



HiPath 3000/5000 RSM  
HiPath 3000 V3.0  
HiPath 4000 V1.0

optiPoint 410

Administrator Manual

**SIEMENS**

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## Important Notes

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### **Note! (for U.S.A and Canada only)**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This product is a UL Listed Accessory, I.T.E., in U.S.A. and Canada.

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The device conforms to the EU guideline 1999/5/EG, as attested by the CE mark.



This device has been manufactured in accordance with our certified environmental management system (ISO 14001). This process ensures that energy consumption and the use of primary raw materials are kept to a minimum, thus reducing waste production.

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# Safety Precautions

## For Your Safety

The IP telephone optiPoint 410 complies with the European standard EN 60 950 which deals with the safety of information technology appliances including electronic office equipment. This device has been designed with safety in mind, thus protecting both individuals and objects.

There is always the danger of small objects being swallowed by young children. In the case of the optiPoint 410, this applies in particular to the connecting cord clip.

Please make sure that such items are not accessible to children.

- Use only the enclosed power supply together with the special LAN cable.
- Never open the power supply enclosure.

## Protection of the Telephone

- The telephone must not be used in bathrooms, etc. as it is not splashproof.
- Before connecting or disconnecting the LAN cable or the headset cord, pull the power plug out of the plug receptacle first..

## Location of the Telephone

- The telephone should be operated in a controlled environment with an ambient temperature between 5 °C and 40 °C (40 °F and 104 °F).
- To ensure good handsfree talking quality (not available with optiPoint 410 entry/basic), the area in front of the microphone (front right) should be kept clear. The optimum handsfree distance is 20 in (50 cm).
- Do not install the telephone in a room where large quantities of dust accumulate; this can considerably reduce the service life of the telephone.
- Do not expose the telephone to direct sunlight or any other source of heat, as this is liable to damage the electronic equipment and the plastic casing.
- Do not operate the telephone in damp environments such as bathrooms.

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## General Information

### About the Manual

The instructions within this manual will help you in administering and maintaining the optiPoint 410. The instructions contain important information for safe and proper operation of the optiPoint 410. Follow them carefully to avoid improper operation and get the most out of your multi-function telephone in a network environment.

These instructions describe administration through the operation of optiPoint 410. In addition, you can administer optiPoint 410 with the help of a web interface → page 54 or through a deployment tool (see instruction on administration with deployment tool).

There is a separate manual for the operators. A quick reference guide contains a fast and reliable explanation corresponding to frequently used functions.

### Product Identification

The identification details of your telephone are given on the nameplate containing the exact product designation and serial number on the bottom of the base unit. Please have these ready whenever you call our service department because of trouble with or defects on the unit itself.

### Echo Effect

In some cases, while using the telephone you may hear an echo, which can be quite strong. This is not due to any design defect or other fault with your IP telephone, but caused by the other client.

For example, if the echo occurs during a teleconference, it may be that the loudspeakers and microphones need to be repositioned.

## Notes and Symbols

### Safety

Information that is important for preventing injury or damages is marked specially, as they are important instructions for correct use of the unit.



This symbol indicates a hazard. Failure to follow the instructions given may result in injury or in damage to the unit.

---



Key information important for the proper use of the unit is marked with this symbol.

---

### Reference to operation steps

The following symbols are used to indicate the different operation-related sequence descriptions:



Operation of the optiPoint 410 entry.



Operation of the optiPoint 410 economy/standard.



Operation through the web-based management tool.



## Step by Step

### Operating the telephone



Lift the handset (off-hook).



Replace the handset (on-hook).



Conduct a call.



Enter a telephone number or code.



Increase or reduce the value depending on the current operating mode.

Continue? >



The option appears on the screen.

Press the  key to confirm your selection.



2=Configuration? >



Look for the select option.

Press the   keys, until the option appears on the screen.

Then press the  key to confirm your selection.

### optiPoint 410 entry

Changing and viewing the configuration data in the optiPoint 410 entry is done by entering different reference numbers.

For description of viewing data values on the LEDs of the optiPoint 410 entry see → page 98.

## Setting Up the Telephone

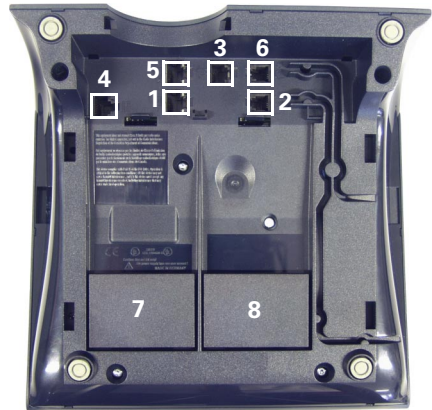
This chapter describes how to connect the individual elements of the optiPoint 410 with each other (→ Installing the Telephone) and how to set up the optiPoint 410 ready for operation (→ Preparing for Operation).

## Installing the Telephone

### Connectors on the bottom of the telephone



optiPoint 410 entry



optiPoint 410 economy/standard

	entry	economy	standard	
1	Ethernet port for LAN connection (optional with PoL <sup>1</sup> )			
2	Handset connector			
3	Connector for a local power supply unit (optional <sup>1</sup> )			
4	-		Module connector	
5	-		Ethernet port for PC	
6	-		Headset connector	
7	-		Adapter 1	
8	-		Adapter 2	

<sup>1</sup> **Power over LAN:**

If power is supplied over the LAN cable, no local power supply is required.

## Starting up the optiPoint 410



Only use **switches** in the LAN, to which the optiPoint 410 is connected. An operation at hubs can cause serious malfunctions in the hub and in the whole network.



The Western plugs of all cable connections must audibly snap into place.

- Plug the short end of the handset cable into the handset and the other end into the connector **7** at the bottom of the telephone and feed the cable through the guide channel in the base unit.
- Using the headset connector:  
Plug the jack of the headset cable into connector **6** at the bottom of the telephone and feed the cable through the guide channel in the base unit.
- Using optiPoint modules (**4**):  
Mount this device following the instructions in the installation guide (A31003-H8400-B934-\*-6ZD1).
- Using adapter (**7, 8**):  
Mount this device following the instructions in the installation guide (A31003-H8400-B934-\*-6ZD1).
- Using a LAN connection to PC:  
Plug the jack of the connection cable into the connector **5** at the bottom of the telephone.

Only if power **not** supported by LAN:



Use only the plug-in power supply unit fitting the optiPoint 410:

- GER/IM: AUL:06D1284
- GBR: AUL:06D1287
- USA: AUL:51A4827

- Plug the plug-in power supply unit into the mains.
  - Plug the connector **3** at the bottom of the telephone into the plug-in power supply unit.
- 
- Plug the jack of the LAN cable into the connector **4** at the bottom of the telephone and connect the cable with LAN.
  - Feed the cables through the relief on the back of the housing and fix them by means of the cable clip.

## Step by Step

### Preparing for Operation

For the optiPoint 410 economy/standard, follow the sequence described below. The sequence for the optiPoint 410 entry is described from → page 15.



The start up process sequence describes a standard case of configuration. Network configurations that deviate from the standard case may require additional entries.

### optiPoint 410 economy/standard

If problems are encountered during the initial start up, or if you have queries on individual specifications, the following chapters will be of help:

- For specialized information on the administration of the optiPoint 410 see "Alphabetical Reference" → page 66.
- o For descriptions of different configuration-related situations, see "Administration scenarios" → page 88.
- For error messages in the display of the optiPoint 410 see "Error Messages" → page 47.

### Entering the administration area

01=Configuration? >



Confirm to enter the Configuration Menu.



Enter admin password  
(default: **123456** → page 92).



Confirm.

## Step by Step

01=Network? >

### Only if no DHCP server:

Confirm.

01=DHCP IP assign? >

Confirm.

▶ off? >

Confirm to **switch** the DHCP IP assign **off**.  
The change is displayed.

▶ 02=Terminal IP addr.? >

Choose and confirm.

Change? >

Confirm.



Enter **IP address** of the **optiPoint 410**  
(to edit see → page 94).



Confirm. The IP address is displayed.

▶ 03=Terminal mask? >

Choose and confirm.

Change? >

Confirm.



Enter **terminal mask** of the **optiPoint 410**  
(to edit see → page 94).



Confirm. The terminal mask is displayed.

▶ 00=End? >

Choose and confirm to go to the top level of the configuration menu.

## Step by Step

▶  >

>

>

>

>

▶  >

>

### In all configuration types:

Choose and confirm.

Confirm.

Confirm.



Enter IP address of the **HiPath PBX** (to edit see → page 94).



Confirm. The IP address is displayed.

▶  >

>

Choose and confirm.

Confirm.



Enter the **subscriber number** of the **optiPoint 410** (to edit see → page 92).



Confirm. The subscriber number is displayed.

▶  >

>

Choose and confirm twice to end the configuration menu.

Confirm to restart the optiPoint 410.

After the restart finished the phone is in idle state.

## Troubleshooting

If the optiPoint 410 economy/standard does not function after making the described configuration, the failure can be attributed to peculiarities of the network environment.

More information on error detection is available in the "Start up not successful" → page 90.

## Step by Step

### optiPoint 410 entry

If problems are encountered during the initial start up, or if you have queries on individual specifications, the following chapters will be of help:

- For specialized information on the administration of the optiPoint 410 see "Alphabetical Reference" → page 66.
- For descriptions of different configuration-related situations, see "Administration scenarios" → page 88.
- For error messages in the display of the optiPoint 410 see "Error Messages" → page 47.

### Entering the administration area

**1 0 3**



Press the keys **simultaneously**

Enter admin password  
(default: **123456** → page 92).



Terminate the operation.

You are now in the **Administration Area** (all LEDs flash).

The top two function keys take over the following functions in this area:

#### 1<sup>st</sup> Function key



Press key to make settings.

#### 2<sup>nd</sup> Function key



Press key to view settings.

Step by Step

**Only if no DHCP server:**



Press key.



Enter code to **switch** the DHCP IP assign **off**.



Terminate the operation.



Press key.



Enter code.



Enter **IP address** of the **optiPoint 410**  
(to edit see → page 94).



Terminate the operation.



Press key.



Enter code.



Enter **terminal mask** of the **optiPoint 410**  
(to edit see → page 94).



Terminate the operation.



Press key.



Enter code.



Enter the **default Route** of the **optiPoint 410**  
(to edit see → page 94).



Terminate the operation.

**Only if you are working in a Virtual LAN (VLAN):**



Press key.



Input the code to define the **manual configuration** of  
the VLAN Discovery Mode.



Terminate the operation.



Press key.



Enter code.



Enter **(0 - 4095)** for the **Virtual LAN ID** → page 81  
(to edit see → page 92).



Terminate the operation.



## Step by Step

### Other settings

All other settings of your optiPoint 410 entry must be made through the "**Web-based Management Tool**" → page 54.

Open the "System" page in your browser and enter the following parameters:

- PBX address → page 72
- Participant No. → page 80
- Participant password → page 80
- System type → page 80

Confirm your entries and start the telephone:



Press key.



Enter the code.



Confirm the entry.

After the start, the telephone is silent and you can make the other settings → page 49 .

### Error handling

If the optiPoint 410 entry does not function after making the described configuration, the failure can be attributed to peculiarities of the network environment.

More information on error detection is available in the "Start up not successful" → page 90.

# Administration

The following pages describe how to make administration settings for the optiPoint 410 in a HiPath 3000/5000 / HiPath 4000 system.


There are different ways to make settings:

- **Locally on the telephone:**
  - optiPoint 410 economy/standard → page 19
  - optiPoint 410 entry → page 49
- **Remote maintenance through LAN:**
  - Web-based Management Tool → page 54.
  - Deployment Tool (for further information see "Administration Manual Deployment Tool").

A few functions of the optiPoint 410 Display Module are administered directly on the Display Module → page 62.

The execution of the configuration and diagnostics jobs described below require good knowledge of network technology as well as of network protocols, and they are normally carried out by network administrators. For your support you will find some background information in the chapter "Alphabetical Reference", → page 66.


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 The administration of an optiPoint 410 (locally or through remote maintenance) is possible only if no conversation is being conducted over this telephone.

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**Step by Step**

**optiPoint 410 economy/standard**

 In optiPoint 410 economy, the menu numbers deviate partially from the representation given here.

In this context, see the menu structure of optiPoint 410 economy → page 107.

**Access to the Administration Menu**

 If you are in the Administration Menu, then the optiPoint 410 cannot be accessed ("offline").

All configuration and diagnostic operations are protected against illegal accesses by the Administrator password.

Press keys **simultaneously**.


**1 0 3**

**03=Start Phone?** >

**01=Configuration?** >

**or**

**02=Diagnostics?** >



Confirm to start the phone.

Choose and confirm to enter the Configuration Menu.

Choose and confirm to enter the Diagnostics Menu.

Enter admin password (default: **123456** → page 92).

Confirm.

The first entry of the selected menu is displayed.

## Step by Step

01=Network? >

Confirm.

01=DHCP IP assign? >

Confirm.

Off? >

Confirm.

or

 On? >

Confirm.

The change is displayed.

### Terminal IP Address

For detailed information see → page 80.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

Confirm.

 02=Terminal IP addr.? >

Choose and confirm.



Enter IP address (to edit see → page 94).



Confirm. The change is displayed.


### Terminal Mask

For detailed information see → page 80.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

Confirm.

