EXECUTIVE SUMMARY

SIP – the Session Initiation Protocol – is one of those deceptively simple inventions that can transform the very nature of communications. What SMTP did for email and HTTP did for Web browsing, SIP promises to do for communications of all types, including voice, email, video, or any medium yet to be invented.

SIP is now almost universally seen as a linchpin technology for future network applications, both wireline and wireless. Microsoft chose SIP as the basis for its real-time communications servers. Cisco Systems, the leading iPBX vendor, is developing SIP products as well. SIP is accepted as the future underlying technology for emerging packet-based voice networks (VOIP), and it is the basis for integrated communications efforts now underway in the wireless world.

SIP Hosted Services: A Heavy Reading Competitive Analysis identifies and evaluates the ways in which SIP can generate new revenue streams for service providers from corporate customers over the next few years. The report focuses on four key revenue-generating applications:

- SIP Centrex
- SIP contact centers
- SIP unified messaging
- SIP multimedia conferencing

The heart of the report is a series of detailed product matrices covering all known carrier-grade SIP platforms now on the market. The report catalogs and compares 78 products from 47 different vendors, including 14 public companies and 33 private companies.

The product matrices for all four SIP platform categories allow full comparison of vendor offerings by the following criteria:

- Level of SIP support built into the product
- Support for other protocols
- Detailed lists of product functions and features
- Interoperability with other platforms or relevant products and technologies from other vendors
- Platform scaleability
- Links to billing systems and other OSS functions
Along with detailed product information, the report analyzes the revenue and profit prospects for each type of hosted SIP service, using a unique return on investment (ROI) model developed by the report’s author, Heavy Reading Analyst at Large Margaret Hopkins. The economic analysis includes projections on probable capex and opex costs to deploy SIP services, probable revenues based on achieving certain levels of market share, projected payback periods for initial investments, and projected five-year profit/loss and cash flow results.

Key Findings

Key findings of the report include the following:

SIP will be the basis for a new, scaleable, flexible communications network. Given the strength and breadth of its support among vendors and service providers, SIP will emerge as the basis for future integrated multiservice and multimedia communications. SIP’s ability to bridge different types of services (voice, email, mobile, etc.), its distributed nature, and its robust presence management capabilities make it the clear technology choice for future communications networks.

Although many aspects of SIP are fully developed and in commercial deployment now, work on SIP within the IETF probably will not be completed until the end of this decade. There is about six years’ worth of work still to be done in the SIP committees of the Internet Engineering Task Force. The IETF also needs to maintain communication with the 3rd Generation Partnership Project (3GPP), which is now developing a SIP implementation for mobile networks. Integration of wireline and wireless implementations is essential for SIP to deliver its full benefits.

Hosted contact centers are now the most attractive SIP application for service providers. The ROI analysis conducted by Heavy Reading indicates that SIP-based hosted contact centers will deliver the fastest payback and highest rate of return among the four key applications evaluated. Our ROI model suggests that carriers can achieve positive cash flow within the first year of deploying SIP-based hosted contact centers. One caveat is that contact centers also have the highest opex among the four applications, due to the need for bigger support staffs.

Dozens of vendors now offer SIP-based or SIP-supported platforms, but relatively few of those platforms are truly carrier-grade. Only a handful of SIP platforms for hosted Centrex, contact center, unified messaging, and multimedia conferencing can scale to the number of users carriers would need to support in a full-fledged commercial deployment. Most systems now on the market are geared primarily to handling limited numbers of small to medium business clients.

Although many incumbent vendors offer SIP platforms, they do not see SIP development as a high priority at present. Vendors including Cisco Systems and Nortel Networks now offer SIP-enabled platforms, but those platforms are based on other communications protocols, with SIP compatibility “bolted on.” In an interview for this report, a Cisco representative noted that Cisco has not lost any customers because of its lack of a native SIP product line.

