VCU Technology Services

2022 ANNUAL REPORT

WE ARE THE UNCOMMON

VCU is truly a public good, adapting and innovating to meet the changing needs of our students and our community, and the technology we deliver plays a key role.

The people, projects and accomplishments featured in this annual report show how the VCU Technology Services team delivers technology solutions and services to empower a community unlike any other.

We are an Unstoppable Team
With Unwavering Commitment
Delivering Unparalleled Service

Alex Henson
Chief Information Officer,
VCU Technology Services

Academic Technologies
LABS AND CLASSROOMS

MAJOR PROJECTS

The VCU Adobe Creative Cloud Student Subscription is now included as part of the VCU Student Software Bundle. Students no longer need to pay an additional subscription fee out of pocket as the software is already included in their student technology fee.

UPGRADES

Introduced a new bulk agreement for cost-recovery of non-student VCU licenses reducing the rate for Adobe Acrobat to as low as $9 per person per year. This is a significant annual cost reduction savings for Adobe Acrobat. In addition to these reductions in pricing, a new process was introduced for automatic license enrollment. This will reduce administrative overhead for the Labs and Classroom Computing team and business unit Adobe liaisons by up to 80% .

DATA ITEMS

- Total Adobe Creative Cloud Cost Savings for Students is over $10M annually compared to retail pricing.

- Total Adobe Acrobat Cost Savings for non-student VCU employees is over $1.3M annually compared to previous pricing.

- Reduced the average Adobe Software License renewal bill by over 70% for most departments compared to our previous Adobe license pricing model for Acrobat.

- Adobe licensing for non-student VCU employees has not only become more affordable for business units, but it is also being more broadly deployed and utilized effectively "right-sizing" our agreement, ensuring considerable cost savings.

Academic Technologies
LEARNING SYSTEMS

NEW SERVICES

Teaching and Learning One-Stop-Shop Workshop Series: Learning Systems partnered with the CTLE and VCU Online to offer workshops incorporating pedagogical and technical best practices spanning multiple modalities.

Self-paced asynchronous courses: in partnership with the VCU Online/AltLab team, Learning Systems created a five-course series of self-paced courses on "Surviving in Canvas."

UPGRADES

Canvas Feature Updates: The Learning Systems team began compiling and publishing monthly Canvas release blogs starting in September 2021 to update the VCU community on upcoming system changes and feature enhancements.

VCU Canvas Administrators: compiled a list of all current VCU Canvas administrators to gauge interest in receiving administrator-specific updates from the Learning

Systems team. The group was created in October 2021 and had 36 active members from the VCU community.

With assistance from the ITSMO team, Learning Systems implemented a dashboard view of our ticketing requests in Cherwell to improve our ability to anticipate support needs and respond accordingly.

Customer support survey pilot: developed and implemented a pilot customer support survey to gather additional feedback from customers via Google Forms.

Learning Systems Academy: based on feedback from our customers and the Learning Management System faculty and stakeholders group, we added several quick how-to videos about frequently asked questions in Canvas and Kaltura in the Learning Systems Academy Kaltura channel.

DATA ITEMS

- The Learning Systems team handled a total of 2,047 tickets with an average resolution time of 3.6 days. Of the survey responses we received, the average customer survey score was 4.5 out of a possible 5 rating.

- In 2022, the Learning Systems team began tracking attendees that register and attend live training workshops to track the level of successful promotion and engagement they are soliciting. From January to June 2022, the team led 18 training sessions with 216 registrants and 123 attendees.

- From July 1, 2021, to June 30, 2022, the Learning Systems team published 67 blog posts to communicate updates, training information, share special events, and more. Since starting to track blog analytics in March 2022, the Learning Systems blog has had 1,483 visitors and 2,896 page views.

Labs and Classrooms hosted a national conference primarily targeting Higher-Ed IT professionals.

LEARNING SYSTEMS

Two members of the Learning Systems team were nominated for Exceptional Customer Service Award Nominations this year with glowing letters of support. Some of these comments are below with identities removed:

"Whenever I work with Learning Systems, either through a ticket or a more pressing request, [they are] helpful, solutions-driven, and calm. [They] continually provide innovative solutions to complex challenges. Most importantly, [they are] willing to listen to the client's needs, creating a custom solution rather than providing a canned response... As is [their] style, [they are] flexible and can help immediately. The problem was not resolved after the initial fix, and [they were] open to connecting via Zoom a second time and working through the issue until it was solved. [The School's Dean] was impressed by the level of service, but I was not surprised. That is what I've come to expect from [them]."

