TECHNOLOGY SERVICES
ORGANIZATION PART I: ENTERPRISE IT

- Jarrod Borek
- Manuel Gomez
All TSO staff, except the CT State AVP of Academic Operations and CT State AVP of Technology Operations will be campus based.
PRINTING

Student support ticket example
## Connecticut State Community College Technology Service Organization Services Catalog

<table>
<thead>
<tr>
<th>Service [Service Category]</th>
<th>Category [Service]</th>
<th>Service Offerings</th>
<th>Service Offering Attributes</th>
<th>Service Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop and Mobile Computing</td>
<td>Hardware Lifecycle Services</td>
<td>Device Inventory Management</td>
<td>Campus IT Services</td>
<td>Provide support to tag and record data in inventory management system for computer equipment and software assets owned and managed by IT; Participate in physical audits to locate computer equipment and software owned and managed by IT;</td>
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<td>Managing Device Inventories</td>
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<td></td>
<td>System Office IT Services</td>
<td>Provide systems, equipment, and support needed to maintain inventory for all Windows, MAC and Android devices, including servers, desktops, laptops, and mobile devices. Scope of service support includes but not limited to purchasing consultation, inventory equipment procurement and support, equipment for tagging and inventory tags themselves, procedures for storing, performing inventory tasks, and auditing processes, and provisioning inventory technology and equipment refresh.</td>
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<td>Managing Device Inventories for AssetWorks, Equip</td>
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<tr>
<td>Printing and Related Services</td>
<td>Printing and Reprographic Services</td>
<td>Printing and Reprographic Services</td>
<td>Campus IT Services</td>
<td>Modify to [Reprographic Technology] Provide design/build consultation for reprographic technology integration; Provide integration support; Provide reprographic equipment (i.e. printers, copiers, scanners, fax machines, plotters, etc...) and reprographic equipment support; Provide support for break/fix requests for reprographic equipment and connectivity/cable plant; Install, upgrade, and update reprographic software.</td>
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<td>Supporting Faxing Services and Non-Banner/Non-Enclave Printers/Copiers/Scanners</td>
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<td>Printing and Reprographic Services</td>
<td>System Office IT Services</td>
<td>System Office IT Services</td>
<td>Managing Ryan Systems, uniFLOW System</td>
<td>Provide systems and support to maintain reprographic technology associated with printers, scanners, copiers and fax machines. Scope of service support includes but not limited to purchasing consultation, hardware procurement, equipment tagging, storing, inventory tasks, auditing processes, device refresh, and technology recycling.</td>
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<td>Printing and Reprographic Services</td>
<td>System Office IT Services Managing Ryan Systems, uniFLOW System</td>
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Campus Requests

Student, Faculty or Staff

Walk-In
Phone Call

Campus Service Desk Team

Service Desk team reviews request and creates a ServiceNow ticket containing service attributes for routing purposes.

ServiceDesk

cscu.service-now.com
CREATE IT INCIDENT

A support ticket in Service Now
The student calls the local IT Help Desk or walks into IT. Informs IT they are having trouble printing
Regardless of the way a student reaches out to IT, all student* IT requests originate at the local campus.

Method I – Service Now request sends the request to local IT staff via an email notification to assigned fulfillers.

Method II – the student reaches out directly (and IT staff create the Service Now ticket after the fact for tracking purposes).

*College staff and faculty may be asked to create a service ticket before receiving IT assistance.
**MYTHS AND HALF TRUTHS**

**Myth:** Service Now requests go to Hartford or New Britain first. *All campuses have fullfillers on site who receive the requests.*

**Half-Truth:** A student requesting help directly from IT will be directed to the help desk. Front line academic technicians and student workers assist students first and create a service ticket later. There are exceptions when a service ticket would actually be faster. For instance, a student needs a standard password reset. We have a 24/7/365 service for password resets, so in this case the preferred means for getting a reset is to use that service.
A STUDENT CANNOT PRINT AND CONTACTS IT. WHAT HAPPENS NEXT?
<table>
<thead>
<tr>
<th>IT Support Level</th>
<th>Function</th>
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<tbody>
<tr>
<td>Tier 0</td>
<td>Self-Help and User-Retrieved Information</td>
</tr>
<tr>
<td>Tier 1 [A]</td>
<td>Basic Onsite Academic and Enterprise Technology Service Resolution and General Service Desk Fulfillment Tasks</td>
</tr>
<tr>
<td>Tier 2 [A]</td>
<td>In-Depth Onsite Academic Technology Support</td>
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<tr>
<td>Tier 2 [E]</td>
<td>In-Depth Onsite Enterprise Technology Support</td>
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<tr>
<td>Tier 3</td>
<td>Technology Subject Matter Expert for Service Support</td>
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<tr>
<td>Tier 4</td>
<td>Outsourced Support</td>
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</tbody>
</table>

