



DEPARTMENT OF DEFENSE

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CHIEF INFORMATION OFFICER

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**MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
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UNDER SECRETARIES OF DEFENSE
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CHIEF INFORMATION OFFICERS, MILITARY
DEPARTMENTS**

SUBJECT: DoD Internet Protocol Version 6 (IPv6) Definitions

- References:**
- (a) DoD CIO Memorandum, DoD Internet Protocol Version 6 (IPv6) Interim Transition Guidance, September 29, 2003**
 - (b) DoD CIO Memorandum, DoD Internet Protocol Version 6 (IPv6) Implementation, February 6, 2008**
 - (c) DoD Internet Protocol Version 6 (IPv6) Address Plan, March 21, 2008**

Reference (a) provided an initial DoD definition for IPv6 Capable systems or products. Reference (b) tasked the Office of the DoD Deputy CIO and the Defense Information Systems Agency to develop an IPv6 Capable definition in coordination with the DoD Components.

The Department recognizes the need to update and clarify definitions of IPv6 Capable and IPv6 Enabled to establish common terminology and understanding for each term, establish a reference for universal reporting, and identify tasks and milestones needed for each definition. While the DoD definitions are derived from the IPv6 standard profiles contained in the DoD Information Technology Standards Registry (DISR), harmonization with U.S. Government definitions is achieved through the ongoing synchronization of the DISR and the National Institute of Standards and



Technology IPv6 standard profiles. Accordingly, the following are to be used when defining DoD products and networks as being IPv6 Capable or Enabled:

IPv6 Capable Products – Products (whether developed by commercial vendor or the government) that can create or receive, process, and send or forward (as appropriate) IPv6 packets in mixed IPv4/v6 environments. IPv6 Capable Products shall be able to interoperate with other IPv6 Capable Products on networks supporting only IPv4, only IPv6, or both IPv4 and IPv6, and shall also:

- Conform with the requirements of the DoD IPv6 Standard Profiles for IPv6 Capable Products document contained in the DISR
- Possess a migration path and/or commitment to upgrade from the developer (company Vice President, or equivalent, letter) as the IPv6 standard evolves
- Ensure product developer IPv6 technical support is available
- Conform to National Security Agency (NSA) and/or Unified Cross Domain Management Office requirements for Information Assurance products

IPv6 Capable Networks – Networks that can receive, process, and forward IPv6 packets from/to devices within the same network and from/to other networks and systems, where those networks and systems may be operating with only IPv4, only IPv6, or both IPv4 and IPv6. An IPv6 Capable Network shall be ready to have IPv6 enabled for operational use, when mission need or business case dictates. Specifically, an IPv6 Capable Network must:

- Use IPv6 Capable Products
- Accommodate IPv6 in network infrastructures, services, and management tools and applications
- Conform to DoD and NSA-developed IPv6 network security implementation guidance
- Manage, administer, and resolve IPv6 addresses in compliance with the DoD IPv6 Address Plan (reference (c)), when enabled

IPv6 Enabled Network – An IP network that is supporting operational IPv6 traffic, through the network, end-to-end.

Thank you for your support to this effort. My point of contact for this action is Mr. Kris Strance (Office of the Deputy CIO), (703) 607-0249, kris.strance@osd.mil.



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