

Documentation

HiPath 4000 V5 System Components - Software - Installation & Configuration

Service Documentation

A31003-H3150-S102-2-7620

Communication for the open minded

Siemens Enterprise Communications
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1 Installation of HiPath 4000 Assistant



For the administration of HiPath 4000 networks via the HiPath 4000 Manager it is recommended to use at the HiPath 4000 Manager a version equal to or higher than the highest version used on any of the Assistants at the customer's side.

Otherwise, because of the different database structures used at Manager and Assistant side, problems with the data synchronization might occur. Additionally, the Manager would not be able to administer all Assistant features, since it would not be possible for the data-UPLOAD to incorporate the new imported Assistant data into the Manager database (this data would be ignored).

Please refer also to the information related to this issue in the Assistant/Manager release notes.

1.1 Windows (Laptop)

Valid for all users (service, GVS and development) with Windows PC.

1.1.1 Requirement: SW Download from R-SWS-S (Web portal)

Make sure that the HiPath 4000 software is already on your laptop (EWS).

If not, use a procedure like the one described in the “Service Manual HiPath 4000 V2.0 Feature Usage Examples - Chapter “Software Update of HiPath 4000 Systems” - Section “SW Download from R-SWS-S (Web Portal)””.

1.1.2 Instructions for SCSI Switches

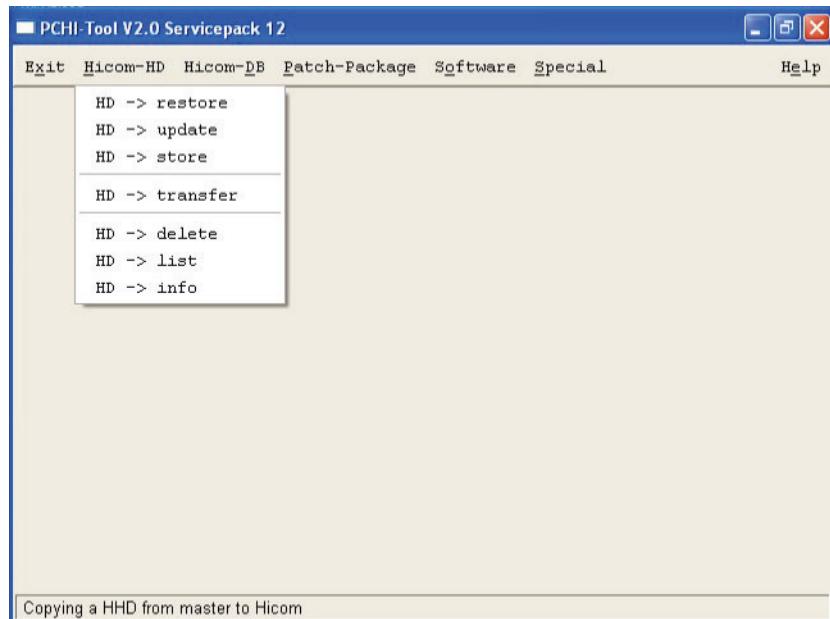
- Start the PCHI tool and use it to create a HD or MOD.

PCHI manual → <http://intranet.mch4.siemens.de/startup/pchidoc.htm>

- Select **Hicom-HD** → **HD** → **restore**

Installation of HiPath 4000 Assistant

HP Workstation Infrastructure (HP UX)



Follow the instructions given by PCHI to create a HD or MOD.

1.1.3 Instructions for cPCI Switches

Steps

- Create a MOD with PCHI.
- Start the HiPath 4000 Assistant from MOD.
- Copy the required areas with AMO “DDRSM” from MOD to HD.

Read the release notes in KMOSS.

1.2 HP Workstation Infrastructure (HP UX)

Applies for all users with HP workstations (GVS and Development).

1.2.1 Requirements

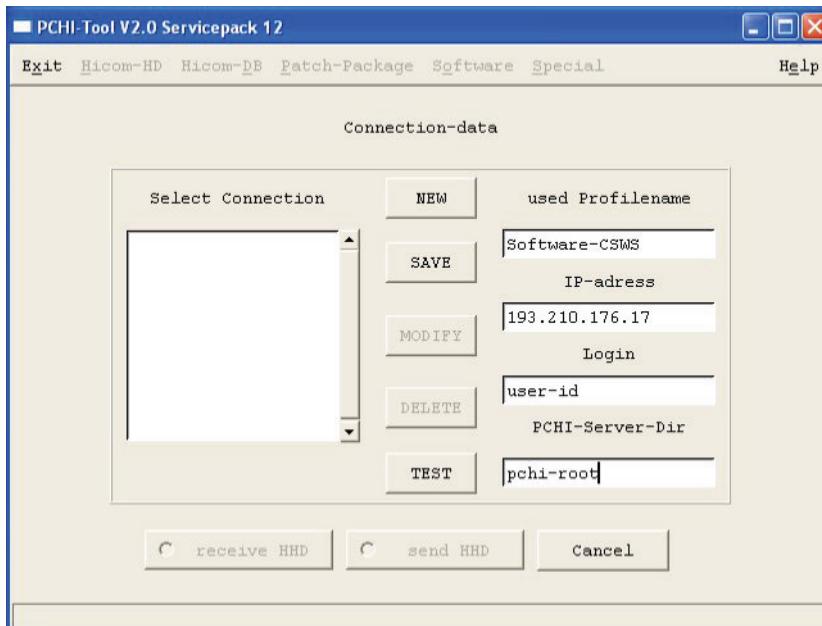
- Make sure the PCHI tool is installed on the HP workstation.
- Make sure that you have a user ID and password for access to the PCHI download area of the C-SWS-S.

To get a user ID and password, contact: Swsdelivery.bel@siemens.com

1.2.2 Download (Transfer) SW to HP Workstation

Steps

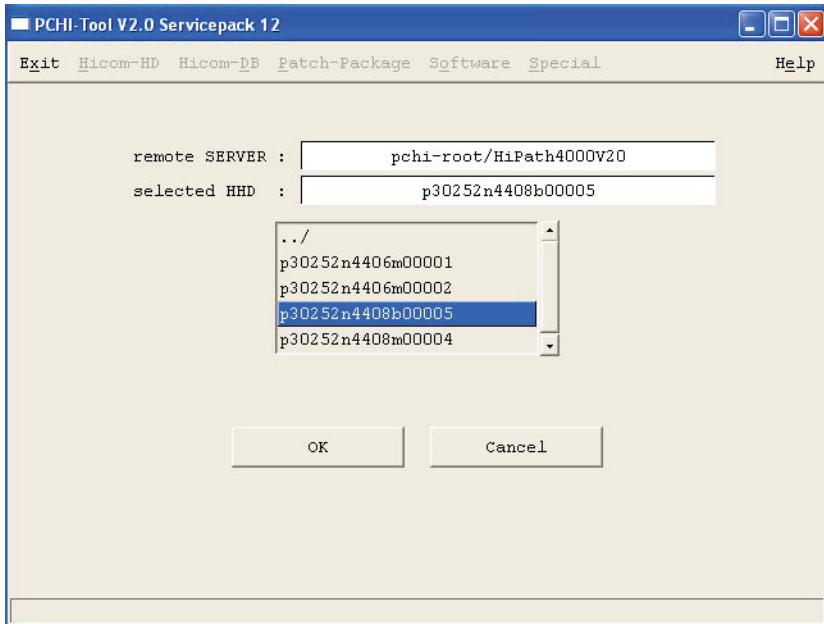
- Start PCHI with: “pchi service”.
- Connect to the C-SWS server by configuring the following parameters.



- Transfer the software (C-SWS server → HP workstation).

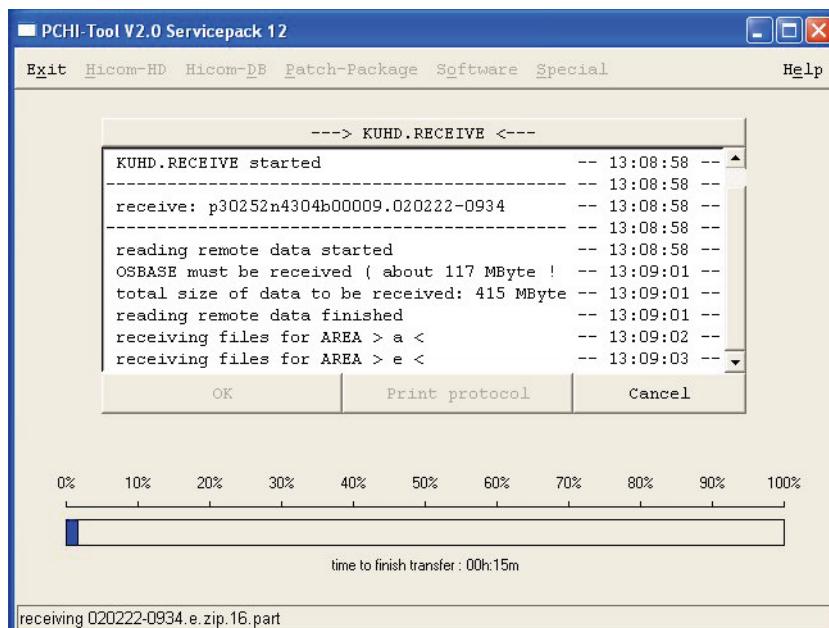
Select the software you want to transfer.

Installation of HiPath 4000 Assistant HP Workstation Infrastructure (HP UX)



- Start the transfer by clicking the **OK** button.

Download (transfer) the software from the C-SWS server to the local UNIX drive (with PCHI).



- Create a new hard disk with the PCHI tool.

Installation of HiPath 4000 Assistant
HP Workstation Infrastructure (HP UX)

Select “Hicom-HD → HD → restore” from the menu (see Section 1.1.2, “Instructions for SCSI Switches”).

Installation of HiPath 4000 Assistant

HP Workstation Infrastructure (HP UX)

2 Installing UnixWare7 on HiPath 4000

Observe the following description to avoid errors during installation or when operating the applications.

2.1 Requirements

UnixWare7 and the HiPath 4000 Assistant applications can only be installed on if the following requirements have been met:

- Client PC must meet the EWS standard
- Client operating systems supports: Windows 2000, Windows NT

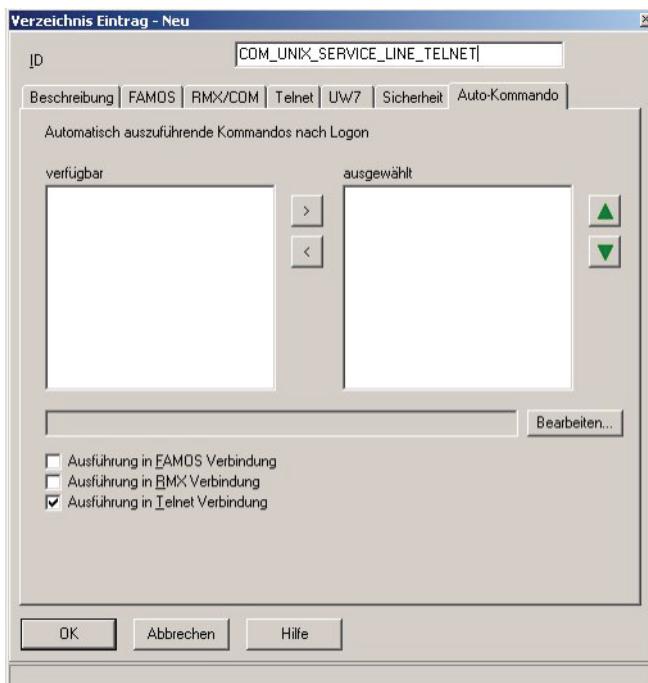


The PC must correspond at least to the system requirements set by the operating system.

2.2 Configuring the V.24 interface on the switch for Unix

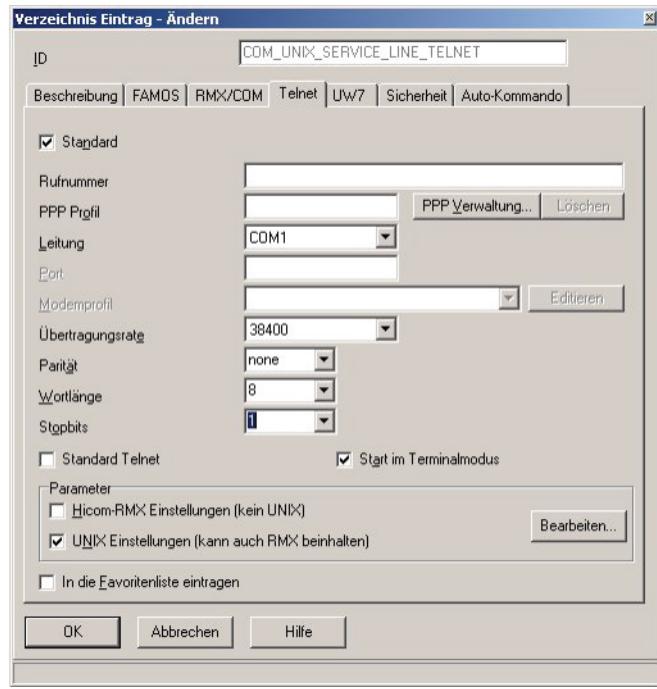
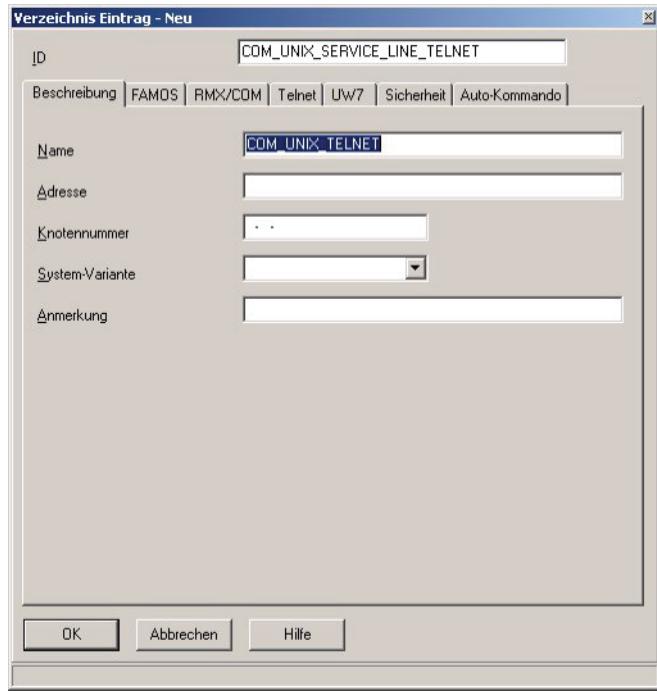
Do not configure the V.24 interface on the DSCXL as an RMX/COM interface. Always configure it as a telnet connection.

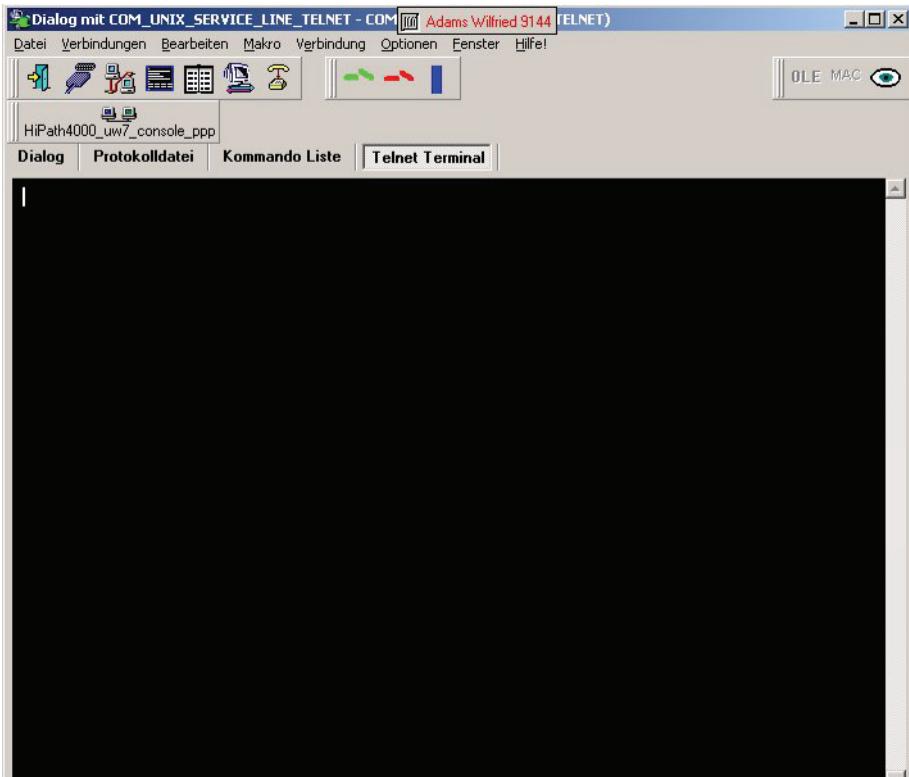
The Telnet settings are **COM1,38400,N,8,1** (DSCXL) and **COM1,115200,N,8,1** (DSCX,DPC5).



Installing UnixWare7 on HiPath 4000

Configuring the V.24 interface on the switch for Unix





The part number of the V.24 cable is S30267-Z355-A25-4 (DSCXL) and S30267-Z19-A30 (DSCXL,DPC5).

