



CentreVu® Explorer

Version 1.2

Installation and Getting Started Guide

585-215-835
Comcode 108217571
Issue 2
May 1998

Disclaimer

Intellectual property related to this product (including trademarks) and registered to Lucent Technologies Inc. has been transferred or licensed to Avaya Inc.

Any reference within the text to Lucent Technologies Inc. or Lucent should be interpreted as references to Avaya Inc. The exception is cross references to books published prior to April 1, 2001, which may retain their original Lucent titles.

Avaya Inc. formed as a result of Lucent's planned restructuring, designs builds and delivers voice, converged voice and data, customer relationship management, messaging, multi-service networking and structured cabling products and services. Avaya Labs is the research and development arm for the company.

Notice

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

Your Responsibility for Your System's Security

Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party, for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf. Note that there may be a risk of toll fraud associated with your telecommunications system and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

You and your system manager are responsible for the security of your system such as programming and configuring your equipment to prevent unauthorized use. The system manager is also responsible for reading all installation, instruction, and system administration documents provided with this product in order to fully understand the features that can introduce risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from nor will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use.

Lucent Technologies Fraud Intervention

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

Trademarks

- I CentreVu is a registered trademark of Lucent Technologies.
- I Netscape Navigator is a trademark of Netscape Communications Corporation.
- I UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited.
- I MacIntosh is a registered trademark of Apple Computer Inc.
- I OS/2 is a registered trademark of IBM.
- I DEFINITY is a registered trademark of Lucent Technologies.
- I Intel and Pentium are registered trademarks of Intel Corporation.
- I Microsoft, MS, MS-DOS, Access, Windows, and Windows NT are registered trademarks of Microsoft Corp.
- I All other product names mentioned herein are the trademarks of their respective owners.

Ordering Information

- Call:** Lucent Technologies Publications Center
Voice: 1-800-457-1235
International Voice: +1-317-322-6416
Fax: 1-800-457-1764
International Fax: +1-317-322-6699
- Write:** Lucent Technologies BCS Publications Center
2855 N. Franklin Road
Indianapolis, IN 46219
U.S.A.
- Order:** CentreVu Explorer Installation and Getting Started Guide
Document No. 585-215-835
Comcode 108217571
Issue 2, May 1998

For additional documents, refer to the section entitled "Related Documents" in the Preface.

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

Lucent Technologies National Customer Care Center

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

Document Support Telephone Number

Lucent Technologies provides telephone numbers for you to use to report errors or to ask questions about the information in this document. The support telephone numbers are:

Voice: 1 888 584-6366 and

International Voice: +1-317-322-6848.

European Union Declaration of Conformity

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

EMC Directive 89/336/EEC

Low Voltage Directive 73/23/EEC



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

Disclaimer

Intellectual property related to this product (including trademarks) and registered to AT&T Corporation has been transferred to Lucent Technologies Incorporated.

Any references within this text to American Telephone and Telegraph Corporation or AT&T should be interpreted as references to Lucent Technologies Incorporated. The exception is cross references to books published prior to December 31, 1996, which retain their original AT&T titles.

Heritage Statement

Lucent Technologies—formed as a result of AT&T's planned restructuring—designs, builds, and delivers a wide range of public and private networks, communication systems and software, consumer and business telephone systems, and microelectronics components. The world-renowned Bell Laboratories is the research and development arm for the company.

How are we doing?

Document Title: *CentreVu® Explorer*
Installation and Getting Started Guide
Document No.: 585-215-835 Date: May 1998

Lucent Technologies welcomes your feedback on this document. Your comments can be of great value in helping us to improve our documentation.

1. Please rate the effectiveness of this document in the following areas:

| | Excellent | Good | Fair | Poor | Not Applicable |
|----------------------|-----------|------|------|------|----------------------|
| Ease of Use | | | | | //////////////////// |
| Clarity | | | | | //////////////////// |
| Completeness | | | | | //////////////////// |
| Accuracy | | | | | //////////////////// |
| Organization | | | | | //////////////////// |
| Appearance | | | | | //////////////////// |
| Examples | | | | | //////////////////// |
| Illustration | | | | | //////////////////// |
| Overall Satisfaction | | | | | //////////////////// |

2. Please check the ways you feel we could improve this document:

- | | |
|--|---|
| <input type="checkbox"/> Improve the overview/introduction | <input type="checkbox"/> Make it more concise/brief |
| <input type="checkbox"/> Improve the table of contents | <input type="checkbox"/> Add more step-by-step procedures/tutorials |
| <input type="checkbox"/> Improve the organization | <input type="checkbox"/> Add more troubleshooting information |
| <input type="checkbox"/> Include more figures | <input type="checkbox"/> Make it less technical |
| <input type="checkbox"/> Add more examples | <input type="checkbox"/> Add more/better quick reference aids |
| <input type="checkbox"/> Add more detail | <input type="checkbox"/> Improve the index |

Please provide details for the suggested improvement. _____

3. What did you like most about this document?

4. Feel free to write any comments below or on an attached sheet.

If we may contact you concerning your comments, please complete the following:

Name: _____ Telephone Number: (____) _____

Company/Organization: _____ Date: _____

Address: _____

When you have completed this form, please fold, tape, and return to address on back, or you can fax the form to 303-538-2195.

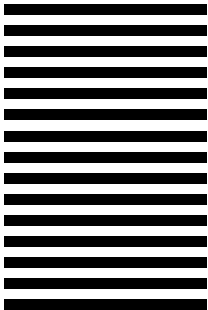
Do Not Tear — Fold Here Last, Then Tape the Long Edge and Both Ends of the Mailer



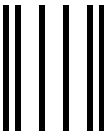
Lucent Technologies
Department JC0E11400
1200 West 120th Avenue
Westminster, CO 80234-9987

FIRST CLASS PERMIT NO. 1999

BUSINESS REPLY
MAIL



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



Lucent Technologies
Bell Labs Innovations

Do Not Tear — Fold Here First



Table of Contents

Software Installation 1-1

| | |
|--|-------------|
| System Overview | 1-1 |
| Network Diagram | 1-2 |
| ECS/Switch Requirements | 1-3 |
| CentreVu CMS Requirements | 1-3 |
| External Call History Interface (ECHI) Overview | 1-3 |
| Customer Responsibilities | 1-4 |
| CentreVu Explorer Server Requirements and Recommendations | 1-4 |
| Processor | 1-4 |
| Memory | 1-5 |
| Hard Disk Drives | 1-5 |
| Remote Access | 1-5 |
| System Software Configuration | 1-6 |
| Co-residency Issues | 1-6 |
| Disk Storage Requirements | 1-7 |
| Optional Recommendations | 1-8 |
| Network Connectivity | 1-9 |
| Client Requirements and Recommendations | 1-10 |
| Installation Information Chart | 1-11 |
| CentreVu Explorer Installation Preparation | 1-12 |
| CentreVu Explorer Server Hardware Checklist | 1-12 |
| Setting Up the CentreVu Explorer Server | 1-14 |
| Setting Up CentreVu Explorer Client | 1-15 |
| Setting Up CentreVu CMS | 1-15 |
| Provisioning and Activation of ECHI | 1-16 |
| CentreVu Explorer Server Software Installation Sequence | 1-17 |
| Microsoft Windows NT 4.0 and Microsoft Internet Information Server 2.0 | 1-18 |
| Microsoft SQL Server 6.5 | 1-18 |
| Microsoft SQL Server 6.5 Service Pack 3 | 1-18 |
| Microsoft Windows NT 4.0 Service Pack 3 | 1-18 |
| Microsoft Internet Information Server 3.0 | 1-19 |
| CentreVu Explorer | 1-19 |
| Installing on CentreVu Explorer Server | 1-20 |
| Loading CentreVu Explorer Software | 1-20 |
| Establishing Network Connection | 1-21 |
| Installing on Desktop Client | 1-21 |
| Launching CentreVu Explorer | 1-22 |
| Verifying the Installation | 1-23 |
| CentreVu Explorer Database Backup | 1-26 |

Getting Started with Explorer 2-1

| | |
|-------------------------|------------|
| Product Overview | 2-1 |
|-------------------------|------------|

Table of Contents

| | |
|---|------------|
| Explorer Login Window | 2-3 |
| Main Menu | 2-4 |
| Window Elements | 2-5 |
| Displaying Results | 2-6 |
| Window Viewing and Sizing | 2-7 |
| A Quick Start to CentreVu Explorer | 2-9 |
| Troubleshooting 3-1 | |
| Introduction | 3-1 |
| Troubleshooting Tips | 3-2 |
| NT Event Log Error Messages Types | 3-2 |
| Installation Error Messages | 3-2 |
| SQL Server Error Messages | 3-4 |
| Data Import Service Messages | 3-5 |
| ODBC Error Messages | 3-6 |
| DB-Library Error Messages | 3-6 |
| Log-in Error Messages | 3-7 |
| Service Affecting Automated Procedures | 3-7 |
| Data Import | 3-7 |
| Database Maintenance Procedures | 3-8 |
| Appendix A A-1 | |
| NT Server Connection Assistance | A-1 |
| Establishing Server Network Connection | A-2 |
| Hardware | A-2 |
| Software | A-2 |
| CentreVu Explorer Server Identification | A-3 |
| CentreVu Explorer Protocol Assignment | A-4 |



Software Installation

System Overview

CentreVu® Explorer collects data in a Lucent Technologies call center environment. Data is delivered to an external *Microsoft** *Windows NT*† server via a local area network (LAN) connection to the *CentreVu* Call Management System (CMS).

Note: The *CentreVu* CMS must be connected to a *DEFINITY*® Enterprise Communications Server (ECS)/switch. As such, *CentreVu* Explorer operates only in a Lucent Technologies environment.

Files are transmitted over the local area network at a rate based on the CMS settings. *CentreVu* Explorer reads these files, formats the data, and stores it in a local database. This data is accessed via a query engine utilizing a web browser front end as an access vehicle.

*Microsoft is a registered trademark of Microsoft Corp.

