Telecommunications Solutions Brief

Stratus Technologies Triple Play Services Solution

June 2007
Market Overview
The communications and entertainment market are quickly converging and subscribers are choosing bundled services as a way to optimize their time and budget. Many CATV operators are offering Triple Play (voice, data and video) services to capture additional subscriber revenues while protecting market share for their traditional service offerings. As new players enter the market and threaten what was once the exclusive domain of the multi-service operator (MSO), CATV operators are compelled to differentiate their offerings while rigorously managing expense to ensure a return on investment (ROI). Inevitably, success and future profitability will be awarded to operators who are skilled at introducing cost-effective, value-added services to the market quickly in response to changing customer needs.

In a competitive environment in which expense must be carefully managed, per-subscriber revenue growth is essential and customer retention is critical for sustained profitability, Stratus Technologies can provide a solution and roadmap to help evolve operator networks at the right pace while facilitating growth and differentiation and preparing these networks for anything the future may hold (e.g., SMS, 3G, fixed-mobile convergence and IP Multimedia Subsystem (IMS)).

Solution Elements
Stratus Technologies offers an end-to-end Triple Play solution and a suite of professional services, including planning, design, installation, integration and testing. Our feature-rich, turnkey solution incorporates carrier-class elements from leading vendors and provides a single point-of-contact for streamlined maintenance and support.

VoIP Services
The Stratus Residential and Enterprise VoIP (E-REV) is a full-featured, turnkey solution that enables service providers to turn up VoIP services in a matter of weeks and respond quickly to changing customer needs. Based on the modular, open ENTICE™ (emerging networks telecommunications infrastructure control environment) architecture, E-REV is a pre-integrated solution for end-to-end delivery, provisioning and management of VoIP services that can be scaled and customized to create a variety of market offerings. By combining session controller and softswitch functionality into a single, open solution based on a common architecture, E-REV allows calls to move seamlessly through NATs, firewalls, the Internet and the PSTN. E-REV includes customizable templates that facilitate the creation of branded retail-side Web pages and an intuitive user interface, so service providers can give their residential customers control over their communications services.

The E-REV solution can be deployed on fault-tolerant ftServer® systems from Stratus Technologies, which deliver the added advantages of the Red Hat® Enterprise Linux® operating environment combined with an Intel-based platform known for 99.999% + reliability. These continuously available telecommunications-grade servers are NEBS™ Level-3 compliant.

Media Control
Stratus provides media services such as network based announcements, voicemail, unified messaging, auto-attendant and IVRU services as part of the Triple Play solution. In addition, third-party media servers can be connected using SIP/XML signaling, and custom applications can be developed either by Stratus or ISV partners.
Signaling Network Interface
Stratus supports a wide variety of third-party Media Gateways and Media Gateway Controllers for interfacing with the PSTN. Support for industry-standard signaling protocols, such as SIP, H.323, SS7, PRI and H.248, facilitates interoperability, enabling Stratus to leverage best-of-breed products and deliver the optimum solution for each customer’s requirements.

Solution Architecture

Cable Modem Termination System (CMTS)
In partnership with Motorola, Stratus offers proven, standards-based CMTS technology that is innovative and can support new services in the future. With expertise in routing, switching, telephony, video, aggregation and redundancy, Motorola is adept at enabling critical data, voice and video services while optimizing the use of existing infrastructure and minimizing stranded investments. By taking a holistic view of today’s revenue demands and tomorrow’s architectural and service requirements, CATV operators can leverage their network assets while deploying next-generation CMTS platforms and evolving the network to deliver video and other high-speed services.

Operations and Billing Support Systems (OSS/BSS)
The Stratus Triple Play solution utilizes a turnkey operations support systems (OSS) software suite from Rodopi Software for billing, customer care, service provisioning, hosting, email and front-end functionality. Chosen for its flexible features, this fully integrated business platform cuts costs and streamlines network operations by enabling and delivering all services with a single application. The package provides capabilities such as:

- Unlimited number of pricing schemes
- Customizable invoices
- Ability to add one-time fees
- Variety of payment methods
- Commission support
- Payment and credit card gateway integration
- Multiple currencies
- Real-time rating engine
- Promotions, special discounts, limited offers
- Automatic invoice dispatching (mail, email)
This powerful OSS/BSS solution gives operators a unified platform for ISP integration that can seamlessly scale to serve any number of customers and services.

