

New Service Catalog Design

Easier to Use

We hope you enjoy the new design of the Service Catalog. The table of contents (TOC) is hyperlinked, so you can click a topic and jump there. The TOC label at the top-right of each page will jump back to the table of contents. In addition, all the navigation and search features in Adobe Reader work on the Service Catalog as well.

We want to hear from you

Please send any questions, comments, or suggestions for improvements to ServiceDesk@WV.gov. Please put Service Catalog in the Subject line (or, click the title above).

Useful Tips for Service Catalog

Underlines are hyperlinks to catalog sections or email. Clicking the OT logo will take you to our website. Ctrl-F is find in Adobe Reader.

Service Catalog 2012



Service Areas

- **Client Services Delivery**
- **Infrastructure Design and Operations**
- **Business and Technology Solutions**
- **Information Security and Control**
- **Mail Room Service**
- **General Support**



West Virginia

Office Of Technology

Effective Date: July 1, 2011

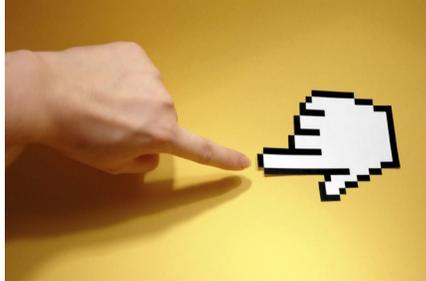
Table of Contents (TOC)

Executive Overview 3	Infrastructure Design & Operations (Optional Services) 14	Information Security & Controls (Shared Services)27	Mail Room Services 36
Client Services Delivery (Shared Services) 4	Centralized SAN Storage	Information Security	Central Mail Package Service
Electronic Communication	Centralized SAN Tier 2	OT Initiated Audits	Central Mail Flat Sorter
Microsoft Licensing	Enterprise Backup	Awareness Training	General Support (Shared Services) 39
PC Support	Centralized Agency Server	Data Classification Facilitation	Project Management Services
User Account Management	Centralized Hosting Servers	Incident Response	General Support (Optional Services) 40
Client Services Delivery (Optional Services) 8	Distributed Servers	Info Security Threat Mngmt.	CTO Requisition Review
Audio & Web Conferencing	Distributed Storage	Internet Usage Monitor & Filter	Miscellaneous Charges
Electronic Faxing Services	Impact Printer	Privacy Office Support	Dedicated Service Fee
Remote Access	LASER Printer	Vulnerability Testing	Project Support
Smart Phone Devices	High Speed Cut Sheet	Web Filtering	Technical Consultant
Training	Remote Printer	Information Security & Controls (Optional Services)34	Schedule of Rates 42
Infrastructure Design & Operations (Shared Services) 11	Mainframe Computing	Email Encryption	Billing Questions 44
Disaster Recovery Flatwoods	System Support	Investigative & Forensics Srvs.	
Network Engineering	Inserter Service	Information Security Auditing	
Telephony Support	Business & Technology Solutions .. 23	Mail Room Services36	
Infrastructure Design & Operations (Optional Services) 14	Application Development	Central Mail Hourly	
Cabling Installation	Database Development	Central Mail Presort	
Centralized Archive Storage	Environmental Database Spt	Interdepartmental Mail	
Centralized MNF Data Storage	Website Services	Central Mail Letter	
Centralized MNF DRS	WV FIMS		



Executive Overview

Welcome to the **2012 OT Service Catalog**. The following pages list and explain the technology products, services and related rates for OT customers throughout this fiscal year. The service set and the billing methodology have evolved for a variety of reasons; the primary changes are due to streamlining of rates to reflect services actually rendered and the cost of providing those services.



The overall annual cost to the OT for products for fiscal year 2012 approximates \$34,000,000. We've made these rate changes in order to more accurately associate our expenses with the actual costs of the services we provide. As you will note, we added a few new services this year. In addition, many of the established rates saw increases or decreases. These changes are necessary to ensure compliance with federal cost allocation guidelines as noted in the Office of Management and Budget Circular A-87.

What Has Changed?

There are significant improvements in the current OT product set. An overview of the benefits follows:

- A complete overhaul in the support costs billing methodology from a “pay for consumption” model to a shared service rate approach
- A more consistent and equitable distribution of service costs to users
- The ability to eliminate surprises in service costs – all increased charges can be traced to increased volume or increased capacity

- A transition in networking charges to more appropriately reflect those agencies using the network infrastructure
- A reduction in certain key service rates and the implementation of many new service rates to better determine the cost of supplying individual services

Definitions

- **Core Customers** are defined as members of those agencies that have consolidated under the Office of Technology.
- **Other Agencies** are defined as those that have not consolidated.
- **OT** is defined as the Office of Technology.
- **OISC** is defined as the Office of Information Security and Control.

What are Shared Services?

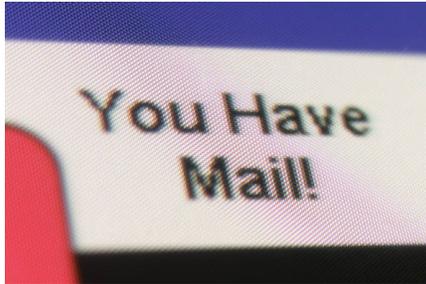
Shared services are those common services that are provided by the OT to all executive branch agencies such as electronic communication, networking, pc support, telephony support, security services and user account management. The cost recovery model is based upon units deployed by the agency rather than by utilization by the agency. The OT determines the cost to provide these services across the entire group and determines the rate to charge per unit by dividing the total cost by the total number of units being supported. The end result is a more equitable allocation of the cost to be recovered and more efficient support model for the end-user.

Client Services Delivery (Shared Services)

Electronic Communication

What is it?

Email is the exchange of mail electronically. The standard email service will be provided using Microsoft Exchange and Outlook. Outlook is a personal information manager from Microsoft, and is part of the Microsoft Office suite.



Although often used mainly as an email application, Outlook also provides calendar, task and contact management.

Used with Exchange, Outlook provides enhanced functions for multiple users in an organization, such as shared mailboxes and calendars.

The standard email service will also provide web access; spam, malware, and virus filtering; a common address book; Office Communicator; and 24/7 support.

Office Communicator is a powerful collaborative tool that incorporates presence awareness for our core customers. This tool integrates with the Microsoft Office application suite natively, but it cannot be used to communicate with customers not on the Executive Domain (wv.gov).

Email for smartphone devices such as Blackberries, Windows Mobile, and other select devices will be provided at an additional charge as not all customers require this service. See Smart Phone Devices in this document for additional information.

Centralized archiving for email is available for email records that must be retained for an extended period. Central storage rates for archiving will be applied on a per gigabyte per month basis.

What is included in the charge for this service?

The pricing includes all labor, contracts, hardware, software, storage and other direct costs required by OT to provide the standard Email service. The Exchange license is billed to the agency separately on a monthly basis under the OT's Enterprise Licensing Agreement with Microsoft.

How will we charge?

The number of email accounts multiplied by the monthly rate determines this charge, which includes all shared email accounts, shared calendars, etc. Mailboxes in excess of 500 Mb may be subject to an excess mailbox size charge billed at the Centralized SAN Storage rate.

What can be done to manage consumption?

Limiting the number of email accounts within your organization can help control associated costs. Actively managing the number of items in your email by deleting unnecessary items will assist you in maintaining a manageable mailbox size.



Client Services Delivery (Shared Services)

Microsoft Licensing

What is it?

Microsoft Licensing is a service that provides Microsoft software products to state agencies as needed throughout the year. An inventory will be performed once a year to determine the products and number of licenses being used by agencies. Any additional licenses added through the year will be “trued-up” annually.



What is included in the charge for this service?

Current State of West Virginia Contract licensing agreement includes a core set of software including Microsoft Office Professional Suite and Client Access Licenses for Exchange, Windows, SMS (software distribution and asset management), SharePoint (collaboration product) and Office Communicator. Also included is software assurance on the above products along with the Operating System. Software assurance allows for deployment of the most current software versions at no additional cost. Other Microsoft software products can also be included in the contract for additional fees.

How will we charge?

The contract will be managed by the Office of Technology. Agencies will be billed quarterly.

What can be done to manage consumption?

Reducing the number of overall PCs will decrease software licensing and support costs. We recommend employing a practice of assigning no more than one PC per employee. Organizations that assign both desktops and laptops to individual employees should re-evaluate this practice. Employees who are mobile and need to use their computers in multiple locations on a regular basis can be assigned a laptop and docking station rather than a desktop. A small pool of laptops can be established for use by employees who are primarily

stationary and need a laptop on an occasional basis. Be prudent in requesting and additional products. Install only what is needed. Agencies utilizing Word Perfect, Lotus Approach and other competing products are likely to pay an annual maintenance fee for both products. In order to reduce cost and avoid compatibility issues we strongly encourage the migration away from these competing products.

Technology Learning Center

The place for State employee software training

- ⇒ Classes are small (10 students), individual instruction is emphasized
- ⇒ Classes are offered in a variety of formats
- ⇒ Classes are designed to meet each individual's needs
- ⇒ Contact us at 558-6384 for all your training needs

Client Services Delivery (Shared Services)

PC Support

What is it?

The OT provides a managed desktop service for agencies in order to meet service level agreements regarding personal computing requirements.

