Transferology

WEAVE *ZOOM*

TEAMS PHONES

ERP Workday
Simple Syllabus

MY FAU

✓Teamwork
✓Excellence
✓Service
✓Innovation
Technocentric

DATA ANALYTICS

OwlCloud
Mediasite
APPSPACE
1 PASSWORD
COMMON APP
DASHBOARDS

FAU FLORIDA ATLANTIC UNIVERSITY

OFFICE OF INFORMATION TECHNOLOGY

2022-2023

ANNUAL REPORT

Jason Ball
**Associate Provost
& Chief Information Officer**

LOOKING AHEAD

I am pleased to present the 2022–2023 Office of Information Technology Annual Report.

In this year's report you will see exciting advancements in our research computing operations with additional GPUs and ARM processors to meet the expanding demands in the areas of data science and artificial intelligence. Investments to improve the student experience are well underway with the launch of the new MYFAU look and feel; the new Success Network solution, EAB Navigate; and a centralized syllabus solution to standardize and simplify how students can review course content and expected outcomes. These tools, combined with the predictive models developed by IEA and the analytics teams, continue to have a significant impact on our rapid improvement in the areas of student success.

From continued investments to improve classrooms and computer labs, to the opening of game-changing facilities in the Stiles–Nicholson Brain Institute, to the expansion of new facilities to support A. D. Henderson, we continue to invest in improving the on-campus experience.

As we transition through this year, we will continue to focus on improving the student experience, from upgrading the experience for students through a new Admissions infrastructure to better navigation and communication tools for our existing student body. I look forward to reporting on those successes next year.
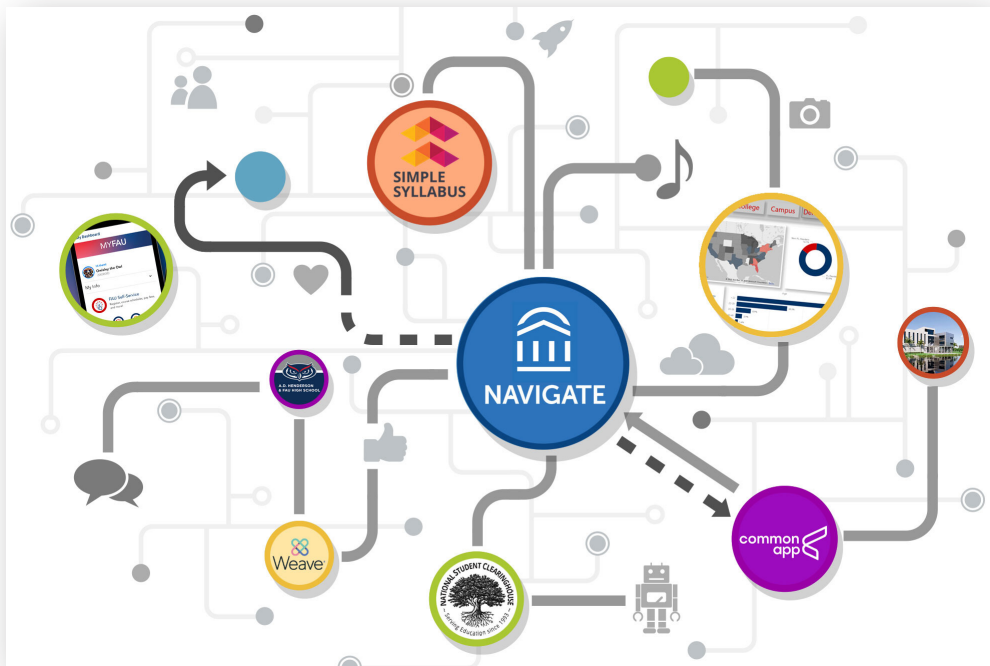
ADMINISTRATIVE SYSTEMS: DEPLOYMENT OF MAJOR APPLICATIONS, CHANGES, & UPGRADES

FISCAL YEAR 2022–2023

FY 2022–2023 saw upgrades and changes to several major administrative applications used at FAU, including Workday HCM/Finance and the Ellucian Banner Student Information System.

