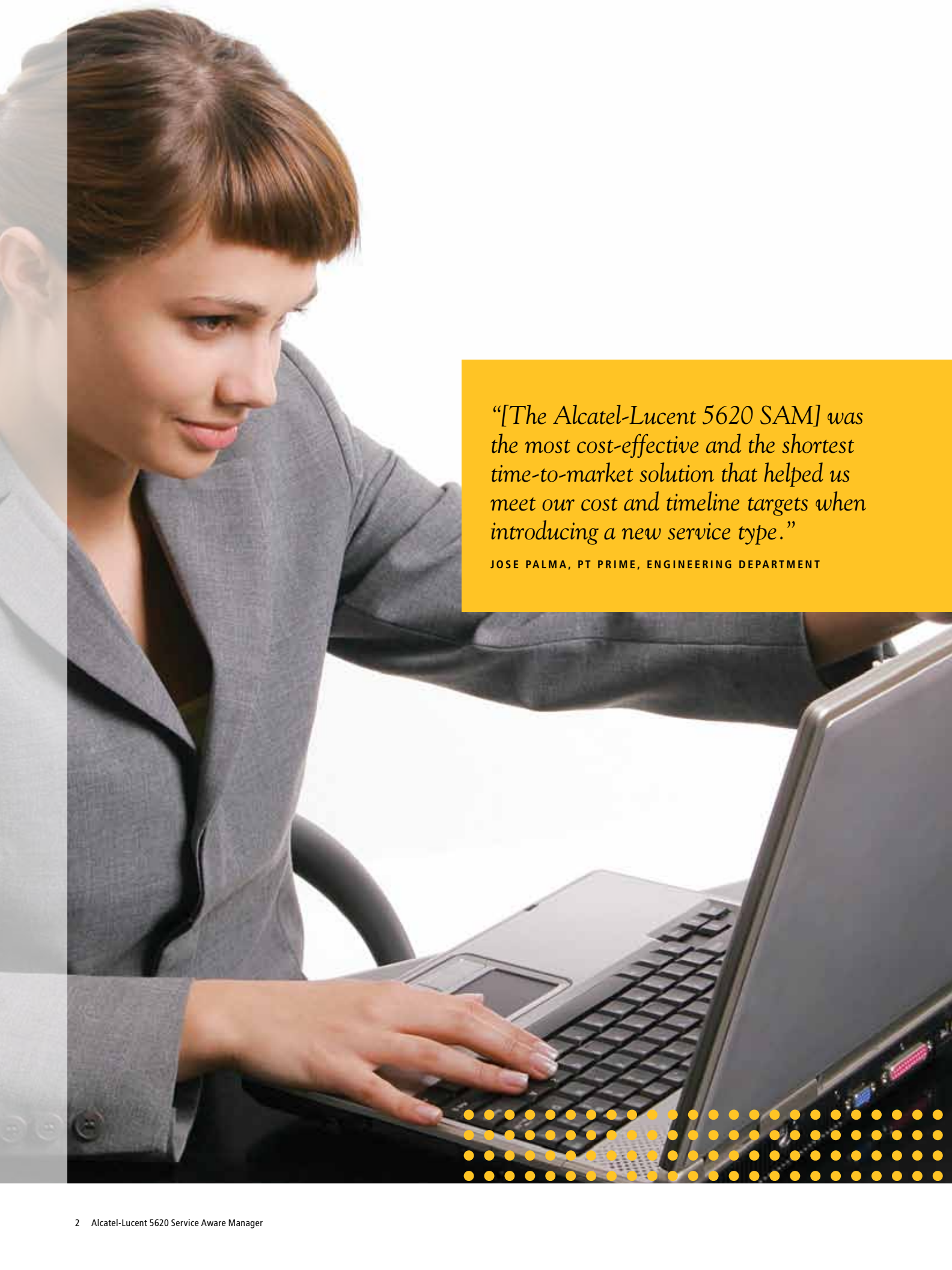


# Alcatel-Lucent 5620 Service Aware Manager



Unified management of IP/MPLS  
and Carrier Ethernet networks  
and the services they deliver



A woman with brown hair and bangs, wearing a grey blazer, is sitting at a desk and working on a laptop. She is looking down at the keyboard with a slight smile. The background is white. A yellow text box is overlaid on the right side of the image.