"Learning Systems did a deep dive into the question I had regarding Canvas and came up with a speedy answer that addressed the issue and offered me more appreciation of the various utilities in Canvas. As usual, Learning Systems has been consistently excellent in responding and resolving technology-related teaching issues and is someone I have huge confidence in."

Academic Technologies
MEDIA SUPPORT SERVICES
Classroom Support

MAJOR PROJECTS

Four lecture halls in Temple and three lecture halls in Monroe Campus Academic Learning Commons were updated.

The addition of ceiling microphones allows for classroom conversations to be shared with Zoom calls or PC-based captures. These microphones provide additional flexibility to the instructor by allowing them not to have to stand behind the podium to have their voice heard by the far site.

DATA ITEMS

- Resolved 850 Cherwell tickets related to audio-visual system requests and issues.

- Completed 4,318 preventative maintenance checks in central classrooms.

- Completed 91 ad-hoc training sessions and 59 scheduled training sessions for faculty and users of our centrally supported classrooms.

"Learning Systems has been consistently excellent in responding and resolving technology-related teaching issues." *-VCU Faculty*

Academic Technologies
MEDIA SUPPORT SERVICES
Engineering and Design

MAJOR PROJECTS

Finalized all twenty-five
2021 HEETF installs by having deliverables
reviewed, corrected, and archived.

Engineering Research Building - Closeout
of the new construction/facilities project
was completed with no downtime despite
COVID-19 restrictions and changing
timelines.

DATA ITEMS

- 51 projects assigned to Media Support Services (MSS) project managers during the fiscal year.

- 24 projects completed for the fiscal year.

- Programming and wiring diagrams reviewed for nearly 60 newly installed systems and system upgrades.

- 28 audio-visual systems programmed internally by the MSS Engineering and Design programmer.

BEHIND **THE** SERVICE

MEDIA SUPPORT SERVICES ENGINEERING AND DESIGN AND CLASSROOM SUPPORT

Every year, MSS Engineering and Design and MSS Classroom Support work together on updating the centrally managed classroom systems. Engineering and Design manage the audio-visual integrators installing the projects, and Classroom Support serves as quality assurance to check the installation to be sure all of our standards are met. Over the past several years, a Commissioning Checklist was developed so that any member of the MSS team can complete the commissioning process. This year, we made a major revision that combined multiple layers of the commissioning communication process into a single spreadsheet. This document provides a communication process for the commissioning technician, the project manager, and the system integrator. The Commissioning Checklist we use today helps ensure our classroom systems function as designed and meet our standards. These standards have been developed to ensure those systems work reliably for the technology's lifespan.

MSS ENGINEERING AND DESIGN

Technology hardware availability issues and shipping delays added substantial risks and tasks to nearly every audio-visual project. Each MSS E&D team member played a significant stakeholder role. MSS E&D team members' efforts required to complete to account for the additional tasks and extra efforts, such as multiple quotes and scope revisions, aided greatly in combating this burden to ensure teaching, meeting, and other spaces in the VCU community were positively impacted.

The Commissioning Checklist we use today helps ensure our classroom systems function as designed.

IMAGINE THE POSSIBILITIES

Pre 2014
- Adobe perpetual licenses were purchased by faculty, staff, and students.

2014 - 2015

2014
- VCU faculty, staff, and students purchased Adobe perpetual licenses for specific applications to be used on a single device.

2015
- VCU Schools and departments began establishing Adobe Value Incentive Plan (VIP) agreements

2016 - 2018

2016
- The School of the Arts moved from a VIP agreement to a three-year Enterprise Term License Agreement (ETLA).

2017
- Sixty-four VIP licenses were placed under the VIP Linked Membership Agreement (level 4 discount pricing).

2019

February 2019
- The Associate Director of Learning Media in VCU ALTlab, (former) Assistant Director of VCU CTLE, Associate Dean for Academic Affairs in VCU School of Arts (SOA), and the Director of VCU Academic Technologies attended an Adobe Creative Campus collaboration event to learn about digital literacy in higher education.

May 2019
- VCU Communication Arts graduate Mary Metzger won the Adobe Top Talent and Design Achievement award for her innovative project depicting the impact of invisible chronic illness.

June 2019
- VCU Technology Services partnered with the School of Arts (SOA) to convert seventy-two department agreements to a single ETLA for the entire university.
A new three-year Adobe ETLA was signed for the entire university, making Adobe apps available at significantly discounted rates.
- Dedicated Adobe representative assigned to VCU to collaboratively

develop strategic plans that maximize the partnership between VCU and Adobe.