2.3 Recommendation

You can follow the status of the installation process on the Unix console. However, this is only possible if the console is connected to

- V.24/4 (Line 11) on DSCX, DPC5
- 2nd serial line labelled "Service" on DSCXL.

Messages about the installation process also appear on the Comtes operating terminal (see Appendix A, “Outputs on the Comtes Operating Terminal”).

2.4 Installing UnixWare7 on the ADP

Use the configured HiPath 4000 hard drive (from the factory) for installation on the ADP. Initial installation of a HiPath 4000 system is prepared at the regional headquarters (see Chapter 1, “Installation of HiPath 4000 Assistant”). The hard drive for customers is either sent from the factory or copied from a master hard drive.

Installing UnixWare7 on HiPath 4000

Installing UnixWare7 on the ADP

Installation of UnixWare7 is almost entirely automated, that is, UnixWare7 is installed automatically after the RMX system has been started.

To install UnixWare7 on the ADP:

1. Install the hard disk in the system.

The RMX system is started immediately from the RMX partition on the hard disk.

The RMX system starts.

Installation on mono systems begins when Call Processing starts (status of the 7-segment display: "A").

Installation on duplex systems begins when the ADP on the 7-segment display has reached the status "-".

2. The UnixWare7 installation program then starts automatically. The installation package is first copied on to the installation partition of the HiPath 4000 hard drive. The installation is then performed there.



The system must not be restarted during the installation process.

```
*****
Preparing installation from RMX-Partition
*****

14:12 Checking hard disk space ...
14:12 Creating the Unix partition(s), please wait ...
14:12 Creating Install-Partition ...
14:12 Mounting Install-Partition ...
14:12 Transferring ADP Boot-Unix image, please wait ...
14:12 Transferring Unix Base archive, please wait (~5 min)...
14:13 Transferring OS enhancement packages, please wait (5 min)...
```

Unix-Boot ends and the Unix base system starts as soon as the base system is installed. The Unix base system now installs the applications (Configuration Management, Fault Management, Unix Basis Administration, and so on).

The installation takes some time. Ignore the message "System is ready". It is not possible to log on at this point as the valid license is only activated once the application installation has been completed. This message only refers to the Unix base system. The applications are installed after this message appears. If the applications have been installed completely, a message to this effect is displayed.

3. If you receive the following message on the console, the installation has been completed successfully, that is the Unix base system and all the applications have been installed:

Activation of First installation was successful.

Confirm this message with 

2.5 Activating the Group Directory Feature for CMI V3.0

The processes for the group directory feature for CMI V3.0 must be restarted whenever a new UnixWare7 application is installed. This does not apply for updates. Proceed as follows:

- Log in as "engr".
- Open a Unix shell.
- Enter the following command:

```
/opt/cm/bin/PB_control activate
```

To verify whether the process (Manager) or the processes (Assistant) are running, execute the following command in the Unix shell:

```
procadmin -l
```

The command has been successful if the following processes are displayed:

- comproc_dom_cmipsa (Manager)
- comproc_cmipsa (Assistant)
- comproc_cmipbp (Assistant)

2.6 Possible Errors and Error Correction

1. Start the installation again from the beginning (although Unix has already been installed).

Solution

- Plug in the Unix console
- Perform a soft restart on the ADP (for dual systems) or on the BP (for mono systems)
- The following Unix ADP BIOS message appears: Press ESC to activate BIOS
- Press the `Esc` key
- A prompt window containing the following selection options appears first:
 - 1) UnixWare7 functions ...
 - 2) Change Interf parameters ...

Installing UnixWare7 on HiPath 4000

Possible Errors and Error Correction

- 3) SCSI functions ...
- 4) Continue with normal boot

Enter 1) and confirm your selection.

- Select the type of installation you want to perform:

- 1) Install and activate UNIX from RMX :SCR: area (first inst.)
- 2) Install and activate UNIX from UNIX installation partition
- 3) Create UNIX boot partition from external medium ...
- 4) Boot from UNIX boot partition ...

Select [ESC] :

You must always enter 1) if you are installing the software for the first time. Confirm your selection.

- The UnixWare7 installation program starts automatically. All installation packages are copied to the install partition if you selected item 1) Install and activate UNIX from RMX :SCR: area (first inst.). The packages are installed from the install partition.
- If you receive the following message, the installation has been completed successfully:

Activation of First installation was successful.

2. Installation is concluded with the "Activation of 'First installation' failed" error message.

Error diagnosis

You can find the `software_activation.log` and `software_activation.sum` files in the `/var/adm/log` subdirectory. You can use these files to determine which components were installed:

- `software_activation.sum` lists the installed components. A display window appears indicating which components
 - have been installed ("done"),
 - have not been installed successfully ("failed")
 - have not been executed (no value).
 - The `software_activation.log` file provides a detailed description of the installation process
3. Installation is cancelled (for example, due to a power failure, reload executed too early, error message).

Solution

You must reinstall the applications. You can start the file `emerg_appl_inst` in the `/opt/swabase/bin` subdirectory. The following window appears:

Emergency Handling for Applications

- 1) Reinstall all applications from Unix-Install-Partition
 - 2) Reinstall all applications from RMX-Area ¹
 - 3) Exit
 - If you select item 1), the applications are reinstalled from the previously created install partition.
 - Select item 2) if an attempt to copy the data to the install partition was unsuccessful.
4. Installation completed successfully but the COM1 interface does not work
Refer to The COM1 interface does not work
5. Repairing the file system

If the file system of the hard disk's Unix partition is damaged, system restart is no longer possible and Unixware cannot be started.

Solution

The file system can be repaired using the the boot menuas follwos:

- Plug in the Unix console
 - Perform a soft restart on the ADP (for dual systems) or on the BP (for mono systems)
 - The following Unix ADP BIOS message appears: Press ESC to activate BIOS
 - Press the `Esc` key
 - A prompt window containing the following selection options appears:
 - 1) UnixWare7 functions ...
 - 2) Change Interf parameters ...
 - 3) SCSI functions ...
 - 4) Continue with normal boot
- Enter 1) and confirm your selection.

1. Point 2) only appears if the initial installation was unsuccessful. Reason: you must take into consideration during subsequent installations of the applications that new versions may have already been loaded onto the system. Only the installation partition is compared, however, during these version pushes.

Installing UnixWare7 on HiPath 4000

Possible Errors and Error Correction

- Select the required installation type:
 - 1) Install and activate UNIX from RMX :SCR: area (first inst.)
 - 2) Install and activate UNIX from UNIX installation partition
 - 3) Create UNIX boot partition from external medium ...
 - 4) Boot from UNIX boot partition ...

Select [ESC] :

Select menu item 4) and confirm your selection.

- The keyboard menu is displayed.
Select the relevant language and press **Enter** to confirm.
- Confirm the system time (date and time) by pressing **y** and **Enter**.
If the system time is incorrect, it can be reset after repair and successful reboot using the Unix Basis Administration application.
- The boot menu then appears
 - 1) Install the Unix operating system
 - 2) Update the Unix operating system
 - 3) Display the revision of installed software
 - 4) Display the revision of software on media
 - 5) Repair filesystems + provide shell access to base
 - 6) Exit
- To repair the file system, select menu item 5).

Boot Unix now attempts to load all file systems. In doing so all file systems are automatically checked. If certain file systems are found to be defective, an attempt is made to repair them using the `fsck` program.

Boot-Unix then attempts to re-load the file system.

If the repair is unsuccessful, an error message, informing you that re-installation is necessary, appears on the screen.

If the repair is successful, you can open a shell with which further changes can be made in the Unix base:

Do you want to access the Unix base via a shell ?
Please enter 'y' or 'n':

If you select "y", you are requested to enter the "Engineering Account" password. This account is called *engr*:

Please enter password for *engr* account:

If the password is entered correctly, a shell is opened, in which "/" is the **base root directory**.

If you

- did not request a shell,
 - entered an incorrect password
- or
- have exited the shell

the boot menu (after confirmation) re-appears. You can exit the menu using menu item 6). A restart is performed and the Unixware system restarts.

Installing UnixWare7 on HiPath 4000

Possible Errors and Error Correction

3 PPP Setup

The following sections describe the PPP setup for the HiPath 4000/External Server and Installing PPP on the Client PC.

3.1 General Remarks

1. Cable specifications:
 - Direct connection V24 - 1:1 serial cable S30257-Z7728 + adapter S30122-K5883-X-1
 - Modem V24/3 - 1:1 serial cable S30257-Z7728
 - Modem V24/2 - LBU cable
2. Password criteria:
 - Passwords must consist of at least eight characters (special longer character lengths)
 - Passwords must contain characters from at least three of the following four categories:
Examples:
 - Upper case letters A, B, C, Z
 - Lower case letters a, b, c, z
 - Arabic numerals 0, 1, 2, 9
 - Non-alphabetic characters . " ' * & % !
 - Passwords should not contain your user name or any part of your name.

3.2 HiPath 4000/External Server

This chapter describes two types of connection: Direct Connection to the Console Using V.24/PPP and PPP over Modem.

3.2.1 General Instructions

1. If telnet access is required, use the user ID *engr*.
2. Speed

For HiPath 4000, the processor boards DSCX-X100 and DPC5-X100 are released with AMD K6-2 processors and a speed of 115200 bps.

PPP Setup

HiPath 4000/External Server

3.2.2 Direct Connection to the Console Using V.24/PPP

The console sets itself to the highest speed automatically. To check this, the console should first be accessed using a terminal program such as Procomm or HyperTerminal. If this works, you can attempt the connection from a Windows client using the dial-up network.

The UnixWare7 IP address is 192.0.2.221.

PPP to the UNIX Console of the ADP server (line 11 or V24/4), the DMP5L (COM1) and the Primergy hardware (COM1) is preconfigured in the HiPath 4000 platform.

This feature is **only** intended to be used by the TAP.

The physical connection is a null modem cable. You will need the nullmodem.inf file to configure a "Generic NULL Modem" in Windows.

To automate the logon process, you will need the SiemensCPPP.scp script file (<http://muesie1.mch4.siemens.de/UNITY/FAQ/PPP/>).

To connect from a Windows PC (TAP) to a HiPath 4000 Assistant/Manager system (AS-L, AS-N or CSC), you must configure a Dial-Up-Networking (DUN) connection. Simply select the configured "Generic NULL modem" as the calling device and the "SiemensCPPP.scp" file in the scripting section. The server will provide an IP address for the connection.

When starting the newly-configured PPP connection for the first time, a dialog box requesting a user name and password appears. Use the user name "cppp" and the password "cppp". Leave the field "Domain" empty.

3.2.3 PPP over Modem

PPP to a HiPath 4000 Assistant/Manager server over a modem is available using "Dynamic Incoming PPP".

You must configure the modem on the ADP using UBA (physical links) and at least one "dynamic incoming PPP" bundle (CHAP data).

A login script is **not** required.

To connect from a Windows PC to the ADP, you must configure a Dial-Up-Networking (DUN) connection. Simply select your configured modem as the calling device. The server will provide an IP address for the connection.

When starting the newly-configured PPP connection for the first time, a dialog box requesting a user name and password appears. Provide the CHAP user name and password as configured on the ADP server for the incoming PPP Link. Leave the field "Domain" empty.

3.3 Installing PPP on the Client PC

The following sections provide information on installing PPP on your client PC. You have two options - either Installing PPP using HiPath 4000 Expert Access or direct installation using the functions on your PC, depending on the operating system (see Section 3.3.2, "Operating System: Windows NT 4.0" or Section 3.3.3, "Operating System: Windows 2000").

3.3.1 Installing PPP using HiPath 4000 Expert Access

The simplest way to install PPP on your client PC is using the HiPath 4000 Expert Access function Connect. It does not matter whether your PC is running under Windows 2000 or Windows NT. Refer to the Online Help for HiPath 4000 Expert Access for detailed information.

3.3.2 Operating System: Windows NT 4.0



You must have administrator rights for the tasks explained below.

There is a standard procedure for the initial installation of PPP on an NT computer. The steps for activating PPP are as follows:

- Verify or Install The TCP/IP Protocol
- Verify or Install Dial-Up Networking
- Install The Modem or Null Modem
- Check the Direct Connection Using HyperTerminal
- Configure the PPP Link
- Start The PPP Connection

3.3.2.1 Verify or Install The TCP/IP Protocol

Follow the instructions below to check if the TCP/IP protocol has been installed on your TAP:

1. Start the "Control Panel".
2. Select "Network".
3. Select the "Protocols" tab.

The list of network protocols must include the "TCP/IP protocol". If it does, proceed to Section 3.3.2.2, "Verify or Install Dial-Up Networking".

If it does not, click **Add...** and follow the instructions on the screen.

PPP Setup

Installing PPP on the Client PC



Caution

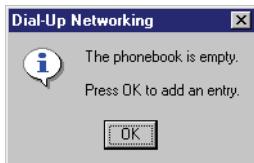
If you are prompted to insert the Windows NT 4.0 CD, use the correct **Service Pack** after installation.

3.3.2.2 Verify or Install Dial-Up Networking

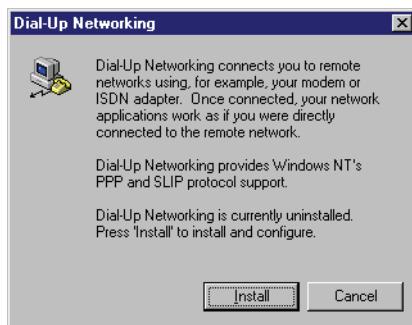
To check if dial-up networking (Remote Access Service - RAS) has been installed on your EWS:

1. Select "My Computer" from the desktop.
2. Select "Dial-Up Networking".

If dial-up networking is already installed, the following screen appears:



If dial-up networking is not yet installed, the following screen appears:



3. Follow the instructions on the screen.



Caution

If you are prompted to insert the Windows NT 4.0 CD, use the correct **Service Pack** after installation.

Installing HyperTerminal

For testing purposes, you should also install HyperTerminal as follows:

1. Click "Start" -> "Settings" -> "Control Panel" -> "Add/Remove Programs".
2. In the tab "Windows NT Setup", check the **Details...** of the "Communications" component. If it is already checked, HyperTerminal is installed. If not, check it and click **OK** twice to install it.

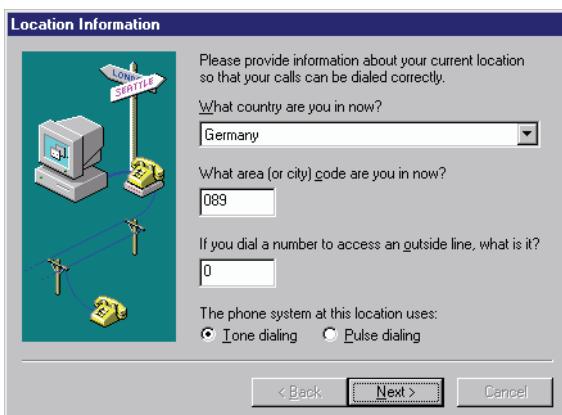
3.3.2.3 Install The Modem or Null Modem

The PPP system in Windows NT allows you to use only modems that have been configured in the operating system. Each modem requires specific configuration parameters that are described in the **.INF** files. This is also true for a null modem. This file (nullmodem.inf) is a component of HiPath 4000 Expert Access.

To install a modem or null modem:

1. Select -> "Control Panel" -> "Modems".

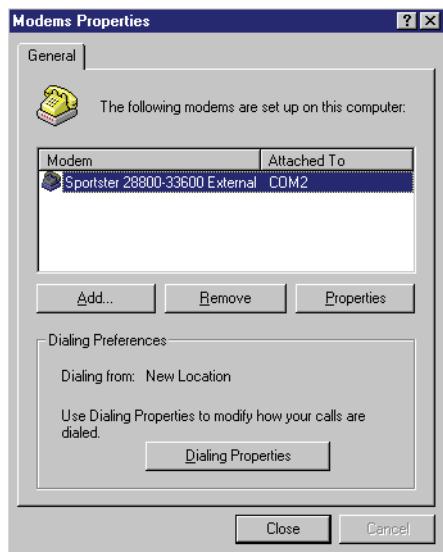
If this is the first time a modem is being configured on the PC, the following dialog is displayed:



If a modem is already configured, the following window is displayed:

PPP Setup

Installing PPP on the Client PC

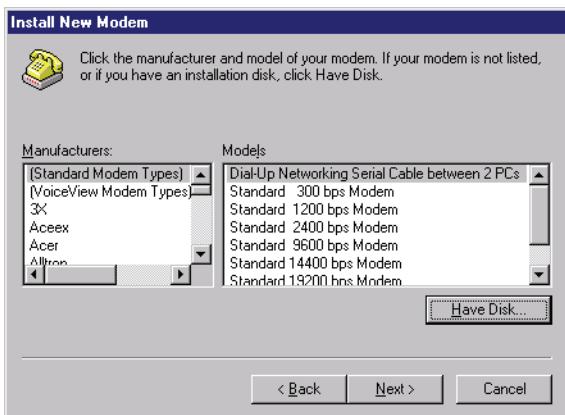


If the "Generic NULL Modem" is not installed, click the **Add...** button.

