

**Lucent Technologies**  
Bell Labs Innovations



# DEFINITY<sup>®</sup> IP Softphone

Release 1

Getting Started



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## Getting Started

### About DEFINITY IP Softphone

This guide describes how to install the DEFINITY® IP Softphone applications and log into the DEFINITY server. DEFINITY IP Softphone is a collection of computer telephony integration (CTI) applications that enables you to control telephone calls (both incoming and outgoing) directly from your PC. DEFINITY IP Softphone enables you to log into your company's DEFINITY server remotely and make and receive telephone calls from the telephone extension.

For more information about the DEFINITY IP Softphone applications, refer to the *IP Softphone Overview and Troubleshooting*. This document is a Portable Document Format (PDF) document that is located in the Overview Document folder on the DEFINITY IP Softphone CD. To view this document, you will need Adobe Acrobat® Reader 3.0 or later. You can install Adobe Acrobat Reader 4.0 from the DEFINITY IP Softphone CD or download it from the Internet at <http://www.adobe.com>.

DEFINITY IP Softphone supports the following three configurations:

- **Road-Warrior Configuration (Voice over IP)**

The road-warrior configuration enables travelers to use the full DEFINITY ECS feature set from temporary remote locations anywhere in the world (such as a hotel room). The road-warrior configuration consists of two software applications running on a PC that is connected to DEFINITY ECS over an IP network. The single network connection between the PC and DEFINITY ECS carries two channels, one for the signaling path and one for the voice path. DEFINITY IP Softphone software handles the call signaling and an H.323 V2-compliant audio application, such as Microsoft® NetMeeting® 3.0x, handles the voice communications. The user places and receives calls via the IP Softphone interface on the PC and uses a headset connected to the PC (or the PC's microphone and speakers) to speak and listen.

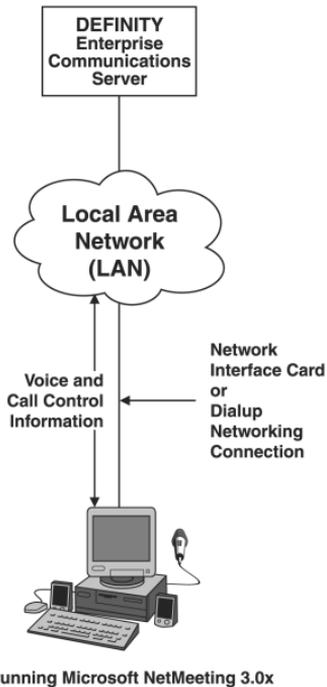
With the road-warrior configuration, Microsoft NetMeeting has been configured to run in the background and uses only the audio portion of the application. The data collaboration feature of NetMeeting can be used as a stand-alone application, but it is disabled during an IP Softphone session.

You can use an H.323 application other than Microsoft NetMeeting 3.0x in the road-warrior configuration. However, if you use an H.323 application other than Microsoft NetMeeting 3.0x, that H.323 application will not run in the background like Microsoft NetMeeting.



**NOTE:**

DEFINITY IP Softphone works with any H.323 Version 2-compliant application (such as Microsoft NetMeeting 3.0x) that can register with an E.164 alias.