An extensive marketing campaign, including a new website, was launched to inform students about the discounted license opportunity and to raise awareness within the VCU community of the benefits to students developing Adobe skills.

September 2019
- VCU was designated an Adobe Creative Campus, the first school in Virginia to achieve this recognition.

2020

March - May 2020
- Upon remote learning being implemented due to the pandemic, VCU Libraries, School of Arts, Technology Services, and other departments contributed to a limited two-month license at no cost to our students. In addition, Adobe worked closely with VCU departments to identify creative ways to engage their students and provided a collection of online learning resources.

June 2020
- Seven VCU faculty and academic leaders participated in the Adobe Creative Campus Faculty Development Institute (FDI), which included a dynamic program of hands-on development workshops, sharing of ideas and strategies for fostering student engagement experiences that develop digital literacies to connect the curriculum with career and community.

- As the result of the FDI and in support of the Black Lives Matter movement, the Center for Sports Leadership kicked off an "Our Stories" campaign to allow program students and alumni an opportunity to tell their own stories using Adobe Spark.

July 2020
- Andrew Ilnicki from VCU School of the Arts was one of fifteen global educators invited to participate in the Adobe Master Teachers project.

September 2020
- The first Adobe Creative Jam was hosted by VCU, organized by the da Vinci Center, Schools of Business, Medicine, the Brand

Center, and others; students from forty-nine majors participated. The event was planned and coordinated by several VCU staff and students; a faculty member from VCU was the event speaker, and some VCU students were part of the judge's panel.

October 2020
- Many VCU departments and programs began hosting training sessions, workshops, and seminars.

- Two VCU students produced a special video for the 2020 eduMAX opening event on behalf of Adobe. A VCU student, along with twenty-five drummers from different Adobe Creative Campuses, was selected to play a custom cadence for the video.

November 2020
- VCU faculty, along with Film and Video students, were invited to the exclusive "Hollywood Post-production Workflows with Adobe and Team Fincher" event.

December 2020
- Greg Burton, VCU Director of Communications and Engagement

for the Center for Sports Leadership (CSL), spoke at the Faculty Development Institute (FDI) reunion about the CSL campaign he conducted as the result of what he learned during the June FDI event

2021

Spring 2021
- The VCU da Vinci Center was awarded a Faculty Development gift to support a new program to expand the design-thinking curriculum.

Fall 2021
- VCU students were identified as VCU Adobe Ambassadors to promote the use and benefits of Adobe apps from the student perspective.

September 2021
- Adobe hosted and facilitated Virginia Higher Education's Adobe Roundtable, where leaders from Virginia schools discussed digital literacy, student success, creativity, and high-impact teaching across the curriculum. In addition, VCU shared feedback on becoming a Creative Campus and the value of

having Adobe Creative Cloud available to faculty, staff, and students.

October 2021
- Adobe apps were used for product innovation and problem-solving at the VCU Healthhacks event.

2022

January 2022
- Substance 3D Collection added to the VCU Creative Cloud offering.

April 2022
- Released a new, updated, and redesigned VCU Adobe website for easier navigation and access to licensing information, applications, and resources.

June 2022
- VCU ETLA expanded to include full access to Adobe's Creative Cloud apps for all students enrolled at VCU.

Pre 2014 | 2014 2015 | 2016 2017 2018 | 2019 | 2020 | 2021 | 2022 and onward

VCU Adobe Journey Timeline

An Adobe enterprise licensing agreement was agreed upon in 2022, allowing students access to Adobe Creative Cloud applications at no additional cost. Several departments partnered with VCU Technology Services to make this campaign a success.

Adobe
CREATIVE
C A M P U S

ADMINISTRATIVE SYSTEMS

MAJOR PROJECTS

During fiscal year (FY) 2022, the Administrative Systems team began a Banner Cloud Migration project in collaboration with Ellucian and other colleagues from VCU Technology Services, Finance, Human Resources, and Strategic Enrollment Management.

This will move our existing Banner Enterprise Resource Planning system, Operational Data Store, and associated Ellucian products from the VCU University Computer Center to the Ellucian Managed Cloud by early December 2022.

Administrative Systems collaborated with Grants and Contracts to implement the Effort Reporting (*Effort Certification Reporting Technology*) system upgrade to the cloud by providing new interface files as directed by Grants and Contracts. Administrative Systems collaborated with the Controller's Office to implement the VCU Banking transition replacement.

