Access Point® Family
Service Provider IP Services Solutions





A broad portfolio of purpose-built IP services routers.

Only Lucent lets you deliver high-speed IP routing, IP VPN, QoS, firewall security, and policy management from one cost-saving platform.

Benefits

- Implement revenue-generating managed IP services at diverse customer sites
- Capitalize on industry-leading price/performance
- Migrate from basic to enhanced IP services without additional infrastructure investments
- Offer bandwidth management and Quality of Service guarantees
- Simplify network deployment, provisioning, and management
- Maximize security with built-in firewall, L2TP, IPSec support
- Choose software for your specific application requirements

Lucent Technologies
Bell Labs Innovations

A full family of IP platforms purpose-built for delivering multiple high-return IP services

Lucent's Access Point product portfolio offers you a complete suite of high-performance IP platforms that support diverse business-quality IP services. Each portfolio member incorporates multi-access routing, secure VPN, quality of service (QoS) management, firewall security, and policy management capabilities in a cost-saving all-in-one package.

Access Point portfolio members are the ideal choice to help you capitalize on managed IP services business opportunities. They make it easy for you to create premium service packages by deploying intelligent CPE devices. And they enable your enterprise customers to fully leverage the business benefits of the Internet and the corporate network infrastructure.

Access Point platforms are the CPE component of Lucent's unique, end-to-end *Service Intelligent*™ Architecture, which lets you deliver next-generation IP services tailored to end-users' changing needs.

Access Point product family

Now in its third generation, the performance-proven Access Point family comprises:

- **Access Point 300**. For small and medium-sized branch office enterprise sites, Access Point 300 routers support IP data forwarding rates of 50 Mbps, 3DES encrypted forwarding rates of 5 Mbps, and 150 site-to-site or 500 simultaneously active remote access VPN tunnels.
- **Access Point 600**. For enterprises' medium-sized regional and branch locations, the Access Point 600 supports data forwarding rates of 220 Mbps, 3DES encrypted forwarding rates of 90 Mbps, and 600/3,500 site-to-site/remote access VPN tunnels.
- **Access Point 1500**. For larger enterprise locations and network edge (POP) deployments, the Access Point 1500 delivers IP data forwarding rates of 700 Mbps, 3DES encrypted forwarding rates of 155 Mbps, and support for 1,500/5,000 site-to-site/remote access VPN tunnels.

The Access Point advantage

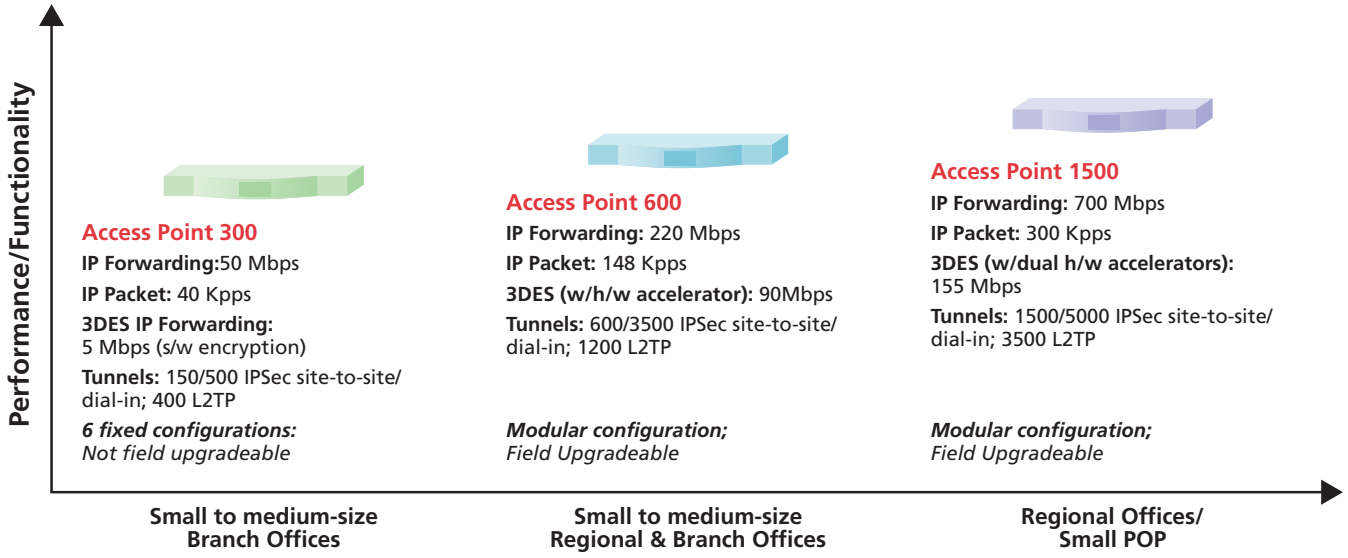
- **Multiservices versatility and value —** Delivering diverse next-generation IP services from one flexible platform, Access Point routers are single-box solutions that in many respects surpass more costly multi-box offerings.