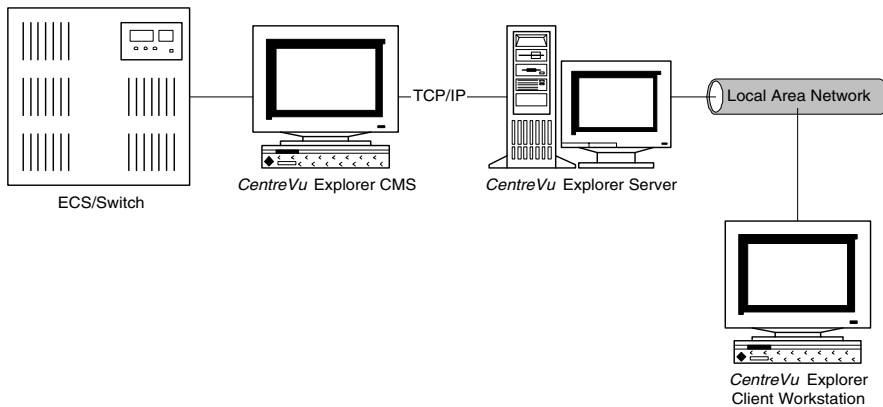
†Windows NT is a registered trademark of Microsoft Corp.

Network Diagram

The following is a list of the network requirements:

- ECS/switch
- *CentreVu* CMS
- *CentreVu* Explorer server
- Local area network
- *CentreVu* Explorer client workstation.

The following diagram indicates a typical network configuration utilizing *CenterVu* Explorer.



ECS/Switch Requirements

The ECS/switch requires a communication link to the *CentreVu* CMS. Appropriate automatic call distribution (ACD) translations must be configured to generate external call history (ECH) results on the *CentreVu* CMS. These results include measured agents, vectors, vector directory numbers (VDNs) and other applicable call center translations.

No exceptional connection logistics exist for the *CentreVu* Explorer product. Standard ECS/switch communication to *CentreVu* CMS is used.

CentreVu CMS Requirements

The External Call History Interface (ECHI) feature must be authorized in the *CentreVu* CMS. See setup information in the *CentreVu Call Management System Release 3 Version 4 External Call History Interface* (585-215-804), *Version 5 External Call History Interface* (585-215-824) or *Version 6 External Call History Interface* (585-215-854) documents.

External Call History Interface (ECHI) Overview

The External Call History Interface is an optional *CentreVu* CMS feature, which allows for the transfer of *CentreVu* CMS Release 3 Version 4, Version 5 or Version 6 call record files (call history data files) to another computer for processing.

This feature is useful for call centers with a high volume of call traffic. It allows a much higher volume of call data to be processed and stored because the *CentreVu* CMS computer can process only a limited amount of call data.

As calls are processed, call records are recorded in a file (one record per call segment) until the file size reaches 20 megabytes (MB) or the end of an interval is reached, whichever comes first. A new file (and its first record) is then created as the first segment of the next call is processed.

Customer Responsibilities

You must do the following to transfer call history data:

1. Purchase the External Call History Interface package.
2. Contact your Lucent representative to have the ECHI feature authorized. If you are an international customer, contact your Lucent Technologies representative or distributor.
3. Install the ECHI feature on *CentreVu* CMS.
4. Set up the connection between the *CentreVu* CMS computer and the computer that will be receiving the data.
5. Setup the NT server and install the *CentreVu* Explorer software.

CentreVu Explorer Server Requirements and Recommendations

CentreVu Explorer employs industry standard components to deliver access to ECS/switch CMS Call History data. As such, the final system configurations may vary in individual call centers. Recommendations for the *CentreVu* Explorer configuration follow. Hardware performance varies based on actual system configuration.

Processor

The minimum recommended processor to be used with *CentreVu* Explorer is the *Intel** *Pentium*† Pro because of its 32-bit software architecture. Since all components of *CentreVu* Explorer are of 32-bit code, your system benefits from the *Pentium* architecture. Additionally, faster processor speeds improve the performance of *CentreVu* Explorer.

The minimum recommended processors for the *CentreVu* Explorer server are as follows:

- Pentium 150 Mhz or greater
- Pentium Pro, multiple processor architecture for large call centers.

*Intel is a registered trademark of Intel Corporation.

†Pentium is a registered trademark of Intel Corporation.

Memory

CentreVu Explorer requires 128 MB of memory. Database server performance on large data sets is directly affected by available memory.

Call centers of all sizes benefit from *CentreVu* Explorer. Call centers taking 100,000 or more ACD calls per day quickly accumulate large volumes of data. Smaller call centers taking less than 10,000 ACD calls per day also accumulate large volumes of data over a period of months. Therefore, the following memory is recommended:

- Minimum—128 MB RAM
- Recommended—256 MB RAM
- Long term considerations—motherboard with capacity of 1 gigabyte (GB) of RAM.

Hard Disk Drives

The amount and type of local disk storage directly impacts *CentreVu* Explorer's ability to store and retrieve information. A direct correlation exists between local disk capacity and the total number of call records that can be stored. Actual disk space usage will vary by call center depending on the number of ACD calls per day, the average number of segments per call, and the number of days that *CentreVu* Explorer is required to keep data online. Please refer to Table 1, "*Disk Storage*," which shows disk storage requirements for a variety of daily call volumes

CentreVu Explorer operates more efficiently with Ultra Fast Wide Small Computer System Interface (SCSI) disk drives. Having the option to add Input/Output (I/O) controllers allows for performance increases as the situation dictates.

The following hard disk drives are recommended:

- Multiple 2 GB and 4 GB drives (depending on storage requirements)
- Drive type—Ultra Fast Wide SCSI
- Multiple Ultra Fast Wide SCSI smart array controllers/channels.

Remote Access

The *CentreVu* Explorer server requires a 28.8 (or greater) high-speed modem and also requires that the *Microsoft* Remote Access Service (RAS) be configured.

Remote access is necessary for system diagnosis, maintenance, and software updates.

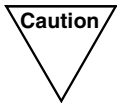
System Software Configuration

The following software packages are required to operate with *CentreVu* Explorer Version 1.0:

- *Microsoft Windows NT* Server 4.0 Service Pack 3
- *Microsoft SQL* Server 6.5 with Service Pack 3
- *Microsoft* Internet Information Server 3.0 with Active Server Pages (ASP) support.

Co-residency Issues

CentreVu Explorer is configured at installation to use all resources of the server on which Explorer is loaded.



It is strongly recommended that the server remain fully dedicated to *CentreVu* Explorer. The loading and running of additional software on the *CentreVu* Explorer server is strongly discouraged because it can result in performance degradation to *CentreVu* Explorer users.

Disk Storage Requirements

This table shows call record storage requirements based on the number of calls per day over a period of months.

Table 1: Disk Storage

| # of Months | Avg # of Segments | ACD Calls Per Day | In MegaBytes | |
|----------------|----------------------|----------------------|--------------|-------------|
| | | | Daily Req'd | Total Req'd |
| 3 | 3 | 100,000 | 87.3 | 7,853.5 |
| 6 | 3 | 100,000 | 87.3 | 15,707.0 |
| 12 | 3 | 100,000 | 87.3 | 31,414.0 |
| 24 | 3 | 100,000 | 87.3 | 62,828.1 |
| ↑ 3 | 2 | 100,000 | 58.2 | 5,235.7 |
| 6 | 2 | 100,000 | 58.2 | 10,471.3 |
| 12 | 2 | 100,000 | 58.2 | 20,942.7 |
| 24 | 2 | 100,000 | 58.2 | 41,885.4 |
| 6 | 2 | 20,000 | 11.6 | 2,094.3 |
| 12 | 2 | 20,000 | 11.6 | 4,188.5 |
| 24 | 2 | 20,000 | 11.6 | 8,377.1 |
| 6 | 2 | 5,000 | 2.9 | 523.6 |
| 12 | 2 | 5,000 | 2.9 | 1,047.1 |
| 24 | 2 | 5,000 | 2.9 | 2,094.3 |

Example

Question: *How much disk space do I need on my server to store 3 months of call records?*

Your call center averages 100,000 calls per day with an average of 2 segments per call.

The above table shows that you would need at least 5.2 GB (5,200 MB) of disk space allocated for call records on your server.

- Daily storage requirement = 58.2 MB
- Data Total = 58.2/day x 90 days = 5,238 MB (5.2 GB)
- Disk storage for records = 5,238 MB = 5.2 GB.

Segments—All *CentreVu* Explorer information is collected on the database server in the form of call data that is divided by call segments. A segment is defined by the ECS/switch as a logical grouping of call information. Each call that enters the

ECS/switch call vector processing has a minimum of one (1) segment. Over the life of the call, information is added to a segment based on the corresponding events occurring during the call's life, starting from the time it entered vector processing and until vector processing releases all call record information for the call.

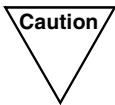
For more complete information regarding the format of ECHI data, please refer to the following External Call History Interface documents:

- *CentreVu Call Management System Release 3 Version 4 External Call History Interface* (585-215-804)
- *CentreVu Call Management System Release 3 Version 5 External Call History Interface* (585-215-824).
- *CentreVu Call Management System Release 3 Version 6 External Call History Interface* (585-215-854).

Optional Recommendations

We recommend the following components to enhance overall system performance and integrity:

- UPS—Uninterruptable power supply.



An unprotected power hit may result in loss of some or all data.

- Digital tape backup—A tape backup is desirable as an archiving mechanism to minimize the requirement for on-line storage and protect valuable call center historical information.
- Near-line storage—In addition to a resident tape backup, near-line storage may be provided for direct access to archived historical information.
- Disk array controller—In the event the *CentreVu Explorer* server employs multiple hard drives, a smart array controller may be installed to allow disk mirroring, disk striping, and other storage enhancements.

Network Connectivity

CentreVu Explorer requires a transmission control protocol/internet protocol (TCP/IP) connection to the *CentreVu* CMS via a local area network (LAN). The TCP/IP LAN connection is necessary so that the CMS can transfer external call history data to the *CentreVu* Explorer server. This same LAN connectivity allows client workstations to access *CentreVu* Explorer through a web browser.