Specifically, this service provides a consistent and reliable client computing environment to our end user customers. Desktop Support is responsible for configuring each PC with standard software so that state employees have established standard computing programs available to them for performing their duties. The personal computers shall also be configured so the OT is able to access the individual machines for installation and support of software, distribution of patches, and for repairs and anti-virus scanning.

Additionally this service covers support of associated standard computing peripherals such as printers, scanners, PDAs, smart phones, and digital cameras.

What is included in the charge for this service?

The basic service includes all personnel, hardware, software and other direct costs required by OT to provide IT service delivery for the desktop, peripherals, and associated centralized services. This covers software licensing costs for hard drive encryption and power management tools. This does not cover the cost for the actual PCs, printers or other client computing devices.

Specifically, this service applies to:

- State issued personal computing devices
- Software support for the defined standard operating systems, productivity tools and associated software suites



- Technical support, maintenance, and repair of managed hardware and software
- Standard operating environment management through the controlled release of security patches, anti-virus updates, and other specified software applications

How will we charge?

Charges for PC support products are based on the number of devices (desktop PC, laptop PC, notebooks) multiplied by the monthly rate.

What can be done to manage consumption?

Reducing the number of overall PCs will decrease software licensing and support costs. We recommend employing a practice of assigning no more than one PC per employee. Organizations that assign both desktops and laptops to individual employees should re-evaluate this practice. Employees who are mobile and need to use their computers in multiple locations on a regular basis can be assigned a laptop and docking station rather than a desktop. A small pool of laptops can be established for use by employees who are primarily stationary and need a laptop on an occasional basis.



Client Services Delivery (Shared Services)

User Account Management

What is it?

User account management and directory services include establishment of a single User ID per state employee and User Provisioning: the creation, change and removal of user accounts from the network, establishment and management of user home directories, network shares, network printing assignments, network group management, and Virtual Private Network accounts.



What is included in the charge for this service?

Costs associated with hardware, software and personnel required by OT to provide a single ID, User Provisioning, and automated password reset are included in this cost. This covers the establishment of a service to allow users to update their user directory information on an as-needed basis.

How will we charge?

We base this charge on number of network accounts per agency per month.

What can be done to manage consumption?

It is important from both a cost and security perspective, to ensure that accounts for employees who leave the organization are removed from the network. Compliance with the account management process for proper notification of employee transfer and termination will ensure that the agency is charged only for active employees, while preserving security.

www.myittools.wv.gov

A website with the latest on available technology tools

- ⇒ MeetingPlace
- ⇒ BlueZone
- ⇒ RightFax
- ⇒ Remote Access
- ⇒ The Technology Learning Center (TLC)
- ⇒ Web Mail
- ⇒ Web Instant Messaging (IM)



West Virginia

Office Of Technology

Client Services Delivery (Optional Services)

Audio & Web Conferencing

What is it?

Audio conferencing is the live exchange of information among persons and machines remote from one another but linked by a telecommunications system, usually over the phone line.

Web conferencing is used to conduct live meetings or presentations over the Internet. In a web conference, each participant sits at his or her own computer and is connected to other participants via the internet. Attendees simply enter a URL (website address) or click a link to enter the conference.



What is included in the charge for this service?

All labor, contracts, hardware, software and other direct costs required by OT to provide this service make up the charges.

How will we charge?

Audio and Web conferencing is available through Office Communication Server for owners of enterprise client access licenses (members of the OT consolidated domain Executive). This option relies on the infrastructure in place for instant messaging. Because it is a feature of technology that is already in place, there is no additional usage charge if this method is used for audio and web conferencing.

Another option for audio and Web conferencing is available. With this legacy option the meeting scheduler will be billed for the meeting. Meeting participants will not be billed. The charge will be the number of minutes the meeting is scheduled for multiplied by the number of reserved ports multiplied by the rate. Should the meeting extend beyond the scheduled meeting time the meeting organizer will be billed for the actual minutes used. Should the meeting consume more ports than scheduled the meeting organizer will be billed for the actual ports used. A port can be viewed as each unique connection that will be participating in the meeting, e.g., each phone that is dialed into the meeting or each computer connected to the web conference. Valid billing information will

be required before users can register to set up meetings. Billing information is not required for meeting participants.

What can be done to manage consumption?

Given the state's focus on energy conservation, audio and web conferencing offer an attractive alternative to actual face to face meetings. Audio and web conferencing can reduce travel time and costs and increase productivity as a result of saving time.

Electronic Faxing Services

What is it?

PC faxing integrates network fax and email into a single solution. This solution allows users to conveniently fax a single document to an individual or broadcast fax documents to fax groups or a fax distribution list from your computer. Use your desktop capabilities to improve efficiency and save time and money.

What is included in the charge for this service?

All labor, contracts, hardware, software and other direct costs required by OT to provide this service make up the charges.

How will we charge?

The rate for Electronic faxing will be charged per faxed page.

What can be done to manage consumption?

Cost can be reduced by eliminating existing leased fax machines and analog circuits used to support traditional fax numbers.

Client Services Delivery (Optional Services)

Remote Access

What is it?

There are currently two ways for users to access the state network and applications remotely. Virtual Private Network is the preferred method.



VPN Account — a virtual private network provides secure connection to the specified state private network resources via the Internet from outside the state private network. VPN can be used for continuity of operations or remote work locations. VPN accounts should be established for any employee critical to that agencies continuity of operations plan.

Dial-up Account — connection to the state private network via a dial-up modem from outside the state private network. This service will be eliminated in the near future. We strongly discourage dial-up and it should be used only as the last alternative.

What is included in the charge for this service?

All labor, contracts, hardware, software and other direct costs required by OT to provide this service make up the charges.

How will we charge?

The rate for remote access will be charged per account multiplied by the monthly rate.

What can be done to manage consumption?

Agencies should ensure that accounts are only requested for those employees who need them and eliminate accounts when they are no longer needed.

Smart Phone Devices

What is it?

Smart phones are devices such as the BlackBerry, Windows Mobile devices, IOS (iPhone), and Android based devices. While smart phones offer the basic functionality of a wireless phone, they also offer advanced functions such as full -featured email, contact and calendar management, internet browsing and the ability to read business documents in a variety of formats such as PDF and Microsoft Office.

What is included in the charge for this service?

There are several components of cost for smart phone devices. The monthly service fee from the vendor, the cost of the equipment to obtain the device from the vendor and the OT charges which encompasses labor, contracts, hardware, software and other direct costs required by OT to provide smart phone service calls and enable receipt of email and calendaring. Vendor charges, including the cost of the device, will be billed directly by the vendor to the agency. OT charges will be billed on the monthly invoice to the agency.

How will we charge?

The cost to the agency will be determined by the number of devices multiplied by the monthly rate. For non-BlackBerry and non-Windows devices that are supported with specific technologies, there will be an associated license cost. This license will belong to the purchasing agency. This license will cover the use of a single device.

What can be done to manage consumption?

While smart phones can greatly improve productivity and communication for a mobile workforce, agencies will need to right-size the number of devices within their respective agencies to gain the most benefit from the incremental cost. Agencies may find that certain roles within the organization may benefit more from a smart phone than those more traditional or less mobile in nature.

Client Services Delivery (Optional Services)

Training

What is it?

The IT Training unit, led by Certified Microsoft Trainers, includes a variety of products and services:

- 1) Instructor-led training is delivered in both the physical classroom setting and virtual classroom through the web. Courses include:
 - standard Microsoft desktop tools
 - specialized software products on demand
 - customized courses based on customer or agency need
- 2) Self-paced, web-based training for Microsoft products.
- 3) Design and development of custom agency business training courses for delivery through the web.
- 4) Online registration and scheduling tools. Customers who are sponsoring conferences use this tool to register attendees and schedule them for individual conference sessions.
- 5) A Learning Management System to deliver and track online training.



What is included in the charge for this service?

Costs associated with hardware, software, services and personnel required by OT to provide training and administer systems are included in this charge.

How will we charge?

Instructor-led training is a per course charge.

Per course charges for Microsoft Office products are waived for OT Core Customers though there may be an associated course booklet fee.

Per course charges for software products on demand will be determined at the time the course is set up and may include costs associated with course delivery by a third party product specialist.

Online, self-paced Microsoft Office Suite courses are available at no charge to OT Core Customers.

Design and development of custom courses are priced based on a per-hour labor charge. Customers will be provided with a projected cost estimate prior to initiation of work.

Charges for the Scheduling and Learning Management tools are on a per-event basis and are waived for OT Core Customers.

What can be done to manage consumption?

OT encourages full use of these services. The better employees are trained on the use of desktop productivity tools, the more efficient they will be in using these tools to perform their jobs.

Most instructor-led courses are provided on a first-come, first-serve basis. In order to assure the most cost efficient delivery of courses, all classroom seats should be full. Employees who register for class but don't attend have blocked a seat that could have been occupied by another employee waiting to take the class. Employees should attend their scheduled classes, send a substitute, or cancel in a timely manner so another employee can register for the course.

Infrastructure Design and Operations (Shared Services)

Disaster Recovery Flatwoods

What is it?

The state is currently leasing space for a second primary data center in Flatwoods WV. One of the uses of the data center will be to house equipment (network, servers, storage, etc.) to be used in the event of an emergency at the Building 6 data center or agency data centers.



What is included in the charge for this service?

