Introduction

The 2018-2019 Division of Information Technology (DoIT) Annual Report provides an overview of the major accomplishments of the division from July 1, 2018 through June 30, 2019, as well as goals for fiscal year 2019-2020.
Mission Statement

The Division of Information Technology is committed to delivering a strategic advantage to Radford University by fostering creative and innovative use of technology to achieve the University's objectives. The division promotes effective stewardship of information assets and provides a secure, highly reliable technology infrastructure along with high-quality, customer-oriented services and support, so as to meet the ever-changing needs of the university community.
Radford University Carilion Transition

The largest initiative undertaken by the Division of Information Technology in fiscal year 2019 was the support of the merger of Jefferson College of Health Sciences (JCHS) into the Radford University family of colleges and departments. In the summer of 2018, an Information Technology Subcommittee was formed to assume responsibility for evaluating and implementing all infrastructure, networking, security, applications, and user support models for the merger. The goals of this committee were to:

1. Quantify current information technology needs as well as needs generated by future growth
2. Determine hardware, network, and infrastructure needs and create plans to meet those needs
3. Determine administrative and academic application needs and create plans to meet those needs
4. Determine information and data security needs and create plans to meet those needs
5. Determine technology support and training needs and the best approach for meeting those needs

DoIT completed Phase 1 of the Radford University Carilion (RUC) merger during summer 2019.
**BY THE NUMBERS**

Zoho Project tool used for centralized tracking of more than 400 tasks and 45 milestones.

### Enterprise Systems Transition

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>2,946 Records</td>
</tr>
<tr>
<td>Academic Records</td>
<td>51,399 Current Students</td>
</tr>
<tr>
<td>Accounts Created</td>
<td>3,076 Applicants, Students, Faculty, Staff</td>
</tr>
<tr>
<td>eBills</td>
<td>1,392 Delivered</td>
</tr>
<tr>
<td>Blackboard LMS</td>
<td>403 Course Shells</td>
</tr>
<tr>
<td>Course Enrollments</td>
<td>5,048</td>
</tr>
<tr>
<td>Accounts Created</td>
<td>164</td>
</tr>
<tr>
<td>Employee Records</td>
<td>185 Transitioned</td>
</tr>
</tbody>
</table>

### Technology Cutover

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty/Staff/Departmental</td>
<td>210 Computers Re-Imaged</td>
</tr>
<tr>
<td>Computer Labs/Classrooms</td>
<td>110 Computers Re-Imaged</td>
</tr>
<tr>
<td>Xerox Copier/Printers</td>
<td>16 Installed</td>
</tr>
<tr>
<td>User and Departmental Files</td>
<td>1,514,336 Migrated</td>
</tr>
<tr>
<td>Digital Signs</td>
<td>16 Transitioned</td>
</tr>
<tr>
<td>Carilion VLAN</td>
<td>350 Changes</td>
</tr>
</tbody>
</table>
Fischer Identity Management Implementation

In May, DoIT completed the implementation of Fischer International Identity System. Fischer was selected to replace the aging Aegis Identity system and Bonita self-service applications due to its strong presence in, and commitment to, the higher education identity management space. Fischer also provides extensive integration capabilities to many common higher education ERP systems utilized by the university.

Implementation of Phase I included account provisioning and deprovisioning, and self-service functionality for account claim, password resets, and forgot password applications.

BY THE NUMBERS

<table>
<thead>
<tr>
<th>Automated Workflows</th>
<th>Connected</th>
<th>User Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 Created</td>
<td>4 Systems</td>
<td>45 Policies</td>
</tr>
</tbody>
</table>

Accounts: 75,219 Migrated
New Accounts: 6,703 Summer 2019
Password Resets: 13,479 Processed by System
CableTV Upgrade

A new CableTV service contract was negotiated through a competitive bid process and was awarded to Apogee. Cable TV for students living in University Housing will include the ability to stream Live TV. The new streaming service, Stream2, now provides residential students:

- **80 Streaming TV Channels**
- Live streaming to student devices including Laptop, Smartphone, Tablet, Roku, Fire, Apple TV
- **20 Hours of DVR available**
- **Trick Play** - Pause live TV, rewind, fast forward or start over any TV show from the last 24 hours
New Strategic Plan

In 2019, a new 2019-2024 Information Technology Strategic Plan was developed to align technology initiatives with the University’s new strategic plan, 2018-2023 Strategic Plan: Embracing the Tradition and Envisioning the Future.