- ECS/switch to CMS—Standard CMS connectivity.
- CMS to Explorer—Local area network connection running TCP/IP with file transfer protocol (FTP) active.
- *CentreVu* Explorer Server to Client—Local area network connection running TCP/IP.

Client Requirements and Recommendations

The client workstation must be able to run a supported web browser. *CentreVu* Explorer has been tested with *Microsoft* Internet Explorer 3.01 and *Netscape Navigator** 3.0. However, any hypertext markup language (HTML) 2.0 compliant browser will work.

The following configuration is recommended for running *CentreVu* Explorer from a PC:

- Pentium central processing unit (CPU) or better
- 90 megahertz (MHz) or higher
- 16 MB of RAM or better
- Mouse
- Web browser (HTML 2.0 compliant)
- An Ethernet LAN card
- *Windows*† 95 or *Windows NT* workstation
- VGA monitor or better. (A terminal with a resolution of 1024 X 768 video resolution or higher makes viewing data easier.)

Note: The following instructions describe how to install *CentreVu* Explorer.
 These instructions can also be used to upgrade *CentreVu* Explorer from 1.1 to 1.2. However, *CentreVu* Explorer 1.0 cannot be upgraded. Contact the Lucent TSO for information on how to upgrade *CentreVu* Explorer 1.0.

*Netscape Navigator is a trademark of Netscape Communications Corporation.

†Windows is a registered trademark of Microsoft Corp.

Installation Information Chart

This information applies to installations. Please complete the following table and keep for your records when installing or upgrading.

Table 2: Checklist

| What you need | Definition | Write It Down Here |
|------------------------|---|--|
| LAN Card | The physical connection between the <i>CentreVu</i> CMS and the Explorer server must be provided over a LAN. Two types of connections are available—Ethernet or Token Ring. | (Circle One) Ethernet Token Ring |
| Server computer name | <i>CentreVu</i> Explorer server computer name. | |
| Server domain name | <i>CentreVu</i> Explorer server domain name. | |
| Server IP address | | |
| Server subnet mask | | |
| Server default gateway | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

CentreVu Explorer Installation Preparation

The following checklist is designed to assist Lucent Technologies in the installation of your *CentreVu* Explorer server.

CentreVu Explorer Server Hardware Checklist

Please fill in the hardware checklist below, taking care to specify additional information or descriptions where requested.

System Memory

A minimum of 128 MB is required; 256 MB is recommended.

- Please specify amount: _____

CPU Type

- *Intel Pentium* Processor (Please specify): _____
- *Intel Single Pentium* Pro 150 Mhz Processor
- *Intel Single Pentium* Pro 180 Mhz Processor
- *Intel Single Pentium* Pro 200 Mhz Processor
- *Intel Dual Pentium* Pro 150 Mhz Processor
- *Intel Dual Pentium* Pro 180 Mhz Processor
- *Intel Dual Pentium* Pro 200 Mhz Processor
- Other Processor (Please specify clock): _____

Disk Type

- EIDE
- SCSI (Ultra SCSI Recommended)

Disk Controller Type

- EIDE controller
- SCSI controller
- RAID (Redundant Array of Inexpensive Disks) Array Controller (Please specify RAID Level): _____
- Other (Please specify): _____

Number of I/O Controller Channels

- Please specify the number of channels: _____

Disk Capacity

A minimum of 4 GB of disk capacity is required.

- Please specify disk capacity: _____

CD-ROM

- Yes
- No

Setting Up the *CentreVu* Explorer Server

Verify that the *CentreVu* CMS can ping the *CentreVu* Explorer server. This test establishes the IP connectivity required for the *CentreVu* CMS to transfer external call history data to the *CentreVu* Explorer server.

Can you successfully ping the *CentreVu* Explorer server from the CMS?

- Yes
- No

Fill in the temporary IP address line only if you plan on enabling ECHI on *CentreVu* CMS more than 3 days prior to the scheduled installation date for the *CentreVu* Explorer server.

Note: You may need to enlist the assistance of a network administrator to accurately provide the IP address and network name resolution information.



CentreVu Explorer server modem number _____

CentreVu Explorer IP address ____ - ____ - ____ - ____

CentreVu Explorer server system name (Choose a name no more than 15 characters in length) _____

CentreVu Explorer login/password information _____

CentreVu CMS IP address ____ - ____ - ____ - ____

CentreVu CMS login/password information _____

Gateway IP address ____ - ____ - ____ - ____

DNS Server IP address ____ - ____ - ____ - ____

Setting Up *CentreVu* Explorer Client

If you plan on accessing the *CentreVu* Explorer server from a client workstation, verify that you can reach the *CentreVu* Explorer server by pinging it from a workstation.

Can you successfully ping the *CenterVu* Explorer from a client workstation?

- Yes
- No

Setting Up *CentreVu* CMS

Lucent Technologies Professional Services will require the following information:


- *CentreVu* CMS modem number _____

Provisioning and Activation of ECHI

Call your Lucent representative to schedule activation of ECHI.

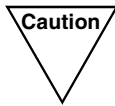
Has External Call History Interface been installed on CMS?

- Yes
- No

Note: ECHI should be activated within 24 hours prior to the installation of the  *CentreVu Explorer* server software. Activation of ECHI requires a shutdown and restart of the *CentreVu CMS*. Care should be taken to schedule this appropriately.

CentreVu Explorer Server Software Installation Sequence

This section documents the software installation sequence required to install the software components for the *CentreVu Explorer* server.



Failure to follow the installation sequence may result in a violation of the warranty.

The following list comprises a complete set of software required to build a functioning *CentreVu Explorer* server from a server grade PC. It is assumed that the PC has sufficient hardware components (for example, disk, memory, and CPU). See the section entitled “*CentreVu Explorer Server Requirements and Recommendations*,” in this chapter for a complete list of system requirements.

- *Microsoft Windows NT Server 4.0*
- *Microsoft Windows NT 4.0 Service Pack 3*
- *Microsoft Internet Information Server 2.0*
- *Microsoft SQL Server 6.5*
- *Microsoft SQL Server 6.5 Service Pack 3*
- *Microsoft Internet Information Server 3.0 with ASP Support*
- *CentreVu Explorer.*

Note: As an option, you may add a browser to the server.



Microsoft Windows NT 4.0 and Microsoft Internet Information Server 2.0

Microsoft Windows NT Server 4.0 is the operating system for the *CentreVu Explorer* and must be loaded before any other software components. If there is an existing version of *Windows NT* on the server, it should be removed. It is preferable to format the system disk and install *Windows NT Server 4.0* rather than attempt to upgrade an earlier version to 4.0. If the system already has *Windows NT Server 4.0* loaded, this step can be skipped.

Microsoft Internet Information Server 2.0 must be loaded and configured as part of the *Windows NT Server 4.0* setup process. *CentreVu Explorer* requires this software to be loaded.

Microsoft SQL Server 6.5

Microsoft SQL Server 6.5 is the database engine for *CentreVu Explorer*.

Microsoft SQL Server 6.5 Service Pack 3


Microsoft SQL Server 6.5 Service Pack 3 is a set of fixes and enhancements to the original release of *Microsoft SQL Server 6.5*. The Service Pack 3 contains relevant fixes and enhancements that are important to the integrity and performance of *CentreVu Explorer*. To download *Microsoft* service packs, access the Microsoft Corporation home page.

Microsoft Windows NT 4.0 Service Pack 3

Microsoft Windows NT Server 4.0 Service Pack 3 is a set of problem fixes and enhancements for *Microsoft Windows NT Server 4.0*. To download *Microsoft* service packs, access the Microsoft Corporation home page.


Microsoft Internet Information Server 3.0

The *Microsoft* Internet Information Server 3.0 with ASP support is intended to be loaded on top of the *Microsoft* Internet Information Server 2.0, and it must be loaded after the *Windows NT* Server 4.0 installation has been completed.

Note:  *Microsoft* Internet Information Server 3.0 is an upgrade only and must be installed after Internet Information Server 2.0. When installing Internet Information Server 3.0, you must include support for Active Server Pages (ASP). ASP support is required by *CentreVu* Explorer. To download the Internet Information Server 3.0 upgrade, access the Microsoft Corporation home page.

CentreVu Explorer

The final component to be installed is *CentreVu* Explorer software.

Note:  The *CentreVu* Explorer installation process will be aborted if any of the previous software components are not loaded.

Installing on *CentreVu* Explorer Server

The primary tasks in *CentreVu* Explorer server installation are as follows:

- Loading *CentreVu* Explorer software
- Establishing network connection.

Loading *CentreVu* Explorer Software

Prior to loading the *CentreVu* Explorer application software, make sure you have loaded all of the required software.

Note: Have your *Windows NT* administrator account password and your SQL Server system administrator password available.



1. Log onto the NT server as **Administrator**.
2. Insert the *CentreVu* Explorer CD into the appropriate drive. The *CentreVu* Explorer Setup program will AutoPlay.
3. If you wish to run Setup manually, click the **Start** button and then click **Run**.
4. Run the Setup program on the CD.
5. The setup wizard appears. Follow the instructions in each of the screens that follow.

Establishing Network Connection

Appendix A of this document contains a high-level overview for connecting a server running *Microsoft NT* Server 4.0 to a local area network. Refer to *Microsoft* documentation for complete guidelines on how to connect a *Windows NT* Server 4.0 machine to your local area network.