 03=Terminal mask? >

Choose and confirm.



Enter IP address (to edit see → page 94).




Confirm. The change is displayed.

**Step by Step**

▶ **01=Network?** >

▶ **04=Default route?** >



▶ **01=Network?** >


▶ **05=IP Routing?** >

**01=Route 1?** >


**or**

▶ **02=Route 2** >


**01=IP route?** >



▶ **02=Gateway ?** >



▶ **03=Mask ?** >



**Default Route**

For detailed information see → page 68.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Confirm.

Choose and confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.

**IP Routing**

For detailed information see → page 73.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Confirm.

Choose and confirm.

Confirm.

Choose and confirm.

Confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.

Choose and confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.

Choose and confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.

## Step by Step

01=Network? >

Confirm.

▶ 06=QoS? >

Choose and confirm.

01=QoS L2/L3? >

Confirm.

L2Off/L3Off >

Confirm.

**or**

▶ L2Off/L3On >

Choose and confirm.

**or**

▶ L2On/L3Off >

Choose and confirm.

**or**

▶ L2On/L3Onf >

Choose and confirm.

The change is displayed.

### Layer 3 Voice

For detailed information see → page 74.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

Confirm.

▶ 06=QoS? >

Choose and confirm.

▶ 02=L3 Voice? >

Choose and confirm.



Enter value (to edit see → page 92).

Confirm. The change is displayed.

### Layer 3 Signalling

For detailed information see → page 74.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

Confirm.

▶ 06=QoS? >

Choose and confirm.

▶ 03=L3 Signalling? >

Choose and confirm.



Enter value (to edit see → page 92).

Confirm. The change is displayed.

## Step by Step

01=Network? >

▶ 06=QoS? >

▶ 04=L2 Voice? >



### Layer 2 Voice

For detailed information see → page 74.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Confirm.

Choose and confirm.

Choose and confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

### Layer 2 Signalling

For detailed information see → page 74.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

▶ 06=QoS? >

▶ 05=L2 Signalling? >



Confirm.

Choose and confirm.

Choose and confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

### Layer 2 Default

For detailed information see → page 74.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

▶ 06=QoS? >

▶ 06=L2 Default? >



Confirm.

Choose and confirm.

Choose and confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.

## Step by Step

### VLAN Method

For detailed information see → page 81.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

Confirm.

06=QoS? >

Choose and confirm.

07=VLAN method? >

Choose and confirm.

Manual >

Confirm.

**or**

DHCP >

Choose and confirm.

Confirm. The change is displayed.

### VLAN ID

For detailed information see → page 81.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

01=Network? >

Confirm.

06=QoS? >

Choose and confirm.

08=VLAN id? >

Confirm.



Enter value (to edit see → page 92).

Confirm. The change is displayed.



**Step by Step**

01=Network? >

07=Port mode? >

01=LAN port 1 mode >

**or**

02=LAN port 2 mode? >

10 Mbit/s half dup >

**or**

10 Mbit/s full dup >

**or**

100 Mbit/s half dup >

**or**

100 Mbit/s full dup >

**or**

Auto? >

**LAN Port Settings**

For detailed information see → page 75.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Confirm.

Choose and confirm.

Confirm.

Choose and confirm.

Confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

The change is displayed.

**DNS IP Address**

For detailed information see → page 69.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Confirm.

Choose and confirm.



Enter IP address (to edit see → page 94).



Confirm. The change is displayed.

01=Network? >

08=DNS IP addr.? >

## Step by Step

01=Network? >

Confirm.

▶ 09=Domain name? >

Choose and confirm.

Change? >

Confirm.



Enter value (to edit see → page 93).



Confirm. The change is displayed.

### Domain Name

For detailed information see → page 69.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

### System Type

For detailed information see → page 80.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

▶ 02=System? >

Choose and confirm.

01=System type? >

Confirm.



Enter System type (to edit see → page 93).



Confirm. The change is displayed.

### PBX address

For detailed information see → page 72.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

▶ 02=System? >

Choose and confirm.

02=PBX Address? >

Choose and confirm.



Enter IP address (to edit see → page 94).



Confirm. The change is displayed.

**Step by Step**

**Subscriber Number**

For detailed information see → page 80.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

**02=System?** >

Choose and confirm.

**03=Subscriber number?>**

Choose and confirm.



Enter value (to edit see → page 92).



Confirm. The change is displayed.

**Subscriber Password**

For detailed information see → page 80.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

**02=System?** >

Choose and confirm.

**04=Subscriber password?>**

Choose and confirm.



Enter password (to edit see → page 92).



Confirm.



Reenter password.



Confirm. The new password is accepted.

**LDAP Server Address**

For detailed information see → page 72.



"LDAP Server Address" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

**03=Appl.?** >

Choose and confirm.

**01=LDAP?** >

Confirm.

**01=LDAP server address? >**

Confirm.



Enter IP address (to edit see → page 94).




Confirm. The change is displayed.


## Step by Step

### LDAP Server Port

For detailed information see → page 71.

 "LDAP Server Port" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **03=Appl.?** >

Choose and confirm.

**01=LDAP?** >

Confirm.

 **02=LDAP server port?** >

Choose and confirm.




Enter value (to edit see → page 92).



Confirm. The change is displayed.

### WAP Mode

For detailed information see → page 82.

 "WAP Mode" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **03=Appl.?** >

Choose and confirm.

 **02=WAP?** >

Choose and confirm.

**01=WAP mode?** >

Confirm.

**HTTP** >

Confirm.

**or**

 **WSP** >

Choose and confirm.

The change is displayed.

## Step by Step

▶  >

▶  >

▶  >

▶  >

▶  >


▶  >

>

▶  >

### WAP Server Address

For detailed information see → page 82.

 "WAP Server Address" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.


Choose and confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.

### WAP Server Port Number

For detailed information see → page 82.

 "WAP Server Port Number" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.


Choose and confirm.

Enter value (to edit see → page 94).

Confirm. The change is displayed.

### Help Internet URL Base

For detailed information see → page 73.

 "Help Internet URL Base" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Confirm.

Choose and confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

## Step by Step

03=Appl.?



Confirm.



04=Help intranet URL? &gt;



Choose and confirm.



Enter value (to edit see → page 93).



Confirm. The change is displayed.

### External Access

For detailed information see → page 71.



"External Access" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.



03=Appl.?



Choose and confirm.



05=Canonical dialling? &gt;



Choose and confirm.

01=External Access? &gt;



Confirm.



Enter value (to edit see → page 92).



Confirm. The change is displayed.

### International Prefix

For detailed information see → page 73.



"International Prefix" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.



03=Appl.?



Choose and confirm.



05=Canonical dialling? &gt;



Choose and confirm.



02=International Prefix? &gt;



Confirm.



Enter value (to edit see → page 92).




Confirm. The change is displayed.

## Step by Step


▶ **03=Appl.?** >

▶ **05=Canonical dialling?** >

▶ **03=Local Country Code?>**   



▶ **03=Appl.?** >

▶ **05=Canonical dialling?** >

▶ **04=National Dial Prefix? >**   



▶ **03=Appl?** >

▶ **05=Canonical dialling?** >

▶ **05=Local Area Code? >**   


### Local Country Code

For detailed information see → page 77.

 "Local Country Code" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.


Confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

### National Dial Prefix

For detailed information see → page 77.

 "National Dial Prefix" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.


Confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

### Local Area Code

For detailed information see → page 77.

 "Local Area Code" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Confirm.


Enter value (to edit see → page 92).

Confirm. The change is displayed.


## Step by Step

### Local District Code

For detailed information see → page 77.

 "Local District Code" cannot be configured for the optiPoint 410 economy

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 03=Appl.? >

Choose and confirm.

 05=Canonical dialling? >

Choose and confirm.

 06=Local District Code? >

Confirm.




Enter value (to edit see → page 92).



Confirm. The change is displayed.

### Language


For detailed information see → page 75.

 "Language" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 03=Appl.? >

Choose and confirm.

 06=Language? >

Choose and confirm.

English

Confirm.

The change is displayed.


### Download Server Address

For detailed information see → page 71.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 04=File Transfer? >

Choose and confirm.

 04=DL server address? >

Choose and confirm.



Enter IP address (to edit see → page 94).



Confirm. The change is displayed.



**Step by Step**


**FTP Account Name**

For detailed information see → page 72.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **04=File Transfer?** >

Choose and confirm.

 **05=FTP account name?** >

Choose and confirm.



Enter value (to edit see → page 93).



Confirm. The change is displayed.

**FTP Username**

For detailed information see → page 72.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **04=File Transfer?** >

Choose and confirm.

 **06=FTP username?** >

Choose and confirm.



Enter value (to edit see → page 93).



Confirm. The change is displayed.


**FTP Password**

For detailed information see → page 72.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **04=File Transfer?** >

Choose and confirm.

 **07=FTP password?** >

Choose and confirm.



Enter password (to edit see → page 92).



Confirm.



Reenter password.



Confirm. The new password is accepted.

## Step by Step

 **04=File Transfer?** >

Choose and confirm.

 **08=App. filename?** >

Choose and confirm.



Enter value (to edit see → page 93).



Confirm. The change is displayed.


### Application Filename

For detailed information see → page 66.

Enter "Administration Menu" and go to the Configuration Menu → page 19.


### LDAP Template Filename

For detailed information see → page 76.

 "LDAP Template Filename" cannot be configured for the optiPoint 410 economy.

 **04=File Transfer?** >

Choose and confirm.

 **09=LDAP filename?** >

Choose and confirm.



Enter value (to edit see → page 93).




Confirm. The change is displayed.


### DSM Application Download Filename

For detailed information see → page 71.

 "DSM Application Download Filename" cannot be configured for the optiPoint 410 economy.

 **04=File Transfer?** >

Choose and confirm.

 **10=DSM filename?** >

Choose and confirm.



Enter value (to edit see → page 93).



Confirm. The change is displayed.

**Step by Step**

**SNMP Trap IP Address**

For detailed information see → page 79.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

**05=SNMP?** >

Choose and confirm.

**01=SNMP trap address?>**

Confirm.



Enter IP address (to edit see → page 94).



Confirm. The change is displayed.

**SNMP Password**

For detailed information see → page 79.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

**05=SNMP?** >

Choose and confirm.

**02=SNMP password?** >

Choose and confirm.



Enter password (to edit see → page 92).



Confirm.



Reenter password.



Confirm. The new password is accepted.

**Codec**

For detailed information see → page 67.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

**06=Speech?** >

Choose and confirm.

**01=Codec?** >

Confirm.

**HiQal preferred** >

Confirm.

**or**

**LoBand preferred** >

Choose and confirm.


**or**

**LoBand only** >

Choose and confirm.

The change is displayed.

## Step by Step

 **06=Speech?** >

Choose and confirm.

 **02=Compression?** >

Choose and confirm.

**G.729** >

Confirm.

**or**

 **G.723** >


Choose and confirm.

The change is displayed.

### Silence Suppression

For detailed information see → page 79.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **06=Speech?** >

Choose and confirm.

**03=Silence Suppression>**

Confirm.

**On** >

Confirm.

**or**

 **Off** >


Choose and confirm.

The change is displayed.

### SNTP Server IP Address

For detailed information see → page 79.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 **07=Date/Time?** >

Choose and confirm.

**01=SNTP IP addr?** >

Confirm.



Enter IP address (to edit see → page 94).




Confirm. The change is displayed.

**Step by Step**

▶ **07=Date/Time?** >

▶ **02=Timezone offset?** >



▶ **07=Date/Time?** >

▶ **03=Daylight saving?** >

**On** >

**or**

▶ **Off** >

▶ **07=Date/Time** >

▶ **04=Date Format** >

**YY-MM-DD** >

**or**

▶ **MM/DD/YY** >

▶ **DD.MM.YY** >

**Time Zone Offset**

For detailed information see → page 81.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

**Daylight Saving**

For detailed information see → page 68.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Confirm.

Choose and confirm.

The change is displayed.

**Date Format**

For detailed information see → page 68.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Confirm.

Choose and confirm.

Choose and confirm.

The change is displayed.

## Step by Step

▶ **07=Date/Time?** >

▶ **05=Date** >



▶ **07=Date/Time** >

▶ **06=Time** >



▶ **08=Phone Administration?>**

**01=Admin password?** >

**Change?** >



### Date

For detailed information see → page 68.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Enter value (to edit see → page 92).

Confirm. The change is displayed.

### Time

For detailed information see → page 80.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Enter value (to edit see → page 94).

Confirm. The change is displayed.

### Administration Password

For detailed information see → page 66.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Confirm.

Confirm.

Enter password (to edit see → page 92).

Confirm.

Reenter password.

Confirm. The new password is accepted.

**Step by Step**

- ▶ **08=Phone Administration?>**
- ▶ **02=Factory Reset? >**
- Yes >**

- ▶ **08=Phone Administration?>**
- ▶ **03=Clear user data? >**
- Yes >**


- ▶ **09=General Info? >**
- 01=Applic. Versn.? >**

- ▶ **09=General Info? >**
- ▶ **02=MAC address? >**

**Factory Reset**

For detailed information see → page 71.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

 Resetting can lead to the failure of all the functions of the optiPoint 410. Ensure that you have all the required information for start up → page 12.

Choose and confirm.

Choose and confirm.

Choose and confirm.

**Clear User Data**

For detailed information see → page 67.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

Choose and confirm.