**Figure 1. Road-Warrior Configuration (Voice over IP)**

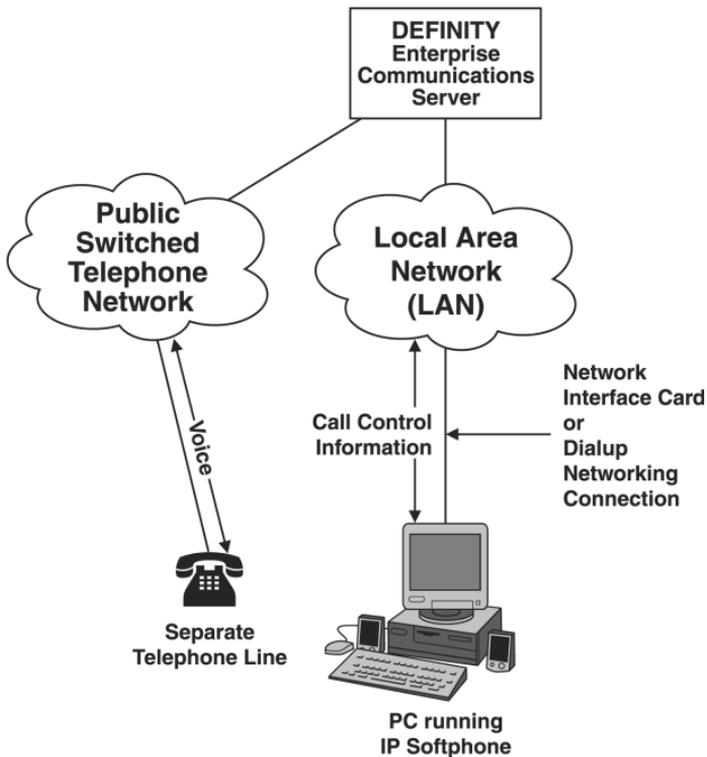
## ■ **Telecommuter Configuration (Dual Connection)**

The telecommuter configuration of DEFINITY IP Softphone enables telecommuters to use the full DEFINITY ECS feature set from home. It consists of a PC and a telephone with separate connections to DEFINITY ECS. The PC is connected to DEFINITY ECS over an IP network to provide the signaling path. The PC runs the DEFINITY IP Softphone software to provide the user interface for call control. A standard telephone is connected to DEFINITY ECS over the public-switched telephone network (PSTN) to provide a high-quality voice path. The user places and receives calls via the IP Softphone interface on the PC and uses the telephone handset to speak and listen.

When you make or answer a call with DEFINITY IP Softphone, your separate telephone line is controlled by the DEFINITY server. While the DEFINITY server controls this telephone line, you are unable to place calls from the telephone attached to this telephone line. Any digits you dial from this telephone will be dialed during the current call. When the DEFINITY server no longer controls the telephone line, you can place calls from the telephone attached to the telephone line.

If you receive an incoming call on your separate telephone line while that line is controlled by the DEFINITY server, that caller will hear either ringing (if you have call waiting on that line) or a busy signal. If you have call waiting, you can answer the incoming call as you would answer any other call waiting call.

For the telecommuter configuration, you must have a separate telephone line available at your remote location. You do not need an H.323 PC audio application such as Microsoft NetMeeting 3.0x.



**Figure 2. Telecommuter Configuration (Dual Connection)**

## ■ Stand-alone H.323 Configuration (Voice over IP)

The stand-alone H.323 configuration enables users to place and receive calls via an H.323 V2-compliant audio application, such as Microsoft NetMeeting 3.0x, running on a PC that is connected to DEFINITY ECS over an IP network. *Since this configuration offers limited call handling capabilities, the stand-alone H.323 configuration is not recommended.*

## Before You Begin

***If you will always have a separate telephone line for a voice connection (telecommuter configuration), make sure you have the following:***

- a valid user account on your company's LAN
- a valid user account on your company's DEFINITY server. (Verify your account administration with your DEFINITY System Administrator. Your DEFINITY System Administrator will provide you with an extension number and password for your account.)
- the node name or IP address for the DEFINITY server (that is, the IP address for the C-LAN)
- the telephone number to access your company's LAN via dialup networking (if you are logging in via a modem)

Now, verify the hardware and software requirements for DEFINITY IP Softphone (page 24), and then go to "Step 1: Install the DEFINITY IP Softphone Software" on page 13.

