# ITS Services

## Table of Contents

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITS SERVICES</td>
<td>3</td>
</tr>
<tr>
<td>ITS SUPPORT COMMITMENT FOR SERVICES</td>
<td>3</td>
</tr>
<tr>
<td>EVENING AND WEEKEND ASSISTANCE (FOR BILLABLE ITS SERVICES)</td>
<td>3</td>
</tr>
<tr>
<td>1. TECHNICAL ASSISTANCE - DEDICATED TECHNICAL SUPPORT PERSON</td>
<td>5</td>
</tr>
<tr>
<td>2. ITS CENTRAL FILE STORAGE AND PRINT SERVICES</td>
<td>7</td>
</tr>
<tr>
<td>2(a) CENTRAL FILE STORAGE (FORMERLY WALTER/WESTERNCLOUD)</td>
<td>7</td>
</tr>
<tr>
<td>2(b) PRINT SHARING ONLY</td>
<td>8</td>
</tr>
<tr>
<td>3. VIRTUAL DESKTOP INFRASTRUCTURE (VDI) SERVICE</td>
<td>8</td>
</tr>
<tr>
<td>4. WESTERN DOMAIN AUTHENTICATION</td>
<td>9</td>
</tr>
<tr>
<td>5. NETWORK ACCESS</td>
<td>9</td>
</tr>
<tr>
<td>5(a) AFFILIATE NETWORK ACCESS - FTEs</td>
<td>9</td>
</tr>
<tr>
<td>5(b) REZNET STUDENT ROOM CONNECTION</td>
<td>10</td>
</tr>
<tr>
<td>6. CENTRAL BACKUP/RECOVERY SERVICES</td>
<td>10</td>
</tr>
<tr>
<td>7. HOSTING DOMAIN NAME AND WEB SERVICES</td>
<td>11</td>
</tr>
<tr>
<td>7(a) DOMAIN AND DNS HOSTING</td>
<td>11</td>
</tr>
<tr>
<td>7(b) WEB SITE HOSTING</td>
<td>11</td>
</tr>
<tr>
<td>7(c) WEB SITE STATISTICS</td>
<td>11</td>
</tr>
<tr>
<td>8. SERVER HOSTING AND MAINTENANCE</td>
<td>12</td>
</tr>
<tr>
<td>8(a) HOSTING A COMPUTER IN THE ITS DATA CENTRE</td>
<td>12</td>
</tr>
<tr>
<td>8(b) HOSTED SERVER SYSTEM ADMINISTRATION</td>
<td>12</td>
</tr>
<tr>
<td>8(c) HOSTED APPLICATIONS</td>
<td>13</td>
</tr>
<tr>
<td>9. SECURITY CAMERA INSTALLATION, MAINTENANCE AND IMAGE HOSTING</td>
<td>14</td>
</tr>
<tr>
<td>9(a) INSTALLATION AND IMAGE HOSTING</td>
<td>14</td>
</tr>
<tr>
<td>9(b) CAMERA HARDWARE MAINTENANCE</td>
<td>14</td>
</tr>
<tr>
<td>10. WIKI HOSTING</td>
<td>15</td>
</tr>
<tr>
<td>11. TREND ANTIVIRUS</td>
<td>16</td>
</tr>
<tr>
<td>12. DATABASE HOSTING</td>
<td>16</td>
</tr>
<tr>
<td>13. VISIX DIGITAL SIGNAGE</td>
<td>16</td>
</tr>
<tr>
<td>14. PAPERCUT PRINTING SOLUTION</td>
<td>17</td>
</tr>
<tr>
<td>BILLABLEITS COMPUTER SUPPORT SERVICES</td>
<td>20</td>
</tr>
<tr>
<td>1. TECHNICAL ASSISTANCE – TIME AND MATERIALS</td>
<td>20</td>
</tr>
<tr>
<td>2. WEB SERVICES</td>
<td>21</td>
</tr>
<tr>
<td>2(a) WEB SITE DESIGN AND DEVELOPMENT</td>
<td>21</td>
</tr>
<tr>
<td>2(b) WEB APPLICATION DEVELOPMENT</td>
<td>21</td>
</tr>
</tbody>
</table>
3. ADDITIONAL EMAIL QUOTA ................................................................. 22
4. ADDITIONAL WEB SPACE ............................................................ 22
5. ITS COMPUTER TRAINING LAB RENTAL ........................................ 23
6. SOFTWARE SITE LICENSING ............................................................. 23
7. SCANEX EXAM SCANNING ............................................................. 23
8. SECURITY CABLING ......................................................................... 24
9. VIDEO CONFERENCING ................................................................. 24

BILLABLE ITS TELECOMMUNICATIONS SERVICES ..................................... 25
1. INSTALLATION AND SETUP OF VOICE AND DATA COMMUNICATIONS LINES ........................................................................................................ 25
2. DATA COMMUNICATIONS LINE USAGE SERVICES .................................. 26
   2(A) SERIAL DATA LINES ..................................................................... 26
   2(B) DARK FIBRE OPTIC COMMUNICATIONS LINES .............................. 26
3. TELEPHONE LINE USAGE SERVICES AND FEATURES ........................... 26
   3(A) STANDARD TELEPHONE LINE SERVICE .................................... 26
   3(B) ANALOG TELEPHONE LINE SERVICE ........................................ 27
   3(C) DIRECT IN DIALING (DID) PHONE NUMBER ................................ 27
   3(D) TELECONFERENCING ............................................................. 27
4. TELEPHONE SET OPTIONS ................................................................ 28
5. LONG DISTANCE RATES .................................................................... 28
6. OTHER TELECOMMUNICATIONS SERVICES ......................................... 28
   6(A) ENHANCED VOICEMAIL APPLICATIONS .................................... 28
   6(B) CALL CENTER TECHNOLOGY ................................................ 29
   6(C) PAGING INTERFACE .................................................................. 29
   6(D) EXTERNAL PHONE RINGERS .................................................. 29
   6(E) CONSULTING AND TRAINING .................................................. 29

ITS CORE SERVICES (NON-BILLABLE) .................................................... 31

HELPDESK ............................................................................................. 31
INSTRUCTIONAL TECHNOLOGY SUPPORT ........................................ 31
RESEARCH SUPPORT ........................................................................... 31
INFRASTRUCTURE SUPPORT ............................................................. 31
MAJOR SERVERS AND SERVICES ......................................................... 32
PERSONAL COMPUTING ACCOUNT WITH E-MAIL, WEB AND CALENDAR ........................................................................................................... 32
OTHER SERVICES .................................................................................. 32

APPENDIX A: ITS RATE SUMMARY ......................................................... 33
ITS Services

This document outlines the services that Information Technology Services (ITS) provides to the Western University community. It contains many of the principles under which both the billable and non-billable services are provided, enabling customers to choose the most appropriate offerings from several families of service. ITS publishes its service offerings to provide guidance to the Western community to help customers plan and manage their computing and telecommunications needs.

This Services Document is organized into four main sections:

- Pre-planned computer support service relationships, defined through an ITS Service Agreement;
- Billable ITS computer support services, available on an "as needed" basis;
- Billable ITS Telecommunications Services;
- ITS Services (non-billable).

ITS pricing is generally organized into three categories:

1. "Internal" pricing for Western's Faculties and Units;
2. "Affiliate" pricing for formally affiliated organizations, or for services provided to Western's faculty, staff or students for personal equipment; and

All pricing shown in this document is for Internal customers, unless otherwise noted.

ITS Support Commitment for Services

ITS offers a variety of services to customers through several operating units, with operating hours attuned to the needs of each environment. Normal operating hours are described with the services, as applicable.

Beyond normal working hours, ITS extends its best efforts to keep the Campus Backbone network and the central network services (*) operating 7 days per week, 24 hours per day for use by faculty, staff and students.

(*) The central network services include: Backbone network operation, Domain Name Services, DHCP, LDAP-based Directory services, Dial-in Modem pool, Internet access, voice services, e-mail, Western Web space, central file and print services and OWL Learning Management System services.

Evening and Weekend Assistance (for billable ITS services)

If assistance is needed outside of the normal service hours, it can be arranged by requesting and scheduling work in advance or by requesting a "Call out" list be created of specialists that will be contacted to deal with emergencies. Time worked outside of regular hours will be charged at 1 1/2 times the normal "Time and Materials" service rate. If the problem can be dealt with by the ITS support person from their home, there will be a minimum of one hour charged at the increased rate. If the support person must come to campus to solve the problem then there will be a minimum of three hours charged at the increased rate.
Pre-Planned ITS Computer Support Service Relationships  
(ITS Service Agreement)

The **ITS Service Agreement** is a record of the service relationship between ITS and its customers from the University community for the use and support of information technology.

The Service Agreement reflects a mutual commitment to specific types and volumes of service, at a fixed price for a defined period of time.