The IT plan provides the framework and guidance for evaluating technology decisions, new technology initiatives and annual operational planning by focusing on the following areas:

- **Academic Excellence, Innovative Teaching**
- **Strategic Enrollment Growth and Student Success**
- **IT Culture**
- **Operational Efficiencies and Access to Data**
- **Enhanced Services and Availability**
- **Secure IT Environment**
- **Communication and Branding**

The division’s project portfolio and operational plans will track progress toward strategic goals and objectives outlined in the plan. Targeted projects and operational strategies will be proposed and prioritized based on institutional priorities and available funding. Progress toward meeting these goals and objectives will be documented each year in the *Division of Information Technology Annual Report*. 
Strategic Initiatives Completed in FY19

Major Initiatives Planned for FY20

- RUC Transition Phase II
- Reed/Curie Renovation
- Cardinal Human Capital Management
- IMPACT / ASSET Enhancements
- Capital Campaign Web Site
- Closing Security Standard Gaps
- NRCC Bridge Program IT Implementation
- DegreeWorks Upgrade
- eVA Integration
- Oracle 12c Upgrades
- Content Management System AEM Upgrade
- StarRez Implementation
- Windows 2008 Server upgrades
- Service Catalog Update
- Ellucian Ethos Integration
- Data Center Firewall Upgrade
- Banner 9 Self Service
- AppWorks Conversion
- Office365 Modern Authentication
- IMPACT B2C Model Implementation
- REAL IT Implementation
- Enterprise Reporting Enhancements
- Executive Dashboards
- D2L to Banner Grade Integration
Mission Statement

The mission of Electronic Engineering and Communication Services (EECS) is to provide up-to-date engineering and technical support for all campus electronic learning spaces, campus radio station WVRU, campus cable television systems, satellite downlink facilities, a modern campus TV studio, internet up-linking systems for professional television broadcast access, campus digital signage, audio-visual (AV) support engineering, graduation streaming services, and repair and surplus of various electronic equipment and computers.
Major Accomplishments

- Completed classroom upgrades for multiple classrooms in Kyle Hall and Walker Hall.
- Installed new height-adjustable podiums in several classrooms.
- Installed 10 displays in collaboration spaces in the Harvey Knowledge Center as well as two 80-inch displays in larger rooms.
- Provided IT and AV support for relocation of the Clinical Simulation Center to Cook Hall.
- Negotiated the contract for a new cable TV and streaming service.
- Coordinated video streaming and AV for graduation including two large LED displays.
- Installed large LED displays at the entrance to the Library.
- Renewed the FCC license for WVRU radio station.
- Updated campus digital signage server to the latest version to support RUC.
Mission Statement

The mission of Enterprise Systems is to provide systems analysis, design, programming, and implementation services supporting core university administrative systems and business processes. This includes:

- Actively partnering with our customers to evaluate and recommend business services where additional automation increases efficiencies for system users.
- Planning and implementing fully integrated administrative systems.
- Providing university employees access to transactional and historical data for operational and strategic planning purposes.
- Engaging the university community to develop and enhance reporting strategies to support the academic mission of the university.
Major Accomplishments

- Provided technical support to administrative areas to integrate systems, establish business processes, and migrate data from JCHS to Radford University due to the merger.
- Developed student processing interfaces for Banner and D2L in support of the IMPACT office.
- Created data repositories for a new student retention reporting tool for the Office of Student Success and Retention.
- Modified the Starfish integration to meet the needs of various programs interacting with the Office of Student Success and Retention.
- Implemented Accommodate software and created integrations with Banner to support the Center for Accessibility Services.
- Implemented Banner Document Management Report Manager software for importing of admissions applications to Xtender.
- Created and enhanced many baseline processes for the Banner Payroll, HR and Budget Revitalization project.
- Upgraded the Banner INB ERP to Banner 9 Administrative Pages.
- Created an electronic workflow to submit Grant Proposal requests to the Office of Research and Grants Management.
- Developed an electronic workflow for new course requests for Academic Affairs.
- Integrated an electronic exit interview process in Banner Self Service for the Office of Student Success and Retention.
- Developed an online employee payroll deduction process for Advancement Services.
- Integrated the CommonApp Undergraduate Admissions application with Banner.
- Created the PeopleAdmin to Banner hiring proposal interface for Human Resources.
- Implemented and supported the configuration of the PeopleAdmin Onboarding module for Human Resources.
- Installed and tested the Ellucian Ethos integration platform.
- Implemented and configured the Data Exporter integration for Starfish and Banner for the Office of Student Success and Retention.
Mission Statement

Identity Services & IT Audit Compliance maintains the identity and access management environment, and supports the division’s strategic planning, project portfolio management, IT audit, and policy and compliance initiatives.

Major Accomplishments

■ Implemented the new Fischer Identity Management system to include account provisioning and deprovisioning, and self-service functionality for account claim, password resets, and forgot password applications.

■ Identity Services coordinated and published updates to the Information Technology Strategic Plan and other Level II operating authority compliance reports. The annual submission was prepared for the Educause Core Data Survey and other reports.
Mission Statement

The mission of the Information Security Office is to protect the confidentiality, integrity, and availability of the university's computer systems, electronic data and networks from unauthorized access, disclosure, disruption, modification, or destruction.