***If you do not have a separate telephone line for a voice connection (road-warrior and stand-alone H.323 configurations), make sure you have the following:***

- a valid user account on your company's LAN
- a valid user account on your company's DEFINITY server. (Verify your account administration with your DEFINITY System Administrator. Your DEFINITY System Administrator will provide you with an extension number and password for your account.)
- the H.323 extension (that is, the media extension) if you are using an H.323 application other than Microsoft NetMeeting 3.0x. Contact your DEFINITY System Administrator for your media extension number.
- the node name or IP address for the DEFINITY server (that is, the IP address for the C-LAN)
- the telephone number to access your company's LAN via dialup networking (if you are logging in via a modem)
- a PC sound card, speaker/headset, and microphone
- a PC audio application (such as Microsoft NetMeeting 3.0x) to hear and speak to the other party on a call. The PC audio application must be an H.323 application that can register with an E.164 alias.  
**You must have a PC audio application if you do not have a separate telephone line to hear and speak to the other party on a call.** You can download a copy of Microsoft NetMeeting 3.0x from <http://www.microsoft.com/netmeeting/>.

If you are using Microsoft NetMeeting 3.0x, make sure the **Run NetMeeting in the background when Windows starts** check box is disabled (via the **Options** command in the Tools menu of Microsoft NetMeeting 3.0x).

If you are using an H.323 application other than Microsoft NetMeeting 3.0x, make sure the auto-answer feature is enabled on your PC audio application.

Now, verify the hardware and software requirements for DEFINITY IP Softphone (page 24), and then go to the next section, “Step 1: Install the DEFINITY IP Softphone Software,” on page 13.

## Perform the following steps to install and configure DEFINITY IP Softphone

### Step 1 Install the DEFINITY IP Softphone Software

1. Insert the DEFINITY IP Softphone CD into your CD-ROM drive.

If the Autorun feature is enabled on your PC, the DEFINITY IP Softphone Setup dialog box appears. Go to Step 4.

2. Double-click on the My Computer icon on your desktop.
3. Double-click on the CD-ROM icon, and then double-click on **setup.exe**.

The DEFINITY IP Softphone Setup dialog box appears.

4. Choose the **Next** button.

The Check for Running Apps dialog box appears.

5. Choose the **Next** button.

The Select Destination Directory dialog box appears.

6. Specify the destination folder, and then choose the **Next** button.

The Select Components dialog box appears. You can select one of the following installation options:

- **Standard Installation**

This option installs all of the DEFINITY IP Softphone applications.  
*This is the suggested installation option.*

- **Custom Installation**

This option enables you to specify which DEFINITY IP Softphone applications you want to install.

7. Choose the appropriate button.

If you chose the **Standard Installation** button, the Standard Installation dialog box appears, displaying the components that will be installed. Choose the **OK** button to close this dialog box.

If you chose the **Custom Installation** button, the Custom Installation dialog box appears, displaying the installation options. Select the appropriate installation option button, and then choose the **OK** button.

8. Choose the **Next** button.

Follow the prompts to install the software.

When you are finished installing the software, perform one of the following steps:

- If you will be using Microsoft NetMeeting 3.0x or you will be using DEFINITY IP Softphone in telecommuter configuration, go to “Step 3: Log into the DEFINITY Server” on page 17.
- If you will be using an H.323 application other than Microsoft NetMeeting 3.0x, go to “Step 2: Configure an H.323 Application Other Than Microsoft NetMeeting 3.0x” on page 16.

## **Step 2 Configure an H.323 Application Other Than Microsoft NetMeeting 3.0x**

***Perform this procedure only if you plan to use an H.323 application other than Microsoft NetMeeting 3.0x.***

You must install and configure the H.323 application before running DEFINITY Login. To configure an H.323 application other than Microsoft NetMeeting 3.0x, perform the following steps:

1. Start your H.323 application.
2. Set the application to have a gatekeeper place calls. For the gatekeeper, be sure to enter the node name or IP address for the DEFINITY server. You can get this information from your DEFINITY System Administrator.
3. Set the H.323 application to register using the telephone number provided to you by the DEFINITY System Administrator. (This is the media extension.)
4. Set the appropriate network bandwidth setting for the H.323 application.
5. Close the H.323 application.
6. Go to “Step 3: Log into the DEFINITY Server.”