*"[The Alcatel-Lucent 5620 SAM] was the most cost-effective and the shortest time-to-market solution that helped us meet our cost and timeline targets when introducing a new service type."*

JOSE PALMA, PT PRIME, ENGINEERING DEPARTMENT



## Go beyond traditional network management

The pressure is on. Service providers know they must grow their customer base to increase service revenue and limit operational spending to increase profitability. They're transforming to converged, all IP networks. But it's not enough to meet all of their business objectives. To rapidly launch, deliver and assure a new generation of services while controlling costs, they must also transform to a converged service-aware management solution.

Traditional element and network management solutions simply do not allow service providers to keep pace with the volume and complexity of today's services. Manual processes are too slow and error prone. Reactive problem detection leads to longer outages and dissatisfied customers. And integration with existing systems and processes is expensive and time-consuming, making it extremely difficult to protect existing investments.

The Alcatel-Lucent 5620 Service Aware Manager (SAM) takes service providers well beyond the traditional boundaries of element and network management. It enables unified, end-to-end management of IP/MPLS and Carrier Ethernet networks and the services they deliver to help service providers quickly gain the efficiencies they need to beat the competition. Fast and easy provisioning reduces time-to-market and increases flexibility when launching new services. Proactive troubleshooting helps resolve problems before they affect customers. And ease of integration within the existing operational environment helps service providers get the most from their investments.





## Accelerate configuration and provisioning

Agility is key to maintaining a competitive edge. Service providers must be able to quickly and easily configure and change network elements, routing infrastructure and services. Provisioning services using command line interfaces is cumbersome and can lead to misconfigurations. Introduction of new equipment and services can be delayed and the customer experience can be tarnished. In addition, the need for IP experts increases the demands on these critical resources.

The 5620 SAM gives service providers several options to accelerate configuration and provisioning processes and minimize the risk of misconfigurations:

- Easy-to-use graphical forms enable point-and-click element and network configuration and service provisioning. Wizards can also be used to guide operators step-by-step through complex tasks.
- Advanced scripting, templating and rules-based configuration allow service provider experts to customize the 5620 SAM for specific network or service requirements. This allows junior resources to handle more intricate tasks and eliminates repetitive data entry activities.
- Automated, zero-touch service provisioning flows can be implemented through integration with existing service fulfillment systems using the 5620 SAM Operations Support System (OSS) interface.

When provisioning is complete, a single click allows operators to verify that complex services are operating correctly across all layers.

As shown in the illustrations, independent research has confirmed the 5620 SAM increases service provider productivity and flexibility while reducing costs.

Figure 1. The 5620 SAM increases service provider productivity and flexibility while reducing costs.

### Provisioning productivity

75% improved

One customer said that provisioning that had previously taken approximately 15 minutes could now be done "in a minute or less"

With the 5620 SAM



1 minute or less

Using CLI



15 minutes

### Reduction of script development costs

50% improved

Reduce script development costs by 50%

### Strategic flexibility

\$800,000 saved

One organization stated that a product launch that might have otherwise required a \$1,000,000 investment could be achieved with only \$200,000

*“One of the major benefits of Alcatel-Lucent’s solution is the Service Aware Manager (SAM) platform, which we’ll leverage extensively to simplify and automate our provisioning and service assurance processes for our customers.”*

PAUL BROAD, AAPT, CHIEF EXECUTIVE OFFICER



## Enable proactive service assurance

To reduce customer churn, service providers must deliver a consistently high quality customer experience. Customers don’t care about the technology that’s making their experience possible. Whether they’re at home, at work or on the move, any reduction of service quality or a persistent outage is simply a bad experience.

Service providers can’t risk losing customers because they are dissatisfied with their experience. More importantly, they can’t risk the financial penalties for violating strict Service Level Agreements (SLAs) for business-critical services.

Today’s network and service environments are increasingly complex. Implementing service assurance with traditional element and network-centric tools and command line interfaces is inefficient and resource-intensive.

### **Resolve problems before they affect customers**

With the 5620 SAM, service providers can proactively identify and resolve potential problems in the network before they impact customers. For example, scheduled test suites give

service providers detailed information on network performance and assurance thresholds for any services where increased latency, jitter or packet loss will diminish quality of experience. And a distributed platform for real-time statistics and accounting data collection gives service providers the fine-grain information they need to avert SLA violations. They can also use this detailed data for network planning and to implement more flexible billing options.