**Application Version**

For detailed information see → page 66.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Confirm. The information is displayed.

**MAC Address**

For detailed information see → page 77.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm. The information is displayed.





## Step by Step

▶ **03=Key test?** >

**Please press key** >

e.g. ▶, ⊕ or 

### Key Test

For detailed information see → page 74.

Enter "Administration Menu" and go to the Diagnostics Menu → page 19.

Choose and confirm.

Press any key (except ) and read the display.

Confirm to end the test.

### Audio Loop Test

For detailed information see → page 67.

Enter "Administration Menu" and go to the Diagnostics Menu → page 19.

Choose and confirm.

▶ **04=Audio loop test?** >

**Continue?**

Confirm to end the test.

### RAM Test

For detailed information see → page 78.

Enter "Administration Menu" and go to the Diagnostics Menu → page 19.

Choose and confirm.

Wait until the result is displayed.

▶ **05=RAM test?** >

**Continue?** >

Confirm to end the test.

### ROM Test

For detailed information see → page 79.

Enter "Administration Menu" and go to the Diagnostics Menu → page 19.

Choose and confirm.

Wait until the result is displayed.

▶ **06=ROM test?** >

**Continue?** >

Confirm to end the test.

## Step by Step

 **07=Ping Test?** >

**01=User specified IP?** >

**or**

**02=Gateway?** >

**or**

**03=DL server address?** >

**or**

**04=Default Router IP?** >

**or**

**05=Route 1 Gateway IP?>**

**or**

**06=Route 2 Gateway IP?>**

**or**

**07=SNMP trap address?>**

**or**

**08=Terminal IP addr.?** >

**or**

**09=DNS Server?** >

**Ping?** >

**or**

 **Change?** >



### PING Test

For detailed information see → page 78.

Enter "Administration Menu" and go to the Diagnostics Menu → page 19.

Choose and confirm.

Confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

Choose and confirm.

### Execute test:

Confirm to start pinging.

The result appears on the display after a few seconds.

### or PING change target:

Choose and confirm.

Enter IP address (to edit see → page 94).

Confirm. The change is displayed.



On changing the IP addresses of the entries "02=..." to "09=..." the IP addresses actually entered in the optiPoint 410 are changed. This can lead to the limiting of functions.

### Step by Step

#### Line Status

For detailed information see → page 76.

Enter "Administration Menu" and go to the Diagnostics Menu → page 19.

▶ **08=Line test?** >

Choose and confirm.

**Off?** >

Confirm.

**or**

▶ **On?** >

Choose and confirm.

The change is displayed.

## Step by Step

▶ 04=File Transfer? > ✓

01=DL application? > ✓

▶ 04=File Transfer? > ✓

02=DL LDAP template? > ✓

▶ 04=File Transfer? > ✓

03=DL DSM? > ✓

## Downloads/Uploads

### Download Application

For detailed information see → page 70.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.


Confirm.

If no file name were defined → page 34, you have to browse to the file → page 45.

After the download is completed, the phone restarts.

### Download LDAP Template

For detailed information see → page 70.

 "Download LDAP Template" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.


Choose and confirm.

Choose and confirm.

If no file name were defined → page 34, you have to browse to the file → page 45.

### Download DSM Application

For detailed information see → page 70.

 "Download DSM Application" cannot be configured for the optiPoint 410 economy.

Enter "Administration Menu" and go to the Configuration Menu → page 19.

Choose and confirm.

Choose and confirm.

If no file name were defined → page 34, you have to browse to the file → page 45.

**Step by Step**

Main_Directory	8
lpphone.app	3

**Browse interface on optiPoint 410 economy**

If no filename was specified for the data transfer during a download/upload operation from the telephone, a directory and file selection menu appears in the optiPoint 410 economy.

Example: The top line of the display shows the directory name (if known) and the total number of elements in the current directory (i.e. 8). These elements can be a mixture of files and/or directories.

The second line shows the current selected element and to the right the index of this element in the current directory (i.e. 3).

The display "." (one point) ) represents the current directory, the display ".." (two points) represents the sub-directory.

During the selection, the keys of the optiPoint 410 economy have the following meanings:

⊕ If a directory is selected, press key to move into that directory (one directory level deeper).

⊖ Press key to move up one level in the directory hierarchy.

⏪ ⏩ Press keys to move up/down through the list of files/directories in the current directory.

☑ Confirm to start file transfer.

lpphone.app	□□□□□
-------------	-------

If up/download has been activated successfully, the file transfer is indicated by a progress indicator in the second line (in case of application download and configuration upload).

The name of the file being transferred is displayed in the top line.

lpphone.app	1254
-------------	------

In case of configuration download a progress indicator is not used, instead the number of bytes transferred is shown.

➡ After validation of the received data the received data will overwrite the existing data.

## Step by Step



Press keys **simultaneously** to enter "Administration Menu".



Lift handset.



Press keys **simultaneously**.



Replace handset.

or



Press these keys **in sequence**.

Restart? >



Confirm.

### By pulling the power plug

Disconnect the red Western plug of the power supply unit cable (Pos. **3** → page 10) or, if "Power over LAN", disconnect the LAN cable (Pos. **1** → page 10) from the optiPoint 410 for a few seconds. Then reconnect the plug.

### Nach Neustart

On normal restart the following displays come in sequence:

Warning: Restarting  
User request

NETBOOT - 1.10  
optiPoint 410

4:28PM 16.07.03  
1228 >

Basic display after finished restart.

## Step by Step

No IP address

### Error Messages

#### No IP address

The DHCP server cannot assign any terminal IP address  
→ page 80.

#### Possible solution:

Check the DHCP server.

No Network

#### No LAN connection

The telephone is unable to find a network.

#### Possible solution:

Check the network cable.

No HiPath password error

#### No valid registration password

The PBX No. → page 72, Participant No. → page 80,  
and/or the participant password → page 80 are invalid.

#### Possible solution:

Change the PBX address → page 72.  
Change the Participant No. → page 80.  
Change the participant password → page 80.

No System

No System

#### FTP error message

Error:  
<Error string>

Error during file upload/download:

An error occurred during data transfer. An appropriate  
error message can be viewed in the display.

Not all necessary FTP parameters are set.

#### Possible solution:

Enter the FTP account name → page 72.  
Enter the FTP password → page 72.  
Enter the FTP path → page 72.  
Enter the FTP username → page 72.

FTP parameter missing  
EXIT?

## Step by Step

No Database

PABX not found

Client not registered

Reject cause unknown

### Other error messages

The connection or login to the database failed.

No IP connection to the gateway.

The telephone is not correctly arranged through HiPath Manager E.

No client licenses exist in the gateway.

(Empty display) No connection to the power supply  
→ page 10.



## Step by Step

### optiPoint 410 entry

After integrating the optiPoint 410 entry into your network successfully → page 15, you can make all other settings through the "Web-based Management Tool" → page 54.

### Entering the administration area



If you are in the administration area, you cannot reach the optiPoint 410 ("offline").

All configuration and diagnostic operations are protected against illegal accesses by the Administrator password.

**1 0 3**

Press keys **simultaneously** to enter "administration area".



Enter admin password  
(default: **123456** → page 92).



Terminate the operation.

You are now in the administration area (all LEDs flash).

### View settings

You can make the system display the important settings of your optiPoint 410 entry.

Making changes in the administration area (see above).

<VIEW>



Press the 2<sup>nd</sup> function key from the top.

Enter the 2-digit code (Table → page 101) for the desired function.



Confirm the entry.

The settings are displayed through different illuminations of the LEDs. The table on → page 98 describes the meaning of the LEDs.

## Step by Step



### Restart

Making changes in the administration area → page 49.

Press keys **simultaneously**.

Press keys **simultaneously**.

Enter the Administrator password (default: **123456** → page 92).

During start-up the LEDs momentarily illuminate in succession.

### Reset factory settings



The resetting can lead to the failure of all the functions of the optiPoint 410. Ensure that you have all the necessary information for start up → page 15.

For standard values, see → page 95.

Disconnect the red Western plug of the power supply unit cable (Pos. **3** → page 10) or, if "Power over LAN", disconnect the LAN cable (Pos. **1** → page 10) from the optiPoint 410 for a few seconds.



Lift handset.



Press keys **simultaneously**.



Enter the reset password (**124816**).



Confirm the entry.



Replace the handset.

**Step by Step**

**LEDs on the phone:**

**Error Messages**

The LEDs flash till you switch to the Administration Mode → page 49.

**No IP address**



The DHCP server cannot assign a terminal IP address → page 80.



**Possible solution**

Check the DHCP server.

**No terminal screen**



The DHCP server cannot assign a terminal screen → page 80.



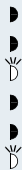
**Possible solution**

Check the DHCP server.

**No Default Route**



The DHCP server cannot assign a default route → page 68.



**Possible solution**

Check the DHCP server.

**No IP Address is set**



The DHCP IP assignment → page 69 is switched off and no terminal IP address is configured.



**Possible solution**

Activate the DHCP IP assignment → page 16.

Enter the terminal IP address → page 16.

## Step by Step

### No terminal screen is set

☞ The DHCP IP assignment → page 69 is switched off and no terminal screen is configured.

#### ► Possible solution

► Activate the DHCP IP assignment → page 16.

☞ Enter the terminal IP address → page 16.



### No Default Route is set

☞ The DHCP IP assignment → page 69 66 is switched off and no default route is configured.

#### ► Possible solution

► Activate the DHCP IP assignment → page 16.

☞ Enter the default route eingeben → page 16.



### No Participant No. / password

☞ The number → page 80 and/or password → page 80 are not configured.

#### ► Possible solution

► Enter the Participant No. → page 17.

☞ Enter the participant password → page 17.



### No network

☞ The telephone cannot find the network.

#### ► Possible solution

► Check the network cable.



**Step by Step**

**No PBX address**

☞ No PBX address → page 72 is configured.

**Possible solution**

▶ Enter the PBX address → page 17.

**The PBX does not react**

☞ The telephone cannot find the PBX → page 85.

**Possible solution**

▶ Check the PBX.

**Log in failed**

☞ The PBX No. → page 72, Participant No. → page 80, and/or the participant password → page 80 are invalid.

**Possible solution**

☞ Change the PBX address → page 72.

▶ Change the Participant No. → page 80.

☞ Change the participant password → page 80.

## Step by Step

# Web-based Management Tool

## General

The optiPoint 410 is equipped with an HTTP web server that permits the mapping of the telephone's content on the web browser of a PC integrated in the LAN ("Web-based Management Tool").



For this, the IP data of the optiPoint 410 → page 101 and the PC must be arranged correctly.

The web-based management tool contains the following formula elements:

### [Administration](#)

To go to the corresponding page, click on the link.

To take over the changes in the current form, click on the button. This operation transfers the changes to the optiPoint 410.

Click on the button to reset the changes in the current form to the earlier values in the optiPoint 410.

Click on the button to execute an action (such as "Save", "Download", "Invoke" and "Restart"). A message is displayed if there is an error.

Select an option in the List field.



To activate/deactivate a function, click on the checkbox.

## Preparation

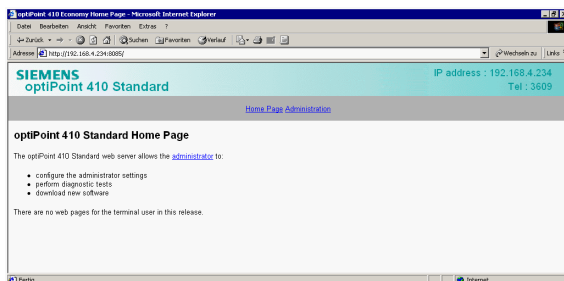
### Open web-based management tool

To invoke the interface, open a web browser and enter the following URL:

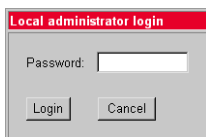
**http://[IP of the telephone]:8085**

where [IP of the telephone] represents the IP address of the optiPoint 410 that you wish to match.

The start page of the optiPoint 410 web server is displayed (example optiPoint 410 standard).



Click on "Administration".




Enter the administrator password for this optiPoint 410 telephone and click on "Login".

The web-based management tool is structured as follows in the administration area:

- "General Information" → page 56
- "Administrator settings" → page 56
  - "Gatekeeper settings" → page 56
  - "Applications" → page 56
    - "LDAP settings" → page 56
    - "WAP gateway" → page 57
    - "Canonical dialling" → page 57
    - "Miscellaneous" → page 57
  - "File transfer" → page 58
  - "Network and routing" → page 58
  - "Audio settings" → page 59
  - "Quality of Service" → page 59
  - "SNMP settings" → page 59
  - "Date/Time settings" → page 60
- "Download application" → page 60
- "Download LDAP template" → page 60
- "Diagnostics" → page 61
- "Restart terminal" → page 61
- "Change administrator password" → page 61

---

 Click on the required field to see a description for each parameter.

