

## A sip of the future

*Take the lead with Hotsip in the new world of SIP enabled communication*

The new communications protocol, Session Initiation Protocol (SIP), brings people closer together, dramatically increases accessibility and mobility, and simplifies communication. SIP erases the differences between the various forms of communication, blending the Internet, fixed and wireless telephony, text and video into a seamless, real-time based communications channel.

With SIP, you no longer have to spend valuable time trying to reach people via different addresses and telephone numbers. One SIP address is all you need. No different from a regular email address, such as patrik@hotsip.com, a SIP address enables people to be accessible on any communications device, anywhere in the world, at any time.

One of the many SIP enabled services is the ability to make a call to a person's SIP address using your computer, smart phone or mobile phone. The call will be transmitted through a SIP server across the Internet, and, depending on how the person has configured his or her personal SIP settings, can be directed anywhere in the world to a mobile phone, a fixed phone or a PC. Your call can even be routed to all of these devices simultaneously, or indeed to none at all if the person in question has elected to be inaccessible.

Find out more about SIP on the Internet at:

[www.hotsip.com](http://www.hotsip.com)

[www.sipforum.org](http://www.sipforum.org)

[www.ietf.org/html.charters/sip-charter.html](http://www.ietf.org/html.charters/sip-charter.html)

[www.cs.columbia.edu/~hgs/sip](http://www.cs.columbia.edu/~hgs/sip)

The SIP standard, and technical infrastructure being developed by Hotsip, will enable a host of services apart from the smart routing of telephone calls over the Internet. For instance, using just one SIP address, your colleagues and friends will be able to make phone and video calls to you, set up video conferences and chat sessions, play network games, send you instant messages, and check out exactly how you want to be reached, if at all.

All these things can be done from fixed and wireless devices connected to the Internet, such as PC's, palm computers, game consoles and mobile phones.

### New business opportunities

SIP opens the door to a world of new opportunities for both operators and businesses of all kinds.

By offering new SIP enabled services, operators such as telecom companies and Internet Service Providers will be able to attract new customers, cut back customer turnover, increase traffic revenues, strengthen margins through the provision of value-added services, and boost customer satisfaction.

Companies will be able to use SIP in their marketing and customer programs, creating stronger customer relations through new means of interactive communication.

Furthermore, network gaming will attract new target groups since SIP will make it much easier to invite and engage people in network game sessions.

### Do you want to play a part?

Take part in the new communications era by sending us an email describing your vision of how SIP can contribute to improving your business excellence or making your daily work easier.

Just send it to: [develop@hotsip.com](mailto:develop@hotsip.com). Those who submit the three best suggestions will be rewarded with a **Palm Vx** and all participants will receive a SIP client and address.

If you would like to discuss SIP with us or be sent more information on the SIP products we have in the pipeline, please call **Esko Airas**, on +46 739 888 172, or send an email to: [sales@hotsip.com](mailto:sales@hotsip.com)

You are Invited

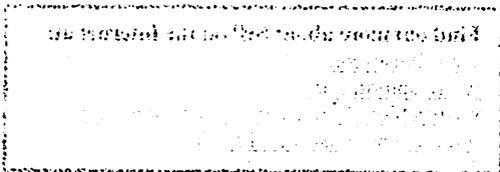
## A Glimpse of the Future

Take the lead with ISIP in the new world of ISIP enabled communication

The new communication protocol, Session Initiation Protocol (SIP), brings people closer together. It fundamentally increases accessibility and mobility, and simplifies communication. SIP erases the differences between the various forms of communication, blending the Internet, land and wireless telephony, text and video into a seamless, real-time based communication channel.

With SIP, you no longer have to spend valuable time waiting to reach people via ISIP or other means and telephone numbers. One SIP address is all you need. No different from a regular email address, such as jsmith@company.com, a SIP address enables people to be accessible on any communication channel anywhere in the world, in any time.

Over the next few years, SIP enabled services will be able to make a call to a person's SIP address using a computer email phone or mobile phone. The call will be transmitted through a SIP server across the



Internet, and the person has no idea that the person has contacted him. The person has contacted him through a SIP server, and the person has contacted him through a SIP server. The person has contacted him through a SIP server, and the person has contacted him through a SIP server.

The SIP standard, and related technology, is being developed by IETF and other groups. It is designed to be a simple, easy-to-use protocol for instant messaging, voice over IP, and other applications. SIP will be able to make phone and video calls to even out-of-office contacts. SIP will be able to make phone and video calls to even out-of-office contacts.

All these things can be done from land and wireless devices already connected to the Internet, such as PCs, palm computers, smart phones, and mobile phones.

### Your business opportunities

SIP opens the door to a world of new opportunities for both operators and businesses of all sizes.

By offering new SIP enabled services, operators such as telecom companies and Internet Service Providers will be able to attract new customers, and back existing customers, increase traffic, and create new revenue streams through the provision of value-added services, and best customer self-service.