**Responsibilities of ITS to Service Agreement Customers**

ITS agrees to designate a primary contact person who will be available to help manage the overall service relationship with the customer, according to the terms of the established Service Agreement. In addition, a secondary contact will be designated as a backup, should the primary contact be unavailable.

The ITS contact (or designate) will make recommendations to the customer contact regarding any technology changes the ITS contact feels would be beneficial as a result of campus wide research and development.

**Responsibilities of the Customers under the Service Agreement**

The customer agrees to designate a primary contact person within the unit. In addition, a secondary customer contact will be designated as backup should the primary contact be unavailable. This customer contact will interact with the necessary faculty and staff to establish the computing needs of the unit, discuss the needs with the ITS contact and help establish priorities for the work to be done. It is recommended that the ITS contact be included in discussions or meetings concerning strategic planning for the computing or networking needs of the unit.

The ITS contact person (or designate) must have free access to network servers, workstations (faculty, staff and lab) and associated materials such as software media at reasonable times whenever called on to provide service.

**Terms and Conditions of the Service Agreement**

The customer shall notify ITS as soon as possible of any equipment or software failure. ITS reserves the right to re-negotiate charges under this agreement if equipment is modified or expanded or service requirements change.

Notice of any additions or deletions of registered equipment, or changes to the services which may affect the pricing or terms of the agreement must be received in writing by ITS to help manage a consistent understanding of the service relationship and associated fees. ITS requires a 30-day notice of the cancellation of all or part of this agreement.

Unless otherwise specified, ITS will assume that anyone employed by your Faculty / Unit is authorized to request a chargeable service, within the terms of the Service Agreement. Alternatively, ITS will work with the customer to define appropriate approval processes to manage service request and provision.
Service Agreement Options

The following service relationships can be planned with ITS for the support of networks and workstations on campus.

1. Technical Assistance - Dedicated Technical Support Person

Description
Technical assistance and consulting is available from ITS on a wide range of computer and network platforms. ITS will provide a pre-defined level of staffing to help the customer manage their computing and networking facilities at a considerable discount to the "as needed" service offerings. Through the Dedicated Support arrangement, ITS customizes the service provided to fit the customer's needs, according to the customer's priorities. The customer gets added value through:

- the ability to arrange for a "portion" of a person's support time to meet their real needs on a cost-effective basis;
- the synergies of a broader team, utilizing the best practices developed through their considerable experience and leveraging areas of specialized expertise within ITS;
- training and support provided to the Dedicated Technical Support staff, as needed to get the job done; and
- emergency staffing support provided to the customer on request, ensuring continued service during individual staff holidays, sickness or other absences from work.

The Dedicated Support service (available at up to a 40% lower cost than our "Time and Materials" rate) is available to areas that require a significant amount of technical assistance. ITS will dedicate a percentage of a technical support person’s time to be working on-site in the client’s area. This committed amount will be evaluated on a regular basis to determine the correct level of support needed. A minimum of 1 month commitment required.

Pricing
- Internal: $48.00 per hour for "one day per week" (20% FTE) support
- Affiliate: $58.00 per hour for "one day per week" (20% FTE) support

Volume Discounting available:
If a Unit commits to larger volumes of contracted service, discounts to the standard hourly rates for Dedicated Technical Support services (above) are applied as follows:
- 6% discount - for 17.5 hours per week (50% + FTE)
- 12% discount - for 35 hours per week or more (100% + FTE)

Roles and Responsibilities
The ITS Dedicated Technical Support person will create and maintain supporting documentation that will describe the client environment and the work done so that others may quickly learn the necessary facts to troubleshoot and support the area.
The customer must provide a single point of contact who will be responsible for setting priorities for the ITS support person and attempt to involve ITS in any IT planning undertaken by the Unit. In this fashion, the Dedicated Technical Support person may work more closely with the Unit to offer guidance and keep the customer apprised of developments in information technology direction on campus.

**Terms and Conditions**
ITS will work with the customer to establish a regular schedule for the Dedicated Technical Support person to support the client's needs and priorities. There are some basic guidelines used to ensure the efficiency of the overall service provided:

- Dedicated Technical Support work is scheduled within the normal working hours of Monday to Friday, 8:30 a.m. to 4:30 p.m. (excluding holidays observed by Western);
- The customer must contract for a minimum of 20% of a support person's time, i.e. at least 1 day a week, year round, to take advantage of the Dedicated Technical Support service (NOTE: customers who do not need a committed 1 day/week of service can take advantage of the "Time and Materials" services offered, described below in the "as needed" section);
- This time can be reserved in blocks throughout the work week, varying in size from 3 hours to a full 7-hour working day, to organize the contracted support time into a regular schedule that fits available resources to the customer's needs.

**Emergency Service**
Typically, a Dedicated Technical Support person will perform all non-critical work during the designated hours each week. Should an emergency arise (e.g. server down or other critical service become unavailable) during regular working hours, but while the dedicated support person is not on site, a call should be made to the Support Centre and the Dedicated Technical Support person (or emergency backup) will attempt to contact the department within 2 working hours of the trouble call. Calls outside the normal hours of the Dedicated Support arrangement will be charged at the normal ITS Time and Materials rates.

Emergency (2-hour) response can be provided upon request, but will carry with it a charge for an extra hour. See "Evening and Weekend Assistance", above, for support outside of the regular work week.
2. ITS Central File Storage and Print Services

Provides network print sharing, personal and shared file storage (with automated daily backup)

**NOTE:** This fee does not include end-user workstation support. See "Technical Assistance – Dedicated Support Person" or "Technical Assistance – Time and Materials"

2(a) Central File Storage (formerly Walter/WesternCloud)

**Description**

ITS can provide access to central server resources for secure, on premise data storage and sharing.

For units with new central storage needs, a separate disk volume will be created that may be accessed remotely and shared among many users. Setup, security and management of the disk can be done entirely by departmental administrators or with ITS assistance. Disk charges will be assessed on the actual amount of space consumed by live data and backup on the volume. Amount of space consumed by backup is dependent upon the variability of the data (ie: static data will require less backup space than dynamic data). Default schedule of backup of file changes is once per day with a retention of 28 days

**NOTE: existing spaces formerly referred to as Walter**

Software licensing is no longer included in this service. Disk space is managed as a combination of Home and Work directories. Management of folder setup and security must be done by ITS staff and will normally be at no additional cost*. Disk will be allocated in 250GB increments for charging purposes**. Disk charges will be assessed on the basis of actual live data space used and a calculation of space occupied by backup of that data. Default schedule of backup of file changes is once per day with a retention of 28 days

*If a unit requires a reorganization of space that requires a significant amount of resources, Time and Materials charges may apply.

** Some existing customers formerly in the Walter model with very small disk requirements will be moved into the new model at a per GB rate as appropriate

For users with special CPU or performance requirements, a different solution may be required. If you are planning to use the disk space for databases or high performance computing, please contact ITS to discuss your specific needs.

**Pricing**

- Internal: $15.00 / 250GB/ month
- Affiliate: $30.00 / 250GB/ month
System Configuration
There are minimum configuration standards that users of this service must meet in order to fit application and support requirements. Clients must have a minimum of:

- IBM-compatible, Intel-based computer;
- Windows 7, Windows 8/8.1
- The currently approved campus virus protection software must be enabled and up-to-date on each PC.

2(b) Print Sharing Only

Description
Allows for the connection and sharing of printers on the network. ITS sets up the print queue(s) and configures each workstation to point to the appropriate queue. Can be used in concert with Central File Server Access services, or independently to provide printer-sharing capabilities to a group of workstations.

Pricing
- Internal: $1.00 / printer / month
- Affiliate: $2.00 / printer / month

3. Virtual Desktop Infrastructure (VDI) Service

Description
Virtual desktop infrastructure (VDI) is designed to host desktop operating systems within virtual machines that reside/run on a centralized server infrastructure. Key points about VDI at Western:

- Our current offering is designed to be used in a lab environment.
- Our implementation is designed to use what are called zero client devices in the labs. These devices cannot run independently as desktops but instead connect to central servers where the desktop’s processing actually takes place. ITS can assist in acquiring needed client devices.
- A customized image can be created for each lab including only the applications that lab requires with any security measures needed applied to the desktops.
- These desktops can be used by our undergrad and graduate student population as well as faculty and identified supporting staff members. More granular restrictions can be applied if needed – for example if you want a lab restricted to graduate students for a particular faculty.
- 2 GB of central disk is provided for each student to store their assignments. This disk is purged when the student leaves Western.
- USB keys can be used in these devices as they can with any PC.
- Management of individual lab images is delegated to the department involved. ITS will work with these administrators to gain an understanding of the tools and processes involved.
Pricing:

Initial Purchases:
- Zero Clients (approx) $500 / client

NOTE: Zero Clients can be purchased from any manufacturer, though it is recommended that the client units have the teradici chipset to take advantage of the management console. Compudata has been chosen as the preferred vendor for VDI Zero Clients.