Administrative Systems implemented two major Workday releases

- WD 2022 Release 2, with an entirely new interface, the People Experience, was deployed. Users have an improved inbox and new dashboard items with limitless possibilities for customization of the WD work experience.
- WD 2023 Release 1 introduced more updates to the People Experience and enhanced the system with new widgets and reporting upgrades.

BANNER SELF-SERVICE 9

Major changes to the Banner Self-Service portal are underway. The entire Banner Self-Service ecosystem is undergoing a major user interface lift, migrating from version 8 to 9. Students will experience a new landing page that is easier to navigate, and they will see new applications for Student activities and Financial Aid, among other areas. This is a major change that will help students access information in a more simplified and effective manner. The project will be completed by FY24.
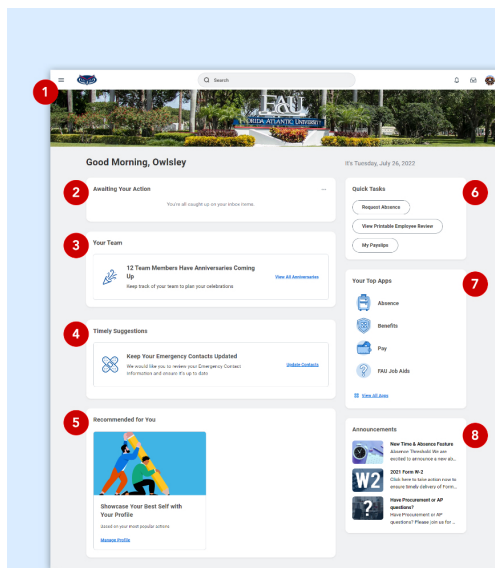

1. **Global Navigation Menu**
Quick access to all applications and organize your Shortcuts.

2. **Awaiting Your Action**
Displays up to three of the most recent items from your Inbox, and a quick link to your inbox.

3. **Your Team**
For managers only. Access reminders and action items about your team.

4. **Timely Suggestions**
Cards based on your profile and activities in Workday.

5. **Recommended For You**
Workday will use this section to promote articles or videos designed to help you learn more about specific Workday features.

6. **Quick Tasks**
Displays the most frequently accessed tasks.

7. **Your Top Apps**
Shows your top 4 apps. Click the "View All Apps" to acces all Workday applications.

8. **Announcements**
Same announcements, a new location.

ADMINISTRATIVE SYSTEMS:
OTHER PROJECTS OF NOTE

OIT Project and Portfolio Management

In response to the great demand for technology projects, the new Value Management Office (VMO) launched a new project intake and governance process for OIT. With the collection of capacity management and the centralization of project submissions, OIT will be better able to align resources with projects and eliminate substantial project risk. This new project portfolio will also provide much-needed visibility into all major projects, timelines, and deadlines. The strategy is for all projects to be aligned with FAU's mission and to provide students with the best technology services.
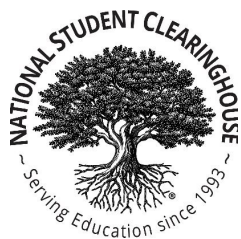
e-Transcripts

Current students, former students, and alumni can now request their transcripts electronically and get them delivered securely and quickly. This new service, e-Transcripts, works directly with the National Student Clearinghouse, is FERPA compliant, and provides a direct connection to the student's record, extracting an official transcript the student can use as needed.

Common and University Applications

The Development team implemented all changes required for successful launch of both the Common and University applications.

Weave Assessments

A new cloud system called Weave provides academic and administrative departments with increased functionality to complete annual assessments. Weave is SACS compatible and will assist the institutions with the completion of reports to SACS as needed. Weave now offers many new areas to display findings and to successfully measure all activities for Goals and Outcomes.

Simple Syllabus Integration

The new online Simple Syllabus system provides an enhanced experience for students and faculty. The Development team integrated the new system with the Student Information System (Banner), moving information from both systems to ensure course sections, enrollments, and other critical data points were passed to the new system.

