														
THRESHOLD	The limit, as a number of occurrences, administered for the exception type. An exception occurs when the VDN activity falls outside of that limit.	smallint	2 bytes																														
TIME	The limit, as a number of seconds, administered for timed exceptions types. An occurrence is logged against the threshold when the VDN activity falls outside of that limit.	smallint	2 bytes																														

Table 3-38: VDN Exceptions Database Items (vdsn Table) (Contd)

Database Item	Description	Column Type	Length
VDN	The VDN for which the exception occurred.	char(6)	6 byte ASCII text string
VECTOR	The vector number associated with the exception.	smallint	2 bytes

Vector Exceptions Database Items

The Vector Exceptions database item descriptions (Table 3-39) are **historical** items. They apply to the Vector Exceptions (*vecex*) table. Vector exceptions are available only with the Vectoring feature.

Table 3-39: Vector Exceptions Database Items (vecex Table)

Database Item	Description	Column Type	Length																		
ACD (index)	The ACD of the vector.	smallint	2 bytes																		
EXTYPE	The type of exception that occurred: <table border="0"> <thead> <tr> <th>Numerical Value</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>30</td> <td>Number calls in an ACD split queue</td> </tr> <tr> <td>32</td> <td>Number calls abandoned while in vector</td> </tr> <tr> <td>72</td> <td>Number calls forced busy</td> </tr> <tr> <td>73</td> <td>Number calls disconnected</td> </tr> <tr> <td>74</td> <td>Number unsuccessful lookahead interflow attempts</td> </tr> <tr> <td>75</td> <td>Number unsuccessful adjunct routing attempts</td> </tr> <tr> <td>80</td> <td>Time in vector (min)</td> </tr> <tr> <td>81</td> <td>Time in vector (max)</td> </tr> </tbody> </table>	Numerical Value	Type	30	Number calls in an ACD split queue	32	Number calls abandoned while in vector	72	Number calls forced busy	73	Number calls disconnected	74	Number unsuccessful lookahead interflow attempts	75	Number unsuccessful adjunct routing attempts	80	Time in vector (min)	81	Time in vector (max)	smallint	2 bytes
Numerical Value	Type																				
30	Number calls in an ACD split queue																				
32	Number calls abandoned while in vector																				
72	Number calls forced busy																				
73	Number calls disconnected																				
74	Number unsuccessful lookahead interflow attempts																				
75	Number unsuccessful adjunct routing attempts																				
80	Time in vector (min)																				
81	Time in vector (max)																				
ROW_DATE	The date on which the exception occurred.	date	4 byte <i>Informix</i> date																		
ROW_TIME	The time at which the exception occurred.	smallint	2 bytes																		
SEQNO	The sequence number of this exception record.	integer	4 bytes																		

Table 3-39: Vector Exceptions Database Items (vecex Table) (Contd)

Database Item	Description	Column Type	Length
THRESHOLD	The limit, as a number of occurrences, administered for the exception type. An exception occurs when the vector activity falls outside of that limit.	smallint	2 bytes
TIME	The limit, as a number of seconds, administered for timed exceptions types. An occurrence is logged against the threshold when the vector activity falls outside of that limit.	smallint	2 bytes
VECTOR	The vector number for which the exception occurred.	smallint	2 bytes

Malicious Call Trace Exceptions Database Items

The Malicious Call Trace Exceptions database item descriptions (Table 3-40) are **historical** items. The exception type will always be 90 = Malicious Call. They apply to the Malicious Call Trace Exceptions (mctex) table.

Table 3-40: Malicious Call Trace Exceptions Database Items (mctex Table)

Database Item	Description	Column Type	Length
ACD (index)	The ACD on which the malicious call was recorded.	smallint	2 bytes
ANI_SID	The billing number or phone number from which the malicious call originated (available only if the ECS has ANI/SID service).	char(8)	8 byte ASCII text string
EQLOC	The location of the trunk that carried the malicious call.	char(9)	9 byte ASCII text string
II_DIGITS	The Information Indicator (II) digits. Indicates type of originating line of caller.	smallint	2 bytes

Table 3-40: Malicious Call Trace Exceptions Database Items (mctex Table) (Contd)

Database Item	Description	Column Type	Length
LOGID	The Login ID of the agent reporting the malicious call.	char(10)	10 byte ASCII text string
ROW_DATE	The date on which the malicious call was reported.	date	4 byte <i>Informix</i> date
ROW_TIME	The time at which the malicious call was reported.	smallint	2 bytes
SEQNO	The sequence number of this exception record.	integer	4 bytes
SPLIT	The split/skill of the agent reporting the malicious call.	smallint	2 bytes
THRESHOLD	Not used.	smallint	2 bytes
TIME	Not used.	smallint	2 bytes
TKGRP	The number of the trunk group that carried the malicious call.	smallint	2 bytes
VDN	The VDN that carried the malicious call. Available with Generic 2 and Generic 3 ECS with Vectoring.	char(6)	6 byte ASCII text string

Data Collection Exceptions Database Items

The Data Collection Exceptions database item descriptions (Table 3-41) are **historical** items. They apply to the Data Collection Exceptions (`linkex`) table.

Table 3-41: Data Collection Exceptions Database Items (linkex Table)

Database Item	Description	Column Type	Length																
ACD (index)	The ACD for which data collection was interrupted.	smallint	2 bytes																
DURATION	The length of time for which data collection was off.	integer	4 bytes																
REASON	<p>The reason for the interruption of data collection. The reasons may be as follows:</p> <table border="1"> <thead> <tr> <th>Numerical Value</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>91</td> <td>Data collection started</td> </tr> <tr> <td>92</td> <td>Data collection started—new translations</td> </tr> <tr> <td>93</td> <td>Data collection turned off</td> </tr> <tr> <td>94</td> <td>Data collection busied out</td> </tr> <tr> <td>95</td> <td>Data collection timed out</td> </tr> <tr> <td>96</td> <td>Data collection clock was reset</td> </tr> <tr> <td>97</td> <td>Data collection session down</td> </tr> </tbody> </table>	Numerical Value	Reason	91	Data collection started	92	Data collection started—new translations	93	Data collection turned off	94	Data collection busied out	95	Data collection timed out	96	Data collection clock was reset	97	Data collection session down	smallint	2 bytes
Numerical Value	Reason																		
91	Data collection started																		
92	Data collection started—new translations																		
93	Data collection turned off																		
94	Data collection busied out																		
95	Data collection timed out																		
96	Data collection clock was reset																		
97	Data collection session down																		
ROW_DATE	The date on which data collection was interrupted.	date	4 byte <i>Informix</i> date																
ROW_TIME	The time at which data collection was interrupted.	smallint	2 bytes																
SEQNO	The sequence number of this exception record.	integer	4 bytes																
THRESHOLD	the limit, as a number of occurrences, administered for the exception type. An exception occurs when the data collection activity falls outside of that limit.	smallint	2 bytes																

