



August 28, 2008

11400 Burnet Road  
Austin, TX 78758

Mr. Jeremy Duncan  
Joint Interoperability Test Command  
Ft. Huachuca, Arizona

Dear Mr. Duncan:

IBM's AIX® operating system is an open, standards-based operating system, from IBM Corporation, that conforms to The Open Group's Single UNIX<sup>1</sup> Specification Version 3. It operates on the IBM POWER™ (formerly known as IBM System p™) hardware platforms. The Virtual I/O Server (VIOS) is part of the IBM POWER Systems Advanced Power Virtualization hardware feature. VIOS allows sharing of physical resources between Logical Partitions (LPARs) including virtual SCSI and virtual networking. This allows more efficient utilization of physical resources through sharing between LPARs and facilitates server consolidation.

Based upon our commercially-reasonable test efforts, AIX Version 6.1 on a virtualized environment, that uses VIOS, meets the compliance requirements for the Advanced Sever Profile, as specified in the DoD IPv6 Standard Profiles for IPV6 Capable Products, Version 2.0, with the exception of the IKEv2-related IPsec requirements.

Specifically the following IKEv2-related RFCs will be supported in a future release of AIX.

- RFC 4301 Security Architecture for the Internet Protocol
- RFC 4302 IP Authentication Header (AH)
- RFC 4303 IP Encapsulating Security Payload (ESP)
- RFC 4305 (ESP and AH) Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH)
- RFC 4306 Internet Key Exchange (IKEv2) Protocol
- RFC 4307 Cryptographic Algorithms for Use in the Internet Key Exchange Version 2 (IKEv2)
- RFC 4308 Cryptographic Suites for IPsec

In addition, the new MUST RFCs for the Advanced Server Profile, from the DoD IPv6 Profiles Version 3.0 (draft), will be targeted for future releases.

- RFC 4861 supersedes RFC 2461 (Neighbor Discovery for IPv6)
- RFC 4862 supersedes RFC 2462 (IPv6 Stateless Address Auto-configuration)
- RFC 4865 SMTP Submission Service Extension for Future Message Release
- RFC 4941 supersedes RFC 3041 (Privacy Extensions for Stateless Address Auto-configuration in IPv6)
- RFC 5095 Deprecation of type 0 routing headers in IPv6

The specific compliance requirements met by AIX Version 6.1 are presented below using the checklist from Appendix F of the DoD IPv6 Generic Test Plan, Version 3, as required by the JITC IPv6 Interoperability Certification Process, Version 1.2:

#### **Network Server Requirements (Simple and Advanced Server)**

##### **IPv6 Base**

- RFC 2460 Internet Protocol v6 (IPv6) Specification
- RFC 2461 Neighbor Discovery for IPv6
- RFC 2462 IPv6 Stateless Address Auto-configuration or RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6) or both.
- RFC 2462 IPv6 Stateless Address Auto-configuration (Section 5.5 only)
- RFC 4007 IPv6 Scoped Address Architecture

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<sup>1</sup> UNIX is a registered trademark of The Open Group in the United States and other countries.

- RFC 4193 Unique Local IPv6 Unicast Addresses
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4443 Internet Control Message Protocol (ICMPv6)
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6

***(Required support for at least one of the below)***

- RFC 2464 Transmission of IPv6 Packets over Ethernet Networks
- RFC 2467 Transmission of IPv6 Packets over FDDI Networks
- RFC 2472 IP Version 6 over PPP
- RFC 3572 IPv6 over MAPOS (Multiple Access Protocol over SONET/SDH) (JITC Recommended)

***(Optional additional connection technologies)***

- RFC 2491 IPv6 Over Non-Broadcast Multiple Access (NBMA) Networks
- RFC 2492 IPv6 over ATM Networks January 1999
- RFC 2497 Transmission of IPv6 Packets over ARCnet Networks
- RFC 2590 Transmission of IPv6 Packets over Frame Relay Networks Specification
- RFC 3146 Transmission of IPv6 over IEEE 1394 Networks
- RFC 4338 Transmission of IPv6, IPv4, and Address Resolution Protocol (ARP) Packets over Fibre Channel

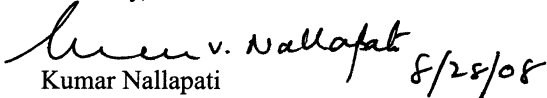
**Advanced Server (Must support the Host/Workstation requirements and add network services according to the manufacturer's service profile)**

- RFC 1981 Path MTU Discovery for IPv6
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 4213 Transition Mechanisms for IPv6 Host and Routers  
(Hosts/Workstations MUST support dual stacks and MAY support other mechanisms)
- RFC 3986 Uniform Resource Identifier (URI): Generic Syntax
- RFC 3484 Default Address Selection for IPv6
- RFC 3596 DNS Extensions to Support IPv6 (Hosts must be capable of using IPv6 DNS)
- RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
- RFC 3041 Privacy Extensions for Stateless Address Auto-configuration in IPv6
- RFC 2616 Hypertext Transfer Protocol (HTTP)
- RFC 959 File Transfer Protocol (FTP)
- RFC 2428 FTP Extensions for IPv6 and NAT
- RFC 2821 Simple Mail Transfer Protocol (SMTP)
- RFC 3226 DNS Security and IPv6 A6 aware server/resolver message size requirements

**IPSec**

- RFC 2401: Security Architecture for the Internet Protocol
- RFC 2402: IPsec Authentication Header (AH)
- RFC 2406: IPsec Encapsulating Security Payload (ESP)
- RFC 2407: The Internet IP Security Domain of Interpretation for ISAKMP
- RFC 2408: Internet Security Association and Key Management Protocol
- RFC 2409: The Internet Key Exchange (IKE)
- RFC 4109: Algorithms for Internet Key Exchange Version 1 (IKEv1)

Sincerely,

 8/28/08

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