



HiPath 5000

The Real Time IP System with HiPath 5000 RSM and the Survivable Media Gateway HiPath 3000

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Global network of innovation

HiPath 5000 is an IP communications platform and key part of the Siemens HiPath strategy. It features an IP distributed architecture to integrate voice into data networks and to combine the best of packet- and circuit-switched technology.

HiPath 5000 Real Time Services Manager (RSM) is the central IP networking server. The CD shippable software operates on an industry standard Windows 2000 server and delivers new capabilities including single point of administration for multi gateway systems, central application interfaces and network wide telephony features.

1000 users distributed over up to 32 locations can be networked providing full HiPath ComScendo feature set. Central applications are supported via open interfaces, which makes them available to all Workpoint Clients – IP phones, soft clients and digital system phones.

HiPath 5000 Real Time IP System unites the capabilities of HiPath 5000 RSM with the flexibility and performance of the HiPath 3000 as a Survivable Media Gateway (SMG), leveraging a broad array of device and trunk type support. Remote sites can be equipped with a dedicated HiPath 3000 to provide call processing and local PSTN access. The gateway is fully survivable in case of corporate-network disruption allowing Workpoint Clients to continue telephony tasks.

HiPath 5000 Real Time IP System Key-offerings:

- Mix and match of Workpoint Clients, hard- or soft-phone, IP or TDM
- Distributed IP telephony system with network wide telephony features
- Survivable Gateways with central administration
- Central application concept delivered to all workpoints
- Common feature set for all Workpoint Clients with HiPath ComScendo

Workpoint Client Family

The wide range of IP and TDM Workpoint Clients offer an interactive multi language user interface.

IP Workpoint Clients

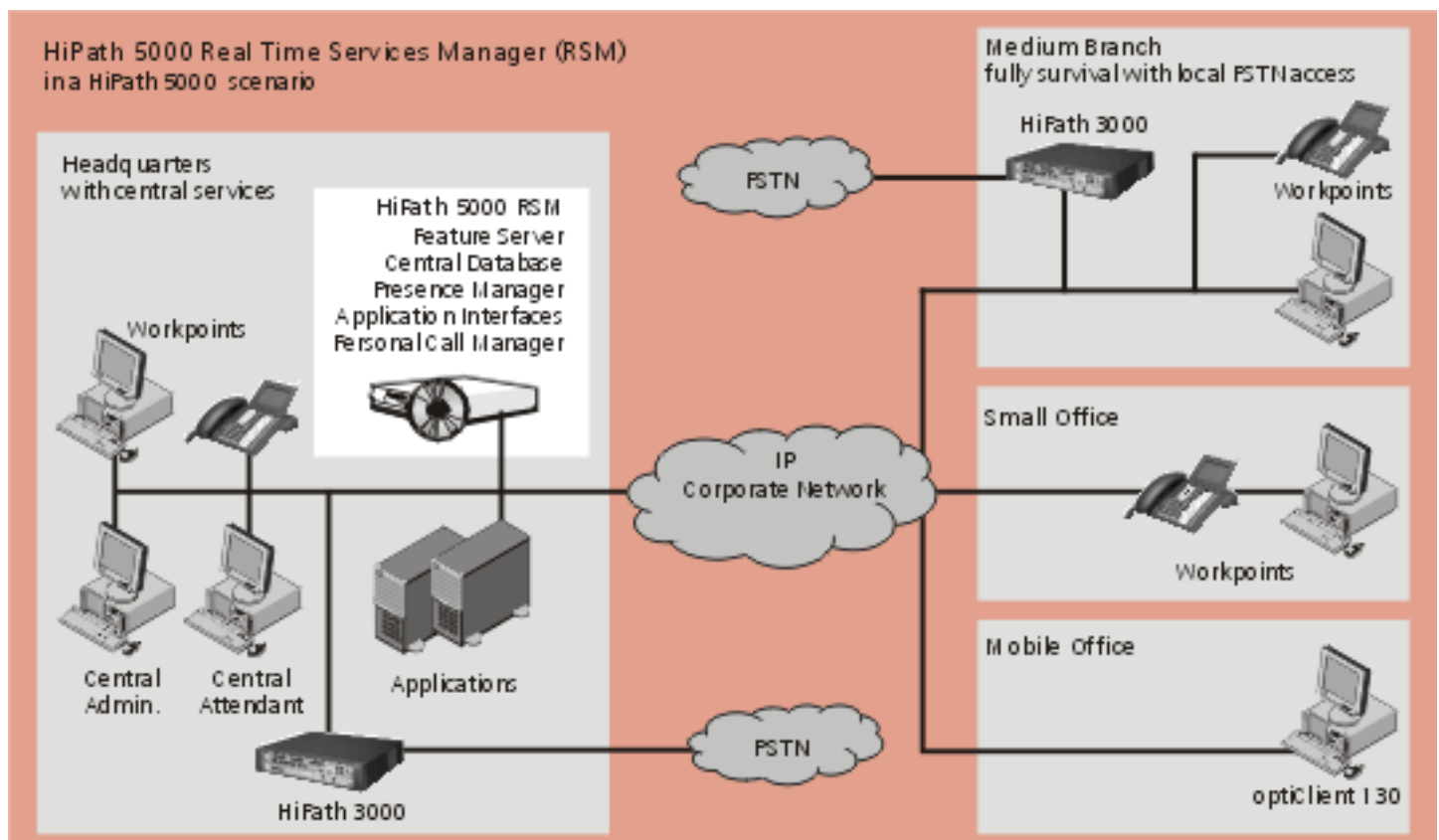
- optiClient 130 V4.0
IP soft client delivers telephone functionality to a standard PC
- optiPoint 400 economy V3.0
Terminal for pure IP telephony
- optiPoint 400 standard V3.0
Professional IP phone
- optiPoint 600 office V1.0
Dual mode (IP & TDM) telephone with touch screen
- optiClient Attendant V6.0
Central attendant console