The charges reflect the true cost of maintaining the data center. These charges include infrastructure costs, such as power, cooling, floor space, Ethernet connections and a network circuit.

How will we charge?

Since this facility will be available as backup to any server or storage device the charge will be based on the number of available servers and storage devices that can possibly be backed up at the secondary location.

What can be done to manage consumption?

The use of virtual servers instead of physical and the use of OT owned storage.



Infrastructure Design and Operations (Shared Services)

Network Engineering

What is it?

This service provides the local/wide area infrastructure necessary for users to access and transmit data/voice/video throughout the state network with speed and innovation. This is designed to deliver the core data communications for most state and non-state entities who access state electronic resources. It securely connects users to a common integrated platform that enables data movement between applications/systems/processes and enhances our ability to communicate electronically both internally and externally from the state network.



What is included in the charge for this service?

This service consists of the engineering, installation, operation, and maintenance of all shared networking equipment (routers, switches, firewalls, wireless access points, video conferencing devices). This includes, but is not limited to, the following:

- Shared networking equipment
- Troubleshooting and repair of local/wide area communications
- Administration via system monitoring, security access and control
- Management change
- Availability and service restoration of wide area connectivity

How will we charge?

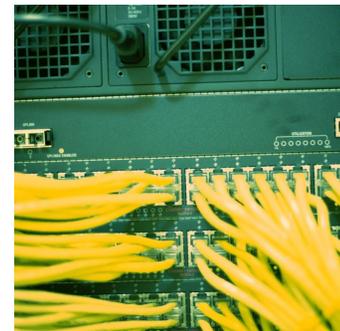
The service for network connectivity can be split between supported and non-supported. Non-supported agencies are those agencies normally outside of the executive branch or constitutional officers that provide their own equipment and networking support personnel but are still using the OT-supported WAN backbone equipment. Supported agencies receive support on their WAN/LAN connectivity from the OT. The monthly fee is billed on a per connection basis with the non-supported rate being less than the supported.

The rate includes services related to break fix and troubleshooting type services. Project installation could be an additional fee. In turn key project circumstances where a third party vendor is being utilized OT resources would normally be restricted to project management types of services. The vendor fee would be paid by the agency. Projects that are being implemented by the OT not involving a turn-key vendor in most cases would incur charges by OT personnel at the technical consultant hourly rate.

What can be done to manage consumption?

Partnering network convergence technologies can create a great opportunity to manage consumption of network hardware.

- Using standard hardware
- Training people (lack of training drives up cost on infrastructure maintenance)
- Creating stock inventory to alleviate unneeded maintenance costs



Infrastructure Design and Operations (Shared Services)

Telephony Support

What is it?

The Internet Protocol Telephony (IPT)/ Traditional Voice and Contact Center Services products include the core network infrastructure and services that enable employees to access/ distribute voice communications from their desktop or the regional agency offices throughout the state network, i.e., the services required to deliver dial tone and contact center agents.



What is included in the charge for this service?

IP Telephony/Traditional Voice Services

- **Service provision:** Support of hardware/software, troubleshooting, repair, administration and engineering of the voice infrastructure to include standard/current versions of operating software. Additional activities include management, compliance reviews, service level management, Moves/Adds/Changes (MAC's) and maintenance agreements.
- **Inventory Maintenance:** Telephony hardware/software, call recording hardware/software, desktop handsets, soft phone applications, voice mail hardware/software, and local voice circuits are in addition to the charge for the Telephony Support service.

Contact Center Services

- **Service Provision:** Support of hardware/software, troubleshooting and repair, administration and engineering of upgrades to the contact center infrastructure, maintenance, service level management, and compliance reviews.
- **Service Provision:** Support of hardware/software, troubleshooting and repair, administration and engineering of upgrades to the contact center infrastructure, maintenance, service level management, and compliance reviews.

- **Inventory:** Contact Center hardware/software, routing control services hardware/software, circuits (inbound and outbound calls), contact agents, and maintenance are in addition to the charge for the Telephony Support service.

How will we charge?

The rate for telephony support will be charged per account multiplied by the monthly rate. The rate for Cisco Internet Protocol Phones is based upon the cost of the phone spread over a recovery period of 36 months.

When using the Office Communications Server for telephony, the endpoint device must be purchased by the individual user/agency. Softphone access is available through workstations and laptops equipped with a microphone, speakers, and/or headphones.

The rate includes services related to break fix and troubleshooting type services. Project installation could be an additional fee. In turn key project circumstances where a third party vendor is being utilized OT resources would normally be restricted to project management types of services. The vendor fee would be paid by the agency. Projects that are being implemented by the OT not involving a turn-key vendor in most cases would incur charges by OT personnel at the technical consultant hourly rate.

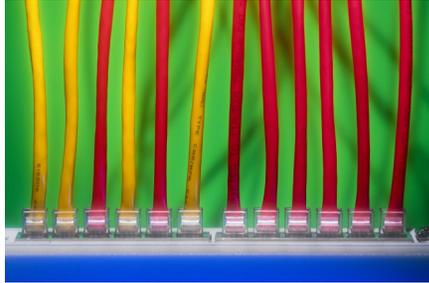


Infrastructure Design and Operations (Optional Services)

Cabling Installation

What is it?

Cabling installation provides dedicated communication lines connecting end-users, printers, faxes, telephony gear, and most other equipment networked to the state network. This provides customers with cost effective, secure, and reliable access to all the available state electronic applications and communications services.



What is included in the charge for this service?

Inventory: copper and fiber cabling, connectors, terminators, cabling racks.

Service provision: Engineer, supply, install, operate and maintain all communication connectivity needs; management of capacity, performance, availability, and service restoration.

How will we charge?

Charges incurred for cabling services are based upon the hourly established rates multiplied by the number of hours to complete the cabling project plus the cost of any travel and materials.

What can be done to manage consumption?

Clients can provide detailed needs to technology staff so they can engineer solutions for high efficiency and low cost, and can assist in ensuring accurate volumes are predicted and shared during the planning processes. It is much less expensive to run more cable at the time of initial installation than to install additional cabling at a later time.

Centralized Archive Storage

What is it?

Centralized Archive Storage is OT owned storage and should be used for any system where the data does not change, such as a document imaging system. For those agencies that already use Centera for archiving or imaging systems, we can provide space on the offsite Centera for use as a replication target. Since the data does not change and can be replicated there is no need to back-up this data. The data stored on Centralized Archive Storage can be replicated to an offsite location.

What is included in the charge for this service?

Storage infrastructure and personnel to design, specify, install, configure, allocate, administer and maintain the storage hardware and infrastructure.

How will we charge?

All costs for hardware and support personnel will be rolled together to determine a complete cost of operation for this service. This cost will then be divided by the total amount of configured storage and presented as a dollar per gigabyte fee. Customers using our production Centera can be set up for offsite replication and will be charged for storage space on both units .

What can be done to manage consumption?

Manage your data storage by proper use of retention policies.



Infrastructure Design and Operations (Optional Services)

Centralized MNF Data Storage

What is it?

Data Storage for datasets residing on disk and tape directly accessed through the enterprise server.



What is included in the charge for this service?

The charges reflect the cost of providing disk and tape storage connected to the enterprise server. Charges include costs such as equipment, systems software, vendor maintenance of hardware and software, systems programming, disaster recovery services, and infrastructure.

How will we charge?

A snapshot is taken on the first day of each month of all datasets residing on disk and tape. The customers are billed based on their datasets allocated at the time this snapshot is taken. The charge is the number of GB multiplied by the rate.

What can be done to manage consumption?

Datasets should have expiration dates coded so they will be deleted when they are no longer needed. Check to see which datasets haven't been accessed in several years and delete them. Datasets that are never accessed, but which may not be deleted because of statutory reasons, can be written to tape and stored offsite on the agency's premises. The customers will no longer be charged for these datasets. Make sure that datasets are not being over-allocated.

Centralized MNF Data Recovery Storage (DRS)

What is it?

This service represents data storage for backups of agency servers. This service should eventually be replaced by the Enterprise Backup solution.

What is included in the charge for this service?

The charges reflect the cost of providing the backups of the agency's servers. Charges include costs such as equipment, systems software, vendor maintenance of hardware and software, systems programming, disaster recovery services, and infrastructure.

How will we charge?

A snapshot is taken on the 1st day of each month of all data included in the agency's backups. The customers are billed based on their allocations at the time this snapshot is taken. The charge is the number of GB multiplied by the rate.

What can be done to manage consumption?

Customers can realize savings by deleting unneeded data from their servers.

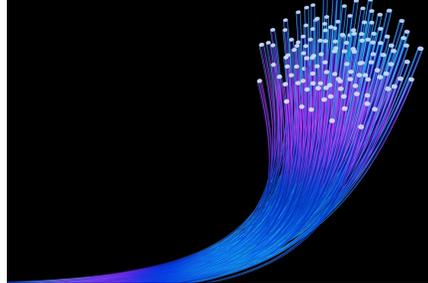


Infrastructure Design and Operations (Optional Services)

Centralized SAN Storage

What is it?

Centralized Storage is OT owned and operated storage arrays that provide disk space to Windows, UNIX and Linux servers located at the Building 6 Data Center. It should be used for applications which require high performance disk storage (high input/output rates) such as databases and virtual machines. High performance is achieved by use of smaller high speed disks and a high speed fiber network. OT personnel will work with the agency to determine what class of storage is appropriate for their application.



