

# IPv6 MIGRATION SERVICES



CSC  
NORTH AMERICAN  
PUBLIC SECTOR

*As agencies posture themselves to comply with Office of Management and Budget (OMB) guidance regarding IPv6 transition activities, they face both technical and financial challenges. While IPv6 offers enhanced functionality that will better address increasing reliance on the Internet, the road map toward achieving that functionality must be carefully laid out. CSC offers a powerful set of tools, processes and expertise to provide our customers with transition options that will best support their changing business needs.*

## Features and benefits

- Increased address space
- IPv6 address autoconfiguration
- Enhanced quality of service
- IP security

## Why CSC?

CSC has worldwide experience providing IPv6 planning and implementation support to Government and commercial customers and will provide clients with the insight required to accurately assess the impact of IPv6 on operations. CSC will evaluate migration options that address client objectives and constraints while maintaining compatibility with current and planned technical initiatives in the client's environment.

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Our experience and knowledge of applications and network systems uniquely qualifies us to complete the OMB-required inventory, impact assessment and transition planning tasks in an efficient and cost-effective manner. Our dual-stack architecture configuration will enable communication via both IPv6 and IPv4 formats. Our preparation for these transitions is evidenced by our past performance, our Enterprise Network Managed Services Center of Excellence and test lab, and our experienced personnel.

## Features and Benefits

### Increased Address Space

- IPv6 increases the IP address size from 32 bits to 128 bits to support a much greater number of addressable nodes, more levels of addressing hierarchy and simpler autoconfiguration of addresses

### IPv6 Address Autoconfiguration

- Stateless address autoconfiguration
  - No manual configuration of hosts
  - Minimal configuration of routers
  - No additional servers
- Stateful address autoconfiguration
  - DHCPv6
  - Manual configuration
- Stateful and stateless autoconfiguration may be used simultaneously and complement each other

## Enhanced Quality of Service (QoS)

- IPv6 enhances QoS using a new flow label capability that permits the sender to request special handling for delay-sensitive communications
  - VoIP
  - Multimedia
  - Video conference

## IP Security

- IPv6 provides extensions to integrate existing IP security authentication, data integrity and data confidentiality communications