

### **SIEMENS**

Global network of innovation

HiPath 2000 – New drive through IP communication.

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## HiPath 2000 – Voiceless data networks came first.

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 communication solution of the future. And with the innovative communication system HiPath 2000, IP communication gives your company a competitive edge today.

## HiPath 2000 – the best IP communication 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 communication 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 give 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.

## HiPath 2000 – IP communication 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 communication. 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 (plug & play)
- Low maintenance costs through IP network technology
- Reduced service and administration costs through WEB-based management
- Secure IP communication through IPSec and VPN
- Flexible expansion via user licenses
- Economical integration in HiPath networks via CorNet IP/SIP

#### HiPath 2000 - Naturally from Siemens.

Of course, the Real Time IP System HiPath 2000 offers you all the advantages that have made Siemens the leading provider of communications solutions. Especially high reliability and protection against failure, combined with the highest degree of flexibility and the highest level of performance - plus outstanding compatibility and maximum scalability. Siemens is the only provider of complete solutions consisting of the wireless infrastructure, user applications and end devices. Only these end-to-end solutions offer a high return on investment, low total cost of ownership and permit smooth implementation and conversion. And all this from a single source with the comprehensive portfolio of HiPath services.

#### HiPath – Total business communications.

The development of comprehensive, innovative and future-proof solution concepts for all industrial areas – that is our goal. A noticeable increase in your effectiveness and productivity – that is our promise.

### IP telephony – The right solution for your company.

With IP telephony or communication over IP, existing data networks are also used for voice communication on the basis of the Internet Protocol (IP). The Internet Protocol permits simultaneous voice and data transmission in real time. The digitized voice signal is compressed for transmission, arranged in packets and then converted back into the voice format at the receiving end. There is no longer a need for a separate network for voice communication. And the associated costs for installation.

Because of its consistent QoS (quality of service), IP telephony offers the full voice quality of a "classic" telephone system; and it is much more secure. Impermissible access to voice data is prevented by a variety of IP-based security features, such as firewalls, encryption protocols and virtual private networks (VPN).

Thanks to IP telephony, calls among employees – even at different corporate sites – can be routed via the corporate network and are thus free of charge. But it is not only internal call costs that can be cut by IP telephony; many external long-distance calls can also be made at the local call rate thanks to least-cost routing. This method routes the voice call within the WAN to the corporate site that is geographically closest to the party being called.

The integration of voice in the IP network opens up completely new options for telephony. Thanks to the standard-based approach, the telephone fuses with applications on PCs, servers or in the Internet and Intranet. This link to existing business processes creates a communications environment that requires just one single IP infrastructure but is available to employees using a wide variety of end devices. For users this greatly simplifies the use of previously separate communications channels.

IP telephony offers many advantages and, with HiPath 2000, is a secure investment in the future.



#### HiPath 2000 - 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 what 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.

HiPath 2000 - Simple mobility, too.

HiPath 2000 is also the ideal solution for companies that expect the greatest possible mobility from their communications solution. Mobile workplaces, teleworking, or virtual offices? No problem with HiPath 2000, because the IP phone numbers make employees independent of place. The router technology with VPN and encryption ensure that access to the office network is particularly secure. The plug & play functiona-

lity simplifies moving employees and workplaces and also facilitates 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.

HiPath 2000 – 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.

## Always accessible: Integrated voice mail.

If no one answers an extension, the integrated voice mail function ensures that no call is lost. Many convenient features optimize accessibility:

- Up to 24 individual mailboxes
- 2 hours of recording capacity
- Up to a length of one minute each
- 2 personal greetings to choose from And with the automatic switching function Auto Attendant, callers can be connected to another extension if desired when a number is busy. Simply and conveniently.

## HiPath applications – A perfect match.

Together with the Real Time IP System HiPath 2000, the numerous applications offer a custom-tailored communications solution. The system permits direct access to applications that are stored on a central Windows server.

## You need faster communications processes?

HiPath SimplyPhone, the powerful CTI client for the desktop, saves work time and accelerates communications processes by integrating telephone and PC. You simply select missed or completed calls from address databases or lists. HiPath SimplyPhone for Outlook/Lotus Notes is the integrated solution for existing contact and scheduling software.

### You want to make multimedia communication more efficient?

HiPath ComAssistant increases the efficiency of every user through individual control of multimedia communications directly via the Web browser. No matter whether it is voice or e-mail communication.

### You want cost transparency and IP accounting?

Teledata Office is used to determine the costs of all communications services (phone, fax, Internet) and provides for a breakdown by extension, trunk line, or department. A LAN interface makes it possible to transmit the communications data directly to a central server for analysis.

#### You need professional call distribution?

optiPoint attendant expands optiPoint 410, optiPoint 420 and optiPoint 600 by adding a busy lamp field, thus providing a convenient overview of the status of all connections. optiClient attendant is the simulation of a convenient attendant console on the PC. All the functions can be executed conveniently using keyboard and mouse.