**Telecom Professional Services**

Stratus can assist CATV providers with end-to-end implementation of Triple Play solutions, offering services that include network assessments, network planning, custom application development, system integration, transition to operations and more. Designed to minimize risk and reduce time-to-revenue, these comprehensive services are backed by more than 25 years of experience integrating products and services from industry-leading companies to deliver superior solutions for operator networks.

The foundation of a successful Triple Play solution deployment depends largely on the solution partner. Our business model is uniquely geared to deliver the flexibility, innovation and reliability needed to help CATV operators become successful multi-service operators. Our rigorous, disciplined approach to project management coupled with our industry expertise can help ensure a successful, timely cost-effective Triple Play solution implementation that can be scaled and customized quickly to accommodate changing market needs.

**Solution Features and Benefits**

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<th>Features</th>
<th>Benefits</th>
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<td>Fully integrated, turnkey solution</td>
<td>• Single point-of-contact from design to installation to support</td>
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<td></td>
<td>• Rapid time to market</td>
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<td>Flexible, scalable solution</td>
<td>• Will scale to support subscriber growth</td>
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<td>Industry-leading partners and components</td>
<td>• Proven interoperability with third-party devices and gateways</td>
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<td>Modular architecture</td>
<td>• State-of-the-art solution capable of evolving with network requirements</td>
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<td>Robust feature set for VoIP and converged services</td>
<td>• Satisfies subscriber needs</td>
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<td>Industry-leading solution availability</td>
<td>• Delivers 99.999%+ uptime</td>
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<td>25+ year history of network deployments</td>
<td>• Trusted, experienced vendor</td>
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**The Stratus Difference**

Several capabilities exclusive to the Stratus architecture provide competitive advantages to all types of service providers:

- Built-in APIs facilitate the development of custom applications and the integration of VoIP services into enterprise office suites or vertical applications;
- Support for third-party components affords service providers the opportunity to select other solution components, such as billing;
- The E-REV solution architecture can be partitioned, enabling service providers to host end-to-end VoIP services for multiple “switchless” resellers on the same platform;
- Because Stratus telecom solutions share the ENTICE architecture, they can be seamlessly integrated together to create solutions that precisely align with customer needs.
The unique design of the Stratus E-REV solution empowers service providers to differentiate their offerings, leverage existing network assets, rapidly add high margin services and respond quickly to changing market needs.

**Conclusion**
Stratus offers a quick and cost-effective way for CATV operators to enter the bundled services market and capture a greater share of subscribers’ total communication and entertainment spending. The pre-integrated E-REV solution simplifies deployment, reduces time-to-market and provides a single point-of-contact, while Stratus professional services help ensure a successful, timely cost-effective implementation. By offering bundled services, operators can maximize revenue and encourage subscriber loyalty while harnessing the power of existing infrastructure and preserving investment in existing network assets. CATV operators who choose Stratus leverage over 25 years of market-leading experience in deploying solutions for the world’s largest network operators.

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<th>Service Provider Benefits</th>
<th>Subscriber Benefits</th>
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<td>• Revenue Now, IMS Ready</td>
<td>• Simplified use of voice, data and video services</td>
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<td>• Rapid time-to-market, enhanced revenue opportunity</td>
<td>• Unified billing</td>
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<td>• Reduced operational costs</td>
<td>• Simplified customer service</td>
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<td>• Reduced churn by providing multiple services</td>
<td>• User-friendly subscriber self-care</td>
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<td>• Increased ARPU</td>
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**Service Providers Count on Stratus**
For more information on Stratus telecom solutions, please visit [www.stratustelecom.com](http://www.stratustelecom.com).

**About Stratus**
Stratus Technologies is a global solutions provider focused exclusively on helping its customers achieve and sustain the availability of information systems that support their critical business processes. Based on more than 25 years of expertise in server and services technology for continuous availability, Stratus is a trusted solutions provider to customers in manufacturing, life sciences, telecommunications, financial services, public safety, transportation & logistics and other industries.

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