Information

HiPath BizIP V1

VoIP for smaller companies and offices

Communication for the open minded

Siemens Enterprise Communications
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Just Communicate

HiPath BizIP – a revolutionary technology for total IP communication. Voice and data communication via a DSL connection, and only one internal network for both the PC and the telephone. Simplicity itself! Connect the BizIP telephones to the LAN ... and start enjoying low-cost Internet telephony.

HiPath BizIP is the modern voice and data communication system for small companies, offices, agencies, and the SOHO sector. HiPath BizIP is a cost-effective solution for as few as two subscribers, and can be progressively extended to cater for more than 15 employees.

HiPath BizIP is a secure and reliable communication system for Internet telephony (Voice-over-IP). Its revolutionary peer-to-peer technology makes for simple device installation and configuration.

A special BizIP access device with integrated gateway function connects the internal data network to ISDN and the Internet. Routing functionality controls the broadband connection to the Internet for both data traffic and Internet telephony.

HiPath BizIP provides pure IP technology and features high-quality telephones with intuitive user operation via display and dialog keys. The portfolio also includes standard SIP terminals such as WLAN phones and is thus able to satisfy all the requirements of a modern working environment.

A wide range of voice telephony features such as DSS keys, combined with applications such as CTI (Computer Telephony Integration) and integrated voice mail, guarantee support for all aspects of professional communication.

## SIP – the standard for Internet telephony

HiPath BizIP supports the open and standardized SIP protocol (Session Initiation Protocol) for Internet telephony. This means that users can take advantage of VoIP telephony provider offers using either system connections or individual call numbers. Such low-cost Internet services represent a new dimension in communication. Quality of Service (QoS) always gives priority to voice communication, and the codecs used guarantee the highest transmission quality. Due to mixed operation involving both ISDN and DSL network connections, existing call numbers can be retained, and a step-by-step migration to SIP-based provider services is possible.

Lower costs

The integration of a router and gateway in one and the same system optimizes hardware costs. And the combination of voice and data communication on the LAN also reduces the costs for administration and maintenance. Existing Internet connections can be utilized more economically by also using them for calls to the public network. The number of ISDN lines can be reduced, leading to lower basic charges. There is no charge for Internet connections to partners within the networks of associated providers.

Flexible expansion

HiPath BizIP is highly flexible when it comes to adding additional telephones. Telephones are connected to existing LAN cables and connected to the PC via the integrated miniswitch. The BizIP telephones detect each other during automatic configuration and require no further administration. Analog devices such as fax machines or cordless telephones can be connected just as easily as standard SIP terminals. Mobile phones can also be easily integrated into the system.
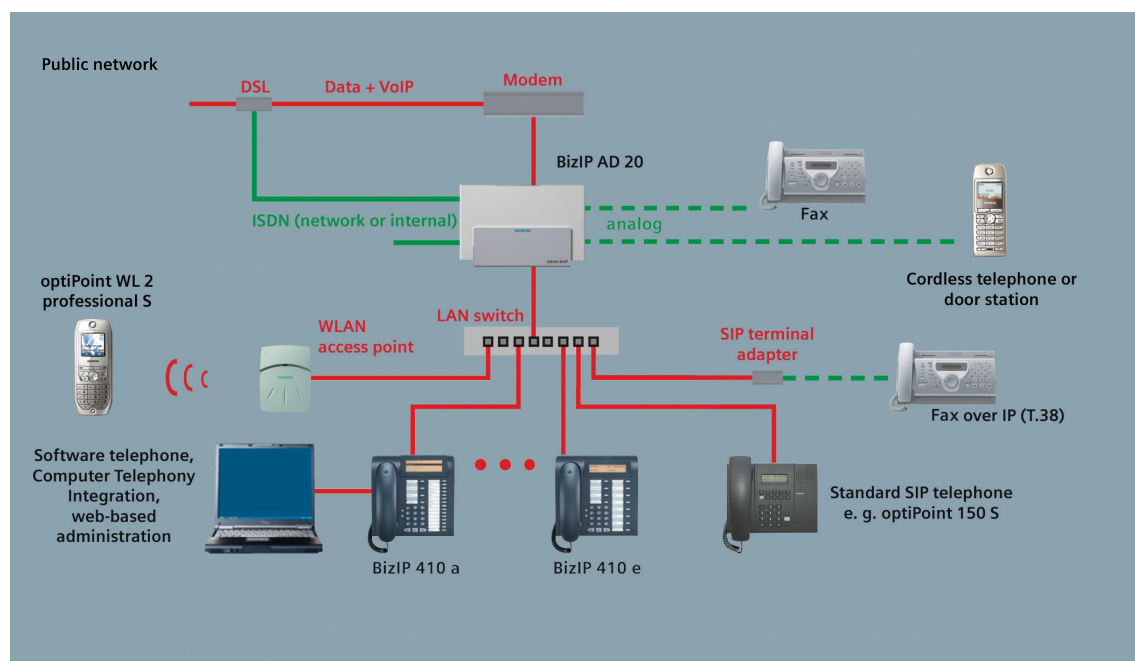
HiPath BizIP – Components

HiPath BizIP is a clearly-structured product concept with optimally aligned components and flexible expansion and accessory options.

BizIP AD 20

This access device handles communication with public voice and data networks. Network connections are simple to administer using the browser-based Installation Assistant.