Glossary

3332 Platform	<i>Intel</i> [*] based CMS platform
Abandoned Call	A call in which a caller hangs up before receiving an answer from an agent. The call could be queued to a split/skill or in a vector/VDN or ringing at an agent before it is abandoned.
Abandoned Call Search	An ACD capability that enables the system to make sure on certain trunk types that the caller is on the line before passing the call to an agent.
Acceptable Service Level	<p>A target value set to define the acceptable amount of time for an agent to answer a call. Target values are normally set as objectives by management.</p> <p>A percentage of calls answered within a set amount of time (for example, 80% of calls answered within 20 seconds).</p>
Access Permissions	Permissions assigned to a CMS user so that the user can access different subsystems in CMS or administer specific elements (splits/skills, trunks, vectors, and so on) of the ACD. Access permissions are specified as read or write permission. Read permission means the CMS user can access and view data (for example, run reports or view the Dictionary subsystem). Write permission means the CMS user can add, modify, or delete data and execute processes.
ACD	See <i>Automatic Call Distribution</i> .
ACD Call	A call that queued to a split/skill and was answered by an agent in that split/skill, or a call that queued as a direct agent call and was answered by the agent for whom it was queued.
Acknowledgment	A window that requires you to confirm an action or to acknowledge a system message (for example, system going down, warning, or fatal error for the user window). This window cannot be moved, sized, or scrolled and disappears only when you confirm the message.
Action List	A menu in the upper-right corner of most user windows. The menu lists the actions available for that particular user window (for example, add, modify, delete, and so on). You select an action after entering necessary data in the user window.
Activate Agent Trace	From this window you can start CMS tracing of agent activities. These activities include all agent state changes until the trace is turned off. You

* Intel is a registered trademark of Intel Corp.

can activate traces for a maximum of 100 agents for an *Intel* computer, or 250 agents for a *Sun* computer, at any one time. You must activate an agent trace to obtain an Agent Trace report.

Active VDN Calls

Also known as counted-calls to a VDN. A Call Vectoring capability available with G3V4 or later switches. Counted-calls to a 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.

ACW

See *After Call Work*.

Add

A CMS Action that adds the data entered in the given window to the database.

Adjunct/Switch Applications Interface (ASAI)

An open application interface through which processors and switches can jointly provide services that require applications to initiate, receive, and control calls or make use of switch features. (See *Open Application Interface*.)

After Call Work (ACW)

An agent state generally representing work related to the preceding ACD call. Going on-hook after an ACD call during MANUAL-IN operation places the agent in ACW. With Generic 3, ACW is also accessible by a button on the agent's set and may not be related to an ACD call.

Agent

A person or Voice Response Unit (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's position. Agent logins are required for all CMS-measured ACD agents.

Agent Occupancy

The percentage of time that you are expecting or targeting for each split/skill agent to spend, while logged in, on ACD calls and in ACW.

Agent Position (EAS)

The combination of the agent login ID and the skills the agent is assigned. Data are collected for the agent by skill, so the total work for the agent must be summed over all skills in which the agent worked.

Agent Position (Non-EAS)

The combination of agent login ID and split the agent logged into. Agents logged into multiple splits have multiple positions associated with them. Call data are collected separately for each agent/split combination.

Agent Skill	<p>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.</p> <p>See <i>Primary Skill</i>, <i>Secondary Skill</i>, and <i>Skill Level</i>.</p>
Agent State	<p>A feature of agent call handling. Agent states are the different call work modes and call states an agent can be in (ACD, ACW, AVAIL, AUX, UNSTAFF, DACD, DACW, OTHER, UNKNOWN, RING). Data about these states is displayed in real-time and historical reports.</p> <p>See the definition of each state for additional information.</p>
Agent Terminal	<p>The voice terminal used by a call center agent.</p>
Agent Trace	<p>You must start an agent trace before you can obtain an Agent Trace report. You can select the dates that the report will cover. This report lists each agent activity and the time it occurred. The Agent Trace report can be helpful when evaluating how well individual agents are using their time.</p>
AI	<p>See <i>Auto-In</i>.</p>
Algorithm	<p>A prescribed set of well-defined rules or instructions for the solution of a problem; for example, the performance of a calculation, in a finite number of steps. Expressing an algorithm in a formal notation is one of the main parts of a software program.</p>
ANI	<p>See <i>Automatic Number Identification</i>.</p>
Announcement	<p>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.</p>
Answered Call	<p>The agent's state changes to ACD or DACD. The term answered is used only for split/skill and direct agent ACD calls. (See Connected for non-ACD calls.) For manual answer agents, the call is answered when the agent selects the ringing line appearance. For automatic answer agents, the call is answered directly after the zip tone is applied.</p>
API	<p>See <i>Application Programming Interface</i>.</p>