Installing on Desktop Client

Installing the desktop administration vehicle for *CentreVu* Explorer requires any industry standard web browser. Compatible web browsers include the following:

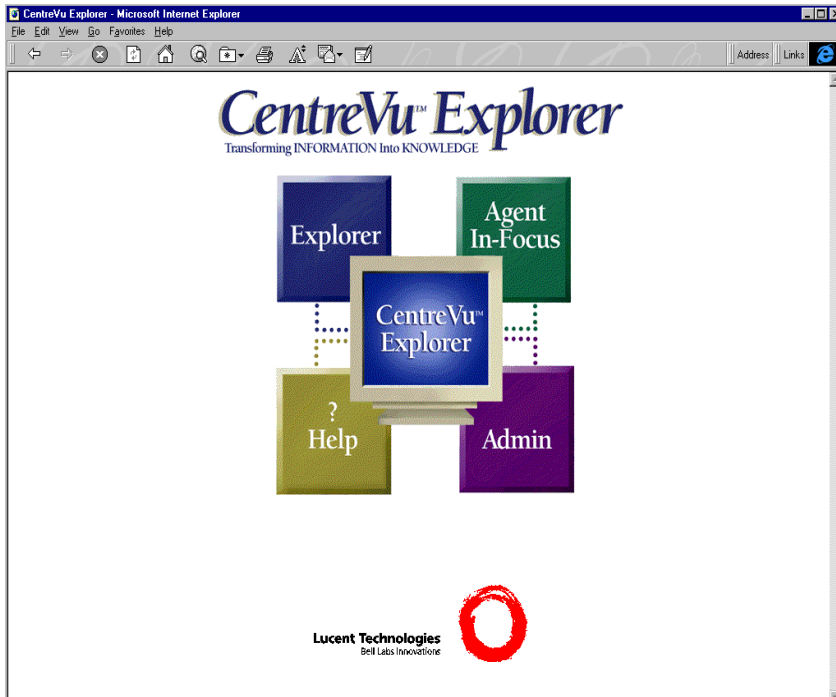
- *Microsoft* Internet Explorer 3.0 or greater.
- *Netscape Navigator* 3.0 or greater.

Launching *CentreVu Explorer*

After installing the appropriate browser, click on the internet browser icon on your desktop.

After clicking the internet browser icon, your predefined “home page” is activated. If the *CentreVu Explorer* screen is not defined as your start-up screen, you must change the IP address to your *CentreVu Explorer* server.

After entering the correct IP address or host name, the *CentreVu Explorer* home page will appear as shown below:

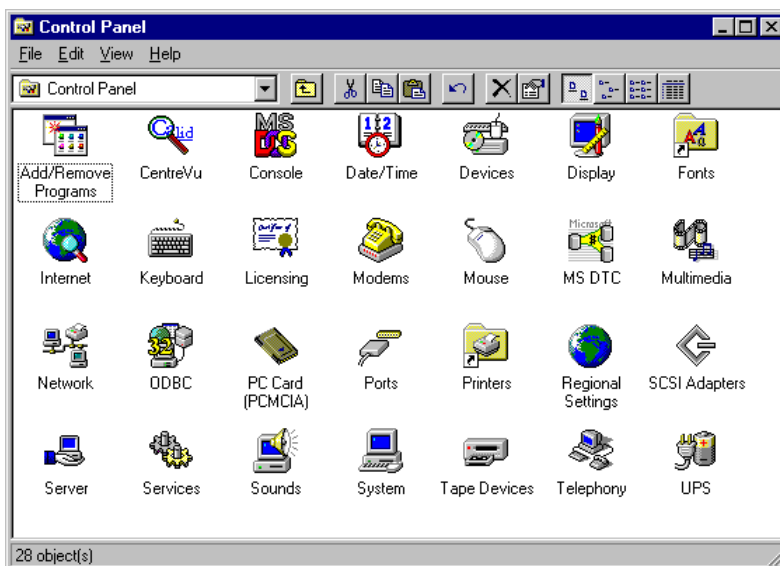


You are now ready to use *CentreVu Explorer*.

Verifying the Installation

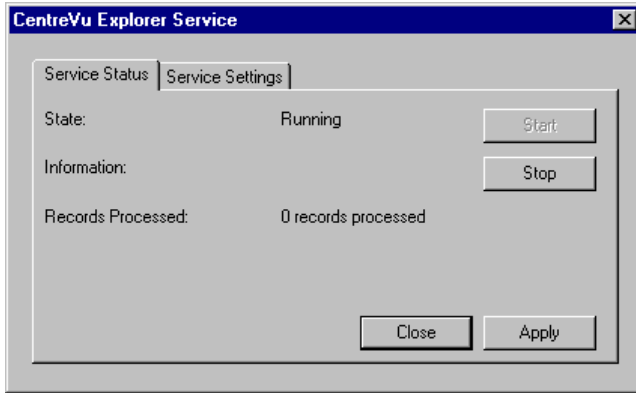
When you have completed the installation of *CentreVu Explorer*, the following procedure can be used to determine if data is flowing from the *CentreVu CMS*:

1. Log into the *CentreVu Explorer* server.
2. From the Start Menu choose **Settings**.
3. Click on **Control Panel**. You should see a window similar to the one shown below:



4. From the Control Panel double click on the *CentreVu* icon.

You should then see the *CentreVu* Data Import Service Control applet as shown below:



Verify that the *CentreVu* Explorer Service is running. If the status is stopped, click on the **Start** button to start the service. If there are external call history records available and the *CentreVu* CMS is sending data properly, the records processed field should increment within 45 minutes of the installation completion time.

Once the Records Processed field has incremented from zero, records in the database can be viewed from the *CentreVu* Explorer browser.

Failure to see the Records Processed field increment from zero indicates that one of the following situations is occurring:

- There is little or no ACD activity occurring in the ECS/switch.
- External Call History Interface has not been activated in the *CentreVu* CMS.
- The *CentreVu* CMS ECHI data transfer routines have not been configured properly.
- The ECHI data transfer interval in the *CentreVu* CMS is set to an interval greater than 30 minutes.
- The *CentreVu* CMS is unable to connect via IP to the *CentreVu* Explorer server.
- The *CentreVu* Explorer server has not been installed properly.
- The SQL server database is not functioning.

The last two items in the list can be checked by looking in the NT Event Log for any errors pertaining to the SQL Server or the *CentreVu* Explorer Service. If there are no error messages indicating a failure, record the message and contact the National Customer Care Center at 1-800-242-2121. (Lucent Technologies also offers fee-based installation consultation.) Customers outside the United States should contact their Lucent representative or distributor.

***CentreVu* Explorer Database Backup**

CentreVu Explorer stores ECHI data from the *CentreVu* CMS in a *Microsoft* SQL Server database. We recommend the database be periodically archived to allow for data recovery in the event of a catastrophic system failure. The backup interval should be determined based on acceptable data loss. Nightly or daily off-peak backups are suggested.

Data backup is performed using standard *Windows NT* and SQL Server tools. Contact your *Windows NT* and SQL Server administrators to assist you in setting up a data backup plan for *CentreVu* Explorer.

Preventing data loss up front is the best method for assuring the integrity and accuracy of your data. Setting up the *CentreVu* Explorer server with a fault-tolerant disk configuration is the best way to prevent data loss. See *Windows NT* Help for more information about how disk mirroring, disk stripe sets, and redundant array of inexpensive disks (RAID) configurations can help you achieve fault tolerance and performance for your *CentreVu* Explorer server.



Getting Started with Explorer

Product Overview

CentreVu® Explorer transforms valuable *DEFINITY*® call center information into powerful knowledge. This knowledge is crucial to the management of your call center.

By applying information collected from the Lucent Technologies *CentreVu* Call Management System (CMS), *CentreVu* Explorer provides a graphical user interface enabling desktop queries, reports and cradle-to-grave analysis of a call center's performance. *CentreVu* Explorer provides a powerful mechanism to store and retrieve valuable call center data over any period of time. Additionally, call centers have access to this detailed information well into the future.

The *CentreVu* Explorer provides details into call center activities for the use of management, including the following:

- Cradle-to-grave per call reporting
- Agent activities such as talk time and call work codes
- Vector directory number (VDN) and split/skill information
- Call transfers from split/skill, voice response units and switches
- Special call treatment such as Service Observing and Malicious Call Trace

- Queue treatment such as holding times and abandons in queue.

CentreVu Explorer delivers knowledge to the desktop via powerful *Microsoft*^{*} *Windows NT*[†] based internet server technologies. *CentreVu Explorer* requires only a frame compliant web browser on the client. This architecture provides access to critical call center data from any desktop PC or workstation running a web-enabled operating system, such as *Windows*[‡], *OS/2*^{**}, *UNIX*^{††}, or *MacIntosh*^{‡‡}. Employing this technology uses minimal desktop PC resources. This architecture also allows an organization full access to *CentreVu Explorer* from multiple web-enabled operating systems.

The hardware architecture of *CentreVu Explorer* is expandable to meet storage requirements. It combines a local storage system with external archived capabilities to provide rapid query access while collecting historical information over long periods of time. The customer selects system storage capacities and data retrieval rates to meet the individual call center requirements.

CentreVu Explorer provides a navigation method to query a library of elements and “drill down” to further call details. Starting at a high level, you can select one of several call center elements and step through additional layers until you reach the information you desire.

*Microsoft is a registered trademark of Microsoft Corp.

†Windows NT is a registered trademark of Microsoft Corp.

‡Windows is a registered trademark of Microsoft Corp.

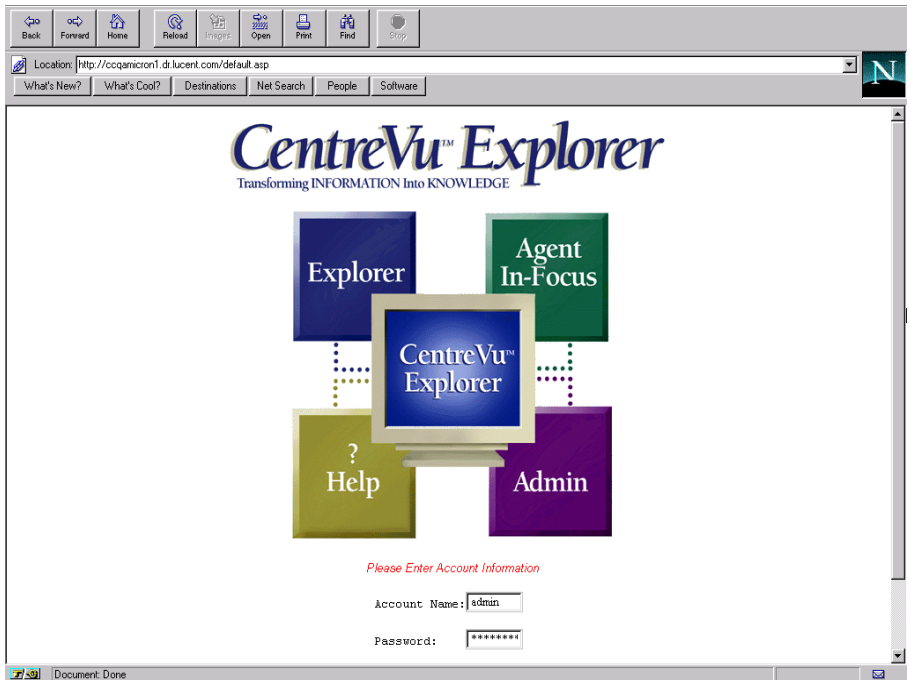
**OS/2 is a registered trademark of IBM.

