

The second revolution in IP networking

With the explosive growth of online users and smart devices around the globe, the Internet is at an inflection point. Enterprises rely on Internet Protocol (IP) addressing to connect, communicate, and support business continuity, expansion, and innovation. IP is in essence the new dial tone.

As the pool of IPv4 addresses fast becomes exhausted, enterprises must take steps now to maintain seamless, pervasive connectivity with consumers, partners, and businesses.

The next-generation protocol, IPv6, not only affords virtually unlimited address space, but also opens the door to new business and technology opportunities through features and functions not offered by IPv4—higher performance, enhanced mobility, automated management, built-in multicasting for multimedia applications, tightened security, simplified administration, and more.

Smooth sailing or perfect storm?

Any organization that relies on the Internet to any extent needs to begin transitioning to IPv6 today. Asia Pacific has already depleted its supply of IPv4 addresses, and other regions are not far behind. As a result, more and more of your customers or partners are operating in an IPv6 world. If you don't move ahead with IPv6, you'll be unable to reach—or be reached by—them. You could be shut out of potentially high-growth markets that are captured by IPv6-ready competitors.

In addition, you may have undetected IPv6 capabilities in your network today that could create potential security risks. For example, most operating systems ship with IPv6 enabled and preconfigured to tunnel out of the network. If unmonitored, this capability can open internal and external security holes, as non-IPv6-aware security and management systems will not recognize the traffic.

Moving to IPv6 is more than a network protocol upgrade. Everything in your IT environment is connected to the network, and the network in turn touches everything in the IT environment. Servers and storage, printers, mobile devices, websites, intranets, applications, and IP-based telephony at the core of Unified Communications all rely on IP addresses.

Transition mechanisms allow both IPv4 and IPv6 to run in parallel. However, without a well-designed IPv6 game plan for operating in this dual-protocol environment, you're liable to be caught in a perfect storm of technology and business issues.

End-to-end services for IPv6 success

Because enterprises typically purchased and configured their Internet and internal networking components to support IPv4 traffic only, multiple issues inevitably arise with the transition to IPv6.

While most IT manufacturers have been producing IPv6-enabled devices for years, networking gear may need to be upgraded with new software—or replaced, if it is not upgradable—to support IPv6 traffic. Management and security systems that support both IP environments are necessary. And you need to verify that your mission-critical applications can "talk" IPv6.

Tackling issues like these calls for specialized experience and skillsets. HP can help. We complement your in-house capabilities with a full suite of IPv6 consulting and implementation services:

- **HP IPv6 Transformation Experience Workshop**. Begin exploring your transition opportunities and challenges.
- HP IPv6 Readiness Assessment. Gauge the current state of IPv6 in your environment; identify needed upgrades and potential problem areas.
- HP IPv6 Architecture and Design. Obtain expert recommendations for IPv6 optimization.
 - HP IPv6 Web Start Service. Quickly IPv6-enable an IPv4-only website, as you plan your longer-term strategy.
- HP IPv6 Transition Consulting Service. Focused on the specifics
 required to implement the IPv6 lifecycle strategy within the
 infrastructure, taking a client from no IPv6 footprint to a planned
 startup IPv6 footprint, a dual IPv4/IPv6 steady-state environment,
 and ultimately the decommissioning of IPv4.
- HP IPv6 Integration and Deployment Service. Cut time-to-results with hands-on help from product procurement to staging, configuration, testing, and deployment.

Preview your networking and IT future

IPv6 Transformation Experience Workshop

What are the specific technology and business implications of IPv6 for your business? What would your IPv6 roadmap need to encompass? When should you make IPv6 transition planning a priority? What are the potential risks and costs of not having a plan?

This highly interactive half-day session for your IT and business executive stakeholders introduces the advantages of and requirements for moving to IPv6. Seasoned network and IT consultants provide valuable perspectives by sharing HP's experience in diverse customer situations, stimulating open discussion of your specific challenges, and helping you envision your transformation journey.

HP's proven workshop methodology gives your organization a convenient way to:

- Discover your critical success factors
- Gain stakeholder buy-in and alignment
- Identify required skillsets and training
- Spot potential quick wins
- Increase traction for current projects

Explore your unique issues and opportunities

IPv6 Readiness Assessment

Exactly how prepared is your organization for IPv6? What specific transition challenges do you face? Where might IPv6 already be present in your environment? What do you stand to gain from the transition? How can you leverage the technical capabilities of IPv6 to meet your strategic business objectives?

Gain a full understanding of the starting point for your IPv6 journey with HP IPv6 Readiness Assessment Service.

Customized to your specific requirements, the assessment provides a comprehensive evaluation of the implications of IPv6 transition for your end-to-end computing environment.

HP experts project the benefits and risks of IPv6, spotlight opportunities for taking advantage of its features and functionality to simplify and enhance your network and IT environment, and identify new service offerings that IPv6 could enable.

WHY TRANSITION NOW?

