

No.: Y15-407

Title: TCP/IP Naming Standard

Rev. Date: 3/11/02

The purpose of this document is to establish a standard for determining and assuring the implementation of TCP/IP names within BWXT Y-12.

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| Revision Date | Description of Change | Pages Affected |
|----------------------|---|-----------------------|
| 3/11/2002 | DM/R Number – 02-15/407-001 Description – To compile and formally document the naming standards for TCP/IP addresses New Document | All |

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| PURPOSE | The purpose of this document is to establish a standard for determining and assuring the implementation of TCP/IP names within BWXT Y-12. |
| APPLIES TO | This standard applies to all computing devices within Y-12 that are attached to the unclassified network and are running the TCP/IP protocol. |
| OTHER DOCUMENTS NEEDED | NONE |
| WHAT TO DO | A. Establishing the Standard for TCP/IP Names |
| Information Systems and Technology (IS&T) | <ol style="list-style-type: none"> 1. Develop and define the standards as well as the structure and methodology for device names and domain names. Appendix A provides a list of terms and definitions associated with TCP/IP names, and Appendix B is a summary of TCP/IP naming requirements and general information. |
| Employees | <ol style="list-style-type: none"> 2. Request domain and subdomain approval from IS&T via CIO@y12.doe.gov. |
| Computing and Telecommunications Security Organization (CTSO) | <ol style="list-style-type: none"> 3. Verify and approve the standards for TCP/IP names. 4. Approves recommended changes to TCP/IP naming conventions used within Y-12. |
| RECORDS | (None) |
| SOURCE DOCUMENTS | <ul style="list-style-type: none"> • DOE O 200.1, <i>Information Management Program</i> • DOE N 205.1, <i>Unclassified Cyber Security Program</i> |

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APPENDICES

- A. Definition of Terms
- B. TCP/IP Naming Requirements and General Information

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APPENDIX A

Definition of Terms

Computing device - Any device used for computing, including PCs, workstations, servers, and printers.

TCP/IP protocol - TCP/IP (Transmission Control Protocol/Internet Protocol) is the standard Internet protocol, originally developed for DARPA (Defense Advanced Research Projects Agency).

TCP/IP Name - A unique hierarchical Internet name based on a sequence of subnames separated by periods (dots), which includes a device name and a domain name.

Device name - A name for a device that is the first subname of the TCP/IP name.

Domain name - A subname of the Internet name hierarchy that follows the device name.

Unclassified network - The network within Y-12 that carries all unclassified computing traffic. This network is attached to the three site (Y-12, ETTP, and ORNL) network, which is in turn attached to the Internet.

NetBIOS name - A unique name (up to 15 characters in length) given to Microsoft clients and servers for Microsoft networking.

Long e-mail name - The unique mailname given to each person who has a Y-12 e-mail account. These names usually follow the pattern of last name and first initials of the first and middle names.

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APPENDIX B

TCP/IP Naming Requirements and General Information

- TCP/IP names for devices running the TCP/IP protocol connected to the unclassified Y-12 network consist of a device name followed by a domain name.
- Windows 95/98/NT clients and servers are configured with NetBIOS names for Microsoft networking.
- The TCP/IP name consists of a unique device name followed by the Y-12 domain name of y12.doe.gov (e.g. napierrw.y12.doe.gov).
- The NetBIOS name conforms to the conventions specified in "Naming Conventions for Microsoft Network Devices" as provided in:
<http://www-internal.y12.doe.gov/cio/msname.htm>
For PCs this convention specifies that the NetBIOS name be based on the long e-mail name.
- The TCP/IP device name should be the same as the NetBIOS name.
- All devices exist in the "top level" Y-12 domain named y12.doe.gov (i.e. there are no subdomains).
- Additional domain names may be granted in special cases, such as for visibility for large projects involved with technology transfer (e.g. orcmt.org).
- Requests for additional domains or subdomains require formal approval by Information Systems and Technology (IS&T). Requestors should submit requests to CIO@y12.doe.gov.