Application Programming Interface	A set of related functions that a computer programmer uses to obtain some kind of service from another piece of software. Programmers of <i>Windows</i> based applications use the <i>Windows</i> API to create windows, draw text on the screen, access files, and perform all other services provided by <i>Windows</i> . Despite the use of the word application in this term, applications might not be the only software using an API; lower-level software components such as network drivers also have APIs, but these components are not “applications” and are not typically used directly by applications.
ASA	See <i>Average Speed of Answer</i> .
ASAI	See <i>Adjunct/Switch Applications Interface</i> .
Auto-Available Split	An ACD capability that ensures that after a power failure or a system restart, Voice Response Units (for example, the <i>CONVERSANT</i> [®] Voice Information System) are brought on line again immediately, without time-consuming reprogramming.
Auto-In (AI)	An ACD work mode that makes the agent available to receive calls and allows the agent to receive a new ACD call immediately after disconnecting from the previous call.
Automatic Call Distribution (ACD)	<p>A switch feature using software that channels high-volume incoming and outgoing call traffic to agent groups (splits or skills).</p> <p>Also an agent state where the extension is engaged on an ACD call.</p> <p>See <i>Redirect On No Answer</i> and <i>Auto-Available Split</i>.</p>
Automatic Number Identification (ANI)	A general industry term referring to knowledge of the calling party number (CPN). When the calling party is behind a switch, the number provided can be either a billing number for the switch or the station identification (SID) number.
AUX	See <i>Auxiliary Work</i> .
AUX Reason Codes	AUX reason codes enable a call center to track an agent’s time more precisely when the agent is in the AUX state. The agent can specify exactly why the AUX state is used, such as lunch or meetings.
Auxiliary Work (AUX)	An agent work mode. For example, the agent is engaged in non-ACD work, is on break, in a meeting, or at lunch. An agent can reach this state by pressing the AUX WORK button or dialing the proper access code from the voice terminal. The agent can also reach the state by going off-

	hook to make or answer an extension call while in AVAIL or with a call on hold while in AI/MI mode.
AVAIL	See <i>Available</i> .
Available (AVAIL)	An agent state in which the extension is able to accept an ACD call. The agent enters this state by selecting the AI or MI work mode.
Average Agent Service Time	The average time you are expecting or targeting each agent to spend on an ACD call, including talk time and after-call-work time.
Average Speed of Answer (ASA)	<p>The average amount of time a caller waits before connecting to an agent. ASA is usually an objective set by your call center's management.</p> <p>The actual ASA for a split/skill includes the time spent in queue and the time ringing an agent. ASA for a VDN includes the time spent in vector processing, in queue, and the time ringing an agent.</p> <p>Interval ASA is used for BCMS and CMS reporting where the ASA is calculated on reporting interval boundaries and the ASA is cleared to zero at the start of each reporting interval.</p> <p>See also <i>Rolling ASA</i>.</p>
B Channel	An ISDN channel that carries voice and circuit-switched data at a bandwidth of 64,000 bits per second. It will carry packet data at 19,200 bits per second (dial-up) or 64,000 bits per second (dedicated). "B" is an abbreviation of Bearer Channel.
Backup	The process of protecting data by writing the contents of the disk to an archive (or tape) that can be removed from the computer environment and stored safely.
Basic Call Management System (BCMS)	Call center management information available on the G3 switches and the Enterprise Communications Server (ECS) that can provide statistics on a limited number of agents, splits/skills, trunk groups and VDNs.
Basic Rate Interface	An ISDN channel arrangement that provides multiple channels over the existing two-wire local loop. This service has up to three channels: one D and a maximum of two B channels.
BCMS	See <i>Basic Call Management System</i> .
BRI	See <i>Basic Rate Interface</i> .

Calculation	The abbreviated name (calculation name) for the formula calculation that generates the data for a field in a report.
Call-Based Items	The category of database items in CMS that are committed to the database after the call completes. If a call starts and ends in different intrahour intervals, all of the call-based data is recorded in the interval in which the call completed. Most database items are call-based.
Call-Handling Profile	A set of objectives describing how you want a split/skill to handle calls. Call-handling profiles are part of the Forecasting subsystem.
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 or to enter numeric information using the telephone dial pad.
Call Vectoring	<p>A switch feature that provides a highly flexible method for processing ACD calls.</p> <p>A call vector is a set of instructions that controls the routing of incoming and outgoing calls based on current conditions. Examples of call vector conditions include time of day and the number of calls in queue.</p>
Call Work Code (CWC)	An ACD capability that allows the agent to enter a string of digits during or after the call and send them to the <i>CentreVu</i> Call Management System for management reporting.
Caller Needs	The reasons a customer calls your call center.
Calls Carried	Trunk data. The number of inbound/outbound calls that occupied the trunk during a given time period.
Cancel	A CMS action that cancels the current Backup, Restore, or Migration that is in progress.

Caution Condition	A graph term. The bars in the graph report change color or intensity indicating that the data being displayed met your defined first threshold limit.
Central Office (CO)	The location housing telephone switching equipment that provides local telephone service and access to toll facilities for long-distance calling.
CentreVu Supervisor	The Call Management System application for the <i>Microsoft Windows</i> operating environment.
Change Agent Skills	An agent's skills may be changed from CMS by using the Change Agent Skills Window. Through this window a user can quickly see what skills are currently assigned to a single agent and the user can easily change a single agent's skill assignment.
Close	Users can close a window using the Close command on the Control menu. Closing an application's main window is the same as quitting it.
CMS	See <i>Call Management System</i> .
CMS Large	One of two hardware configurations for the CMS product line. This configuration has 128MB RAM, 4GB of disk storage space, and one processor.
CMS Options	The optional features available with CMS. CMS options include graphics, forecasting, and vectoring.
CMS X-Large	One of two hardware configurations for the CMS product line. This configuration has 128MB RAM, 4GB of disk storage space, and two processors.
CMSQL	A tool that allows direct queries of the historical database. This tool is the interactive interface typically used to view the <i>Informix</i> database. For CMS purposes, CMSQL is used instead of <i>Informix</i> SQL.
CO	See <i>Central Office</i> .
Configuration	The way that the computer is set up to allow for particular uses or situations.
CONN	See <i>Connected</i> .
Connected (CONN)	A trunk state in which a caller and an agent are connected on an ACD call.