**Diagram:**
- **Academic**
  - Tier 1 [A]
  - Tier 2 [A]
- **Enterprise**
  - Tier 2 [E]
  - Tier 3
- **System Office**
  - Tier 3
  - Tier 4

Connections:
- Campus Academic Technology Staff → Campus Academic Technology Services Support Staff
- Campus Enterprise Technology Staff → CT State Enterprise Shared Technology Services Support Staff
- CSCU Office of IT Shared Services Support Staff
ACADEMIC IT SUPPORT (TIERS 1[A] & 2[A])

**Tier 0**
- Student finds related printing support documentation
- print Search - Service Portal (service-now.com)

**Tier 1[A]**
- Academic IT Tech I or student worker verifies the student is attempting to print correctly
- Academic IT Tech I or student worker check the printer for standard issues. Is the printer on? Is there a paper jam?

**Tier 2[A]**
- Academic IT Tech II or Academic IT Tech III performs a more in depth onsite analysis
- Does the student need their printing budget increased? Does the printer queue need to be cleared?
ENTERPRISE IT SUPPORT (TIERS 2[E] & 3)

Tier 2[E]
- Onsite Enterprise IT staff have access to more sensitive systems. At this level an Enterprise Technology Administrator I or II will look at Network and server problems

Tier 3
- At this stage, the service request is no longer a standard break/fix and it has a deeper issue. It goes to an onsite Enterprise Technology Administrator III or to the Enterprise Technology Manager – who may or may not be on site.
- Are there a group of students who are not being added to print server? Is there a firewall configuration blocking printing?
What about Tier 4?

That is beyond the scope of this presentation.

For this example, the “outsourced support” might be the System Office IT support staff who manage the Managed Print Services server, or it may be the vendor who provides support, Ryan Business Systems.

At Tier 4 support the Assoc. Vice President of Technology or the Assoc. CIO would be involved
Why Enterprise IT?

According to Industry Standards, 75-80% (Swain & Garza) of support tickets are resolved by Tier 2[A].

Enterprise IT primary role is the Delivery of IT services:

- Security Controls
- Disaster Recovery
- Network Architecture
- Virtualization
- Project Services
# ACTIVE PROJECTS

<table>
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<th>Project</th>
<th>Description</th>
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<td>Core Migration and upgrade at all 12 campuses</td>
<td>Requires Saturday and Sunday work so as not to interrupt classes</td>
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<tr>
<td>MFA: Multi-Factor Authentication</td>
<td>Roll out requirement to faculty, students, and staff</td>
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<tr>
<td>DIM: Desktop Imaging and Management</td>
<td>Will provide a standard software images across the system</td>
</tr>
<tr>
<td>SVI: Server Virtualization Infrastructure</td>
<td>Centralize servers for management and cost effectiveness</td>
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<tr>
<td>VDI: Virtual Desktop Infrastructure</td>
<td>Deliver virtual desktops to CSCU students, faculty, and staff</td>
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</tbody>
</table>
Enterprise Network Shared Technology Services - These are technology services sourced by CSCU Office of IT Shared Services, delivered by CT State Enterprise Shared Technology Services Support Staff and fulfilled by Campus Academic Technology Services support staff or directly consumed by students, faculty and staff.

Typical services include: WAN Links, Network Switch Management, Network Routers, Network Identity and Access Management, Wireless, and other related network infrastructure services.

CT State Technology Service Organization

Technology Service Jurisdiction
Fulfillment

Technology Service Jurisdiction
Delivery

Technology Service Jurisdiction
Sourcing

ENSTS General Level Service

ENSTS Advanced Level Service

ENSTS Expert Level Service

CSCU Office of IT Shared Services Support Staff

Students, Faculty or Staff Consumption

Campus Academic Technology Services Support Staff

CT State Enterprise Shared Technology Services Support Staff

ENTERPRISE NETWORK SHARED TECHNOLOGY SERVICES MODEL
THANK YOU

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Dr. Manuel Gomez