COMMUNICATION INFRASTRUCTURE:
RELIABLE DELIVERY OF COMMUNICATION SERVICES

OIT Infrastructure manages University computing systems and servers and all aspects of networking and voice services, network design, and the installation of the communication infrastructure for new construction and renovations.
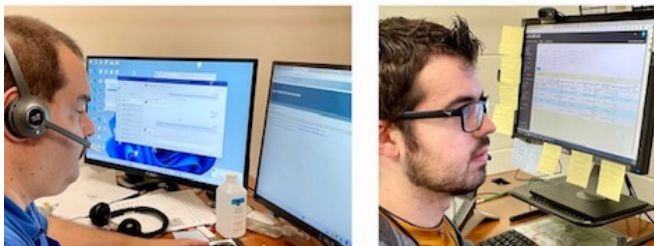

VOICE SERVICES

The Voice Services team installs, configures, and supports the University's 4,381 desktop telephones.

The Voice system processed over 1.59 million inbound calls to the University and 2.67 million total calls during the past year. Total talk time exceeded 2,985 days.

- 4,381 subscribers
- 3,387 VoIP sets
- 994 analog sets
- 2,232 service requests for FY 2022/2023

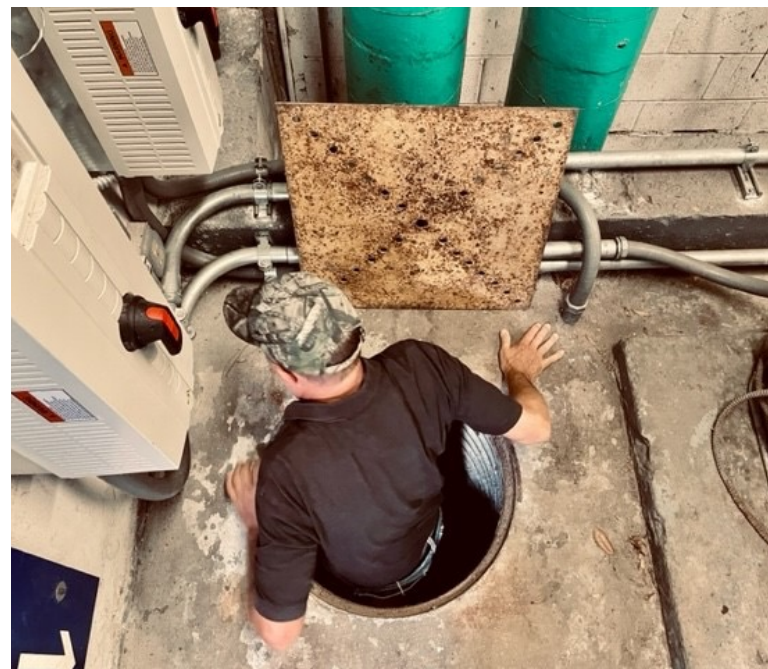**IP PBX and Voicemail 100% reliability to date**

INSTALLATION AND REPAIR

Technical Services installs and maintains the University's cable infrastructure.

- 21,520 copper cables
- 252 telecommunication closets
- 2.5 miles of duct bank
- 1.3 miles or 6,738 feet of tunnels

235 service requests for FY 2022/2023

IT SITE DESIGN

The CI Project Management team designs and inspects communication facilities, cabling systems, pathways, and related infrastructure to meet University needs for construction and renovation projects.

- 14 minor projects across all campuses
- 2 major projects:
  - Stiles–Nicholson Brain Institute in Jupiter
 - Henderson University School in Boca

Network Services

Network Services designs, installs, and operates all wireless and wired networks for the University.