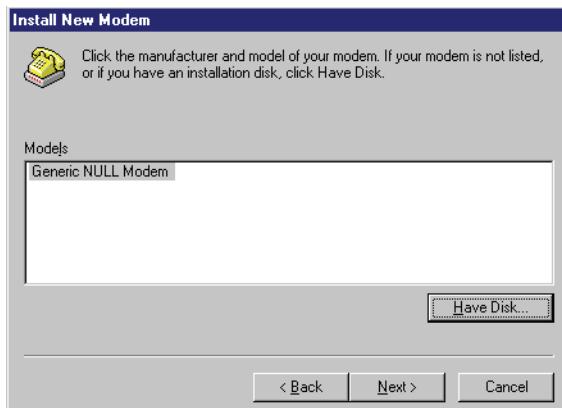


2. Select the checkbox "Don't detect my modem; I will select it from a list" to select the modem yourself.
3. Click **Next**.

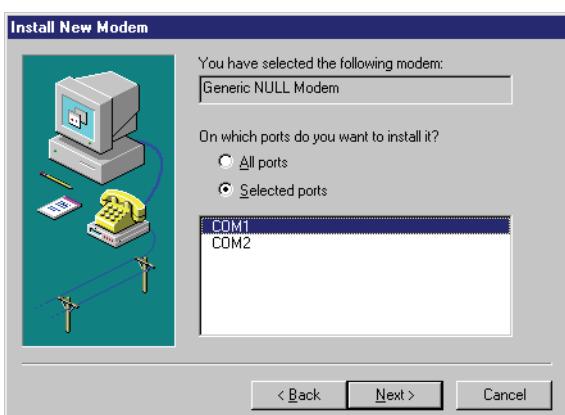
PPP Setup
Installing PPP on the Client PC



4. Click **Have Disk...** and navigate to the file "nullmodem.inf" in the UDSC directory on your hard disk (normally: C:\Program Files\Siemens Communications\UDSC).



5. Make sure that the entry "Generic NULL Modem" is highlighted and click **Next >** to continue.



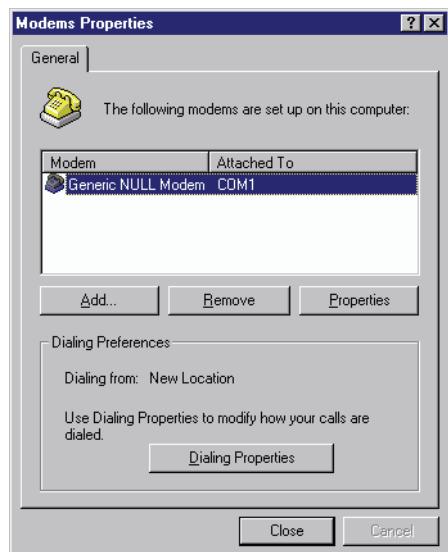
6. Select the serial port where you have plugged in your null modem cable.

PPP Setup

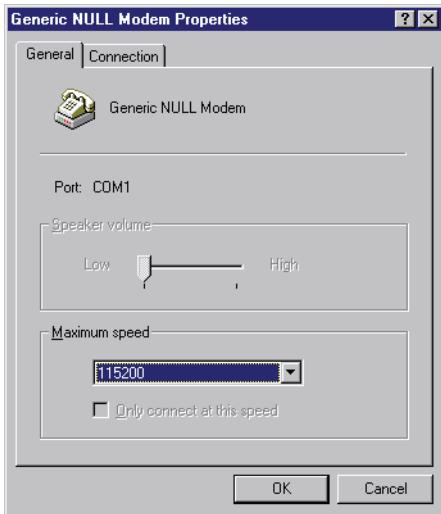
Installing PPP on the Client PC



7. Click **Finish**. The following window is displayed.

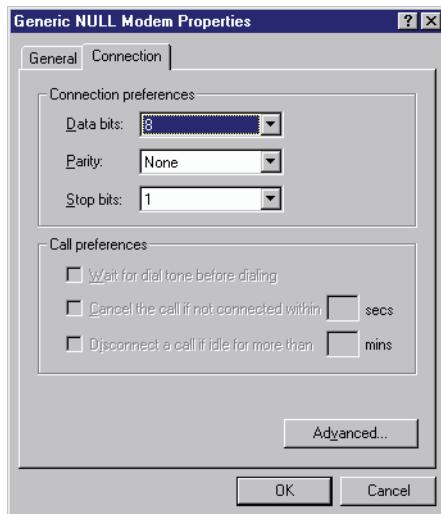


8. Click **Properties**.



9. In the "Maximum speed" field, select "115200".

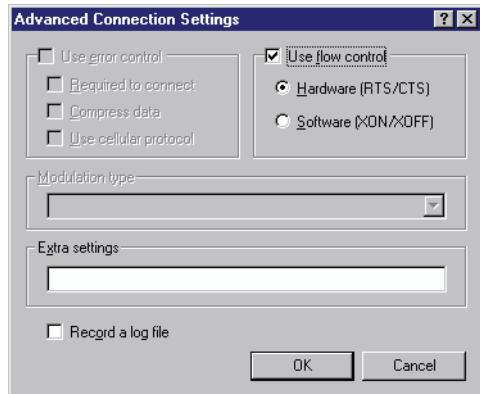
10. Click **Connection**.



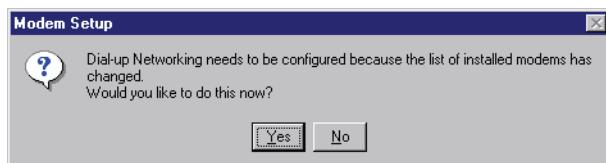
11. Click **Advanced....**

PPP Setup

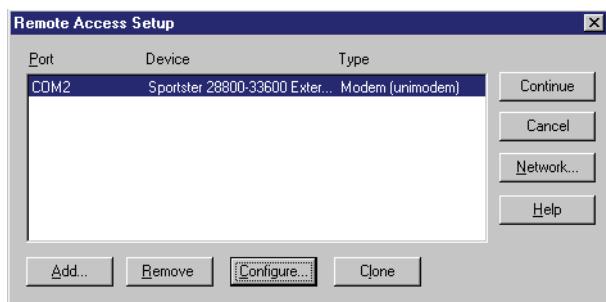
Installing PPP on the Client PC



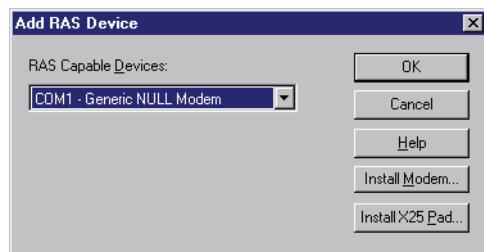
12. Ensure that the option "Hardware (RTS/CTS)" is selected in the "Use flow control" group box.
13. Close the dialog boxes by clicking **OK**. The Modem Setup dialog box automatically appears on your screen:



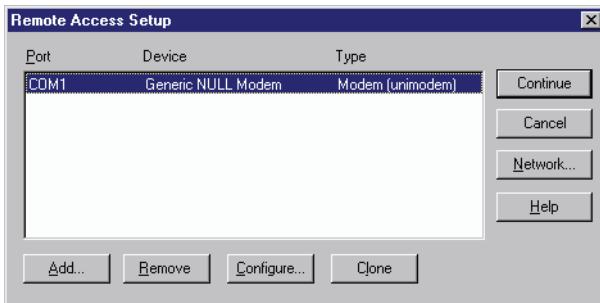
14. After installing a new modem, you must add it to the Remote Access Service (RAS) by clicking **Yes**.



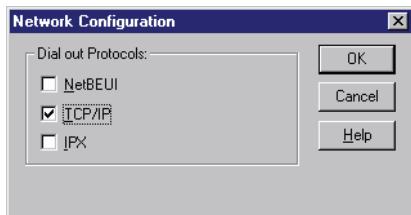
15. Click **Add...**.



16. In the RAS Capable Devices drop-down box, select "COM <x> - Generic NULL Modem" and click **OK**.



17. Click **Network....**



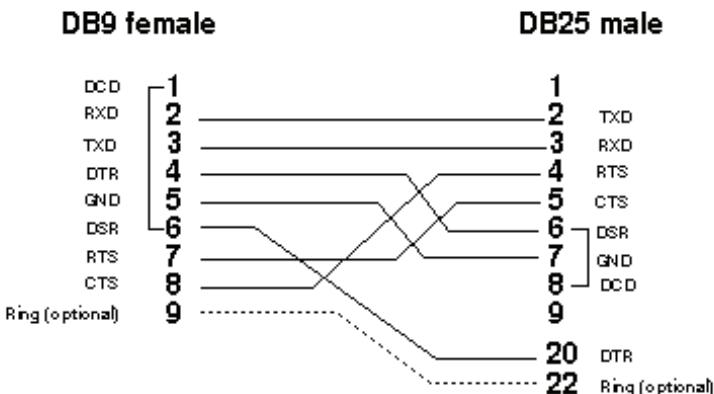
18. Click **OK**.

19. Click **Continue**. Windows NT now performs some internal configuration steps. When these have been completed, the system must be restarted.

Your null modem should now be configured in the system.



Check your null modem cable and make sure that the pin allocation is correct (see Figure 3-1, Null Modem Cable and Pin Allocation).



PPP Setup

Installing PPP on the Client PC

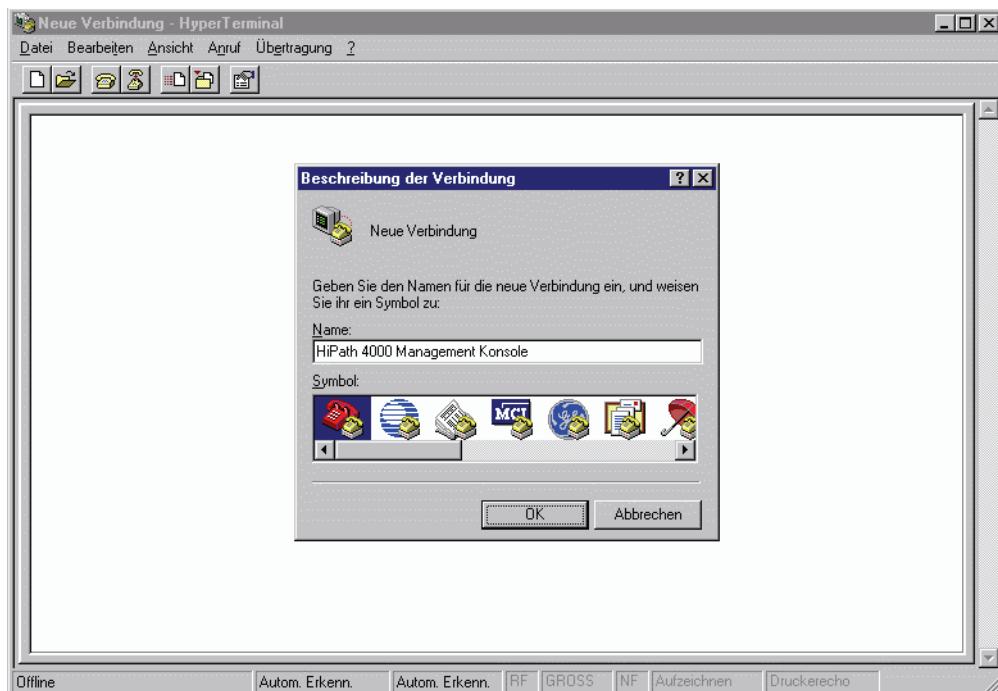
Figure 3-1 Null Modem Cable and Pin Allocation

3.3.2.4 Check the Direct Connection Using HyperTerminal

If you want to use a direct connection to the HiPath 4000 Server, you can check if the link is already working by using HyperTerminal. HyperTerminal is a simple terminal emulation similar to Procomm Plus.

To check if your HiPath 4000 Server is already correctly configured:

1. Click "Start" -> "Programs" -> "Accessories" -> "HyperTerminal".
2. Click HyperTerminal to obtain the following window:



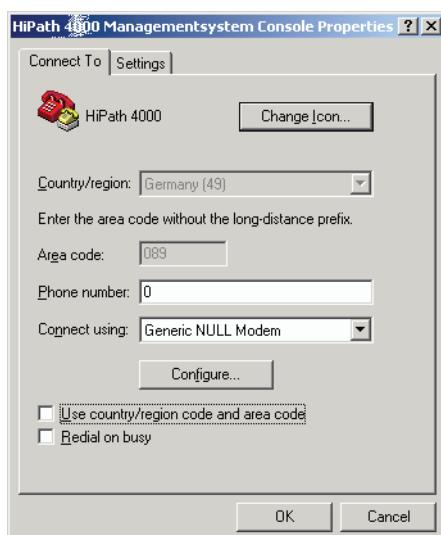
3. Enter a name for the new connection (such as "HiPath 4000 Management Console") and click **OK**.



4. In this window you must select the "Generic NULL Modem" and enter a telephone number. If you are using a null modem, you will only need to enter a "0" as no actual dialing operation is performed.
5. Click **OK**.



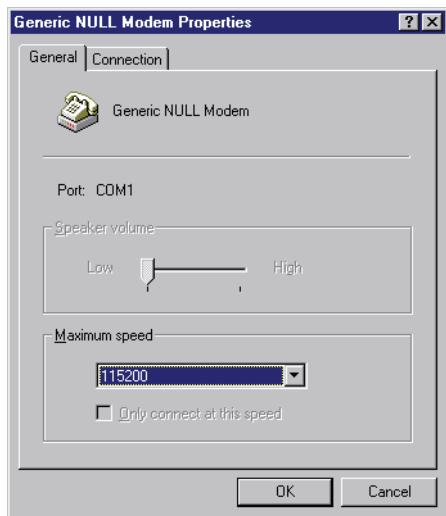
6. Click **Modify....**



7. Deactivate the "Use country/region code and area code" checkbox and click **Configure....**

PPP Setup

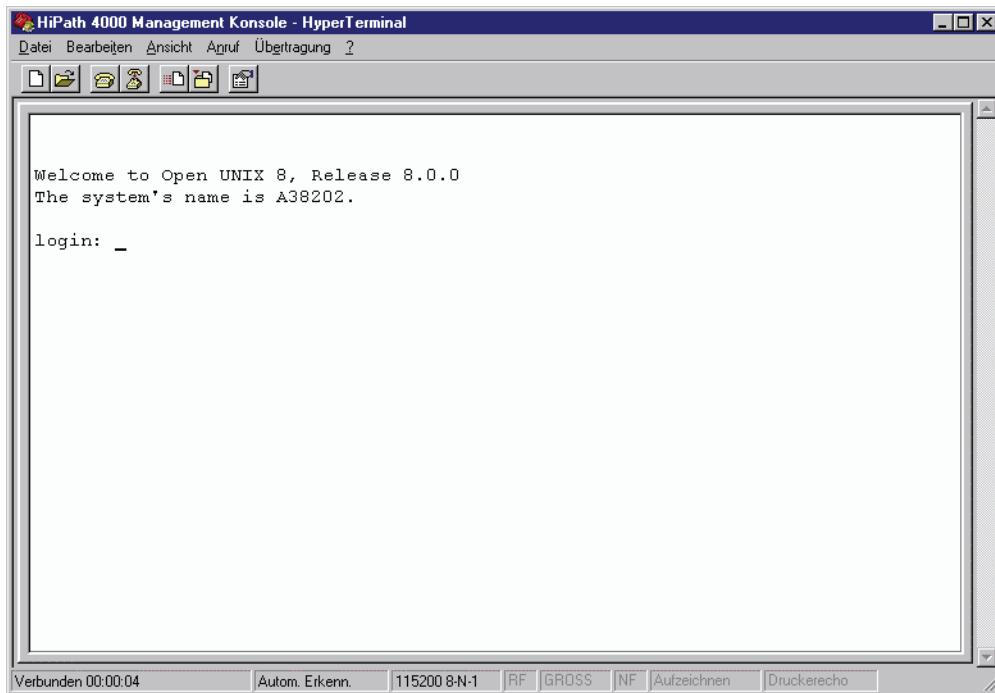
Installing PPP on the Client PC



8. Verify that the "Maximum speed" is set to 115200. Click **OK** twice.



9. Click **Dial** to activate the connection. A screen similar to that shown below should be displayed:



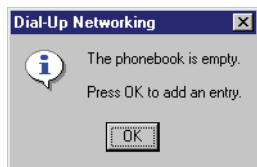
This ensures that there is a connection via the null modem cable.

10. You can save these settings as a profile in HyperTerminal (-> File -> Save). A link on the desktop is also helpful.

3.3.2.5 Configure the PPP Link

To configure the PPP link:

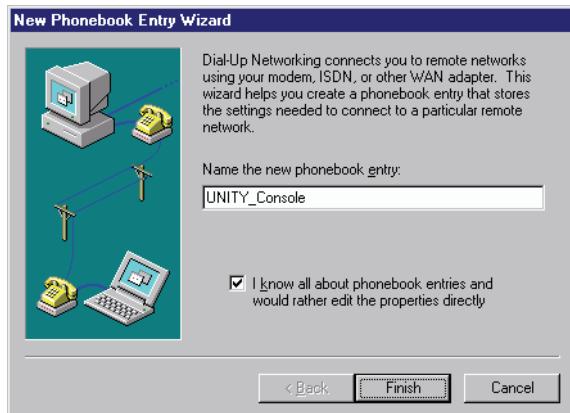
1. Double click "My Computer" -> Dial-Up Networking. If the dial-up network on your computer has never been used, the following message appears:



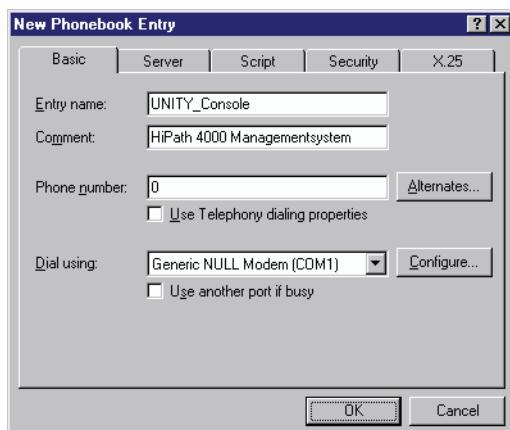
2. Click **OK** to continue. If entries are already contained in the phonebook, click the **New** button to add a new entry. A wizard for creating a new entry opens.