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

‡‡Macintosh is a registered trademark of Apple Computer, Inc.

Explorer Login Window

After launching *CentreVu Explorer*, the login window appears as follows:

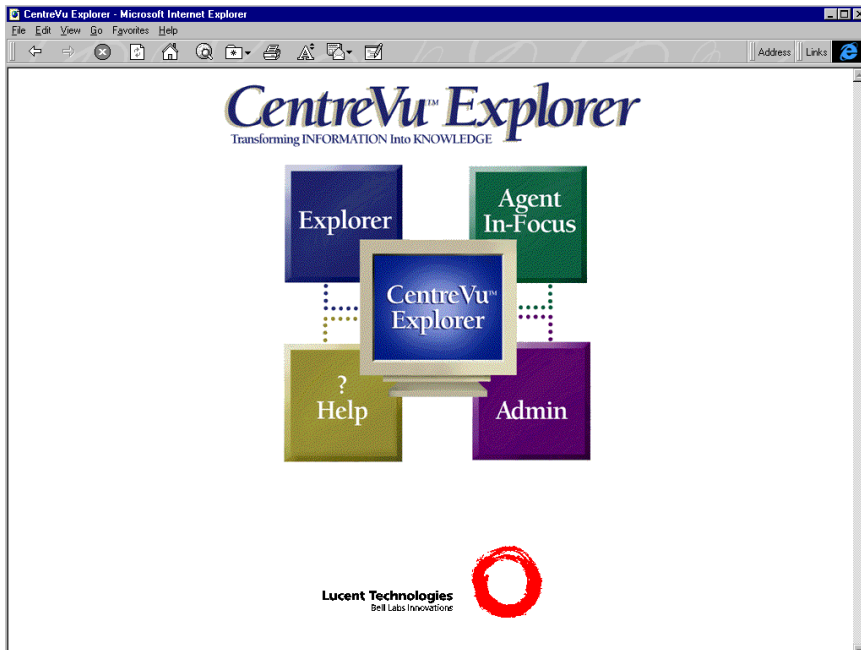


Enter a valid account name and password then click the **Submit** button to gain access to the *CentreVu Explorer* Main Menu window. If you do not have a *CentreVu Explorer* login account, please see your *CentreVu Explorer* administrator. In the event that you enter an incorrect or invalid account name or password, an error message requesting the correct information appears.

The *CentreVu Explorer*, Agent In-Focus, Help, and Admin icons are not active from the login window. Only the computer monitor icon is active. Clicking on the computer monitor icon displays software version information. The computer monitor icon is also active from the Main Menu window.

Main Menu

The *CentreVu* Explorer main window displays four icons as shown below:



Click on **Explorer** to go to the query and reporting interface of *CentreVu* Explorer.

Click on **Agent In-Focus** to access predefined queries for common reporting scenarios.

Click on **Admin** to access screens to do any of the following:

- Choose fields to display in query results
- Add, view, and edit agent names and login IDs
- Add or edit VDN names, split/skill names, or Reason Codes

Click on **Help** to access *CentreVu* Explorer on-line help.

Click on **CentreVu Explorer** to check the version number.

Window Elements

The *CentreVu* Explorer window is divided into the following frames:

Element Selection Frame
Search Criteria Frame

The screenshot shows the CentreVu Explorer window with the following components:

- Element Selection Frame:** Contains two sections: "Agent Info" and "Call Info". Each section has a list of checkboxes for selecting query fields.
 - Agent Info:**
 - ☐ Answering Agent
 - ☐ Agent Talk Time
 - ☐ After Call Work
 - ☐ Call Work Code
 - ☐ Times Held
 - ☐ Caller-On-Hold Time
 - ☐ Originating Hold Time
 - ☐ Abandoned From Hold
 - ☒ Transferred Call
 - ☐ Conference Call
 - ☐ Last Observer
 - ☐ Malicious Call
 - ☐ Assistance Requested
 - ☐ Audio Problem
 - ☐ Agent Released
 - ☐ Observed Call
 - ☐ Originating Login Name
 - ☐ Dialed Number
 - ☐ Originating Reason Codes
 - ☐ Answering Reason Codes
 - ☐ Stroke Tally
 - Call Info:**
 - ☐ Universal Call ID
 - ☐ Call ID
 - ☐ Segment Number
 - ☐ Calling Party
 - ☐ Answering Disposition
 - ☐ ii Digits
 - ☐ Collected Digits
 - ☐ ACD
 - ☐ Net In Time
 - ☐ In-Queue Wait Time
 - ☐ Caller Abandoned
 - ☐ Forced Busy Calls
 - ☐ Forced Disconnect Calls
 - ☐ First VDN
 - ☐ First Vector
 - ☐ Answering Split/Skill
 - ☐ Answering VDN
 - ☐ Answering Vector
 - ☐ Priority Answered
 - ☐ Direct Agent Queued
 - ☐ 1st Split/Skill Q'd to
 - ☐ 2nd Split/Skill Q'd to
 - ☐ 3rd Split/Skill Q'd to
 - ☐ Trunk Group
 - ☐ Equipment Location
 - ☐ Duration
 - ☐ Interflowed
- Search Criteria Frame:** Contains search criteria fields:
 - Begin Date: 4/21/95
 - End Date: 4/21/97
 - Max Rows Returned: 30
 - Conference: [NOT Conferenced Call]
 - Malicious: [Not Malicious Calls]
 - Transferred: [Not Transferred Calls]
 - Display Options:**
 - ☐ Agent Information
 - ☐ Call Information
 - ☒ Session Display
- Query Results Frame:** Contains a table of query results.

| Call ID | Universal Call ID | Segment Number | ACD | Segment Start Time | Calling Party | Dialed Number | First VDN | In Queue Wait Time | Answering Split | Answering Agent | Duration |
|---------|-------------------|----------------|-----|--------------------|---------------|---------------|------------------|--------------------|---------------------|-------------------------|----------|
| 8001 | | 1 | 1 | Dec 3 1996 7:00AM | 0001B1520 | 3300 | 3300-Allied Test | 31 | 12-Wettbewerb Messe | 11212-Callahan, Colleen | 67 |
| 8002 | | 1 | 1 | Dec 3 1996 7:00AM | 53540 | 19098645732 | - | 0 | 12-Wettbewerb Messe | - | 595 |
| 8003 | | 1 | 1 | Dec 3 1996 7:00AM | 516-826-???? | 10330 | 10330- | 19 | 2-Französisch | 11623-Iman | 181 |
| 8004 | | 1 | 1 | Dec 3 1996 7:00AM | 53048 | 85999 | - | 0 | 2-Französisch | - | 5 |

Element Selection Frame—This frame contains the ECHI elements that are used to formulate queries. The ECHI elements are divided into two logical groups:

- **Agent Info**—Contains elements related to agent-based information.
- **Call Info**—Contains elements related to call-based information.

The element selection is made by clicking the box next to each element. Check marks appear at those elements selected for the current query. See “Appendix A,

Sample Query” in the *CentreVu Explorer User Guide* (585-215-840) for additional information on building queries.

Search Criteria Frame—This frame allows the user to enter parameters specific to the items selected in the query section when the “Build Query” button is selected. The search criteria frame also contains several elements used to control the execution of the query such as Start Date, End Date, and Max Rows Returned. For more information on how to provide search criteria to find the information you are looking for, see “Appendix A” in the *CentreVu Explorer User Guide* (585-215-840).

Query Results Frame—This frame displays the data that is returned for a query. The specific elements or columns that are returned are controlled by choices you make in the search criteria frame as described below.

Displaying Results

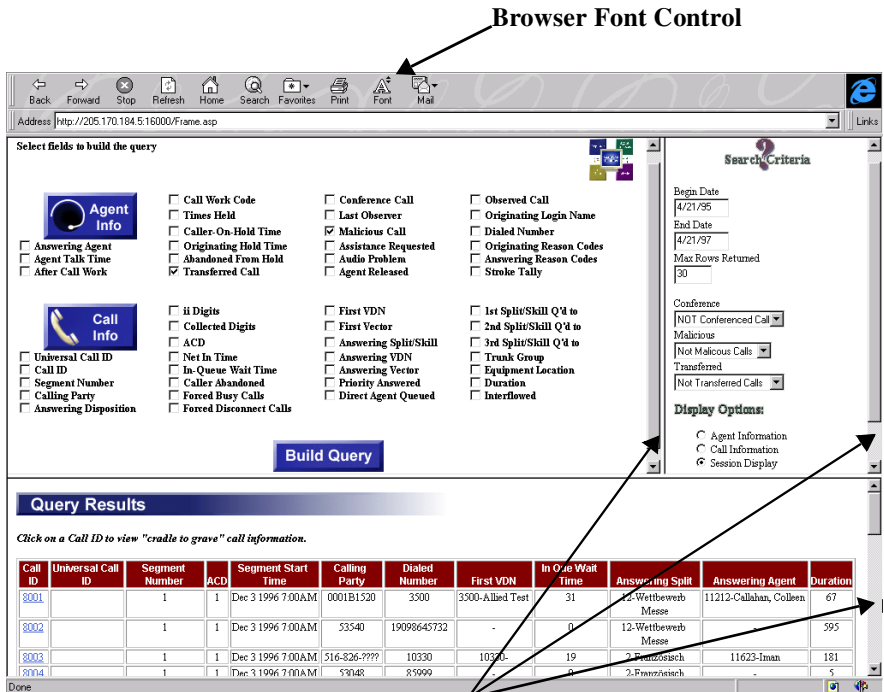
Explorer lets you display the results in three different formats as follows:



- **Agent Information**—The elements shown in the Agent Info section of the Element Selection Frame are displayed horizontally in table format.
- **Call Information**—The elements shown in the Call Info section of the Element Selection Frame are displayed horizontally in table format.
- **Session Display**—The elements deemed as “standard” for the call center are displayed. This allows the display of a subset of commonly requested information and eliminates the need for scrolling on terminal resolutions that do not allow full single-screen display of data.

