

**Bureau of Infrastructure and Operations**

The mission of the Bureau is to provide support for all components of an information technology network that are needed to support the business requirements of the Department of Transportation. The Bureau will ensure compliance with Commonwealth policies so interagency requirements can also be fulfilled.

The new Bureau of Infrastructure and Operations is the result of the reorganization/consolidation of the Planning and Consulting Division and the Operations Division of the former Bureau of Information Systems. The main responsibilities are:

1). Provide overall direction, support, and management of PENNDOT’s Server Farm and the client/server infrastructure located throughout the Department including server hardware and software; networking devices such as routers and switches; and Personal Computers.

2). Manage the enterprise server (Mainframe) operations provided through the Office of Administration’s contract with the Data Powerhouse, and the high production data print center.

3). Coordinate customer service activities including help desk calls, problem management, service requests, change management, and asset management.

The Bureau will include three Divisions:
- Client/Server Infrastructure
- Operations
- Customer Service

**Network Division**

This division operates and maintains all distributed computing platforms and systems used within the department including servers, workstations, storage devices, and network devices.

The division includes a security section which is responsible for: setup and installation of network security devices including firewalls and intrusion detection; installation and configuration of security software; monitors for security breaches; cleans and removes viruses and other malicious software; coordinates credit card testing.

The network operations section designs, implements, and maintains a secure network architecture to meet the needs of the department and its business partners. This will include the infrastructure for intelligent transportation systems. The section sizes, orders, and manages all network circuits and devices.
A section specializing in the use of Microsoft’s SMS manages and updates the majority of the devices which have a Microsoft Windows based operating system. Routine updates as well as custom developed packages are routinely tested and deployed by this group. EPO is also maintained to ensure virus detection is current. Level 2 workstation support is also provided.

The server operations section build, configure, and maintain servers; assist application develop teams with project design; diagnose and resolve server issues; and monitor operations and performance. Employees in this section are responsible for backup and recovery of all distributed servers and storage devices. For the distributed servers general duties include software maintenance, product support, setup, testing, tuning, and customization for products including, Windows Server 2003, Rational products, Websphere products, Oracle, SQL Server, Notes/Domino, Crystal, DB2 connectors, messaging, TWS E-2-E, Remedy, RFID, Filenet, and SRS.

**Operations Division**

The Operations Division has three primary focus areas: software support, database administration, and print services. This division acts as liaison with the Data Powerhouse.

Software management is needed for the enterprise server. The general duties of those supporting the enterprise server software include:

- Install, setup, test, support, coordinate implementation, and maintain mainframe operating system software (z/OS), executive software, and application software
- Analyze and tune overall system/software performance
- Work with DPH, developers, and users to troubleshoot problems
- Work with projects to identify needs and determine new or changed directions
- Monitors usage and participate in capacity planning
- Create and review software standards and technical specifications

Some supported software products include: z/OS, z/Linux, IMS, TSO, MQ, Websphere products, Software AG products, Tivoli Workload Manager, Vision Builder, SAS, and RMDS.

Database administrators will continue to design, administer, and maintain all database systems and structures. The general duties of those supporting database administration include:

- Create databases
- Establish security parameters
- Loads, copies, reorganizes, backups, recovers, and purges databases
- Monitors database performance and tunes for optimum performance
- Support database disaster recovery and execution of semi-annual disaster recovery test
- Centralized storage management and planning
Develops database retention schedules
Work with DPH to ensure needed database are stored off-site
Test all new database software releases and coordinates implementation
Enforce database standards compliance
Work with developers to determine database requirements and consult on database issues
Create and review database standards and technical specifications
Plan transition of all IMS and DB2 databases to Oracle

The databases supported will continue to include IMS and DB2. Responsibilities are being expanded to include Oracle and SQL 2005.

The printing section support mainframe printing production including technical support, configuration, and job setups for both the Print Center and all local printers. They maintain all on-line and batch printing hardware and software. Printers are configured for both internal and external users. Forms and print products are designed and tested. VPS and One Print servers are maintained. Printer utilization is reviewed to optimize use of these resources.

Two high speed printing systems are located in the Print Center which produces all batch generated customer products. Duties at the Print Center include: daily product production, managing print queues, quality control, controlling report distribution, troubleshooting problems, and maintaining equipment. The Center operates 6 days a week 24 hours per day. They also test and implement new print jobs.

**Customer Service Division**

The Customer Service Division is responsible for client issue management for the Technology Bureau. The division provides a single point of contact for program areas on all IT needs, coordinates client needs with the appropriate Technology Bureau staff and/or contractors, and follows up to ensure services are provided timely to meet expectations. This division communicates with all program offices to keep them informed of plans and changes in IT support services.

This division coordinates user needs with the appropriate IT staff and follows up to ensure services are provided in timely manner and meet expectations. The division provides:
- Help Desk Services
- Desktop Software Support
- On-site Workstation Support at Keystone and ROC
- End User Support for web development and reporting
- Management of the PennDOT Internet and Intranet sites
- Voice/Telecommunications Support
UserID Management

The division also has units focused on serving the IT organization in the areas of automations, change management, and inventory management. More specifically these units:

Plan daily operating schedules
Coordinate operation problems with Operation and Client/Server Infrastructure Support
Oversee production migration for new and updated applications
Point of contact for job submission, region starts and stop operation
Develop, implement, and maintain Tivoli Workload Scheduler, Remedy HelpDesk, and Service Request Systems
Oversees and manages changes to applications, software, and operating systems
Maintains records of all changes requested and their status
Manage and maintain department wide IT inventory records
Coordinate maintenance service with vendors