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Global network of innovation

HiPath 3000 and HiPath 5000 – networked communications solutions for medium-sized companies.

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Secure, flexible and cost-effective - Networking solutions with HiPath 3000 and HiPath 5000.

The HiPath 3000 and HiPath 5000 Real Time IP Systems are the tailor-made communications solutions for medium-sized companies. Through unequalled flexibility, performance and resilience, HiPath 3000 can be used in several scenarios together with HiPath 5000 within distributed networks. One thing is certain - HiPath always fits.

Return on Investment (ROI).
The decision for a new communications solution is also always a matter of money. Costs for administration and maintenance can be reduced via centrally managed and distributed applications. The use of standard components means less effort on integration and lower infrastructure costs for new installations - and not only today. The innovative products from HiPath are already prepared for the demands of tomorrow. **That's what Siemens calls investment protection.**

Compatibility and scalability.
The HiPath 3000 and HiPath 5000 Real Time IP Systems offer you the highest level of flexibility and performance. Thanks to Siemens' migration strategy, existing communications solutions can be integrated as desired step-by-step, making it extremely cost-effective. It's also easy to expand the Real Time IP Systems to include innovative services, such as Presence and Instant Messaging.
That's what Siemens calls made-to-measure.

Market-leading resilience.
The HiPath 3000 and HiPath 5000 Real Time IP Systems offer a particularly high level of reliability and outage security. All components are perfectly aligned.
That's what Siemens calls reliability.

HiPath always offers the perfect Real Time IP System for medium-sized companies and branch office solutions. All employees have full access to all **HiPath ComScendo** features via their phones or clients - whether they are at headquarters, a branch office or a teleworker workstation. **Quality of Service (QoS)** makes sure that real time communication receives precedence - thus guaranteeing application performance and prioritizing voice communication. With Siemens, you have many years of experience and practice in real time communications at your disposal. Only we offer such a comprehensive portfolio of innovative Real Time IP Systems, flexible applications and high performance workpoints and clients. **Decide now for a networked communications solution from Siemens.**

Performance on demand - HiPath applications.

Alongside the Real Time IP Systems, the wide range of applications facilitates a unified, yet tailor-made communications solution. This is made simple and cost-effective through access to the central Windows server. Be it a demanding call center solution or innovative unified messaging function - with HiPath applications, you are always able to set up your communications system to suit precisely your requirements.

HiPath SimplyPhone, the powerful CTI client for the desktop saves time through the integration of phone and PC, and accelerates communications processes. Opt for HiPath SimplyPhone for Web as a server-supported application with central directory and easy-to-use menu, for use via web browser or WAP. Or use HiPath SimplyPhone for Outlook/Lotus Notes as an integrated solution for existing contact and appointment management software.

HiPath ComAssistant improves the efficiency of each user through the individual control of multimedia communication, be it voice or e-mail communication. Wide-reaching features such as Click&Dial, call reporting, incoming communication filtering, LDAP address book search and one number service optimize working processes, regardless of where you are.

HiPath Xpressions is the modular and flexible unified messaging application for pure voicemail functions, e-mail messages, fax transmission and SMS all the way through to CTI functions. All services are brought together in one mailbox and can be called up from any location.

HiPath ProCenter is the range of applications for professional and economical call center software solutions and innovative customer relationship management.
The eCRM application integrates internet, e-business and mobile business, as well as fax, thus optimizing customer service and maximizing customer loyalty. And all of this comes with increased profitability.

Have you ever considered a networked communications solution?

Markets change. And you want to prepare your company as best as possible. Perhaps even across several locations. You would like to expand regional branch offices, or improve connections with external service providers? You work non-centrally with mobile field operatives or have outsourced tasks to teleworkers? You're looking for a communications solution that can be adapted to fit perfectly to your requirements and that also has the flexibility to meet future demands - making it particularly cost-effective? If this is the case, then the networked communications solutions from HiPath are the right choice.

A networked solution combines several communications systems and shares identical features, services and applications. Be it diverse locations, branch offices or the integration of external representatives, networking makes communications processes simple - faster, more transparent, more consistent and more cost-effective.