PPP Setup

Installing PPP on the Client PC

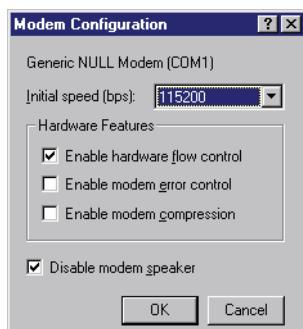


3. Click **Next>**.



4. Assign a name for the new PPP connection (such as UNITY_Console), enter 0 as the telephone number, and select the generic null modem.

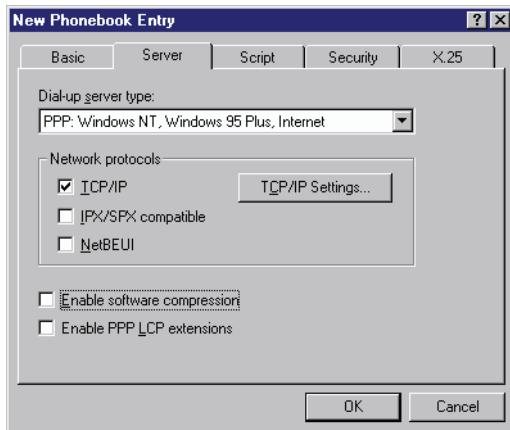
5. Click **Configure....**



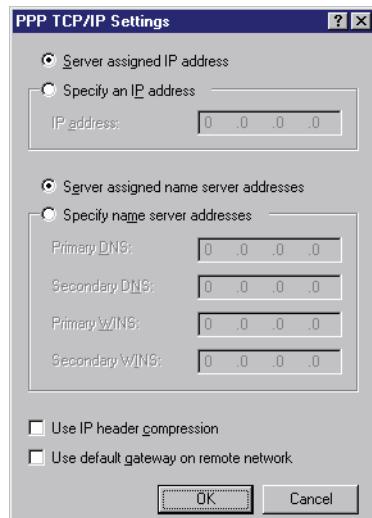
6. Verify that the "Initial speed" is set to "115200" and select "Enable hardware flow control".

7. Click **OK**.

8. Select the **Server** tab:



9. Select only the "TCP/IP" protocol and click **TCP/IP Settings....**



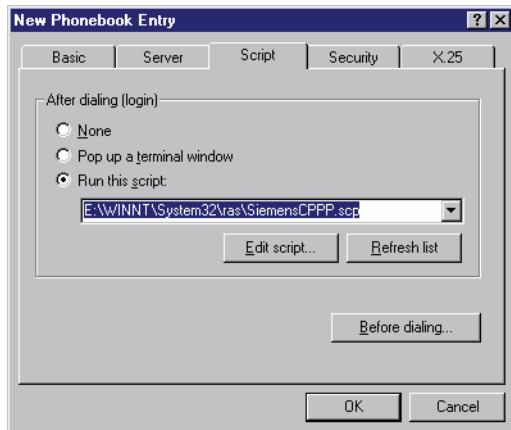
10. Deactivate the "Use IP header compression" and "Use default gateway on remote network" checkboxes.

11. Click **OK**.

PPP Setup

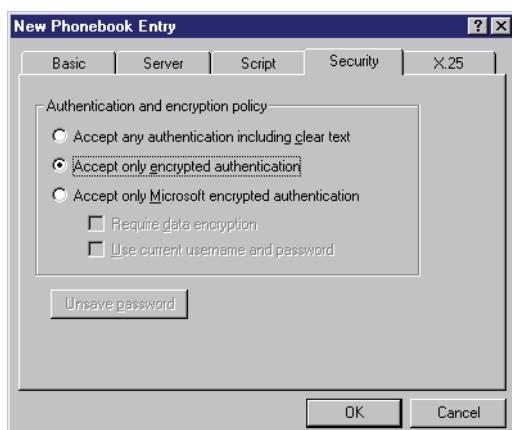
Installing PPP on the Client PC

12. Select the **Script** tab:

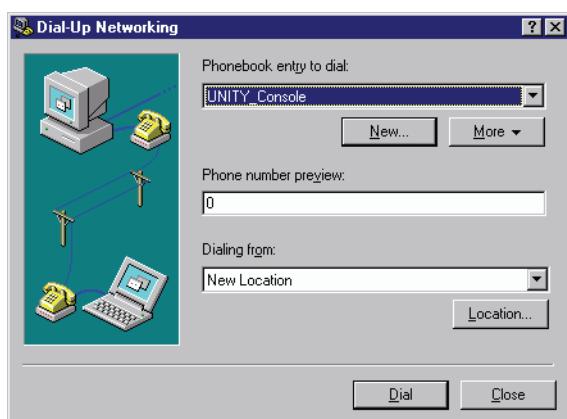


13. Activate "Run this script" and select "SiemensCPPP.scp" in the drop-down box.

14. Select the **Security** tab:



15. Click "Accept only encrypted authentication" and click **OK**.

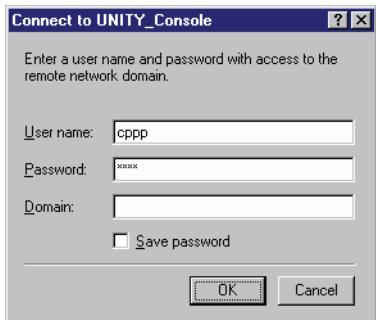


16. Proceed to Start The PPP Connection.

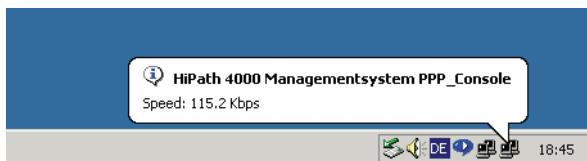
3.3.2.6 Start The PPP Connection

To start PPP connection:

1. Click **Dial**:



2. Enter the user name "cyyy", and the password "cyyy". Leave the field "Domain" empty.
3. Click **OK**. The connection is active when the icon appears in the taskbar (lower right).



3.3.3 Operating System: Windows 2000



You must be logged on as at least a "*Standard User*" (Power Users Group). A *Restricted User* (Users Group) does not have the necessary rights.

The procedure is similar to that with Windows NT as follows:

- Create a New Dial-Up Connection
- Check the Dial-Up Connection
- Set Up a Dial-Up Connection

3.3.3.1 Create a New Dial-Up Connection

To create a new dial-up connection:

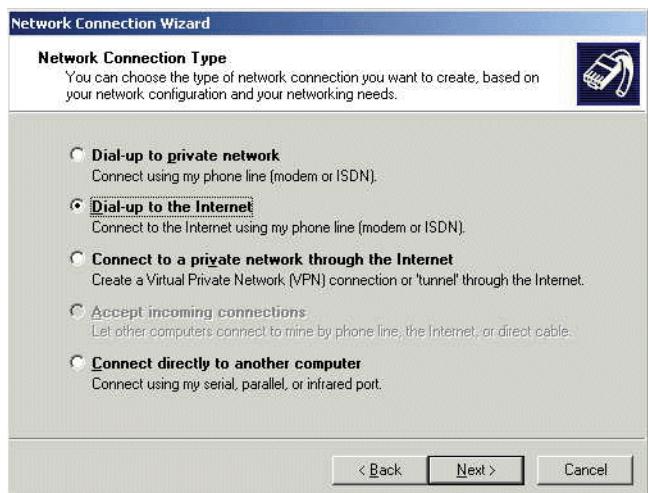
1. Select "Start -> Settings -> Network and Dial-Up Connections".
2. Double-click "**Make New Connection**".

PPP Setup

Installing PPP on the Client PC



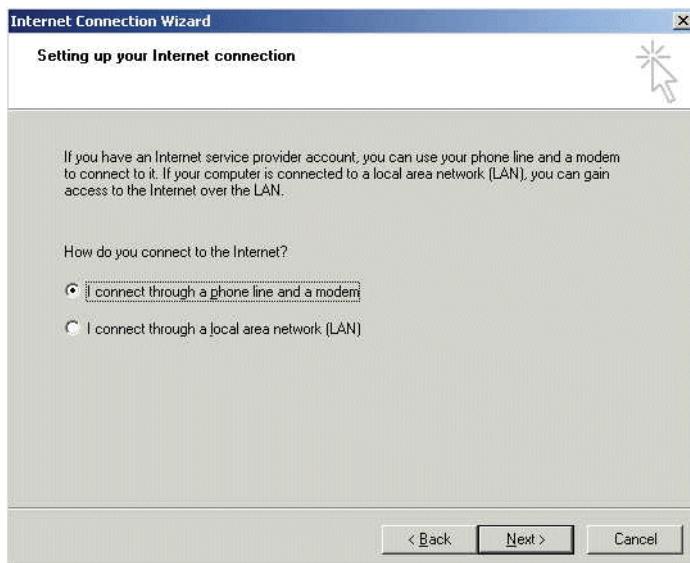
3. Click **Next >**.



4. Click "Dial-up to the Internet" and click **Next**.



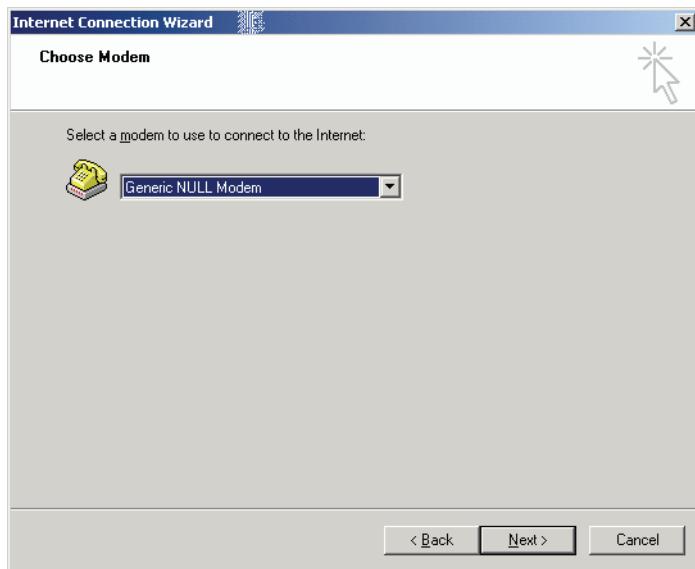
5. Click "I want to set up my Internet connection ..." and click **Next**.



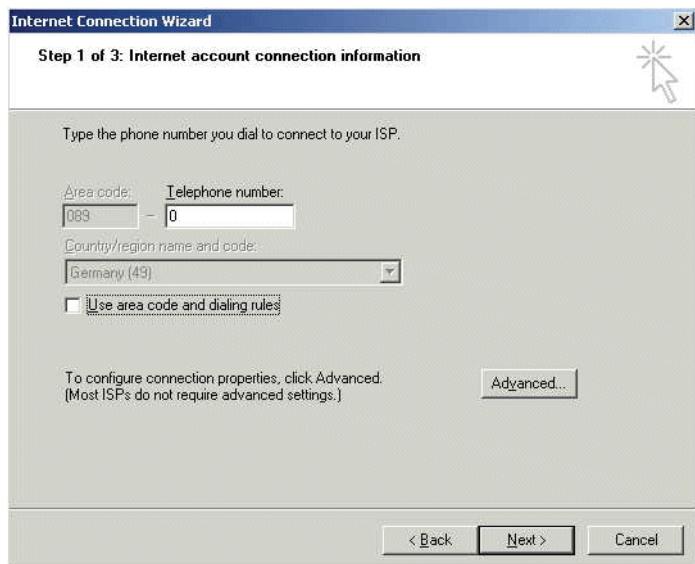
6. Click "I connect through a phone line and a modem" and click **Next**.

PPP Setup

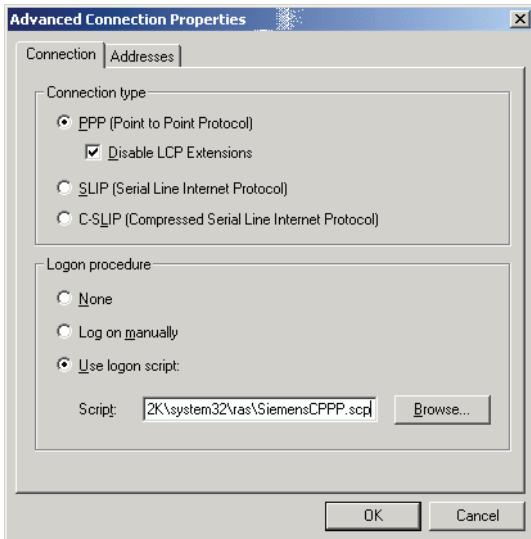
Installing PPP on the Client PC



7. Select the modem to be used and click **Next**.



8. Enter the phone number for the destination system (if it is a generic null modem, enter 0) and click **Advanced....**



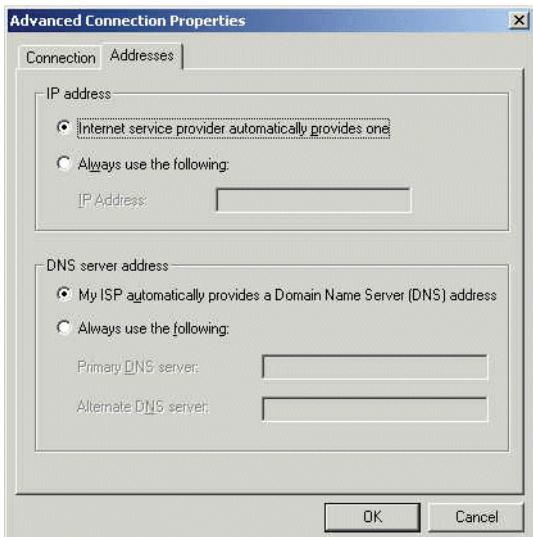
9. Select PPP (Point to Point Protocol) and activate the "Disable LCP Extensions" checkbox. Then click Use logon script: and select the relevant script by clicking **Browse**.

For connections via modem, use "SiemensInPPP.scp".

For connections via a null modem cable (for example, for UNIX Console line 11), use "SiemensCPPP.scp".

10. Click **OK**.

11. Open the "Addresses" tab:

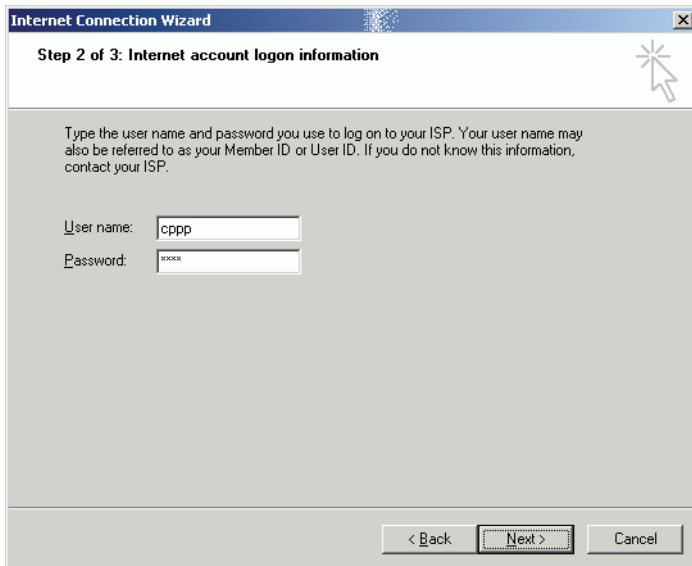


12. Accept all default value settings. The ADP sets the necessary parameters for the connection setup.

PPP Setup

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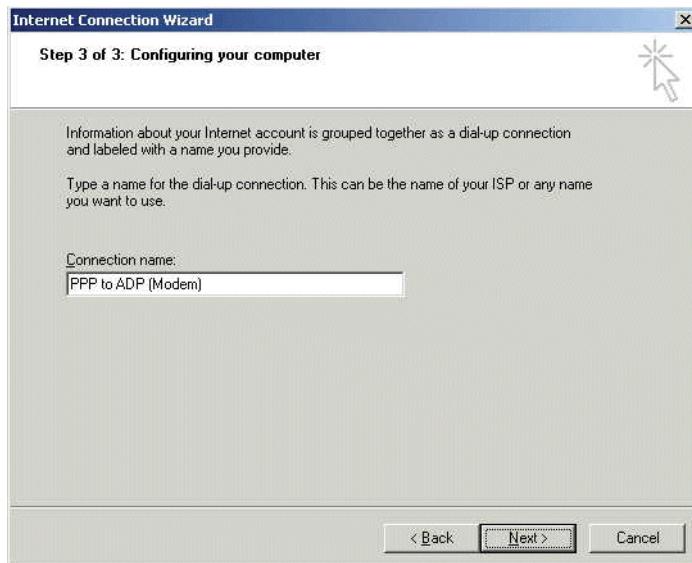
13. Click **OK** and **Next**.