Window Viewing and Sizing

Based on your monitor's size and terminal resolution, a varying amount of data may be displayed in a single window. To vary the amount of data available, the following options exist as shown below:



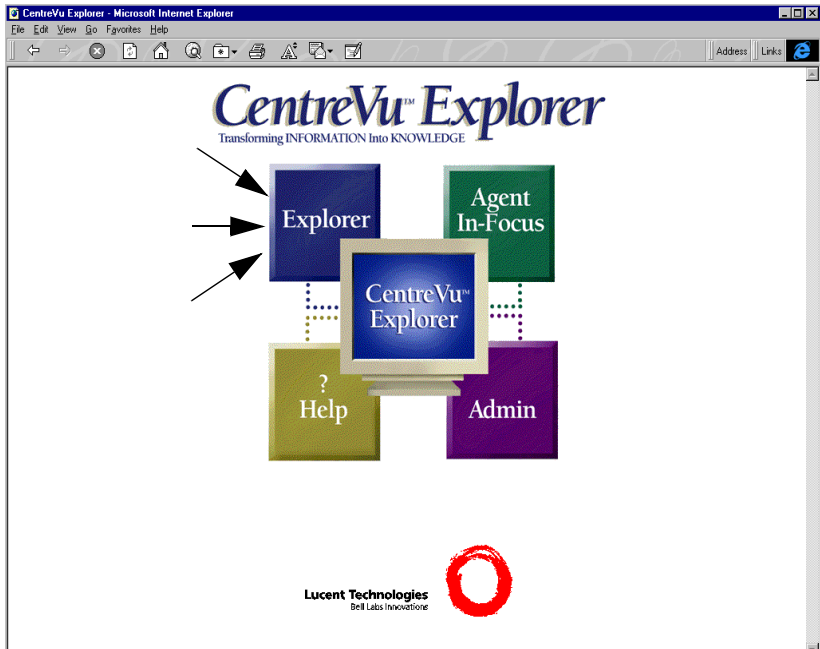
Scroll Bars

- **Scroll Bars**—Three scroll bars exist and appear in the event that all information is not presentable based on the current system and query requirements.
- **Browser Font Control**—In the Toolbar, the font size may be increased or decreased by sequentially stepping through the sizes and clicking on the font icon.
- **Screen Resolution**—Adjusting the screen resolution of your terminal to at least 1024 X 768 greatly enhances the viewable data in a single screen.

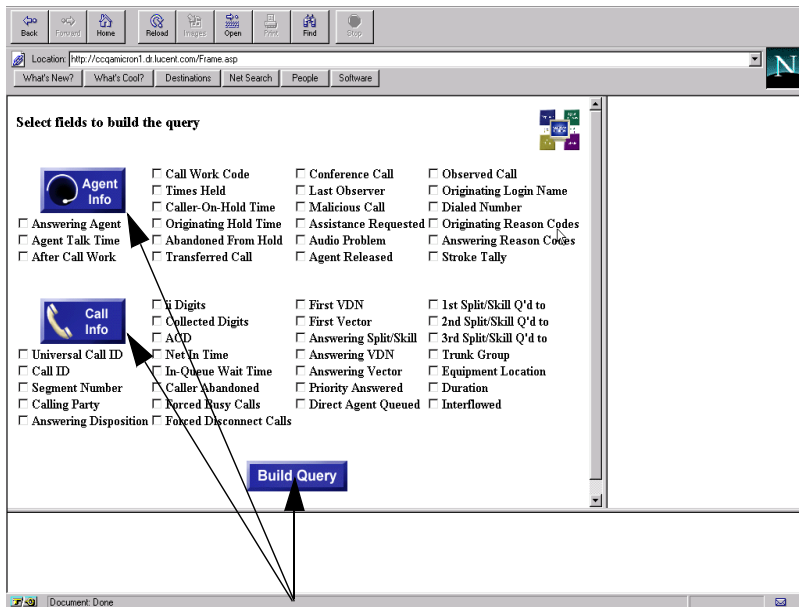
- **Reduce Search Criteria Section**—Moving the control bar between windows expands the results section.
- **Session Display**—Viewing with the Session Display mode reduces elements to most commonly requested items. Additional details can be obtained in the cradle-to-grave reports.
- **Frame Resizing**—The individual frame boundaries can be dragged with the mouse to change the size of each frame independently.

A Quick Start to *CentreVu* Explorer

1. To enter *CentreVu* Explorer, click on the Explorer icon as shown below:



The Element Selection window appears:



Build Query Buttons

2. Check the query elements for your search and click on **Build Query**. See “Appendix B, Query Elements” in the *CentreVu Explorer User Guide* (585-215-840) for definitions and parameters for each of the query elements.)

Note: You may also click the Agent Info and Call Info icons to build the query.



When the following window refreshes, parameters for each of the options you selected appear in the Search Criteria frame on the right side of the window. Also included in the Search Criteria frame are query control parameters for the date range and the maximum number of rows of results to return.

The screenshot shows a web browser window with the URL `http://205.170.184.5:16000/Frame.asp`. The browser's address bar and navigation buttons (Back, Forward, Home, Reload, Stop) are visible. Below the browser window, the main content area is divided into two sections.

Select fields to build the query

This section contains two main categories of search criteria, each with a corresponding icon and a list of checkboxes:

- Agent Info** (Agent icon):
 - ☐ Answering Agent
 - ☐ Agent Talk Time
 - ☐ After Call Work
 - ☐ Call Work Code
 - ☐ Times Held
 - ☐ Caller-On-Hold Time
 - ☐ Originating Hold Time
 - ☐ Abandoned From Hold
 - ☒ Transferred Call
 - ☐ Conference Call
 - ☐ Last Observer
 - ☐ Malicious Call
 - ☐ Assistance Requested
 - ☐ Audio Problem
 - ☐ Agent Released
 - ☐ Observed Call
 - ☐ Originating Login Name
 - ☐ Dialed Number
 - ☐ Originating Reason Codes
 - ☐ Answering Reason Codes
 - ☐ Stroke Tally
- Call Info** (Phone icon):
 - ☐ Universal Call ID
 - ☐ Call ID
 - ☐ Segment Number
 - ☐ Calling Party
 - ☐ Answering Disposition
 - ☐ ii Digits
 - ☐ Collected Digits
 - ☐ ACD
 - ☐ Net In Time
 - ☐ In-Queue Wait Time
 - ☐ Caller Abandoned
 - ☐ Forced Busy Calls
 - ☐ Forced Disconnect Calls
 - ☐ First VDN
 - ☐ First Vector
 - ☐ Answering Split/Skill
 - ☐ Answering VDN
 - ☐ Answering Vector
 - ☐ Priority Answered
 - ☐ Direct Agent Queued
 - ☐ 1st Split/Skill Q'd to
 - ☐ 2nd Split/Skill Q'd to
 - ☐ 3rd Split/Skill Q'd to
 - ☐ Trunk Group
 - ☐ Equipment Location
 - ☐ Duration
 - ☐ Interflowed

A **Build Query** button is located at the bottom of this section.

Search Criteria

This panel on the right contains the following fields and options:

- Begin Date:**
- End Date:**
- Max Rows Returned:**
- Display Options:**
 - ☐ Agent Information
 - ☐ Call Information
 - ☒ Session Display
- Find Results** button

An arrow points to the **Find Results** button.

3. Enter a date range for your query.
4. Enter new values for the query options or accept the defaults shown.
5. Select one of the display options: Agent Information, Call Information, or Session Display.
6. Click **Find Results**.

The Query Results frame appears at the bottom of the window. This frame shows the results of your search. The top of the screen continues to display the Element Selection and Search Criteria frames.

Note: Repeat the previous steps to drill down to more specific subsets of the call information.

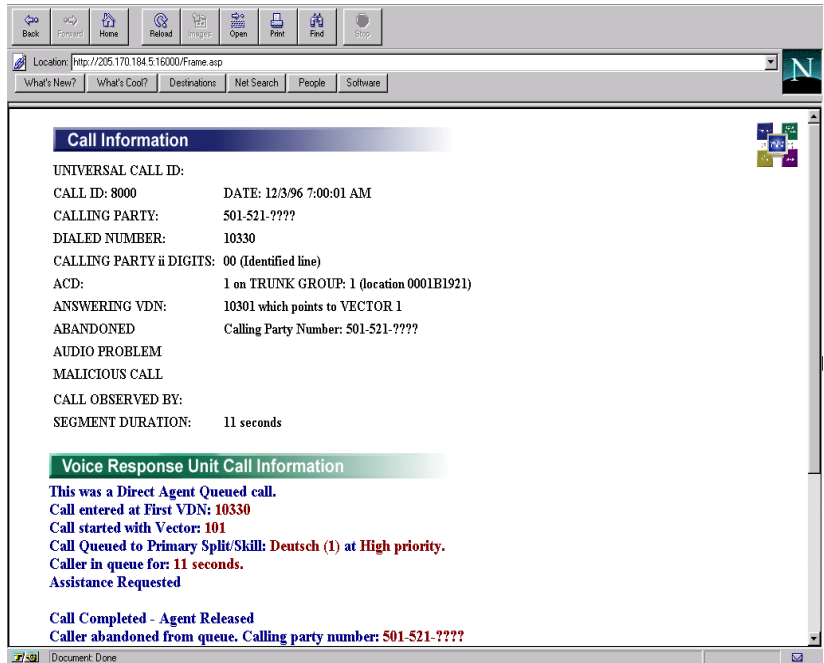
The screenshot shows the CentreVu Explorer web interface. At the top is a navigation bar with buttons like Back, Forward, Home, Reload, Images, Open, Print, Find, and Stop. Below this is a search bar and a menu with options like What's New?, What's Cool?, Destinations, Net Search, People, and Software. The main area is divided into three sections:

- Select fields to build the query:** This section contains two columns of checkboxes. The first column has 'Agent Info' (with a blue icon) and 'Call Info' (with a blue icon). The second column lists various call-related fields such as 'Call Work Code', 'Times Held', 'Caller-On-Hold Time', 'Abandoned From Hold', 'Transferred Call', 'Conference Call', 'Last Observer', 'Malicious Call', 'Assistance Requested', 'Audio Problem', 'Agent Released', 'Observed Call', 'Originating Login Name', 'Dialed Number', 'Originating Reason Codes', 'Answering Reason Codes', 'Stroke Tally', '1st Split/Skill Q'd to', '2nd Split/Skill Q'd to', '3rd Split/Skill Q'd to', 'Trunk Group', 'Equipment Location', 'Duration', and 'Interflowed'.
- Search Criteria:** This section on the right includes input fields for 'Begin Date' (4/20/99), 'End Date' (4/20/2010), and 'Max Rows Returned' (30). It also has a 'Transferred' dropdown menu and 'Display Options' (Agent Information, Call Information, Session Display).
- Build Query:** A blue button at the bottom of the query builder section.