---

## General Information

General information	
<b>MAC address:</b>	00:01:e3:20:fa:39
<b>Software:</b>	
Application version:	0.2.8 DBG
Web content:	1.0

## Administrator settings

### Gatekeeper settings

Gatekeeper settings	
Gatekeeper address:	<input type="text" value="192.168.4.30"/>
Subscriber number:	<input type="text" value="3611"/>
New subscriber password:	<input type="password"/>
Confirm new subscriber password:	<input type="password"/>
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>

## Applications

### LDAP settings

(optiPoint 410 standard only)

LDAP settings	
LDAP server address:	<input type="text" value="0.0.0.0"/>
Port number:	<input type="text" value="389"/>
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>



## WAP gateway

(optiPoint 410 standard only)

**WAP gateway**  
Gateway address:   
Port number:   
Connection type:   
Username:   
New password:   
Confirm new password:   
Home page:

## Canonical dialling

(optiPoint 410 standard only)

**Canonical dialling**  
External Access Code:   
International Dial Prefix:   
Local Country Code:   
National Dial Prefix:   
Local Area Code:   
Local District Code:

## Miscellaneous

(optiPoint 410 standard only)

**Miscellaneous**  
Help internet URL:   
Language:

## File transfer

(„LDAP template filename“ and „DSM filename“ only at optiPoint 410 standard)

File transfer

Download server address:

FTP account name:

FTP username:

New FTP password:

Confirm new FTP password:

Software download filename:

LDAP template filename:

DSM filename:

Action on submit:  ▾

## Network and routing

(„LAN Port 2 Mode“ only at optiPoint 410 standard)

Network IP address and routing

DHCP

Terminal IP address:

Terminal mask:

DNS IP address:

Domain Name:

**IP Routing:**

Default Route:

Route 1: <input type="text" value="0.0.0.0"/>	Route 2: <input type="text" value="0.0.0.0"/>
Gateway 1: <input type="text" value="0.0.0.0"/>	Gateway 2: <input type="text" value="0.0.0.0"/>
Mask 1: <input type="text" value="0.0.0.0"/>	Mask 2: <input type="text" value="0.0.0.0"/>

**Lan Port Settings:**

Lan Port 1 Mode:  ▾

Lan Port 2 Mode:  ▾

## Audio settings

**Audio settings**

Codec:

Compression:

Silence suppress:

## Quality of Service

**Quality of Service (QoS)**

	Layer 3	Layer 2
Required	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Voice	<input type="text" value="46"/>	<input type="text" value="5"/>
Signalling	<input type="text" value="26"/>	<input type="text" value="5"/>
Default		<input type="text" value="5"/>

VLAN Discovery:

VLAN id:

## SNMP settings

**SNMP settings**

Trap server address:

Community string

New password:

Confirm new password:

## Date/Time settings

**Date/Time settings**

SNTP IP:

Timezone offset:   Hours  Mins

Daylight Saving:

Date Format:

Day:

Month:

Year:

Hour:

Minute:

## Download application

The "Download application" → page 70 link leads to the concerned download page on which more information is provided.

## Download LDAP template

The "Download LDAP template" → page 70 link leads to the concerned download page on which more information is provided.

## Diagnostics

**Invoke Tests**

Select which tests to invoke:

Ping -- IP Address:

RAM test

ROM test

This page will be reloaded with the updated test results after the tests have been invoked.

**Test results**

Ping:	Address pinged: 0.0.0.0 Result: NONE
RAM test:	Result: NONE
ROM test:	Result: NONE

## Restart terminal

This link leads to the page on which you can trigger a restart of the optiPoint 410. Other information on this page.

## Change administrator password

**Change administrator password**

Current admin password:

New password:

Confirm new password:

# The optiPoint 410 Display Module

## LDAP configuration

The following preconditions must be fulfilled to use the corporate telephone directory:

- An LDAP server is available and the server data is entered in the Display Module (see below).
- The LDAP template matching the server configuration was installed → page 63.

The LDAP configuration area is protected against unauthorized access through a password.

### Configure LDAP server

To start the application, click the symbol on the start page.



Open the context menu and select "Server Settings".



Open the display keyboard and enter the administrator password.



Confirm.



The screenshot shows a 'Settings' window with a title bar containing a keyboard icon, 'abc', a home icon, and a question mark icon. Below the title bar is a section titled 'Server Settings'. It contains two input fields: 'Server:' with the value '137.128.15.230' and 'Port:' with the value '389'. At the bottom of the window are buttons for 'Save', a list icon, and a close 'X' icon.

IP address of the LDAP server

Port No. of the LDAP server

Enter the IP No. and the Port for the LDAP server. The standard Port No. is "389".

Save the configuration.



### Install LDAP template



To start the application, click on the symbol on the start page.



Open the context menu and select "LDAP template".



Open the display keyboard and enter the administrator password.



Confirm.

IP address of the FTP server

FTP username

FTP password

FTP account



Go to the next step.

Filename of the LDAP template

Name of the directory in which the template is located

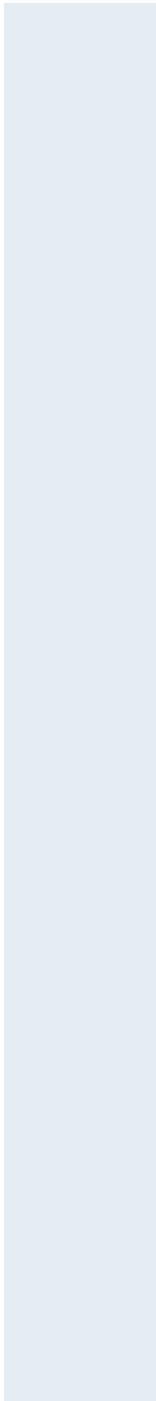


Start the download operation.

## LDAP template example




Template-String	declaration
SEARCHBASIC "O=SIEMENS COMM, C=GB"	organisation and specification of country
SEARCHFILTER1 = "surnameNational,Surname"	search criterion (fast and advanced)
SEARCHFILTER2 = "givenNameNational,First-name"	search criterion (fast and advanced)
SEARCHFILTER3 = "department,Department"	search criterion (advanced)
SEARCHFILTER4 = "localityShortCode,Location"	search criterion (advanced)
SEARCHFILTER5 = "ou,Org. Unit"	search criterion (advanced)
SEARCHATTRIB1 = "commonNameNational,Name,0"	cannot be selected
SEARCHATTRIB2 = "telephoneNumber,Telephone,1"	selectable field
SEARCHATTRIB3 = "alternatePhone,Telephone 2,1"	selectable field
SEARCHATTRIB4 = "mobileTelephoneNumber,Mobile,1"	selectable field
SEARCHATTRIB5 = "ou,Organisational Unit,0"	non-selectable field
SEARCHATTRIB6 = "localityNational,Location,0"	non-selectable field
SEARCHATTRIB7 = "department,Department,0"	non-selectable field
SEARCHATTRIB8 = "mainFunction,Function,0"	non-selectable field
EOF	end of file





## Alphabetical Reference

This glossary offers basic information that can be used by the administrator to carry out configuration- and diagnostics-related jobs in the optiPoint 410.


- The Chapter "Description of functions" explains alphabetically sorted terms that, for instance, you will encounter in the menus.  
The symbols lead to the concerned operational sequence descriptions:
  -  Operating the optiPoint 410 economy/standard/advance
  -  Operating the optiPoint 410 entry
  -  Operating with the help of the web-based management tool
- This is followed by the Chapter "Abbreviations and Specialized Terms".

## Description of functions

You will find more information in the relevant literature on the topics "Network Technology" and "→ VoIP".

### Action On Submit

- You can select, whether an action will be executed by clicking on "Submit". The actions are also executable by download functions  
→ page 60.

 → page 57

### Administration password

- Here you can change the password that is necessary for accessing the administrator area.
- Standard password → page 95.
- Password editor in the optiPoint 410 → page 92.

 → page 38  → page 61

### Application Filename

- Specify the name of the file containing the software of the optiPoint 410.
- The file must exist in a defined directory on the → FTP server (→ Download Server Address, → FTP Path).
- Valid values: 1 ... 24 characters
- Standard name → page 95.
- Text editor in the optiPoint 410 → page 93.

 → page 34  → page 58


### Application Version

- Displays the version of the telephone software.
- This value can give an indication about the range of functions of the optiPoint 410 and it changes when the telephone software is updated (→ Download Firmware).

 → page 39  → page 56

### Audio Loop Test

- The test activates the microphone and the loudspeaker in the handset.
- You can check these components by speaking and listening.

 → page 41

### Audio Mode

- "Codec" → page 67

### Autodiscovery Server Address

- Further description ... (entry)

### Autodiscovery Server Port

- Further description ... (entry)

### Clear User Data

- With this function you can delete all the entries made by the user in the optiPoint 410.

 → page 39  → page 59

### Codec

- Here you can select the audio transfer principle that should be used.

Codec	Audio Mode	Use of
HiQual preferred	Uncompressed audio transmission	Uncompressed audio transmission use (→ G.711). Suitable for broadband Internet connections.
LoBand preferred	Use preferred compressed audio transmission.	Suitable for connections with different bandwidths.
LoBand only	Use compressed audio transmission exclusively.	Suitable for connections with low bandwidth.

- Standard value → page 95.

 → page 35  → page 59


### Compression

- Here, you can select one of the two compression processes that should be used if the "LoBand" → Codec was selected: → G.723 or → G.729.
- Standard value → page 95.

 → page 36  → page 59

### Configuration Filename

- Specify the name of the file containing the configuration data of the optiPoint 410 enthält.
- The file must exist in a defined directory on the → FTP server (→ Download Server Address, → FTP Path).
- Valid values: 1 ... 24 characters and corresponding to the DOS conventions (8.3).
- Standard name → page 95.
- Text editor in the optiPoint 410 → page 93.

 → page 58

### Date

- Manual definition is necessary only if this information is not transmitted automatically (e.g., by the → PBX or by a → DHCP server).
- Define the date format here and enter the current date.
- Date/Time editor in the optiPoint 410 → page 94.

 → page 38  → page 60

### Date Format

- Manual definition is necessary only if this information is not transmitted automatically (e.g., by the → PBX or by a → DHCP server).
- Define the date format here.

 → page 37  → page 60




### Daylight Saving

- Manual definition is necessary only if this information is not transmitted automatically (e.g., by the → PBX or by a → DHCP server).
- Activate this switch if a time shift should be considered in relation to the summer period.

 → page 37  → page 60




### Default Route

- Enter the → IP address that was assigned to your → PBX if no → DHCP server assigns this value dynamically (→ DHCP IP Assignment).
- If the value was assigned dynamically, it can only be read.
- A restart is necessary after the change.
- Standard value → page 95.
- IP editor in the optiPoint 410 → page 94.



 → page 68  → page 16  → page 58


### DHCP IP Assignment

- Activate this option if the required IP data of the telephone should be assigned dynamically by a → DHCP server.
- If no DHCP server is available in the IP network, please deactivate this option. In this case, the data corresponding to the → Terminal IP Address, → Terminal Mask and → Default Route must be defined manually.
- A restart is necessary after the change.
- Standard value → page 95.

 → page 20  → page 16  → page 58

### Display Test

- Conduct this test to check the function of the → LCD display in the Display telephone.
- Different display contents are displayed with the  and  keys.

 → page 40

### DNS IP Address

- Enter the → IP address of the → DNS server here only if no → DHCP server assigns this value dynamically (→ DHCP IP Assignment) and the optiPoint 410 is operated on a → PBX through → HFA.
- Standard address → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 25  → page 58


### Domain Name

- Enter the name of the associated domain only if the optiPoint 410 is not operated in a → PBX through → HFA.
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 26  → page 58



### Download Configuration

- Use this function to download a configuration for the optiPoint 410 stored on the → FTP server.
- The following parameters must be set before undertaking the download operation:
  - → Download Server Address, → FTP Path, → Configuration Filename
  - → FTP account Name
  - → FTP Username, → FTP Password

 → page 60

### Download DSM Application

- Can be configured only for optiPoint 410 standard/advance and is required only if an optiPoint 410 Display Module is used.
- Use this function to download an updated software version for the optiPoint 410 Display Module from the → FTP server.
- The following parameters must be set before undertaking the download operation:
  - → Download Server Address, → FTP Path, → Application Filename
  - → FTP account Name
  - → FTP Username, → FTP Password
  - Detailed description: → page 88.

 → page 44  → page 60


### Download Firmware

- Use this function to download an updated software version for the optiPoint 410 from the → FTP server.
- The following parameters must be set before undertaking the download operation:
  - → Download Server Address, → FTP Path, → Application Filename
  - → FTP account Name
  - → FTP Username, → FTP Password
  - Detailed description: → page 88.

 → page 44  → page 60



### Download Hold Music

- Use this function to download a hold music for the optiPoint 410 from the → FTP server.
- The following parameters must be set before undertaking the download operation:
  - → Download Server Address, → FTP Path, → Hold music Filename
  - → FTP account Name
  - → FTP Username, → FTP Password

 → page 60

### Download LDAP Template

- Can be configured only for the optiPoint 410 , and is meaningful only if an → LDAP server is used.
- Use this function to load an LDAP template file in the optiPoint 410.
- The following parameters must be set before the load operation:
  - → Download Server Address, → FTP Path, → Application Filename
  - → FTP account Name
  - → FTP Username, → FTP Password
  - Detailed description: → page 88.