What is included in the charge for this service?

Included in the charge for centralized storage is the physical equipment (storage array, SAN infrastructure, host connectivity) and personnel to design, specify, install, configure, allocate, administer and maintain the storage arrays and attached systems.

How will we charge?

All associated costs will be rolled together to determine a complete cost of operation. This cost will then be divided by the total amount of configured storage and presented as a dollar per gigabyte fee. This fee will appear on your bill along with other charges for hosted services under a line item called Server Farm/VMware/SQL/Web which will also include charges for other hosted services such as VMware virtual servers, SQL database hosting and web site hosting.

What can be done to manage consumption?

Manage your data storage by proper use of retention policies.

Centralized SAN Storage Tier 2

What is it?

Centralized SAN Storage Tier 2 is OT owned and operated storage arrays that provide disk space to Windows, UNIX and Linux servers located at the Building 6 Data Center. It should be used for applications which require lower performance disk storage (low input/output rates). One example are static images such as jpeg files. Lower performance and cost is achieved by use of less expensive large low speed disks. OT personnel will work with the agency to determine what class of storage is appropriate for their application.

What is included in the charge for this service?

Included in the charge for centralized storage is the physical equipment (storage array, SAN infrastructure, host connectivity) and personnel to design, specify, install, configure, allocate, administer and maintain the storage arrays and attached systems.

How will we charge?

All associated costs will be rolled together to determine a complete cost of operation. This cost will then be divided by the total amount of configured storage and presented as a dollar per gigabyte fee. This fee will appear on your bill along with other charges for hosted services under a line item called Server Farm/VMware/SQL/Web which will also include charges for other hosted services such as VMware virtual servers, SQL database hosting and web site hosting.

What can be done to manage consumption?

Manage your data storage by proper use of retention policies.



Infrastructure Design and Operations (Optional Services)

Enterprise Backup

What is it?

This service includes backups of agency data.



What is included in the charge for this service?

The charges reflect the cost of providing the backups of data, including an offsite copy when the secondary data center is online. Charges include costs such as equipment, systems software, vendor maintenance of hardware and software, systems administration, and infrastructure.

How will we charge?

The amount of agency data that is protected via Enterprise Backup is calculated each month. The amount of data is based on the ability to recover data from up to 30 days ago. The charge is the number of GB's protected multiplied by the rate. Any agency that requires more than 30 days of data recovery will be charged at a higher proportional rate.

What can be done to manage consumption?

Customers can realize savings by deleting unneeded data from their servers.

Centralized Storage & Backup

These services make up OT's centralized storage and backup options for customers

- ⇒ [Centralized Archive Storage](#)
- ⇒ [Centralized MNF Data Storage](#)
- ⇒ [Centralized MNF Data Recovery Storage \(DRS\)](#)
- ⇒ [Centralized SAN Storage](#)
- ⇒ [Centralized SAN Storage Tier 2](#)
- ⇒ [Enterprise Backup](#)

Infrastructure Design and Operations (Optional Services)

Centralized Agency Owned Server

What is it?

Any server owned by an agency that is housed in the Building 6 data center on the capitol complex.



What is included in the charge for this service?

Included in these charges are the following services:

- Proactive monitoring and maintenance of platform hardware, to include warranty repair as needed
- Centrally administered patch management deployment for operating system and application support
- Centrally administered antivirus software for each system
- Backup monitoring and restoration
- Operating system administration
- Hardware specification for procurement to support life cycle management
- Power, cooling and Ethernet connections.

How will we charge?

All costs for support infrastructure (power, cooling and networking plus the cost of support personnel are used to calculate a per server costs.

What can be done to manage consumption?

Use Virtual servers and OT owned storage will minimize personnel, floorspace, power and cooling costs.

Centralized Hosting Servers

What is it?

Through IT consolidation and standardization, server-based applications that can be operated off consolidated and/or central servers can reduce the overall IT hardware and support needs for organizations. Centralized servers are defined as OT-owned and operated Intel server hardware and software. They provide a number of centralized, shared network resources or services including web servers, SQL database servers, virtual servers, shared physical servers for specific agency applications and other network resources.

What is included in the charge for this service?

Included in these charges are customer consultation, system design and testing, hardware, software, complete system administration, housing of systems in a secure, controlled environment and associated personnel costs.

How will we charge?

The charge will depend on the type of system and the software and hardware support requirements. The OT will meet with the customer to determine the actual need and platform specification.

What can be done to manage consumption?

The OT can help clients ensure that applications and databases located on consolidated servers are designed for efficient functionality and are tuned for optimal performance.



Infrastructure Design and Operations (Optional Services)

Distributed Servers

What is it?

Servers owned by an individual agency, but managed by the OT are defined as Distributed Servers that are located in an agency owned facility. Our goal is to greatly reduce the number of Distributed Servers and move towards Centralized Server solutions.



What is included in the charge for this service?

Included in these charges are the following services:

- Proactive monitoring and maintenance of platform hardware, to include warranty repair as needed
- Centrally administered patch management deployment for operating system and application support
- Centrally administered antivirus software for each system
- Backup monitoring and restoration
- Operating system administration
- Hardware specification for procurement to support life cycle management
- Installation and deployment of new systems

How will we charge?

The monthly charge is calculated on a per server basis for administration and planning.

What can be done to manage consumption?

By moving toward standardization of applications across the Enterprise, shared equipment and services can be achieved. The OT manages this aspect by

monitoring and benchmarking platform workloads and evaluating bandwidth requirements for each location. We then work to reduce the number of individual distributed servers.

Identify candidates for consolidation to a better suited existing platform(s) on site, or potential migration to one of the Data Center environments. The overall goal is to retain distributed servers only where there is a justifiable business case.

Distributed Storage

What is it?

Storage that is owned by an individual agency but is managed by the OT is defined as distributed storage. This service will gradually be phased out and replaced by Centralized Storage as storage devices are moved from agency facilities to the central data center.

What is included in the charge for this service?

Included in the charge for distributed storage is the personnel time required to design, specify, install, configure, allocate, administer and maintain the storage arrays and attached systems at the customer site.

How will we charge?

The monthly charge is calculated on a per storage array basis for administration and planning.

What can be done to manage consumption?

Reduce the amount of distributed storage.

By moving toward standardization of applications across the Enterprise, shared equipment and services can be achieved. We recommend your working closely with the OT to plan, design, and implement centralized storage. The overall goal is to retain distributed storage only where there is a justifiable business case.

Infrastructure Design and Operations (Optional Services)

Impact Printer

What is it?

The OT uses an impact printer to produce printed output, mostly labels, for its customers. Impact printing was once the standard. Its use has declined, but it is still required for some purposes.



What is included in the charge for this service?

The charge reflects the true cost of the operator's time, the paper and labels required, and the cost of procuring and maintaining the hardware.

How will we charge?

The impact printer rate is based upon 100 pages of printed output.

What can be done to manage consumption?

Agencies should determine that the job is necessary. Could other methods besides paper distribution be used for the task at hand?

LASER Printer, High-speed Cut Sheet, Highlight Color

What is it?

The OT uses three high-speed laser printing systems and a variety of "pre-post" peripheral devices to produce printed output for its customers at its central site.

- LASER Printer — is continuous-form print using IPDS protocol. Users benefit from Advanced Function Print (AFP) capabilities that allow a variety of form sizes in simplex or duplex. This printer is channel-attached to the OT Enterprise server.
- High-speed Cut Sheet Print — uses 8.5 x 11 cut sheet paper and is also simplex or duplex. PDF, postscript and other network formats are supported. This is an IP-attached printer that can be accessed through the state backbone.

- Highlight Color — is available with high-speed cut sheet print. Red toner can be used to highlight areas of the output.

What is included in the charge for this service?

The charge reflects the true cost of procuring, operating, and maintaining the equipment, as well as the cost of the paper. The equipment is highly mechanical and requires considerable vendor maintenance. The cost of paper fluctuates but trends higher.

How will we charge?

The printer rates are based upon 100 pages of printed output.

What can be done to manage consumption?

It is critical that user-agencies work closely with the OT to ensure that print jobs are formatted and submitted correctly. Large, unusual print runs should be scheduled as far in advance as possible. Agencies should monitor their printing requirements to see if other, less expensive alternatives, such as electronic communications, would be acceptable in some cases.

Remote Printer

What is it?

Remote, in this context, essentially means mainframe-related printing done at the customer's site rather than the data center.

What is included in the charge for this service?

This charge reflects the true cost of supporting remote printing in the enterprise server environment and includes the cost of licensing and maintaining the mainframe-based software that controls remote printing, and the time that system programmers and other personnel spend supporting the service.

How will we charge?

The remote printer rate charge is per line of printed output.

What can be done to manage consumption?

Customers should review their printing practices to see if less expensive alternatives, such as report distribution software, would suffice.

Infrastructure Design and Operations (Optional Services)

Mainframe Computing

What is it?

The mainframe is an IBM z-Series Enterprise server that the OT uses to support a variety of state agency applications.



What is included in the charge for this service?

The charges reflect the true cost of executing a transaction, i.e., a batch job or online teleprocessing session, on the mainframe. Charges include costs such as equipment, systems software, vendor maintenance of hardware and software, systems programming, disaster recovery services, and infrastructure.

