**COMMONWEALTH OF PENNSYLVANIA**

**HEALTH & HUMAN SERVICES DELIVERY CENTER**

# INFORMATION TECHNOLOGY STANDARD

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| Name of Standard: | Number: |
| **Topological Connectivity**  | **STD-ENSS007**  |
| Domain: | Category: |
| **Network**  | **Wide, Metropolitan & LAN’s**  |
| Date Issued: | Issued by Direction Of:  |
| **05/09/2001**  |  **Jon Arnold, Chief Technology Officer** **Health & Human Services Delivery Center** |
| Date Revised:**08/05/2020** |

**Abstract:**

The Health and Human Services Delivery Center (HHS DC) network consists of local area networks (LANs), metropolitan area networks (MANs), wide area networks (WANs), protocols for data transfer, interface cards, servers, and more. This document provides the details of the technology employed in the HHS DC network.

**General:**

The purpose of this document is to provide technical details of the topological connectivity of the HHS DC network, which serve as standards for that network.

HHS DC no longer supports the use of any proprietary equipment and network protocols.

**Standard:**

## LAN Connectivity

At a macro level, HHS DC’s network is an extended LAN using TCP/IP for host-to-host connectivity. The LAN protocol used by the network is the IEEE 802.3 Ethernet standard.

Each of the Department of Human Services’ (DHS) campus facilities (state hospitals and mental retardation centers), state office complexes, and county assistance offices are networked using 100BaseT or higher network interface cards (NIC’s), routers, and switches. Fiber transport is used where required by distance or workload capacity.

## MAN Connectivity

HHS DC’s MAN connectivity is delivered by a pair of Gigabit Ethernet circuits to COPANET. Century Link manages the COPANET ring for the Commonwealth of Pennsylvania Office of Administration (OA).

## WAN Connectivity

The WAN sites connect to Verizon’s Private Internet Protocol (PIP) cloud, a Multiprotocol Label Switching network (MPLS), and communicate back to DHS over Ethernet Virtual Circuits (EVC’s), that connect PIP to COPANET. The handoff of the WAN traffic to DHS is via the COPA/DHS WAN Virtual Routing and Forwarding (VRF) table delivered over COPANET.

**Exemptions from this Standard:**

There will be no exemptions to this standard.

**Refresh Schedule:**

All standards and referenced documentation identified in this standard will be subject to review and possible revision annually or upon request by the HHS Delivery Center Domain Leads.

**Standard Revision Log:**

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| --- | --- | --- | --- |
| **Change Date**  | **Version**  | **Change Description**  | **Author and Organization**  |
| 05/09/2001  | 1.0  | Initial Creation  | Unknown  |
| 03/27/2002  | 1.1  | Edited style and added sections to doc.  | Beverly Shultz  |
| 04/26/2004  | 1.2  | Updated  | Tom Zarb  |
| 02/10/2005  | 1.2  | Reviewed  | Doug Rutter, DTE  |
| 11/13/2006  | 1.2  | Reviewed  | Doug Rutter, DTE  |
| 12/10/2007  | 1.3  | Reviewed and edited style  | Doug Rutter, DTE  |
| 04/28/2010  | 1.4  | Reviewed, inserted proprietary statement  | Matt Messinger  |
| 02/14/2011  | 1.5  | Revised for Network transition  | Matt Messinger  |
| 11/18/2013  | 1.5  | Reviewed – No Change Necessary  | Matt Messinger  |
| 03/31/2015  | 1.6  | Reviewed – Changed DPW to DHS  | Bob Gordon, BIS-DTE  |
| 03/04/2016  | 1.7  | Updated the CTO’s name  | Aamir Qureshi, BIS-DTE  |
| 03/19/2020 | 2.0 | Updated to new Organization/reviewed. | Bob Gordon, HHS TSO |
| 08/05/2020 | 2.1 | Signature removed. | P. Gillingham |