» IP communications for smaller companies «

HiPath 2000

SIEMENS

» HiPath 2000 –
the separation of voice and
data networks stops here «

Non-voice data networks are a thing of the past. So, if you already
have an efficient IT infrastructure in your company – why not use it
for voice communication as well?

HiPath 2000 enables modern companies to exploit all the advantages of IP communications for voice and data in a single solution. You need only one system and just one network for a variety of communications tasks. Whether Internet access for the networking of PCs with router function, mobile teleworkers, IP telephones or wireless LAN for voice and data – HiPath 2000 is always the right solution.

Less for more

The restriction to just one network means less configuration and service effort and correspondingly lower costs. That makes sense. But even more interesting is how much more HiPath 2000 can offer your company. HiPath 2000 and the wide variety of applications make it possible to optimize your business processes and increase the efficiency and productivity of employees. Thus applications such as integrated voice mail or call distribution are already integrated in the standard product.

Simple mobility, too

HiPath 2000 is also the ideal solution for companies that expect the highest degree of mobility from their communications solution. Mobile workplaces, teleworking or virtual offices? No problem with HiPath 2000. The router technology with VPN and encryption makes access to the office network particularly secure. The assignment of IP telephone numbers facilitates the movement of employees and workplaces. Identification via PIN provides ideal prerequisites for desk sharing.

And the mobility of employees in a company can be increased even further through integration in a WLAN solution. With outstanding voice quality, employees can thus utilize extensive telephony functions independent of their location in the company.

Today and in the future

By using future-oriented software technologies, such as LINUX, or by supporting future SIP-based carrier voice services, HiPath 2000 is currently already well prepared for the communication requirements of tomorrow. Thus HiPath 2000 makes your company fit for the future.

HiPath 2000 – always the right fit!

HiPath 2000 can be utilized as an IP communications system with integrated Internet routing functionality or as an Internet access router with integrated Voice over IP functionality. Just the way your company imagines its communications of the future.

HiPath 2000 – from Siemens, of course

Through a dialog with the customer, Siemens Communications develops innovative communications solutions that set trends and support enterprises in reaching their goals. Perfectly adapted to the most diverse branches and different company sizes and structures. The Real Time IP System HiPath 2000 also offers all the advantages that have made Siemens the leading provider of communications solutions: especially high reliability and protection against failure, combined with the greatest level of

flexibility and performance, along with fantastic compatibility and maximum scalability. Siemens is the only provider of complete solutions consisting of wireless infrastructure, user applications and devices. Only these end-to-end solutions offer a high return on investment, low total cost of ownership, and facilitate smooth implementation. And all this from a single source with the comprehensive portfolio of HiPath Services.

With HiPath Services, Siemens offers a comprehensive portfolio of solutions and services that increase the reliability, availability and security of networks and applications. Additional details can be found at: www.siemens.com/ hipath-services.

» IP telephony – the right solution for your company?

In IP telephony or Communication over IP, the Internet Protocol makes possible voice communication in real-time via the existing data network. The digitized speech is compressed for transfer, put into packages and converted back into the speech format at the recipient's place. Thanks to consistent QoS (Quality of Service), IP telephony offers the full voice quality of a "classic" telephone system, and in addition, it is much safer. Unauthorized access to voice data is prevented via a large number of IT-based safety devices, such as firewalls, encoding protocols and Virtual Private Networks (VPNs).

In today's world, fast, reliable communication is a decisive factor in the efficiency of business processes – and is thus essential to business success. That is why the computer, enterprisewide networking and rapid access to the World Wide Web play an important role in all your work processes. Therefore, if you already have a powerful IT infrastructure in your company – why not use it for voice communication as well? Voice communication via an IT infrastructure: that is IP telephony – the communications solution of the future. And with the innovative communications system HiPath 2000, IP communications gives your company a competitive edge today.