- 30,000 daily devices
- 5,600 wireless access points
- 1,200 networking devices
- The University's first 400 Gb network was placed into production in 2023.
- The Jupiter residential buildings received new networking switches, all with high-performance 10 Gb uplinks.
- Innovation Village South was upgraded with all new 10 Gb switches.
- Over 200 new access points were added to Parliament Hall.
- The FAU High-Performance Computing infrastructure was upgraded to a 100 Gb backbone network.
- NWRDC was upgraded to a 100 Gb internal backbone network.
- Athletics baseball and softball facilities received multiple Wi-Fi upgrades.
- Over 500 new Wi-Fi 6 access points were installed in 2023, including complete upgrades in Science and Engineering and the College of Education.
- More than 100 Petabytes of data were transferred through the network.
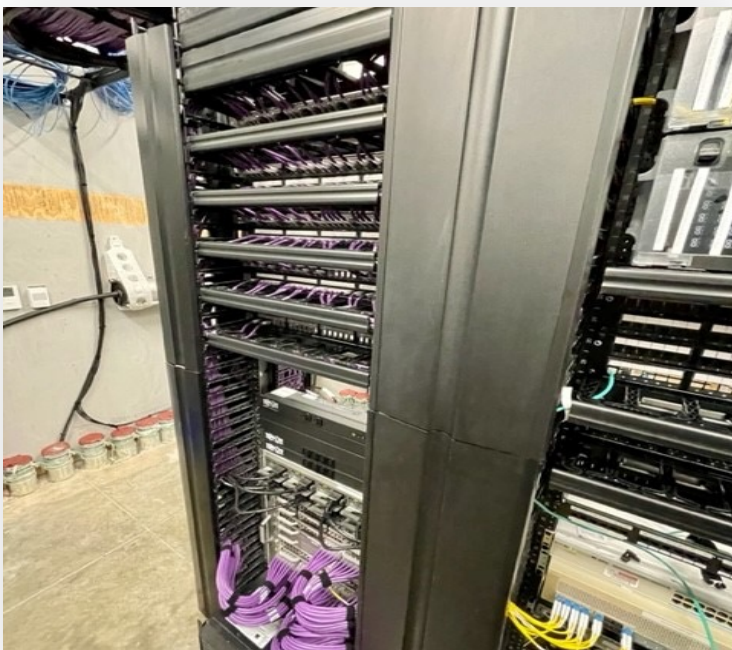
ENTERPRISE SYSTEMS: SUPPORTING SERVER & STORAGE EXPANSION
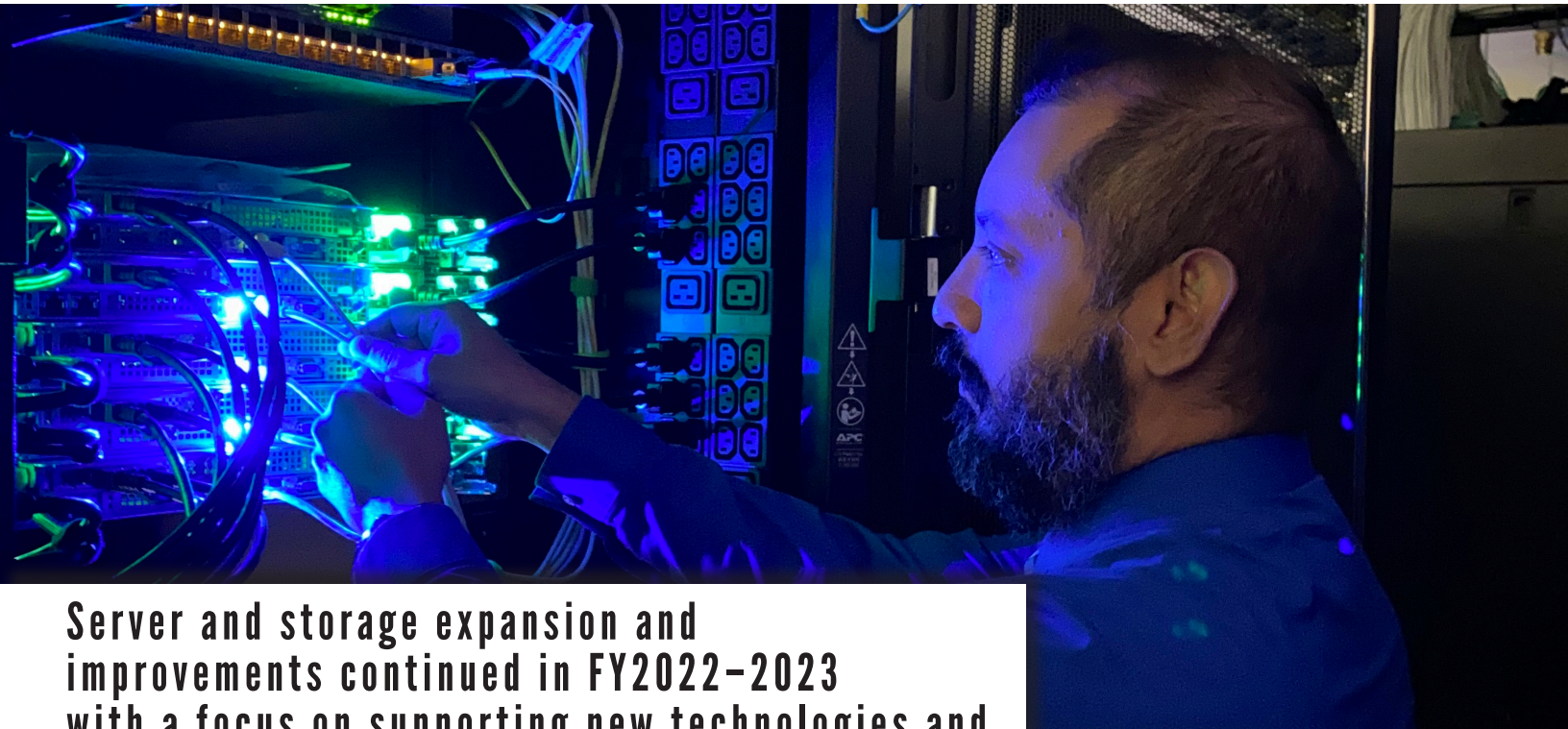
Server and storage expansion and improvements continued in FY2022–2023 with a focus on supporting new technologies and advancements undertaken by OIT.

