COMMONWEALTH OF PENNSYLVANIA
HEALTH & HUMAN SERVICES DELIVERY CENTER

INFORMATION TECHNOLOGY STANDARD

Name of Standard:	Number:
WAN Protocols	**STD-ENSS016**
Domain:	Category:
Network	**Wide, Metropolitan & LAN's - Protocols**
Date Issued:	Issued by Direction Of:
05/09/2001	
Date Reviewed:	
08/05/2020	**Jon Arnold, Chief Technology Officer** **Health & Human Services Delivery Center**

Abstract:

A protocol is an agreed upon format for interaction at the computer as well as the human level. A wide area network (WAN) is a network created by connecting two or more local area networks (LANs) across a broad geographic area.

General:

The purpose of this document is to inform the reader regarding WAN protocols used by the Department of Human Services (DHS).

The Health and Human Services Delivery Center (HHS DC) supports the Departments of Health (DOH), Human Services (DHS), Aging (PDA), Drug and Alcohol Programs (DDAP) and Military and Veterans Affairs (DMVA).

The purpose of this document is to announce the WAN protocols determined by the Network Unit and in place at the Health and Human Services Delivery Center (HHS DC) Technology Services Office (TSO).

Standard:

HHS DC TSO's standard protocol for connecting LANs across a broad geographic area is a combination of Frame Relay and Multiprotocol Label Switching (MPLS) Virtual Private Networks (VPN). Frame relay switches provide a permanent virtual circuit (PVC) connection to each network location at speeds ranging from 768 Kbps (two PVC's would constitute a full T1 or 1.544 Mbps) to 1.2 Gbps (consisting of two OC12 PVC's of 600 Mbps each). MPLS is a standards-based technology used to speed up

the delivery of network packets over multiple protocols such as the Internet Protocol (IP), Asynchronous Transport Mode (ATM) and frame relay network protocols. A virtual private network (VPN) uses shared public telecom infrastructure, such as the Internet, to provide secure access to remote offices and users.

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:

Change Date	Version	Change Description	Author and Organization
05/09/2001	1.0	Initial Creation	Unknown
04/08/2002	1.1	Edited for style	Beverly Shultz
04/26/2004	1.1	Reviewed	Timothy Stouffer
12/14/2004	1.2	Updated	Timothy Stouffer
07/13/2005	1.2	Reviewed content – No changes	Timothy Stouffer
11/13/2006	1.2	Reviewed content – No changes	Doug Rutter
01/29/2008	1.3	Reviewed content & Edited style	Doug Rutter
09/24/2010	1.3	Reviewed content – No changes	Doug Rutter
12/18/13	1.3	Updated	Robert Gordon, BIS-DTE
04/23/2015	1.4	Replaced DPW references with DHS	Robert Gordon, BIS/DTE
03/07/2016	1.5	Updated Director's name	Aamir Qureshi, BIS/DTE
03/30/2020	2.0	Update Org., Review Content	Bob Gordon, HHS TSO
08/05/2020	2.1	Remove Signature.	P. Gillingham HHS TSO