14. Use the following data for the user name and password depending on the serial interface on the ADP:

Serial Line (ADP)	User name	Password
Line 11	cyyy	cyyy

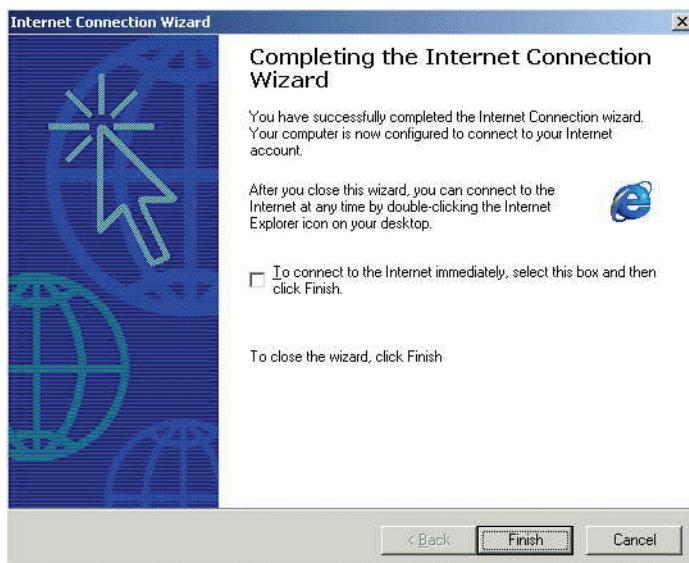
15. Click **Next**.



16. Enter a name for the configuration (e.g. "HiPath 4000 Management PPP_Console") and click **Next**.



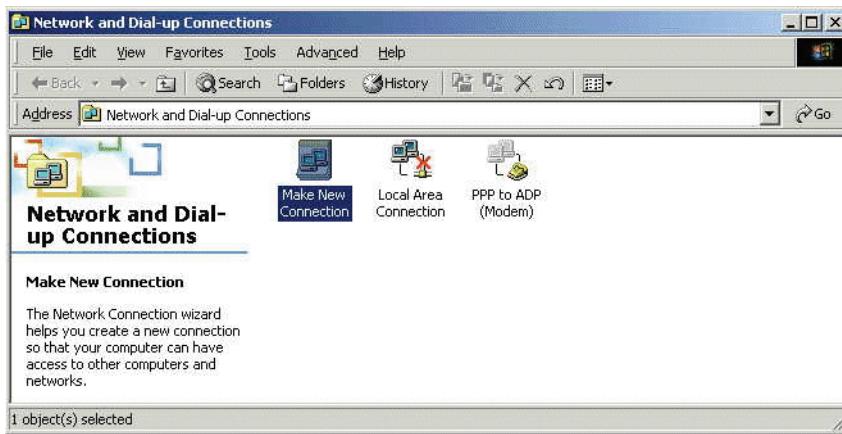
17. Select **No** and click **Next**.



18. Deactivate the "To connect to the Internet immediately ..." checkbox and click **Finish**.

PPP Setup

Installing PPP on the Client PC

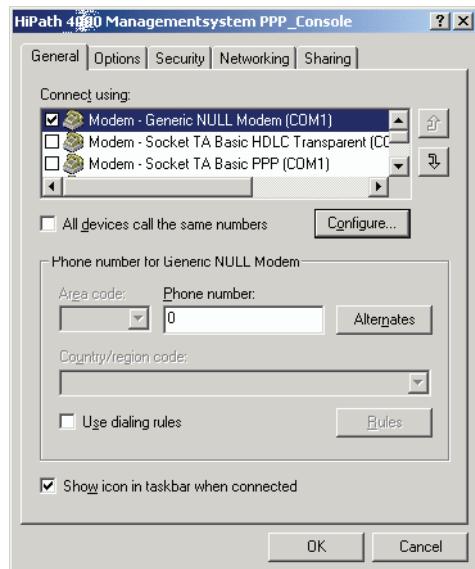


A new dial-up connection should now be displayed in the "Network and Dial-Up Connections" window.

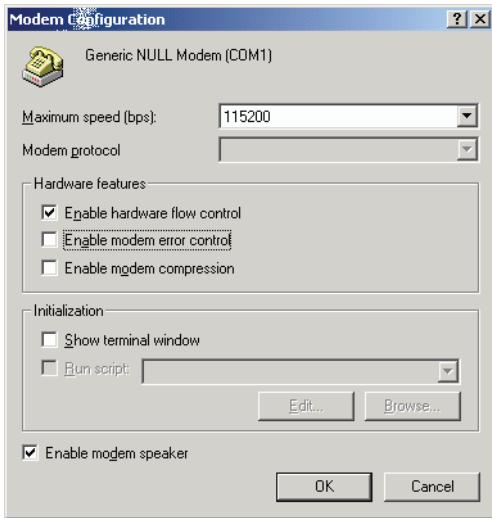
3.3.3.2 Check the Dial-Up Connection

To check the dial-up connection:

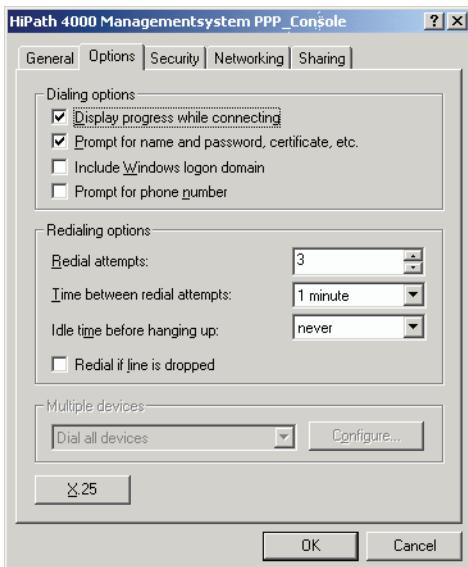
1. Click "Start" -> "Settings" -> "Network and Dial-Up Connections".
2. Select the newly-created dial-up connection (PPP-ADP)
3. Select **Properties** from the context menu (right-click) and verify the entry.



4. Select the modem to be used and enter the phone number for the remote system.
5. Click **Configure...** to check the modem settings.



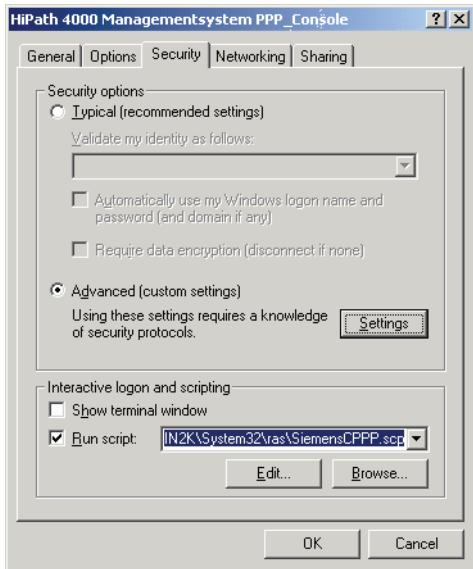
6. Click **OK** to return to the **General** tab.
7. Select the **Options** tab.



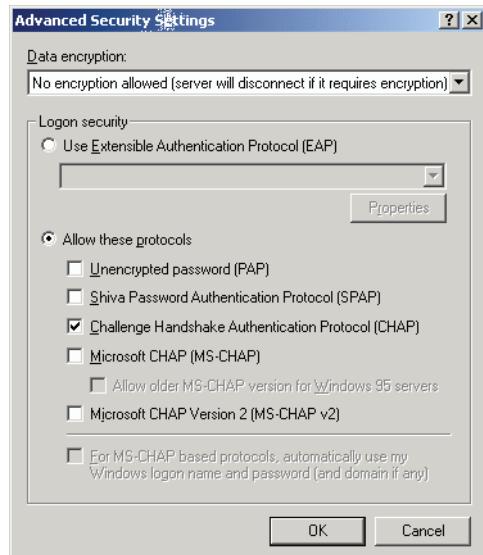
8. Select the **Security** tab.

PPP Setup

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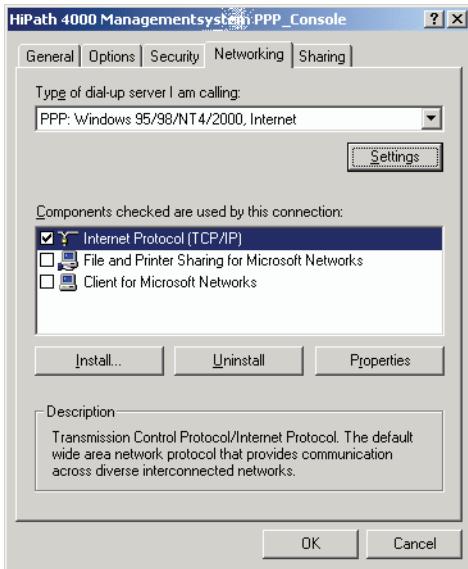


9. In the "Security options" group box, click Advanced (custom settings).
10. Click **Settings**.

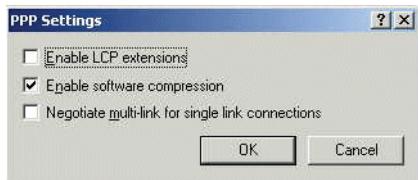


The ADP only supports the Challenge Handshake Authentication Protocol (CHAP).

11. Click **OK** to return to the **Security** tab.
12. In the Interactive logon and scripting group box, select the option Run script and then the required script.
13. Select the **Networking** tab.



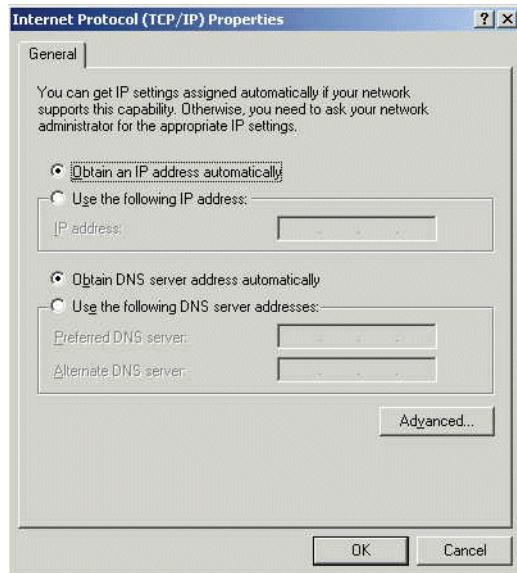
14. Select the type PPP: Windows 95/98/NT 4/2000, Internet.
15. Click **Settings**.



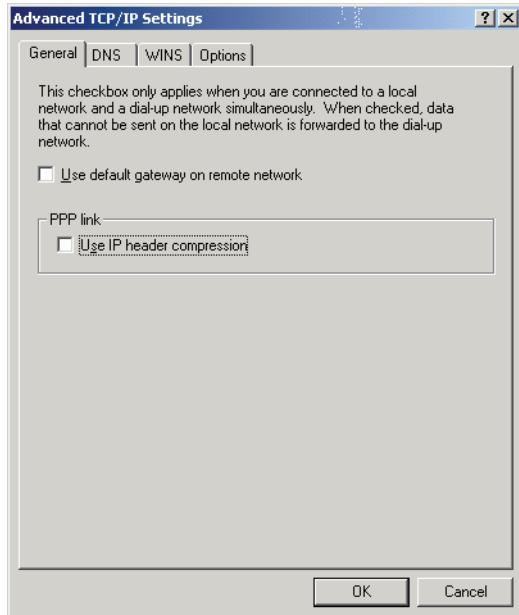
16. Click Enable LCP extensions and Negotiate multi-link for single-link connections.
17. Click **OK** to return to the previous dialog.
18. Select the TCP/IP protocol and click **Properties** in the lower section of the dialog box.

PPP Setup

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19. Do not change the default settings; the ADP assigns the addresses necessary for the connection setup to your PC.
20. Click **Advanced...** to access additional parameters.



21. Deactivate the Use IP header compression checkbox. The ADP does not support this feature.
22. Click **OK** twice and select the **Sharing** tab.



23. Click **OK**.

3.3.3.3 Set Up a Dial-Up Connection

To set up a configured connection, double-click the entry in the Network and Dial-Up Connections window.



1. You can now recheck the values that have been set. If the **Save Password** checkbox is activated, the password entered in the user password file is stored.
2. Click **Dial** to set up the connection.

PPP Setup

Installing PPP on the Client PC

3.3.4 Windows XP Professional



You must be logged on as at least a "Standard User" (Power Users Group). A Restricted User (Users Group) does not have the necessary rights.

The procedure is similar to that on Windows 2000 as follows:

- Create a New Dial-Up Connection
- Check the Dial-Up Connection
- Set Up a Dial-Up Connection

3.3.4.1 Model Installation



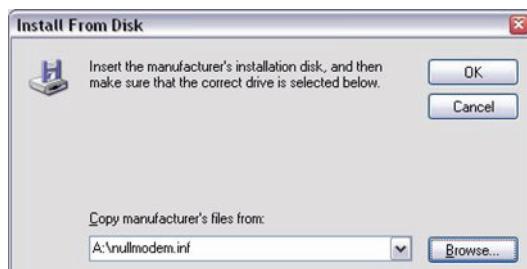
1. Click Add.



2. Select Don't detect my modem; I will select it from a list and click Next >.



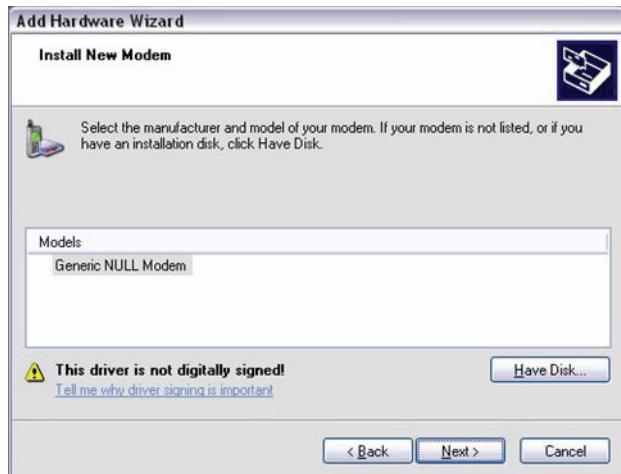
3. Click Have Disk....



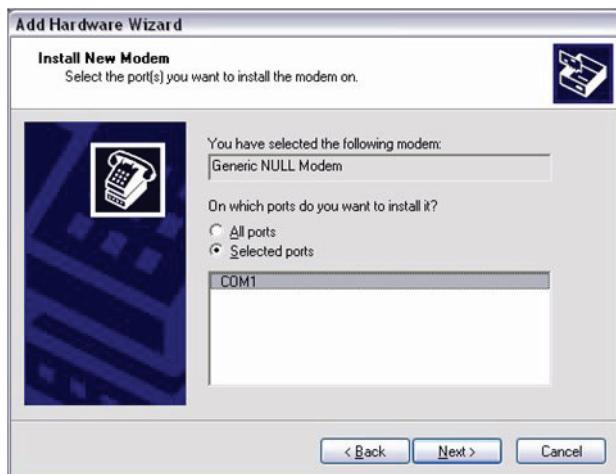
4. Choose nullmodem.inf in the dialog and click OK.

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5. Click **Next >**.



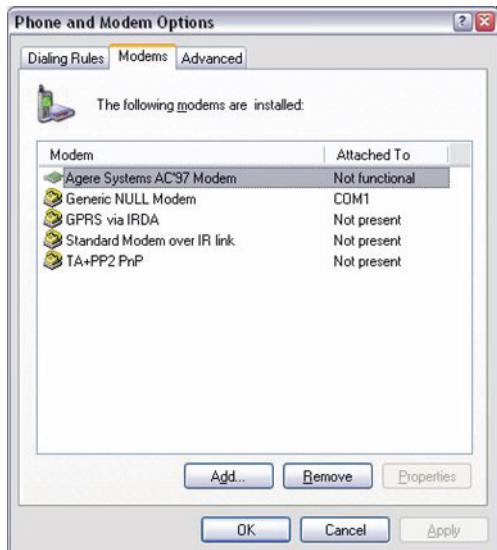
6. Select **Selected ports** and click **Next >**.



7. Click **Continue Anyway**.



8. Click **Finish**.



9. Click **OK**.

The Null Modem is now configured.

3.3.4.2 Create a New Dial-Up Connection

To create a new dial-up connection:

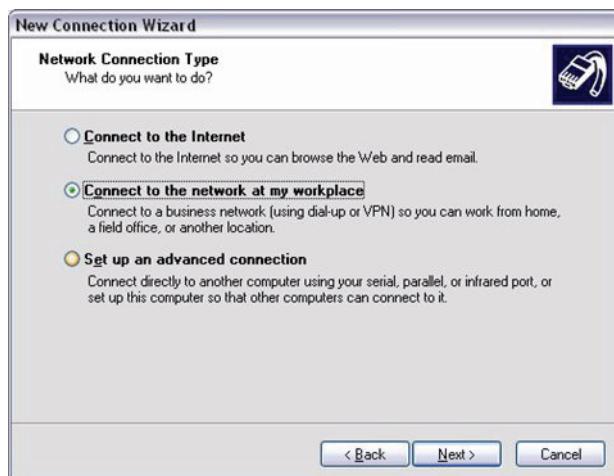
1. Select **Start -> Connect To -> Show all connections**.
2. Create a new connection (e.g. **File -> New connection**).

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3. Click **Next >**.