# optiPoint devices – Always the right connection.



# HiPath 2000 V1.0 – Technical data.

#### HiPath 2030

- Up to 4 S<sub>0</sub> 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<sub>0</sub> interfaces (ISDN)
- Up to 20 IP workpoints
- 4-port LAN switch
- DMZ access
- External WLAN solution



## HiPath 200 Configurati

#### optiPoint 410 and optiPoint 420 family.

The especially flexible optiPoint IP telephony offers maximum adaptability and extraordinarily high voice quality thanks to G.711, G.729 and G.723 broadband codec technology for every need. If desired with automatic transfer of key assignments and labels.



#### optiClient 130.

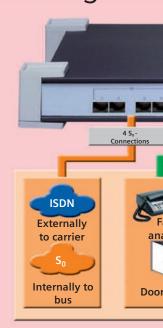
Telephony via the PC offers many advantages: no telephone takes up space on your desk and you are able to work with the same familiar user interface anywhere – whether in the office or on the go.

#### optiPocket.

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

#### Gigaset WL2 professional.

The convenient WLAN telephone also provides the full range of features in the company on a mobile basis. With up to 4 hours of speaking time and up to 80 hours of stand-by time.



## HiPath 2000 –

## 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:** Conversion of IP data packets for signaling and voice data to a 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

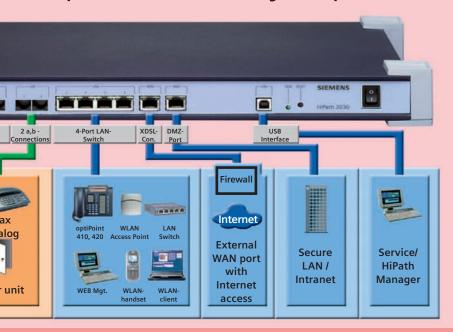
**Session Initiation Protocol (SIP):** The standard protocol for IP telephony, which is based on the architecture of popular Internet applications.

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.



# on options for every requirement.



# HiPath Services – A single source.

With HiPath Services, Siemens offers a comprehensive portfolio of solutions and services, which increase the reliability, availability and security of networks and applications – from consulting to integration to services for operation and outtasking – to make sure that business processes run smoothly – any time, any place.

**HiPath Professional Services** ensure optimal integration of applications and business processes through solution-based consulting, system integration and complex adaptation services.

**HiPath Lifecycle Services** offer end-to-end assistance from implementation to ongoing support. This ensures the availability and security of the communications network with all its applications.

**HiPath Managed Services** also offer outtasking, if desired, for complete communications management – to provide increased availability of the communications infrastructure and to reduce overall costs.



## HiPath 2000 – World class features.

As a software suite, HiPath ComScendo provides the most comprehensive voice communication features both for the real-time IP system HiPath 2000 and for telephones. And it does so regardless of whether they are being used via IP phones, TDM phones, or PC clients. In each case, the appropriate software components are set up automatically. Thanks to its scalability, HiPath ComScendo can be adapted optimally to the various communications needs of companies.

#### **Selected HiPath ComScendo features:**

- Absentee text messages
- Announcement/message facility
- Automatic redial (expanded)
- Authorization classes
- Call cost logging
- Call destination & call source display in the event of call diversion and call pick up.
- Call forwarding no answer after timeout; 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
- Intercept position/switchboard tannoy
- Internal texts to feature handset
- Line keys
- Line seizure (automatic)
- Lock telephone (individual code)
- Music on hold with system announcement
- Night service/ Day service
- Parking
- Project Code
- Recall
- Speed dialing (individual/central)
- Switches (actuators/sensors)
- Telephone book, central
- Telephone book, internal
- Text messages
- Toggling

## Our strengths – your gain.

The real-time IP System HiPath 2000 offers modern mid-sized companies the perfect IP communications solution for up to 30 users. HiPath 2000 offers convincingly reliable voice communication and fast, simple access

to uniform voice and data communication, which is fully integrated in companies' day-to-day business processes. A wide variety of applications and state-of-the-art end devices round out the solution portfolio.

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Siemens Communications is one of the world's largest players in the telecommunications industry, active in more than 160 countries. Unique in global comparison, Siemens Communications consolidates experience and competence in every key market segment – devices for consumers as well as complex network infrastructures, solution packages or applications for enterprises and network operators. In addition to its hardware and software portfolio, Siemens Communications offers comprehensive service along the entire value chain. For each and every customer, anytime, from A to Z.

On this basis Siemens Communications is developing solutions for tomorrow's communication. The road to the future has a name: LifeWorks, an innovative concept aiming at making communication easier and more effective. Both in business and private life, for every network and every device. To concentrate on what's important for our customers, that's what LifeWorks and Siemens Communications stand for.

More information about Siemens Communications at http://www.siemens.com/communications

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Order No. A50001-N14-W171-1-7600

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Printed in Germany.

EN\_246 WS 090510.