NEW SERVICES

Administrative Systems collaborated with the Office of the Provost to build and launch a new custom Self-Service Banner 9 page for students to use to confirm their current physical location address is accurate.

Administrative Systems collaborated with Human Resources to build and launch a new custom Self-Service Banner 9 page for employees to confirm that their permanent address, work address, and current physical location are accurate.

Automated the weekly COVID-19 testing compliance notification to employees with a religious or medical exemption who must get tested weekly.

UPGRADES

Created new monthly expense report functionality for Research Dashboards to allow more in-depth tracking and certification by fiscal and research administrators.

Developed multiple new reports and dashboarding functionality for the Budget Office, including a summary new Year End Totals report for use within the Budget Office and by users throughout the university.

Revamped and expanded Faculty and Staff Tuition Waivers reporting, utilized by Human Resources.

Completed the conversion of PMIS (the retired State of Virginia HR management system) to Cardinal (the State's new HR system).

DATA ITEMS

- 1,516 tickets closed for Administrative Systems in FY 2022.

- 2,151 customers accessed the VCU Reporting Center in FY 2022.

- Administrative Systems maintains approximately 30 integrations and 50 applications on 66 servers using multiple databases and performs over 17,000 file transfers.

WEB SERVICES

"Overall, I think the tools and support here are first-rate. I really enjoy working with the staff on the Friday consulting time. They are always helpful, cheerful, and knowledgeable."

"The entire Web Services team is so knowledgeable, helpful, professional, and fun. VCU is lucky to have all of you!"

"I cannot say enough how much I value the weekly support I receive at Web Services consultation hours, not to mention help through email and chat. I'm honestly baffled that other webmasters can get by without seeing them so often. ;) They have supported our unit in innumerable ways and to see the Compass collaboration between them and University Relations come to fruition has been a big deal for us in advancing our own web initiatives."

APPLICATION SERVICES

NEW SERVICES

Manage non-vcu.edu domains - purchased domain names via Google Domains for non-vcu.edu domains that should still be centrally managed (vcujobs.com, onevcu.com, etc.)

Call Me By My Name Utilization - Developed a website that features information regarding applications and services used by the university and whether they support the name of the use, pronouns, and gender/gender identity.

UPGRADES

CampusEMS - Partnering with Student Affairs, the CampusEMS reservation system was successfully migrated to the cloud.

Updated Web Standards Guidelines and Compass.

eID-tools/husky upgrade

TerminalFour (T4) was upgraded to the latest release for bug fixes and user interface improvements.

DATA ITEMS

- Approaching 150 websites using the Compass Web Framework

- T4 web content management system manages 93.9% of VCU organization websites.

- Consulting Hours - Over 300 clients attended roughly 100 consulting services by Web Services, contributing over 900 hours of no-cost web-related tasks for organizational websites.

- Over 96% of survey respondents agreed that VCU Technology Services provides excellent Siteimprove support and services.

- 97% agreed that VCU Technology Services provides excellent T4 support and services.

- 97% of survey respondents agreed that TerminalFour is extremely helpful

- 11,115 sold dining plans last year with a total value above $20.4 M

- 8.08 million Go! Keywords (VCU URL shortening service) accessed in last year (once every 3.9 seconds)

- 62 different application versions were downloaded 7,905 times from 7/1/21-6/30/22.

- 154 ESRI (geographic information system software) training courses were completed online by students, faculty, and staff last year.

- 1,971 ArcGIS Online items and 242 ArcGIS online accounts were created

- 22,156,281 CAS logins, equating to 1 every 1.4 seconds.

- 443 sites in the accessibility monitoring service.

- The average accessibility score for VCU web is 92.5% up 2% from last year.

- 362 sites (or 81.7%) with an accessibility score of 90 and above (30% improvement).

- 436 sites (or 98.4%) with an accessibility score of 80 and above.

- 34,652 total pages scanned by Siteimprove.

The entire Web Services team is so knowledgeable, helpful, professional, and fun.

NEW SERVICES

COVID-19 Response: Established BetterMed testing site on campus in partnership with Risk and Safety Management and VCU Health System support expanding testing appointment availability.

Google Assignments: Launched tool in Canvas Learning Management System to create and rapidly grade assignments easily.

Google Drive LTI 1.3: Launched in Canvas for the quick embedding of Google Drive files in rich-text editors throughout Canvas. Launched in collaboration with Learning Systems.

