



## 2017 – 2018 Annual Report September 14, 2018

# **Highlights:**

### **Infrastructure & Wireless**

The networking team concentrated on infrastructure upgrades with the installation of new switches providing 10G connectivity between buildings. In addition, these new switches will prepare the College for future VoiP telecom installations. Networking also provided support to CUNY as they installed the final phase of the new PaloAlto firewall. Finally, on the wireless side, in addition to the continued rollout of additional access points throughout the campus, students are now using ClearPass for wireless authentication providing for easier connectivity and seamless access throughout the campus.

OITS networking deployed (32) Power over Ethernet access switches in preparation for the Telecom VOIP phone migration. We also added redundant network connections to each telecom closet along with new uninterruptible power supplies (UPS). OITS is proud to announce that we have expanded the ClearPass Access Management System to include CSI-Guest network which allows external visitors access to the wireless network.

# 2018 - 2019 Priorities:

# Infrastructure & Wireless

The focus for the networking team will be replacing end of life access layer switches in order to provide a faster and more reliable network experience. As bring your own device (B.Y.O.D) continues to grow, we will continue to deploy new state-of-the-art access point's (AP's) to allow our Students, Faculty, and Staff to use their wireless devices on campus.

### Information Technology Services Strategic Plan

The Information Technology Strategic Plan (ITSP) in collaboration with the <u>Information</u> <u>Technology Advisory Council (ITAC)</u> developed this plan carefully aligning each of the goals and objectives with the College's <u>Institutional Priorities</u>.

# **Applications and Web Development**

Significant accomplishments have been made by the web team in order to comply with accessibility requirements. Included in these achievements is the remediation of 1700 PDF's as well as addressing numerous website formatting and navigation issues.

# Training

Of particular interest this year to our College Community was the offering of Tech Byte Tuesday's virtual training sessions allowing participants to attend technology training events remotely. Leveraging Blackboard Collaborate, participants attended training sessions delivered over the Internet from their workstation or the comfort of their home. Sessions were archived for future viewing, which will soon be available on our website.

We are also excited to announce a new collaboration between ITS, the Faculty Development Center and Modern Languages. The Online Collaboration team is now available to assist faculty with converting their courses into hybrid or fully online courses using Blackboard. Faculty interested in getting assistance with course development, Blackboard or technology can contact the training team for personalized assistance.

### **IOT - Computer Availability**

CSI consists of numerous open computer labs and public access stations for student use, which are equipped with several software packages needed for assignments. As such, we felt it would be beneficial if students had a way to know the status (available/in use) of computers in these spaces, before they arrive. Students could decide which area to visit, based on how many computers are not being used, at any given time.

The availability of computers in 1L202, 1L212, 1C213, and 3N217, as well the 3 floors of the Library, in real time, refreshed every 15 seconds. This information is <u>available on the web</u>, as a graphical map of the room, as well as in table format, thereby making it ADA compliant.

## **Computer Upgrades**

Numerous computers were replaced with SSD (solid state drives) in Smart Classrooms and the teacher stations in instructional labs. These drives allow for a faster boot up time, approximately 10 times faster than a regular hard drive. The new drives were also equipped with the necessary software needed for the variety of classes and disciplines that take place in these rooms. In addition, we also upgraded the memory in specialized labs.

### Smart Classrooms

We continued to upgrade the projectors in various buildings with projectors that are laser based, with lamp-less green technology.

# Simplifying the Software Procurement Workflow

Software purchases have always required stringent procurement guidelines in order to account for approvals, terms and conditions, and budgetary constraints. The process has become more involved with the inclusion of multiple forms, which are needed for management, security, and accessibility regulations. Due to the growing complexity of the system, a procurement workflow and policy has been developed by OITS and the Purchasing Department, to better manage this arduous process. This will detail the steps users need, in order to correctly complete the procurement process, while automatic status notifications, through our KACE Ticketing System, will keep them regularly informed of the progress. Be on the lookout for training sessions that will be conducted early in the Fall semester.

# **Additional Accomplishments:**

# 2M and St. George

OITS continues to support the Smart Classrooms and computer labs located at St. George and 2M, which like other instructional spaces, are equipped with the appropriate technology and software needed for classes.

## Website

With the implementation of the new federal ADA Level "AA" requirement, OITS had a lot of modifications needed to meet these new regulations. We remediated over 1,700 PDFs on the site as well as over 60 color contrast issues and multiple tabbing navigation issues on the homepage. We have one more phase of remediation that involves navigation levels which we hope to begin in the fall.