How will we charge?

CPU Batch Rates:

- Day Rate – for the first 120 CPU seconds of a batch job on workdays. Batch jobs that begin execution between 8:00 a.m. and 5:00 p.m., Monday through Friday will be charged at the Day rate for the first two minutes or less. For amounts over two minutes see the Priority rate description below. Any job executing at 8:00 a.m. and not finished by 11:00 a.m., Monday through Friday, will be charged at the Day rate for the first two minutes regardless of when the job started. Jobs processed on holidays will not be charged the Day rate, unless they are still executing at 11:00 a.m. on a non-holiday weekday.
- Priority Rate – for the CPU seconds in excess of 120 on workdays. Batch jobs that begin execution between 8:00 a.m. and 5:00 p.m., Monday through Friday, and run more than two minutes will be charged the Priority rate for the time in excess of two minutes. The Day rate will be charged for the first two minutes. Any job running in the system at 8:00 a.m. and not finished by 11:00 a.m., Monday through Friday, will be charged at the Day rate for the first two minutes and the Priority rate for the time that exceeds two minutes.

CPU Batch Rates:

- Jobs processed on holidays will be charged the Night rate, unless they are still executing at 11:00 a.m. on a non-holiday weekday.
- Night Rate – for CPU batch work on nights, weekends, and holidays. Batch jobs that begin execution between 5:00 p.m. and 8:00 a.m., Monday through Friday, and from 5:00 p.m. on Friday until 8:00 a.m. on Monday are charged the Night rate, as long as the job is not still running in the system after 11:00 a.m., Monday through Friday. Jobs processed on holidays will be charged the Night rate, unless they are still executing at 11:00 a.m. on a non-holiday weekday.

Charges for enterprise server transactions are based on CPU (processor) seconds and the priority of the transaction itself, as determined by the preceding rules. However, the customer has the ability to control costs by using off-peak time. The Priority Rate, for example, is relatively high, and the Night Rate relatively low.

CPU Linux Rate – for Unix and Oracle transactions on the enterprise server.

CPU Teleprocessing Rate – for online transactions, such as CICS, DB2, TSO.

What can be done to manage consumption?

Economies in mainframe operations are the joint responsibility of the OT and its customers. Following are example of how consumption can be managed:

- Identify processing that can qualify for off-peak pricing
- Code efficient programs to support the application
- Upgrade to later software release levels and eliminate the inefficient old releases

Infrastructure Design and Operations (Optional Services)

System Support

What is it?

The Data Center of the OT is responsible for operating and maintaining the enterprise server (mainframe computer), peripheral devices, and network that support data processing activities in most areas of State government. System software programmers are responsible for installing, removing, and changing system software. These programmers are the interface between OT and the user agencies any time there is a question or problem relating to software on the mainframe.



What is included in the charge for this service?

The hourly rate established for systems support reflects the skill set of the staff and the experience of the staff which is extremely technical and requires a high degree of systems knowledge.

How will we charge?

The Data Center charges for services at the established rate per hour.

What can be done to manage consumption?

Normally users are not charged for the services of the systems programmers except in specific cases when users request their assistance.

Inserter

What is it?

The Office of Technology processes and mails documents on behalf of many state agencies. The inserter rate reflects the true cost of the services performed. The services provided range from distribution of pre-printed documents, to “mailers” which are documents printed on OT printers then distributed.

What is included in the charge for this service?

The costs include envelopes, labor, and the procurement and maintenance of distribution equipment. Postage is assessed separately.

The distribution section uses both primary and secondary mail inserter systems to distribute the massive amounts of mailers in a timely manner. Inserters are large, mechanically complex systems that require considerable maintenance and oversight. Such systems are both costly and indispensable.

Distribution procures and stocks an assortment of envelopes, both ordinary and special, for the needs of its customers. Those costs are included in the inserter rate.

How will we charge?

The inserter rate is formally called the distribution piece rate. The rate is simply based upon a single processed mailer, or “piece.”

What can be done to manage consumption?

Agencies should, of course, first determine that distribution of a paper document is necessary. If it is, then they should work with the OT to determine the paper is used prudently. Could the information be printed on both sides of the sheet, for example? Could multiple images be produced on the single sheet? Could the typeface be reduced slightly?

Business and Technology Solutions

Application Development (Programmer Analyst)

What is it?

The Applications Development Center of the OT is responsible for providing application software development and support to state agencies. While many of our customers are smaller agencies that do not have their own programming staffs we also provide assistance to larger agencies. The Applications Development Center is the unit responsible for maintaining and supporting several key business applications, including the statewide Human Resource Information System (HRIS), the statewide Position Information Management System (PIMS), the statewide Leave System and full database support for the statewide Financial Information Management System (FIMS).



What is included in the charge for this service?

The hourly rate established for the application development and/or support service reflects the skill set of the staff, the experience of the staff and an understanding of the business environment (commonly referred to as the institutional knowledge), and includes an understanding of the processes, culture, people, organizational structure and other dynamics associated with state government.

How will we charge?

The Applications Development Center charges for services at the established rate per hour.

What can be done to manage consumption?

Additionally, customer commitment to the consistent application of a standard project management methodology will aid in the efficient delivery of quality services.

Database Development

The Applications Development Center of the OT is responsible for providing application software development and support to state agencies. This includes applications using databases. A database administrator (DBA) is used for all the design and development of the database part of the project. While many of our customers are smaller agencies that do not have their own DBA programming staffs we also provide assistance to larger agencies.

What is included in the charge for this service?

Database and table design, normalization, indexing, stored procedures, queries, report design, database testing and optimization are all part of database development services. These services reflect the skill set and experience of the staff and an understanding of the business environment (commonly referred to as the institutional knowledge), and includes an understanding of the processes, culture, people, organizational structure and other dynamics associated with state government.

How will we charge?

The Applications Development Center charges for services at the established rate per hour listed at the end of this catalog.

What can be done to manage consumption?

The agency that includes the needs of all the stakeholders of the application and insures these needs are clearly reflected in the design documents will have the shortest development times.

Business and Technology Solutions

Environmental Database Support

What is it?

The Applications Development Center of the OT is responsible for providing database administration (DBA) and maintenance support to state agencies. While many of our customers are smaller agencies that do not have their own DBA staffs we also provide assistance to larger agencies.



What is included in the charge for this service?

The OT offers full service database support that includes regular monitoring of your database system and our online-support-ticket-system Service Desk. “Off Hours Maintenance” is included in our database maintenance service, as well as these activities:

- Configure, monitor, test and review backups
- Review error logs and operating system event logs
- Verify that all scheduled jobs have run successfully.
- Monitor disk space to ensure your database system won't run out of disk space.
- Periodically monitor performance
- Regularly monitor and identify blocking issues.
- Keep a log of any changes you make to servers, including documentation of any performance issues you identify and correct.
- Ensure all critical security patches are applied

How will we charge?

Agencies are billed for the number of tables being maintained multiplied by the established rate per table. The rate per table is listed at the end of this catalog.

What can be done to manage consumption?

Agencies should insure that their database is well designed and optimized for their use. Any tables created for a temporary purpose should be removed as soon as possible to reduce charges.



Business and Technology Solutions

Website Services

What is it?

WV.gov, in partnership with West Virginia Interactive (WVI), provides website design, hosting and enterprise search services for West Virginia government agencies. WVI will implement the website through an Enterprise Content Management System (CMS) and will assist the agency with the creation of the website design, site architecture, design integration into the CMS system, training, hosting, system maintenance, security, support, and service upgrades related to the partner's redesigned website. The CMS allows the agency to develop and maintain website content, images, document libraries and other resources as needed. Furthermore, if desired, intranet services can also be provided to agencies through the use of the CMS.



What is included in the charge for this service?

Site Design: WVI will work with your team to create a custom website design that reflects the agency's unique branding and identity requirements while meeting the state's web design standards.

Information Architecture: WVI will provide guidance on designing a structure for the website that will ensure that visitors can find information easily.

Microsoft Office SharePoint Server 2007: WVI uses Microsoft Office SharePoint Server 2007 (MOSS) as its Enterprise Content Management System. Agencies are able to leverage the MOSS platform's web content management features to build, maintain and enhance their website through easy-to-use editing tools. MOSS also provides customizable workflow features that allow agencies to determine how content changes are administered and approved for public release.

Enterprise Google Search: WVI will configure custom "collections" to enable Google search tailored specifically to the website. Additional "collections" can be added to provide agencies with very specific search options that may change over time.

What is included in the charge for this service?

Training: WVI provides ongoing training for using MOSS. Training topics include: Usability and Accessibility; Website Planning and Design; and Content Management within MOSS.

Hosting: All MOSS sites are hosted within the WV.gov secure and fully redundant class IV data center.

How will we charge?

Website billing is based on a transaction model with monthly rates that are determined by the number of website hits the site receives for the month. Monthly fees are capped based on the actual size-category of the website:

Small: For agencies with a website that contains less than 50 pages.

Medium: For agencies with a website that contains more than 50 but less than 100 pages.

Large: For agencies with a website that contains more than 100 pages.

Enterprise: For agencies that need to host multiple websites with individual domain names. The primary website is billed at the small web-site rate and all additional sites, regardless of size, are billed at a discounted rate.

What can be done to manage consumption?