The best IP communications solution you can get

The completely new HiPath 2000 is a pure IP communications system with an open LINUX-based software architecture. It offers companies with up to 30 employees fast, easy access to uniform voice and data communication via the Internet Protocol. It is also integrated perfectly in business processes. With HiPath 2000 companies can utilize a comprehensive range of features and communicate via high-quality devices that are very simple to operate. IP communications with HiPath 2000 provides security, high quality, flexibility and high availability:

- IP telephony uses a variety of security features that are familiar from the IT world, also offering protection of voice communication against hackers and viruses

- To protect communications HiPath 2000 offers maximum security against failure

- Quality of service (QoS) ensures constant high voice quality and always gives voice communication top priority in the hierarchy of data flow

Thus companies do not have to give up anything that characterizes today's TDM telephony, but they can also exploit all the advantages of IP communications.
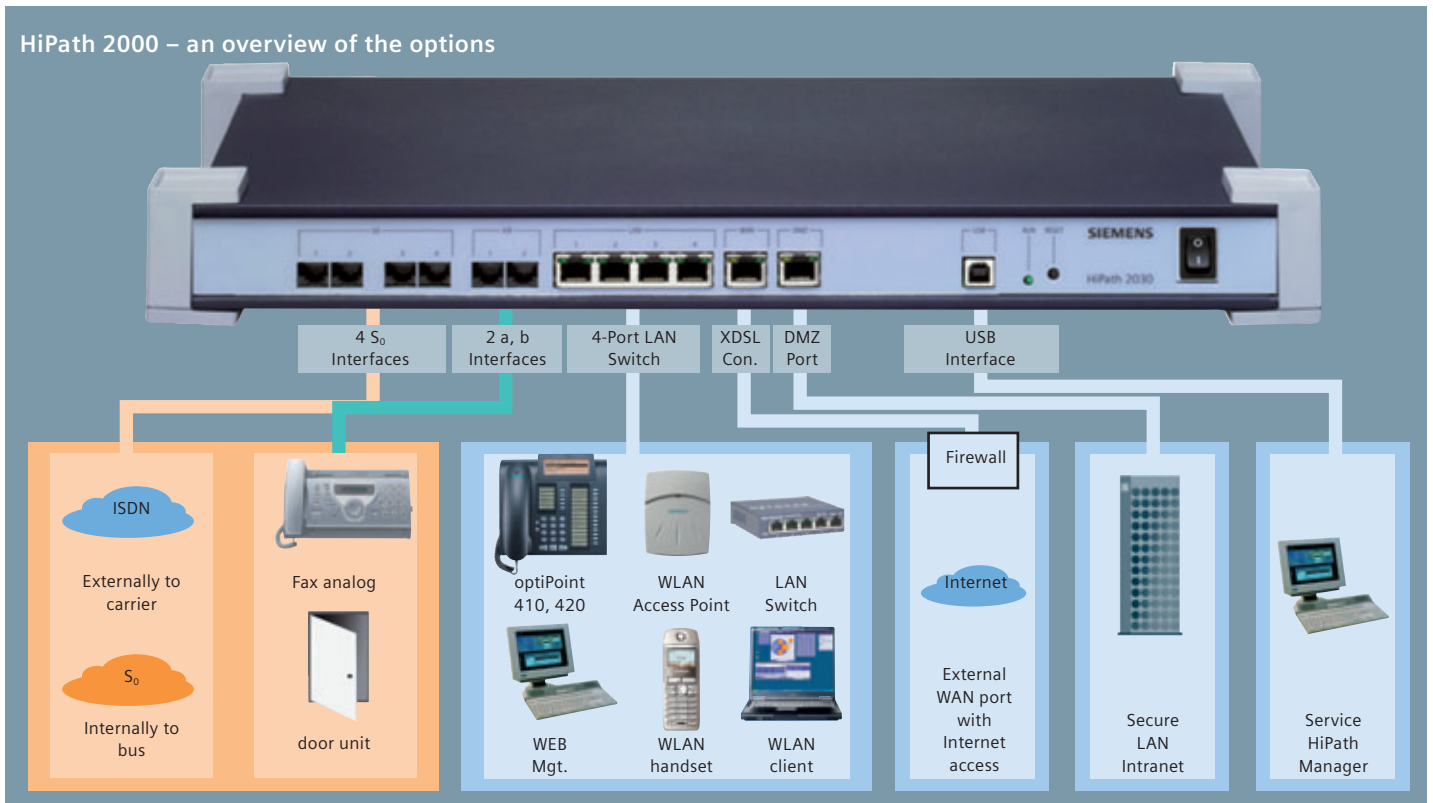
IP communications that pays off for you

The Real Time IP System HiPath 2000 is a clever investment. It is marked not only by low procurement costs, but is also a convincing choice due to its ease of installation and economical operation. Communications processes are simplified; collaboration in cross-locational teams is optimized and accessibility for customers is increased. HiPath 2000 enables companies to exploit the decisive benefits of state-of-the-art IP communications. Today and in the future – because HiPath 2000 is already open for future carrier services as well.