- Microsoft VDA Licenses (equivalent to) $3.44/desktop/mth

NOTE: The VDA licenses are purchased under a subscription term contract and must be purchased in advance. At the end of the contract, you will be required to renew licenses. ITS will manage the purchase for you and pass the initial purchase and any subsequent renewal costs back to your department.

Monthly Fees:
- Infrastructure (base 2CPU and 4GB RAM): $14.00 /desktop / mth
- Additional RAM: $1.00/GB/mth
- Additional Disk Space for storage of desktop images: $.06/GB
- Software (SPSS): $9.00/desktop/mth

4. Western Domain Authentication

Description
The Western domain for authentication only option for stand-alone network users grants you access to the Central Western Active Directory. Active Directory is the Windows authentication and authorization service. Some advantages of this service are

- It can provide a standard method to acquire central Microsoft patch management through the Windows System Update Service server. This includes Microsoft Office products as well as operating systems.
- Taking advantage of Active Directory’s GPO feature can increase security by applying policies to lock down machines.
- Systems that authenticate to the Western domain can be accessed using the Western userid and password, rather than requiring a local account. This access can be controlled through the creation of permission groups.
- The Western domain for authentication only option provides lab administrators the opportunity to restrict stations to valid Western users only. It also provides for better central management of security policies and Windows update distribution.

Pricing
- Internal and Affiliate customers:
As a result of the Western Microsoft Campus Agreement, there is no charge for connected workstations at this time.

5. Network Access

5(a) Affiliate Network Access - FTEs
Description
ITS provides "core" backbone network services to Western as part of the infrastructure support component of its mission. Affiliates using "core" backbone network services from ITS are subject to Western's network policies and guidelines. The intent of this service is to provide you with basic network connectivity and limited internet services. If your business requires additional network services or a more robust internet feed, ITS can assist you in identifying options.

If you subscribe to any other data networks services, these networks must be physically isolated from Western data networks. Hosts connected to the Western data network cannot be directly connected to any network associated with an alternate ISP. Hosts configured in this manner are a potential security risk to the Western network facilities.

For affiliated organizations, the core backbone network services and the ongoing Western support for them can be accessed for a network connectivity fee. The actual infrastructure to connect the workstation to Western's backbone network is still the responsibility of the affiliated organization.

Pricing
- Affiliate: $10.00 / Student/Staff/Faculty FTE/ year

5(b) RezNet Student Room Connections
Description
ITS will partner with Residence management organizations to provide appropriate network infrastructure and support services to facilitate the connectivity and management of direct Student Residence room access to the Western backbone network and services.

These services include:
- Internet connectivity;
- Liaison services between support staff for backbone network connectivity troubleshooting and network management services;
- Collaborative security monitoring and management;
- Coordination of student identification and authorization services.

Pricing
Pricing for these services is dependent upon how the Residence management organization contracts for the service relationship and is negotiated directly with each client according to a standard framework.

6. Central Backup/Recovery Services
Description
ITS offers central network backup/recovery services for many commonly used server and desktop operating systems. This service provides unattended, overnight backups performed between 5pm and 7am, scheduled to accommodate client needs. File recovery can be managed directly by the administrator of the client machine.

NOTE: E-mail notifications are sent by the system to inform system administrators of the
completion of each backup. It is the client's responsibility to check these e-mails on a daily basis to insure that the backup has completed properly and that the output appears reasonable. Logs of all actions performed by Legato Networker are maintained centrally for at least 1 year.

The client subscribes to the backup protection service on a computer by computer basis. For each computer, the monthly cost of the backup service is dependent upon the total volume of data backed up in that month.

**Pricing**
The pricing for Backup / Recovery service is outlined below.

**Basic Service – 2 months retention**
- Internal: $0.15 / GB; Minimum $15.00 / month / computer
- Affiliate: $0.25 / GB; Minimum $20.00 / month / computer

The cost of the basic backup service is dependent on the total volume of data backed up in a particular month, with a minimum monthly charge. Backup copies are retained for 2 months. See for more information on backup service

### 7. Hosting Domain Name and Web Services

#### 7(a) Domain and DNS Hosting
**Description**
For customers that wish to establish a unique, non-"Western" web domain identifier (i.e. not *.uwo.ca) and the supporting name resolution services, ITS can setup and maintain this within the Western network, if appropriate. ITS will setup and register the DNS to support a host name and provide appropriate e-mail aliases. ITS will maintain the information, at the client's direction.

There is no charge for ITS to setup and register the DNS to support a host name, but you must provide written permission from your Dean, Chair or Budget Unit Head.

The customer is responsible for registering an approved name. There is a fee payable to the Registry site for this registration. ITS can assist the customer with the Domain Name approval and registration process based on our hourly rates (minimum 1 hour charge).

#### 7(b) Web Site Hosting
**Description**
ITS can provide web services on Western's central web server or on a domain other than the standard [www.uwo.ca](http://www.uwo.ca) domain. Customers of the Domain and DNS Hosting service can take advantage of this service to use Western's web infrastructure and avoid the necessity to build their own. The Domain name and DNS hosting must be setup first, see 7(a) above for details.

**Pricing**
- All customers: $150.00 initial, one-time setup fee;
- All customers: $100.00 annual, ongoing maintenance fee for a 250 MB web site.

#### 7(c) Web Site Statistics
**Description**
ITS can provide detailed statistics on web site traffic for a hosted web site.

**Pricing**
- All customers: $150.00 initial, one-time setup fee; and
- All customers: $100.00 annual, ongoing maintenance fee to manage the necessary logs.

### 8. Server Hosting and Maintenance

#### 8(a) Hosting a Computer in the ITS Data Centre

**Description**
The ITS computer room is specifically designed for the support of computer equipment and networking. For customers who would like to find a secure environment for a key networked server, ITS can offer the following services:
- UPS power supply
- Network connectivity
- Air conditioned environment
- Controlled access security environment
- Software monitoring and emergency call-out to a single designated phone number (software determines if the server has gone down or is not transmitting on the network --- NOT whether your application is doing what it is supposed to do)
- Secure remote access to the server console via IP/KVM. The required request form for this service can be found at https://www.uwo.ca/its/hostingservers.html

**Pricing**
- All customers: $300.00 per server initial, one-time setup fee(*);

(*) **NOTE:** Each server must have a designated system administrator and contact information for at least one person in the case of an emergency or noted hardware failure.

There may be special, one-time implementation costs, driven by the power or facilities requirements of the hosted machines or labour costs associated with the initial configuration. ITS will negotiate an appropriate cost-sharing arrangement with the client to accommodate this.

Additional charges may be incurred if access is required to the Data Center outside ITS staffed hours (6:30am to midnight Monday to Friday). Please see “Evening and Weekend Assistance”, above for support costs outside of these hours.

#### 8(b) Hosted Server System Administration

**Description**
For customers taking advantage of "computer hosting" in the ITS Data Centre but do not have arrangements to provide system administrative support for the hosted machines(s), there is a server maintenance fee. This provides for standard maintenance of the operating system so that it is updated with the current security patches and bug fixes regularly.

**Pricing**
Pricing for this service is based on the applicable ITS Technical Assistance labour fees (see "Time and Materials" rates for this service). This may vary over time, depending upon individual circumstances, but experience indicates that the typical amount of work involved will fit within our minimum support levels:

- For Unix/Linux servers, a minimum 4 hours of labour per month will be provided and billed;
- For Windows 2003/2008 servers, a minimum 2 hours of labour per month will be provided and billed.

8(c) Hosted Applications
Dedicated Virtual Server:

Using a Virtual Server allows the application to live on a shared hardware platform, but it is configured to use an independent copy of the operating system. It can be updated, restarted and otherwise maintained without impacting the other applications on the same hardware. A virtual server can run Windows or Linux Red Hat operating systems. Essentially, there is no functional difference between a virtual and a physical server.

A virtual server resides within an enterprise level infrastructure providing many advantages:

- Physical security benefits provided by the central data centers within ITS…
  - controlled physical access
  - UPS power supply
  - controlled air conditioned environment
  - Software monitoring and emergency call-out
  - Secure remote access to the server console via SSH/RDP
- Redundancy that you cannot achieve with a single physical server.
- Payment for only the hardware resources you need rather than buying an entire server.
- Abstraction of the server from the hardware which minimizes downtime if/when hardware needs to be taken down for update/replacement.
- Portability of the individual virtual servers which aids in restores or Disaster Recovery scenarios.
- Power, space and cooling savings.
- Daily full backups that are maintained for 30 days.

The cost of a Virtual Server includes all required operating system licensing, backup of the OS and data, hardware considerations, environment costs, and staff resources to support the physical infrastructure. Specific licensing for database and/or applications will be the responsibility of the department.