RamsData: Established RamsData community of practice in partnership with Institutional Research and Decision Support for VCU faculty and staff members to meet regularly and share knowledge and best practices about data management and analytics.

UPGRADES

Google Workspace features provide improved collaboration tools:
Progress auto-saving in Google Forms

Appointment schedules, working location, and focus time in Google Calendar

Co-hosts and immersive backgrounds in Google Meet

Smart chips and automatic summaries in Google Docs

Intelligent function/formula suggestions in Google Sheets

Spaces features in Google Chat

Join Google Meets from Docs, Sheets, and Slides files

New integrated view in Gmail

Improved email security: Additional security features are enabled in Google, Cisco, and Zix to protect end-users from phishing and malware attacks.

VCU alumni were moved from the old student Google Workspace tenant to their own Google Workspace tenant and given an @alumni.vcu.edu address.

DATA ITEMS

- Mass email sent: 34 million

- Listserv emails sent: 9.4 million

- Blocked 372 million incoming spam email messages

- Delivered 357 million emails

- 845 Google Shared Drives

MAJOR PROJECTS

Quest 2025 connection: "Student Success"

ImageNow: Eliminating WebNow servers for increased security

ImageNow: Financial Aid Streamlining project

ImageNow: Integration of Perceptive Experience, ImageNow's web interface, with VCU Central Authentication System

ImageNow: School of Dentistry, HR department integration

ImageNow: Treasury Services (Collections) department integration

DocuSign-ImageNow integration: Division of Student Affairs, remote status attestation agreements

DocuSign-ImageNow integration: Financial Aid, Satisfactory Academic Progress appeals

DocuSign-ImageNow integration: Financial Aid and enrollment change

DocuSign-ImageNow integration: Human Resources, flexible work arrangements

ImageNow: CHS Forensic Science: fiscal grant and non-grant solution

ImageNow: Institute for Drug and Alcohol Studies and Wright Center for Clinical and Translational Research department training, and business process updates

ImageNow: Medicine For All department training and business process update

UPGRADES

ImageNow: Complete system upgrade

ImageNow: Changed document conversion

Benefits: Higher throughput, quicker processing, fewer errors, better support

NEW SERVICES

COVID-19 Response: Expanded testing appointment availability to include weekends in partnership with VCU Health System

Department Records Coordinator meetings: Established regular meetings with department records coordinator across campus to share record keeping knowledge, address challenges, and encourage departmental collaboration

DATA ITEMS

Smartsheet

- Licensed users: 242

- Collaborators: 2,295

- Total sheets: 8,760

- Total shares: 73,846

ImageNow:

- Captured pages: 994,136

- Workflow transactions: 516,000

- Captured documents: 471,856

- Department solutions (total onboard): 94

DocuSign

- Envelopes Sent: 147,442

- Signatures: 283,038

- Envelopes Completed: 118,667

- Templates: 980

- DocuSign CFR Part 11 (e-signatures for FDA studies)

- Envelopes Sent: 607

- Envelopes Completed: 476

- COVID-19 Response 20,174 COVID-19 tests processed

- Records Management 164 Certificate of Records Destruction approved

COLLABORATION SERVICES

The Google Workspace team completed a full academic year with all faculty, staff, and students in the same Google Workspace "vcu.edu" domain. Collaboration among the VCU user community is greatly improved because our dual role students and employees no longer face the challenges of managing two accounts.

The use of Google Shared Drives and collaboration in Google Meet, Chat, and Spaces are continually increasing as Google continues to provide the latest innovations in collaboration.

Collaboration among the VCU user community is greatly improved.

FISCAL ADMINISTRATION

MAJOR PROJECTS

IT Check-In with Procurement-biweekly to strategize resolutions for any procurements that may be problematic.

DATA ITEMS

- Contract renewal/design projects: 201

- Expense transfers: 813

- P-card transactions: 411

- Purchase orders: 530

- TS-hosted conferences: 4

INFORMATION SECURITY

NEW SERVICES

Additional endpoint patching services for third-party applications.

Additional automated configuration management for Apple macOS devices.

Data security plan review services for researchers.

UPGRADES

Continual enhancement of security monitoring, incident detection, and response.

Significantly enhanced security vulnerability response capabilities and reduced time to respond.

DATA ITEMS

- Detected and responded to over 42,000 security events.

- All units, except for one school, is now on centralized patching.

- More than 73% of all systems are patched within the same month of issuing first and third-party patches.

- An initial coordinated response to all critical vulnerabilities is reduced to less than 24 hours.