- Low procurement costs, DSL router and gateway are implemented in a single system

- Preinstalled software makes start-up extremely simple

- Low maintenance costs through IP network technology

- Reduced service and administration costs through WEB-based management

- Economical integration in HiPath networks via CorNet IP/SIP

- Secure IP communications through IPSec and VPN

- Flexible expansion via user licenses

- Connection to SIP carrier for affordable Internet telephony

» HiPath 2000 – unlimited possibilities «

HiPath 2000 – an overview of the options

4 S$_0$ Interfaces	2 a, b Interfaces	4-Port LAN Switch	XDSL Con.	DMZ Port	USB Interface

- ISDN — Externally to carrier
- S$_0$ — Internally to bus
- Fax analog
- door unit
- optiPoint 410, 420
- WLAN Access Point
- LAN Switch
- WEB Mgt.
- WLAN handset
- WLAN client
- Firewall
- Internet — External WAN port with Internet access
- Secure LAN Intranet
- Service HiPath Manager

HiPath ComScendo – world class features

As a software suite, HiPath ComScendo provides the most extensive range of voice communication features for both the real-time IP system HiPath 2000 and the telephones. And it does so independent of which end device is being used – whether at a fixed workplace (telephone, PC) or mobile (handset, notebook, PDA). In either case, the appropriate software components are set up automatically. Selected HiPath ComScendo features:

- Absentee text messages
- Announcement/message facility
- Automatic redial (expanded)
- Authorization classes
- Call cost logging (external reporting as option)

- Call destination & call source display in the event of call diversion and call pick up.
- Call forwarding – no answer after time-out; immediately if busy
- Call forwarding from the extension
- Call intercept
- Call number suppression
- Call pickup
- Call signaling
- Call transfer (internal/external)
- Callback facility from public network provider
- Callback on busy and no answer (automatic)
- Caller list
- Camp-on/call waiting tone
- Conference (internal/external)
- Consultation
- Display languages (can be specified individually)
- Do not disturb/"silent call"
- Door intercom and lock function

- External music source (optional)
- Group call
- Hunt group (linear/cyclic)
- Integrated Voicemail (HiPath 2030)
- Intercept position/switchboard tannoy
- Internal texts to feature handset
- Line keys
- Line seizure (automatic)
- Lock telephone (individual code)
- Music on hold with system announcement (standard/individual)
- Night service/day service
- Parking
- Project code
- Recall
- Speed dialing (individual/central)
- Telephone book, central in system
- Telephone book, internal
- Text messages, internal
- Toggling

HiPath 2000 V1.0 – technical data

HiPath 2030
- Up to 4 S_0 interfaces (ISDN)
- Up to 30 IP workpoints
- 2 analog ports
- 4-port LAN switch
- DMZ access
- External WLAN solution
- Integrated voicemail module with up to 24 boxes

HiPath 2020
- Up to 2 S_0 interfaces (ISDN)
- Up to 20 IP workpoints
- 4-port LAN switch
- DMZ access
- External WLAN solution

》 **Always accessible: integrated voicemail**

If no one happens to be at a particular extension, thanks to the integrated voicemail, no calls are lost. Many convenient features optimize accessibility:
- Up to 24 individual mailboxes
- Up to 2 hours of recording capacity
- Adjustable recording length
- Selection from 2 personal greetings

And with the automatic attendant function "Auto Attendant," callers can be connected to another number if desired, for example, when the phone is busy. Simple and convenient.

Complete IP functions in a single system

DSL Router Function: Multiple users in data traffic thus gain access to the Internet and incoming data is distributed to the addressee (DHCP, NAT/NAPT).