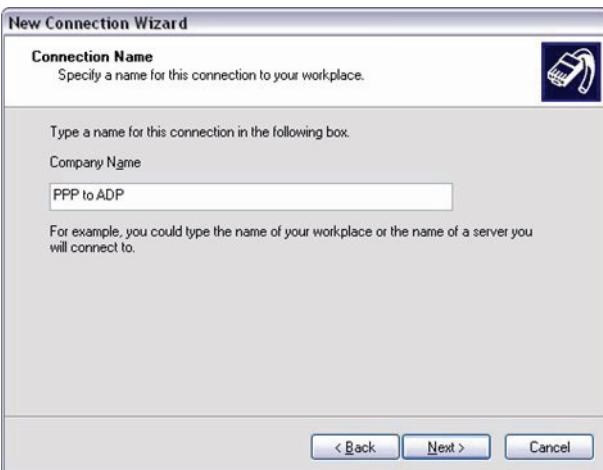
4. Click **Connect to the network at my workplace** and click **Next >**.



5. Select **Dial-up connection** and click **Next >**.



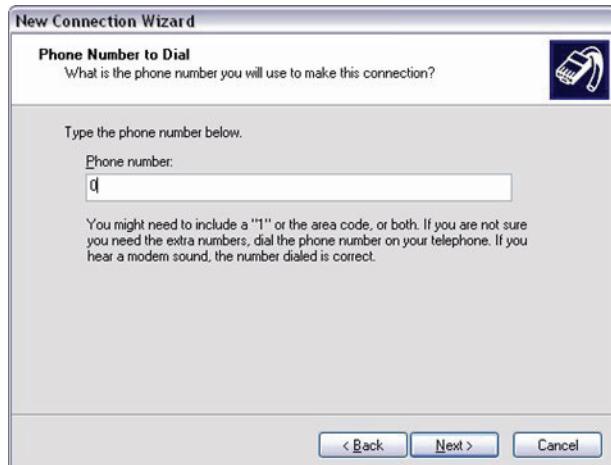
6. Select **NULL modem** and click **Next >**.



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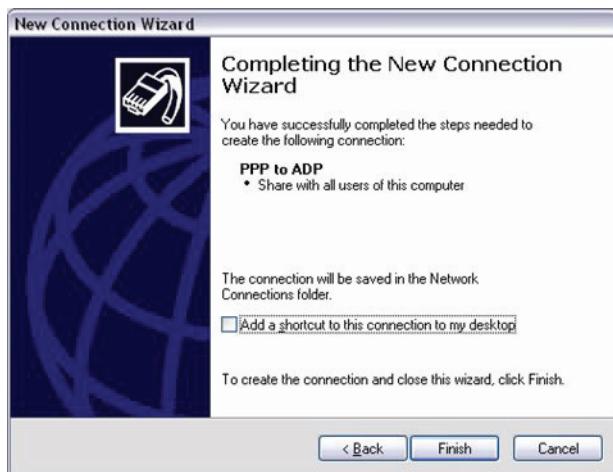
- Enter the name of the connection, e.g. "PPP to ADP", and click **Next >**.



- Enter **0** as the phone number here and click **Next >**.



- Choose if you also want other users of this PC to use the connection (**Anyone's use**) or not (**My use only**) and click **Next >**.



10. Click **Finish**.



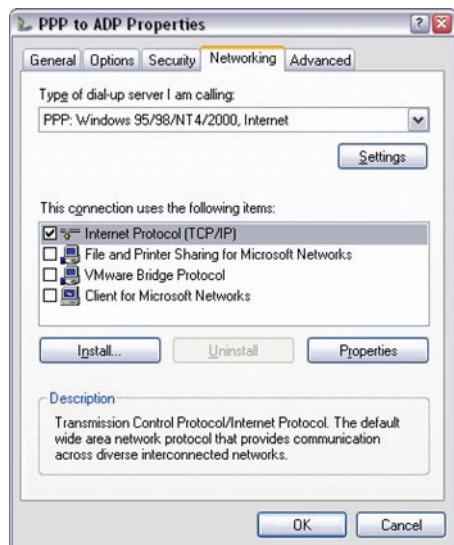
11. Click **Properties**.

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12. In the **Security** tab, activate the **Run script** checkbox and browse for the **SiemensCP-PP.scp** login script.



13. In the **Networking** tab, deactivate all protocols except **Internet Protocol (TCP/IP)**. Select this protocol and click **Properties**.



14. Click Advanced.



15. Deactivate the Use default gateway on remote network and Use IP header compression checkboxes and click OK.

PPP Setup

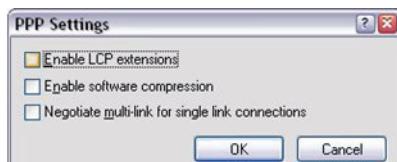
Installing PPP on the Client PC



16. Click **OK**.

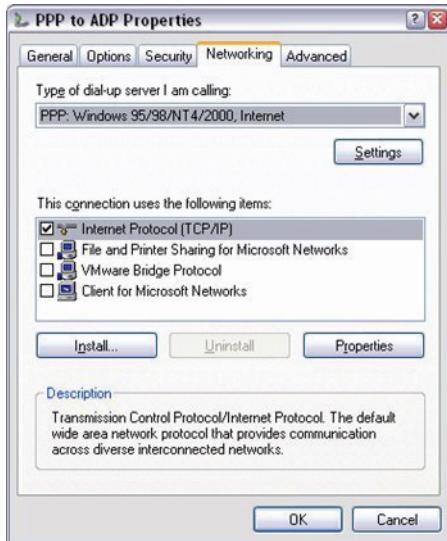


17. Click **Settings**.



18. Deactivate the **Enable LCP extensions** and **Enable software compression** checkboxes and click **OK**.

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19. Click **OK**.



20. Enter Cppp as the user name and Cppp as the password and click **Dial**.



21. The connection is active when a corresponding icon appears in the system tray.

PPP Setup

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4 HiPath 4000 Assistant Applications

This chapter describes the applications installed during the installation process (in the order they appear on the HiPath 4000 Assistant start page). It also gives a short overview of the tasks performed by each application.

For further information about the applications, please refer to the corresponding online help.

Software Management

- Software Transfer

The HiPath 4000 Software Transfer (SWT) application is a tool which transfers software using the LAN (TCP/IP). SWT uses ftp.

- Software Activation (SWA)

The Software Activation (SWA) function activates either a Revision Level Complete (RLC) or a Patch Package (PP) that has been transferred to the HiPath system's UnixWare7 system using the SWT function

- Backup & Restore

The HiPath Backup & Restore (HBR) allows you to save configuration data or software from RMX, UNIX and UNIX applications to a backup copy file and restore the data as required. This means that an accurate backup copy of the data and/or software is available in the event of a system failure.

- Application Administration

The HiPath 4000 Application Administration (APP) installs, updates, and remove applications. This application also allows you to display the names of the installed applications and the installation packages that are on the installation medium. Magneto-optical disks, CDs, and the installation partition on the HiPath hard disk can be used as installation media..

- Software Transfer 2

The SWT2 (Software Transfer 2) component is part of HiPath 4K Manager. It is a tool for transferring patch packages (PP), release level complete (RLC) and preliminary bug fixes (VK) via a TCP/IP network.

Access Management

- Session Management

- Change Password
- Session Manager

- License Management

HiPath 4000 Assistant Applications

The HiPath 4000 License Management (LicM) application allows the administrator to obtain information on the installed licenses and to install new licenses. This protects all HiPath 4000 applications and all software that requires a license and that a customer might want to install.

- Account Management
 - User Account Administration
 - System Account Administration
 - Access Right Configuration
 - Access Right Group Configuration
 - Export User Reports
- Manage Web Server Certificates
 - Certificate for this Web Server
 - Certificate for Network management
- Emergency Shell Access

Utilities

- Data Migration Tool

With the Data Migration Tool (DMT), you can migrate existing data from other applications to the HiPath 4000 Assistant.

- PPP Logging

Using the HiPath 4000 Management PPP Logging application, the administrator can display PPP connection status information or set the level debug message recording.

- Local Alarm Agent

The HiPath 4000 Local Alarm Agent (LAA) service function can be used to monitor servers from both the HiPath LAN and a C-LAN.

- ACDAPP - Utilities

The HiPath 4000 ACDAPP application is used to configure call center related data, for example ACD agents and ACD groups.

- Report Generator

Report Generator is used to run reports using report templates.

To run a report means to generate a report on metered data stored in the database of the supported HiPath 4000 Manager/Assistant applications (e.g. Configuration Management, Performance Management). The report result can be displayed in different forms (e.g. pie chart, table) and in different formats (e.g. xml, Excel® spreadsheet).

To run a report you need a report template. The report template determines the application for which the report is to be generated and the form of the report result. There are two types of report templates: templates for predefined reports and templates for customized reports (please refer to the description below for more details).

Base Administration

- Unix Base Administration

Unix Base Administration (UBA) is the basic administration service function for the configuration of the system resources, the TCP network and the firewall on UnixWare7. It is also used for shutting down the UnixWare7.

- Smart Address Change

The "Smart Address Change" application is used in a Virtual Private Network (VPN) exclusively for changing the already configured own VPN address.

- Logging Management

Logging Management allows you to search the logon events, using a standard query. It also allows you to modify, create and save queries.

- CCAII Configuration

- Application Control

- Simple Network Management Protocol - HiPath SNMP

Simple Network Management Protocol is used to provide a standard interface for monitoring and configuring network resources.

Expert Mode

- HiPath 4000

- HiPath 4000 Expert Access

For additional information, refer to the online help.

- HG 35xx Web Based Management

- HG 35xx Telnet / SSH

System Management

- HiPath 4000 Administration

HiPath 4000 Assistant Applications

- PhoneMail Administration
- HiPath 4000 / HG3500 Administration

Configuration Management

HiPath 4000 Assistant Configuration Management runs locally on HiPath 4000 systems (ADP **Administration Data Processor**). It administers subscriber data, personal data and station data, cards, bundles, and device data.

Das Configuration Management includes the following functions:

- Network
- System Data
- Station
- Tables
- Groups
- Personal Data
- Least Cost Routing
- HiPath Inventory Management
- IPDA Wizard
- Scheduled Batch
- Session Log
- CHESE Wizard
- User Settings

Collecting Agent



The HiPath COL Homepage is started in a Web browser via a URL (IP address); it can not be launched via the Homepage of HiPath 4000 Assistant/Manager or via the Desktop.

To start the HiPath COL Homepage enter the COL URL followed by the name of the Homepage (HiPathCOL.asp) in a web browser or by using a bookmark containing the HiPath COL URL, e. g. <http://servername/COL/HiPathCOL.asp>.

You can also create an icon on your desktop containing the COL URL link!

HiPath Call Data Collection (COL) is used to collect accounting data in a HiPath network.

- Homepage - Collecting Agent

- Collecting Status
- Output Line Status

Fault Management

- Alarm Configurator

The Alarm Configurator is used to manage switch alarms. It is used to assign alarms to subscribers or trunks and to generate alarms automatically for trunks to which alarms have not yet been assigned.

Performance Management

- Performance Management

This is the Home Page of Performance Management. Single-clicking on a link in the menu displays a brief description of the feature. Double-clicking on the link takes you to the relevant page.

- Reporting Status

This feature allows you to view a list of available reports and report groups. It also allows you to add, delete, or edit a report or report group.

- Run Report

This feature allows you to run a report or report group.

- Report Group

This feature allows you to associate one or more reports into a report group. It also allows you to run more than one report.

- Report Definition

This feature allows you to create or modify a report.

- Filter Definition

This feature allows you to create or modify a filter.

- Metering Settings

This feature takes you to the PM tab sheet of the System Management page. From this tab sheet, you can specify the metering settings that are associated with a selected switch.

- Administration

This feature allows you to perform the following administration functions on the data in the PM database:

- Specify how data from the P<M database is to be automatically retained or deleted

HiPath 4000 Assistant Applications

- Manually delete data
- Determine database statistics
- Call Routing Display

Session Management

- Change Password
- Emergency Password Reset

Emergency Password Reset (EPR) provides a mean to reset administrator (user "engr") password in case the password was lost or the system was corrupted. Prior to using that feature, the system must be configured appropriately, and the feature must be enabled by the system administrator.

- Session Manager

Diagnostics

- HistIP

The HistIP application is a diagnostics tool which can help the user in troubleshooting and analysis of the IP Boards and the customer LAN interface on HiPath 4000 systems.

- Dynamic Traffic Monitoring

The HiPath 4000 Data Traffic Metering (DTM) application is used to measure the capacity of the available trunk groups. It enables a snapshot of any particular trunk group to be generated or bundle-specific monitoring to be started.

- ACL-C Tracer

The ACL-C Tracer tool provides two basic helper functions:

- • Tracing of the ACL-C messages (off-line or interactive)
- • Testing the ACL-C links by configuration check

The ACL-C Tracer is able to trace the messages and check configuration settings only on the switch where the application is installed. For tracing the ACL-C messages on different switches the application has to be installed on each switch node in a switch network.

- Test Simulation of Key Function Activity

The TSKA application enables the HiPath 4000 Assistant user to display and simulate OptiSet or OptiPoint devices at a customer's site. TSKA displays:

- display messages
- LED status

- functional key assignments

The user can remotely simulate the pressing of function keys and keys of the keypad. Therefore, a graphical representation of the device in a browser window is provided.

- **Hardware and Symptom Diagnosis**

The HiPath HG 1500 (HSD) application is an adaption of the US tool, Enhanced Error Analysis (EEA).

The tool is designed to assist service personnel in:

- Debugging hardware problems
- Isolating configuration or trunk problems
- Providing relevant information for software problems in the PBX

- **IPDA Service Access**

- CQR Viewer

Call Quality Recording - CQR allows a call's QoS data (cumulative data) to be recorded over IP.

The CQR viewer displays this data.

- MIB Viewer

Management Information Base - this is the formal definition of data which can be displayed via SNMP (**Simple Network Management Protocol**). One of the many examples of this is counters for incoming, defective and transmitted packets on all levels of the IP stack.

The MIB viewer allows access to this data in a HG 3570 or HG 3575.

- QoS Viewer

Quality of Service - for Voice Over IP this usually means Delay, Packet Loss (and Jitter) for IP packets.

The QoS viewer cyclically displays the QoS data of an IP connection (between HG3575 and HG3570 or HG3575) and depicts this data graphically.

- **Switch Diagnosis**

- Real Time Diagnosis System

Realtime Diagnosis System provides telephony fault localization for station and data lines and limited trunk fault reporting capabilities for trunk facility problems. It provides tools and features to help reduce the time of solving trunk problems, as well as enabling you to solve the problems more efficiently.

HiPath 4000 Assistant Applications

5 User Accounts

5.1 Definition

Ten different user accounts are supported by Security Manager: five for HiPath 4000 Assistant/Manager and five for HiPath 4000 HTS. Only the accounts relevant to HiPath 4000 Assistant are described in this chapter.

The five user accounts are shared as follows:

- Three for customer service levels (engr, rsta, rsca)
- Two for the customers (cusa, cust)

Every user who logs on to a HiPath 4000 server is assigned one of these levels.

For safety reasons, you are asked to change the pre-defined password the first time you log on.

The following table provides an overview of the different user accounts.

User account	Password issued by	Additional information
rsca	Siemens2000	Remote Service Customer Assistance (limited system administration privileges). For "lower level" service technicians.
rsta	Siemens2000	Remote Service Technical Assistance (limited system administration privileges). For "upper level" service technicians. Access for rsca security level.
engr	Siemens2000	Engineer (comprehensive system administration privileges for engineers). Access for all security levels Access to the UNIX shell and superuser rights (uid 0).
cusa	c.u.s.a	Customer Security Administrator (limited system administration privileges for "customer security administrators"). For "master" administrators employed by the customer. Access for security level cust.
cust	--	Customer (standard user). Individual accounts for the relevant customer environment can be set up during the runtime.

User Accounts

Customer Account Profiles for HiPath 4000 Assistant

Refer to the Security Management (SecM) online help for further information (for example password rules).