At the bottom of the window is a table with the following columns: Call ID, Universal Call ID, Segment Number, ACD, Segment Start Time, Calling Party, Dialed Number, First VDN, In Queue Wait Time, Answering Split, Answering Agent, and Duration. The first row of data shows: 8000, 1, 1, Dec 3 1996, 501-521-7777, 10330, 10330-, 11, 1-Deutsch, -, 11. An arrow points to the 'Call ID' column header.

- By clicking on a Call ID number, you see a cradle-to-grave analysis of an individual call. This window shows the life of the call from the time the caller entered the call center until the call was disconnected.

The Cradle-to-Grave window appears as shown below:





Troubleshooting

Introduction

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

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

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

Note: Troubleshooting procedures are usually carried out by an Administrator.



Troubleshooting Tips

This section helps you with problems you may encounter when installing, logging into, or running *CentreVu*® Explorer. It contains tables which describe error messages that may appear in *CentreVu* Explorer.

NT Event Log Error Messages Types

The following types of error messages can appear:

- Information—Used primarily for informational messages. Usually not indicative of a problem.
- Warning—Indicates that the error may be problematic.
- Error—Indicates that a serious error occurred. This error class usually requires attention.

Installation Error Messages

This table lists the installation error messages.

| Error Message | Corrective Action |
|---|---|
| This software will only run under <i>Microsoft</i> [*] <i>Windows NT</i> [†] Server 4.0 with <i>Microsoft</i> Internet Information Server 3.0 with ASP support installed. | Install <i>Windows NT</i> Server 4.0 before attempting to install <i>CentreVu</i> Explorer. |
| This installation requires NT Administration rights. | The installer must be logged into the NT server with an account that has administration rights. Log onto NT with an account that has administration rights. If your account does not have administration rights, have your NT administrator create a temporary account for you. |

| Error Message | Corrective Action |
|---|--|
| <p>This machine does not have the correct version of <i>Microsoft</i> Internet Information Server installed.</p> <p>Please correct the problem by installing Internet Information Server 3.0 with ASP support before attempting to perform this install again.</p> | <p>The NT Server must have Internet Information Server 3.0 with ASP support loaded before attempting to install <i>CentreVu</i> Explorer. Complete the Internet Information Server installation before attempting to install <i>CentreVu</i> Explorer.</p> |
| <p>This machine does not have the correct version of <i>Microsoft</i> SQL Server installed.</p> <p>Please correct the problem by installing <i>Microsoft</i> SQL Server 6.5 (Service Pack 2 recommended) before attempting to perform this install again.</p> | <p>The NT Server must have <i>Microsoft</i> SQL Server 6.5 loaded before attempting to install SQL Server 6.5. Complete the SQL Server installation before attempting to install <i>CentreVu</i> Explorer.</p> |
| <p>Some critical Internet Information Server paths could not be found on this server's disk drives. Please contact your NT Administrator and have them correct the problem, then run Setup again.</p> <p>The missing pathname is \InetPub\ftproot</p> <p>Press OK to abort this installation.</p> | <p>Internet Information Server is not set up correctly. Have your NT Administrator correct the problem before attempting to install <i>CentreVu</i> Explorer.</p> |
| <p>The database is currently version 1.0. This routine is not capable of upgrading from 1.0 to 1.2. Please contact the Lucent TSO for instructions. Install will now exit.</p> | <p>Contact the National Customer Care Center.</p> |

* Microsoft is a registered trademark of Microsoft Corp.

† Windows NT is a registered trademark of Microsoft Corp.

SQL Server Error Messages

This table lists the SQL server error messages.

| Error Message | Corrective Action |
|---|--|
| <p>Error: 1105, Severity: 17, State: 2</p> <p>Can't allocate space for object 'Syslogs' in database '[dbname]' because the 'logsegment' is full. If you ran out of space in Syslogs, dump the transaction log. Otherwise, use ALTER DATABASE or sp_extendsegment to increase the size of the segment.</p> | <p>An operation on the <i>CentreVu Explorer</i> Database caused an internal database error. This error indicates that the database ran out of log space. Record the message and contact the National Customer Care Center.</p> |
| <p>Error: 1105, Severity: 17, State: 1</p> <p>Can't allocate space for object '[object name]' in database 'tempdb' because the 'system' segment is full. If you ran out of space in Syslogs, dump the transaction log.</p> | <p>An operation on the <i>CentreVu Explorer</i> Database caused an internal database error. This error indicates that the database ran out of space. Use the Data Discard Dialog Box described in the <i>CentreVu Explorer Versions 1.2 User Guide Issue 2</i> (585-215-840) document. If that doesn't help, record the message and contact the National Customer Care Center.</p> |
| <p>Mesg 17148: SQL Server terminating due to 'stop' request from Service Control Manager</p> <p>INFORMATION</p> | <p>SQL Server was shutdown manually. Contact your database administrator to have the service restarted.</p> <p>Record the message and contact the National Customer Care Center.</p> |
| <p>SQL Server Scheduled Task: 7, 'Update Usage' -- Status: Failed</p> <p>-- Task Invoked on: 3/10/97 12:35:15 PM --</p> <p>Message: DBCC execution completed. If DBCC printed error messages, see your System Administrator. (Message 2528)</p> <p>INFORMATION</p> | <p>No corrective action required.</p> |
| <p>SQL Executive Service successfully started</p> | <p>No corrective action required.</p> |

Data Import Service Messages

This table lists the data import service messages.

| Error Messages | Corrective Action |
|--|---|
| The service was started. INFORMATION | No corrective action required. This is merely an informational message. |
| The service was stopped. INFORMATION | No corrective action required. This is merely an informational message. |
| The <i>CentreVu</i> Explorer Service was installed. INFORMATION | No corrective action required. This is merely an informational message. |
| The <i>CentreVu</i> Explorer Service was removed. INFORMATION | No corrective action required. This is merely an informational message. |
| The initialization process failed. WARNING | Record the message and contact the National Customer Care Center. |
| Could not read the file <i>chrnnnn.xxx</i> WARNING | The listed file could not be processed by the Data Import Service. Record the message and contact the National Customer Care Center. |
| <i>chrnnnn.xxx</i> file is either corrupt or invalid. INFORMATION | An External Call History data file from the CMS was not in the expected format. Record the message and contact the National Customer Care Center. |

ODBC Error Messages

This table lists the ODBC error messages.

| Error Message | Corrective Action |
|---|--|
| [Microsoft] [ODBC SQL Server Driver] [SQL Server] Login failed WARNING | An attempt to login to SQL has failed. Record the message and contact the National Customer Care Center. |
| [Microsoft] [ODBC Driver Manager] Connection not open WARNING | Record the message and contact the National Customer Care Center. |

DB-Library Error Messages

This table lists the DB-Library error messages.

| Error Message | Corrective Action |
|--|---|
| DB-LIBRARY error - Unexpected EOF from SQL Server. Connection broken. ERROR | The connection to SQL Server was lost. Record the message and contact the National Customer Care Center. |
| DB-LIBRARY error - DBPROCESS is dead or not enabled. ERROR | An attempt was made to communicate with a non-existent process. Record the message and contact the National Customer Care Center. |
| DB-LIBRARY error - Attempt to bind to a non-existent column. | The file format of the ECH file from the CMS does not match what was expected. Record the message and contact the National Customer Care Center. |

Log-in Error Messages

This table lists the DB-Library error messages

| Error Message | Corrective Action |
|--|---|
| The CentreVu Explorer Service which loads the call history data is not processing at this time. Please contact your Windows NT system administrator for help | The database is more than 95% full. Refer to the Data Discard section of this document. |

Service Affecting Automated Procedures

This section documents the automated procedures within *CentreVu Explorer* that cause service interruptions. The interruptions range from moments to over an hour in duration. The time of day is listed where applicable.

Data Import

The Data Import Service runs continuously and is responsible for putting External Call History data from the Call Manager System (CMS) into the *CentreVu Explorer* SQL Server database. The Data Import Service can be configured to check for the existence of new data from the CMS at any interval from one minute to several days.

Each time the Data Import Service finds a file to import, it immediately inserts those records into the database. This procedure has the potential to lock out query requests for the duration of the import procedure, although the likelihood is quite small. The import procedure typically lasts less than one minute for call centers with large volumes of automatic call distribution (ACD) data.

Database Maintenance Procedures

CentreVu Explorer contains built in database maintenance procedures designed to keep the database healthy and responsive. These procedures are setup during the installation of *CentreVu* Explorer and are scheduled to run automatically in the late evening and early morning hours. These maintenance procedures vary in duration depending on the size of the database, the call traffic, and the hardware that hosts the *CentreVu* Explorer Server. The durations can range from a few seconds to hours depending on these variables.