The common wisdom is that enterprises need not concern themselves with IPv6 unless they are in a region where IPv4 address exhaustion has occurred. But other factors may point to potential business continuity issues and highlight the urgency of transitioning to IPv6 now:

- Do you have e-commerce sites in Asia or other parts of the world that have deployed IPv6 networks?
- Are your suppliers or business partners moving to IPv6?
- Do you do business with government agencies in countries where IPv6 adoption has been mandated?
- Do you expect to expand or open facilities in countries where IPv6 addressing is the only option?
- Do you have telecommuting workers in countries where IPv4 addresses have been exhausted who need to access internal services over VPNs?
- Do you have mobile workers who have been issued IPv6 addresses and need to connect to your internal network?
- Do you rely on a cloud-based service provider who is testing IPv6?
- Can all your customers reach your externally facing servers?

Chart your course for IPv6 optimization

IPv6 Architecture and Design

Making changes in your network and IT architecture requires careful planning—including analyzing your needs upfront, setting well-defined objectives, defining critical dependencies, and evaluating areas of transition-related risk.

HP IPv6 Architecture and Design provides a trained HP consultant to assess the current and future IT architecture from a business, technical, and implementation viewpoint. This service will help clients develop a comprehensive set of design specifications that can be utilized as a blueprint for adopting IPv6. HP consultants will analyze the customer's current state and desired state, and then build a foundational strategy to help ensure that IPv6 can be successfully deployed across the entire enterprise.

IPv6 Web Start Service

If you have an urgent need for an IPv6 Web presence—and cannot wait for a full transition to a dual IPv4/IPv6 environment—turn to HP IPv6 Web Start Service.

Leveraging leading IPv6 gateway technology and industry best practices, HP designs and deploys a gateway solution that IPv6-enables an IPv4-only website. As a result, clients immediately realize the benefits and maintain communication continuity as they develop a comprehensive strategy to transition to a dual IPv4/IPv6 environment and ultimately to an enterprise-wide IPv6-only environment.

Plan to meet all the challenges of change

IPv6 Transition Consulting Service

Here's expert consulting you can call on when you're ready to move forward with IPv6 implementation and need hands-on planning assistance.

HP IPv6 Transition Consulting Service helps you move smoothly to IPv6 while managing a dual IPv4/IPv6 environment during the transition period. It addresses critical questions such as these:

- 1. Where do you start?
- 2. Which transition mechanisms should you use?
- 3. How can you best leverage IPv6 features and functionality to simplify your network and IT management and operations?

Key focal areas for this service include:

- · Access and connectivity management
- DNS and DHCP planning
- IP address management
- Product compliance
- Security planning
- Applications and services modification
- Operational impacts

As part of the consulting engagement, HP prepares a customized transition plan complete with recommendations for capitalizing on IPv6 to meet your strategic objectives.

Enjoy a rapid, nondisruptive deployment

IPv6 Integration and Deployment Service

Make your IPv6 strategy a reality with HP IPv6 Integration and Deployment Service.

Drawing on more than 40 years of experience working with multivendor infrastructures, HP can help you get your IPv6 environment up and running quickly and efficiently by supplementing your IT staff with the expertise necessary to achieve a successful deployment. Key features of this vendor-agnostic service include:

- Professional project management of the end-to-end integration and deployment
- Pilot and test
- Staging and distribution for large-scale deployments
- Installation and configuration
- Integration
- Troubleshooting
- Acceptance testing
- Training
- Release to production

In addition, HP Education Services offers a wide array of high-quality courses to help keep skill levels up to date. Visit www.hp.com/learn for more information.

Team up with HP to make the most of IPv6

HP is uniquely positioned to help customers with their IPv6 journey. We have a broad IT product and services portfolio and can bring proven solutions and unparalleled expertise to all phases of an IPv6 transition.

A founding member of the industrywide IPv6 Forum, HP has been a pioneering designer and implementer of the new protocol since its inception in 1995. We support IPv6 across all our product lines, and we offer transition mechanisms and strategies to allow IPv6-based platforms to interoperate with IPv4.

In addition to a full suite of end-to-end lifecycle services tailorable to your unique needs, HP is at your service with a proven IPv6 transformation methodology, a team of experienced consultants, global network and IT delivery and implementation capabilities, and a consistent focus on helping you leverage technology for favorable business outcomes.

For HP, it's about true partnering. Our consultants and support experts can work with you to transform your IT, converge your infrastructure, and keep your technology running right. Think of it as technology with a human touch. To explore ways to do more with your technology investments, connect with our service experts at www.hp.com/go/tsconnect.

Global citizenship at HP

At HP, global citizenship is our commitment to hold ourselves to high standards of integrity, contribution, and accountability in balancing our business goals with our impact on society and the planet. To learn more, visit www.hp.com/hpinfo/globalcitizenship, and for information about the HP Eco Solutions program, go to www.hp.com/ecosolutions.

Start your IPv6 transition journey by visiting www.hp.com/services/IPv6





V