Companies will be able to use SIP in their marketing and customer programs, creating strong customer relations through new means of interactive communication.

Furthermore, network gateway will attract new target groups since SIP will make it much easier to invite and engage people in network time sessions.

### The future is now

In a world where communication is becoming more and more digital, it is essential to have a strong presence in the digital world. SIP is the key to this digital world, and it is time to start using it. SIP is the key to this digital world, and it is time to start using it.

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You are invited

## Hotsip Fact Sheet

Hotsip aims to be the leading retailer of interactive services and real-time communication based on Session Initiation Protocol - SIP. SIP makes it possible to communicate with anyone, anywhere, anyhow using one and the same address. The user can determine how the message is to be received (e-mail, voice- and video communication, mobile phone, chat, gaming, buddy list, etc.).

Hotsip was founded in the last quarter of 1999, following the founders, Jens Lundström and Johan Liseborns, advanced work within research and development of Internet services and SIP. Before Hotsip was founded, the core group worked together for over two years at a Telia/Ericsson research lab – Ellementel Utvecklings AB in Stockholm, Sweden.

### What is SIP?

SIP, Session Initiation Protocol, is a technique to initiate interactive sessions for real-time communication between end users. A session can be voice, video, chat, game or combinations of these and other interactive real-time communication. For all sessions only one address is used. The SIP-address looks like an e-mail address: [maria@hotsip.com](mailto:maria@hotsip.com). SIP also handles mobility, which means that a user can initiate a session with the SIP-address from several different terminals such as a PC, PDA (Personal Digital Assistant) or a mobile phone and decide on how, and when to be reached.

The protocol SIP was developed by the IETF (Internet Engineering Task Force), which is a global and open organization specializing in the development of Internet architecture. Among other things, IETF is responsible for the web protocol HTTP and the mail protocol SMTP. SIP is secure and will scale over the whole Internet as well as work with other Internet standards. It is chosen as the standard for the Mobile Internet system in third generation's mobile networks.

### Hotsip's services and hotsip.com

Hotsip develops and hosts end-user services based on SIP. In this way, the company offers Internet Service Providers and different wireless operators a new means to reach their customers. Hotsip gives these companies the opportunity to offer their consumers interactive services over several different terminals and several different media – from e-mail, chat, SMS to voice and image based media.

Via the consumer portal, [hotsip.com](http://hotsip.com), users can download the software needed to use SIP based services and by doing so also get a free SIP-address.

#### Backed by Speed Ventures

The founders, Jens Lundström and Johan Liseborn own Hotsip, along with personnel and the Venture Capital Company Speed Ventures. On the board is, among others, Jan Gapinski, CEO of Speed Ventures Sweden and Patrik Fältström. The company currently has about 30 employees, where more than half work with product development and the rest with sales, marketing and management.

For more information on the Hotsip products please call Esko Airas, on +46 739 888172, or send an email to [sales@hotsip.com](mailto:sales@hotsip.com).

For more information, please contact us or visit [www.hotsip.com](http://www.hotsip.com)

## **Hotsip – Telia Demonstration**

*This demonstration shows how old telephony and Internet services can be integrated, spreading communication over multiple terminals using different bearer networks and media.*

*Session Initiation Protocol, SIP, offers 3G services in today's networks!*

### **Hotsip Client**

To use SIP services, you need the Hotsip Client. This software could be described as a living address book used to initiate and manage communication sessions. You can see if a person is on-line and where he or she can be reached. You can also invite him or her by telephone, email, chat, video telephone, instant messaging as well as issue invitations to join network games. All of this with the same SIP address, using an intuitive graphical computer interface, and the telephony network for voice communication.

### **SIP Services**

The key functions of SIP Services are:

#### **Initiating communication**

When you open your Hotsip client, you will see a list of your friends and whether they are online or not. You could then set up communication sessions, using computers, mobile phones or both. When you receive a call, the client also lists your counterpart.

#### **Presence information**

You can use the client to distribute presence information, indicating if you are available for communication or do not want to be disturbed.

#### **Redirection of calls**

You can redirect calls to different answering places, depending on the caller and the time. For example, you could decide if a call should go to your mobile phone or be redirected to voice mail or e-mail.

### **Golden Gate**

The integration of Internet with the telephony network is made possible by Telia's Golden Gate concept. Golden Gate allows services traditionally found in Intelligent Networks (IN) to be created in a SIP environment.