*CentreVu
Explorer*



Appendix A

NT Server Connection Assistance

The following sections provide assistance in connecting *CentreVu*® Explorer to your local area network (LAN). In particular, these instructions pertain to the administration of the *Microsoft** *Windows NT*† Server 4.0.

Note: Refer to the *Microsoft* software support manuals and your network administrator for further assistance.



*Microsoft is a registered trademark of Microsoft Corp.

†Windows NT is a registered trademark of Microsoft Corp.

Establishing Server Network Connection

Hardware

Communication between *CentreVu* Explorer and *CentreVu* Call Management System (CMS) is provided via a LAN connection. Additionally, for terminals external to the *CentreVu* Explorer server, access is provided via a LAN.

Networks may be one of the following:

- Ethernet
- Token Ring.

The appropriate hardware must be installed on *CentreVu* Explorer respective to the network topology. Follow the instructions provided with the hardware interface to install the card in your system.

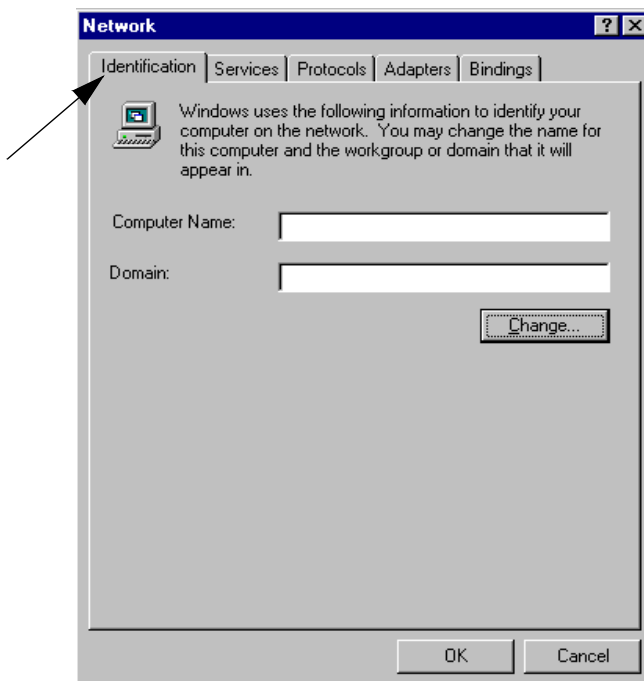
Software

CentreVu Explorer must be configured as follows to properly communicate with the *CentreVu* CMS. This configuration is accessed via the network system settings on your system. To access these settings:

1. Click the **Start** Button, point to **Settings**, and click **Control Panel**.
2. Double click the **Network** icon. This assigns the software configurations detailed in the following sections.

CentreVu Explorer Server Identification

Select the **Identification** tab in the Network Administration window. The following screen appears:



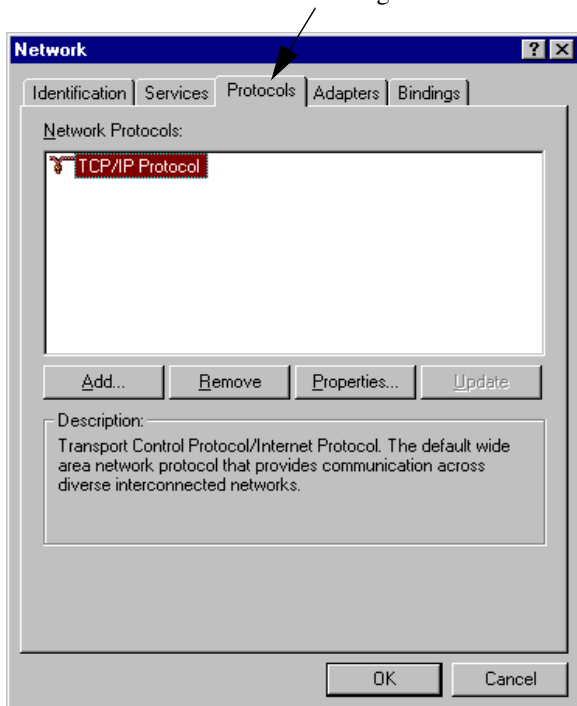
Enter the following information:

1. **Computer Name**—This field provides a place to type the host name for your computer. This is the name of the *CentreVu Explorer* server. This might be a name you use to identify your computer on a smaller, local network. The host name is combined with a domain name or suffix to create your intranet address.
2. **Domain Name**—This field provides a place to type the name of the domain for your computer. Domain refers to a set of computers on a network that have been assigned a group name. For example, a company's domain name on the internet might be "thiscompany.com." A domain can contain two or more workgroups.

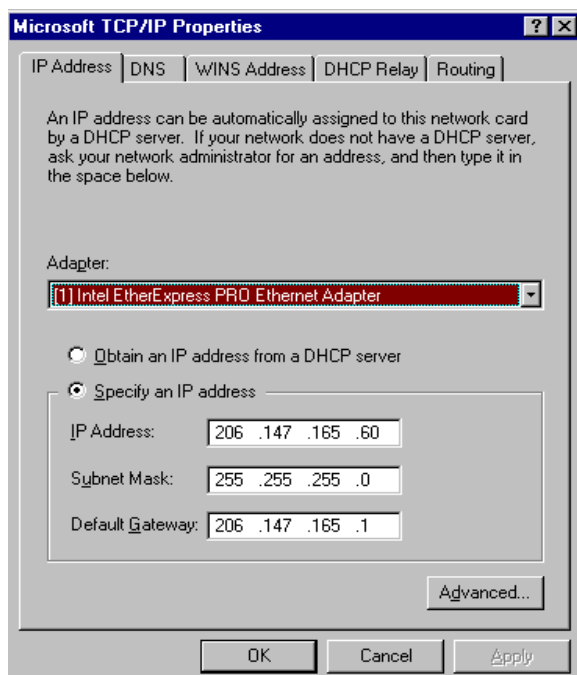
CentreVu Explorer Protocol Assignment

The Ethernet or Token Ring assignments must be made to successfully connect to the network. Assignments are made in the Protocols tab of the Network Administration window. Following is a representative setup of an Ethernet environment.

Select the **Protocols** tab from the Network dialog box.



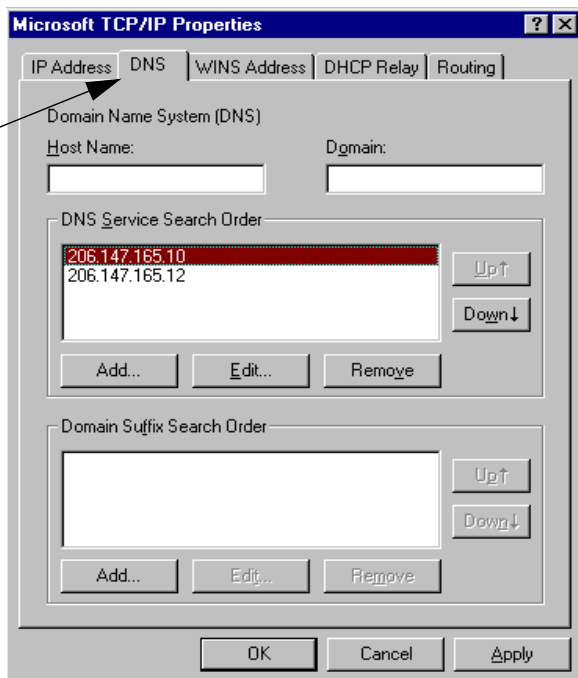
Select the TCP/IP Protocol item from the **Protocols** tab of the Network dialog box. The following window is displayed:



Enter the appropriate IP address for the *CentreVu* Explorer server. Also enter the Subnet Mask and Default Gateway information.

1. IP Address—Enter the IP address obtained from your network administrator. An IP address is 4 numbers from 0 to 255, separated by periods.
2. Subnet Mask—Enter the Subnet Mask number obtained from your network administrator. This number combined with the IP address identifies the network your computer is on.
3. Default Gateway—Enter the number for the gateway you want to add. The value in each field must be a number between 0 and 255. A gateway is a connection or interchange point that connects two networks that would otherwise be incompatible. For example, a LAN may need a gateway to connect it to a WAN or to the Internet.

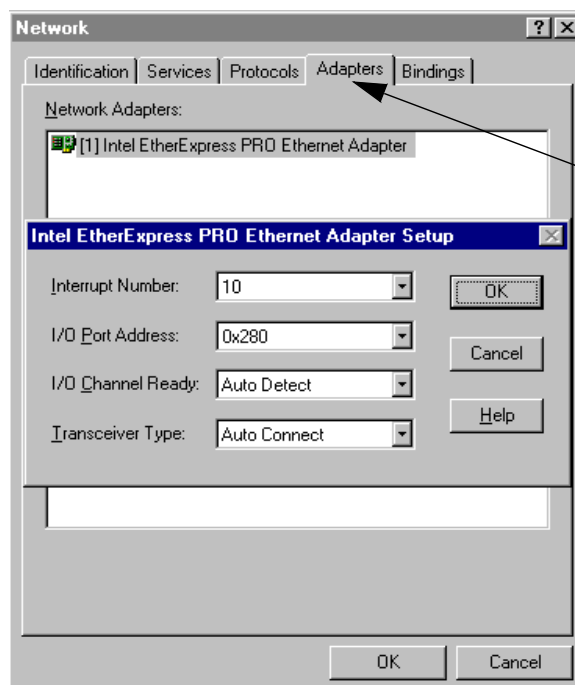
The DNS Server information is configured via the **DNS** tab. After selecting the **DNS** tab, the following screen appears:



The following information is required:

- Host Name—Enter the same information entered in the Computer Name field in the Identification tab.
- Domain—Enter the same information entered in the Domain field in the Identification tab.

Set the adapter to Auto Detect in the **Adapters** tab.



Caution After setting up the system software, you must restart your computer for the changes to take effect. Exit all programs and save any work in progress.

If you are still experiencing problems, contact your network administrator for the proper software setup.