TDM Workpoints

- optiPoint 500
Digital phones with easy operation
- optiset E telephones
Installed base digital phones
- Cordless phones
Integrated cordless multi-cell solution (country specific)

IP Analog Adapter

- HiPath AP 1100 V3.0
(1 port analog adapter for fax and modems)



HiPath 5000 Real Time Services Manager

IP enables distribution of communications elements with ease and economy. However, real-time communication requires specialized technologies that tie all network elements together as. HiPath 5000 RSM serves this function across the communications network – and ultimately to the broader array of Workpoints, Applications, and Gateways in the enterprise.

Delivered on a CD, HiPath 5000 RSM can be installed on industry standard Windows 2000 servers. It provides new capabilities including single point of administration for multi gateway systems, central application interfaces and network wide telephony features.

HiPath 5000 RSM offers:

- Central Feature Server
 - Real-time Telephony Presence Manager for all workpoints
- Personal Call Manager
 - Configuration of individual call processing via Web browser for all users
- Central Administration support
 - Database synchronization for all HiPath 3000
 - Customer administration program
- Central Accounting support
- Central Application Interfaces
 - 1st and 3rd party TAPI 3.0

HiPath 5000 RSM supports:

- Up to 1000 telephony users
- Network wide telephony features for up to 32 HiPath 3000 SMG nodes
- Multiple applications on stand-alone servers via remote Mikrosoft® TSP

HiPath 3000 V4.0

For more Details see:
HiPath 3000 Real Time IP System data sheet

HiPath 3000 has evolved into a Survivable Media Gateway (SMG) with a broad array of device and trunk types. The HiPath 3000 SMG also retains its circuit-switched capabilities for trunking to provide alternate and backup routing choices. Full support of digital and analogue devices allows integrating traditional TDM equipment without drawbacks. There are three models offered as 19" rack mounted cabinets. Remote sites can be equipped with a HiPath 3000 SMG to provide call processing and local PSTN access. The gateway is fully survivable even in case of corporate-network disruption allowing workpoint clients to continue telephony tasks with their local gateway.

HiPath 3000 offers:

- HiPath HG1500 V2.0 card
 - Embedded gatekeeper
 - Router with firewall functionality
 - SNMP support
- Up to 248 trunks *
- Up to 500 registered workpoints*
- IP/PSTN least cost routing and PSTN fall back
- Ad-Hoc-Conferencing through fully integrated conference unit

Support of traditional trunk types:

- S₀-BRI, S₁/S_{2M}-PRI
- S_{0FV}, S_{2MFV} With CorNet N; QSig protocol (project specific)
- E&M interface (HiPath 37xx only);
- HKZ/DID analog trunk connection (HiPath 37xx only)
- DSS1 Euro-ISDN support

* Number depends on the number of configured users, call center agents, attendant consoles, etc.