Independent of their current working location, employees are always reachable on one single number. This central communications entry point ensures that the company maintains consistent and unified outward representation. Networking makes working and business processes more efficient, in that all users share the same base of information. Groups can be defined and teams pulled together. It improves teamwork across locations, increases availability and reduces communications costs.

Even employees outside the company premises are connected seamlessly to the communications network. Mobile workers have access to the same functions and data as they would from within the company, independent of their current location - be they external representatives or management. And this applies worldwide. The use of data lines for voice transmission significantly reduces communications costs for teleworkers.

Tailor-made for your company - HiPath solutions.

Scenario 1: Teleworkers.
The starting point:
A medium-sized company from the automotive supplier sector installs a Siemens call center solution for contract handling, supported by an Integration Unified Messaging Service (UMS). A HiPath 3000 Real Time IP System is already in place at one location.

The task:
The company would like to outsource part of its call center to remote workstations. The homeworkers need an efficient, powerful and flexible solution with the same features and functionalities as for the office. The remote workstations have access to the internet via either an ISDN or DSL connection.

The solution:
Use of the HiPath 3000 Real Time IP System and installation of optiClient 130. Homeworkers or mobile employees in the field can be reached on one single phone number. Employees are connected to the Real Time IP System via ISDN or DSL.

Scenario 2: Small office or team.
The starting point:
A multimedia advertising agency currently works from one location in small teams. A Siemens unified messaging solution is installed in order to centralize all incoming calls and customer contacts. A HiPath 3000 Real Time IP System is already in place.

The task:
The number of employees is set to grow thanks to the arrival of additional contracts. However, current facilities are too small. Therefore small project teams of 3-4 employees will be formed in two new off-site locations. A best-cost solution is required that can be realized without the need for further Real Time IP Systems.

The solution:
Use of the HiPath 3000 Real Time IP System and installation of optiPoint phones and optiClient 130. The connection to the HiPath 3000 Real Time IP System at company headquarters is made directly via IP (xDSL).

Scenario 3: Medium-sized branch offices.
The starting point:
A medium-sized industrial company currently has only one location and owns a HiPath 3000 Real Time IP System with a call center and an Integration Unified Messaging Service (UMS).

The task:
The company wants to grow its presence within its home country at several separate locations. Data/voice communication must be unified and centrally administered. Existing applications should continue to be used. A local PSTN access at each location is desired.

The solution:
Installation of a further HiPath 3000 Real Time IP System in each of the branch offices with individual local public network access. Networking with company headquarters occurs via IP. Centrally administered applications, such as unified messaging, call centers, fault and accounting management and presence management, can all be accessed.

TELEWORKER

optiClient 130

HEADOFFICE

HiPath 3000

central administration

central switching

appli-cations

IP Company network

workpoints

workpoints

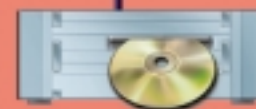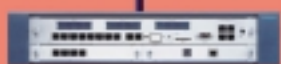# TEAM

workpoints

HiPath 5000

- Feature Server
- Presence Manager
- Personal Call Manager
- Central administration
- Application interfaces

HiPath 3000

BRANCH

Always the right connection - types of networking.

HiPath offers you two alternative networking options - always suited to your physical structures and your requirements. Be it a single installation or complex branch concept with central and sub-locations, HiPath offers the right communications solution. Convenient, economical and future-proof.

Digital networking:
Company communications networks can be realized between several HiPath Real Time IP Systems via digital public lines or internal lines. Networking between HiPath Real Time IP Systems and third party systems is carried out using the Q.SIG protocol. This way, the systems are connected with each other using public and/or private lines.

IP networking:
The HiPath 3000 Real Time IP System offers the possibility to network several locations with up to 32 nodes and 500 users per node - and up to 1,000 users in the whole network - via TCP/IP-based data lines. The use of DSL via VPN reduces communications costs and thus makes networking particularly economical.

HiPath ComScendo networking features:
- Authorization
- Call back on free/busy
- Call divert
- Call divert when free or busy
- Call intercept
- Call number and/or name suppression
- Call number display
  (caller, connected user)
- Central BLF signaling for optiClient attendant
- Conference
- CorNet N base procedures
- Cost transfer
- Hold/callback/consult
- Message waiting indication
- Name display
  (caller, connected/busy user)
- Transfer before and after answer

Simple administration.
Perfect service.