- Ethernet connection for broadband Internet access (DSL modem)
- Ethernet connection for internal LAN (10/100 Mbit/s)
- 2 ISDN network or subscriber connections (S_0)
- 2 analog subscriber interfaces
- SIP gateway
- Router and stateful firewall

BizIP 410 e

System telephone (in artic or manganese) with interactive user prompting via display and dialog keys.

- Two-line display
- Loudspeaker and headset connection
- 10/100Base-T miniswitch and Power over Ethernet
- 12 programmable function keys with LEDs
- 3 dialog keys: Yes, Back and Continue

BizIP 410 e

Feature telephone, as BizIP 410 e, but also with

- four-line illuminated display
- speakerphone function
- 19 programmable function keys with LEDs
- Can be expanded by adding an optiPoint key module and an optiPoint adapter.

WLAN expansions

HiPath Wireless Standalone Access Point

AP2630 with integrated antenna or AP2640 with external antenna

- 10/100 Mbit/s with PoE (802.3af)
- Optional external power supply
- Wall-mounted installation in buildings

optiPoint WL2 professional S

- WLAN telephone with SIP voice features and menu guidance, large phone book and access to LDAP directory
- Up to 4 hours of talk time
- 50 hours of stand-by time
- 802.11 g/b standard
- Security and encryption based on WEP and WPA

Never miss a call:
Integrated voicemail

This personal mailbox is extremely easy to operate and offers convenient user prompting via display, function keys and dialog keys.

- Up to 20 minutes of recorded voice per BizIP 410 telephone
- Message waiting indication
- Access protection (PIN)
- User prompting (via display and voice)
- Access messages from any telephone
- Callback
- System and personal announcements
- Group mailbox

The automated attendant functionality enables you further improve your availability for customers.

Convenient use of phone from the PC
- Organize your calls on the screen
- Dial by mouse-click
- The "XPhone Entry" software is part of the package

Functional enhancements

Expansion modules, adapters and accessories (headsets, for example) to flexibly customize the equipment to the requirements of the individual employee:

- **optiPoint key module** with 16 additional function keys, LEDs and labelling options
- **optiPoint acoustic adapter** for connecting a headset with call pickup or an external loudspeaker box and desk microphone.
- **optiPoint recorder adapter** for connecting a recording device or a second earphone.

SIP terminals to supplement system phones
- **optiPoint 150 S** the entry-level device for VoIP and teleworkers
- **SIP terminal adapter** for Fax over IP based on T.38 or additional analog telephones

Lightning fast – 3 steps to peer-to-peer telephony

1. Connect BizIP AD 20 to

- DSL modem,
- ISDN connection,
- LAN switch,
- power supply.

2. Connect BizIP 410 telephones to

- LAN switch and
- power supply (unless "Power over Ethernet" is used).
- Enter user names.

3. Enter access data:

- Open the browser on any PC connected to the LAN.
- Enter Internet, VoIP and ISDN data.
- Define call assignment to internal users.

HiPath BizIP – Features

Voice

- Intercept station
- Caller lists
- Call forwarding/call deflect
- Classes of service
- DSS keys with LED and call pickup
- Three-party conference
- Dial-in for external calls via HiPath BizIP
- Group call
- Call hold
- Code für Internet/ISDN, fallback to ISDN
- Speed-dial (individual)
- Microphone on/off
- Night service
- Simultaneous ringing on mobile phone and home office phone
- Consultation hold/toggle
- Station number identification/station number suppression
- Do not disturb
- Internal phonebook (200 entries system-wide)
- Telephone locking
- Transfer
- Join calls
- Redial
- Music on hold
- Call waiting

Data communication

- DHCP server
- Dynamic DNS
- Router for DSL
- Firewall, extended for VoIP
- Quality of Service, Traffic Shaping

Applications

- Personal voice mail
- Automated attendant
- XPhone Entry and TAPI interface for setting up connections from the PC, contact data and lists of unanswered calls
- Evaluation of call data Windows-based program for recording and displaying call data per station.

Wireless infrastructure

The use of HiPath Wireless Standalone access points (AP 2630/2640) guarantees full-coverage voice and data communication with roaming and hand-over for WLAN telephones. Up to 5 WLAN access points can be connected to the LAN to provide coverage in buildings and outside areas.

Technical data

Maximum configuration

- 2 S_0 ports (BRI, network or internal bus)
- Up to 8 simultaneous Internet calls
- 16 peer-to-peer telephones on the LAN
- 2 analog station on the Access Device (fax, entrance telephone or cordless)
- Up to 8 SIP devices

A maximum of 32 devices in total

Network requirements

- LAN 10/100 Mbit/s with LAN switch, optional Power over Ethernet
- DSL modem with LAN interface, recommended bandwidth 32 kBit/s per call with voice compression in accordance with G.729 and 90 kbit/s for G.711
- ISDN connection, system or multi-device interface

Important supported standards

- VoIP:
  RFC 3261 / 3262 / 3265 / 3515 (SIP), RFC 2327 (SDP), RFC 3550 (RTP), RFC 2833 (DTMF/RTP)
- Codecs:
  G.711, G.729, G.723
- Data:
  RFC 2131 (DHCP), RFC 2663 (NAT), RFC 2516 (PPPoE), RFC 2616 (HTTP), RFC 959 (FTP)
- QoS:
  IEEE 802.1P, RFC 1349 (TOS), RFC 2474/ 2475 (DiffServ)

The latest technical information can be found at http://wiki.siemens-enterprise.com/index.php/HiPath_BizIP

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