Golden Gate basically moves the call routing decisions to a SIP Redirect server. This is how it works:

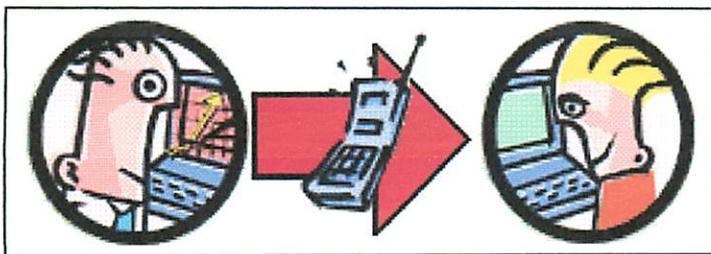
1. A call is transferred from the caller to the redirect server, placed in an IP network.
2. The IP-number to set up the phone call to is returned through an interconnector server acting as a service router and a firewall.
3. The signaling gateway translates the IN service protocol to the corresponding SIP messages and then returns a response.

## User Cases

*The demonstration shows user cases involving two users, we can call them Billy and Sally. They are both equipped with mobile phones and computers with Internet connections and the Hotsip client.*

### Billy initiates communication

Billy calls Sally on her mobile phone. Sally's presence status is *available*. As soon as Billy has dialed the number, Sally shows up in Billy's client under the "in call category", even if she was not present in his address book before. At the same time, Billy shows up in Sally's client.



All features built into the client could now be used for the ongoing telephone call and Billy and Sally can even add new communication channels to the ongoing session.

For example, if they need to exchange driving directions they can easily start a shared white board application. A white board pops up at both parties' computers and everything Billy draws is shown to Sally and vice versa. The client uses their SIP addresses to set up this new session.

### Sally is busy

Billy calls Sally, but her presence status is *busy* and she does not want to be disturbed. Billy is automatically directed to Sally's voice mail through the built-in redirection capabilities of SIP.

This is the advantage of controlling the call routing from a graphical user interface at the user's computer. The same setting will also affect all inbound communication to this user, so the user do not have to bother with mysterious \*# codes.



### Billy and Sally play games

After a hard days work, Billy is exhausted and wants to relax. He therefore invites Sally to an online game of Quake by selecting Sally in his Buddy List and clicking on the game plug-in. Billy and Sally meet in a multi-player network game, starting simultaneously at each one's computer. They could have invited more players.

### More information

With SIP you can communicate with anyone, anywhere and anyhow, using one and the same address.

If you want more information about SIP, Hotsip AB or products please visit [www.hotsip.com](http://www.hotsip.com) or contact us on the addresses below. You can also get a SIP address at the site!

## www.hotsip.com – Introducing SIP to Consumers

*The site [www.hotsip.com](http://www.hotsip.com) is a portal for end-users of Hotsip services. It builds a SIP user network, establishes useful contacts and markets SIP services.*

*Get a SIP address and be one of the first to use SIP!*

On [www.hotsip.com](http://www.hotsip.com), Hotsip introduces the Session Initiation Protocol, SIP, to Internet Service consumers internationally. SIP is used for setting up interactive real-time communication with anyone, anywhere and anyhow, using only one address. The web site offers SIP services, establishes useful contacts with consumers all over the world and builds a SIP user network. On the web site, end-users can register a personal SIP address, download Hotsip's client software and learn more about the new Internet standard.

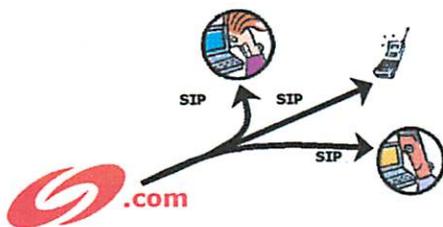
### SIP user network

The value of SIP services to end-user increases with the number of distributed clients. ISPs and wireless operators also have an instant value of their end-users if there already is a large user base.

### Feedback from end-users

Hotsip is continuously developing innovative and high-quality services for the end-users of SIP. [www.hotsip.com](http://www.hotsip.com) gives direct feedback on how and with whom the consumers communicate, what their profiles are and what new client functionality they want. To deliver what your customers ask for, there is a need to know them and understand how they want to use SIP services today and in the future. Through [www.hotsip.com](http://www.hotsip.com), Hotsip has a unique opportunity for fast deployment and acceptance testing of new solutions and concepts.

### Spreading the word...



*Consumers of today are interested in new areas of information technology and the development of services. At the same time, they demand higher capacity, more speed and quality content of Internet and wireless communication.*

### Using Hotsip services

With Hotsip services, a user can see if a friend is online and contact her by phone, e-mail, chat, video telephone, instant messaging or invite her to join network based games – all this by using one and the same address. All the users need is a SIP client. The software will be available for free after the summer of 2000, but users can already pre-register their own SIP address.

### Hotsip – the company

Hotsip develops new service concepts and creates enabling solutions based on SIP. These solutions enable service providers and wireless operators to deliver new and richer content and interactive services to end-users. For more information on the Hotsip products please call Esko Airas, on +46 739 888172, or send an email to [sales@hotsip.com](mailto:sales@hotsip.com).

**For more information, please contact us or visit [www.hotsip.com](http://www.hotsip.com)**