Access Point Applications

- Multi-access IP routing
- IP VPNs
- Managed bandwidth/QoS with CBQ
- Mobile IP services
- Data center services
- Web/application hosting
- Multi-dwelling unit (MDU)/multi-tenant unit (MTU) Internet access
- Metro-optical network edge routing

- **Price/performance leadership —** Access Point platforms deliver superior performance at substantially lower purchase prices than competitive products. Because multiple services are integrated in one platform, your installation and ongoing ownership costs are minimized as well.
- **Future-proof growth path —** You can cost-effectively migrate from a single application at the smallest remote office to a multiservices implementation at a large headquarters site. And you can move from basic to advanced IP services without additional infrastructure upgrades.
- **Robust multi-access routing —** Access Point provides IP routing capabilities that have been certified and deployed by the industry's leading Internet providers.
- **State of-the-art Mobile IP support —** Mobile workers enjoy the same suite of IP services available in their wireline environments. This is enabled through RFC2002-2006 standards-based Mobile IP Foreign Agent/Home Agent services, coupled with Access Point's superb WAN access routing.
- **Best-in-class QoS —** IP QoS is supported by class-based queuing (CBQ), the open bandwidth management technology that ensures that the required bandwidth is delivered to the right users whenever and wherever they need it.
- **Advanced security safeguards —** An integral ICSA-certified stateful and stateless packet filtering firewall includes built-in denial of service protection. The Access Point 300 and Access Point 600 are also certified to the Federal Information Processing Standard (FIPS) to ensure the highest levels of security and integrity, as defined by the U.S. Government (available October 2002).
- **Versatile VPN gateway and router —** Secure IPSec VPN tunneling and encryption let Access Point operate as a fully integrated VPN router or a QoS-enabled VPN gateway. Access Point can also function as an L2TP network server (LNS) or L2TP access concentrator (LAC) terminating or aggregating remote user L2TP/PPP tunnels at enterprise sites or your POP.

Access Point Product Family



Each member of Lucent's proven Access Point router family is purpose-built to deliver multiple IP services with industry-leading price/performance.

- **Rich management services —** Choose an intuitive command line interface (CLI), an industry-standard SNMP manager, or a graphical web management navigator. An on-board RADIUS client simplifies management of Mobile IP, VPN and dial-in clients for user authentication, call accounting, and support of IPSec client configuration data.

Access Point QVPN Builder®

Cost-effectively deploy, manage, and scale IP VPN and QoS capabilities to accommodate hundreds of individual user sites with QVPN Builder software. An integral part of the Access Point family, this powerful problem-solver automates and centralizes policy-based, end-to-end provisioning of VPN and QoS networks.

Access Point Software Feature Packages

Tailor Access Point platforms to deliver the specific applications capabilities you need — and cost-effectively upgrade capabilities as your needs change — with Access Point software feature packages.

All Access Point platforms include BASE Package software at no extra charge. This provides IP routing, LAN/WAN interface support, an ICSA-certified firewall, QoS management, and secure management operations. In addition, you can choose from three optional feature packages for delivering enhanced IP services:

- **Advanced Networking Package —** Includes BASE Package applications support plus advanced routing, support for PPPoE and PPPoA, and tunneling capabilities for L2TP VPN and Mobile IP applications
- **QVPN Package —** Includes BASE Package functionality plus ICSA-certified IPSec VPN support for both site-to-site and remote access applications
- **IP Services Package —** Includes all features of BASE, Advanced Networking, and QVPN packages. A FIPS certified release is also available for use with the Access Point 300 and Access Point 600 platforms

Expert support from Lucent Worldwide Services

All Access Point platforms are protected by a full suite of technical support services, including Lucent's RTS Advantage service. RTS Advantage offers 7x24 remote technical assistance, plus a subscription service that brings you software upgrades and updates at no additional charge. And to facilitate IP solution design and deployment, Lucent offers a full suite of global professional and customer support services.