Connected Call	A non-ACD call (that is connected to an agent through a VDN) for which <i>CentreVu</i> CMS receives an indication that the call rang or was answered.
Continue	A CMS action that resumes the suspended Restore or Migration operation.
CONVERSANT	<i>CONVERSANT</i> [®] is a powerful voice response system which interacts with the caller. This system may include: automated call routing, announcement storage, message retrieval, and callback.
Copy Group or Profile	A CMS action that creates a new group or profile from an existing one.
Current	A CMS screen-labeled key (SLK) that allows the user to cycle through open windows.
Current Interval	Represents the current intrahour interval, which can be 15, 30, or 60 minutes. The current interval is part of the real-time database. CMS starts collecting ACD cumulative data at the beginning of the interval (on the hour, half-hour, or quarter hour) and continues collecting ACD cumulative data until the end of the interval. When the current interval changes, all cumulative data is cleared and CMS begins counting cumulative data again starting from zero. The length of the interval is set in the <i>System Setup: Storage Intervals</i> window and is called the <i>intrahour interval</i> .
Current Window	The user window in which you are actively working.
Custom Reports	Real-time or historical reports that have been customized from standard reports or created from scratch. See the <i>CentreVu</i> CMS R3V5 <i>Custom Reports</i> (585-215-822) document for more information.
CWC	See <i>Call Work Code</i> .
D Channel	An ISDN channel that transmits at 16,000 bits per second. The signaling information connects, monitors, and disconnects calls. It can also carry low-speed packet data at 9,600 bits per second. "D" is an abbreviation of Data Channel.
DABN	See <i>Dequeued and Abandoned</i> .
DACD	See <i>Direct Agent ACD</i> .
DACW	See <i>Direct Agent ACW</i> .

Daily Data	Interval data that has been converted to a 1-day summary.
Data Collection Off	CMS is not collecting ACD data. Data already collected will not be lost when turning data collection off.
Data Collection On	CMS is collecting ACD data.
Data Points	Dates of historical data used in Forecasting. A data point should include data for each interval of the working day.
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, and so on) or statistical data on ACD performance (number of ACD calls, wait time for calls in queue, current states of individual agents and so on).
Database Management System (DBMS)	The software that manages access to structured data. For example, <i>Microsoft SQL Server</i> is a database management system. Database management system can also be used generally to include PC database products such as <i>Microsoft Access</i> , as well as any other software that can provide data access services.
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	<p>The standard format for entering dates on CMS reports. Acceptable formats are:</p> <ul style="list-style-type: none">• Month/day/year (for example, 3/21/93)• A “-” offset based on today's date (for example, -1 for yesterday)• 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). <p>When you specify a date for a weekly report, that date 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 <i>No records found</i> displays in the status line.</p>

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

DBMS See *Database Management System*.

DDC See *Direct Department Calling*.

Default Skill (Generic 2.2 with EAS) Every skill that ends with a “0” is called a default skill, since every staffed agent in the skill group is logged into this skill by default. The default skill is the first skill for each skill group.

Delete A CMS action that removes the entry on the window from the database.

Dequeued and Abandoned (DABN) A trunk state in which the trunk quickly goes to idle after the caller abandons the call.

Dialed Number Identification Service (DNIS) A network capability that identifies, for each call, the number dialed or the area from which the call originated (for example, a specific 800 number set up for a promotion).

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. Dictionary also allows customized calculations to be created for use in reports.

DID See *Direct Inward Dialing*.

Dimmed Indicates unavailable or disabled. A dimmed menu item, button, or command is displayed in a lighter shade than the standard display and cannot be selected.

See *Grayed Out*.

Direct Agent ACD (DACD) An agent state in which the agent is on a direct agent ACD call.

Direct Agent ACW (DACW) An agent state in which the agent is in the after call work (ACW) state for a direct agent ACD call.

Direct Agent Calling An EAS capability that makes it possible for a caller to reach the same agent every time and still include the call as an ACD call in the management tracking of the call center. This is ideal for claims processing where a client needs to speak with the agent handling the claim. This flexibility ensures a high level of customer service without reducing management control.

Direct Department Calling (DDC)	A process of selecting an agent when more than an agent is available. With DDC, the call will go to the agent closest to the top of an ordered list. (This is a non-EAS option only.)
Direct Inward Dialing (DID)	An incoming trunk used for dialing directly from the public network into a communications system without help from the attendant.
DNIS	See <i>Dialed Number Identification Service</i> .
Driver	A dynamic link library that processes ODBC function calls received from the driver manager, submits the resultant SQL requests to a specific data source, and returns the results to the requesting application. If necessary, a driver modifies an application's request so that the request conforms to the syntax supported by the associated DBMS. See <i>Structured Query Language, Database Management System, and Dynamic Link Library</i> for more information.
Driver Manager	A dynamic link library that loads drivers on behalf of an application.
Dynamic Link Library	A dynamic link library is another name for a driver or a driver manager. A dynamic link library is specific to the DBMS of the data being accessed. For example, an <i>Informix</i> specific dynamic link library will be used to access data in an <i>Informix</i> database, such as the CMS database.
EAD	See <i>Expert Agent Distribution</i> .
EAS	See <i>Expert Agent Selection</i> .
ECS	See <i>Enterprise Communications Server</i> .
Enterprise Communications Server (ECS)	An Enterprise Communications Server is another name for a switch release, for example, the G3 ECS, or switch.
Entity	A generic term that refers to one of the following: Agent, Split/Skill, Trunk, Trunk Group, VDN, or Vector.
Error Message	A response from a program indicating that a problem has arisen or something unexpected has happened, requiring your attention.
EWT	See <i>Expected Wait Time</i> .
Exception	A type of activity in the ACD which falls outside the limits you have defined. An exceptional condition is defined in the CMS Exceptions

subsystem, and usually indicates abnormal or unacceptable performance of the ACD (by agents, splits/skills, VDNs, vectors, trunks, or trunk groups).

Exception Reports Display occurrences of conditions that fall outside the limits you defined.

Expected Delay See *Expected Wait Time*.

Expected Wait Time (EWT) An estimate of how long a caller will have to wait in queue to be served by a call center considering the current and past traffic, handling time, and staffing conditions. (Also referred to as *expected delay*.) The time spent in vector processing before being queued and the time spent ringing an agent with manual answering operation are not included in the EWT prediction. EWT is a switch-based calculation that can be used in vector processing decisions and can be viewed from CMS (release R3V4 and later). The EWT feature is available on the *DEFINITY* G3V4 switch, and the *DEFINITY* Enterprise Communications Server (ECS) Release 5.

