



IPv6 transition roadmap

A phased implementation roadmap is essential for enterprise network teams adopting IPv6. This checklist walks organizations through eight essential steps for successful IPv6 adoption. Each step addresses specific technical and organizational requirements while emphasizing enterprise preparedness through skills development and governance.

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Action	Status
Establish executive sponsorship and governance	
Assign ownership across network, security, enterprise architecture and procurement.	<input type="checkbox"/>
Define IPv6 standards for all new purchases and deployments.	<input type="checkbox"/>
Align initiatives with broader digital transformation priorities.	<input type="checkbox"/>
Conduct comprehensive assessments	
Inventory infrastructure, applications, cloud environments and edge.	<input type="checkbox"/>
Identify IPv6 readiness, gaps and high-risk legacy systems.	<input type="checkbox"/>
Map business-critical services to underlying network dependencies.	<input type="checkbox"/>
Define strategy and business case	
Prioritize use cases such as Internet-facing services and cloud-native workloads.	<input type="checkbox"/>
Align timelines with refresh cycles and cloud initiatives.	<input type="checkbox"/>
Build a financial model that includes cost avoidance and investment requirements.	<input type="checkbox"/>
Enable foundational capabilities	
Upgrade network infrastructure, security tools and monitoring systems for IPv6 support.	<input type="checkbox"/>
Train teams and address skills gaps.	<input type="checkbox"/>
Update security architecture to ensure parity between IPv4 and IPv6 controls.	<input type="checkbox"/>
Launch pilot deployments	
Start with low-risk use cases, such as new applications or cloud workloads.	<input type="checkbox"/>
Validate performance, security controls and processes.	<input type="checkbox"/>
Refine standards and deployment models.	<input type="checkbox"/>
Expand dual-stack adoption	
Enable IPv6 alongside IPv4 gradually across core services and user systems.	<input type="checkbox"/>
Ensure consistent policy enforcement, visibility and logging for both protocols.	<input type="checkbox"/>
Address application compatibility and partner integration issues.	<input type="checkbox"/>
Optimize and transition toward IPv6-first deployments	
Reduce reliance on IPv4 on internal services and cloud-native apps.	<input type="checkbox"/>
Simplify architecture by minimizing NAT and legacy dependencies.	<input type="checkbox"/>
Track KPIs such as IPv6 traffic share and risk reduction continuously.	<input type="checkbox"/>
Implement and scale	
Embed IPv6 into standard operating procedures, procurement and architecture governance.	<input type="checkbox"/>
Monitor vendor ecosystem alignment and emerging requirements continuously.	<input type="checkbox"/>
Position IPv6 as a strategic, long-term enabler of innovation (e.g., IoT, edge computing).	<input type="checkbox"/>