ITS offers two versions of our Virtual Servers (slice) – small and large. The small size is ideal for a typical web application server where there is no real need to store data. The large size can accommodate applications that require more resources overall – more CPU, more memory, more disk.

<table>
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<tr>
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<th>SMALL</th>
<th>LARGE</th>
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<tbody>
<tr>
<td># Virtual CPUs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Memory</td>
<td>1GB</td>
<td>2GB and up</td>
</tr>
<tr>
<td>Disk provided for data storage (beyond)</td>
<td>10GB</td>
<td>50GB</td>
</tr>
<tr>
<td>Cost per month for</td>
<td>$50.00</td>
<td>$75.00</td>
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<td>-------------------</td>
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<tr>
<td>Internal departments</td>
<td>$50.00</td>
<td>$75.00</td>
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<tr>
<td>Affiliates</td>
<td>Plus one time setup fee of $100.00</td>
<td>Plus one time setup fee of $100.00</td>
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Additional disk space is available and will be charged on a monthly basis according to usage levels.

**Pricing**
- **Internal:** $0.06 /GB/month
- **Affiliate:** $0.12 /GB/month

**NOTE:** A trained system administrator must be designated for each virtual server. The system administrator is responsible for the day-to-day management of the server including but not limited to OS and application patching, monitoring logs, and overseeing application configuration. If you do not have someone who can assume this role, ITS can provide this service. Please refer to **Section 8(b) Hosted Server System Administration** for details as to the cost for this service.

### 9. Security Camera Installation, Maintenance and Image Hosting

#### 9 (a) Installation and Image Hosting

**Description**
ITS offers a central service for hosting images for IP based security cameras. These images are archived for 25 days on our central server. This service is available to Western departments and affiliates who choose to purchase and install cameras on the Western network. Consultation with Campus Community Police must be done prior to purchase and/or installation of cameras. [http://www.uwo.ca/police/videomonitor.htm](http://www.uwo.ca/police/videomonitor.htm).

**Pricing**
- **Internal and Affiliate customers:**
  - Installation of Network connectivity to camera(s): Pricing is dependent on number of lines to be installed. See pricing information under “Installation and Setup of Voice and Data Communications Lines” in the 'Billable ITS Telecommunications Services' section.
  - Client side configuration for viewing of images: charged at "Time and Materials" rates

- **Affiliate/Ancillary customers:**
  - Monthly charge for storage of camera images: $10/camera/month

**NOTE:** Client side configuration fees waived for Dedicated Support Departments

#### 9 (b) Camera Hardware Maintenance
ITS, in cooperation with Campus Community Police Services, is responsible to provide monitoring and maintenance support for Western's security camera network. As the environment ages, challenges have been identified around budgeting for maintenance and replacement of cameras and the processes for confirmation and payment for support/replacement requests.

In response, ITS has developed a maintenance program that would address the following two points for the benefit of all security camera stakeholders

**Pricing**

1-19 cameras: $7.50/mth/camera  
20 cameras +: $5.00/mth/camera

This cost assumes that cameras will be refreshed on an 8 year cycle and includes all parts, labour and licensing to maintain the existing camera or replace as needed. Any net new camera installations would be funded by the requesting unit and be included in the maintenance program from the point of installation.

*Starting in Fiscal 2016-17, this maintenance program will be required for all cameras connecting to the central video monitoring system.*

**10. Wiki Hosting**

**Description**

ITS offers a wiki hosting service through Kiwi.uwo.ca. Kiwi.uwo.ca is built using an application called Confluence from Atlassian. It is described as "an enterprise wiki that makes it easy for your team to collaborate and share knowledge".

For each wiki space you can designate the following:

- User(s) who will administer the wiki space.
- User(s) who have read/write access to the space.
- User(s) who have read only access to the space.

**NOTE:** Each user accessing the wiki space must have a valid Western identity.

Each wiki space requires an assigned Space Administrator. This administrator is responsible for day to day management issues for the space including the following: - page and attachment deletions; - requesting user access additions and modifications for the space; - exporting of the space to maintain space level backups

Supporting documentation is available to help novice wiki users learn to leverage the many features offered by this product including structuring of your space, use of attachments, export of content to PDF files, formatting macros, etc.

**Pricing**

- All customers: $15 per wiki space per month.

**NOTE:** This provides up to 2 GB of disk. Disk space used in excess of 2 GB will be charged at:

- Internal: $0.06 per GB/month
11. Trend Antivirus

Western completed a review of antivirus protection products for campus desktops and servers in the spring of 2010. This review confirmed that the product used at Western since 2001, Trend OfficeScan, is still the best choice for the Western computing environment. The latest version of the product provides virus and malware protection for Windows, Macintosh and Linux systems. Trend is purchased and maintained by Western’s central administration and is available for use on faculty/departmental desktops at no cost to the user. This software has also historically been available to some affiliated and ancillary users of the Western network at no cost. With the latest renewal of Trend (effective May 1, 2010), all affiliate and ancillary units will be charged a nominal fee for the use of this software.

Pricing:

- Internal: No cost
- Affiliate/Ancillary: $6 per workstation per year

12. Database Hosting

Description
ITS provides a Database environment capable of hosting multiple databases including Microsoft SQL Server, MySQL and Oracle.

SQL Server & MySQL
SQL server and MySQL databases up to 2GB in size are hosted free of charge. Additional database disk space is available.

Pricing
Additional database disk space:

- Internal: $0.06 per GB/month
- Affiliate: $0.12 per GB/month

Oracle
Requests for hosting Oracle databases can be discussed on an individual basis. Please contact the ITS Help Desk helpdesk@uwo.ca.

13. VISIX Digital Signage

Description
VISIX is a digital signage solution that allows delivery of user created content to a mounted television screen. The system can be used for many purposes, including display of specific departmental program offerings, general Western promotional material or local schedule and wayfinding information. VISIX screens are also designated as a vehicle for Western’s Emergency Response messaging to campus.

ITS manages the central server that stores and pushes departmental content to individual screens and also provides support and training to maintain both the hardware and software required for the VISIX environment.

Pricing:

**Initial Purchase:**

Channel player:

- All Customers: approx $2500*

*NOTE: Does not include installation of equipment or required data lines*

Television set purchase and installation:

- All Customers: cost dependent on size and type of television selected

*NOTE: Televisions are purchased directly by customer. Sales/Support contact available*

**Monthly Charges:**

Channel Player Software and Hardware Upgrade and Support:

Includes:

- Annual maintenance costs for channel player software
- ITS support for VISIX software and hardware, including hardware repair and training
- First response to VISIX troubles within 48 hours
- Channel player replacement on a four year refresh cycle to ensure that channel player hardware and operating system software in the Western VISIX environment keeps pace with upgrades to the central VISIX application.

- Internal: $40/mth/channel player
- Affiliate: $50/mth/channel player

*Based on a small form factor unit purchased from a Western authorized supplier. Includes cables and other parts required to connect to the television set. A channel player is able to support multiple screens displaying the same content.

14. Papercut Printing Solution

**Description:**

The Papercut printing solution is a Western centrally managed application supported jointly by Western Libraries and ITS. This solution is used to provide a chargeback mechanism for units that would like to provide printing, photocopy and scanning services to students.
Papercut provides printing to students via a Papercut account that is linked with the student Western email address. Funds can be added to this account on the web with a credit card or through the purchase of Papercut redemption cards available at designated locations. Students can generate a document on any Papercut-attached workstation and print to any printer in the Papercut system. This service can also be made available to visitors to Western using guest accounts. Units can choose to use standard printers with an attached release station to provide printing or use the Western standard Toshiba Multi-Function device for printing and other functions such as scan and copy.

Revenues generated by the Papercut printing solution are managed by ITS and will be reimbursed to each participating unit on a quarterly basis, based on the number of pages printed at each unit printer.

**System Requirements:**
- **Printer Server:** For units with more than one printer, a print server must be available within the unit to support the print queues that will attach to Papercut. If you only have one printer, please contact the ITS Helpdesk (x83800) for information on other options.
- **Release Station:** In order for the student to select and release print to a particular printer, a release station must be attached to the printer. Minimum release station specs are:
  - Intel Core i5 Processor
  - 8GB RAM
  - Windows 7 Enterprise
  - Minimum 128 GB SSD (Recommended for Performance)

**Pricing:**

**Cost to students:**

Units are able to designate costs independently for each printing service managed (color, black&white printing, photocopies)

**Cost to Department:**

If required:
- One time purchase of Release Station license software: approximately $180/station for license and support to the end of the five year contract.
  OR
- One time purchase of embedded MFD software: approximately $800/MFD for license and support to the end of the five year contract

(NOTE: this software includes upgrade support for the term of the Western Papercut contract: to 2020. Renewal of the **support only** will be required after this time and is expected to be approximately 20% of the original cost of the software/station)

Print queues that print directly do not require additional licensing

**Reimbursement of print revenue to department:**
Reimbursement will be based on the amount per page paid by the student, less HST remittance and administrative fees based on an agreed upon formula.