5.2 Customer Account Profiles for HiPath 4000 Assistant

Navigating the start page		Cust.account	
Application	Definition	Service	Cust.
ACDAPP	Call Center Configuration Administrator	rsca	cusa
ACDAPP	Call Center Configuration Client User	rsca	cust
ACDAPP	Call Center Administration	rsca	---
ACDAPP	ACDAPP Status	rsca	cust
APP	All APP functions	enqr	---
COL	COL Basic Features	rsca	cust
Direct Access	Expert Access	rsta	---
Direct Access	HiPath 4000 Assistant Launchpad	rsca	cust
Direct Access	Phonemail Logon	rsca	cust
DMT	All DMT functions	rsca	cust
DTM	Job Administration	rsta	cusa
DTM	Monitoring	rsta	cusa
DTM	Snapshot	rsca	cust
FTW	FTW feature text	rsca	cust
FaultM	ACL-C Tracer	rsca	cust
HBR	Administration Backup Device	rsca	---
HBR	Backup	rsca	---
HBR	HBR_Common	rsca	cust
HBR	GLA/PDS Handling	rsca	---
HBR	Restore	rsca	---
HBR	Backup Schedule Configuration	rsca	---
SWT	All SWT functions	rsta	cusa
LAA	All LAA functions	rsca	cust
LAP	All LAP functions	rsca	cust

Table 5-1 HiPath 4000 Assistant - Customer Account Profiles

Navigating the start page		Cust.account	
Application	Definition	Service	Cust.
PM	Performance Management standard feature	rsca	cust
RepGen	Report Generator standard feature	rsca	cust
SWA	All Software Activation functions	rsta	---
SecM	Emergency Shell Access	rsca	---
SecM	Direct AMO dialog	rsta	---
SecM	RMX file system	rsta	---
SecM	Security Profile Definition	rsca	---
SecM	Unix file system	rsca	---
SecM	Access right configuration for customer level users	rsta	cusa
SecM	Access right group configuration for customer level users	rsta	cusa
SecM	Change Password	rsca	cust
SecM	Administration of customer level users	rsta	cusa
SecM	Administration of predefined system accounts	rsca	cusa
SecM	Manage customer administrator level sessions	rsta	---
SecM	Manage customer level sessions	rsta	cusa
SecM	Manage expert level sessions	engr	---
SecM	Manage own sessions	rsca	cust
SecM	Manage first level service sessions	rsta	---
SecM	Manage second level service sessions	engr	---
SysM	System Management full access	rsca	cust
UBA	CMX Configuration	rsca	cust
UBA	LAN Configuration	rsca	cust
UBA	System Administration	rsca	cust
UBA	WAN Configuration	rsca	cust
CM	Configuration Management	rsca	cust
HSD	Hardware and Symptom Diagnosis	rsca	---
RDS	Real Time Diagnosis System	rsca	---

Table 5-1 HiPath 4000 Assistant - Customer Account Profiles

User Accounts

Customer Account Profiles for HiPath 4000 Assistant

6 Portlist

The Interface Management Database (IFMDB) contains information regarding the IP ports used by all HiPath products.

<https://apps.g-dms.com/ifm/>

Portlist

7 Preparations Prior to Using HiPath 4000 Assistant/Manager

Please note the following Hardware and Software requirements.

7.1 Hardware Requirements

The following table lists the necessary hardware requirements for the client PC.

Hardware	Requirements
CPU	Pentium III
Clock rate	400 MHz
Operating system	<ul style="list-style-type: none">Windows NT 4.0 / 4 (Workstation Version)Windows 2000 Professional
Browser	<ul style="list-style-type: none">Microsoft Internet Explorer 5.5Netscape Communicator 4.73
Java Runtime Environment	JRE 1.3.1
RAM	128 MB 256 MB RAM is recommended to accommodate the implementation of several applications simultaneously on your client PC.
Monitor	1024 x 768 8 Bit (256 colours)
Hard disk	120 MB

Table 7-1 Client PC Hardware Requirements

7.2 Software Requirements

To be able to use the full scope of functions offered by HiPath 4000 Management certain settings must be made and additional software must be installed on your client PC. These steps need only be performed once.

The necessary steps are described on the Public Page of your system. (Start the browser - enter the defined IP address for HiPath 4000.)

If no connection is made, check if the IP address is entered as a proxy exception. If proxy configuration cannot be performed automatically (e.g. via System Management), it must be carried out manually. Refer to Manually Configuring the Proxy in Microsoft Internet Explorer and Manually Configuring the Proxy in Netscape Communicator for instructions.

Preparations Prior to Using HiPath 4000 Assistant/Manager

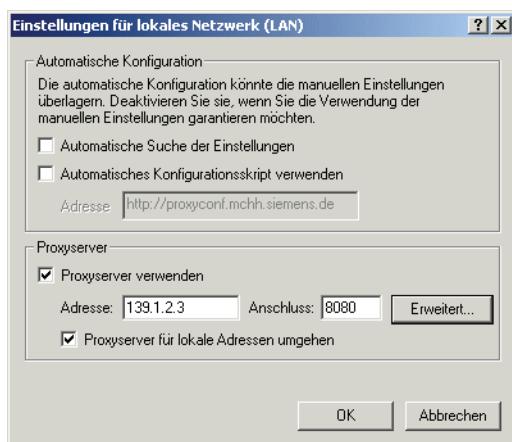
Software Requirements

7.2.1 Manually Configuring the Proxy in Microsoft Internet Explorer

1. Start Microsoft Internet Explorer
2. Extras -> Internet options

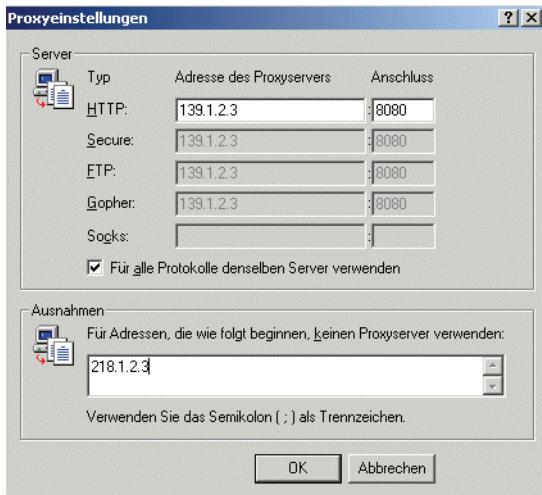


3. Select the "Connections" tab.
4. Select the **LAN Settings** button.



5. Select the **Advanced...** button.

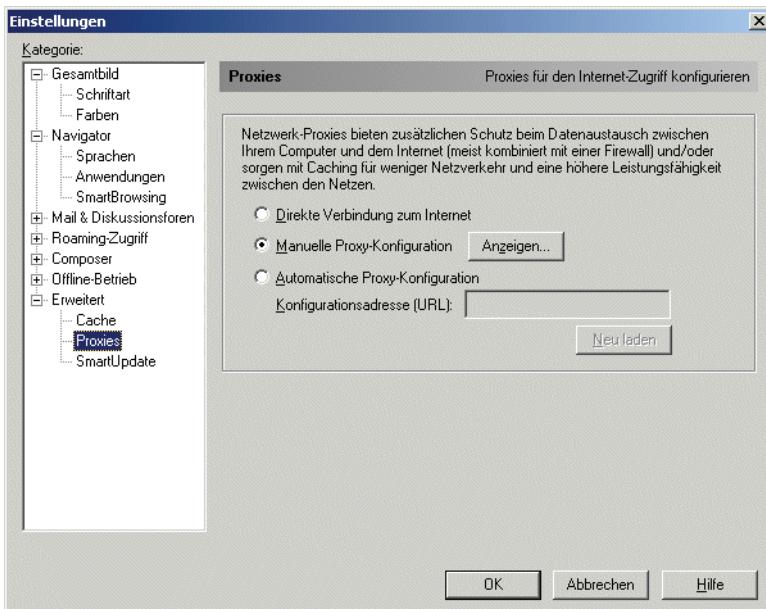
Preparations Prior to Using HiPath 4000 Assistant/Manager Software Requirements



6. In the Exceptions group box, enter the IP address of your server.
7. Confirm three times by clicking **OK**.

7.2.2 Manually Configuring the Proxy in Netscape Communicator

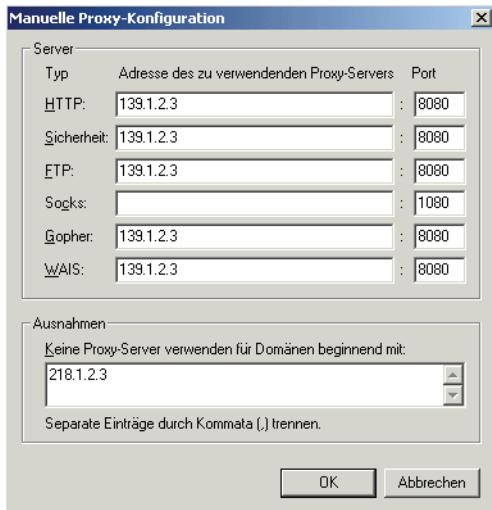
1. Start Netscape Navigator
2. Edit -> Settings....
3. Select **Proxies** in the "Advanced" directory.



4. Then select "Manual Proxy Configuration" and click **View**.

Preparations Prior to Using HiPath 4000 Assistant/Manager

Software Requirements



5. In the Exceptions group box, enter the IP address of your server.
6. Confirm twice by clicking **OK**.

7.2.3 Accessing the Public Page

To access the public page for your system:

1. Enter the predefined IP address for HiPath 4000. The following window is displayed:

- [Client Preparation](#)
For usage of the HiPath 4000 applications it's foremost necessary to prepare your PC so that the required environment for the client software is available.
There is a guided tour through the whole preparation process.
- [HiPath 4000 Administration Tutorial](#)
A short introduction of administration applications, login access, navigational tips, and the Help function.
- <https://218.1.91.84/>
With this link you access the Administration and Service applications of HiPath 4000.

2. Start the wizard by selecting the link "Client Preparation". The first page of the wizard opens. This page contains an overview of the next six steps, such as what is going to be installed or configured on your PC.

Preparations Prior to Using HiPath 4000 Assistant/Manager Software Requirements

HiPath 4000 Assistant

Next

Preparation of the HiPath 4000 Administration Client

For usage of the HiPath 4000 Administration Server it's foremost necessary to prepare your PC so that the required environment for the client software is available.

The installation process is divided into the following steps:

1. [Installation of the Internet Browser](#)
2. [Installation of the Java 2 Runtime Environment](#)
3. [Installation of the Security CA Certificate for the Internet Browser](#)
4. [Installation of the Security CA Certificate for the Java 2 Runtime Environment](#)
5. [Configuration of the Internet Browser](#)
6. [Installation of the Applet Cache Manager](#)

Each step informs you about what should be installed (section *Information*), whether there has to be taken any action of you at all (section *Diagnosis*) and how to perform the installation step (section *Installation*).

For each step successful execution of all preceding steps is prerequisite. Therefore carefully finish a preparation step before proceeding with the next step.

There is a guided tour through the whole preparation process. Simply press the button **Next** at the bottom of this and the following pages. This is the recommended procedure for new users.

Press the button below to reach the start of the public area:

Public Area

Next



- Perform the steps in the order shown.
- It is recommended to proceed only with the **Next** button.
- Complete all steps before moving on to the next step.
- Read the instructions carefully on each page.

3. Press the **Next** button. The first "Installation Page" appears.

7.2.4 Configuring the Installation Page

All subsequent pages have the same layout:

- Information

What is required for error-free operation using HiPath 4000 Management?

- Diagnosis

Preparations Prior to Using HiPath 4000 Assistant/Manager

Software Requirements

Is the necessary software already installed on the PC?

Three statuses exist:



The correct software is already installed on your PC. You can continue the guided tour by clicking **Next**.



The software is installed but not in the version supported. The relevant software must be installed in the "Installation" section.



The necessary software is not installed. The relevant software must be installed in the "Installation" section.

- Installation

Hyperlinks allow you to skip to installation and carry out the installation immediately.

7.2.5 Preparing your client PC

To prepare your client PC:

1. Install the Internet browser

If you have not yet installed a compatible browser on your PC, you can choose between Microsoft Internet Explorer and Netscape Communicator.

Following successful installation, change to the newly installed browser, re-open this page and continue with the installation/configuration.

2. Install the JavaTM 2 runtime environment 1.3.1 (Java plugin)
3. Import the Siemens confidential root certificate in the Internet browser
4. Import the Siemens confidential root certificate in the Java 2 runtime environment
5. Close the browser.
6. Restart the browser and return to step 4.



Further configurations or installations can only be performed successfully when the browser has been restarted.

7. Configure the Internet browser
8. Install the cache memory applet

Preparations Prior to Using HiPath 4000 Assistant/Manager
Software Requirements

9. Close the browser.
10. Restart the browser.

Preparations Prior to Using HiPath 4000 Assistant/Manager

Software Requirements

8 ADP Access

HiPath 4000 V4 uses Unixware and RMX as the two modes of access.

8.1 Connectivity and Software Port Number References

- V.24 ports

The primary V.24 ports on every ADP board, the default use, and software line number designation are as follows:

Port Number	Designation	Logical Port
Port 1	RMX console (Alarm and error message output)	Line 8
Port 2	RMX service access	Line 9
Port 3	Unixware (CCA II - remote access via PPP)	Line 10
Port 4	Unixware (Unixware console)	Line 11

Table 8-1 V.24 Port Designation

- SL200 (C-LAN) with RJ45 on DPC5 or DSCX in ADP only provides configurable IP address for TCP/IP, FTP, Telnet, HTTP, and Firewall.
- Siemens internal LAN interconnects HiPath 4000 processors

8.2 Unixware

Unixware web-based access supports the following connection types:

Connection type	Port / Access Point	Client Application
Intranet or Internet	SL200	Browser window
Direct serial PPP link	CCA II, Port 3 or Port 4	HiPath 4000 Manager or Windows modem dialing properties
Dial-up PPP link	CCA II or Ports 3 or 4 through a modem	HiPath 4000 Manager

Table 8-2 Connection types supported by Unixware

8.3 RMX

Direct AMO access is supported through:

- HiPath 4000 Management application Expert Access

ADP Access

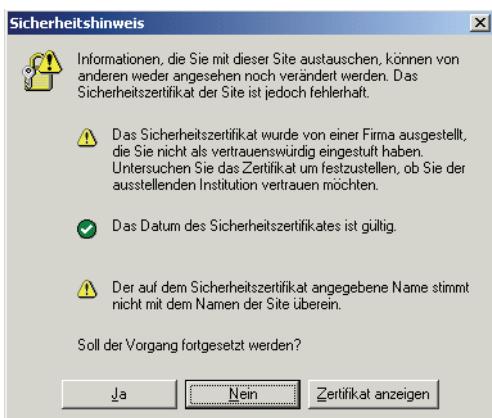
RMX

- Direct serial connection to the RMX port (port 1, line 8), 9600 baud.

9 Configuring HiPath 4000

To configure HiPath 4000:

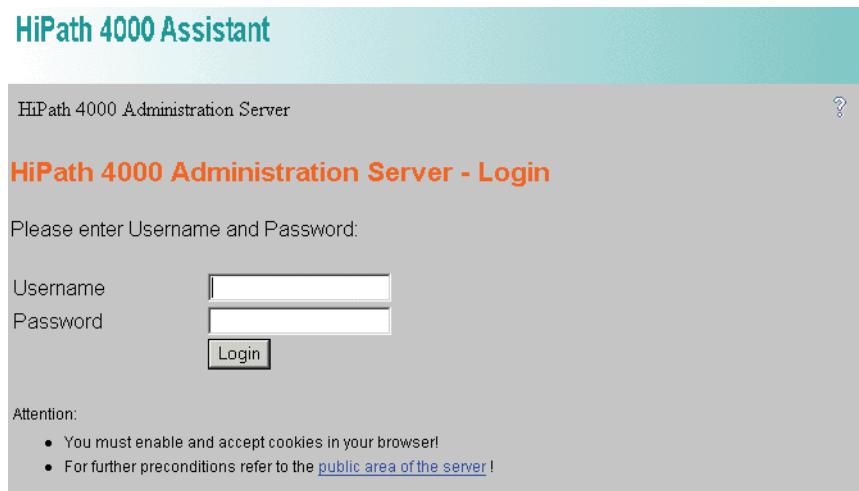
1. Connect the null modem to COM1 on an EWS
 2. Now connect the EWS to line 10 in HiPath 4000
 3. Start the PPP connection (for connection configuration refer to Section 3.3, “Installing PPP on the Client PC”)
 4. Start the browser (for browser configuration refer to Chapter 7, “Preparations Prior to Using HiPath 4000 Assistant/Manager”).
 5. Enter the defined IP address for HiPath 4000, (for example: `http://192.0.2.221`).
- The **HiPath 4000 Administration Server** start window appears.
6. Select the link: `https://192.0.2.221`
 7. Confirm the following window:



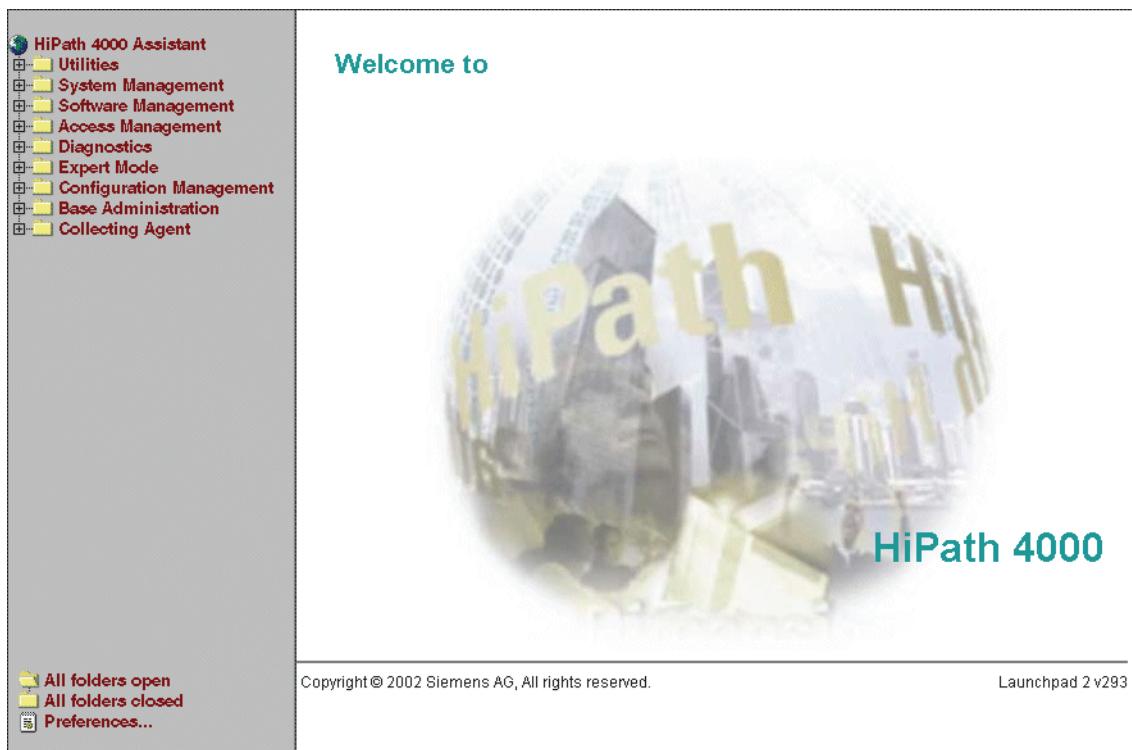
The **HiPath 4000 Administration Server - Login** window appears.