Major Accomplishments

- Migrated the student, faculty, staff, retiree and alumni population to two-factor authentication to improve account security.

- Sent a phishing campaign to students to increase awareness of fake job opportunities; those who fell for the phishing attempt were taken to a webpage with information on how to spot similar emails.

- Conducted multiple table-top disaster recovery exercises to mimic real disasters and allow for the testing of our disaster recovery strategy.

- Created the Computer Security Incident Response Team (CSIRT) Guide to be used in response to a major security event or data breach.

- Provided role-based training to System Owners, Data Owners, Data Custodians, System Administrators and Application Administrators to highlight role responsibilities and discuss security best practices for each role.
Mission Statement

The mission of IT Infrastructure is to provide a secure and highly reliable technology infrastructure for the campus community with a focus on meeting the ever-changing needs and expectations of the university community while minimizing costs.

Major Accomplishments

- Planning and initial work to support networking needs with the renovation of Reed/Curie.
- Upgraded VPN to new hardware and added two-factor authentication.
- Network design planning and testing for Radford University Carilion.
- Completed server hardware upgrades for the Clinical Simulation Center.
- Planning and initial work to support fiber wiring and Wi-Fi connectivity for the newly acquired University-operated apartments.
- Updated VMWare server virtualization environment with new hardware and the latest software version.
- Deployed a new Exchange 2016 server to support the Hybrid Office 365 environment.
Mission Statement

The mission of Printing Services is to produce high quality printed materials for the university community while minimizing costs and ensuring timely delivery.

Major Accomplishments

- 74,000 Homecoming Postcards (UV coated).
- Provided support to campus summer events including Quest, Governor’s School and Boy’s State.
- Admissions Highlander Day oversized UV coated invitation cards.
- Supported other major events with numerous printed pieces for Fall Opening/Move-in, Highlander Festival, and Homecoming.
- Supported numerous ongoing Advancement initiatives and the Momentous Occasion with both confidential and highly visible print collateral.
- Installed a Xerox Versant 180 digital color press to enhance productivity and media handling capabilities.
- 3,500 copies of Admitted Student 20-page booklets, Scholarship Certificates, 12,000+ Large Envelopes, and over 22,000 postcards and folding cards with addressed envelopes.
- Admissions 3-piece, 2-way matched LLC oversize mailing for 10,000 names.
- 125,000 pieces across the Division of Enrollment Management (including VPEM, Admissions, and Financial Aid).
Mission Statement

The mission of the Project Management Office is to improve project success throughout the organization by providing a consistent approach to identify and prioritize technology initiatives that align with the university’s strategic objectives while promoting standard project management methodology, best practices, tools, and templates.
Major Accomplishments

- There are more than 95 active Zoho users across the University now using the portal to manage projects.
- The utilization of the Zoho Projects tool increased to over 100 active projects.
- A standard process for defining project attributes and tracking progress in the Zoho Projects portal was developed.
- New features and customizations were added to enhance the flexibility and better serve the needs of project managers.
- Zoho training sessions and support continued as new users were added to the tool.
- Updated weekly reporting was introduced for monitoring the overall current project status in DoIT.
- Project management guidelines and templates were added to ITOneStop Knowledge Base.
- Project management support was provided to all Directors and Managers leading strategic or large operational projects including the Duo Implementation, a new Strategic Plan and DoIT Service Catalog.
- A new project was added to Zoho to support the IT Subcommittee for the JCHS/RU merger project.
- New weekly reports were introduced for tracking project tasks and milestones for the JCHS/RU merger.
Mission Statement

The mission of Technology Support Services is to provide a high quality, customer-oriented technology environment that supports the instructional, research and business needs of the university community. Technology Support Services serves as the single point of contact for coordination and resolution of all university technology support requests.
Major Accomplishments

- Implemented the online proctoring tool, Respondus Monitor.
- Implemented a plagiarism detection and grammar checking tool, Turnitin.
- Offered 79 technology-training workshops that provided faculty and staff opportunities to enhance their technology skills.
- Piloted Performance Plus in the suite of analytics tools within the learning management system (D2L).
- Provided support as needed for 6,456 video conferences through Zoom, with 39,542 users from 27 different countries.
- Implemented JAMF to simplify maintenance and support of Apple products.
- Replaced 303 computers in 11 labs/classrooms.
- Upgraded Kyle Hall 163 to an enhanced Zoom video conferencing room.
- Processed 15,174 support requests between July 1, 2018 and June 30, 2019.
- Provided technology support and guidance for the IMPACT Program.
- Conducted a Customer Service Enhancement retreat for all staff in Technology Support Services.
Mission Statement

Web & Mobile Technologies is dedicated to the technical development, support, integration and maintenance of Radford University’s web presence, the MyRU Portal, the RUMobile app and various related web applications and technologies. In addition to supporting the development and ongoing changes of Radford University’s online presence, the team works closely with University Relations and the campus community to develop effective, appealing websites that digitally portray RU to the outside world. The team constantly reviews new and upcoming advances in web and mobile technologies with an eye on innovation.
Major Accomplishments

- The ServiceNow IT Management system has been configured and setup to allow IMPACT Learners to submit support requests.