Expert Agent Distribution (EAD) An EAS process that selects an agent when more than one agent is available. With EAS, a call will go to the most idle agent with the skill as primary (skill level one). If none are available, the call goes to an agent who is idle and has the skill as secondary. If none are available, the selection process continues with progressively lower skill levels until an idle agent is found.

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. 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" (Manual In) or "AI" (Auto In) button is lit, the agent is available to take a call in any assigned skills or, in the case of Multiple Call Handling (MCH), in any MCH skills. The ACD queuing and the vector commands *Queue-to-Main* and *Check-Backup* are used to route a call to an agent with the appropriate skill to handle that call.

CMS collects data on skills in the same manner as it collects data on splits. Real-time Agent reports generally indicate the skill in which agents are currently working. Skill reports show the performance of the skill overall, displaying such items as the ASA, the number of calls, and the percentage of calls answered within the target service level for the skill.

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.

External Call	Calls made to off-switch destinations. This includes calls to other switches in a DCS network.
Extension Call	Extension calls are any calls originated by agents and non-ACD calls received by agents. For the Generic 2.2 and Generic 3 switches and the ECS, these include calls an agent makes to set up a conference or transfer.
FBUSY	See <i>Forced Busy</i> .
FDISC	See <i>Forced Disconnect</i> .
Find One	A CMS action that searches the database for entries that match the input value and displays the matching entries one at a time.
First Threshold	A graph term for the lower limit for a particular condition in a graph report. The bar(s) change color/intensity when the defined limit is met, notifying you that a Caution condition could exist.
Forced Busy (FBUSY)	A trunk state in which the switch sends a busy signal to a caller when the call center is too busy to handle the incoming call.
Forced Disconnect (FDISC)	A trunk state in which the switch disconnects the caller.
Forced Multiple Call Handling (FMCH)	A feature available with the G3V4 switch, and the ECS, that, when activated for a split/skill, allows calls to be automatically delivered to an idle line appearance if the agent is in the Auto-In/Manual-In work mode and an unrestricted line appearance is available on the voice terminal, even if the agent is talking on an ACD call.
Function Call	Another name for a request for data generated within an ODBC-enabled application. The embedded SQL function in the application submits the request to the ODBC driver manager as a function call, where it is translated and a DBMS-specific driver manager (dynamic link library) is selected based on the type of data requested.
Get Contents	A CMS action that provides access to the members of an agent group, or to tasks on a shortcut or timetable.

Graphics	A CMS reporting option that allows you to view some reports in bar graph format. <i>CentreVu</i> Supervisor supports other graphic formats.
Grayed Out	When you do not have access to a menu or action list item, it will be grayed out (that is, dimmed or displayed in a different color from the rest of the menu or action list). See <i>Dimmed</i> .
Historical Database	A database that contains intrahour records for up to 62 days in the past, daily records for up to 5 years in the past, and weekly/monthly records for up to 10 years in the past for each CMS-measured agent, split/skill, trunk, trunk group, vector, and VDN.
Historical Reports	Reports that display past ACD data for various agent, split/skill, trunk, trunk group, vector, or VDN activities.
HOLD	A trunk state in which the agent has put the call on hold.
ICM	See <i>Inbound Call Management</i> .
IDLE	A trunk state indicating that the trunk is not in use.
II	See <i>Information Indicator</i> .
Inbound Call Management (ICM)	A set of switch and adjunct features using ASAI to enable the adjunct to provide automatic screen delivery and call routing.
Information Indicator (II)	A 2-digit code that identifies the type of originating line (for example: hotel or pay phone) for incoming ISDN primary rate interface (PRI) calls.
Informix	A relational database management system used to organize CMS historical data.
Informix SQL	A query language tool that is used to extract data from an <i>Informix</i> database. For the CMS historical database, CMSQL is used in place of <i>Informix SQL</i> .
Input Field	An input field is an area on a user window into which a <i>CentreVu</i> CMS user enters one or more valid field values. For example, the valid values for the input field <code>split</code> are integers from 1 through 255 (Generic 3r Version 2 to Version 4) and split names that have been assigned in the Dictionary subsystem.

Integrated Services Digital Network (ISDN)	A digital standard for telephony that enables, among other things, telephone, television, and computer signals on the same lines.
Interval-Based Items	A category of database items. These items generally represent the amount of time during a collection interval spent doing a particular activity. Interval-based items are updated throughout the collection interval and timing is restarted at the end of the interval. Interval-based items should only be used to show the amount of time in an interval for an activity or to calculate percentages of time spent in an interval. Interval-based items should not be used to calculate averages (such as average hold time).
Intrahour Interval	A 15-, 30-, or 60-minute segment of time starting on the hour. An intrahour interval is the basic unit of CMS report time.
ISDN	See <i>Integrated Services Digital Network</i> .
LAI	See <i>Look Ahead Interflow</i> .
LAN	See <i>Local Area Network</i> .
List All	A CMS action that lists all the entries that matched the current field values.
List Devices	A CMS action that lists all the devices which have been specified in the Backup/Restore Devices window.
Local Area Network (LAN)	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	<p>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.</p> <p>The Logical Agent capability allows agents to be called by dialing 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.</p>
LOGOFF	An agent work mode indicating that an agent has logged out and is not available to take ACD calls.

LOGON	An agent work mode indicating that an agent logged in or is staffed.
Logout Reason Codes	Logout reason codes enable an agent to specify the reason for logging out, such as the end of a shift or training.
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.
Maintenance	A CMS subsystem that is used for routine maintenance of the <i>CentreVu</i> CMS, such as backing up data, checking on the status of the connection to the switch, and scanning the error log.
Maintenance Busy (MBUSY)	A trunk state in which the trunk is out of service for maintenance purposes.
Manual In (MI)	An ACD work mode. The Manual In (MI) mode makes the agent available to receive an ACD call and automatically places the agent into the ACW state upon release from the call.
MBUSY	See <i>Maintenance Busy</i> .
MCH	See <i>Multiple Call Handling</i> .
Measured	A term that means an ACD element (agent, split/skill, trunk, trunk group, vector, VDN) has been identified to the switch as of interest to the CMS. The switch sends messages to CMS only for ACD elements that are measured. If the ACD element is not measured on the switch, no data is collected.
Messages	Temporary windows used only for displaying information like “field help” and syntactical field errors. Message windows cannot be moved, sized, or scrolled and do not count in the user window count. Message windows are automatically removed when you correct the error or move to the next field.
MI	See <i>Manual In</i> .
MIA	See <i>Most Idle Agent</i> .
Migration	The process of migrating CMS data when upgrading your CMS. (Execute the “R3 Migrate Data” or “R2 Migrate Data” menu item after selecting

System Setup from the main menu.) Migration is sometimes necessary in order to move the customer's data to a new release. Migration is usually, but not always, driven by a hardware platform change.

