Service Intelligent™ Architecture
New Opportunities for Network Operators



A practical way for service providers to generate new revenues while delivering customized higher-margin services

Benefits

- Customer-aware services dynamically respond to customer demands
- An environment for enterprise outsourcing generates high-margin revenues
- Quickly create unique services to enhance competitive strength
- Reduce network costs and complexity, increase responsiveness

Lucent Technologies
Bell Labs Innovations

A Vision for Service Provider Networks

Lucent Technologies is committed to helping service providers remain competitive. You must offer your customers the most innovative, reliable, flexible, and cost-effective solutions for their businesses. However, in today's economy, you must also maximize margins and optimize capital expenditures. What is the best way to do this? Build Service Intelligence into your network. This open, service-rich environment recognizes customers as they access your network, and then allocates network resources automatically and dynamically, simplifying your network operations and management, so you can offer personalized, business-quality services.

Service Intelligence creates new relationships and new opportunities with your enterprise customers

What's the best way to grow margins while optimizing capital expenses? More and more network providers are recognizing that the future lies with the enterprise customer. Enterprises want to focus on their core business, not managing their network infrastructure. To gain a competitive advantage, more enterprises are looking to service providers to provide higher value services to ease the IT burden. That's where you and Lucent Technologies can help.



Building a network based on Service Intelligent™ Architecture creates an environment that will motivate your business customers to outsource their network infrastructure to you. You can also work with them to quickly create services that increase their competitive strength. Service Intelligence takes your customer relationship beyond the connectivity commodity, and lets you build a value-added relationship with your customers.



Service Intelligence adds value for you and your customers

Your customers want rich, reliable, secure and high quality services with some control and visibility for the services you deliver. The Service Intelligent™ Architecture makes it easy for you to provide your customers all this and more. With the Service Intelligent™ Architecture, your customers can:

- Have the same service and functionality from virtually anywhere
- Get the appropriate quality of service and security by user or by application
- Have automated online customer assistance for e-commerce websites
- Provision and activate their own converged voice and data services through a web-based interface
- Provision bandwidth as needed for their IP VPN's
- Monitor the performance and reliability of the service you provide

You want to operate your network with more precision, fewer support systems and less overhead. With the Service Intelligent™ Network Architecture you can:

- Dynamically allocate bandwidth based on users' needs and requests
- Automatically recognize users and their applications, and allocate resources for them regardless of where they are or how they access your network
- Engineer and manage your network with a single management platform
- Automatically diagnose equipment and facility faults
- Build a network that is self-optimizing and self-configuring
- Use fully integrated and tested components that provide open, standards-based interfaces
- Easily scale your network as the number of users and traffic increases

Service Intelligence at all layers of your network

Our network vision is one of Service Intelligence at every layer of the network – from the core optical layer to the edge of the network; from the metropolitan area network to the local access network; in network elements at the service control layer and in the interfaces to network applications.

AT THE APPLICATION LAYER:

Service Intelligence enables personalized services and provides network management at all network levels.

- Enables new applications to be created using open, standards-based interfaces
- Enables innovative data and telephony applications, such as customer self-provisioning, and multi-media conferencing
- Network operations software in all three layers--provides end-to-end element and services provisioning, monitoring and fault management

AT THE SERVICE CONTROL LAYER:

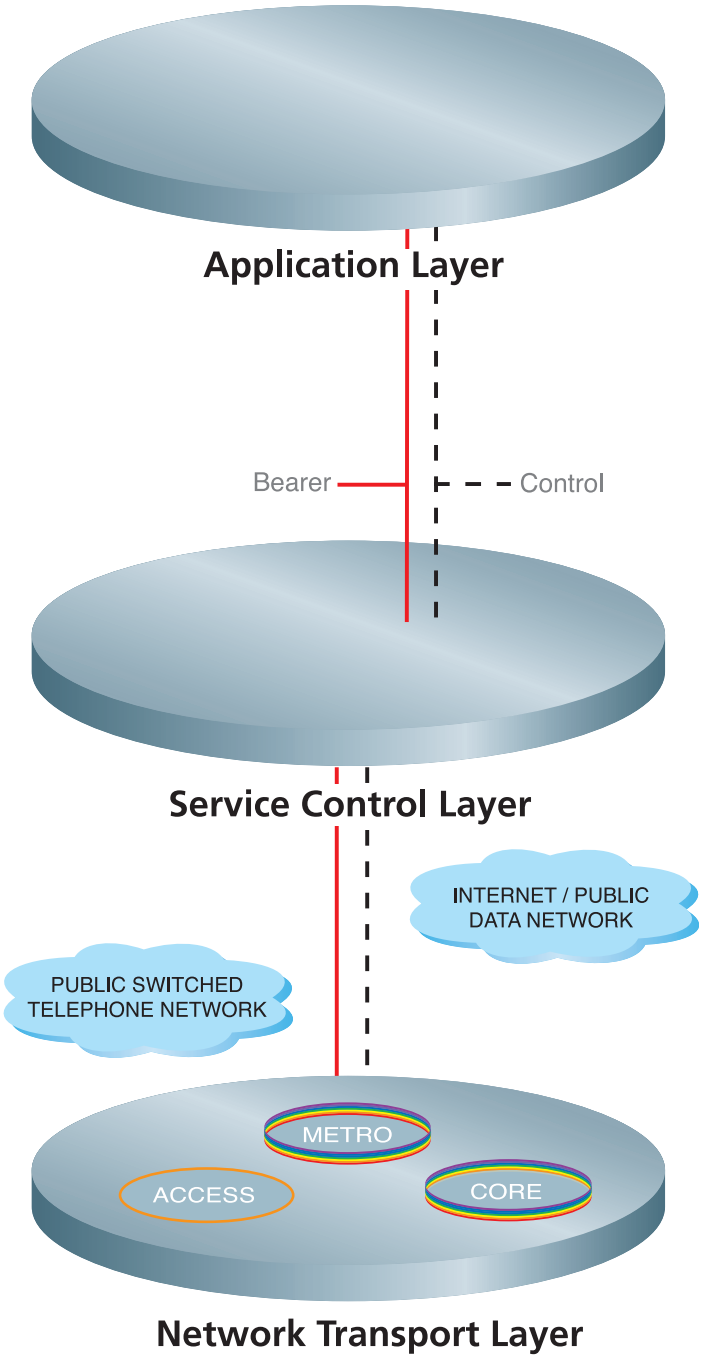
Service Intelligence actively mediates and controls network behavior, applying varying levels of QoS and security for different services and customers.

