Delivering Outsourced IP Address Management Services

Offering managed services enables telecom providers to strengthen their business relationships with enterprise customers, while providing a valuable high-margin service.

Innovative software solutions provide a low-cost, high return-on-investment potential for offering managed services to the enterprise including:

- Accurate IP inventory and reduced IP assignment errors
- Assurance that the enterprise's network is configured and scaled to support their networking needs
- Continuous and responsive uptime providing end user service continuity
- Maximized ROI through optimal utilization of internal resources.

Lucent Technologies
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Ensuring Reliable Critical Application Performance

The moment of truth for the enterprise's network manager comes thousands of times a day, when one of the company's employees accesses an application — and it works the way it's supposed to. There's no delay in start-up. No hanging-up in midstream. No reason to call the help desk — literally no perceptible problems at all.

End-user application experience is key to the overall effectiveness of an enterprise business. In order for applications to function well and be accessible from all points, IP addresses including DHCP and DNS administrations needs to be automated and accurate. Incorrect IP addresses result in lack of service, and overwhelmed DNS servers mean slow intranet, extranet, and Internet performance.

The Value of Outsourcing IP Address Management

The overriding value proposition for providing managed services is to deliver a better, more cost-effective business service. From an end-user perspective, business efficiencies are assured and/or enhanced by implementing a solution that will make more efficient use of network resources and lowering operations overhead. Providing outsourced IP address management is a perfect illustration of delivering more for less.

Outsourcing IP address and name services is a cost-effective means for the enterprise customer to automate and enhance what is the typically labor-intensive process of maintaining the IP address database, domain name systems and related technologies. IP address management can be remotely administered with DNS and DHCP servers located at various points in an enterprise's network using a centrally stored IP address inventory that is accessed by multiple policy-driven servers to configure DHCP parameters and communicate address lease information. This results in reduced efforts for tedious IP address administration tasks, elimination of IP address tracking and synchronization problems, and increased accuracy of IP address management and remote DHCP and DNS server configuration. The IP address management system must be robust enough to support an extremely large volume of access from many users and flexible enough for ease-of-use. A secure portal GUI, such as the one provided by Lucent VitalQIP ™ (diagram 1) provides the means for enterprise IT staff to audit and report upon IP activity by object class, domain, time-of-day, or any address detail.

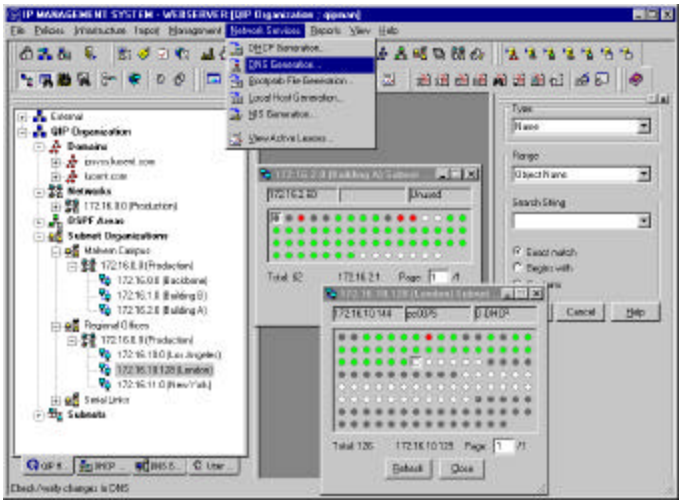

Diagram 1: VitalQIP ™ software delivers industry-leading capabilities to efficiently configure, automate, integrate and administer IP services.

Outsourcing these critical IP functions will eliminate many of the complexities of managing traditional DNS/DHCP configurations. Benefits include accurate IP inventory and reduced IP assignment errors, assurance that the enterprise's network is configured and scaled to support their networking needs, continuous and responsive uptime providing end user service continuity, and maximized ROI through optimal utilization of internal resources. Potential labor savings from automating IP address management can also be substantial. As an outsourcer of IP services to enterprises, providers can pass along a portion of this return to their enterprise customers and establish lucrative multi-year outsourcing contracts.