Modify	A CMS action that changes the database entry to reflect the new values entered in the given window.
Monthly Data	Daily data that has been converted to a monthly summary.
More Help	More help displays a user window containing expanded information about the current primary user window or menu selection in <i>CentreVu</i> CMS. More help is for primary windows only, not output windows (like list all windows).
Most Idle Agent (MIA)	This is an ACD distribution method that maintains a queue of idle agents and distributes a call to the split/skill to the agent closest to the head of the queue who is not marked as "busy." ("Busy" is defined as being in ACW, on an AUXIN/OUT call, or on an ACD call for another split/skill.) Agents in multiple splits/skills are in multiple "eligible agent" lists. There is one list for each skill. If MIA across splits/skills is enabled, agents are put at the bottom of all agent lists after completing an ACD call for any split/skill. If MIA across skills is <i>not</i> enabled, an agent who is on an AUXIN/OUT extension call from the AVAIL wait or on an ACD call for another split/skill continues to move up the list of eligible agents for other splits/skills. Agents in ACW may or may not be in the eligible agent lists, depending upon the setting of an option (<i>DEFINITY</i> ECS R5 and later).
Multi-Agent Skill Change Window	This window allows the user to perform the following administration actions: add up to 32 agents to a skill; move up to 32 agents from one skill to another; and remove up to 32 agents from a skill.
Multiple Call Handling (MCH)	Allows an agent to receive an ACD call while other calls are active on the agent's station. Unless forced MCH is in operation, the agent must put the current call on hold and press AI/MI in order to receive another ACD call.
Multiple Split/Skill Queuing	With Call Vectoring, a call can be queued to up to three splits/skills at the same time. The first agent who becomes free in any of the splits/skills gets the call.
Multiuser Mode	Any administered CMS user can log into CMS. Data continues to be collected if data collection is "on." This is the normal CMS operating mode.

Name (Synonym) Fields	Fields in which you may enter a name (synonym) that has been entered in the Dictionary subsystem (for example, names of agents, splits/skills, agent groups, trunk groups, vectors, VDNs).
Next	A CMS action that displays the next match found following a Find One, Next, or Previous action.
Night Service	A switch capability that assists calls that come in after business hours or on weekends to be automatically rerouted to a split, an announcement, or an alternate destination specifically set up for after-hours coverage.
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.
Nonzero (0) Skill (Generic 2.2 with EAS)	Any skill that does not end in "0" is called a nonzero skill.
Normal Condition	A graph term in which the bars in the graph report are within your defined acceptable limits.
OCM	See <i>Outbound Call Management</i> .
ODBC	See <i>Open Database Connectivity</i> .
Open Application Interface	An open applications interface allows the same application to be supported by a wide range of products and avoids the need to develop specialized interfaces for new applications.
Open Database Connectivity (ODBC)	Open Database Connectivity is a standard application programming interface (API) for accessing data in both relational and non-relational databases.
Open Window	A user window that remains open because you have not yet closed it with the Exit SLK. An open window becomes the current window when it initially appears on the screen or when you make it the current window using the Current SLK.
OTHER	An agent state in which the agent is working on a call for another split or skill, or has put a call on hold and has not chosen another work mode. When the link to the switch first comes up or when the agent has just logged in, the agent state is OTHER until the switch notifies CMS of the agent's state.

Outbound Call Management (OCM)	A set of switch and adjunct features using ASAI, that distributes outbound calls initiated by an adjunct to internal extensions (usually ACD agents).
PEC	See <i>Price Element Code</i> .
Percent (%) Within Service Level	<p>The percentage of calls that were answered by an agent within a specific number of seconds. This observed percentage is used in reports as a statistical value.</p> <p>See <i>Acceptable Service Level</i>.</p>
Previous	A CMS action that displays the previous match found.
Previous Interval	Represents one intrahour interval and is part of the real-time database. At the end of each intrahour interval, the contents of the current intrahour interval are copied to the previous intrahour interval portion of the real-time database.
Price Element Code (PEC)	The set of numbers that Lucent Technologies has assigned to each part that may be ordered.
Primary Skill	<p>The skills assigned to an agent. Primary skills are the areas in which the agent has the most expertise. (This is used in G3V2 through G3V4 with EAS.)</p> <p>See <i>Agent Skill, Skill Level</i>.</p>
Primary Window	The first window opened in response to a menu selection. A primary window may also generate another user window (secondary window). A primary window can be moved, sized, or scrolled, and counts in the window count.
Private Report	A custom or designer report that only the creator can access.
Pseudo-ACD	An area you create on your CMS to place previously backed-up ACD data. A pseudo-ACD is not a <i>live</i> (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 in which an ACD call has seized the trunk and is queued to a split/skill waiting for an agent to answer.