Careful planning and design of the website is a major factor in terms of managing the size and costs associated with a website. Agencies are encouraged to develop a solid information architecture and to develop and maintain website content that is necessary and succinct.

Agency webmasters can closely monitor website size, health and other important metrics using tools and reports provided by the content management system.

Business and Technology Solutions

WVFIMS (Accounts, Expenditures, Transactions)

What is it?

The West Virginia Financial Information Management System (WVFIMS) is the state's accounting system. The OT has a role in the care and maintenance of the Administration's side of the system. The nature of these services is such that they are not easily attributable to any particular organization. The costs of the services provided by OT are recovered through the WVFIMS rates.



What is included in the charge for this service?

Examples of the types of services provided that cannot be directly attributed to any one organization are: storage of the production and warehouse databases, backups of the production and warehouse databases, refreshes of the warehouse, programming support for problem fixes and enhancements, and to and from Auditor interfaces. All of these are examples of services provided every day, but may not be easily and accurately attributed to one organization.

How will we charge?

After the start of each new fiscal year, we ascertain a count of state expenditure and revenue accounts by state organization. This is the basis for the monthly account rate. Also, after the start of each new fiscal year, we create a sum of disbursements and transfers out for the recently closed year by state organization. This is the basis for the monthly expenditure rate. At the time of each monthly billing we take a count of accounting transactions that were completed in that month.

What can be done to manage consumption?

Review your organization's state chart of accounts for obsolete accounts and report any to both the State Budget Office and the State Auditor's Office. If the account can be deleted, the total of accounts billed could be reduced for future billings upon notice of the deletion to the OT.



Information Security and Controls (Shared Services)

Information Security

What is it?

The Office of Technology addresses the mandates set forth in State code to develop an Executive-wide Information Security policy, train all Executive Branch employees, audit for policy compliance, and require corrective action when findings of non-compliance are discovered. A strong information security posture is achieved by using physical, technical, and administrative controls.



What is included in the charge for this service?

The Office of Technology provides the following Security services covered by the fixed Information Security rate:

- OT Initiated Audits for Policy, Regulatory, and Acceptable Risk Level Compliance
- Awareness Training (including periodic Security Tips)
- Data Classification Facilitation
- Incident Response Process and Support Preparedness
- Information Security Threat Management (Security Monitoring)
- Internet Usage Monitoring and Filtering
- Policies and Procedures
- Privacy Office Support
- Vulnerability Management (verify server security) & Penetration Testing
- Web Filtering

To help ensure the delivery of quality services and availability of personnel, customers should submit requests for special or additional services in advance of the date required.

How will we charge?

The rate for Information Security is targeted toward the services that are provided to all agencies equally. Charges for Security services are based upon the number of PC Support units multiplied by the monthly rate.

The information in this section (IS&C Shared Services) provides an explanation of the services provided by the Office for Information Security and Controls (OISC) as part of the flat security rate.



Information Security and Controls (Shared Services)

OT Initiated Audits

What is it?

Information Security Audit Services provide an objective, internally independent, examination of information security controls related to data, systems, operations, personnel, policies, processes, and practices.



What is included in the charge for this service?

Common audit areas include, but are not limited to, the following:

- Account management
- Application controls
- Desktop practices
- Disaster recovery
- Network controls
- Server management
- Policy and regulatory compliance
- Technology acquisitions

An Information Security Audit involves phases, including risk assessment, planning, fieldwork (examination phase), and the final report. Upon completion of the engagement, the client receives a formal presentation and a report on the state of information security controls. This report includes findings as well as recommendations to correct or strengthen controls. After a reasonable period, the OT IT Audit Team will conduct a follow-up meeting to discuss any needed corrective or strengthening measures.

How will we charge?

Internal Information Security Audits are included in the information security rate. Agency requested Information Security Auditing will be charged on an hourly basis per engagement. Auditing is available as a fee-for-service offering to other state organizations and elected officials at an hourly rate.



All incidents related to information systems should be reported to incident@wv.gov, and/or the Service Desk, [servicedesk@wv.gov](mailto: servicedesk@wv.gov)

Information Security and Controls (Shared Services)

Awareness Training

What is it?

Awareness training is the process of communicating to employees the key points set forth in Information Security policy.



What is included in the charge for this service?

This includes the best practices that have been demonstrated to reduce risk to data and systems in organizations. The OISC has adopted training compliant with the ISO1799 standard. The training takes approximately two hours to complete, and the student's successful completion of the training is tracked by the OT Learning Management System (LMS). Information Security tips reinforce and remind users of best practices.

In order to supplement our LMS-based Awareness Training, we email regular security newsletters, release educational videos, and maintain an active website with updated, relevant information.

How will we charge?

Awareness Training is included in the information security rate. The rate for Information Security is targeted toward the services that are provided to all agencies equally. Charges for Security services are based upon the number of PC Support units multiplied by the monthly rate.

Data Classification Facilitation

What is it?

Data Classification is a tool for categorizing data to enable/help agencies effectively answer the following questions:

- What data types are available?
- Where are certain data located?
- What access levels are implemented?
- What protection level is implemented and does it adhere to compliance regulations?

What is included in the charge for this service?

Proper classification of data is necessary in order to apply the correct level of controls on the data both at rest and in transit. This will allow agencies to provide the OT with viable guidance pertaining to prioritization of recovery in the event of a disaster scenario.

The OISC works with agencies to coordinate the appropriate classification of State data.

How will we charge?

This service is included in the information security rate.



Information Security and Controls (Shared Services)

Incident Response

What is it?

Incident response includes all the actions that follow the detection, discovery, and reporting of an information security incident. Examples of incidents include, but are not limited to:



- Lost or stolen laptop computers or other portable devices
- Lost or stolen media containing data that could be determined to be sensitive
- Rampant computer virus infections within the State network
- Loss of system or network functionality
- A disaster scenario or act of terrorism
- A prolonged power outage
- A compromised (hacked) computer server
- A defaced Web page
- An information security policy violation

What is included in the charge for this service?

The OT OISC developed policies, standards, and procedures to establish a framework specific to incident response. The OISC has established a central point of contact for reporting incidents, and an automated notification system to contact key responders. The OISC also offers consulting services and support during the analysis, recovery, and post-mortem phases of incident handling, to any subscribed State organization that is affected by a computer related incident, with a security implication or impact.

Information Security Threat Management

What is it?

Threat Management is the collection of programs, policies, procedures and technologies that enable us to identify and respond to any circumstance or event that has the potential to cause harm to an IT system in the form of destruction, disclosure, adverse modification of data and/or denial of service by exploiting vulnerability.

What is included in the charge for this service?

The OT offers Information Security Threat Management to assist State agencies with safeguarding citizens' data. Internet traffic is monitored 24/7 for unusual activity. Correlation of system events allows technicians to detect policy violations, symptoms of malware, and attacks against State systems.

How will we charge?

This service is included in the information security rate. The rate for Information Security is targeted toward the services that are provided to all agencies equally. Charges for Security services are based on the number of PC Support units multiplied by the monthly rate.



Information Security and Controls (Shared Services)

Internet Usage Monitoring & Filtering

What is it?

Monitoring is the process of checking computer, network, or telecommunication systems, and analyzing them for signs of possible violations or imminent threats to security policies, acceptable use policies, or standard security practices.



What is included in the charge for this service?

The State's Internet usage is recorded at all times to provide the capability for agency management, or law enforcement, to obtain reports of an employee's Internet activity in the workplace.

Site blocking for some categories of websites is standardized across the State Enterprise. Some departments choose to implement site blocking of optional categories that they deem are not needed by their staff for performance of the agency's work.

How will we charge?

This service is included in the information security rate. The rate for Information Security is targeted toward the services that are provided to all agencies equally. Charges for Security services are based upon the number of PC Support units multiplied by the monthly rate.

Information Security Policy & Procedure

What is it?

Policy establishes the foundation for organizational behavior. It portrays the Executive Leadership's expectations for the organization's employees and provides clear standards of conduct. Information Security policies can be publicly accessed on the web at www.wvot.gov. The link is called "Policies Issued by the CTO."



SIGN UP FOR MONTHLY SECURITY NEWSLETTERS!
Visit our website at TECHNOLOGY.WV.GOV or WVISAC.ORG

Information Security and Controls (Shared Services)

Privacy Office Support

What is it?

The OISC works with the State Privacy Office to ensure coordination of effort, support Privacy initiatives, and assist with the meeting of compliance requirements, such as the Health Insurance Portability and Accountability Act (HIPAA).



What is included in the charge for this service?

Services include:

- Coordination of governmental security operations to mitigate damage and prevent recurrence of privacy and security issues.
- Privacy and security advisory and consulting services.
- Development, maintenance, and training in incident management.
- Working with the State Privacy Office to support HIPAA training programs.

How will we charge?

This is a standard service to our Core Customers, and is available as a fee-for-service offering to other state organizations and elected officials at an hourly rate.

What can be done to manage consumption?

When working with the OT, agencies must be responsible for following appropriate protocol. This includes but may not be limited to:

- Being aware of incident reporting procedures for cyber incidents
- Being aware of and complying with the OT security standards and policies
- Identifying critical business systems and applications

- Providing emergency contact information for key agency personnel who may be needed during a cyber security incident.
- Being available to provide critical information that will assist in incident resolution.

Vulnerability Management and Penetration Testing

What is it?

