



U.S. General Services Administration

# Federal Acquisition Service

## GSA Report

# IPv6 Network Readiness

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# Networkx Contractors IPv6 Readiness

## Federal Acquisition Service

Networkx Contractor	Public Facing Servers	Enterprise Networks	MTIPS IPv6 Support	IPv6 Peering	Investment on IPv6	IPv6 World Day
	Sept 30 2012	Sept 30 2014				
AT&T	Dual Stack since 3/2010	Dual Stack NBIP-VPNS Since 1Q2009	Dual Stack target date Dec 2011	Yes and growing	Substantial comparable to Y2K	Participated
	Native IPv6 Ethernet ports 12/2012	Native IPv6 2Q2013				
Level 3	Dual Stack Since 7/2010	Dual Stack Since 7/2010	N/A	Yes and Growing	Substantial	Participated
		Native IPv6 only 2014				
Qwest / Century Link	Dual Stack Now Native IPv6 by 9/30/2012	Dual Stack Now Native IPv6 by 9/30/2012	Transport & Filtering 9/30/2012	Yes and Growing	Substantial	Participated

# Networkx Contractors IPv6 Support

Federal Acquisition Service

Networkx Contractor	Public Facing Servers	Enterprise Networks	MTIPS IPv6 Support	IPv6 Peering	Investment on IPv6	IPv6 World Day
	Sept 30 2012	Sept 30 2014				
Sprint	Dual Stack Since 2010	Dual Stack Since 2007	Dual Stack 9/30/2012	Yes and Growing	Unknown	Participated
	Global Network Dual Stack 9/30/2012					
Verizon	Dual Stack and Native IPv6 Now	Dual Stack and Native IPv6 Now	Dual Stack transport Now Security Reporting 4Q2011	Yes and Growing	Unknown	Participated

# Summary

## Federal Acquisition Service

- ❑ GSA has found that Networx Contractors are investing to upgrade their networks
- ❑ Commercial availability of IPv6 has been demonstrated with the increasing trend of adding peers and adjacencies in the public IP Tier 1 networks
- ❑ If an Agency finds Networx contractors not cooperating during the migration please provide specific details to GSA to help remove any barrier to meeting the IPv6 mandate

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# Back Up

# AT&T IPS IPv6 Service Status

## Federal Acquisition Service

### Networkx IPS dual stack introduced in March 2010

- ❑ Coverage in CONUS and OCONUS(AK, HI, PR, USVI) Region
- ❑ Today: New-Start Dual-Stack Routine/Critical service – T1, NxT1, T3, OC3-12, sub-rate ports, usage billing, managed router
- ❑ Today: Migration (v4 to Dual-Stack) Routine service – T1, NxT1, T3, OC3-12, sub-rate ports, usage billing, managed router
- ❑ Dec '11\*: Migration (v4 to Dual-Stack) Critical service
- ❑ Dec '11\*: New-Start Dual-Stack Routine/Critical Ethernet (Gig/10G) service
- ❑ Jun '12\*: Migration (v4 to Dual-Stack) Routine & Critical Ethernet service
- ❑ Jun '13\*: New-Start/Migration Dual-Stack OC-48 service

\*Target Dates are subject to change

# AT&T IPS IPv6 Service Status (continue)

## Federal Acquisition Service

### Networx IPS native IPv6 available in June 2011

- ❑ Today: New-Start native IPv6 Routine service – T1, NxT1, T3, OC3-12, sub-rate ports, usage billing
- ❑ Dec '11\*: New-Start native IPv6 Critical service and managed router
- ❑ Dec '11\*: Migration (Dual-Stack to Native IPv6) Routine/Critical service T1,NxT1, T3, OC3-12, sub-rate ports, usage billing, managed router
- ❑ Jun '12\*: New-Start Dual-Stack Routine/Critical Ethernet (Gig/10G) service
- ❑ Jun '12\*: Migration (Dual-Stack to Native IPv6)Routine/Critical Ethernet

\*Target Dates are subject to change

# AT&T NBIP-VPNS IPv6 Service Status

## Federal Acquisition Service

### Networx NBIP-VPNS dual stack introduced in 2009

- ❑ Coverage in CONUS Region
- ❑ Today: New-Start Dual-Stack Routine/Critical service – T1, NxT1, T3, OC3-12, Ethernet (Gig/10G), sub-rate ports, usage billing
- ❑ Apr '12\*: Migration (v4 to Dual-Stack) Routine/Critical service – T1, NxT1,T3, OC3-12, sub-rate ports, usage billing
- ❑ Jul '12\*: Migration (v4 to Dual-Stack) Routine/Critical Ethernet (Gig/10G)
- ❑ Oct '12\*: Migration (v4 to Dual-Stack) Frame/ATM to PPP service
- ❑ Jun '13\*: New-Start Dual-Stack OC-48 service

### Networx NBIP-VPNS native IPv6 available in 2013

- ❑ Anticipated service launch is Apr '13\*
- ❑ Apr '13\*: New-Start native IPv6 Routine/Critical service – T1, NxT1, T3, OC3-12, Ethernet (Gig/10G), sub-rate ports, usage billing
- ❑ Jan '14\*: Migration (Dual-Stack to IPv6) Routine/Critical service – T1, NxT1,T3, OC3-12, Ethernet (Gig/10G), sub-rate ports, usage billing

\*Target Dates are subject to change



# IPv6 Address Support

## Federal Acquisition Service

### IPS - allocate IPv6 LAN blocks

- ❑ Assigned per site (aggregated by router/country)–/56 -> /48
- ❑ Not allowed to be advertised to other providers. Customer can bring their own Addresses
- ❑ Only customers w/Address space can be multi-homed with another provider
- ❑ Minimum /48 to be advertised to Internet
- ❑ Minimum /64 routed internally

### NBIPVPN – allocate IPv6 LAN blocks

- ❑ AT&T assigned IPv6 address -/64 address block per port
- ❑ Support of Customer-provided IPv6 addresses in 2012
- ❑ Evaluating support of /127 address block assignments based upon new RFC