INFRASTRUCTURE

MAJOR PROJECTS

Worked closely with Facilities Management and various outside companies for the design of the new Technology Operations Center building and Data Center.

Start the implementation of the $7 million Software-Defined Data Center using Cisco

Application Centric Infrastructure technology to provide "push-button" server deployment.

Completed migration of 35 firewalls to the Next Generation Palo Alto Firewall, ensuring protection against malware, URL deceptions, and SQL vulnerabilities and attacks.

Migrated building VLANs in support of the Telecommunications E911 project.

Migration of Banner Databases to a vendor-managed Software-as-a-Service solution is in progress, completion expected December 2022.

University Computer Center PowerScale Hardware Project (cluster hardware upgraded)

Completed deployment of VMware vSphere 7 upgrades on all clusters, excluding the cluster dedicated to Citrix virtualization.

Development and Alumni Relations project. This effort resulted in provisioning a dedicated hyper-converged infrastructure, hosted in the private cloud (on-premises)
Worked with the School of Dentistry to upgrade their hardware in the data center to the new VXRail and install a redundant system in Harris Hall.

Initiated project to replace aging storage and backup system and move away from magnetic tape storage.

VCU Health Adult Outpatient Pavilion fiber infrastructure installation.

Rice Rivers Center Research Facility

Engineering East - Engineering Research Building

Completed security audits to include network, Active Directory, and Banner servers.

NEW SERVICES

Implemented the Distributed Denial of Service protection service protecting the University from external attacks.

The F5 Web Application Firewall was implemented and now protects 420 Internet-facing servers.

Began collaborating with the Application Services group to provide developers access to our Tanzu Kubernetes evaluation cluster for testing and developer feedback.

Provisioned private cloud infrastructure for Development and Alumni Relations to support the repatriation of data from the public cloud.

Implemented IBM Spectrum Protect Plus for virtual server backups.

UPGRADES

Upgrades to the MySQL Enterprise version 8 databases.

Upgrades to the new Microsoft SQL servers.

Telecommunications memory upgrade ensures phone systems can better adapt to the remote work environment.

VMware vSphere 7 upgrade ensures better management, as well as security of our virtual, compute infrastructure.

McGlothlin Medical Education Center (MMEC) router replacement provides faster network connectivity to Sanger Hall, MMEC, Hunton Student Center, and Theater Row buildings.

Deployed new networks for VoIP systems to enhance E911 capabilities.

Upgraded building connectivity to 10Gbps for several MCV locations. DNS and DHCP hardware

upgrade of Infoblox to ensure continuity of access for address assignment and website lookup for the 29,000 students and 10,000 faculty and staff.

DATA ITEMS

- 342% growth in capacity for the university servers' Load Balancer with a hardware upgrade to increase from 3.5 million to 12 million connections per second allowing for more extensive study and work-from-home access to campus resources.

- Issued over 400 SSL certificates used by web applications throughout the University.

- 600+ server networks moved from the legacy firewall to the Next Generation Palo Alto firewall.

- Wireless: 15,000 concurrent users on the wireless network.

- Over 1 million authentications for the wireless networks in one day.

- Average network usage is 12Gbps.

- Upgraded seven IBM Spectrum Protect servers from version 8.1.12 to 8.1.14 to mitigate Log4J vulnerabilities

- Fulfilled a total of 226 server provisioning and de-provisioning requests.

BEHIND THE SERVICE

INFORMATION SECURITY

The operating systems team collaborated closely with VCU Information Security to respond to a series of highly-publicized, critical Log4J vulnerabilities in late 2021 and early 2022 by developing numerous custom scripts and automation routines to assist VCU Information Security with identifying instances of the vulnerability on Linux and Windows servers hosted by Infrastructure Services. For instance, a script developed by the then-Lead Linux Engineer was deployed in an automated fashion, after which it scanned all hosted Linux servers weekly for the presence of the vulnerability.

Following each weekly scan, the script then issued automated communication reporting any suspicious findings both to VCU Information Security personnel, as well as the appropriate system owners responsible for remediating and responding to the findings.

The operating systems team collaborated closely with VCU Information Security to respond to critical vulnerabilities.

CAMPUS CARD SERVICES

MAJOR PROJECTS

Completed Phase I of the VCU Health Recard Project. New cards were printed for all VCU Health team members, Infant Care, and dually employed patrons. The total number of cards printed this year was 4,264. Approximately 3,000 cards were printed for Phase I before COVID-19.