Aging servers were replaced with new ones that provide increased resources in a denser footprint.

Server blade infrastructure in Boca's main data center has been expanded, which provides an additional capacity of 384 CPU cores and 3 TB RAM. This comes at a critical time as 203 new virtual machines have been created within the last year.

Satellite data center expansion is scheduled to begin on the Partner Campuses. Target date for completion is 2024. Storage capacity has been increased by 40%, with a new focus on cloud tiering of data.

New cloud initiatives include Azure Kubernetes and Azure Frontdoor services.

Leveraging these services comes with the added benefit of having applications in the cloud that are also disaster recovery ready. In addition, over 206 million total email messages were processed, with over 185 million emails being blocked as SPAM or impersonation attempts.

OTHER STATS & PROJECTS

- Microsoft 365 statistics:
  - Over 388K malicious failed login attempts to 365 applications
  - 1,845 new Microsoft Teams created
  - 1,100 new endpoints added to Intune
  - 1,000 new Power BI dashboards created
- A total of 60 physical servers have been decommissioned
- Over 300 DHCP reservations made
- Server consolidations continue from colleges and other departments into OIT's data center. The following have already been included:
  - Student Affairs
  - College of Engineering
  - College of Business, Executive Education
  - FAU Libraries

ENTERPRISE SUPPORT & CLIENT ENGAGEMENT: MANAGING THE GOOGLE TO OFFICE 365 MIGRATION

In early 2022, Google announced that, effective January 1, 2023, it would no longer offer free unlimited storage to academic institutions. To avoid new storage costs, FAU had to reduce its Google storage from over 900 TB to under 200 TB.

Challenges Included:
- Identifying, backing up, and safely removing inactive Google workspace accounts
- Migrating active students' email seamlessly without disruption
- Migrating large files or drives
- Locating shared files with inactive owners or files stored in external drives that counted toward the FAU quota

Milestones Achieved:
- Google storage was successfully reduced from over 900 TB to under 150 TB.
- A 5 GB quota has been enforced on all FAU Google Workspace Accounts (FAU Owl Apps), which is shared across Google Drive, Gmail, Google Photos, and the other Google Apps.
- Google's Shared Drives quota has been limited to 50 GB.