R3V2	See <i>Release 3 Version 2</i> .
R3V4	See <i>Release 3 Version 4</i> .
R3V5	See <i>Release 3 Version 5</i> .
Read Permission	The CMS user with read permission 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/skill, trunk, trunk group, vector, and VDN.
Real-Time Reports	Reports that display current ACD call activity on agents, splits/skills, trunks, trunk groups, vectors, and VDNs for the current or previous intrahour interval. Current intrahour interval real-time reports are periodically updated as data changes during the interval. Previous intrahour interval real-time reports show data totals for activity that occurred in the previous intrahour interval.
Recorded Announcements	Prerecorded greetings and information played to callers as they wait for service.
Redirect On No Answer (RONA)	An ACD capability that removes an unanswered call from the voice terminal at which it is ringing, busies out the port or makes the agent unavailable, and requeues the call at top priority or sends it to a VDN.
Refresh Rate	The number of seconds CMS should wait for each update of the real-time report data. A user's fastest allowable refresh rate is defined in the User Permissions—User Data window as a minimum refresh rate. The default refresh rate when a user brings up the report input window is the administered minimum refresh rate plus 15 seconds.
Release 3 Version 2 (R3V2)	The CMS software release immediately preceding R3V4. When the term R3V2 is used in this document, it applies to the R3V2 software, regardless of the hardware platform on which it is being run.
Release 3 Version 4 (R3V4)	R3V4 can refer to a software version of <i>CentreVu</i> CMS.
Release 3 Version 5 (R3V5)	R3V5 can refer to a software version of <i>CentreVu</i> CMS.

Request Agent	The <i>OpenLink</i> Request Agent resides on the client and interfaces with the ODBC driver via proprietary protocol. The Request Agent links the client applications and the <i>OpenLink</i> Request Broker on the server to facilitate transparent database access.
Request Broker	The <i>OpenLink</i> Request Broker is an ODBC driver manager that resides on the server. ODBC uses data source names as the link between the ODBC Request Broker and the relevant ODBC driver for a particular database. The <i>OpenLink</i> Request Broker provides the link between the user's applications and the DBMS itself by selecting a dynamic link library specific to the database being queried.
RING	<p>An agent state in which a call rings at an agent's voice terminal after leaving the queue and before the agent answers the call. (This agent state is available only with Generic 2.2, and with Generic 3 and ECS.)</p> <p>A trunk state in which a call is ringing at the agent's voice terminal.</p>
Rolling ASA	<p>Rolling ASA is a running weighted average calculation without regard to any interval boundaries. A rolling ASA calculated by the switch or ECS can be used, beginning with R3V4 CMS, for vector routing. Rolling ASA is calculated on the G3V4 switch, and the ECS, and sent to R3V4 and later CMS releases.</p> <p>An additional Rolling ASA calculated by the switch is also available as a real time database item for G3V4 and later G3 switches.</p>
RONA	See <i>Redirect On No Answer</i> .
Run	A CMS action that starts the process for the given window.
Screen-Labeled Key (SLK)	The first eight function keys at the top of your keyboard that correspond to the screen labels at the bottom of your terminal screen in <i>CentreVu</i> CMS. The screen labels indicate the function each key performs.
Scrolling	Moving backward and forward within a window in CMS.
Second Threshold	A graph term for the upper limit you enter for a particular condition in a graph report. When this limit is met, the bar(s) change color/intensity, indicating that a possible Warning condition exists.
Secondary Split/Skill (G3 Vectoring, G2.2 EAS)	The second split/skill the call queues to in a VDN is called the secondary split/skill.

Skill Group (Generic 2.2 EAS)	A group of ten skills. Each consecutive ten skills ending with digits 0 through 9 constitute a skill tens group. For example, skills 10-19 form a skill tens group, as do skills 340-349.
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.) <i>See Agent Skill, Skill Level.</i>
Secondary Window	A user window that is generated from a primary window. Secondary windows can be moved, sized, or scrolled and do not count in the user window count.
SEIZED	A trunk state in which the trunk is being used for either an incoming or an outgoing call.
Select Tables	A CMS action that allows you to select specific tables to Back Up or Restore.
Service Observing—Remote	A feature that allows a user to dial into the switch and monitor a call.
Service Observing—VDNs	A feature available with the G3V4 switch and the ECS that gives a voice terminal user the ability to monitor the treatment a call receives as it is processed by a VDN, routes to another VDN or agent, or transfers to another VDN or agent.
Shortcut	A CMS capability that enables a series of tasks to run immediately on your screen. Shortcut is a fast, easy way to select windows that you might look at every day.
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 when EAS is enabled. An agent skill is a particular expertise or speciality enabling an agent to handle a call which requires someone with that particular area of expertise. You define skills based on specific customer needs and call center requirements.
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.

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.)
Skill, Primary	See <i>Primary Skill</i> .
Skill, Secondary	See <i>Secondary Skill</i> .
SLK	See <i>Screen-Labeled Key</i> .
Solaris System	See <i>UNIX System/Solaris System</i> .
SPARCserver 5	See <i>Sun SPARCserver Computers</i> .
SPARCserver 10	See <i>Sun SPARCserver Computers</i> .
SPARCserver 20	See <i>Sun SPARCserver Computers</i> .
SPARCstation	A workstation client for the <i>SPARCserver</i> .
Split	A group of extensions (referred to as agents) that receives special-purpose calls in an efficient, cost-effective manner. Calls automatically go to a split and can queue if no agents are available.
Split/Skill ACD Call	A split/skill ACD call is a call that routed to a split/skill and was answered by an agent in that split/skill.
SQL	See <i>Informix SQL</i> .
Staffed Agent	An agent who is currently logged in to the switch.
Standard Reports	The set of reports that are delivered with the CMS or <i>CentreVu</i> Supervisor software.
Station	An unmeasured voice terminal extension. An extension that is not currently staffed by an agent or that is a member of an unmeasured split/skill or hunt group.
Stop	A CMS action that stops the Restore or Migration that is in progress. Stop is also a vector command.