- University Advancement, University Relations and DoIT kicked off a collaborative effort to build and roll out a website for the Capital Campaign.

- A new modern design and new web components was developed for the IMPACT program to give the site an innovative and slightly different feel that is also in keeping with the branding of Radford University.

- A web site was developed to collect the University Strategic Plan progress reports from responsible parties working on tasks related to the 2018-2023 Strategic Plan.

- New security features were added to Radford.edu sites to support mandates for additional browser security.

- Web Server Content Security policies were put in place on all web servers to limit what can be run on the server and what can be pulled down from other servers.
SUPPORTED SYSTEMS

ADMINISTRATIVE SYSTEMS

Academic Works Scholarship Management
Activity Insight Faculty Annual Report
Ad Astra Room Scheduling
AlcoholEdu
Asset Works Inventory Scanning
Banner:
- Accounts Receivable
- Budget Development
- Human Resources
- Endowment Management
- Faculty Load and Compensation
- Finance
- Financial Aid
- Fixed Assets
- General Person
- Research Accounting
- Student Records & Admissions

Banner Ancillary Systems:
- Banner Document Management System (BDMS/Xtender)
- Banner Workflow
- Cognos Reporting
- Evisions Form Fusion
- Evisions Intellecheck
- Operational Data Store (ODS)
- Quick Address System
- UC4 Job Scheduling

Blackboard Connect Emergency Alerts
Blackbaud Raiser’s Edge Advancement/Fundraising (CRM)
Bookstore (Book vouchers)
CIPPS – Commonwealth Payroll
Cardinal – Commonwealth Accounting
Class Climate Faculty Evaluations
Cobblestone Contract Management
CollegeNet Admit
CommonApp
Course Catalog
CBORD CS Gold (OneCard)
CBORD Odyssey Housing Management
Degree Works
eVA – Commonwealth Procurement
Faculty Enlight Textbook Adoption
Fusion Student Recreation
Handshake
Campus Management Radius
Customer Relationship Management (CRM)
iGrad Financial Literacy Training
IRB Manager
National Student Clearinghouse

Nelnet Student Tuition/Payment Processing
Nolij Transfer
Campus Labs RU Involved Student Organizations
Physical Therapy PTAdmit
PeopleAdmin
RuffaloCody Campus Call
Royall & Company Application/Marketing
Starfish Advising/Retention
Symplicity Judicial Management
Symplicity Accomodate
T2 Parking Management
Visual Zen (QUEST Orientation)
Zoho Projects

INSTRUCTIONAL SOFTWARE AND SYSTEMS
Adobe Connect
Desire 2 Learn Learning Management
iTunesU
Kaltura Video Streaming
Lecture Capture

Mathematic Statistical Software – SAS, SPSS, JMP, Maple, Mathematica
Microsoft Office 365 online
Qualtrics Online Surveys
Smart Thinking online tutoring
Zoom
UNIVERSITY-WIDE SYSTEMS

Active Directory
Adobe Experience Manager Content Management (RU website)
Anti-Virus/Anti-Spam
Digital Signage
Dublabs RUMobile
Duo Two-Factor Authentication
Facilities Management (AIM/ADX/ALC)
Fischer Identity Management System
Firewall/VPN Management
Palo Alto Networks Intrusion Protection

Intrusion Detection Management
Nessus Vulnerability Scanner
Luminis Portal (MyRU)
Lyris Listserv Management
Splunk Enterprise Security
Microsoft Office365 Email/Collaboration
Network Security & Access Control (ISE)
ServiceNow IT Service Management
Shibboleth Single Sign-On Authentication

DATABASE MANAGEMENT SYSTEMS

Oracle
Microsoft SQL

OPERATING SYSTEMS

Windows
Linux
macOS
Goal 1 Provide technologies and services to support academic excellence, innovative teaching and student-centered learning.

Goal 2 Support strategic enrollment growth and student success with flexible, adaptable systems and services.

Goal 3 Promote an IT culture committed to excellence, innovation and customer service.

Goal 4 Improve operational efficiencies and access to data through integrated administrative systems.

Goal 5 Continually explore methods to enhance services and availability while reducing costs.

Goal 6 Build and maintain a secure IT environment while balancing security, usability and access.

Goal 7 Provide state of the art technologies to support communication and branding.