Support of TDM and cordless Workpoints:

- Cordless phones (HiPath cordless Office), (country specific)
- optiPoint 500 and optiset E telephones including key module and adapter
- optiPoint 600 office V1.0 including key module and adapter
- Analogue terminals (e.g. Group 2 and 3 fax, modem)
- S₀/BRI user bus

Supported Applications

The HiPath applications are fully modular which allows customers to move from small to large, simple to complex, and voice to multimedia with ease and economy. They operate on stand-alone servers or co-reside with the HiPath 5000 RSM, depending on capacity requirements and customer preferences.

Contact Center Solutions

- HiPath ProCenter Compact
- HiPath ProCenter Office

Mobility Office Suite

- HiPath Xpressions Suite
 - HiPath Xpressions Compact (integrated card for HiPath 3000)
 - HiPath Xpressions Entry/Standard/Advanced
- HiPath SimplyPhone Suite
 - HiPath SimplyPhone for Outlook
 - HiPath SimplyPhone for WEB

Administration

- HiPath 3000/5000 Manager
- HiPath Fault Management
- HiPath Accounting Management
- TeleData Office (country specific)

Hotel

- HiPath Hotel Entry/Standard/Advanced (country specific)

Application Middleware

- HiPath TAPI 120 (1st party TAPI 3.0)
- HiPath TAPI 170 (3rd party TAPI 3.0)



Customer Benefits

Reduced Total Cost of Ownership

HiPath 5000 Real Time IP System can be economically installed for small enterprises, ready to grow with future needs. Enhance existing HiPath 3000 systems to fully integrate as a survivable media gateway within a HiPath 5000 Real Time IP System environment.

With HiPath 5000 Real Time IP System businesses can focus on one investment and one team to maintain and optimize the utilization of the data network, while making telephony cabling and expensive leased lines obsolete. Additionally businesses can centralize applications at headquarter locations making them available to all users regardless of location.

Connection costs can be cut down by IP trunking, IP payload switching and least cost routing. Administration effort is reduced through centralized management and applications. Relocation costs can be cut down significantly by leveraging the flexibility of a switched data network.

Enhanced Survivability

Reduce down time and lost productivity to a minimum by deploying a distributed and survivable architecture.

Greater Mobility

optiClient 130 users are always available under the same number and with full feature set, regardless if plugged into the corporate LAN or connected via remote access.

Adaptation to individual user requirements

HiPath 5000 supports mix-and-match of workpoint clients with access to the set of HiPath ComScendo features regardless if TDM or IP, hard or soft-phone. Terminal type and user interface can be selected individually to optimize workforce productivity.

Applications foster business process

HiPath applications are decoupled providing modular choices of "a la carte" HiPath applications, optimized for business processes. HiPath 5000 RSM provides central and open interfaces, which immediately makes applications available to workpoints corporate wide.

HiPath ComScendo

HiPath ComScendo is the Software Suite for Real Time IP Systems. It delivers a comprehensive and proven feature set to the Workpoint Clients – IP phones, soft clients and digital system phones – to optimize the communication process.

Selected HiPath ComScendo features

Caller list

Unanswered internal and external calls are recorded on system telephones with a display if external calls contain a directory number (ISDN) (Calling Number Identification) and internal calls are transmitted with the caller's name. The calls are entered in a list with a date and time stamp and the number of call attempts is recorded. A callback can be initiated directly from this list.

Do-not-disturb/"silent call"

Users can block incoming calls. Callers hear the busy signal when "do-not-disturb" has been activated. Authorized users (attendants, for example) can override this feature. Acoustic signaling of calls can be deactivated on system telephones so they are only indicated on the display (not available on optiset E / optiPoint 500 entry).

Call pickup

Calls can be picked up on users' own telephones within a call pickup group or selectively for specific colleagues in a single node or across networked nodes.

Override

Authorized stations can intrude on other users' calls in progress.

Telephony classes-of-service

Different access authorizations can be assigned to each PBX user, with a distinction being made between:

- unrestricted toll access
- outward restricted toll access
- no toll access

Broadcast intercom call

Broadcast intercom call to system telephones or over external loudspeakers (in a waiting room, for instance), (single node only).