 → page 44  → page 60  
Display Module → page 63

### Download Server Address

- Enter the → IP address of the → FTP server to upload and download files from and to the optiPoint 410.
- Standard value → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 32  → page 58

### DSM Application Filename

- Can be configured only for optiPoint 410 standard/advance, and is required only if an optiPoint 410 Display Module is used.
- Enter the name of the file containing the software of the optiPoint 410 Display Module.
- The file must exist in a defined directory on the → FTP server (→ Download Server Address, → FTP Path).
- Valid values: 1 ... 24 characters
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 34  → page 58

### E.164 Address

- "Subscriber Number" → page 80

### External Directory Access Allowed

- Further description... (DSM)

### External Access


- Can be configured only for the optiPoint 410 standard/advance.
- Specify the number that must be prefixed to access an external telephone number , e.g., "0".
- Standard value → page 95.
- Number editor in optiPoint 410 → page 94.

 → page 30  → page 57




### Factory Reset

- With this function you can reset all administration parameters to the original settings at the time of delivery.

---


 Resetting can lead to the failure of all functions of the optiPoint 410. Ensure that you have all the information necessary for the start up → page 12.

---

 → page 39  → page 50  → page 59

### File Transfer Status

- Displays the status of the possibly executed upload and download operation, such as for instance → Download Configuration.

 → page 56

**Firmware Download Filename**

- “Application Filename” → page 66.

**FTP account Name**

- Valid values: 1 ... 24 characters
- Standard value → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 33  → page 58


**FTP Password**

- Enter the password defined in the → FTP server as password for accessing this server.
- The password must match the → FTP Username.
- Valid values: 1 ... 24 characters.
- Standard password → page 95.
- Password editor in optiPoint 410 → page 92.

 → page 33  → page 58

**FTP Path**

- Enter the path of the directory defined in the → FTP server for uploading and downloading files here.
- The path can be up to 255 characters long.
- Standard path → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 58

**FTP Username**

- Enter the name defined in the → FTP server as user for accessing the server.
- The name must match the → FTP Password.
- Valid values: 1 ... 24 characters.
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 33  → page 58

**Gatekeeper Address**

- Further description...

 → page 26  → page 56



### Gatekeeper Identifier


- Further description... (entry)

### H.235 Security Profile

- Further description ... (entry)

### Help Internet URL Base

- Can be configured only for the optiPoint 410 standard/advance.
- Enter the domain name of the server that provides the online help for the optiPoint 410 on the Internet here.
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 29  → page 57

### Help Intranet URL Base

- Can be configured only for the optiPoint 410 standard/advance.
- Enter the filename of the Online Help for the optiPoint 410 in the Intranet.
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 30  → page 58

### Hold music Filename

- Enter the name of the file containing the hold music.
- The file must exist in a defined directory on the → FTP server (→ Download Server Address, → FTP Path).
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

### International Prefix

- Can be configured only for the optiPoint 410 standard/advance.
- Specify the number that must be prefixed while dialling an international telephone number, e.g., "00".
- Standard value → page 95.
- Number editor in optiPoint 410 → page 94.

 → page 30  → page 57

### IP Routing

- To have constant access to network subscribers of other domains, you can enter a total of two more network destinations.
- An → IP address of the domain and gateway, and a → Subnet Mask must be entered for each further domain you wish to use.
- Standard values → page 95.
- IP editor in optiPoint 410 → page 94.


 → page 21  → page 58

**Jitter Buffer**

- Select the duration of the intermediate storage here (number of data packets) that changes the effect of the → Jitter.


Short	2 packets
Medium	4 packets
Long	6 packets

- The more stable the network connection, the shorter the selected buffer time (less voice delay).
- Depending on the frequency at which the data packets are sent by the terminal devices (e.g., 20 ms or 120 ms), this setting has a markedly different effect.
- Standard value → page 95.

 → page 59

**Key Test**

- Test to check the functions of the telephone keys.
- If you press a function key, the associated LED glows.
- In display telephones, the corresponding name is displayed in the → LCD display when you press a key (exception:  terminates the test.

 → page 41

**L2 Default**

- Further description ...(standard)

 → page 23  → page 59

**L2/L3 Voice/Signalling**

- Can be defined only if the → Layer 3 support is activated (→ QoS L2/L3). The value describes in each case the place in the value of → Layer 2.
- Valid values: 0 ... 63.
- Standard values → page 95.

 → page 22  → page 59

### LAN Port Settings

- The PC port settings can be configured only for the optiPoint 410 standard/advance.
- Here you must define the bandwidth at which the optiPoint 410 should be run. The required value depends on the bandwidth that the switch or router supports in the network.

Bandwidth	Possible application
10 Mbit/s half dup	in 10 Mbit networks with half dup <sup>1</sup> process
10 Mbit/s full dup	in 100 Mbit networks in full dup <sup>2</sup> process
100 Mbit/s half dup	in 10 Mbit networks with half dup <sup>1</sup> process
100 Mbit/s full dup	in 100 Mbit networks in full dup <sup>2</sup> process
Automatic	in standard case

1 Up to a date, the data can only be transmitted or received.

2 Up to a date, the data can be simultaneously transmitted and received.

- A restart is necessary after the change.

 → page 25  → page 58

### Language

- Can be configured only for the optiPoint 410 standard/advance.
- Select the language that should be used for local applications here.
- Standard value → page 95.

 → page 32  → page 57

### Layer 2 Priority

- Can be defined only if the → Layer 2 support is activated (→ QoS L2/L3).
- A priority value between 0 and 7 can be entered for each of the 64 places (priority 7: highly, 0: low).
- This additional information decide during communication with a → Switch about the priority forwarding.
- Standard value → page 95.

 → page 22  → page 58

### LDAP Server IP Address

- Can be configured only for the optiPoint 410 standard/advance.
- If an → LDAP server is being used, enter the → IP address of this server here.
- IP editor in optiPoint 410 → page 94.

 → page 27  → page 56

**LDAP or XML**

- Further description ... (DSM)

**LDAP server Port**

- Can be configured only for the optiPoint 410 standard/advance.
- If an → LDAP server is being used, enter the → Port number here for communication with this server.
- Valid values: 1 ... 65535.
- Number editor in optiPoint 410 → page 92.

 → page 28  → page 56


**LDAP Template Filename**

- Can be configured only for the optiPoint 410 standard/advance.
- If an → LDAP server is used, enter the name of the LDAP template file that is used in connection with this server.
- The file must exist in a defined directory on the → FTP server (→ Download Server Address, → FTP Path).
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 34  → page 58













**LED Test**

- Conduct this test to check the function of the → LED in the optiPoint 410 zu prüfen.
- All the LEDs blink during the test.


 → page 40

**Line Status**

- Activate the display to view the functions and values used to run the → LAN connections in the optiPoint 410.
- Bit rate, activity, half / full duplex, as well as the status of the used network or the manual setting in the optiPoint 410.
- The display takes place through the four → LEDs of the left row (for LAN Port<sup>1</sup>) as well through the top four LEDs of the right row (for PC Port<sup>1</sup>):

Function	LEDs on optiPoint 410					
Speed		10 Mbit/s		100 Mbit/s		-
Activity		-		not activ		activ
Duplex		Half-Duplex		Full-Duplex		-
Status		OK		not available		Error

- The status monitor remains active even during the normal operation of the optiPoint 410. However, it does not affect the operation of the function keys.

 → page 43

1. See → page 10.

### Local Area Code

- Can be configured only for the optiPoint 410 standard/advance.
- Specify the local area code of your company here, e.g., "89" for Munich.
- Canonical format → page 83.
- Standard value → page 95.
- Number editor in optiPoint 410 → page 92.

 → page 31  → page 57

### Local Country Code

- Canonical format → page 83.

 → page 31  → page 57


### Local District Code

- Can be configured only for the optiPoint 410 standard/advance.
- Specify the number of the local district of your company here, (the telephone number without the branch numbers, e.g., "722").
- Canonical format → page 83.
- Standard value → page 95.
- Number editor in optiPoint 410 → page 92.

 → page 32  → page 57

### Location Identifier

- Further description ... (entry)
- Standard name → page 95.
- Text editor in optiPoint 410 → page 93.

 → page 54

### MAC Address


- Displays the → MAC address of a network terminal device (e.g., the optiPoint 410).

 → page 39  → page 56



### MIB-II Error Count

- Displays the number of error messages according to → MIB.
- The used MIB objects are:

MIB-Objects	Explanation
ifInDiscards	Discarded ingoing packets
ifInErrors	Non-valid ingoing packets
ifOutDiscards	Discarded outgoing packets
ifOutErrors	Non-valid outgoing packets

 → page 61

### National Dial Prefix


- Canonical format → page 83.
-  → page 31  → page 57

### Number Field Format Information

- Further description ... (DSM)

### PBX Address

- Enter the → IP address of the → PBX which operates with the optiPoint 410.
- IP editor in optiPoint 410 → page 93.

 → page 26  → page 56

### PC Port Settings

- “LAN Port Settings” → page 75

### PING Test

- Conduct a → PING test to check whether a server or another terminal device (e.g., the optiPoint 410) can be reached in the network.
- For this, enter an → IP address as the test target, the connection to which you wish to test.

 → page 42  → page 61

### QoS L2/L3

- The settings relate to the → Layer 2 and → Layer 3 areas of the → QoS, that regulate the prioritisation of the transferred data.
- For Layer 2, the → VLAN Discovery Mode and the → Virtual LAN ID can be changed. For Layer 3, the → L2/L3 Voice/Signalling can be changed.
- The activation of Layer 2 and / or Layer 3 support is meaningful only if the used → Switch can interpret this information (e.g., "Layer 2 Switch").
- Standard value → page 95.

 → page 22  → page 59


### RAM Test

- Here you can test the → RAM memory of your optiPoint 410.
- The results are displayed after the test is over.

 → page 41  → page 61

### Registration Time to Live

- Further description ... (entry)

 → page 54

### ROM Test

- You can test the → ROM memory of your optiPoint 410.
- The results are displayed after the test is over.

 → page 41  → page 61

### Search Fields Presented

- Further description ... (DSM)

### Security Time Window

- Further description ... (entry)

### Silence Suppression

- With this switch you can define whether the suppression of background noise should be activated during silence (no conversation).
- Standard value → page 95.

 → page 36  → page 59

### SNMP Password

- Specify the password that was defined in the → SNMP server as the password for accessing this server.
- The password should be 1 to 24 characters long.
- Standard password → page 95.
- Password editor in optiPoint 410 → page 92.

 → page 35  → page 59


### SNMP Trap IP Address

- If an → SNMP server exists in the network, enter the → IP address of this server here.
- Standard address → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 35  → page 59

### SNMP Trap Port

- Define the → Port here through which the → SNMP error messages should be transmitted.

 → page 54

### SNTP Server IP Address

- If an → SNTP server exists in the network, enter the → IP address of this server here.
- Standard address → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 36  → page 60

### Subscriber Number

- Enter the subscriber number for the optiPoint 410 here.
- The number can be 1 to 24 characters long.
- This number is used as the internal telephone number.
- Number editor in optiPoint 410 → page 94.

 → page 27  → page 56

### Subscriber Password

- Further description ...
- Password editor → page 92.

 → page 27  → page 56




### System Type

- Select the type of the used communication platform here.

 → page 26  → page 54




### Terminal IP Address

- Enter the → IP address for the optiPoint 410 here, provided no → DHCP server assigns this value dynamically (→ DHCP IP Assignment).
- If the value was assigned dynamically, it can only be read.
- A restart is necessary after the change.
- Standard value → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 20  → page 16  → page 58

### Terminal Mask

- Enter the → Subnet Mask for the optiPoint 410 here, provided that no → DHCP server assigns this value dynamically (→ DHCP IP Assignment).
- If the value was assigned dynamically, it can only be read.
- A restart is necessary after the change.
- Standard value → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 20  → page 16  → page 58

### Time

- The manual definition is necessary only if this information is not transmitted automatically (e.g., by the → PBX or by a → DHCP server).
- Define the time format here and enter the current time.
- Date/Time editor in optiPoint 410 → page 94.

 → page 38  → page 54




### Time Zone Offset

- Make an entry here only if an → SNTP server provides time zone information.
- The specification describes the shift in hours corresponding to the time zone information of the SNTP server.
- Standard value → page 95.
- Integer editor in optiPoint 410 → page 94.

 → page 37  → page 60

### Upload Configuration

- Use this function to load (back up) an optiPoint 410 configuration on the → FTP server.
- The following parameters must be set before the upload operation:
  - → Download Server Address, → FTP Path, → Configuration Filenname
  - → FTP account Name
  - → FTP Username, → FTP Password
- Quick entry into the optiPoint 410 → page 103.




 → page 60

### Upload/Download Status

- “File Transfer Status” → page 71

### Virtual LAN ID

- Can be defined only if the → Layer 2 support is activated (→ QoS L2/L3).
- Enter a value from 0 to 4095 here. This value describes the association with a certain VLAN, if a → VLAN is used.

 → page 24  → page 16  → page 59

### VLAN Discovery Mode

- Can be defined only if the → Layer 2 support is activated (→ QoS L2/L3).
- Here you must define the location from where the → Virtual LAN ID should be fetched, if → VLAN is used.

Manual	The ID entered in → Virtual LAN ID is used.
DHCP	If a → DHCP server is used, then the ID delivered by this server is applied.

 → page 24  → page 16  → page 59

**WAP Access Password**

- Further description ... (DSM)

**WAP Access User Name**

- Further description ... (DSM)

**WAP Gateway/Proxy IP Address**

- Further description ... (DSM)

**WAP Connection Type/Mode**

- Can be configured only for the optiPoint 410 standard/advance.
- Choose the protocol over which the data transfer should take place for WAP applications: → HTTP or → WSP.