Training:

- Faculty are able to update their own profiles. We have taken the "train-the-trainer" approach by training a representative from each academic division to teach/assist faculty in updating their profiles.
- Many departments are able to update their web pages. This summer we did our first training session for academic divisions and various administrative departments to update their own website pages. OITS trained over 30 individuals from various departments. We are planning a second training session in the fall.

We have developed several new sites and applications:

- FERPA Online Tutorial application
- Adult Learning Center site and online registration system
- With the split of the Engineering Science and Physics department, OITS developed two new department sites.

# High Performance Computing Center (HPCC)

The HPCC continues to provide support for faculty research as well as provide upgrades and reconfigurations to systems in order to improve the utilization and better serve the CUNY research community. Accomplished during the summer 2018 several upgrades to all of the production files systems were performed as well as the upgrade of the whole stack of system software for the main production server. In addition, a different control and management software was installed to allow precise analytics, implementation of fair share policies, software driven job placement, and a single point job submission.

HPCC also developed and implemented a database (with a web interface) for reporting those publications, where faculty leveraged HPCC facilities for their research. In addition, the HPCC WIKI was reconfigured in order to access information easier. Finally, an automatic account creation system was developed with a user friendly web interface. Finally, a specialized student sever was configured as well as the reconfiguration of existing servers to expand the number of CPU cores available for users. The reconfiguration of existing storage was also completed in order to provide more storage for research projects.

HPCC continues to make strides on system improvements with the goal of centralizing the management of submitting jobs as well as working closely with the HPCC Steering committee on developing

sustainability models. Finally, HPCC worked closely with research faculty on writing grant proposals, specifically for a large scale big data visualization wall.

#### **Presentations and Publications**

- Website redesign presentation: Annual CUNY IT conference
- Educause Review article: <u>Supporting Accessibility in Cloud</u>
- MakerSpace Vision becoming a reality: NJEdge/MRI annual conference

#### ON THE HORIZON:

#### **Disaster Recovery**

As part of CUNY's Disaster Recovery initiative, CSI has been a pilot school in a program designed to help with the selection and implementation of a software tool which will be used to capture all relevant information needed for a robust DR plan. CSI OITS in conjunction with selected administrative areas has undertaken a series of meetings with CUNY Central and NYSTEC. An extensive hardware and software inventory was performed by IT, and detailed Business Impact Analysis documents are being completed by other administrative offices concerned. Once this pilot phase has been completed, the information gathered will be used for the evaluation of a proposed DR software. We will continue to work with CUNY CIS during the selection and implementation of this DR application and with the advantage of having been a pilot school, will hopefully be one of the first schools to make use of the new initiative once launched.

### **Managing Email Traffic**

Our Kemp load balancers will be upgraded with new hardware, which will more efficiently handle routing of traffic to our Microsoft Exchange email servers."

### Website

Phase II of website updates will include finalizing changes necessary for Level "AA" compliance. In addition, training will be expanded to administrative and academic department offices so they can update their own departmental websites.

### Training

The training team will be expanding "Tech Byte Tuesday" to include additional sessions for Faculty, Staff, and students as well as provide face-to-face options. Additional training sessions will focus on OneDrive functionality and form creation as well as expanding polling. We will also be focusing on One Drive training.

# By the Numbers:

### Network

483 Network requests closed32 Power over Ethernet (PoE) Switches deployed23 Wireless Access Points deployed

#### Helpdesk

Faculty/Staff:

12978 – Total number of tickets in KACE (All Divisions) 6447 – Total number of HD tickets. 362 – Total number of St. George tickets. Student: 16,176 – Total number of student assists 8,718 – Assisted at HelpDesk

> 6,895 – Assisted at IT Doctor 562 – Assisted at St. George

CUNYfirst:

801 – Tickets input by the HelpDesk towards Central.

#### Hardware

258 New computers for staff & faculty 100 Refurbished computers for staff & faculty Windows 10 upgrade: 150 computers were upgraded to Windows 10

### Email

Blocked	18,533,633
Virus	10,787
Quarantined	1,225,097
Allowed	14,715,511

# Lab and Smart Classroom Upgrades

150 SSD installations 20 Projector Upgrades/Replacements 42 Memory Upgrades **Technology Training** 

Faculty & Staff 46 Faculty & Staff Training Sessions were conducted between 7/1/17 – 6/30/18

- 27 Classroom
- 16 Meet & Greet
- 3 Virtual (Tech Byte Tuesdays)

Student Events conducted between 7/1/17 – 6/30/18

19 – CART Sessions

2 – Professor Requested Workshops

- 30 Technology Literacy Workshop
- 1 Spooktacular