

Backgrounder



HP in the Network and Service Provider Market

Telecom Heritage + IT Innovation

What network and service providers need today

The industry is changing rapidly. Customers now rule the market – and they expect anytime access to information and services – wherever their day takes them. Increasingly, they want services that are content-rich, personalized and relevant to their lifestyles. Network and service providers (NSPs, or operators plus network equipment providers) must respond with hundreds of innovative services that consumers and enterprises will value and use.

Amid the pressure to deliver new, revenue-generating services, complexity is increasing. Mobile is added to fixed. Data added to voice. Rich content added to simple text and voice. Circuit-switched yielding to packet-switched. NSPs must manage complexity in order to reduce network costs and increase return on investment.

Legacy infrastructures, still mostly proprietary, are costly and cumbersome and inflexible. NSPs must evolve to modular, standards-based technologies that are proven in the commercial, computing world to reduce costs and increase flexibility.

The need for speed is paramount. Time-to-market can be the competitive edge. Service providers must be able to launch new services quickly and cheaply – and scale them up or down at will. The key to this transformation will be the adoption of service-oriented architectures.

In short, NSPs must be swift and agile, customer-driven, and able to adapt quickly to change.

HP is at the nexus of NSP need: telecom, IT, consumer and rich media

HP has 25 years experience in building core network infrastructure for NSPs. No other IT company has such expertise in both voice and data networks. And to this core strength, HP adds its well-known presence in both enterprise IT and consumer markets – including expertise in IP-based technologies, all of which are vitally important to NSPs. HP also has expertise and deep relationships with the media and entertainment companies that are providing the content for new services.

For NSPs, HP's broad array of software, platforms, services, and complete solutions are grouped into four major "blueprints" which map directly to NSP needs: 1) Service Delivery Platform to streamline service enablement; 2) Integrated Service Management to combine operational and business support systems; 3) Digital Media Platform to integrate rich, digital content into services; and 4) Advanced Open Telecom Platform to provide commercial off-the-shelf platforms that are enhanced to meet carrier-grade

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requirements.

With HP's own hardware, software, and services, including OpenCall and OpenView, plus technologies from more than 500 tightly linked partners, HP is helping the world's top 200 NSPs deliver voice, data, and multimedia services to hundreds of millions of subscribers.

HP's presence in consumer and enterprise markets is also valuable to NSPs. HP has been rapidly "mobilizing" its entire line of notebook PCs, Tablet PCs, and iPAQ Pocket PCs. HP is enabling these powerful devices with multiple wireless capabilities, so consumers and business professionals can be seamlessly connected – and enjoy anywhere, anytime access to voice, data and multimedia services.

In the enterprise market, NSPs also value HP's leadership in helping businesses "mobilize." HP works closely with businesses and NSPs to extend key business applications (such as email and sales force automation) beyond the confines of the office – to help mobile workers work productively outside the office. HP is also very active in driving the worldwide growth of wireless local area networks (WLANs or "hotspots"), both public and private.

In the media and entertainment industry HP expertise in content management and distribution is helping mobile and fixed operators enrich their service offerings with content that customers want.

Finally, for both businesses and consumers, HP is leading the effort to make mobile printing a reality. From devices to infrastructure, HP, along with many NSPs, is making it easy to capture, print and share images wirelessly – for both personal enjoyment and business productivity.

The combination of HP presence and expertise in telecom, enterprise and consumer markets worldwide is making HP a preferred partner for NSPs around the world.

HP "blueprints" enable NSPs to streamline entire services lifecycle

The HP Service Delivery Platform (SDP) is a blueprint for developing and deploying sophisticated end-user services. SDP allows service providers to deliver these services across multiple network types – fixed, mobile, and broadband – and across different network generations: 2G/2.5G/3G/IMS. SDP features a standards-based development environment, automated partner management ecosystem, reliable revenue sharing model for content providers, and defined service interaction methodology. Carriers that deploy services within this blueprint, including real-time IMS (Internet Protocol Multimedia Subsystem) services, can get to market faster with new niche services, reduce service deployment complexity, simplify service interaction, ease service management – and ultimately, increase revenues and reduce costs. SDP is powered by HP OpenCall software and HP Advanced Open Telecom Platforms, managed by HP Integrated Service Management, and delivered by HP consulting, integration, and support services.

The HP Integrated Service Management (ISM) blueprint provides a services oriented architecture that proactively integrates operational and business support systems (OSS and BSS), and enables NSPs to quickly deliver, manage, track and bill for subscriber

services. Based on open standards, HP ISM automates complex business processes, increases efficiency and flexibility, reduces management costs, speeds time to market, and improves customer care.

HP ISM Integration Framework integrates business processes while insulating them from the implementation. It is aligned with Next Generation OSS (NGOSS).

- HP ISM Software
 - HP OpenView OSS software portfolio provides NSPs with network management and service assurance across IP, IT and telephony networks.
 - HP Convergent Charging features integrated voice and data, pre- and post-paid infrastructure
 - HP Revenue Assurance includes solutions for billing and provisioning accuracy, fraud loss, revenue analysis, real-time data warehouse and customer care
- HP Services provides an array: service performance assessments, gap analysis, NGOSS best practices, and complete systems integration offerings.

The HP Digital Media Platform (DMP) is a standards-based service-oriented architecture that reduces the cost and complexity of digital content management and digital content delivery. The HP DMP blueprint includes platforms, a core DMP infrastructure, DMP adapters and software, and services from HP and partners. It facilitates: 1) digital content management (aggregation, management, re-purposing and archiving in media-optimized storage) and 2) digital content delivery (distribution via different networks and channels to consumers with a variety of end-user devices – PCs, digital TVs, set top boxes, digital video recorders, and mobile devices). The HP DMP supports a heterogeneous environment in which multiple vendor products (digital asset management, digital rights management) can be integrated to support a common media workflow.

The HP Advanced Open Telecom Platform (AOTP) blueprint encompasses an array of products and services that leverage the inherent advantages of modular, standards-based technologies. With its dual IT and telecom expertise, HP can bring commercial off-the-shelf (COTS) technologies and enhance them to meet the stringent requirements of telecom operating environments. With HP AOTP, network equipment providers can enable operators to accelerate time-to-market – and time-to-revenue – while reducing structural cost and risk. HP AOTP includes the industry's most complete offering of enterprise and carrier-grade platforms (rack-mount, blade and custom), operating systems including carrier-grade Linux, telecom software such as HP OpenCall and HP OpenView, and SAF-compliant management software. The HP AOTP also includes platform testing and validation, consulting and integration services, global support, and a large partner network.

HP leadership positions in NSP markets

- Ninety percent of all e911 deployments in tier 1 CDMA carriers in North

America

- No. 1 provider of off-switch signaling software (HP OpenCall, 3600 SS7 platforms in 50 countries)
- No. 1 provider of SMS enabling platforms (hardware and software) – more than 70 percent of short message traffic runs on HP OpenCall SS7 software platforms
- More than 80 million people at 35 operators on five continents depend on HP mobility management solutions (HP OpenCall mission-critical Home Location Register)
- No. 1 in TMN-based network & systems management (HP OpenView OSS, 180 networks worldwide)
- 100 million+ subscribers depend on HP mobile prepaid wireless solutions (HP OpenCall and NonStop platforms, HP Services/Consulting & Integration)
- More than 460 Service Control Points (SCPs) deployed around the world (39 percent market share) deliver mission-critical core network transaction processing for wireline and wireless networks

Additional information on HP and its solutions for network and service providers is available at www.hp.com/go/communications.

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