HiPath MetaManagement.
HiPath MetaManagement is the comprehensive and far-reaching management solution for the unified administration of networks made up from HiPath Real Time IP Systems and server-based applications. It enables powerful, fully scalable network management across the entire network area. This ensures maximum availability for your resources, enables central monitoring of all network components and simultaneously reduces communications and administration costs.

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 - from consulting and integration through operational services. It ensures that all business processes run smoothly - regardless of time and place.

Professional Services ensure optimum integration of applications and business processes with solution-oriented consulting, system integration and complex adaptation services.

Lifecycle Services offer comprehensive assistance from implementation through ongoing support. This guarantees the availability and security of the communications network with all applications.

Managed Services take over, if desired, total communications management - for increased availability of the communications infrastructure and reduced overall costs.

At a glance - the technical data:*

Interfaces:
- S_0 base connection with DSS1 protocol
  - System connection
  - Multiple equipment connection
- S_{2M} primary multiplex connection with DSS1
- 2 Ethernet interfaces:
  - 10/100 Mbit/s
  - 10/100 Mbit/s (DSL with PPPoE/PPTP)

Protocols:
- Voice Coding:
  - G.711 (64 kBit/s - MOS 4.4)
  - G.723.1 (5.3–6.3 kBit/s - MOS 3.9)
  - G.729A (8kBit/s - MOS 4.2)
  - G.729 AB (8kBit/s / VAD)
- Point to point protocols:
  - PPP / PPP multilink static only / voice over PPP
  - PPoE
  - PPTP
- Remote Access:
  - Analog V.34
  - Analog V 90
  - GSM V.110 bitrate adaption
  - ISDN

Quality of Service:
- Quality of Service layer 2
  - IEEE 802.1p
- Quality of Service layer 3
  - Type of Service (ToS) / IP precedence
  - DiffServ

Access control / firewall / further security functions / miscellaneous:
- Call back for registered numbers (RAS)
- PAP
- CHAP
- MS-CHAP V1
- NAT / NAPT
- MAC address filtering
- IP address filtering
- Port filtering
- IP mapping
- RAS for initial operation V.34/V.90
- PPP compression MPPC/STAC
- Static and dynamic bandwidth management

* HiPath 3000 V4.0 and HiPath 5000 V4.0

Our strengths – your gain.

Networked communication optimizes work-ing and business processes, regardless of the structure of your company. Disparate locations, teleworkers or branch operations can be integrated simply and cost-effective-ly into HiPath Real Time IP Systems. Features are then available to all employees - regard-less of where they happen to be within your company. And, through the large choice of applications and terminals, the communica-tions solution can be adapted to suite your requirements perfectly.

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Siemens Information and Communication Networks is a leading supplier of networks and real-time applications for enterprises and network operators. Over one million customers in more than 160 countries trust our solutions. Our global footprint and our expertise in voice and IP communication enable us to deliver turnkey network solu-tions of any scale and complexity through-out the world.

LifeWorks
With LifeWorks, the communication of the future starts today. Innovative applications can be delivered over any network and to any communication device in a user-friendly and efficient way. LifeWorks leverages the potential of Next Generation Networks for network operators, companies and users.

Next Generation Networks
Next Generation Networks deliver voice, da-ta and video applications over one network. Network operators can now increase prof-itability by generating new revenue streams at a lower cost. Enterprises are able to boost productivity by integrating our communica-tion solutions into their business processes. End users enjoy the benefits of new voice/data applications.

Siemens Information and Communication Networks supplies everything you need for a smooth and profitable migration from existing networks to Next Generation Networks:
- **Real Time Communications**
- **Next Generation Switching**
- **Next Generation Access**
- **Next Generation Optics**

Comprehensive Services
We offer our customers comprehensive services for the whole value chain. Our worldwide presence also allows us to ad-dress customers' needs at a local level.

Your Partner for Profitable Networks
Siemens Information and Communication Networks has extensive knowledge in the areas of carrier and enterprise networks. We exploit this expertise to further realize our vision of a seamless network extend-ing from the global carrier down to the in-dividual customer. As your partner, we of-fer innovative solutions that deliver fast return on investment, boost productivity, and help you explore new business oppor-tunities. Your continuing success is our priority.
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