### Step 3 Log into the DEFINITY Server

1. Log into your company's LAN.
2. Start DEFINITY Login in one of the following ways:
  - Double-click on the DEFINITY Login desktop short cut.
  - Select the DEFINITY Login short cut from the Start menu.
  - From the Start menu, select **Programs** > the application folder that contains DEFINITY Login (default is **Lucent DEFINITY IP Softphone**) > **DEFINITY Login**.

The DEFINITY Login window appears.

3. In the Extension box, enter your extension on the DEFINITY system.
4. In the Password box, enter your password.
5. If you want the software to save your password for the next time you log into the DEFINITY server, enable the **Remember password for next login** check box.

6. In the Server area, enter the node name or IP address for the DEFINITY server.
  - If you want to enter the node name, select the **DEFINITY Node Name** option button and enter the node name for the DEFINITY server.
  - If you want to enter the IP address, select the **IP Address** option button, and enter the IP address for the DEFINITY server.
7. Perform one of the following steps:
  - If you installed DEFINITY IP Softphone, *DEFINITY IP Softphone* is displayed in the Call Control Application area. If you want to use it to control your calls, go to Step 8.
  - If you want to use a TAPI application other than DEFINITY IP Softphone to control your calls (such as Snap Connection™ or PhoneLine®), choose the **Change** button in the Call Control Application area. The TAPI Call Control Application Configuration dialog box appears. Select the **Other TAPI Application** option button, enter the appropriate information, and then choose the **OK** button. Go to Step 8.
  - If you want to use an H.323 application to control your calls (such as Microsoft NetMeeting 3.0x), choose the **Change** button in the Call Control Application area. The TAPI Call Control Application Configuration dialog box appears. Select the **None - Use PC Audio Application selected in Voice Connection Configuration** option button, and then choose the **OK** button. Go to Step 8.

8. Perform one of the following steps:

- If Microsoft NetMeeting 3.0x is installed, *Microsoft NetMeeting* is displayed in the Voice Connection area. If you want to use NetMeeting to hear and speak to the other party on a call, select the appropriate network bandwidth setting from the drop-down list box, and then go to Step 9.
- If you want to use an H.323 application other than Microsoft NetMeeting 3.0x to hear and speak to the other party on a call, choose the **Change** button in the Voice Connection area. The Voice Connection Configuration dialog box appears. Select the **Other H.323 Application** option button, enter the appropriate information, and then choose the **OK** button. Go to Step 9.
- If you want to use a telephone on a separate line to hear and speak to the other party on a call (that is, the telecommuter configuration), choose the **Change** button in the Voice Connection area. The Voice Connection Configuration dialog box appears. Select the **Telephone at** option button, and enter the telephone number for the telephone. Be sure to enter the telephone number the way you would dial it from your DEFINITY extension. If you select this option, you will speak to and hear the other party using the handset on the telephone that is connected to the telephone number you entered. After entering the telephone number, choose the **OK** button. Go to Step 9.

9. Choose the **Log In** button.

The Login Established dialog box appears when you log into the DEFINITY server successfully, and DEFINITY IP Softphone (or the TAPI application you specified in Step 7 of this procedure) starts. The H.323 application will also start if specified. The Login icon appears in the system tray. (Right-clicking on the Login icon enables you to log off the DEFINITY server.)

You are now ready to use DEFINITY IP Softphone and the other DEFINITY IP Softphone applications. For more information about the features and procedures for DEFINITY IP Softphone, DEFINITY Login, Incoming Call Notifier, DEFINITY Directory, Phonebook, Log Manager, Anywhere Dialer, Auto-Task Manager, and Script Editor, be sure to consult the online help that is provided with these applications.

 **NOTE:**

If you want to convert your existing telephone number/address files (such as AT&TCall files and Message Manager files) into Phonebook files, select the **Import** command from the File menu in Phonebook. Be sure to check the Phonebook online help for complete instructions on importing existing files into Phonebook. (See the “Import files into a Phonebook directory” topic, which is located under “Exporting/Importing Information” in the online help.)

If you did not install DEFINITY IP Softphone, start using the TAPI application or H.323 application that you specified to control your calls. For more information about the features and procedures for DEFINITY Login and Incoming Call Notifier, be sure to consult the online help that is provided with these applications.