Vulnerabilities are found in all computer systems, and they provide opportunities for individuals with malicious intent to launch damaging attacks. These attacks can damage systems, data, and the availability of the service that the systems provide. The damage might occur immediately, or be delayed until a remote command is issued or a pre-set time is reached.

What is included in the charge for this service?

Vulnerability Management is a verification control measure involving scans of the WV State servers to verify and validate that current patches are installed, and working successfully, against the known exploit for which the patch was developed. If this determination is not made, notification occurs, and follow-up is needed to verify that the patching is completed.

Penetration Testing is done to validate that the perimeter defenses (firewalls, etc.) are correctly installed and configured to effectively block unwanted incoming probes that could include malicious attacks against State systems. In order to protect the State network from intrusion, technicians use methods similar to those used by hackers to attempt to breach the perimeter controls in place.

How will we charge?

This is a standard service to our Core Customers, and is available as a fee-for-service offering to other state organizations and elected officials at an hourly rate.

Information Security and Controls (Shared Services)

Web Filtering

What is it?

Web filtering is a service that constantly monitors all internet site access requests by users and filters (blocks) access for state employees to sites that are categorized as unacceptable, such as "hate," "crime," "pornography," etc.



What is included in the charge for this service?

OT assesses charges based on full-time monitoring and blocking of categories identified to be blocked. Report requests detailing a user's Internet activity will result in an additional hourly charge to the agency.

How will we charge?

Web Filtering is included in the Information Security Flat Rate.

What can be done to manage consumption?

A workforce that is well trained on acceptable use policies for the Internet, and complies with these policies will be less likely to require scrutiny (reporting).



Information Security and Controls (Optional Services)

Email Encryption

What is it?

Email encryption provides the subscriber with the ability to send emails, with attachments, that are strongly encrypted (AES algorithm) and secure in transit once they leave the state enterprise (state network). A recipient can then reply or forward the email, and also have enabled encryption, continuing the protection intended by the original sender.



What is included in the charge for this service?

The ability to encrypt any email and attachments to that email at will.

How will we charge?

The charge is calculated based upon the number of accounts with encryption ability multiplied by the monthly rate.

What can be done to manage consumption?

Provide this service only to employees with a need to send highly confidential or legally protected (PHI/PII) information.

Investigative and Forensic Services

What is it?

The OT provides computer forensic investigations for state agencies. These investigations use technical expertise and tools to meet agency investigative needs.

The OISC team includes experienced technical personnel who can assist agencies through the complex processes of managing e-discovery, employee computer/network misconduct, or cyber incidents related to service outage, compromise, or breach of data.

What is included in the charge for this service?

Forensic Services offers customers:

- Industry standard forensic tools
- Forensically sound collection and analysis of evidence
- Identification of vulnerable systems/applications or misuse
- Containment of compromise
- Identification of policy violations
- Recommendations for repairing discovered vulnerabilities
- Post-repair device scanning and evaluation

How will we charge?

Investigative and Forensic Services will be billed on an hourly basis per engagement.

What can be done to manage consumption?

Those requesting Investigative and Forensic Services can potentially avoid additional costs, caused by the unintentional tainting of evidence, by contacting the OISC as soon as the need for Investigative and Forensic Services is determined. Also, customers should not attempt to collect information, secure technology resources or take other action without the specific guidance of the OISC.



Information Security and Controls (Optional Services)

Information Security Auditing

What is it?

External Audit Support/Assistance

Information Security Audit Services are available as a billable service to assist State agencies as they respond to externally mandated audits. Expert assistance with external audits can reduce the opportunity for external auditors to over-reach or unnecessarily inconvenience the agency during an audit. We can partner with an agency who is experiencing an external audit.



Internal Audit Support/Assistance

We can also perform audits, initiated by agency request, providing an objective, internally independent examination of information security controls related to data, systems, operations, personnel, policies, processes, and practices. Common audit areas include, but are not limited to:

- Account management
- Application controls
- Desktop practices
- Disaster recovery
- Network controls
- Server management
- Policy and regulatory compliance
- Technology acquisitions

The OT provides three different information security audit services: a Client Self-Assessment, an OT-Performed Audit, and an OT-Coordinated and -Managed Audit performed by a third party.

What is included in the charge for this service?

Generally, an Information Security Audit involves many phases, including risk assessment, planning, fieldwork (examination phase), and the final report. Upon completion of the engagement, the client receives a formal presentation and a report on the state of information security controls. This report includes findings as well as recommendations to correct or strengthen controls. After a reasonable period, we will conduct a follow-up meeting to discuss any needed corrective or strengthening measures.

How will we charge?

Information Security Auditing will be charged on an hourly basis per engagement.

What can be done to manage consumption?

Clients can reduce costs by providing sufficient notice of audit requests – ideally six months before the due date. Also, clients can reduce audit and review costs by taking advantage of the OISC security and controls self-assessment engagements. The client can follow recommendations issued after a self-assessment to strengthen basic controls and perform advanced preparation for more in-depth audits or reviews.

Mail Room Services

Central Mail Hourly

What is it?

Central Mail Hourly is for services dedicated to a particular agency.



What is included in the charge for this service?

In most cases, this is used for mail delivery and pickup. This includes having your mail delivered to your office by one of the central mail office mail runners, walking or driving. In some cases miscellaneous charges might be used as an effective way to split the cost of a purchased item between many customers.

How will we charge?

These services are charged a (partial) hourly rate depending on the time it takes the runner to reach your office and the frequency of these trips.

Central Mail Presort

What is it?

Central Mail Presort is a charge incurred to apply the postnet barcode to mail pieces.

What is included in the charge for this service?

As per the "state use" law, mail bar coding is done by a sheltered workshop through WVARF. The outgoing mail from various departments is co-mingled to increase the volumes of mail pieces destined for the same zip code. This gives the state's mail the deepest postage discounts possible.

How will we charge?

The presort vendor tracks the number of pieces it has presorted for each agency and monthly provides the information to the central mail office which in turn bills the agency.



Mail Room Services

Central Mail Interdepartmental Mail

What is it?

Central mail Interdepartmental mail refers to the service of maintaining a mailbox at the central mail office for an agency to receive mail into.



What is included in the charge for this service?

Having a mailbox at CMO, allows your agency to accept mail from other agencies without involving the US post office or paying postage fees. CMO employees sort your incoming interdepartmental mail for delivery or pickup. There are 2 pickup locations: The main Central Mail Office on Jefferson St and a satellite office in the basement of the Capitol.

How will we charge?

There is a monthly fee for each Interdepartmental Mailbox.

Central Mail Letter

What is it?

This service involves metering agency letter mail.

What is included in the charge for this service?

This service allows agencies to automate the task of applying postage to their outgoing mail. It eliminates the need for agencies to rent their own meters or buy stamps. Included in this service is metering mail at the lowest postage rate that it is expected to post. Letters that are expected to receive postage discounts are then sent to be presorted (see Central Mail Presort, above). Mail that will not qualify for postage discounts (e.g. hand written addresses, international mail) is metered at the full postage rate and sent directly to the US Post Office. Unsealed letters can be sealed during the metering process.

How will we charge?

Each regular letter that the central mail office meters is charged this fee.



Mail Room Services

Central Mail Package Service

What is it?

This service involves metering outgoing agency packages.

What is included in the charge for this service?

This service allows agencies to avoid the task of choosing a carrier and applying postage to their outgoing packages. It eliminates the need for agencies to rent their own scales or transport their packages to a shipping firm. Included in this service is rate-shopping various carriers (including the USPS) to get the lowest possible price for delivering the package. Packages are picked up by the various carriers at the end of every day.

How will we charge?

Each package that the central mail office ships is charged this fee.

Central Mail Postage

What is it?

This is the actual cost of postage used by the agency after all postage discounts have been applied.

What is included in the charge for this service?

Whether postage was applied in the Central Mail Office or during the insertion process at the Data Center, the postage cost is passed through directly to the agency.

How will we charge?

Actual postage charges are passed through to the agency responsible for the outgoing letter, flat or package.



Central Mail Flat Sorter

What is it?

This service involves metering outgoing agency flats. A flat is too large to be posted at the letter rate, but too small to qualify as a package.

What is included in the charge for this service?

This service allows agencies to achieve discount postage on flats. The contract with WVARF for presorting letters does not include flats. Flats previously were mailed with full postage, but beginning in the first quarter of FY2011, CMO will have the capability of presorting flats in-house to achieve postage discounts. The technology involves bundling flats at the end of every day that are going to the same zip code.

How will we charge?

Each flat that the CMO presorts is charged this fee.



General Support (Shared Services)

Project Management Services

What is it?

Project Management is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives. Clients should arrange for OT project management services when a formal project management methodology is needed to achieve project goals and objectives while controlling scope, quality of deliverables, schedule and budget.



What is included in the charge for this service?

The OT Project Management methodology includes the following processes: initiating, planning, executing, closing, and controlling/monitoring (throughout the project). Per WV State Code, OT will provide project management oversight on any project greater than \$100,000.

Accordingly, we will lead, assist, or provide oversight (depending on level of services requested) for the development of project goals and objectives, schedules, resource allocation plans, backup and recovery plans, communication plans, executive reporting, risk management plans, identification and implementation of operational and security controls, certification and testing steps, accreditation and approval activities, issue tracking and resolution, budget monitoring, etc.

