# COMMONWEALTH OF PENNSYLVANIA

# HEALTH & HUMAN SERVICES DELIVERY CENTER

# INFORMATION TECHNOLOGY PROCEDURE

|  |  |
| --- | --- |
| Name of Procedure: | Number: |
| **Network Assessment Upgrade** | **PRO-ENSS005** |
| Domain: | Category: |
| **Network** | **Network Design** |
| Date Issued: | Issued By: |
| **05/09/2001** | Dean Schutte, TSO Compute Service Delivery Chief, Health & Human Services Delivery Center |
| Date Reviewed: |
| **07/28/2020** |

**Abstract:**

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).

Each site at the Health & Human Services Delivery Center (HHS DC), Aging (PDA) and Insurance (PID) connected to the HHS DC network may need upgrades and performance improvements to its site network.

**General:**

The designated site information technology (IT) coordinator or electronic data processing (EDP) coordinator can initiate a network assessment to determine if an upgrade to the site network in needed.

The purpose of this document is to provide:

1. A procedure to request and obtain a network assessment of an existing network configuration of a specific site for possible upgrades and performance improvements.
2. Guidance completing the network assessment report using the [*Network Assessment Template*](http://mydhs/cs/groups/webcontent/documents/communication/p_032185.doc)*.*

**Procedure:**

**Network Assessment Procedure**

| **Actor** | **Action** |
| --- | --- |
| Designated site IT coordinator or EDP coordinator | Contact your designated Program Office Coordinator (POC) for assistance in beginning the process of evaluating and reporting the current network equipment, configurations, and locations. |
| POC | Send an e-mail request to the Health & Human Services Delivery Center (HHS DC), Technical Services Operations (TSO) for assistance in evaluating the possibility of an upgrade to network infrastructure at a site.  TSO staff will be assigned to complete this project and assist in the documentation process. |
| Site IT Coordinator | Complete the initial Network Assessment forms and provide the appropriate information to section II, including the current network configuration.  Get a list of equipment, locations, and associated IP addresses from the site IT person.  The completed form section II will be forwarded to HHS DC/TSO for review and to determine the need to schedule an on-site visit and interviews with the IT Coordinator and other key staff.  The TSO person assigned to this project will complete sections III, IV and V at the close of this phase. |
| Site IT Coordinator | Be present to assist the TSO staff person in completing sections III, IV and section V of the Network Assessment forms. Be prepared to give estimates of anticipated user growth and network growth, provide access to physical plant areas, and assist in the gathering of any other information needed to complete this phase. |
| TSO Project Lead | The facility is reviewed, and the review is presented to TSO. If the project is approved to move forward, the TSO person assigned as project lead will coordinate the scheduling of vendors to visit the site to, gather information for cost estimates of labor and materials. Any vendor contacts should be done through this person to the completion of the project. |
| The Vendor | Complete the requested estimates and compile a formal report to the HHS IT DC/TSO Network Configuration Team. This estimate will include cost breakdowns for labor, materials, estimated timeframes for completion and other itemized issues such as maintenance agreements.  This will be attached to the Network Assessment report as section VI. Sections VII and I will be completed, and the report compiled.  The final formal report will be forwarded to the site for cost review. (Use the following outline (in [“Appendix I”](#_Appendix_I_2) of this document) as for writing the report. See *Network Assessment Template* for details.) |
| The POC and/or IT Coordinator | Complete Agency Procurement Request (APRs) using the vendor costs and schedules for the TSO. Once these have been received, the FL(s) will be generated and forwarded to the comptroller’s office for final disposition. *The completion of APRs is an indication that the site has enough money in the budget to complete the project. The encumbrance of money from the site budget can be determined by the business office person checking FL status on Report 9.* |