NEW SERVICES

Installed point-of-sale equipment at three new retail areas that opened this year; Gateway Starbucks, Student Commons Steak 'n Shake, and Student Commons Za'atar.

UPGRADES

Replaced end-of-life point-of-sale equipment for VCU Health retail areas, Student Health facilities, and VCU Libraries with new equipment.

Replaced over 3,000 building access card readers on the Monroe Park and MCV campuses in preparation for moving to a new card technology and going mobile with door access.

DATA ITEMS

- 3,110,446 credit cards were processed this past year through our Oracle Symphony point of sale system totaling $13,045,705.89 in sales

- 6,665 Photo Submissions were received

- Printed 34,604 cards this year

- The total customer service appointments scheduled for this year was 20,241

- The total service tickets this past year were 11,878

- There were 12,920,336 building access transactions

TECHNOLOGY SUPPORT SERVICES
DESKTOP SERVICES

MAJOR PROJECTS

The Desktop Services team continued to assist our faculty/staff customers with their desktop hardware/software and telework and/or hybrid telework needs during the ongoing COVID-19 pandemic.

The team collaborated with our Strategic Communications team to create a new Telework Computing Recommendations website where customers can review a selection of hardware devices (laptops, desktops, and other hardware) to use on campus and in their home office settings.

The team took on support of onsite and remote Zoom meetings for the VCU Board of Visitors and VCU Health System Board of Visitors meetings.

A key project for our team last year was to upgrade end-of-life Windows 10 Enterprise versions with new feature updates. This allows for imaging devices with Windows 10 20H2 and 21H1 via MECM (Operating System Deployment).

NEW SERVICES

Desktop Services absorbed half of the Endpoint Computing team operations of Emergency Notifications Systems, which included Omnilert, Alertus beacons/desktop alerts/sirens, and digital signage. The team also took operational ownership of support for the Meraki campus camera system.

UPGRADES

Upon reviewing our Service Level Agreements (SLAs) in terms of metrics and revenue, a significant project was to completely overhaul the SLA process from their antiquated UCC shared drive format of Word Documents and Adobe Acrobat PDFs to a new, more user-friendly, Google-based Google Doc format.

A VCU Desktop Services Standard Service Catalog was created where all paid and unpaid SLA customers can review our standard catalog of services and support. The globally shared document now presents an easy way for our team to communicate what we do.

TECHNOLOGY SUPPORT SERVICES
DESKTOP SERVICES CONTINUED

DATA ITEMS

- The Desktop Services operation resolved 1,826 requests and 3,139 incidents for 4,965 tickets resolved this year. This was an increase from the 1,406 requests and 2,059 incidents for 3,465 tickets resolved in the previous year.

- Our team's most significant gain in tickets was from our VCU Police Department operation, following the deployment of a customer-specific email listener. This new service allowed customers to communicate requests to the Public Safety team through email, which were then automatically converted into Cherwell tickets. Buy-in from both VCU PD customers and technicians helped make this another win for the team.

- Our fixIT operation processed a total of 524 tickets for customers this year. This is a increase from the previous year, where 439 tickets were completed.

- Our Emergency Notification Systems and Meraki camera team increased Meraki camera deployments from 1,278 cameras to 1,384 total cameras.

BEHIND THE SERVICE

DESKTOP SERVICES

This year we experienced another challenging year of the ongoing COVID-19 pandemic for our Desktop Services operation. Despite continued COVID-19 obstacles, our team members provided a high level of customer service and technical support.

Desktop Services, fixIT, Public Safety, and Emergency Notifications Systems operations remained at a high level of support, with designated staff onsite as needed to service our faculty, staff, and student customers. There were many instances of team members meeting customers off-campus to exchange or service computers where an on-campus meeting could not occur due to COVID-19 concerns. Customers such as VCU Police and VCU Facilities could operate as usual in their 24/7 mode of support due to our team ensuring their desktop computing systems, servers, and applications all remained in working order.

Despite obstacles, the Desktop Services team provided a continued high level of customer service.

MAJOR PROJECTS

Stood-up Phase 1 of Asset Management which will enable better insight into what exists in our IT ecosystem and integrate into the Incident/Request/Change Management processes for a more holistic approach to IT Service Management.

Began the Knowledge Management project (Target Implementation 2023), which will provide more efficient Incident and Request management. This will allow customers to solve many issues via self-service. This will subsequently trickle up to the higher tiers of support, allowing analysts more time to handle project work and other value-added activities.