 → page 28  → page 57

**WAP Server Address**

- Can be configured only for the optiPoint 410 standard/advance.
- If a → WAP server exists, enter the → IP address of this server here.
- Standard address → page 95.
- IP editor in optiPoint 410 → page 94.

 → page 29  → page 54

**WAP Server Port Number**

- Can be configured only for the optiPoint 410 standard/advance.
- If a → WAP server exists, enter the → Port number for communication with this server here.
- Standard value → page 95.

 → page 29  → page 57

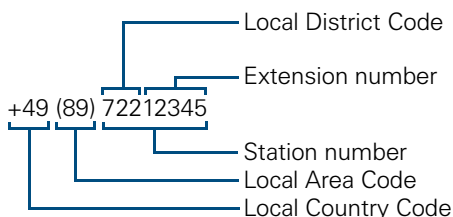
## Abbreviations and Specialized Terms

You will find more information in the relevant literature on the Network Technology and → VoIP.

### Canonical Format

The canonical format is an international standardisation of call numbers. In order for to be able to dial these numbers correctly, the dialing rules (conversion information) must be defined.

Example of a station number in canonical format:



### DHCP

Abbreviation for "**D**ynamic **H**ost **C**onfiguration **P**rotocol".

The dynamic assignment of IP addresses to the subscribers of an IP network with the help of a central DHCP server.

### DNS

Abbreviation for "**D**omain **N**ame **S**ystem".

Internet service for the conversion of voice address names into → IP address.

### E.164

Standardization of telephone numbers according to the International Telephone Number Plan of ITU with a maximum of 15 digits. Usually assembled from the following components: Country Reference Number (CC, **C**ountry **C**ode), Place Reference Number (NDC, **N**ational **D**estination **C**ode) and Subscriber Number (SN, **S**ubscriber **N**umber).

### FTP

Abbreviation for "**F**ile **T**ransfer **P**rotocol".

Is used for transferring files in networks, e.g., to update telephone software (→ Download Firmware).

### G.711

Audio protocol for uncompressed voice transmission. Requires a bandwidth of 64 kbit/s.

**G.723**

Audio protocol for compressed voice transmission. The quality is worse than in → G.711 and → G.729. Requires a bandwidth of about 6 kbit/s.

**G.729**

Audio protocol for compressed voice transmission. The quality is worse than in → G.711 and better than in → G.723. Uses a bandwidth of about 8 kbit/s.

**Gateway**

Mediation components between two different network types, e.g., → IP network and ISDN network.

**HFA**

Abbreviation for "**H**icom **F**eature **A**ccess".

Sets up the connection between → IP telephony and a → PBX with the help of a gateway (e.g., HG 1500 or HG 3530) .

**HTTP**

Abbreviation for "**H**ypertext **T**ransfer **P**rotocol".

Protocol for the transfer of data in → IP networks.

**IP**

Abbreviation for "**I**nternet **P**rotokoll".

**IP address**

Also called "→ IP" in short. The unique address of a terminal device in the network. It consists of four number blocks of 0 to 255 each, separated by a point. To simplify the notation, voice names can be released from a → DNS into the IP addresses.

**Jitter**

Runtime fluctuations in data transmission in → IP networks.

**LAN**

Abbreviation for "**L**ocal **A**rea **N**etwork".

**Layer 2**

2<sup>nd</sup> layer (Data Link Layer) of the 7-layer OSI model for describing data transmission interfaces.

**Layer 3**

3<sup>rd</sup> layer (Network Layer) of the 7-layer OSI model for describing the data transmission interfaces.

**LDAP**

Abbreviation for "**L**ightweight **D**irectory **A**ccess **P**rotocol".  
Simplified protocol for accessing standardized directory systems, e.g., a company telephone directory.

**LCD**

Abbreviation for "**L**iquid **C**rystal **D**isplay".  
Display of numbers, text or graphics with the help of liquid crystal technology.

**LED**

Abbreviation for "**L**ight **E**mitting **D**iode".  
Cold light illumination in different colours at low power consumption.

**MAC**

Abbreviation for "**M**edium **A**ccess **C**ontrol **A**ddress".  
A 48-bit address with the help of which a terminal device (e.g., → IP telephone or Network card) identifies itself uniquely in a network all over the world.

**MIB**

Abbreviation for "**M**anagement **I**nformation **B**ase".  
Database containing descriptions of error messages of the devices and functions in a network.

**PBX**

Abbreviation for "**P**rivate **B**ranch **eX**change".  
Private telephone system that connects the different internal devices to the ISDN network

**PING**

Abbreviation for "**P**acket **I**nternet **G**roper".  
A program to test whether a connection can be made to a defined → IP target. Data is sent to the target and returned from there during the test. The result of the test displays the success / failure of the transmission and possible additional information such as the transmission time.

**Port**

Ports are used in → IP networks to permit several communication connections simultaneously. Different services often have different port numbers.

## QoS

Abbreviation für „**Quality of Service**“.

Describes the subjectively ascertainable quality (service quality) of a voice connection through → IP networks. Properties of QoS are packet loss rate, packet delay, delay deviation, reserved bandwidth, type and bit rate (variable, constant or unspecified).

## RAM

Abbreviation for "**R**andom **A**ccess **M**emory".

Memory with read / write access.

## ROM

Abbreviation for "**R**ead **O**nly **M**emory".

Memory with read only access.

## SIP

Abbreviation for "**S**ession **I**nitiation **P**rotocol".

Protocol standard for initialising calls in → IP networks.

## VLAN

Abbreviation for "**V**irtual **L**ocal **A**rea **N**etwork".

Subdivision of an → IP network into autonomous administration groups (domains). A possibility of characterizing the association with a VLAN is using a → Virtual LAN ID.

## SNMP

Abbreviation for "**S**imple **N**etwork **M**anagement **P**rotocol".

The protocol is used for communication with servers that takeover network management functions. This includes for example, protocolling errors that occur in network components (SNMPTrap).

## SNTP

Abbreviation for "**S**imple **N**etwork **T**ime **P**rotocol".

The protocol is used between timeservers and terminal devices of a network to synchronize the time of the terminal device.

## Subnet Mask

Classifies networks in A-, B- and C networks. Each class has a subnet mask that demasks the relevant bits. 255.0.0.0 for Class A, 255.255.0.0 for Class B and 255.255.255.0 for Class C. In a Class C network, for instance, there are 254 → IP addresses.

## Switch

Transmission position in a star-shaped network.

**VoIP**

Abbreviation for "**V**oice **o**ver **I**P".

E.g., voice transmission through → IP technology.

**WAP**

Abbreviation for "**W**ireless **A**pplication **P**rotocol".

Synonym for graphical applications on mobile telephones, organizers and other suitable terminal devices, transferred in accordance with the protocol by the same name.

**WSP**



Abbreviation for "**W**ireless **S**ession **P**rotocol".

Protocol for transferring data to → WAP-enabled terminal devices.

## Administration scenarios

### Setting up the FTP server

There are several possibilities of performing upload and download operations for the optiPoint 410.

- By operating the telephone,  → page 44.
- With the help of a web interface in an Internet browser (e.g., Internet Explorer 5.5),  → page 54.
- By using the "Deployment Tool" program (integral component of the HiPath Manager E).  
Meaningful while supplying several telephones simultaneously. For this, see the Administration Instructions on Deployment Tool.

A correctly configured FTP server is necessary in all the cases, with the help of which, the data is exchanged through → FTP. The server program must run on the same computer (e.g., PC) in the → LAN in which the optiPoint 410 is run.

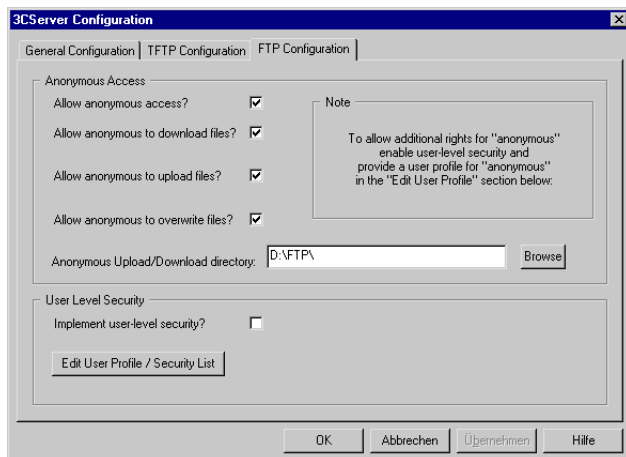
The installation of the "3Cserver" server program of the "3Com" company is described below as an example.



## Installation and configuration

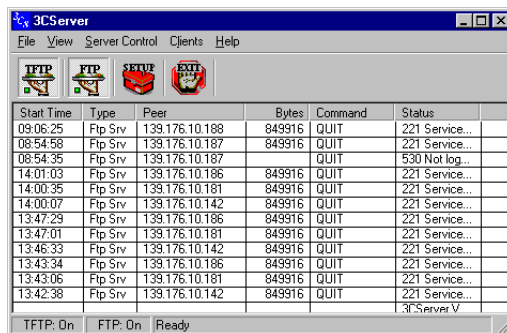
1. Install the software (in the example "3Cserver", that can be downloaded from <http://www.3com.com>).
2. Start the server program.
3. You can set up user profiles or permit anonymous access, as in this example. This is the simpler variant in which it is not possible to assign different access rights to different users.

Go to **File** → **Config** → **FTP configuration** in the menu and specify the directory in **Anonymous Upload/Download directory**, with which the data exchange should take place.




4. Confirm the action by pressing **OK**.

As soon as the data exchange starts, you can see the data of the connections in the main window of the program.





## Check handset functionalities

- Check whether the plugs at the two ends of the handset cable are inserted correctly (handset engaged) → page 10.
- Carry out an Audio Loop test.
  - More information on “Audio Loop Test” → page 67.
  -  → page 41
- Ensure that the handset microphone is not switched off.
  - For more information, see the operating instructions of the optiPoint 410.



## Start up not successful

Check whether one or more of the mentioned questions are valid for your configuration:

### Is the optiPoint 410 being run in a → VLAN ?



- Enter the VLAN ID manually, or, if a → DHCP server is being used, set the “VLAN Discovery Mode” → page 81 on “DHCP”, so that the VLAN ID transferred from the DHCP server is used.
  - More information on “Virtual LAN ID” → page 81.
  -  → page 24  → page 59

### Is the optiPoint 410 being run behind a → Gateway?

- Enter the → IP address of the Gateway in → Default Route.
  -  → page 21  → page 58



### Other configuration possibilities ...

## Check LAN connection





- Check whether the plugs at the two ends of the LAN cable are correctly inserted (handset engaged) → page 10.
- Check the connection with the help of the PING test.
  - More information on “PING Test” → page 78.
  -  → page 42  → page 61

## Determine the software version

You can determine the version of the software that is running the optiPoint 410, e.g., during a pending software update.

-  → page 39  → page 54

## Improve speech quality

- Change the QoS parameters.
  - More information on “QoS L2/L3” → page 78.
  -  → page 22  → page 61
- Increase the “Jitter” buffer time for the optiPoint 410 entry.
  - More information on “Jitter Buffer” → page 74..
- Change the voice compression.
  - More information on “Audio Mode” → page 67, “Codec” → page 67, “Compression” → page 67.
  -  → page 35 → page 36 .
- Activate the suppression of the background noise during silence, for the optiPoint 410 economy/standard/advance.
  - More information on “Silence Suppression” → page 79.
  -  → page 36.

## Editors



optiPoint 410 entry only:

The edited characters are displayed binary coded on the LEDs of the optiPoint 410 entry → page 98.

## Number Editor

Permitted: Numeric values.

Specify the numbers.



Press this key to delete one character at a time to the left.



In case of negative numbers, press this key to change the prefixed sign.

Example: 2235



optiPoint 410 entry only:

It is not possible to edit an existing string. The string will be overwritten by the new text.

## Password Editor

The password editor is used in authorisation and storage mode.

### Authorisation

Permitted: Stored passwords.

### Storage

Password	Permitted values	Length min.	Length max.	Default
Subscriber	alphanumeric	6	20	-
Administration	numeric	6	9	123456
Reset	alphanumeric	6	6	124816
FTP	alphanumeric	0	24	123abc
SNMP	alphanumeric	0	24	Public

















optiPoint 410 entry only:

It is not possible to edit an existing string. The string will be overwritten by the new text.

## Text Editor



Character entry is performed by multiple presses of the keypad keys according to the following tables. This also applies to entry of alphanumeric passwords → page 92.

Example: "+" = press the  key 17 times.


Key	1x	2x	3x	4x	5x	6x	7x	8x	9x	10x	11x	12x
	1											
	a	b	c	2								
	d	e	f	3								
	g	h	i	4								
	j	k	l	5								
	m	n	o	6								
	p	q	r	s	7							
	t	u	v	8								
	w	x	y	z	9							
	(1)	.	-	0								
	(2)											
	#	.	\	_	\$	%	/	(	)	=	[	]
Key	13x	14x	15x	16x	17x	18x	19x	20x	21x	22x	23x	
	{	}	@	~	+	;	:	"	'	!	?	


- (1) Space.
- (2) The next character to be entered will be interpreted as upper case.

### optiPoint 410 economy/standard only

-  Press key to delete to the left.
-  Press key to advance to the next character.

### optiPoint 410 entry only

-  Press key to advance to the next character.