Gatekeeper: Registration of all IP devices (telephone, PC, client) to protect against unauthorized access.

Gateway: TDM-based protocol for transmission to the internal analog end devices or to the telephone network and vice versa.

Firewall: Permits access to specific IP/port addresses to protect the company's voice and data network from outside.

Desk Sharing Mobility: By entering a mobile PIN, employees can use individual telephone settings to log on to the desired workplace.

Virtual Private Network (VPN): IPSec encryption and authentication secure a corporate network that covers multiple locations. Remote LAN access integrates external telephones or sites in the system and gives them the ability to use the voice features. Company data exchanged via the Internet remains confidential.

CorNet IP: The IP-based protocol for signaling and voice provides voice features to LAN users.

Session Initiation Protocol (SIP): The standard protocol for IP telephony, which is based on the architecture of popular Internet applications.

Quality of Service (QoS): In the IP network, voice communication is always given priority to ensure that voice arrives without delay and without any loss in quality.

Codecs: Voice data is compressed and decompressed in IP using the standard G.711/723//729.

» HiPath 2000 – the perfect supplement with applications and end devices «

HiPath applications

Whether CTI applications, cordless solutions, unified messaging or call center – a selection of many optional applications for HiPath 2000.

Would you like to accelerate communications processes? A powerful CTI client for the desktop saves work time and accelerates communications processes by integrating telephone and PC. You simply select from address databases or from lists of missed or completed calls.

Would you like to make multimedia communication more efficient? Increase the efficiency of every user through individual control of multimedia communication directly via the Web browser. No matter whether it is voice or e-mail communication.

Do you need cost transparency and IP accounting? In addition to determining the costs of all communications services (telephone, fax, Internet), it is also possible to do an analysis by extension, trunk line or department. A LAN interface is used to transmit the communications data directly to a central server.

Do you need a professional call switching system? The optiPoint models can be expanded to include a busy lamp field, which provides a convenient overview of the status of all connections. For the optiClient, it is possible to emulate a convenient attendant console on the PC, which can be used to carry out all functions conveniently via keyboard and mouse.

optiPoint 410 standard

An especially flexible IP phone with maximum adaptability, and exceptionally high voice quality thanks to G.722 broadband codec technology. Features can be updated simply via software downloads.

Further models:
optiPoint 410 entry
optiPoint 410 economy
optiPoint 410 economy plus
optiPoint 410 advance

optiPoint 420 advance

Ideal for desk sharing and flexible office environments. Thanks to new, innovative technology for automatic transfer of key presets and labeling, users can access their own key presets from every optiPoint 420.

Further models:
optiPoint 420 economy
optiPoint 420 economy plus
optiPoint 420 standard

❯❯ Comprehensive security – simple administration

HiPath SIcurity. With HiPath SIcurity, Siemens offers complete security systems from a single source: analysis and consulting, network and system security, secure access through SmartCard-based solutions and protection of your resources by means of identity and access management. Solution packages developed on the basis of typical requirements profiles can be adapted flexibly to specific needs. That cuts costs and provides you with the security that all solution components harmonize perfectly with one another.

HiPath MetaManagement. HiPath MetaManagement is the comprehensive, cross-system management solution for uniform administration of networks consisting of HiPath Real Time IP Systems, applications and standards-based third-party-provider products.

optiClient 130

Telephony via PC offers many advantages: no telephone taking up space on your desk; you can work anywhere – whether you are in the office or on the road – with the same familiar user interface.

optiPoint WL2 professional

This convenient WLAN telephone also makes the full range of features available in the company on a mobile basis. With up to 4 hours of calling time and up to 80 hours of standby time.

optiPocket

All the optiClient functions are also offered by optiPocket for PDAs. It is the ideal application for mobility solutions and offers access to all HiPath features via HiPath ComScendo.

Your success is the focus of everything we do at **Siemens Communications**. We work together with you to develop powerful communication solutions that help you achieve your business goals. Take advantage of our proven experience, innovation power and implementation skills in all key areas of voice and data communication.

As a leading provider of communication solutions for mobile, fixed and enterprise networks worldwide, we constantly strive to make communication easier and more efficient. Thus we are setting the trends for a communication environment that fosters your success – today and in the future.

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