How will we charge?

Project management services will be billed on an hourly basis per engagement.

What can be done to manage consumption?

Customers can potentially reduce project management costs by conducting research on project ideas, taking the time to thoroughly consider specific goals and objectives, and following the OT Project Management Methodology. Also, when appropriate, customers can reduce costs by providing a customer project manager or coordinator and project administrative support services.



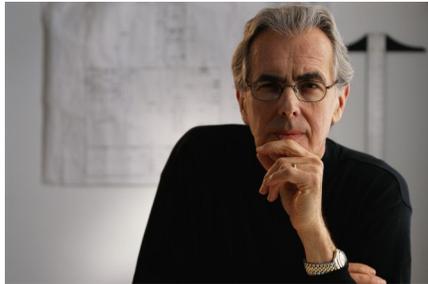
Send Project Management questions to: WVOT.epmo@wv.gov

General Support (Optional Services)

Chief Technology Requisition Review

What is it?

West Virginia Code requires that the CTO review all proposed IT acquisitions. While the CTO does not charge an hourly rate for the time spent on this review, the research process that precedes the CTO's actual review is billable.



What is included in the charge for this service?

The CTO Requisition Review process includes research to determine solution viability, compliance with standards and strategic direction, compatibility with existing infrastructure or requirements for infrastructure adaptation, opportunities for cost savings, such as existing solutions that could be scaled up, rather than acquire a new solution. In addition, this service can include the review of, or even the development of, Requests for Quotation, Requests for Proposal, and Requests for Information.

How will we charge?

These services are charged at the established rate per hour.

Send CTO Review questions to: Consulting.Services@wv.gov

Miscellaneous Charges

What is it?

Miscellaneous charges in most cases are for items such as equipment or software that has been purchased by the OT on behalf of the customer. This can be due to us already having a contract to procure the item or the agency has requested us to be involved in obtaining the purchased item.

What is included in the charge for this service?

Included in these services is the full procurement process of requesting bids, receiving bids, analyzing bids, making recommendations for awards, dealing with vendors, placing the orders for the purchased items and paying the vendor.

In some cases miscellaneous charges might be used as an effective way to split the cost of a purchased item between many customers.

How will we charge?

These services are charged based upon the cost of the item plus a 7% dedicated service fee based on the cost of the item. The 7% fee is described as a dedicated service fee.



General Support (Optional Services)

Project Support

What is it?

Project support is for hourly services that are non technical in nature and might be considered to be billing, clerical, or administrative in nature. In most cases the customer has requested us to perform these services on their behalf.



What is included in the charge for this service?

Some examples of project support include copying, billing, research, filing or administrative functions for a customer project.

How will we charge?

These services are charged at the established rate per hour.

Technical Consultant (Technical, Telephony, Networking Hourly Support)

What is it?

Support for services such as electronic communication, pc support, network engineering, telephony support, security services and user account management as well as other services that are either not covered under our shared services rates or is in support of a non-core agency.

What is included in the charge for this service?

Typically, these services are above and beyond the service provided in our shared services billing structure. Therefore, the services being provided could vary from our traditional support model for our shared services. Non-core agencies can receive service call help with technical problems which could include evaluation of the problem, possible solutions recommendations or help with implementation services.

How will we charge?

These services are charged at the established rate per hour.



General Schedule of Rates

Summary of Services & Rates — Fiscal Year 2012

Service	Rate
Anti-Virus	Complimentary for Core Agencies
Audio and Web Conferencing	\$.020 per minute per connection
Cabling Installation	\$60 per hour*
Centralized Agency Owned Server	\$73.73 per device per month
Centralized Hosting Servers:	
Centralized Virtual Machine	\$17.50 per processor
Centralized Virtual Machine	\$7.50 per 512 RAM
Centralized SQL Database	\$165.00 dedicated instance
Centralized SQL Database	\$16.50 hosted database
Web Hosting Cold Fusion	\$40.00
ASP/ASP.Net) Website	\$40.00
Static Website (HTML Only)	\$20.00
FTP Hosting	\$20.00 per site
Redirect Service	\$5.00 per site
Centralized MNF Data Recovery Storage (DRS Storage)	\$1.66 per GIG per month (one copy)
Centralized MNF Data Storage	\$1.85 per GIG per month (one copy)
Centralized Archive Storage	\$0.50 per GIG per month (one copy)
Centralized SAN Storage	\$0.58 per GIG per month (one copy)
Centralized SAN Storage Tier II	\$0.08 per GIG per month (one copy)
Central Mail Hourly	\$35.00 per hour*
Central Interdepartmental Mail	\$90.00 per box
Central Mail Package Service	\$0.80 per package
Central Mail Flat Sorter	\$0.44 per flat

Summary of Services & Rates — Fiscal Year 2012

Service	Rate
Central Mail Postage	Actual cost of postage
Central Mail Letter	\$0.050 per letter
Central Mail Presort	\$0.035 per letter
Technology Requisition Review	\$60.00 per hour*
Database Maintenance	\$0.275 per table per month
Dedicated Service Fee	7% of miscellaneous charges
Disaster Recovery (Flatwoods)	\$23.39 per server/storage device per month
Distributed Servers	\$121.67 per device per month
Distributed Storage	\$102.88 per device per month
Electronic Communication	\$5.00 per account per month
Email Encryption	\$2.00 per account per month
Enterprise Backup	\$1.52 per GIG per month
Impact Printer	\$17.69 per 100 pages printed
Information Security Auditing, Threat Management, Incident Response (Security Consulting)	\$50 per hour *
Insertor	\$0.060 per piece
Internet Protocol Phones	Cost of the phone over 36 months
Investigative and Forensic Services (Security Consulting)	\$50.00 per hour*

*Priority personnel rates will be double the published rates

General Schedule of Rates

Summary of Services & Rates — Fiscal Year 2012

Service	Rate
IT Consultant	\$55 per hour*
Laser Printer	\$3.32 per 100 pages printed
Laser PNT HighSpeed Cut Sheet	\$3.50 per 100 pages printed
Mainframe Computing Linux	\$.01000 per CPU second
Mainframe Computing Day	\$1.3270 per CPU second
Mainframe Computing Night	\$0.1670 per CPU second
Mainframe Computing Priority	\$11.300 per CPU second
Mainframe CMPTN Teleprocessing	\$0.3912 per CPU second
Miscellaneous Charges	Cost of the item purchased plus 7% dedicated service fee
Microsoft Licensing	Cost of the license
Network Engineering Nonsupport	\$7.50 per connection per month
Network Engineering Supported	\$15.75 per connection per month
PC Faxing Services	\$0.02 per page
PC Support	\$20.00 per device per month
Programmer Analyst	\$75.00 per hour*
Programmer Analyst Fixed Fee	Contact your relationship manager
Project Management	\$75.00 per hour *
Project Management Services	\$0.43 per pc per month
Project Support	\$24.00 per hour*
Remote Access (VPN)	\$2.17 per month

Summary of Services & Rates — Fiscal Year 2012

Service	Rate
Remote Printer	\$.00084 per printed line
Security Services	\$4.20 per device per month
Smart Phone Devices	\$5.00 per device per month
Systems Support	\$80.00 per hour*
Technical Consultant (Technical, Telephony, Networking Hourly Support)	\$60.00 per hour worked for non-bundled services or non-core agencies*
Telephony Support	\$7.35 per account per month
Training (custom class)	Quoted Upon Request
Training (standard class)	Complimentary to Core Agencies; \$75 per half day other agencies
User Account Management	\$2.10 per network account per month
Web Filtering	Complimentary for our Core Agencies
Website Services	See Page 25
Whole Drive Encryption	Complimentary for our Core Agencies
WVFIMS- Accounts	\$3.680 per account per month
WVFIMS- Expenditures	\$1.180 per million expended in FY 2009
WVFIMS- Transactions	\$0.195 per transaction per month

*Priority personnel rates will be double the published rates

How Do I Get Services?

Service Desk

Call or Email

The Office of Technology Service Desk can always connect you to the service provider you need! Reach them by phone, 304- 558-9966 or 1-877-558-9966 or by email, servicedesk@wv.gov



Contact Your Relationship Manager

You can also contact your Relationship Manager. If you do not know who your RM is, contact any of us to find out.

Name	Phone	Email
Sue Lore	304-957-6811	Debra.S.Lore@wv.gov
Janice Morgan	304-957-6871	Janice.B.Morgan@wv.gov
Ed McMinn	304-957-6813	Ed.L.McMinn@wv.gov
Terry Friend	304-957-6865	Terry.L.Friend@wv.gov
Jeff Wilson	304-957-6816	Jeff.K.Wilson@wv.gov

Billing Questions

Questions About Your OT Bill

Who should I contact with questions?

We encourage you to send service questions to the Service Desk using our email system. You can click the Service Desk link above-left to create an email. If you prefer to call, you can call the main Service Desk number above-left, or you can email or call your Relationship Manager listed on the left.

All invoicing questions should be directed to the contact name and email located on your invoice or directed to your Relationship Manager.

Useful Tips for Service Catalog

Underlines in the catalog are hyperlinks to catalog sections or email messages to OT. Clicking the OT logo at the bottom-right of each page will take you to our website. The key combination Ctrl-F brings up the “Find” feature in Adobe Reader (PDF) and allows you to search for any word or phrase.