 It is not possible to edit an existing string. The string will be overwritten by the new text.

## IP Number Editor



Permitted: Integer values from 0 to 255 and dots (".").

Press key to write dots between the IP fields.

Leading zeros will be ignored.

Example: 192.168.1.50



optiPoint 410 entry only:

It is not possible to edit an existing string. The string will be overwritten by the new text.

## Date and time editor

### optiPoint 410 economy/standard only



Enter the numbers.

Field	Permitted Value
Day	01 ... 31
Month	01 ... 12
Year	00 .. 99
Hour	00 ... 23
Minute	00 ... 59



Press these keys to switch between fields within an editor, or between the date and time editors.

## Factory Default Settings

### Standard value

Function	standard value
Administration password → Passwords Functions	123456
Application DL filename (1)	iphone.app
Audio mode	G.711 always
Configuration DL filename	OP400-28069
Default route	0.0.0.0
DHCP IP assign	on
DL server IP address	0.0.0.0
Domain name	
E164 address	null
FTP account name	guest
FTP password → Passwords Functions	123abc
FTP path	null
FTP username	guest
Gatekeepers (1)	0.0.0.0
Gateway	0.0.0.0
H323 ID	null
HiPath password → Passwords Functions	null
HiPathGK	on (not for HiPath 3000/5000)
Hold music filename	MoHFile
IP routing	0.0.0.0 (all)
Jitter buffer	normal
Mobility	On
QoS L2/L3	On/On
QoS Layer 2 Priority	Pos. 12: 6, Pos. 18: 3
QoS Layer 3 Signalling	18
QoS Layer 3 Voice	12
Security	Reduced Security
SNMP password → Passwords Functions	public
SNMP trap ID address	0.0.0.0

Function	standard value
SNTP IP address	0.0.0.0
Terminal IP address	0.0.0.0
Terminal mask	0.0.0.0
Time to live	3
Time zone offset	+0
TimeWindow	10
User password → Passwords Functions	null

(1) Filename is postfixed by a letter a, b, c or d for the various language packages.

## Passwords Functions

Password	Function setting
User Password	Protects the user-specific settings of the optiPoint 410.
Administrator Password	Protects the administration area from unauthorized access („Configuration" and „Diagnostics").
FTP Password	Protects the FTP server from unauthorized access for data transmission (e.g., Downloading of firmware).
HiPath Password	Protects the settings for communication with other HiPath devices.
SNMP Password	Protects the SNMP server from unauthorized access for error assessment.

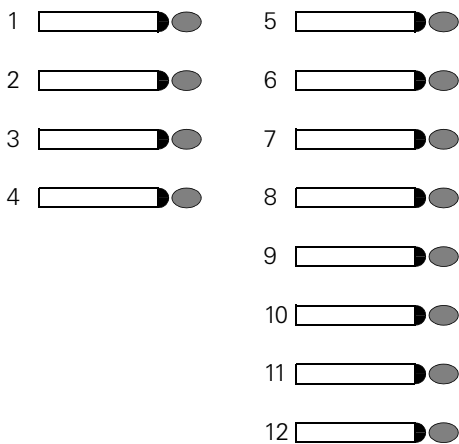


## Programmable Keys optiPoint 410 economy/standard

Taste	Funktion HiPath 3000/5000	Funktion HiPath 4000
1	Program/Service	Program/Service
2	Redial	Redial
3	Mute	Mailbox
4	Speaker	Speaker
5	-	Call pickup
6	-	Call park
7	-	Release
8	-	Show used line
9	-	Ringer cutoff
10	-	Privacy
11	-	Hold
12	Release	Exclusive hold

### Key-Layout

economy/standard





## Technical data

### optiPoint 410 economy/standard

Protocols	H.323, H.225, H.245, TCP/IP, FTP, DHCP, SNTP Gatekeeper routed and direct routed call model
Voice algorithms	G.711 (64 kbit/s), G.723.1 (6,4 kbit/s) Room echo compensation
Interfaces	IEEE 802.3 Fast Ethernet (10/100 Mbit/s) 2 x RJ 45 TP
Pin assignment: LAN receptacle	Pin 1 TX + Pin 2 TX - Pin 3 RX + Pin 4 -- (DC+) Pin 5 -- (DC+) Pin 6 RX - Pin 7 -- (DC-) Pin 8 -- (DC-)
Handset receptacle	Pin 1 microphone - Pin 2 receiver cap + Pin 3 receiver cap - Pin 4 microphone +
Power supply unit receptacle	Pin 1 V - Pin 2 -- Pin 3 -- Pin 4 -- Pin 5 -- Pin 6 V +
Power supply (external plug-in po- wer supply unit)	EU-variant, grounding plug (230 V, 50 Hz) UK-variant (230 V, 50 Hz) US-variant (110 V, 60 Hz)

### optiPoint 410 entry

Protocols	H.323, H.225, H.245, TCP/IP, FTP, DHCP, SNTP Gatekeeper routed and direct routed call model
Voice algorithms	G.711 (64 kbit/s), G.723.1 (6,4 kbit/s) Room echo compensation
Interfaces	IEEE 802.3 Fast Ethernet (10/100 Mbit/s) 2 x RJ 45 TP
Pin assignment: LAN receptacle	Pin 1 TX + Pin 2 TX - Pin 3 RX + Pin 4 -- (DC+) Pin 5 -- (DC+) Pin 6 RX - Pin 7 -- (DC-) Pin 8 -- (DC-)
Handset receptacle	Pin 1 microphone - Pin 2 receiver cap + Pin 3 receiver cap - Pin 4 microphone +
Power supply unit receptacle	Pin 1 V - Pin 2 -- Pin 3 -- Pin 4 -- Pin 5 -- Pin 6 V +
Power supply (external plug-in po- wer supply unit)	EU-variant grounding plug 230 V, 50 Hz (AUL:06D1284)  UK-variant 230 V, 50 Hz (AUL:06D1287)  US-variant 110 V, 60 Hz (AUL:51A4827)

# Operation Codes Summary

In the following pages you will find a list of the reference numbers corresponding to the administration and diagnostics functions in the optiPoint 410 economy/standard and the optiPoint 410 entry in the alphabetical order.

## optiPoint 410 economy/standard


























### Administration State

Operation	optiPoint 410 economy	optiPoint 410 standard	Refer to
Configurations	<b>1 0 3</b> (simult.) ✓  ✓	<b>1 0 3</b> (simult.)	→ page 19
Diagnostics	<b>1 0 3</b> (simult.) ▶ ✓  ✓	<b>1 0 3</b> (simult.)	→ page 49









### Configurations

Operation	optiPoint 410 economy (→ Administration State)	optiPoint 410 standard (→ Administration State)	Refer to
Admin. Password	<b>0 7</b> ✓  ✓  ✓	<b>0 8</b> ✓  ✓  ✓	→ page 66
Application Filename	<b>0 3 0 6</b> ✓	<b>0 4 0 8</b> ✓	→ page 66
Application Version	<b>0 8</b> ✓	<b>0 9</b> ✓	→ page 66
Codec	<b>0 5 0 1</b> ▶ ✓	<b>0 6 0 1</b> ▶ ✓	→ page 67
Clear User Data	<b>0 7 0 3</b> ✓	<b>0 8 0 3</b> ✓	→ page 67
Compressing	<b>0 5 0 2</b> ▶ ✓	<b>0 6 0 2</b> ▶ ✓	→ page 67
Date	<b>0 6 0 5</b> ✓	<b>0 7 0 5</b> ✓	→ page 68
Date Format	<b>0 6 0 4</b> ▶ ✓	<b>0 7 0 4</b> ▶ ✓	→ page 68
Daylight Saving	<b>0 6 0 3</b> ▶ ✓	<b>0 7 0 3</b> ▶ ✓	→ page 68
Default Route	✓ <b>0 4</b> ✓  ✓	✓ <b>0 4</b> ✓  ✓	→ page 68
DHCP IP Assignment	✓ ✓ ▶ ✓	✓ ✓ ▶ ✓	→ page 69
DNS IP Address	✓ <b>0 8</b> ✓	✓ <b>0 8</b> ✓	→ page 69
Domain Name	✓ <b>0 9</b> ✓	✓ <b>0 9</b> ✓	→ page 69
Downl. Server Addr.	<b>0 3 0 2</b> ✓  ✓	<b>0 4 0 4</b> ✓  ✓	→ page 71
DSM Appl. Filename	-	<b>0 4 1 0</b> ✓	→ page 71
External Access	-	<b>0 3 0 5</b> ✓  ✓	→ page 71
Factory Reset	<b>0 7 0 2</b> ✓	<b>0 8 0 2</b> ✓	→ page 71
FTP Account Name	<b>0 3 0 3</b> ✓	<b>0 4 0 5</b> ✓	→ page 72
FTP Password	<b>0 3 0 5</b> ✓  ✓	<b>0 4 0 7</b> ✓  ✓	→ page 72

Operation	optiPoint 410 economy (→ Administration State)	optiPoint 410 standard (→ Administration State)	Refer to
FTP Username	0 3 0 4 <input checked="" type="checkbox"/>	0 4 0 6 <input checked="" type="checkbox"/>	→ page 72
Help Internet URL	-	0 3 0 3 <input checked="" type="checkbox"/>	→ page 73
Help Intranet URL	-	0 3 0 4 <input checked="" type="checkbox"/>	→ page 73
International Prefix	-	0 3 0 5 0 2 <input checked="" type="checkbox"/>	→ page 73
Language	-	0 3 0 6 <input checked="" type="checkbox"/>	→ page 75
Layer 2 Default	<input checked="" type="checkbox"/> 0 6 0 6 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 6 0 6 <input checked="" type="checkbox"/>	→ page 74
Layer 2 Signalling	<input checked="" type="checkbox"/> 0 6 0 5 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 6 0 5 <input checked="" type="checkbox"/>	→ page 74
Layer 2 Voice	<input checked="" type="checkbox"/> 0 6 0 4 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 6 0 4 <input checked="" type="checkbox"/>	→ page 74
Layer 3 Signalling	<input checked="" type="checkbox"/> 0 6 0 3 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 6 0 3 <input checked="" type="checkbox"/>	→ page 74
Layer 3 Voice	<input checked="" type="checkbox"/> 0 6 0 2 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 6 0 2 <input checked="" type="checkbox"/>	→ page 74
LDAP Server Addr.	-	0 3 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 75
LDAP Server Port	-	0 3 <input checked="" type="checkbox"/> 0 2 <input checked="" type="checkbox"/>	→ page 76
LDAP Tmpl. Filename	-	0 4 0 9 <input checked="" type="checkbox"/>	→ page 76
Local Area Code	-	0 3 0 5 0 5 <input checked="" type="checkbox"/>	→ page 77
Local Country Code	-	0 3 0 5 0 3 <input checked="" type="checkbox"/>	→ page 77
Local District Code	-	0 3 0 5 0 6 <input checked="" type="checkbox"/>	→ page 77
MAC Address	0 8 0 2	0 8 0 2	→ page 77
National Dial Prefix	-	0 3 0 5 0 4 <input checked="" type="checkbox"/>	→ page 78
PBX address	0 2 0 2 <input checked="" type="checkbox"/>	0 2 0 2 <input checked="" type="checkbox"/>	→ page 72
LAN port 1 mode	<input checked="" type="checkbox"/> 0 7 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 7 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 75
LAN port 2 mode	<input checked="" type="checkbox"/> 0 7 0 2 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 7 0 2 <input checked="" type="checkbox"/>	→ page 75
QoS Layer Options	<input checked="" type="checkbox"/> 0 6 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 6 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 78
Route 1 Gateway	<input checked="" type="checkbox"/> 0 5 <input checked="" type="checkbox"/> 0 2 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 5 <input checked="" type="checkbox"/> 0 2 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 73
Route 1 IP Address	<input checked="" type="checkbox"/> 0 5 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 5 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 73
Route 1 Mask	<input checked="" type="checkbox"/> 0 5 <input checked="" type="checkbox"/> 0 3 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 5 <input checked="" type="checkbox"/> 0 3 <input checked="" type="checkbox"/>	→ page 73
Route 2 Gateway	<input checked="" type="checkbox"/> 0 5 0 2 0 2 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 5 0 2 0 2 <input checked="" type="checkbox"/>	→ page 73
Route 2 IP Address	<input checked="" type="checkbox"/> 0 5 0 2 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 5 0 2 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 79
Route 2 Mask	<input checked="" type="checkbox"/> 0 5 0 2 0 3 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 0 5 0 2 0 3 <input checked="" type="checkbox"/>	→ page 79
Silence Suppression	0 5 0 3 <input checked="" type="checkbox"/>	0 6 0 3 <input checked="" type="checkbox"/>	→ page 79
SNMP Password	0 4 0 2 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	0 5 0 2 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 79
SNMP Trap Address	0 4 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	0 5 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	→ page 79