String Values	The descriptive words that appear on reports dealing with agents, splits/skills, and trunks. A <i>word</i> is used to describe the value of the data (for example, HOLD, AVAIL, YES).
Structured Query Language (SQL)	A language used to interrogate and process data in a relational database (such as <i>Informix</i>). See <i>Informix SQL</i> .
Submenu	A menu that appears as a result of a menu selection. All menu selections followed by a ">" have submenus.
Subsystem	Each CMS main menu selection (for example, Reports, Dictionary, System Setup, Exceptions, and so on) along with Timetable and Shortcut is referred to as a subsystem of the Call Management System.
Sun Microsystems	Manufactures the <i>Sun SPARCserver 5</i> , 10, and 20, the host computer for the <i>CentreVu CMS R3V5</i> .
Sun SPARCserver Computers	A host computer that is attached to a network and provides services other than simply acting as a store-and-forward processor or communication switch. The <i>Sun SPARCserver 5</i> , 10, and 20 computers are capable of hosting the CMS application software.
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.
System	A general term for a computer and its software and data.
System Setup	A CMS subsystem that allows users to initialize their CMS (for example, selecting the size of the intrahour interval based on how much data storage will be used for CMS data).
Technical Service Center (TSC)	Provisioning, maintenance, and helpline support for Lucent Technologies call center customers.
Terminal	A combination of monitor (video display) and keyboard used to communicate with a computer to enter and display information. See <i>Agent Terminal</i> .
Tertiary Split/Skill	Generic 3 and ECS 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	<p>The standard format for entering times on CMS reports. Acceptable formats are:</p> <ul style="list-style-type: none">• A 12-hour time format with AM/PM (for example, 7:30AM, 5:00PM).• A 24-hour time format (for example, 7:30, 17:00).• A “-” offset based on the current interval date (for example, -1 for the previous hour or -0:30 for the previous half hour interval).
Timetable	<p>A task or group of tasks (such as reports) scheduled for completion at a time that is convenient and nondisruptive for your call center's operation.</p>
Top Skill	<p>The agent's top skill is the agent's first-administered, highest-level skill. This concept is the most useful when you have a Generic 3 switch (with EAS) and with agents who are using skill level call handling preference. In this case, the agent's top skill represents the skill for which the agent is most likely to receive a call. Agents for whom a given skill is the top skill are the agents that a skill supervisor can count on to handle calls for the skill.</p> <p> NOTE:</p> <p>This concept is not useful for agents using the greatest need call handling preference or for agents who are not Generic 3 (with EAS) agents. In these cases, the top skill data is still populated. When using the Generic 2.2 (with EAS) switch, the agent's top skill is always the “zero skill.” For non-EAS agents, the top “skill” is the split the agent has been logged into the longest.</p>
Translations	<p>A CMS action that requests a full set of information about measured entities from the switch.</p>
Trunk	<p>A telephone line that carries calls between two switches, between a Central Office (CO) and a switch, or between a CO and a phone.</p>
Trunk Group	<p>A group of trunks that are assigned the same dialing digits—either a phone number or a Direct Inward Dialed (DID) prefix.</p>
TSC	<p>See <i>Technical Service Center</i>.</p>
UCD	<p>See <i>Uniform Call Distribution</i>.</p>
Uniform Call Distribution (UCD)	<p>A process that selects an agent when more than one agent is available. With UCD, the most idle agent for the skill/split receives the call.</p> <p>See <i>Direct Department Calling</i> and <i>Expert Agent Distribution</i>.</p>

UNIX System/ Solaris System	A multi-user computer operating system that supports CMS. A user can access the <i>UNIX</i> system from the <code>Commands</code> SLK.
UNKNOWN	An agent state in which CMS does not recognize the current state. A trunk state in which CMS does not recognize the state of the trunk.
UNSTAF	See <i>Unstaffed</i> .
Unstaffed (UNSTAF)	An agent state in which the agent is not logged in and, therefore, is not being tracked by CMS.
Update	A process used to modify a customer's existing software release in order to give the customer additional functionality or to fix a problem. The update process involves downloading CMS update files from a cartridge tape to hard disk, and installing the new files.
Upgrade	A process used to move an existing CMS customer from one release/load to another, giving the customer the additional functionality provided in the new release. Depending on which release the customer is upgrading from, and to, the upgrade may involve upgrading the software only, or may involve upgrading software and hardware. When an upgrade involves a major release, then data migration may be a necessary part of the upgrade procedure.
User Application	A user application is the software on the user's PC that the data is being accessed for. For example, a user may want to access data in the CMS database for use in <i>Microsoft Excel</i> . The user generates a query from the embedded data querying function in the application. The data returned from the CMS database can then be used to generate a spreadsheet.
User ID	The login ID for a CMS user.
User Permissions	A CMS subsystem that allows the CMS administrator to define user access permissions.
User Window	A window you can move, size, or scroll. It may contain input fields, reports, or help information.
VDN	See <i>Vector Directory Number</i> .
VDN Counted-Calls	Also known as counted-calls to VDN and active VDN calls. A Call Vectoring capability available with the G3V4 switch and the ECS. 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 currently in a VDN (in vector processing or at an agent).
VDN of Origin Announcement (VOA)	A short announcement that is assigned to a VDN through switch administration. The VOA identifies the origin or purpose of a call for the call center agent who answers the call.
VDN Skill Preference	A prioritized list of agent skills assigned to a VDN. Up to three skills can be assigned. VDN skill preferences are referred to in the vector as “1st,” “2nd,” and “3rd.” Vectors use VDN skills to queue calls based on your preference. CMS tracks calls by VDN skill preference.
Vector	A list of steps that process calls in a user-defined manner. The steps in a vector can send calls to splits/skills, 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 to main”, “check backup”, “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, dial-repeating (DID) trunk group, or ISDN trunk group. The VDN by itself may be dialed to access the vector from any extension connected to the switch.
Vector Step	One processing step in a vector. A vector step consists of a command and one or more conditions or parameters.
Vector Step Condition	A condition accompanying a vector command that defines the circumstances in which the command will be applied to a call.
VOA	See <i>VDN of Origin Announcement</i> .
Voice Response Unit (VRU)	A switch that routes calls to a VRU adjunct computer that provides interactive voice related services to inbound callers.
Voice Terminal	A telephone set, usually with buttons, that gives an agent some control over the way calls are handled.
VRU	See <i>Voice Response Unit</i> .

Warning Condition	A graph term. The bars in the graph report change color or intensity indicating that the data being displayed met your defined second threshold limit.
Weekly Data	Daily data that has been converted to a weekly summary.
Window	Any rectangle on your CMS screen that encloses a menu, data entry fields, reports, or messages.
Window Count	The number of primary windows that can be open at any one time.
Write Permission	The CMS user can add, modify, or delete data and execute processes. Write permission is granted from the User Permissions subsystem.
Zero (0) Skill (Generic 2.2 with EAS)	Every skill that ends with a "0" is called a zero skill. The zero skill is the first skill for each skill group. This is the same as the default skill.

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