SIP specialist vendors are capturing some important customer wins at this early stage of the deployment cycle. White Pajama’s platform is being used by application service provider salesforce.com for its hosted contact center. Polypix has sold its SIP multimedia conferencing platform to a major South Korean service provider. These customer wins indicate that vendors specializing in SIP can have success selling against incumbent telecom equipment vendors.

Makers of softswitches are incorporating SIP into their products, but it’s unclear whether these implementations can deliver on all of the potential benefits of SIP. Companies such as Lucent Technologies, Nortel, and Sonus Networks are adding SIP support to softswitches, but those softswitches are still positioned primarily as replacements for public network circuit switches. Full SIP implementations will likely require a full transition to IP-based architectures.
Report Structure

SIP Hosted Services: A Heavy Reading Competitive Analysis begins with a comprehensive overview of SIP technology and its current status, including analysis of how the standard meets telecom operator requirements and where further development work is needed, which features are currently supported in standards and which important features are still under discussion, and which groups are responsible for different aspects of SIP development.

The overview is followed by detailed analyses of each of the four core SIP application categories. Each of these sections starts with a general technology and market analysis of the application category, followed by a deployment economic analysis based on the ROI model. The ROI analysis includes a five-year projection for revenues, costs, free cash flow, and cumulative cash flow:

Excerpt 1: Cost/Revenue Projection for SIP Multimedia Conferencing

[Graph showing cost/revenue projection for SIP multimedia conferencing with projections for revenues, capex plus opex, free cash flow, and cumulative free cash flow from 2004 to 2008.]

The ROI analysis also features a detailed breakout of capital expenses and operating expenses a service provider can expect to incur for the SIP application over the first five years of operation:

Excerpt 2: Estimated Capex and Opex Costs

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<tr>
<th>CAPEX BREAKDOWN</th>
<th>PERCENT OF CAPEX</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Setup</td>
<td>55.5%</td>
<td>$2,045,289</td>
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<tr>
<td>PSTN Gateway</td>
<td>4.2%</td>
<td>$153,877</td>
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<tr>
<td>Customer Servers</td>
<td>40.3%</td>
<td>$1,485,359</td>
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<tr>
<td>Cumulative Capex</td>
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</table>

<table>
<thead>
<tr>
<th>OPEX BREAKDOWN</th>
<th>PERCENT OF OPEX</th>
<th>NPV</th>
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</thead>
<tbody>
<tr>
<td>Equipment Maintenance</td>
<td>21.8%</td>
<td>$857,898</td>
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<tr>
<td>Hosting Costs and Access</td>
<td>16.3%</td>
<td>$640,663</td>
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<td>Staff Costs</td>
<td>43.9%</td>
<td>$1,730,061</td>
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<tr>
<td>Help-Desk Costs</td>
<td>18.1%</td>
<td>$712,562</td>
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<tr>
<td>Cumulative Opex</td>
<td>100%</td>
<td>$3,941,184</td>
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</table>
Product matrices in each section are accompanied by comparative analyses of vendor offerings, focusing primarily on the key metrics that determine whether a SIP platform is truly carrier-grade.

**SIP Hosted Services: A Heavy Reading Competitive Analysis** delivers valuable information and insight into this emerging and disruptive telecom technology sector. The report is required reading for a wide range of industry participants, including:

**Suppliers of SIP platforms:** In addition to showing exactly how your products stack up against the competition, this report offers an unbiased, independent source that can verify to prospective customers your product’s standing in the SIP universe.

**Service providers:** This report delivers critical insight into the actual costs of deploying hosted SIP services, and it provides detailed information on the products that are now available to bring new revenue-generating SIP services to market.

**Technology investors:** The SIP market has dozens of entrants, all scrambling to establish themselves in what promises to be one of the biggest telecom growth sectors of this decade. This report identifies the public and private companies that can deliver carrier-grade platforms now, giving them the best chance to take an early lead in this wide-open market.

**SIP Hosted Services: A Heavy Reading Competitive Analysis** is published in PDF format.