**Roles and Responsibilities**

ITS is responsible to manage the central Papercut software and hardware and to assist new users with setup on the system. ITS is also responsible to monitor and audit funds flowing into the Papercut account and process quarterly reimbursements to participating units as per the agreed upon formula. Unit administrators are responsible for the sale of print redemption cards and for processing of credits on the Papercut system for any user of the system.

Unit System administrators will be provided with access to the PaperCut Administrative portal in order to manage and monitor the use of departmental printers and will be responsible for supporting users with service delivery within the unit.
Billable ITS Computer Support Services  
(Available on an ‘As Needed’ Basis)

ITS offers a number of services that can be provided on a ‘time and materials’, or ‘as needed’, basis.

Terms and Conditions
Payment for these services may be made on a valid Western account. Where specific services are available to students and affiliate customers, payment may also be made by cheque, credit or debit. Please note that a $20.00 service fee will be levied on all NSF cheques.

The service offerings are listed below.

1. Technical Assistance – Time and Materials

Description
For areas of campus that wish Technical support on a limited basis, ITS offers "Time and Materials" support that can be provided on an hourly basis. Technical assistance and consulting is available from ITS on a wide range of computer and networking platforms, including Windows, Linux, Macintosh and Unix.

Hardware repairs on personal computer workstations, printers and some other office equipment can be completed by a hardware technician. The customer will be responsible for the cost of parts and labour to repair equipment.

We will endeavor to ensure that one of the same two Technical Support people respond to the service call so that ITS staff will become familiar with a unit's equipment and needs.

Pricing
- Internal: $80.00 per hour
- Affiliate: $85.00 per hour

NOTE: There is a minimum fee of one hour for this service.

Terms and Conditions
Normal working hours of Monday to Friday, 8:30 a.m. to 4:30 p.m. (excluding holidays observed by Western).

For maintenance, setups and other non-critical work, a time will be set up that is mutually agreed upon and convenient for the customer. For trouble reports ITS will attempt to get the designated support person (or their backup) on-site within 1 working day.

Emergency response (within 2 hours) can be requested and will be billed by adding one extra hour to the call.

In instances when an ITS Support person brings along a trainee or an expert, you will be charged only for the time of one person.
2. Web Services

2(a) Web Site Design and Development
Description
Official Western websites are eligible to be developed in Western’s Web Content Management System (Cascade Server). This is a centrally funded web based application available to all faculty and staff wishing for web site design and maintenance. No software installation is required and the application can be accessed from any computer with a browser and internet access. More specific information about this application can be found at http://www.uwo.ca/its/cms.

ITS offers custom web site design and development. We will consult with the client to review their specific needs and schedule design projects, as appropriate. Projects will be developed in Cascade Server. On-going maintenance contracts are also available if you would prefer ITS to maintain the site for you.

Pricing
- Internal: $80.00 per hour
- Affiliate: $85.00 per hour
  o Basic web site development and maintenance
  o Web site with programming or scripting

2(b) Web Application Development
Description
ITS offers custom programming for the creation of web-based applications. Web-based programming is typically needed when the site requires interactive web pages or pages that need to access a database. ITS will consult with the client to review needs and schedule design or programming projects, as appropriate.

Pricing
- Internal: $80.00 per hour
- Affiliate: $85.00 per hour

2(c) e-Commerce Solutions/Credit Card Authorization and Payment Processing
Description
ITS maintains a centrally-available service, through an external vendor, that will support secure credit card authentication and payment processing. ITS will work with a Faculty or Unit to identify what is necessary to integrate this service into their e-commerce processes. E-commerce planning support and management of the e-commerce server is provided at no cost by ITS as part of our core services. More information is available at http://commerce.uwo.ca/itoptions.html
Any e-commerce application needs a PSiGate storefront. To apply for a storefront, contact Financial Services. PSiGate setup & transaction costs are paid to PSiGate. PSiGate costs include:

- $0.25 per transaction fee
- $249 per year maintenance fee on storefront

Note: Credit Card administration fees charged by Visa and Master Card still apply.

In addition to this, ITS can provide the following services:

1. Full programming and hosting of the application at Standard Time and Materials Rates
   - ITS application development.
     - Upon reviewing the scope of the application, ITS will provide a quotation for the development.
   - Applications may be hosted on ITS servers. See section 8(c) for cost of this service

2. E-commerce stub
   Here you develop and host the application, but ITS takes care of the gathering of credit card information. All e-commerce applications must use the e-commerce stub for on-line credit card processing and is provided at no cost by ITS as part of our core services.

   Note: PSiGate Storefront fees still apply for either of these options.

3. Additional Email Quota
Description

As a result of the ongoing migration of Western Mail to Office 365 and in preparation for the eventual decommissioning of the legacy email platform, ITS has frozen email quotas and will no longer accept requests for additional capacity effective April 1, 2016. Office 365 offers greatly increased mailbox capacity and quota increases will not be required in the new system.

4. Additional Web Space

Due to a recent upgrade in the central disk environment for Western, ITS has elected to waive corporate web disk charges for the period of May 1, 2015 to April 30, 2016.

Quota levels for websites are intended to accommodate current usage and provide for a reasonable expectation of growth. If you should experience a situation where email disk space levels are not adequate, please contact the ITS Help Desk at 519 661-3800 to determine next steps.

Default quota levels, disk usage and costs will be revisited for the 16/17 fiscal year and charges for additional quota may be reinstated at that time.
5. ITS Computer Training Lab Rental

Description
Access to the ITS Training Lab can be arranged to provide an instructor and class exclusive use of the lab and its equipment. This includes the use of the software and instructional aids consisting of an instructor's workstation, white board, and multimedia projector directly connected to the instructor's workstation. Further information is available at:
http://www.uwo.ca/its/courses/labs.html

Pricing
- Internal: $65.00 per session (morning / afternoon)
- Affiliate: $130.00 per session (morning / afternoon)

Terms and Conditions
Reservations should be made at least two weeks in advance. Internal customers can charge this service to a Western departmental account. Affiliates will be invoiced for these services. The cost of renting the lab is per session where a session is a morning (i.e. 8:30am-12:00n) or an afternoon (i.e. 1:00pm-4:30pm). Inquiries can be emailed to: its-courses@uwo.ca.

There will be an additional charge for installing and testing software if a special setup of the lab is required (at regular "Technical Assistance - Time and Materials" rates). Instructors are responsible for proper software licensing in the lab if they choose to bring in their own software. These arrangements must be made at least two weeks in advance of the scheduled class.

Special service: During the summer a suitable general student lab may have open time available that can be booked for conferences. The terms and conditions are the same as above but the fee per session for this resource is $250.00.

6. Software Site Licensing

Description
ITS negotiates campus-wide licenses for some software, which is available to faculty and staff as outlined on the ITS site licenses web page (see http://www.uwo.ca/its/sitelicense/).

Pricing
Prices vary depending on the software and the number of licenses purchased.

7. Scanex Exam Scanning

Description
This scanning service is available at the ITS Administration Office, Support Services Building Room 4300. ITS will scan the forms and create a file which is uploaded to the user’s OWL secure web location. The client may then process the file using the SCAN-EXAM II software available from Social Science Network and Data Services (see http://ssnds.uwo.ca/softwaredownloads.html).

Two exam formats are supported for scanning: The first is Standard Multiple Choice (180 questions, 5-choice AE) and the second is Extended Multiple Response (45 questions, 20 choice A-T).
The Standard Multiple Choice (180 questions, 5-choice AE) Scantron Form F-13209-UWO can be purchased through Western Office Supplies (see http://www.uwo.ca/finance/wos/). The Extended Multiple Response (45 questions, 20 choice A-T) Scantron Form F-13622-UWO is no longer available for purchase.

**Pricing**
This service is provided at no cost.

### 8. Security Cabling

**Description**
For equipment that will be in public access areas or at risk of theft, ITS will secure the equipment, which will enable the equipment to be covered under Western's self insurance plan. This service is available to any unit on the Western campus.

**Pricing**
The cost of securing the equipment is charged at "Time and Materials" support rates:
- Internal: $80.00 per hour
- Affiliate: $85.00 per hour

### 9. Video Conferencing

**Description**
ITS has a Tandberg Edge 95 (High Definition camera and codec with table microphone) Videoconferencing unit that will connect to similar H323 compliant units over an IP network. The room also features a 65” LCD main display and a 32” LCD secondary display to allow for simultaneous display of a presentation as well as the participants. The room is best suited for small to medium conference groups of between 1–5 people. More information available at: http://www.uwo.ca/its/video_conf/.