- Intelligently matches network capability to individual and end-user service requirements
- Delivers value-added, customized services such as mobile user authentication, location and roaming, VoIP, VPNs and managed security
- Adds new service capabilities to the PSTN using open packet technology

AT THE NETWORK TRANSPORT LAYER:

Service Intelligence makes bandwidth available when and where customers demand.

- More capacity, speed, reliability and flexibility at the core—at lower operations expense
- Breaks the metro bottleneck, efficiently unlocking capacity for services
- High-speed wireline or mobile access solutions provide dynamic, scalable last mile on ramp to the core network



Service Intelligent™ solutions are ready to deploy

To remain competitive, you need to rapidly deliver profitable new services, while reducing your costs and complexity. Our solutions, based on world-class technology from Bell Labs, are available today to help build Service Intelligence into your network.

For Network Transport:

Wireline Access Solutions: Scalable, low-cost edge and broadband access solutions supporting the highest port density in the industry. Services from xDSL, ATM, IP, frame relay, leased line to POTS, VoIP and ISDN.

Mobile Access Solutions: Scalable, low-cost radio access solutions – based on proven spread-spectrum technology - optimized for delivering high speed data and Internet services to your business customers.

Metro Optical Solutions: Metro solutions allow you to break the metropolitan area bottleneck and unlock bandwidth capacity for high-margin services such as Ethernet, storage area networks and transparent wavelength services.

Core Solutions: Optical and data multiservice core switching solutions allow for greater speed, capacity, reliability, and service flexibility in transporting switched services at lower cost and protecting your investment.

For Service Control:

Circuit to Packet Solutions: Open packet technology to lower costs, add new services and enhance existing PSTN Services. Our Softswitch and media gateway solutions deliver the power and profitability of next-generation networks and provide easy, economical integration of packet technology with circuit-based infrastructure.

IP Services Solutions: Deliver value-added IP-based services and applications that your customers can access anywhere using any access technology. Business-quality services include IP VPN, managed bandwidth and security, content management, Internet access and converged voice/data services.

Mobile Addressing and Authentication Solutions: Based on our exclusive Bell Labs-developed technology, mobile addressing and authentication solutions bring your mobile customers the freedom to roam between corporate wireless LAN networks, and 2G or 3G public networks.

For Applications:

Open Service Creation Environment: Open, standards-based interfaces for third-party developers to create additional value-added services that broaden your service portfolio and enhance your revenue stream, allowing you to deliver personalized end-user applications like unified messaging and location-based mobility services.

Network Operations Solutions: Unified management software for end-to-end provisioning, monitoring, and fault management, operating at all levels of the network architecture lowers complexity and cost, and paves the way for quickly delivering new revenue-producing services.

Protect your network investment

To get the most from the investments you've already made, you need to deploy solutions that integrate perfectly with your existing network. Our Service Intelligent™ Network Architecture solutions integrate with your existing equipment. With the unmatched experience of Lucent Worldwide Services, you are assured that our engineers preconfigure and pretest every solution, in addition to providing expert support to implement, operate and maintain your investment. And Bell Labs' best-in-class research and development ensures that our Service Intelligent™ solutions meet your rigorous quality standards.

Our relationship with you

Lucent Technologies is committed to helping you succeed in today's challenging market. To learn more about Service Intelligent™ Network Architecture and how you can evolve your network to deliver new value-added services and reduce network costs and complexity, please contact your Lucent Technologies Sales Representative. Or, visit our Web site at www.lucent.com.

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