Lucent VitalQIP™ IP Address Management

DNS and DHCP management functions are typically complex, as well as time and resource consuming. As more and more IP-based solutions are being implemented, a disciplined approach to IP address management becomes an integral part of the critical path for non-stop service delivery. VitalQIP™ DNS/DCHP IP management software from Lucent Technologies provides an advanced IP address management system with the comprehensive capabilities to manage these high volume IP address management requirements. VitalQIP™ software enables managed services personnel to monitor and configure IP addresses around the clock while keeping DNS and DHCP functions running at optimal speeds and without error. Enterprise customers benefit greatly from leveraging Service Provider staff and expertise as well as their knowledge of the enterprise customer's needs. The business model of delivering outsourced IP address management services to enterprise customers, results in enhanced performance and cost efficiencies otherwise unattainable.

Lucent VitalQIP™ software offers highly scalable DHCP features that can configure "lease time," default gateway, DNS server and other client parameters while managing hundreds of thousands of static and dynamic addresses per server. Moreover, the servers can be distributed over many geographies and reside either on the enterprise LANs or the service provider network. Client/server policies, redundant behavior, and DHCP-DNS integration can all be automated eliminating endless IP schemes, emails and so on.

Lucent VitalQIP™ software offers massively scalable, remotely administrable IP address management that not only includes full multi-vendor support for any BIND-compliant DNS, Windows® 2000, Windows® NT and IBM DHCP, but also includes supports for the latest IP standards such as BIND 9, cryptography keys, mobile DHCP, and on demand address pools for MPLS VPNs.

VitalQIP™ software also has capabilities like administrator templates for enterprise customers, so changes can be made once and applied to dozens of users, reducing administration requirements for the managed service provider. With time-saving features, unparalleled scalability, and support for a wide variety of deployed multi-vendor DNS and DHCP platforms and standards, Lucent VitalQIP™ software is uniquely suited to support IP address management managed services and improves support for other offerings such as IP Centrex, managed firewalls, managed LANs and more.

New Revenue Opportunities for Managed Service Providers

For Service Providers striving to increase profitability, managed services offers important new revenue opportunities that leverage their existing infrastructure and require minimal investment. Another extremely important benefit in today's highly competitive market place is the opportunity to strengthen customer relationships with a broader more flexible portfolio of services.

Service Providers offering outsourced IP address management services provide their business customers the benefits of being able to choose the IP address management level of service that is right for their business. This also helps them gain business efficiencies by implementing a solution that will make more efficient use of network resources and lowering operations overhead. As an outsourcer of IP services to enterprises, service providers can also provide professional network expertise in the planning and design of the IP address infrastructure, provide comprehensive proactive monitoring and management and establish lucrative multi-year outsourcing contracts.

Navis® iOperations Software Solutions

Navis® iOperations software is a comprehensive portfolio of multi-vendor, multi-technology Operations Support Systems for wireline, wireless, optical, circuit and data networks. *Navis*® iOperations systems are developed on extensible, programmable platforms, open APIs and advanced system architecture to provide carrier class reliability and scalability, as well as rapid and affordable integration into a Service Provider's preferred operations infrastructure.

The award winning Lucent *Navis*® iOperations portfolio, including VitalSuite® and VitalQIP™ network management software, support the breadth of Network Management Operations, including Service Provisioning, Service Assurance, Element Management, Mediation, and Modeling. *Navis*® iOperations solutions enable the delivery of advanced services across current and next generation networks – while improving efficiencies, significantly reducing operating expenses and delivering the Quality of Service that customers demand.

For more information, contact your Lucent Technologies sales representative or call 1-888-426-2252 or visit the Lucent Technologies web site at www.lucent.com.

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