Operation	optiPoint 410 economy (→ Administration State)	optiPoint 410 standard (→ Administration State)	Refer to
SNTP Server Address	06 ✓  ✓	07 ✓  ✓	→ page 79
Subscriber number	0203  ✓	0203  ✓	→ page 80
Subscriber password	0204  ✓  ✓	0204  ✓  ✓	→ page 80
System Type	02 ✓  ✓	02 ✓  ✓	→ page 80
Terminal IP Address	✓ 02  ✓	✓ 02  ✓	→ page 80
Terminal Mask	✓ 03  ✓	✓ 03  ✓	→ page 80
Time	0606  ✓	0706  ✓	→ page 80
Time Zone Offset	0602  ✓	0702  ✓	→ page 81
VLAN id	✓ 0608  ✓	✓ 0608  ✓	→ page 81
VLAN Method	✓ 0607  ✓	✓ 0607  ✓	→ page 81
WAP Mode	-	0302 ✓  ✓	→ page 82
WAP Server Address	-	030202  ✓	→ page 82
WAP Server Port	-	030203  ✓	→ page 82

## Diagnostics

Operation	optiPoint 410 economy (→ Administration State)	optiPoint 410 standard (→ Administration State)	Refer to
Audio Loop Test	04 	04 	→ page 67
Display Test	✓  ✓	✓  ✓	→ page 69
Key Test	03  ✓	03  ✓	→ page 74
LED Test	02 ✓	02 ✓	→ page 76
LineTest	08 ✓	08 ✓	→ page 76
PING Test	07  ✓	07  ✓	→ page 78
RAM Test	- 05 ✓	- 05 ✓	→ page 78
ROM Test	06 ✓	06 ✓	→ page 79

## Downloads/Uploads

Operation	optiPoint 410 economy (→ Administration State)	optiPoint 410 standard (→ Administration State)	Refer to
Dwnl. Appl.	03 ✓ ✓	04 ✓ ✓	→ page 70
Dwnl. DSM Appl.	-	0403 ✓	→ page 70
Dwnl. LDAP Tpl.	-	0402 ✓	→ page 70

### Further functions

Operation	optiPoint 410 economy (→ Administration State)	optiPoint 410 standard (→ Administration State)	Refer to
Restart	⊕ 2 8 (simult.) ↶ 1 9 * (simult.) ↷ ✓ or ⊖ ⊕ * 2 (in sequence) ✓	⊕ 2 8 (simult.) ↶ 1 9 * (simult.) ↷ ✓ or ⊖ ⊕ * 2 (in sequence) ✓	

## optiPoint 410 entry

### Administration area

Operation	optiPoint 410 entry	Refer to
Configurations	1 0 3 (simult.)  ⊕	→ page 19

### Configurations

Operation	optiPoint 410 entry	Refer to
Default Route	<PROG>   0 3  ⊕	→ page 68
DHCP IP Assignment	<PROG>   0 0  ⊕	→ page 69
Factory Reset	2 8 9 (simult.)  ⊕	→ page 71
Terminal IP Address	<PROG>   0 1  ⊕	→ page 80
Terminal Mask	<PROG>   0 2  ⊕	→ page 80
VLAN id	<PROG>   2 4  ⊕	→ page 81
VLAN Method	<PROG>   2 5  ⊕	→ page 81

### Further functions

Operation	optiPoint 410 entry	Refer to
Restart	1 4 7 (simult.) or 3 5 ⊕ (simult.) (Administrationpassword) ⊕	
Start phone	<PROG>   9 9 ⊕	



## Menu structure

The following table shows a concerned overview of the menu structure of the optiPoint 410 standard and optiPoint 410 economy (→ page 107).

### optiPoint 410 standard

Menu	Operation steps	Explanation
Administration?		
01=Configuration?		
01=Network?		
01=DHCP IP assign?	→ page 20	→ page 69
02=Terminal IP addr.?	→ page 20	→ page 80
03=Terminal mask?	→ page 20	→ page 80
04=Default route?	→ page 21	→ page 68
05=IP routing?	→ page 21	→ page 73
01=Route 1?		
01=IP route?		
02=Gateway?		
03=Mask?		
00=End?		
02=Route 2?		
01=IP route?		
02=Gateway?		
03=Mask?		
00=End?		
06=QoS?		
01=QoS L2/L3?	→ page 22	→ page 78
02=L3 Voice?	→ page 22	→ page 74
03=L3 Signalling?	→ page 22	→ page 74
04=L2 Voice?	→ page 23	→ page 74
05=L2 Signalling?	→ page 23	→ page 74
06=L2 Default?	→ page 23	→ page 74
07=VLAN method?	→ page 24	→ page 81
08=VLAN id?	→ page 24	→ page 81
00=End?		
07=Port mode?	→ page 25	→ page 75
01=LAN port 1 mode?		
02=LAN port 2 mode?		
00=End?		
08=DNS IP addr.?	→ page 25	→ page 69
09=Domain name?	→ page 26	→ page 69
00=End?		
02=System?		
01=System type?	→ page 26	→ page 80
02=PBX address?	→ page 26	→ page 72
03=Subscriber number?	→ page 27	→ page 80
04=Subscriber password?	→ page 27	→ page 80
00=End?		

Menu	Operation steps	Explanation
-- 03=Appl.?		
-- 01=LDAP?	→ page 27	→ page 75
-- 01=LDAP server address?	→ page 27	→ page 75
-- 02=LDAP server port?	→ page 28	→ page 76
-- 00=End?		
-- 02=WAP mode?	→ page 28	→ page 82
-- 01=WAP mode?	→ page 28	→ page 82
-- 02=WAP server address?	→ page 29	→ page 82
-- 03=WAP server port?	→ page 29	→ page 82
-- 00=End?		
-- 03=Help Internet URL?	→ page 29	→ page 73
-- 04=Help Intranet URL?	→ page 30	→ page 73
-- 05=Canonical dialling?		
-- 01=External Access?	→ page 30	→ page 71
-- 02=International Prefix?	→ page 30	→ page 73
-- 03=Local Country Code?	→ page 31	→ page 77
-- 04=National Dial Prefix?	→ page 31	→ page 78
-- 05=Local Area Code?	→ page 31	→ page 77
-- 06=Local District Code?	→ page 32	→ page 77
-- 00=End?		
-- 06=Language?	→ page 32	→ page 75
-- 00=End?		
-- 04=File transfer?		
-- 01=DL application?	→ page 44	→ page 70
-- 02=DL LDAP template?	→ page 44	→ page 70
-- 03=DL DSM App?	→ page 44	→ page 70
-- 04=DL server address?	→ page 32	→ page 71
-- 05=FTP account name?	→ page 33	→ page 72
-- 06=FTP username?	→ page 33	→ page 72
-- 07=FTP password?	→ page 33	→ page 72
-- 08=App. filename?	→ page 34	→ page 66
-- 09=LDAP filename?	→ page 34	→ page 76
-- 10=DSM App filename?	→ page 34	→ page 71
-- 00=End?		
-- 05=SNMP?		
-- 01=SNMP trap address?	→ page 35	→ page 79
-- 02=SNMP password?	→ page 35	→ page 79
-- 00=End?		
-- 06=Speech?		
-- 01=Codec?	→ page 35	→ page 67
-- 02=Compression?	→ page 36	→ page 67
-- 03=Silence Suppression?	→ page 36	→ page 79
-- 00=End?		
-- 07=Date/Time?		
-- 01=SNTP IP addr?	→ page 36	→ page 79
-- 02=Timezone offset?	→ page 37	→ page 81
-- 03=Daylight saving?	→ page 37	→ page 68
-- 04=Date Format?	→ page 37	→ page 68
-- YYMM-DD?		
-- MM/DD/YY?		
-- DD.MM.YY?		
-- 05=Date?	→ page 38	→ page 68
-- 06=Time?	→ page 38	→ page 80
-- 00=End?		
-- 08=Phone Administration?		
01=Admin password?	→ page 38	→ page 66
02=Factory Reset?	→ page 39	→ page 71
03=Clear User Data?	→ page 39	→ page 67
-- 00=End?		
-- 09=General Info?		
01=Appl. Versn.?	→ page 39	→ page 66
02=MAC address?	→ page 39	→ page 77
-- 00=End?		

Menu	Operation steps	Explanation
-- 02=Diagnostics?		
-- 01=Display test?	→ page 40	→ page 69
-- 02=LED test?	→ page 40	→ page 76
-- 03=Key test?	→ page 41	→ page 74
-- 04=Audio loop test?	→ page 41	→ page 67
-- 05=RAM test?	→ page 41	→ page 78
-- 06=ROM test?	→ page 41	→ page 79
-- 07=Ping Test?	→ page 42	→ page 78
-- 01=User specified IP		
-- 02=Gateway?		
-- 03=DL server address?		
-- 04=Default Router IP?		
-- 05=Route 1 Gateway IP?		
-- 06=Route 2 Gateway IP?		
-- 07=SNMP trap address?		
-- 08=Terminal IP addr.?		
-- 09=DNS Server?		
-- 00=End?		
-- 08=Line test?	→ page 43	→ page 76
-- 00=End?		
-- 03=Start Phone?		
-- Telephony?		

## optiPoint 410 economy




Menu numbers deviating from the optiPoint 410 standard are displayed in **bold** letters.

Menu	Operation steps	Explanation
-- Administration?		
-- 01=Configuration?		
-- 01=Network?		
-- 01=DHCP IP assign?	→ page 20	→ page 69
-- 02=Terminal IP addr.?	→ page 20	→ page 80
-- 03=Terminal mask?	→ page 20	→ page 80
-- 04=Default route?	→ page 21	→ page 68
-- 05=IP routing?	→ page 21	→ page 73
-- 01=Route 1?		
-- 01=IP route?		
-- 02=Gateway?		
-- 03=Mask?		
-- 00=End?		
-- 02=Route 2?		
-- 01=IP route?		
-- 02=Gateway?		
-- 03=Mask?		
-- 00=End?		
-- 06=QoS?		
-- 01=QoS L2 L3?	→ page 22	→ page 78
-- 02=L3 Voice?	→ page 22	→ page 74
-- 03=L3 Signalling?	→ page 22	→ page 74
-- 04=L2 Voice?	→ page 23	→ page 74
-- 05=L2 Signalling?	→ page 23	→ page 74
-- 06=L2 Default?	→ page 23	→ page 74
-- 07=VLAN method?	→ page 24	→ page 81
-- 08=VLAN id?	→ page 24	→ page 81
-- 00=End?		
-- 07=Port mode?	→ page 25	→ page 75
-- 01=LAN port 1 mode?		
-- 02=LAN port 2 mode?		
-- 00=End?		
-- 08=DNS IP addr.?	→ page 25	→ page 69
-- 09=Domain name?	→ page 26	→ page 69
-- 00=End?		

Menu	Operation steps	Explanation
-- 02=System?		
-- 01=System type?	→ page 26	→ page 80
-- 02=PBX address?	→ page 26	→ page 72
-- 03=Subscriber number?	→ page 27	→ page 80
-- 04=Subscriber password?	→ page 27	→ page 80
-- 00=End?		
-- 03=File transfer?		
-- 01=DL application?	→ page 44	→ page 70
-- 02=DL server address?	→ page 32	→ page 71
-- 03=FTP account name?	→ page 33	→ page 72
-- 04=FTP username?	→ page 33	→ page 72
-- 05=FTP password?	→ page 33	→ page 72
-- 06=App. filename?	→ page 34	→ page 66
-- 00=End?		
-- 04=SNMP?		
-- 01=SNMP trap address?	→ page 35	→ page 79
-- 02=SNMP password?	→ page 35	→ page 79
-- 00=End?		
-- 05=Speech?		
-- 01=Codec?	→ page 35	→ page 67
-- 02=Compression?	→ page 36	→ page 67
-- 03=Silence Suppression?	→ page 36	→ page 79
-- 00=End?		
-- 06=Date/Time?		
-- 01=SNTP IP addr?	→ page 36	→ page 79
-- 02=Timezone offset?	→ page 37	→ page 81
-- 03=Daylight saving?	→ page 37	→ page 68
-- 04=Date Format?	→ page 37	→ page 68
-- YYMM-DD?		
-- MM/DD/YY?		
-- DD.MM.YY?		
-- 05=Date?	→ page 38	→ page 68
-- 06=Time?	→ page 38	→ page 80
-- 00=End?		
-- 07=Phone Administration?		
01=Admin password?	→ page 38	→ page 66
02=Factory Reset?	→ page 39	→ page 71
03=Clear User Data?	→ page 39	→ page 67
-- 00=End?		
-- 08=General Info?		
01=Applic. Versn.?	→ page 39	→ page 66
02=MAC address?	→ page 39	→ page 77
-- 00=End?		
-- 02=Diagnostics?		
-- 01=Display test?	→ page 40	→ page 69
-- 02=LED test?	→ page 40	→ page 76
-- 03=Key test?	→ page 41	→ page 74
-- 04=Audio loop test?	→ page 41	→ page 67
-- 05=RAM test?	→ page 41	→ page 78
-- 06=ROM test?	→ page 41	→ page 79
-- 07=Ping Test?	→ page 42	→ page 78
-- 01=User specified IP		
-- 02=Gateway?		
-- 03=DL server address?		
-- 04=Default Router IP?		
-- 05=Route 1 Gateway IP?		
-- 06=Route 2 Gateway IP?		
-- 07=SNMP trap address?		
-- 08=Terminal IP addr.?		
-- 09=DNS Server?		
-- 00=End?		
-- 08=Line Test?	→ page 43	→ page 76
-- 00=End?		
-- 03=Start Phone?		
-- Telephony?		

# Index

The colored page numbers lead in each case to the description of the operation at the following device/surface

-  optiPoint 410 economy/standard
-  optiPoint 410 entry
-  Web-based Management Tool
- **Bold:** Explanations in Glossar

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**DRAFT**

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