**Pricing**
- Internal and Affiliate customers: $100.00 per session

Includes use of room and equipment during the conference, conference setup and testing, and stand-by Technical Support.

**NOTE:**
The Videoconference session should be held between the working hours of the University, 8:30 am to 4:30 pm Monday to Friday. Due to the fact that different time zones may be part of the scenario ITS will try to accommodate sessions outside of these hours but additional charges may apply and will be outlined prior to the booking of the event.

If the remote location uses ISDN telephone lines for Video Conferencing a bridge between the two types of systems would be required. There would be an additional charge for the connection and long distance charges; the total cost would depend on the length and location of the call.
Billable ITS Telecommunications Services

ITS offers both data and voice Telecommunications services. The Telecommunications team can customize the services provided to fit the client’s needs. Clients may select from the standard services listed below. The Telecommunications team works directly with Faculties and Units to engineer solutions that best suit the client’s needs.

1. Installation and Setup of Voice and Data Communications Lines

Description
ITS can organize the installation of telephone or data communications line at the location of the customer’s choice. This is the first step in delivering a new voice or data communications service. The client typically will also need to select the appropriate line usage type (see section #2, below, for data line services and section #3 for voice line services available) and, for phone services, the Telephone Set type that is desired (see #4, below).

Pricing
The cost of the line depends on type (voice or data) and whether or not an existing cable is present and can be used to address the client’s need. Each line is tested, connected appropriately and activated within the appropriate control systems. The pricing options are outlined below*:

(i) Up to five (5) lines:

<table>
<thead>
<tr>
<th>Flat Rate Service Fee</th>
<th>Internal</th>
<th>Affiliate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Installation (cable present)</td>
<td>$120/inst</td>
<td>$128/inst</td>
</tr>
<tr>
<td>Cable Installation (cable not present)</td>
<td>$365/inst</td>
<td>$378/inst</td>
</tr>
</tbody>
</table>

(ii) For installations requiring more than five lines, please contact the ITS Helpdesk (x83800) to request a quotation based on your specific requirements.

*NOTE: Any cable installs requiring special handling due to asbestos in a building will be charged at a Time & Materials rate. If an install falls into this category, the customer will be contacted by a member of our Infrastructure team with an estimated price for the specific install.

Terms and Conditions
ITS warrants the lifetime operation of voice and data communications lines that are installed. ITS maintains and repairs the University's cabling infrastructure and any future problems with installed lines are repaired at no additional expense to the customer. ITS reserves the right to charge installations of wire as time and materials when deemed necessary.
2. Data Communications Line Usage Services

2(a) Serial Data Lines
Description
Data communication lines (Cat 5 wiring) may be installed for a variety of needs such as CHUBB security and cash registers.

Pricing
- Internal and Affiliate:
  - Data Lines connecting two points within a single building: $3.00 / month
  - Data Lines connecting two points across multiple buildings: $6.00 / month

2(b) Dark Fibre Optic Communications Lines
Description
For extremely high capacity telecommunications services, fibre optic cable can be installed and maintained

Pricing
- All customers: $3.00 / meter / year

3. Telephone Line Usage Services and Features

Once the basic line is installed and connected, customers pay for their use of the telecommunications services, as they use them, according to the type of service provided. The functionality of the phone service itself is described as "Line Usage services and features". Some functionality and other requirements could drive the need for different types of "Telephone set" hardware. The Telephone Line usage features are listed below and the Telephone set options are listed in the following section (4).

3(a) Standard Telephone Line Service
Description

Western University a Voice over Internet Protocol (VoIP) infrastructure designed to accommodate continued growth within the campus. A standard telephone line includes local calling services and the provision of standard voicemail.

Pricing
- Internal: $25.00 / month / line
- Affiliate: $30.00 / month / line
3(b) Analog Telephone Line Service

Description
Analog lines may be required to support telephone service connectivity for specialized equipment (e.g. fax machines, modems, etc.). Voice mail is not included in the standard Analog telephone line service, but can be added if needed (see 3(c), below). Analog lines may also be "extended" to a second location which shares the telephone line services. Normal installation and setup charges and Telephone Set option charges apply, but the line usage fees are available on the second phone extension at a reduced rate.

Pricing
- Internal: $27.00 / month / line; Analog Extension: $6.00 / month / extension
- Affiliate: $32.00 / month / line; Analog Extension: $6.00 / month / extension*

* NOTE: * Due to the cost of additional equipment required to service off-site locations, Affiliate Pricing will apply to units located outside the main campus.

3(c) Direct In Dialing (DID) Phone Number

Pricing
- For direct access from an off campus phone $6.00 / month

3(d) Teleconferencing
Six (6) person conference feature is included in basic phone set. See details on how to use this feature at [http://www.uwo.ca/its/telecom/phones/voipFeatures.html#conf](http://www.uwo.ca/its/telecom/phones/voipFeatures.html#conf).

Pricing
Any long distance calls dialed out as part of a conference call will be charged at the standard long distance rates

For information on other possible commercial audio conference services, please see the information at [http://www.uwo.ca/its/telecom/meetmeconference.html](http://www.uwo.ca/its/telecom/meetmeconference.html)
4. Telephone Set Options

Description
ITS offers several telephone set options each with a variety of features.

Pricing
Below are the monthly fees for the various sets and available options:

<table>
<thead>
<tr>
<th>Phone Set</th>
<th>Internal Pricing</th>
<th>Affiliate Pricing*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Extension</td>
<td>$2.75 / month</td>
<td>$3.50 / month</td>
</tr>
<tr>
<td>Multiple Extension</td>
<td>$20.00 / month</td>
<td>$20.00 / month</td>
</tr>
<tr>
<td>Add on module</td>
<td>$30.00 / month</td>
<td>$30.00 / month</td>
</tr>
</tbody>
</table>

* Due to the cost of additional equipment required to service off-site locations, Affiliate Pricing will apply to units located outside the main campus.

5. Long Distance Rates

Description
ITS negotiates favorable corporate long distance rates from the available service carriers at a cost effective and competitive rate for the University.

Pricing
For long distance calls from Western:
- The cost for calls within Canada and the United States is $0.06 per minute plus tax;
- For the cost of International calls, current rates are available on the web at http://www.uwo.ca/its/telecom/general_information/long_distance_rates.html

6. Other Telecommunications Services

Description
ITS offers specialized services to deal with a variety of customer needs. As ITS begins to take advantage of the new technology made possible by the new switch and software we have purchased, there will be more services made available to help with your business needs.

6(a) Enhanced Voicemail Applications
ITS offers menus and autoattendants which provide the ability for a caller to make the selection among several choices to help direct their call. The process is designed by the customer, "Press 1 for…., Press 2 for…". This service is associated with a particular phone number.

Pricing
- Internal and Affiliate: $2.50 / month, for each voicemail box used.
6(b) Call Center Technology
A call centre queue can be set up that forwards calls coming in to one number to several different phone sets based on programmable rules. This is used in a Call Center or Support Centre environment where there is a need for multiple phones to deal with the call load.

Pricing
Please contact the ITS Helpdesk at 661-3800 for information on this service.

6(c) Paging Interface
ITS can set up a paging interface and connect one or more phones to this interface so that the phone may be used to broadcast a message in a large area.

Pricing
The paging interface costs $27.00 / month and each phone connected to the interface costs $1.00 / month.

6(d) External Phone Ringers
If you need the sound of the phone ringing to be heard in a different location (for example the lab next door). There is a fee of $140.00 for the modified telephone set and external ringer as well as a labour cost at "Time and Materials" rate for the installation.

Pricing
There is an ongoing $2.00 / month fee for the use and maintenance of this service.

6(e) Consulting and Training
To meet the telephony needs of a diverse Western community, we provide technical assistance, consulting, design and training for all voice applications. This includes re-design of your existing telephones to accommodate changes caused by renovations and/or reorganization.

An in-house designer is available to provide you with the following applications to enhance your business.

TIME OF DAY APPLICATIONS – move calls automatically from one destination to another destination based on time of day, and/or day of week, and/or date of year.

VOICEMAIL – Automated Attendants, Menu Mailboxes,

CALL CENTER TECHNOLOGY – call queuing applications for call centers

CALL CENTRE SERVICES – Skills based routing, comprehensive reporting and flexible call handling for call centres.

TRAINING: An in-house trainer is available to provide individual or group training on all voice applications. These "hands-on" training sessions are conducted at the end-user’s workplace or in a lab-setting environment for group sessions.

Training sessions, customized to meet your special needs, are available for:
1. Telephone features
2. Voicemail features – personal mailboxes, menu mailboxes
3. Call Centre-Agent telephone feature training including terminology and effects on the call centre.
4. Call Centre-Supervisor - Real-time display training session
5. Call Centre -Supervisor - Reports training session including creation, use and interpretation.