When a problem does occur, the 5620 SAM offers a comprehensive set of tools that lets service providers quickly pinpoint and resolve the issue. Integrated graphical views of the physical and logical topology depict all resources traversed by a service, including the actual routes across the network. And enhanced alarm correlation reduces the number of alerts by providing a single entry that identifies the root cause of the problem.

For service providers, this level of advanced service assurance means improved customer satisfaction, fewer SLA violations and more streamlined operations processes.

### **Add key capabilities to extend service assurance**

To further enhance their service assurance capabilities, service providers can combine the 5620 SAM with the following Alcatel-Lucent products:

- The Alcatel-Lucent 5650 Control Plane Assurance Manager (CPAM), for real-time control plane visualization, surveillance and problem diagnosis. When used with the 5620 SAM, the 5650 CPAM helps network engineers quickly identify IP routing and MPLS path misconfigurations, malfunctions and undetected updates to decrease troubleshooting time and accelerate problem resolution.
- The Alcatel-Lucent 5670 Reporting and Analysis Manager (RAM), for collecting, warehousing and analyzing application and traffic flows for business VPN sites or residential subscribers for more effective application assurance.

Finally, the 5620 SAM open OSS interface offers straightforward and feature-rich integration with existing third-party service assurance systems.



*“The 5620 SAM’s proactive interoperability certification with market-leading OSS provisioning applications reduces the cost and time, not to mention the risk, of deploying new services on Alcatel-Lucent’s Service Routing portfolio.”*

DAVID ELDH, TELIASONERA SWEDEN, PRODUCTS AND PRODUCTION,  
NETWORK DEVELOPMENT IP CORE AND METRO

## Ensure operational fit and flexibility

The challenge of integrating new technologies and services with existing processes and systems is magnified if processes and workflows need to be adapted and complex new interfaces between systems implemented. Time requirements often stretch and costs can soar. But service providers must protect their significant investment in existing operations processes and systems.

With the 5620 SAM, service providers gain a management solution that easily adapts to their existing environment for faster and more cost-effective integration.

For example, all 5620 SAM functionality is accessible through a powerful, open OSS interface. Using XML and Java Messaging Service

(JMS), any or all capabilities can be integrated with other vendor’s applications for flow-through service fulfillment, service assurance and traffic engineering processes. The Alcatel-Lucent OSS Connected Partner Program provides certification for pre-integrated products from leading Independent Software Vendors (ISVs) to further reduce OSS integration time and costs.

In addition, the Alcatel-Lucent Portal Development Service (PDS) offers customized, web-based service portals for service providers or their customers to simplify workflows for service monitoring and provisioning.

Operational flexibility and security are further extended through 5620 SAM span of control features that allow administrators to assign operator privileges based on geography, organization, job function or individual responsibilities. And the ability to deploy the 5620 SAM in a high availability, redundant configuration helps ensure full availability of network and service operations, even during catastrophic failures.

*Research indicates the 5620 SAM delivers a three-year, risk-adjusted return on investment of 73 percent with a payback period of just 10 months with compelling ongoing savings beyond the payback period.*

THE TOTAL ECONOMIC IMPACT OF ALCATEL-LUCENT'S 5620 SERVICE AWARE  
MANAGER FORRESTER CONSULTING, DECEMBER 10, 2007



## Continue to evolve with Alcatel-Lucent

Alcatel-Lucent has a long tradition of excellence in network management and leadership in IP/MPLS and Carrier Ethernet solutions. And we continue to raise the network and service management bar far beyond basic element management systems. Our comprehensive portfolio of service-aware management applications allows service providers to implement the lean and scalable operations processes required to deliver a positive customer experience.

With more than 200 deployments, including some of the world's largest and most advanced networks, the 5620 SAM is a proven solution that sets the standard for each aspect of the service deployment life cycle. It enables:

- Rapid introduction of new services and technologies
- Accelerated and reliable provisioning processes
- Proactive prevention of service-affecting problems
- Faster and simplified problem resolution
- Efficient statistics collection for flexible billing and SLA options
- Unmatched operational scalability to support network and service growth

As service providers continue to transform their networks and services and evolve their operational models to capture more market share, the 5620 SAM will continue to form the cornerstone of their management solution. With an architecture that is modular, extensible and scalable, the 5620 SAM helps service providers address today's challenges with a foundation that will support tomorrow's market-leading service offerings for business, residential, mobile or converged services.



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