For more information about configuring and using H.323 applications with DEFINITY IP Softphone, refer to the *IP Softphone Overview and Troubleshooting*. This document is a PDF that is located in the Overview Document folder on the DEFINITY IP Softphone CD.



**NOTE:**

If you are using an H.323 application other than Microsoft NetMeeting 3.0x, make sure the auto-answer feature is enabled on your PC audio application.

## Troubleshooting

Troubleshooting and overview information for the DEFINITY IP Softphone applications appear in the online help for the applications and in the *IP Softphone Overview and Troubleshooting*. The *IP Softphone Overview and Troubleshooting* is a PDF that is located in the Overview Document folder on the DEFINITY IP Softphone CD. To view this document, you will need Adobe Acrobat Reader 3.0 or later. You can install Adobe Acrobat Reader 4.0 from the DEFINITY IP Softphone CD or download it from the Internet at <http://www.adobe.com>.

If you have questions about or problems with the DEFINITY IP Softphone applications that the online help and the *IP Softphone Overview and Troubleshooting* do not resolve, call Lucent Technologies Technical Support or your local Authorized Lucent Dealer.

For the most up-to-date troubleshooting information, go to [http://support.lucent.com/service\\_support/download](http://support.lucent.com/service_support/download), click the **Help Guides** option button, and select the IP Softphone option from the corresponding drop-down list box.

## Telephones Supported

DEFINITY IP Softphone requires an extension on the DEFINITY ECS that is administered for any of the following display telephones:

- 6408D+      – 6416D+M\*      – 6424D+M\*      – 8410D
- 6416D+      – 6424D+      – 8405D      – 8411D

DEFINITY IP Softphone supports the telephones listed. However, DEFINITY IP Softphone may operate properly with other 6400 Series and 8400 Series telephones. Also, if your extension has a non-display telephone, your DEFINITY System Administrator should administer your extension as a display telephone. For example, if your extension has an 8410B telephone (which is a non-display telephone), your DEFINITY System Administrator should administer your extension as an 8410D telephone (which is a display telephone).

\* These terminals do not support the XM24 (DSS).



### **NOTE:**

DEFINITY IP Softphone does not support data modules. If your extension has a data module configured, you must either have your DEFINITY System Administrator disable it or get a different IP Softphone extension to log into.

## Hardware and Software Requirements

DEFINITY IP Softphone requires a DEFINITY Enterprise Communications Server (ECS) with software release 8.2 or later and the hardware and software listed below:

- an IBM PC-compatible with the following hardware:
    - a Pentium® 133 or faster processor
    - a hard disk with at least 25 MB of space available
    - a minimum of 64 MB of RAM for Microsoft Windows NT® 4.0 Server or Workstation, Microsoft Windows® 2000\* Server or Professional, and a minimum of 32 MB of RAM for Microsoft Windows 98 or Microsoft Windows 95
    - a sound card, speaker/headset, and a microphone (for the road-warrior and stand-alone H.323 configurations only). Your sound card should support full-duplex operation.
    - a network interface card for local area network (LAN) connectivity and/or a modem (28.8 Kbps or faster) for dial-up networking
    - a CD-ROM drive
    - a Windows-compatible VGA (or better) adapter
    - a Windows-compatible pointing device
  - One of the following operating systems:
    - Microsoft Windows NT Server 4.0 or later with Service Pack 4
    - Microsoft Windows NT Workstation 4.0 or later with Service Pack 4
    - Microsoft Windows 98
    - Microsoft Windows 95 with Service Pack 1
    - Microsoft Windows 2000 Server and Windows 2000 Professional\*
  - For the road-warrior and stand-alone H.323 configurations, you will need an H.323 Version 2-compliant application that can register with an E.164 alias (such as Microsoft NetMeeting 3.0x with Service Pack 1). Microsoft NetMeeting 3.0x requires Microsoft Internet Explorer 4.0 or later.
- \* Windows 2000 Server and Windows 2000 Professional will be supported soon.