**Pricing**

Call Centre design and training:
- Internal: $80.00 per hour
- Affiliate: $85.00 per hour
ITS Core Services (Non-Billable)

ITS offers a very wide variety of support services that are provided as part of our core mission at Western:

**Helpdesk**
The ITS Help Desk provides computing assistance for all faculty, staff and students. The Help Desk is the first place to call for troubleshooting, consulting and ITS service dispatch. They can be reached by phone at ext. 83800 or by webform at [http://itshelp.uwo.ca](http://itshelp.uwo.ca) or you can simply drop in at the counter located right inside the main doors of the Support Services Building.

**Instructional Technology Support**
ITS provides many services for instructors and students. The Instructional Technology Resource Centre (ITRC) ([http://www.uwo.ca/its/itrc](http://www.uwo.ca/its/itrc)) assists faculty with integrating technology into their instructional offerings. The Public Student Computing Labs offer a resource for scheduling technology-based classes and labs as well as being a student drop-in and print resource. Course management software (OWL), [http://owl.uwo.ca/](http://owl.uwo.ca/) is provided for developing and offering web-based courses. A variety of other tools for conferencing, news and practice exams are also supported. See [http://www.uwo.ca/its/instruct/](http://www.uwo.ca/its/instruct/) for additional information.

**Research Support**
ITS prepares quotes for grant applications, (e.g. ADF, CFI) which require computing services or resources. These services usually include some or all of the following: programming, application hosting and the purchase cost and set up of computer hardware.

**Infrastructure Support**

ITS provides support of the main campus backbone cabling and equipment infrastructure (both wired and wireless), which includes usage and security monitoring, maintenance and upgrades. Usage, maintenance and security monitoring is provided through the use of software and applications, as outlined below:

- RAMP software developed by ITS, is a sophisticated tool targeted at system administrators, the help desk, user services and network operations. It uses distributed management of centralized databases and services to improve the overall management and security of the campus network. The key feature is the delegation of authority to local administrators to manage and control their assigned views of the network.
- The Central Western Windows Active Directory houses "userids" in the same format as the Western identity for all Western faculty, staff and students. This Active Directory provides a central method of authentication and access control to Windows resources.
- A Windows Server Update Service is provided by ITS. Any corporate or research windows desktop can be configured to automatically receive updates from this service. This offers an effective and quick way to ensure that desktops and Microsoft applications (such Office) are up to date.
- ITS also provides antivirus software from Trend Micro for Western desktops and servers that are covered under our license agreement. This agreement was negotiated to include Western University and affiliated University Colleges.
- Western ROAMS (Remote Office Access Management System) is a client-less Virtual...
Private Network solution which allows secure remote access to internal Western resources including Desktops, File systems, and Applications based on pre-defined access policies.

**Major Servers and Services**
ITS provides and supports servers and software that offer corporate applications and databases, LDAP directory, IMAP and POP mail, mailing lists, DNS services, and DHCP. The corporate web service provides all official units at Western with 250 MB of disk space and top level entry in the Western web search engine. Optional Web disk space is available for a fee. See the "Billable ITS Services that may be used as needed" section.

**Personal Computing Account with E-mail, Web and Calendar**
All members of the Western community are provided with a free personal computer account (also known as the Western Identity) which includes, email and personal calendar.

**Other Services**
ITS provides general consulting, documentation in the form of How-Do-I's, access to software available under centrally funded site license arrangements and other helpful services. For more information about ITS services, please visit the web site at [http://www.uwo.ca/its/](http://www.uwo.ca/its/).
## APPENDIX A: ITS RATE SUMMARY

<table>
<thead>
<tr>
<th><strong>ITS Service Agreement:</strong></th>
<th><strong>Internal</strong></th>
<th><strong>Affiliate</strong></th>
<th><strong>Comments</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. TECHNICAL ASSISTANCE – DEDICATED TECHNICAL SUPPORT PERSON</strong></td>
<td>$48/hr</td>
<td>$58/hr</td>
<td>min. 1 day/week (some volume discounts)</td>
</tr>
<tr>
<td><strong>2. CENTRAL FILE STORAGE AND PRINT SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2(a) CENTRAL FILE STORAGE</strong></td>
<td>$15/250GB/mth</td>
<td>$30/250GB/mth</td>
<td>Formerly “Walter”</td>
</tr>
<tr>
<td><strong>2(b) PRINT SHARING ONLY</strong></td>
<td>$1.00/mth/printer</td>
<td>$2.00/mth/printer</td>
<td></td>
</tr>
<tr>
<td><strong>3. VIRTUAL DESKTOP INFRASTRUCTURE (VDI)</strong></td>
<td>$14/mth + VDA lic (base config: 2 CPU/4GB RAM)</td>
<td>$14/mth+VDA lic (base config: 2 CPU/4GB RAM)</td>
<td>Does not include initial purchase of zero clients or addn'l disk space SPSS software $9/desktop/mth</td>
</tr>
<tr>
<td><strong>4. WESTERN DOMAIN AUTHENTICATION</strong></td>
<td>no cost</td>
<td>no cost</td>
<td></td>
</tr>
<tr>
<td><strong>5. NETWORK ACCESS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5(a) AFFILIATE WORKSTATION CONNECTIVITY</strong></td>
<td>n/a</td>
<td>$10/yr</td>
<td>Assessed for each Faculty/Staff/student FTE</td>
</tr>
<tr>
<td><strong>5(b) REZNET STUDENT ROOM CONNECTIONS</strong></td>
<td>variable</td>
<td>variable</td>
<td>contact Reznet for information</td>
</tr>
<tr>
<td><strong>6. CENTRAL BACKUP/RECOVERY SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7(a) DOMAIN AND DNS HOSTING</strong></td>
<td>no charge</td>
<td>no charge</td>
<td>Assistance avail. @T&amp;M</td>
</tr>
<tr>
<td><strong>7(b) WEB SITE HOSTING</strong></td>
<td>setup: $150+ maint: 100/yr</td>
<td>setup: $150+ maint: 100/yr</td>
<td></td>
</tr>
<tr>
<td><strong>7(c) WEB SITE STATISTICS</strong></td>
<td>setup: $150+ maint: $100/yr</td>
<td>setup: $150+ maint:$100/yr</td>
<td></td>
</tr>
<tr>
<td><strong>8. SERVER HOSTING AND MAINTENANCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8(a) HOSTING A COMPUTER IN THE ITS DATA CENTRE</strong></td>
<td>setup: $300/svr</td>
<td>setup: $300/svr</td>
<td>waived for Ded. Support</td>
</tr>
<tr>
<td><strong>8(b) HOSTED SERVER CONFIGURATION MAINTENANCE</strong></td>
<td>maint: T&amp;M Minimums apply</td>
<td>maint: T&amp;M Minimums apply</td>
<td></td>
</tr>
<tr>
<td><strong>8(c) HOSTED APPLICATIONS VIRTUAL SERVER</strong></td>
<td></td>
<td></td>
<td>Included disk space: small: 10 GB disk space – large: 50GB disk space. Price may change with specific requirements. Setup fees at T&amp;M rates may also apply. Bulk Storage also available (see Central File Storage)</td>
</tr>
</tbody>
</table>

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*Last Revision Date: May 2017*
<table>
<thead>
<tr>
<th>9. SECURITY CAMERAS</th>
<th>1-19 cameras: $7.50/camera/mth 20+ cameras: $5.00/camera/mth</th>
<th>1-19 cameras: $7.50/camera/mth 20+ cameras: $5.00/camera/mth</th>
</tr>
</thead>
<tbody>
<tr>
<td>9(a) INSTALLATION AND IMAGE HOSTING</td>
<td>Camera network install &amp; Client side config (T&amp;M)</td>
<td>Camera network install &amp; Client side config (T&amp;M) + $10/camera/mth</td>
</tr>
<tr>
<td>9(b) CAMERA HARDWARE MAINTENANCE</td>
<td>1-19 cameras: $7.50/mth/camera 20 cameras +: $5.00/mth/camera</td>
<td>1-19 cameras: $7.50/mth/camera 20 cameras +: $5.00/mth/camera</td>
</tr>
<tr>
<td>10. WIKI HOSTING</td>
<td>$15/wiki space/mth addn’l disk: $0.15/GB/mth</td>
<td>$15/wiki space/mth addn’l disk: $0.20/GB/mth</td>
</tr>
<tr>
<td>11. TREND ANTIVIRUS</td>
<td>No Charge</td>
<td>$6/wkstn/year</td>
</tr>
<tr>
<td>12. SQL DATABASE HOSTING</td>
<td>up to 2 GB of disk Space: n/c addn’l disk: $0.15/GB/mth</td>
<td>up to 2 GB of disk Space: n/c addn’l disk: $0.20/GB/mth</td>
</tr>
<tr>
<td>13. VISIX DIGITAL SIGNAGE INITIAL PURCHASE MAINTENANCE</td>
<td>Approx $2500 $40/mth/cnl player</td>
<td>Approx $2500 $50/mth/chnl player</td>
</tr>
<tr>
<td>14. PAPERCUT PRINTING SOLUTION</td>
<td>License costs where applicable</td>
<td>License costs where applicable</td>
</tr>
</tbody>
</table>
## APPENDIX A: ITS RATE SUMMARY

