



April 7, 2008

Capt. Richard J. Duncan  
Joint Interoperability Test Command  
Ft. Huachuca, AZ

Captain Duncan:

This letter states that Dell, Inc.'s **Precision M6300**, mobile workstation, to the best of our knowledge, complies with the August 2007 version 3, Section 1.6 of DoD's IPv6 Standard Profiles for IPv6 Capable Products, as a "Host/Workstation" End Node running the following services:

HTTP (HyperText Transfer Protocol)  
SMTP (Simple Mail Transfer Protocol)  
FTP (File Transfer Protocol)

The Dell Precision M6300™ is the ultimate in mobile performance workstations, offering all of the power you come to expect from workstation computing. Designed for high-end performance needs, the M6300 can handle even the most graphically intensive programs, making it a preferred choice for engineering design, analysis and digital content creation professionals.

Please note that any testing conducted by JITC pursuant to IPv6 Certification, and the results thereof, are proprietary confidential information of Dell, Inc., and constitute a Dell trade secret.

The Dell Precision M6300 is representative of a family of Dell products sharing identical networking stack, including same generation of Ethernet controller and same Ethernet controller driver, hereinafter referred to as "Dell's Precision M6300 family". Certification of the Precision M6300 shall also apply to these other members of this product family:

**Latitude D630**  
**Latitude D630ATG**  
**Latitude D630XFR**  
**Latitude D430**  
**Latitude XT**  
**Latitude D830**  
**Latitude D530**  
**Precision M2300**  
**Precision M4300**

Dell's Precision M6300 family supports the following RFCs as indicated in Appendix (C) of the document "DoD IPv6 Standard Profiles for IPv6 Capable Products, Version 3.0", dated August 1, 2007:



### **Section 2.1: Base Requirements**

- RFC 1981 – Path MTU Discovery for IPv6  
Provide manual or static configuration of its IPv6 Interface addresses
- RFC 2460 – Internet Protocol v6 (IPv6) Specification  
Operate with the default minimum link MTU size of 1280 octets  
Support a minimum link MTU of 1500 to allow for encapsulation
- RFC 2461 – Neighbor Discovery for IPv6
- RFC 2462 – IPv6 Stateless Address Auto-configuration  
Ability to disable section 5.5 in RFC 2462  
Link-local address configuration and duplicate address detection (DAD) must not be disabled.
- RFC 4007 – IPv6 Scoped Address Architecture
- 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
- RFC 3810 – Multicast Listener Discovery, version 2 (MLDv2) for IPv6
- RFC 2464 – Transmission of IPv6 packets over Ethernet networks
- RFC 3315 – Dynamic Host Configuration Protocol for IPv6

### **Section 2.2: IP Security Layer (IPSec) Functional Requirements**

- RFC 4301 – Architecture
- RFC 4302 – IP Authentication Header (AH)
- RFC 4303 – Encapsulating Security Payload (ESP)
- RFC 4305 – Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH)
- RFC 4309 – Using Advanced Encryption Standard (AES) CCM Mode with IPSec Encapsulating Security Payload (ESP)
- RFC 3041 – Privacy Extensions for Stateless Address Autoconfiguration in IPv6
- RFC 4869 – Suite B Cryptographic Suites for IPSec

#### **Section 2.2.2: IKE Version 2 Support**

- RFC 4306 – Internet Key Exchange (IKEv2) protocol
- RFC 4307 – Cryptographic Algorithms for use in the Internet Key Exchange version 2 (IKEv2)
- RFC 4304 – Extended Sequence Number (ESN)
- RFC 2409 – The Internet Key Exchange (IKE)

### **Section 2.3: Transition Mechanism (TM) Functional Requirements**

- RFC 4213 – Transition Mechanisms for IPv6 Hosts and Routers

#### **Section 3.1.1: Host/Workstation Product Class Profile**

- RFC 3484 – Default Address Selection for IPv6  
Default policy table
- RFC 3596 – DNE Extensions to Support IPv6 (Hosts must be capable of using IPv6 DNS)
- RFC 3986 – Uniform Resource Identifier (URI): Generic Syntax



**Section 3.1.3.1: Advanced Server Profile**

RFC 2616 – HTTP

RFC 2821 – Simple Mail Transfer Protocol (SMTP)

**Other Requirements**

RFC 959 – File Transfer Protocol (FTP)

The following IKEv1 (Internet Key Exchange, version 1) RFCs are currently supported:

RFC 2407 - The Internet IP Security Domain of Interpretation for ISAKMP

RFC 2408 - Internet Security Association and Key Management Protocol (ISAKMP)

RFC 4109 - Algorithms for IKEv1

The planned operating system software for IPv6 support on Dell's Precision M6300 family is: Novell's SUSE Linux Enterprise Server 10 SP2.

Other RFCs are listed as "optional" or "N/R"; it is not Dell's intention to support those RFCs at this time.

Sincerely,



Jim Leftwich  
Director, Engineering