



नाम Name _____

अनुक्रमांक Roll No. _____

पाठ्यक्रम Course _____

प्राप्त अंक Marks Awarded _____

दिनांक Date _____

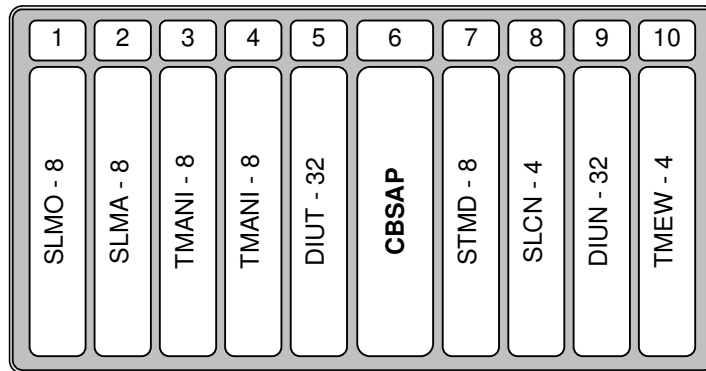
अनुदेशक का अधाक्षर Instructor Initial _____

1. Purpose

To study the Hardware Architecture of Siemens Hipath 3800 exchange and to configure peripheral interfaces.

2. Introduction

Siemens HiPath 3800 Exchange is a 500 ports system suitable for small to medium enterprises. It is a free standing cabinet supporting 10 cards (nine peripheral and one control card). Every slot is wired for 24 pair. Exchange works on 230V AC as well as -48V DC.



Abbr.	Description
SLMO	Line card - digital
SLMA	Line card - analog
TMANI	Trunk CO card
TMANI	Trunk CO card
DIUT	Trunk PRI card
CBSAP	Main Control Card
STMD	Trunk BRI card
SLCN	DECT Card
DIUN	Trunk E1 card
TMEW	Trunk E&M card

- The exchange contains a main control card (CBSAP) in slot 6. Other nine slots are universal type.
- The control card contains a flash SD RAM.
- Every service/feature is authorized in this unit.
- Unless a service/feature is authorized in SAU, it is not available to the user. Even if hardware is available, one can not use the service without authorization in this unit.

3. Special Features - DECT (Digital Enhanced Cordless Telephony)

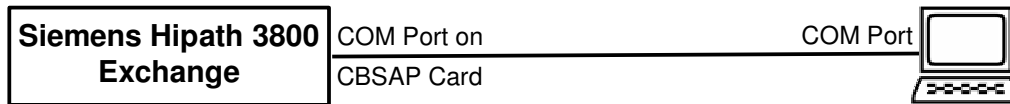
Siemens Hipath 3800 exchange supports DECT feature. This feature is available through SLCN card. **One card supports sixteen base stations. One base station supports registration for 16 DECT handsets.** A base station works upto one kilometer connected on single pair. The required power for the working of the base station is drawn from the line itself. DECT handset works around a radius of **300 meters** from the base station.

Radio Base Station and DECT handset are shown below.



4. Programming Interface

A PC can be connected to the COM port of the main control card. Programming is done through **Hipath Manager** application.



Programming is done with the help of a software called **Hipath Manager** with windows OS and it is supplied by the company along with the exchange. This software is to be installed onto a **PC** to which the exchange is connected physically through a COM port.

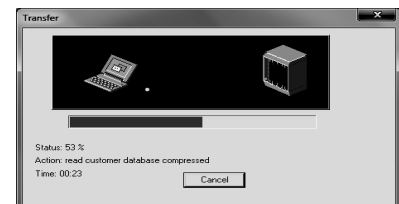
Hipath Manager program is GUI based. It appears like an excel sheet. Simply one has to **click** and type and apply the changes.

Note:

- First the database from the exchange is to be downloaded to **PC**.
- Required changes are applied through **Hipath Manager**.
- To effect the changes in the exchange the database is to be uploaded again back to exchange.

Procedure

- Click HiPath Manager program icon
- Log on Window appears
- Enter user ID (**31994**) & Password (**31994**) and click OK
- HiPath Manager dialog box appears
- Press **Transfer icon** on menu bar
- Transfer dialog box appears
- Click **Read/Write data base** button
- Click on **System-> PC** button
- User database now downloads to PC
- Press OK button
- Close transfer dialog box
- HiPath Manager window becomes active
- Click on **Station Setup** icon on menu bar
- Station window appears

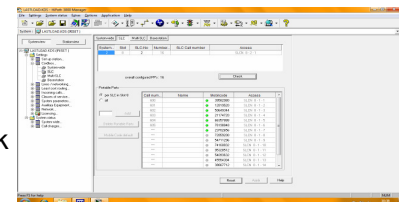
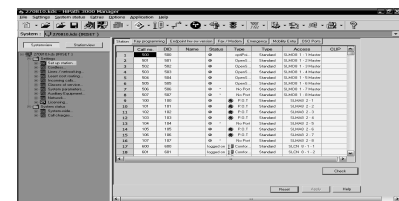


5. Programming a Telephone No.

- In Access Column select the card/port
- In call No. column Click on the corresponding location.
- Enter the telephone No.
- click on check button to see if there is any conflict.
- Conflict is shown with an error message.
- to save changes, click apply button.

6. Programming a Trunk

- Click on **Lines/Networking** icon
- All the available trunk lines appear in the box
- In the **code** column select the required trunk
- In **route** column click on the respective location
- Select the required name of the route in pull down menu
- Click on route tag
- In the name field type a name for the route
- In **seizure** code location type the access code for the trunk
- Click on apply button



7. DECT Handset Registration

- Click on **cordless icon** on menu bar
- Cordless dialog box appears
- click on **SLC** button
- SLC dialog box appears
- Note the DECT Handset No. from Call No. column and the corresponding PIN from Mobile Code column

The following steps are to be done in online dialog box of Hipath Manager

- In transfer dialog box select **online** then click on online button
- Online dialog box appears
- Enter ***94219970707**
- Tel No. is displayed
- Enter DECT Calling No.

The following steps are to be done in the DECT Handset

- Set Date and Time in the Handset
- Go to Settings > Handset > Register H/Set and press OK
- Select Base 1 and press OK
- **Please Enter PIN** is displayed
- Enter PIN of the code corresponding to the DECT calling No.
- Handset rings after a while, confirming registration
- Calling No. of the Handset is displayed on the screen after a while
- Now the DECT Handset can be used like mobile phone.

8. Review Questions

1. Identify the cards in the exchange through Hipath Manager and write down their details

This image shows a blank sheet of white paper with ten horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and extend across the width of the page. There is no handwriting or other markings on the paper.

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2. Define a Telephone No. for 555 and verify

3. Define a CO trunk with access code 3 and checkup

4. Define a PRI trunk line with supported signaling format

5. Register a DECT handset and verify its working

Signature of the Trainee