8. Enter the user name and password to log into HiPath 4000 Assistant:

Configuring HiPath 4000



After successful logon the HiPath 4000 Assistant start page appears.



The cache manager saves the applet on the client PC so that the applet can attain a faster startup time. The cache manager is automatically installed when the start page is started (if it is not already installed).



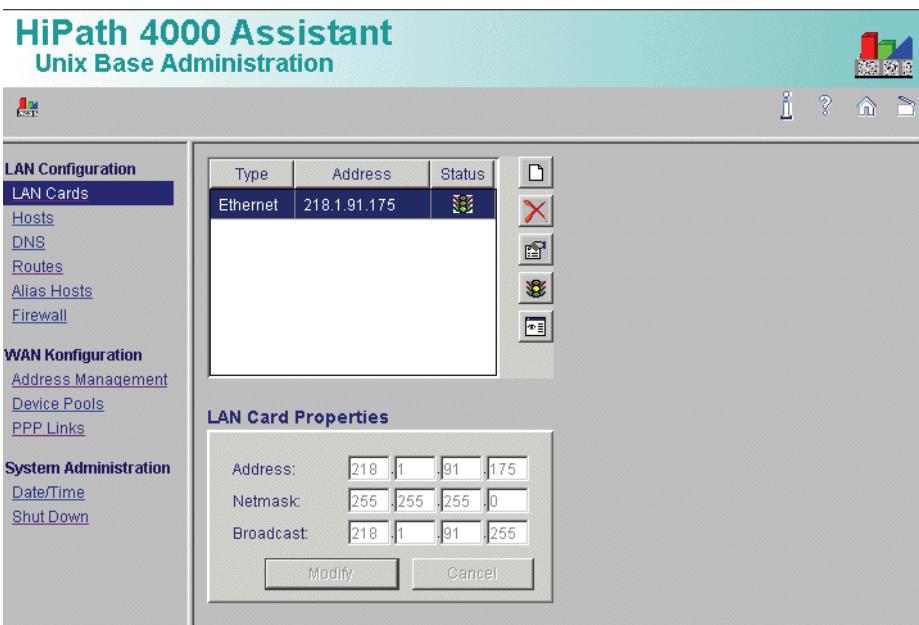
If a message appears indicating that the cache manager was correctly installed, you must close your internet browser and restart it.

If you are informed of a new version of the cache manager on starting HiPath 4000 Assistant (or SWT), this new cache manager should be installed. For this, it is necessary to close your internet browser, uninstall the cache manager using Start -> Programs -> Applet Cache Manager -> Uninstall and then to reinstall the cache manager.

9. In the menu Base Administration, call up the application **Unix Base Administration**.



10. Select **LAN Cards**



Configuring HiPath 4000

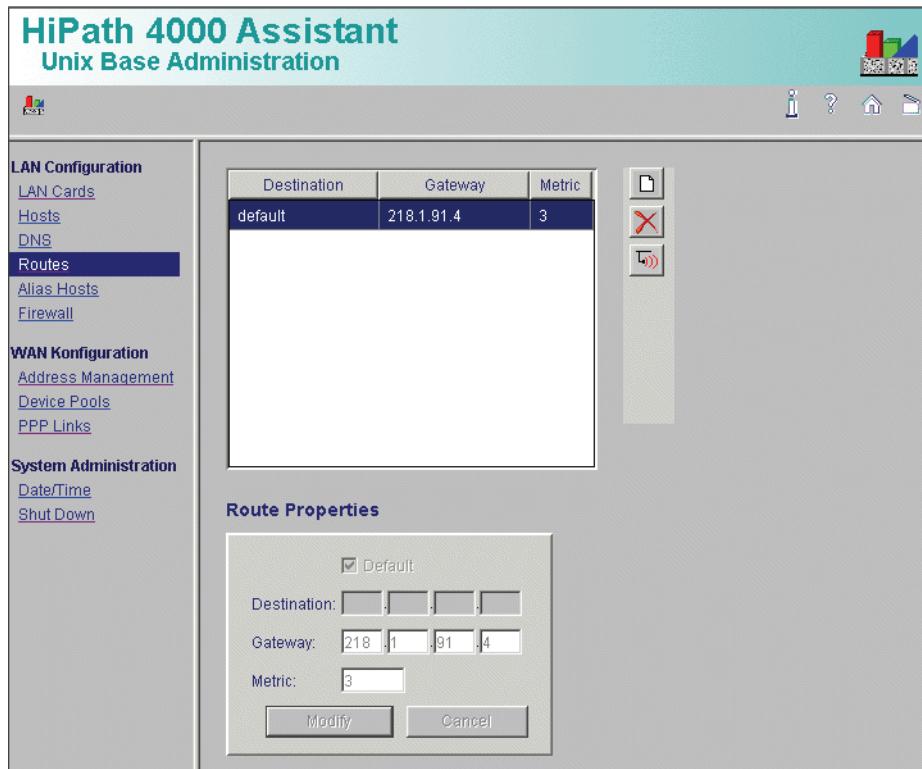
A preconfigured LAN connection already exists for the ADP (for example 192.1.2.5). Use the **Change** function to configure a LAN address from the customer area.



The address from the customer LAN area can be obtained from the system administrator for the customer network.

Configuring the LAN Card with Unix Base Administration the highest possible transmission rate is set up. If you need an other transmission rate you can administrate the wanted transmission rate with the emergency shell (see Appendix B, "Special LAN Card configuration").

11. If you require route entries, select the menu option **Routes** from the **LAN Configuration** menu in the UBA application. Then define a **New Route**.

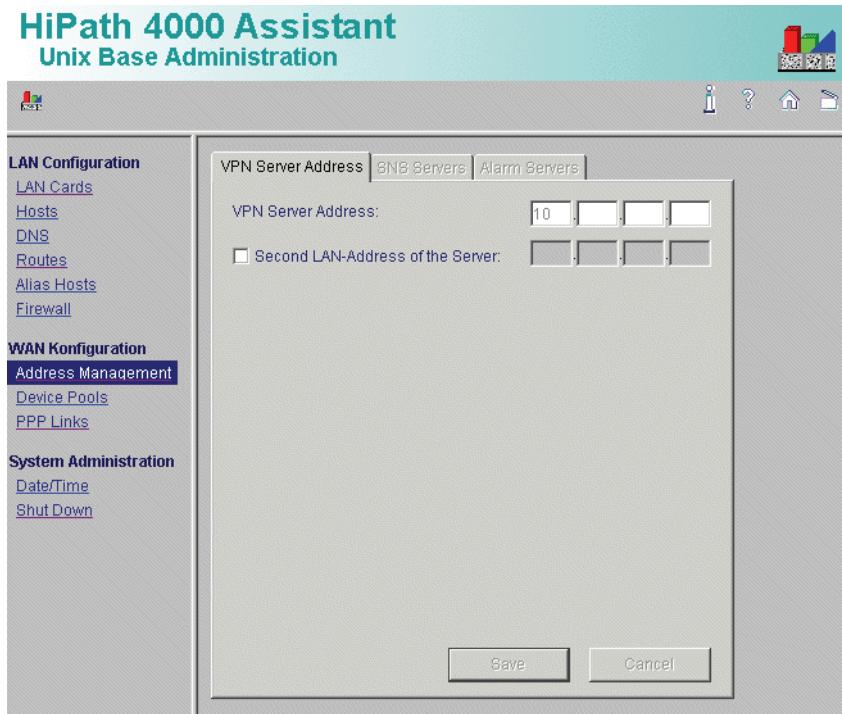


A new route is required if the customer network comprises numerous sub-networks and you want to connect to systems from other sub-networks.

12. If you wish to reach the HiPath 4000 system from an HTS, you must also configure the VPN-Address and the PPP Link in UBA (if not please continue with step 13).

VPN-Address

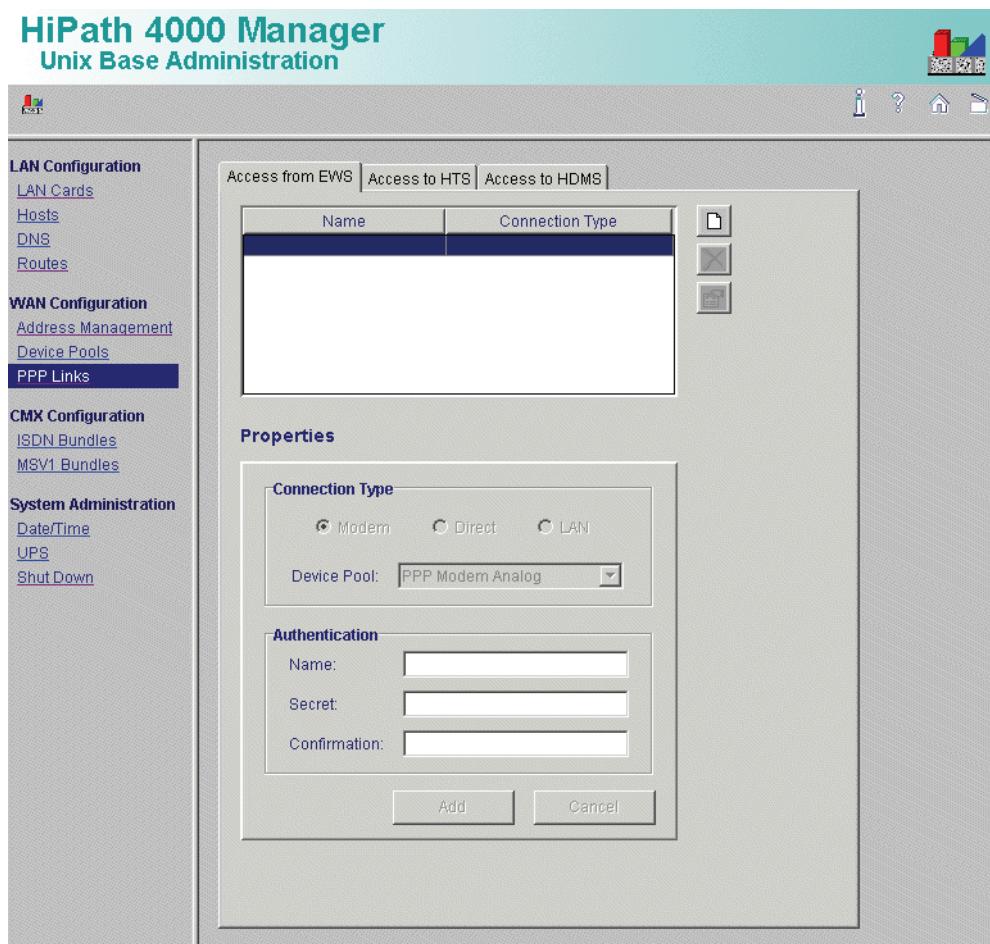
From the menu **WAN Configuration** in the UBA application, select **Address Management**. In the "VPN Server Address" field, enter the corresponding IP address of your VPN server.



PPP Link

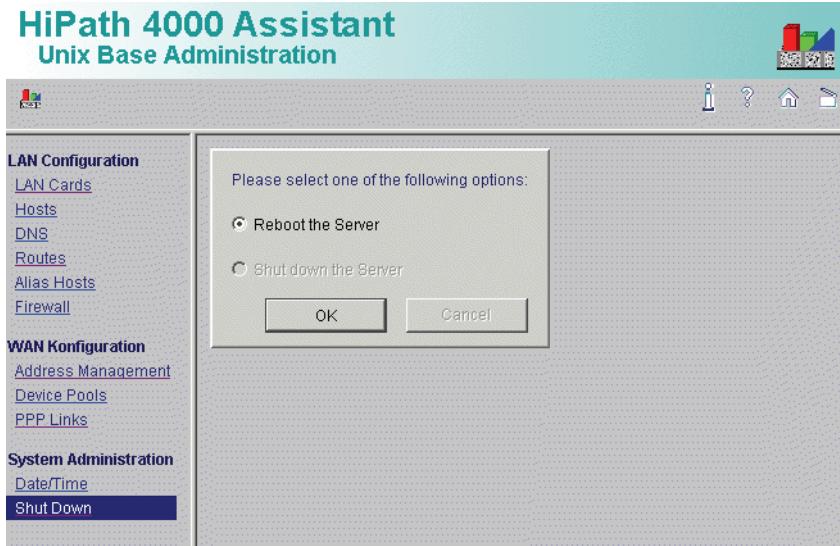
From the **WAN Configuration** menu in the UBA application, select **PPP Links** and then select the "Access to HTS" tab. Enter the corresponding data here.

Configuring HiPath 4000



Confirm by clicking **Add**.

13. Restart the server to activate the changes made. To restart, select the menu option **System Administration** from the **Shut down** menu in the UBA application, then select the option **Reboot the Server** and confirm with **OK**.



The HiPath 4000 system is accessible from the PC and / or from the HTS through the settings made.

9.1 Possible Errors and Error Correction

1. You cannot set up a connection to the system from the browser.

Consequence

Administration using HiPath 4000 Assistant is not possible.

Solution

Check the configuration of the browser and the client PC (see Chapter 7, “Preparations Prior to Using HiPath 4000 Assistant/Manager”).

2. The COM1 interface does not work

Consequence

The necessary configurations cannot be initiated in UBA as there is no connection to the HiPath 4000 Assistant.

Solution

This error message only appears if the client is running on the Windows 2000 operating system. Reboot either the ADP or the client PC.

3. The server, which provides the logon window, cannot be found (http connection).

Reason

Configuring HiPath 4000

Possible Errors and Error Correction

The firewall translates the address (NAT = Native Address Translation). The server behind the firewall thus uses an IP address which is not an official NIC IP address.

Solution

Configure a PPTP tunnel to solve this problem (see <http://apps.g-dms.com:8081/techdoc/en/P31003G6960S404017620/index.htm>).

A Outputs on the Comtes Operating Terminal

The following is output during the installation of UnixWare7 on the Comtes operating terminal (Line 8):

F2102 M4 N0034 NO ACT BPA IX UNIX MESSAGE 01-07-30 10:17:40

ALARM CLASS:CENTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

-- :-- :-- :000: -- -- BST:-- FW: --

FORMAT:3A

CT-TASK: BOOT system reboot

F2102 M4 N0035 NO ACT BPA IX UNIX MESSAGE 01-07-30 10:17:40

ALARM CLASS:CENTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

-- :-- :-- :000: -- -- BST:-- FW: --

FORMAT:3A

LD-TASK: IX-BIOS initialized

F2102 M4 N0036 NO ACT BPA IX UNIX MESSAGE 01-07-30 10:17:40

ALARM CLASS:CENTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

-- :-- :-- :000: -- -- BST:-- FW: --

FORMAT:3A

LD-TASK: IX-BIOS started

F2102 M4 N0037 NO ACT BPA IX UNIX MESSAGE 01-07-30 10:17:48

ALARM CLASS:CENTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

-- :-- :-- :000: -- -- BST:-- FW: --

FORMAT:3A

LD-TASK: BASE system loaded and started

F2102 M4 N0040 NO ACT BPA IX UNIX MESSAGE 01-07-30 10:19:27

ALARM CLASS:CENTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

Outputs on the Comtes Operating Terminal

-- :-- :-- :000: -- -- BST:-- FW: --
FORMAT:3A
CT-TASK: BASE system running

F2102 M4 N0041 NO ACT BPA IX UNIX MESSAGE 01-07-30 10:19:31

ALARM CLASS:CENTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

-- :-- :-- :000: -- -- BST:-- FW: --

FORMAT:3A

Installation of Unix-Applications started

F2102 M4 N0042 NO ACT BPA IX UNIX MESSAGE 01-07-30 11:31:33

ALARM CLASS:CRNTRAL:023

UNIX NAME: UNIX TIME:----- --:--:-- RESTART COUNT:0

-- :-- :-- :000: -- -- BST:-- FW: --

FORMAT:3A

Activation of 'First Installation' was successful.

B Special LAN Card configuration

In some rare cases, an autodetect configuration of the Ethernet LAN adapter is not desirable. In such cases, the user will have to do without a graphical interface for performing changes.

In these cases, the following procedure should be used:

- Log in as *rsta*
- Activate the emergency shell using access management
- Log in as *enqr* and input the following:

unset display	
netcfg	Activate program
hardware	Select the Hardware menu item
modify	Select Modify hardware
advanced options	Select Advanced Options
Duplex Speed	Auto_Auto is now set under duplex_speed by default. A list of configuration options is displayed by pressing the space-bar. The required configuration can be set by pressing each initial letter (twice if necessary).
ESC	Press the ESC key to return to the menu and press the TAB key to return to OK. Press RETURN to confirm.
x (exit)	Close the program under the Hardware menu item

- The card is now reconfigured accordingly
- Restart the server

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