Call cost logging

Call cost logging for each terminal or each trunk in the summation memory. Call duration display is used for lines without call charge pulses.

Group call

Group call for a total of 150 groups with max. 20 users. Individual stations can temporarily leave the group.

Line keys

The following flexible setups are possible with line keys:

- teams,
- executive/secretary functions,
- feature handset (gigaset) in parallel with a system telephone on a single directory number (only in conjunction with HiPath Cordless Office).

Internal telephone book.

All extensions are stored with their associated names in the system's internal telephone book. They can be searched and dialed directly via the display on system telephones.

Speed dialing individual/system

For all services it is possible to store up to 10 destinations on each telephone individually and up to 1,000 destinations centrally in the system.

Toggling

Toggling between two existing connections.

Text messages

Users can send other users pre-defined (e.g. "Visitor waiting") or personal short messages (optiPoint 600 office with USB keyboard only) via the display.

Internal texts to the feature handset

When HiPath cordless is used it is also possible to send internal text messages to the feature handset.

Advisory messages

Advisory messages can be left on your own telephone (e.g. Back at:....).

Project code

Telephone costs can be assigned to a specific procedure or project by entering the project code (max. 11 digits). This can also be done while a call is in progress.

Call number suppression

With ISDN connections, callers can suppress the display of their directory number on the called party's terminal either on a cross system basis or temporarily.

Distinctive call signaling

Distinctive call signaling for internal calls, external calls, recalls, and callback calls.

Add-on ringing

Call signaling simultaneously at several telephones.

Actuators / Sensors

Via a control relay module it is possible to connect up to four free relays that can be accessed via codes (optional).
(no sensors on the HiPath 3700/3750)

Door interface

For entrance telephone and door opener functions. Calls from the entrance telephone can even be routed to an external destination by using external call forwarding.

Automatic redial (expanded)

Automatic redial (expanded) for the last three external call numbers dialed.

Standard features

- **Intercept position/attendant console**
- **Camp-on/call waiting tone**
- **Call forwarding from the extension**
- **Display languages**
(can be specified individually)
- **Conference** (internal/external)
- **Line seizure** (automatic)
- **Music on hold**
- **External music source** (optional)
- **Night service/day service**
- **Parking**
- **Consultation**
- **Callback**
on busy and no answer (automatic)
- **Call forwarding**
no answer after timeout
- **Hunt group** (linear/cyclic)
- **Lock telephone**
(individual code lock)
- **Telephone book, central**
- **Transferring a call**
(internal/external)
- **Recall**

Technical Data

Interfaces/Protocols

- 10/100 Mbit/s Ethernet (TCP/IP protocol)
- H.323v4 (ITU standard)
- CSTA phase III
- TAPI 3.0
- CorNet IP
- S₀-BRI, S₁/S_{2M}-PRI, LS (IM), GS/LS USA, T1, DID
- S₀-BRI, S₁/S_{2M}-PRI, DSS1 Euro-ISDN
- S_{0FV}, S_{2MFV} with CorNet N; QSig protocol
- E&M interface
- HKZ/DID analog trunk connection

Audio Codec

- ITU-G.711
- ITU-G.723.1 – compressed

Quality Of Service

- IEEE 802.1p
- DiffServ (RFC 2474)
- TOS (RFC 791)

HiPath 5000 RSM - Server-PC

Minimum requirements
(for 16 HiPath 3000 SMG nodes)

- Pentium III 1 GHz
- 512 MByte RAM
- 9 GByte hard disk in two partitions
- 3.5" disk drive
- CD-ROM drive
- 17" SVGA color monitor with 800 x 600 resolution
- LAN connection operation at 10/100 Mbit/s Ethernet (TCP/IP protocol)
- Modem 28,800 Baud (Hayes compatible) or ISDN card
- Operating system: Windows 2000 Server
- Internet Explorer 5.0 SP2 or later

Software Version

- HiPath 5000 RSM V4.0
- HiPath 3000 V4.0

Our strengths - Your advantages

Siemens is known worldwide as a trailblazer in the advancement of information and communication technologies. No other company offers such a comprehensive and innovative product portfolio.

With the one-of-a-kind Siemens convergence architecture, HiPath, guide your customers to a secure and flexible migration into the world of innovative IP convergence solutions.

www.hipath.com

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Reference No.: A31002-H5000-A100-1-7629

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