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Features	AP 300	AP 600	AP 1500
Target Market	Small to medium-sized Branch Offices	Small to medium-sized Regional & Branch Offices	Regional Offices, small POP
Processor	Motorola MPC8260	MIPS RM5271	MIPS 7000
Field Upgradeable	No	Yes	Yes
Memory	64 MB SDRAM, not upgradeable	128 MB SDRAM, not upgradeable	128 MB SDRAM, upgradeable to 256 MB SDRAM
Built-in Interfaces	All (Fixed Configurations)	None	2 10/100 Ethernet
Power Supply	AC	AC or DC	AC or DC
Expansion Slots	None	5 slots • 4 PMC interface slots • 1 HW encryption accelerator slots	6 slots • 4 PMC interface slots • 2 HW encryption accelerator slots
HW Encryption Accelerator Modules	None	1 Optional	2 Optional
LAN/WAN Interfaces	• 2 x 10/100 Ethernet • 1 x MSSI (V.35/X.21) • 2 x MSSI (V.35/X.21) • 2 x T1/E1 (FT1/E1) • ISDN BRI: S/T or U	• 10/100 Ethernet • MSSI (V.35/X.21) • HSSI • 4 port T1/E1 (FT1/E1) • ISDN BRI: S/T or U • Frame-based DS3 • ATM DS3 • ATM OC3	• 10/100 Ethernet • MSSI (V.35/X.21) • HSSI • 4 port T1/E1 (FT1/E1) • Frame-based DS3 • ATM DS3 • ATM OC3 • Gigabit Ethernet • Packet over SONET OC3
Configurations	Fixed configurations: • 2x10/100, ISDN S/T • 2x10/100, MSSI, ISDN S/T • 2x10/100, 2xT1/E1, ISDN S/T • 2x10/100, MSSI, ISDN U • 2x10/100, 2xT1/E1, ISDN U • 2 x 10/100, 2 x MSSI, ISDN S/T	• Select up to 4 LAN/WAN interface modules • Select 1 HW encryption module *Note: Must select 1 10/100 and 1 or more additional LAN/WAN modules*	• Select up to 4 LAN/WAN interface modules • Select up to 2 HW encryption modules
Routing Protocols	IP, RIP, RIP2, OSPF, BGP-4, IGMPv2, DVMRPv3, policy forwarding, static and dynamic routing	IP, RIP, RIP2, OSPF, BGP-4, IGMPv2, DVMRPv3, IS-IS, policy forwarding, static and dynamic routing	IP, RIP, RIP2, OSPF, BGP-4, IGMPv2, DVMRPv3, IS-IS, policy forwarding, static and dynamic routing
WAN Protocols	FR, Multilink FR, PPP, Multilink PPP, SMDS, ISDN, PPPoE	FR, Multilink FR, PPP, Multilink PPP, SMDS, ATM, PPPoE/PPPoA	FR, Multilink FR, PPP, Multilink PPP, SMDS, ATM, PPPoE/PPPoA
VPN Tunneling Protocols	IPSec, L2TP (LNS and LAC), IP-IP, GRE, Mobile IP HA/FA	IPSec, L2TP (LNS and LAC), IP-IP, GRE, Mobile IP HA/FA	IPSec, L2TP (LNS and LAC), IP-IP, GRE, Mobile IP HA/FA
IP Forwarding Rate (non-encrypted)	50 Mbps	220 Mbps	700 Mbps
IP Packet Throughput (non-encrypted)	40 Kpps	148 Kpps	300 Kpps
3DES IP Forwarding Rate	5 Mbps (Software Encryption)	90 Mbps (Hardware Encryption)	155 Mbps (Hardware Encryption)
IPSec Tunnels: Remote Access	500	3500	5000
IPSec Tunnels: Site-to-Site	150	600	1500
L2TP Tunnels	400	1200	3500

To learn more, please contact your Lucent Technologies Sales Representative or Lucent Business Partner. Or visit our web site at www.lucent.com.

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