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Internal</th>
<th>Affiliate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITS &quot;As Needed&quot; Services:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. TECHNICAL ASSISTANCE - TIME AND MATERIALS</td>
<td>$80/hr</td>
<td>$85/hr</td>
<td></td>
</tr>
<tr>
<td>2. WEB SERVICES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(a) WEB SITE DESIGN AND DEVELOPMENT</td>
<td>$80/hr</td>
<td>$85/hr</td>
<td>basic design with scripting</td>
</tr>
<tr>
<td>2(b) WEB APPLICATION DEVELOPMENT</td>
<td>$80/hr</td>
<td>$85/hr</td>
<td></td>
</tr>
<tr>
<td>2(c) e-COMMERCE SOLUTIONS/CREDIT AUTHORIZATION &amp; PAYMENT</td>
<td>$249/yr + $0.25/trans</td>
<td>$249/yr + $0.25/trans</td>
<td>Fees paid to PsiGate</td>
</tr>
<tr>
<td>SIMPLE PsiGate COMMUNICATION SETUP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FULL PROGRAMMING &amp; HOSTING OF APPLICATION</td>
<td>$80/hr for dev + PsiGate fees</td>
<td>$85/hr for dev + PsiGate fees</td>
<td>Hosting fees apply if application run on ITS server</td>
</tr>
<tr>
<td>e-COMMERCE STUB</td>
<td>PsiGate fees only (see above)</td>
<td>PsiGate fees only (see above)</td>
<td>PsiGate fees only (see above)</td>
</tr>
<tr>
<td>3. ADDITIONAL EMAIL QUOTA</td>
<td>n/a</td>
<td>n/a</td>
<td>Effective April 1, 2016, no longer provided</td>
</tr>
<tr>
<td>4. ADDITIONAL WEB SPACE</td>
<td>n/a</td>
<td>n/a</td>
<td>Costs to be revisited in 2016/17</td>
</tr>
<tr>
<td>5. ITS COMPUTER TRAINING LAB RENTAL</td>
<td>$65/session</td>
<td>$130/session</td>
<td>GenLab Rental – pls call for info</td>
</tr>
<tr>
<td>6. SOFTWARE SITE LICENSING</td>
<td>variable</td>
<td>variable</td>
<td><a href="http://www.uwo.ca/its/sitelicense/">www.uwo.ca/its/sitelicense/</a></td>
</tr>
<tr>
<td>7. SCANEX EXAM SCANNING</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>8. SECURITY CABLING</td>
<td>$80/hr</td>
<td>$85/hr</td>
<td>Dedicated rates where applicable</td>
</tr>
<tr>
<td>9. VIDEO CONFERENCING</td>
<td>$100/session</td>
<td>$100/session</td>
<td>Possible additional usage charges</td>
</tr>
<tr>
<td>APPENDIX A: ITS RATE SUMMARY</td>
<td>Internal</td>
<td>Affiliate</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Billable ITS</strong></td>
<td></td>
<td></td>
<td>Note: Affiliate pricing applicable to off site units for all set and line options</td>
</tr>
<tr>
<td><strong>Telecommunications Services:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. INSTALLATION AND SETUP OF VOICE AND DATA COMMUNICATIONS LINES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) FIVE (5) LINES OR FEWER*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice/Data, suitable cable present</td>
<td>$120/line</td>
<td>$128/line</td>
<td></td>
</tr>
<tr>
<td>Voice/Data, new cable required (Cat 6)</td>
<td>$365/line</td>
<td>$378/line</td>
<td>* for installs involving asbestos, Time &amp; Materials rates will apply</td>
</tr>
<tr>
<td>(ii) GREATER THAN FIVE (5) LINES*</td>
<td>Contact ITS for quote</td>
<td>Contact ITS for quote</td>
<td>Helpdesk x83800</td>
</tr>
<tr>
<td>2. DATA COMMUNICATIONS LINE USAGE SERVICES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(a) SERIAL DATA LINES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inter-building</td>
<td>$6/mth</td>
<td>$6/mth</td>
<td>See Services Document for description</td>
</tr>
<tr>
<td>2(b) DARK FIBRE OPTIC COMMUNICATIONS LINES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$3/meter/yr</td>
<td>$5/meter/yr</td>
<td></td>
</tr>
<tr>
<td>3. TELEPHONE LINE USAGE SERVICES AND FEATURES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3(a) STANDARD TELEPHONE LINE SERVICE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$25/mo/line</td>
<td>$30/mo/line</td>
<td></td>
</tr>
<tr>
<td>3(b) ANALOG TELEPHONE LINE SERVICE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANALOG EXTENSION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6/mth</td>
<td>$6/mth</td>
<td></td>
</tr>
<tr>
<td>3(c) ENHANCED VOICE MAIL FEATURES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard voicemail services for analog lines or addn’l extensions</td>
<td>$2.50/mth/line</td>
<td>$2.50/mth/line</td>
<td></td>
</tr>
<tr>
<td>Add’n’l voicemail message storage capacity</td>
<td>$2.50/mth/group</td>
<td>$2.50/mth/group</td>
<td></td>
</tr>
<tr>
<td>Add’n’l voicemail greeting message length</td>
<td>$1/mth/extension</td>
<td>$1/mth/extension</td>
<td></td>
</tr>
<tr>
<td>3(d) DIRECT IN DIALING (DID)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6/mth</td>
<td>$6/mth</td>
<td></td>
</tr>
<tr>
<td>3(e) TELECONFERENCING</td>
<td>variable based on service requested</td>
<td>variable based on service requested</td>
<td>see details in Services Document</td>
</tr>
<tr>
<td>4. TELEPHONE SET OPTIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$20/change</td>
<td>$20/change</td>
<td>$5/addn’l charge</td>
</tr>
<tr>
<td>M2008/C7941G (8 button set)</td>
<td>$2.75/mth</td>
<td>$3.50/mth</td>
<td></td>
</tr>
<tr>
<td>M2008HF (8 button set, hands free)</td>
<td>$6/mth</td>
<td>$7.50/mth</td>
<td></td>
</tr>
<tr>
<td>M2616/C7961G (16 button set)</td>
<td>$20/mth</td>
<td>$20/mth</td>
<td></td>
</tr>
<tr>
<td>Add on module for M2616</td>
<td>$30/mth</td>
<td>$30/mth</td>
<td></td>
</tr>
<tr>
<td>Analog phone set, desk model</td>
<td>$2.75/mth</td>
<td>$3.50/mth</td>
<td></td>
</tr>
</tbody>
</table>
## Billable ITS Telecommunications Services:

<table>
<thead>
<tr>
<th>5. LONG DISTANCE RATES</th>
<th>Internal</th>
<th>Affiliate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>variable</td>
<td>variable</td>
<td></td>
<td>/its/telecom/cor/int.html</td>
</tr>
</tbody>
</table>

6. OTHER TELECOM SERVICES

| 6(a) ENHANCED VOICEMAIL APPLICATIONS | $2.50/mth | $2.50/mth | |
| 6(b) AUTOMATED CALL DISTRIBUTION (ACD) | $25/mo/ph | $25/mo/ph | For each ACD queue |
| 6(c) ACD REPORTING | $25/mo/ws | $25/mo/ws | on user's workstation |
| 6(d) PAGING INTERFACE | interface: $27 + $1/mth/phone | interface: $27 + $1/mth/phone | |
| 6(e) EXTERNAL PHONE RINGERS | setup: $140 + $2/mth | Setup: $140 + $2/mth | + Installation charges |
| 6(f) CONSULTING AND TRAINING | $80/hr | $85/hr | |

## APPENDIX A: ITS RATE SUMMARY

### ITS Core Services (Non-Billable):

<table>
<thead>
<tr>
<th></th>
<th>Internal</th>
<th>Affiliate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOMER SUPPORT CENTRE (Help Desk)</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>INSTRUCTIONAL TECHNOLOGY SUPPORT</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>RESEARCH SUPPORT</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>INFRASTRUCTURE SUPPORT</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>MAJOR SERVERS AND SERVICES</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>PERSONAL COMPUTING ACCOUNT WITH EMAIL, WEB AND CALENDAR</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>REMOTE ACCESS</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
<tr>
<td>OTHER SERVICES</td>
<td>no charge</td>
<td>no charge</td>
<td></td>
</tr>
</tbody>
</table>