* Sites are **strongly encouraged** to hire qualified professionals to install and terminate cable. It is **vitally important** to accurately document the installation, whether professional cable installers or departmental staff is used. Before any cabling is installed, one should obtain accurate copies of building blueprints and document the end points (room and IDF) and path of all horizontal Cat 5 and fiber optic cable runs. Each port on the patch panel should have the same **unique** label as the wall plate port in a room. Both ends of the patch cable should also have an identical, **unique** label. In addition, one should maintain a database that minimally maps the patch panel/wall plate port label to a room location and includes the corresponding label for the patch cable as well as a unique hub port number (usually specified through management software).
* Since the failure of any network component could mean that all devices attached to that device will be unable to communicate, it is important to have a viable disaster recovery and maintenance plan in place, especially for server connections. One plan is to execute a hardware maintenance contract with the vendor who can supply a functioning component for the failed one. The contract should include software/firmware upgrades. The major downside to this type of plan is that there may be an unacceptable delay in delivering the replacement component in the event of an emergency.
* HHS DC expects that the report will be used as the basis for a contract or statement of work for completion of the IT infrastructure upgrading as recommended. The actual work contracted for completion may require modification as deemed necessary by the Program Office, HHS DC and/or the site.

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## **Appendix I**

**Completing the Network Assessment Report**

Use the [*Network Assessment Template*](http://mydhs/cs/groups/webcontent/documents/communication/p_032185.doc) to complete the report. Use the following outline while writing the report.

I. Executive Summary

* Write a short narrative including conclusions and recommendations.

II. Overview of Work Completed

* Survey assessment process description; include times, dates and contacts.
* Location Description: department, bureau, and so on.
* BuildingDescription: for each building surveyed, assessed, and included in the recommendations.
* Local staff interviewsummaries: findings and needs as identified.

III. Survey Assessments Findings

* General Observations.
* Environmental Observations (include potential problems for design changes).
* Existing Infrastructure (by building and as configured to the network).
* Existing Cabling (by building and as configured to the network).
* Existing Electronics (by building and as configured to the network).
* Training Issues.
* Summary of Findings.

IV. Recommendations for Infrastructure Upgrades

* General Recommendations.
* Infrastructure Upgrade Recommendations Overview and Rational.
* Site Preparations Recommendations (by building and as configured).
* Cabling Recommendations (by building and as configured to the network).
* Electronics Recommendations (by building and as configured to the network).
* Training Recommendations.
* Summary of the upgrade recommendations.

V. Recommended Implementation Strategies

* Site/Cabling Implementation Strategy: includes a schematic diagram and projected completion timetable.
* Electronics Implementation Strategy: includes a projected completion timetable.
* Workstation Implementation Strategy: include a projected completion timetable.
* Overall Location Upgrade Strategy: including a phased approach to allow for budget or staff support limitations, includes a projected completion timetable for each phase and interdependencies between phases.

VI. Estimate of Time and Materials (Listed)

* Site Preparations – including all incidentals (be specific).
* Cabling.
* Electronics.
* Other System Incidentals (be specific).

VII. Projected Costs

* Design
* Materials
* Labor

**Refresh Schedule:**

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

**Procedure Revision Log:**

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| --- | --- | --- | --- |
| **Change Date** | **Version** | **Change Description** | **Author and Organization** |
| 05/09/2001 | 1.0 | Initial creation | DPW |
| 08/16/2002 | 1.1 | Edited for style | Beverly Shultz |
| 08/02/2004 | 1.1 | Reviewed content – No change necessary | Tom Zarb |
| 07/13/2005 | 1.1 | Reviewed content – No change necessary | Tom Zarb |
| 01/17/2008 | 1.2 | Content and Format updated | Doug Rutter |
| 06/21/2010 | 1.2 | Reviewed content – No changes | Doug Rutter |
| 02/23/2011 | 1.2 | Reviewed content – No changes | Doug Rutter |
| 10/6/2013 | 1.3 | Reviewed content – Added PID & PDA | Matthew Messinger |
| 3/18/15 | 1.4 | Reviewed content – Changed DPW to DHS | Bob Gordon BIS/DTE |
| 03/07/2016 | 1.4 | Reworked form to 5 pages | Bob Gordon BIS/DTE |
| 04/15/2020 | 1.5 | Organization Name Change | HHS TSO |
| 07/20/2020 | 1.5 | Reviewed content – No changes | Bob Gordon, HHS Network |
| 07/28/2020 | 1.5 | Signature removed | M Koerber, HHS TSO |