As part of the Knowledge Management process development, the IT Catalog is being streamlined to improve the customer experience in Cherwell. Additionally, the team participated in development of the Major Incident process and the IT Status tool integration with Cherwell.

These two projects will lead to a more efficient Major Incident resolution and improved service availability communications with the VCU Community.

UPGRADES

Dashboard Catalog Management - This provides a better customer experience when consuming Dashboards in Cherwell. This will streamline the process of integrating new dashboards as will simply be included them in the Dashboard Catalog.

The team is in a state of continual service improvement with Cherwell. One such significant improvement includes the onboarding of Procurement Services to Cherwell to allow Procurement customers easier to request Procurement Services.

DATA ITEMS

- ITSMO received 656 tickets, with 633 being resolved

- Resolved 11,561 departmental incidents utilizing the Cherwell tool

- Resolved 62,828 departmental requests utilizing the Cherwell tool

- Total incidents and requests resolved this year was 74,389

BEHIND THE SERVICE

IT SUPPORT CENTER

We feel our high-level of customer service is best exhibited by direct customer feedback. Below are some excerpts from customer surveys regarding IT Support Center support.

"The gentleman that assisted me was very polite, patient, and helpful. His professionalism and pleasantry are what all customer service requests should be modeled after."

"I am so grateful for the service I received from IT[SC]. They have been expedient in resolving my issues and following up to ensure my difficulties are resolved, allowing me to continue my job responsibilities. Also very kind and thorough in assessing the problems."

"I appreciate the excellent support I always receive from VCU IT Support Center."

"EXCEPTIONAL service."

"The Support Center is always very helpful!"

TECHNOLOGY SUPPORT SERVICES
IT SUPPORT CENTER

UPGRADES

New digital signage installed at the IT Support Center (ITSC) Cabell Library location for improved customer communication and advertising.

DATA ITEMS

- Total customer contacts including phone, email, self-service tickets, and walk-ups: 42,511

- Customer satisfaction score: 97%

- First contact resolution percentage: 76%

- gradeIT sheets scanned: 23,753

- Average customer wait time on the phone: 40 seconds

I am so grateful for the service I received from ITSC.

TELECOMMUNICATIONS SERVICES

MAJOR PROJECTS

VCU Health Adult Outpatient Center - largest campus medical facility in our support portfolio; 16-story building with approximately 900 telephone services

VCU Health Tappahannock Hospital with three clinics in Callao, King William, and Warsaw totaling 413 telephone services

VCU Health at Greengate, Short Pump with 28 telephone services

The Federal Communications Commission adopted 988 as a new 3-digit number to be used nationwide to reach the National Suicide Prevention and Mental Health Crisis Lifeline, starting July 16, 2022. A seemingly small change required VCU Telecommunications to update configurations and test all of the 42 servers comprising the Richmond campus Avaya PBX, along with all 17 standalone systems and their survivable servers.

NEW SERVICES

Successfully piloted Verizon WebEx Calling, cloud-based telecommunications services, in three off-campus locations; VCU Mail Services, VCU Center for Psychological Services and Development, and VCU Health's Children's Hospital of Richmond Bon Air Therapy Center.

Avaya Workplace virtual training sessions, occurring at least twice monthly, to help VCU and VCU Health customers set up the app on their mobile devices and computers.

Avaya Desktop Wallboard - a reporting solution that empowers call center agents by keeping them informed of contact center performance levels, messages, and instant notifications from administrators.

UPGRADES

The Avaya Call Management System that provides call center performance reporting for VCU and the VCU Health System was upgraded to the latest software release; the upgrade provides a web option for agent supervisors, thus eliminating the requirement for installing and configuring client software.

Two additional phases of the Avaya Workforce Engagement (WFE) project went live with VCU Health's Patient Appointment Center, with over 180 managers, supervisors, and agents trained on the application.

Expanded the use of WFE foundational applications: Call Recording and Quality Monitoring to eight call centers across the University and Health System.

OnePrint Pay services were expanded to the Health Professionals Building and Franklin Terrace; P4P devices were replaced in the Health Professionals Building. Franklin Terrace is a new location offering OnePrint Pay services.

Introduced touchless printing on all OnePrint Pay devices at the beginning of the fall semester.

DATA ITEMS

- Billed telephone services: 34,878

- Billed OnePrint devices: 237

- Telecommunications service/support tickets processed: 10,442

- Calls handled by Client Support Team: 7,052

- OnePrint service/support tickets processed: 639

WE ARE THE UNCOMMON

VCU Technology Services