Many shared drives have been migrated to Microsoft Teams. Over 55,000 students have been migrated to Outlook 365.

Starting November 2022, all new students were automatically given Outlook 365 for email. All existing students were provided an opt-in prompt during login to select a date for migration to Outlook 365. Over 200,000 inactive alumni/attended Google Workspace accounts were removed.

As of August 2023, fewer than 2,000 students were pending migration, and FAU was on the last stretch of reducing the remaining unused data.

Total Google WorkSpace Storage Used- July 2022-July 2023
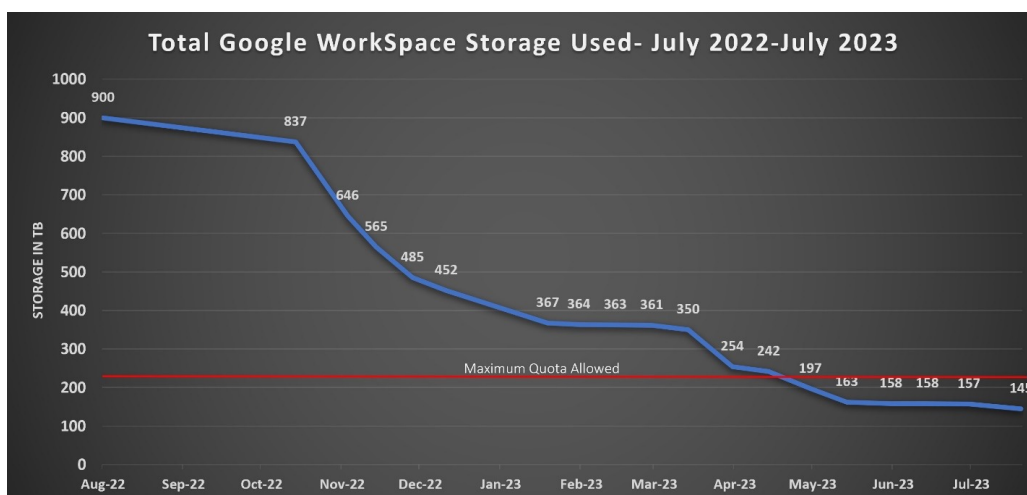
This graph shows FAU Google Workspace storage reduction from August 2022 to July 2023.

FAU began its Google to Office 365 migration in June 2022 and reached its required quota by April 2023.

MYFAU: THE NEW & IMPROVED LOOK & FEEL

MYFAU, the online portal for the FAU community, has a new look and feel. The MYFAU portal is also the official FAU mobile app, available through both Android and Apple stores. Students, faculty, and staff can sign in with their FAU credentials. Those without FAU credentials, including alumni, prospective students, and family and community members, can select the Guest experience to access features like maps and the directory.

Students, faculty, and staff now enjoy easy access to maps, news, and much more. They can:

- Check FAU email
- Navigate around campus with interactive maps
- Register for courses
- Check class schedule
- Check course grades
- Post to discussion forums
- Connect to advisors, faculty, tutors, and support staff
- Learn about and manage financial rewards and fiscal matters
- Access FAU's online and printed library collections
- Use SPOT to evaluate the quality of course instruction
- Find out about clubs and organizations
- Check the hours of operation for the Owl Express Shuttle
- Find out about degree requirements in progress (graduate students only)
- Learn how FAU courses, transfer courses, and courses in progress apply toward degree requirements
- Find out schedules for the FAU sports teams
- Activate FAU alerts

New features and resources include:
- A new interface that improves site navigation
- Today on Campus, which provides up-to-date information on events around the University
- The Faculty & Staff Lounge, where faculty and staff can access work and teaching resources

MYFAU
FLORIDA ATLANTIC UNIVERSITY

My Dashboard
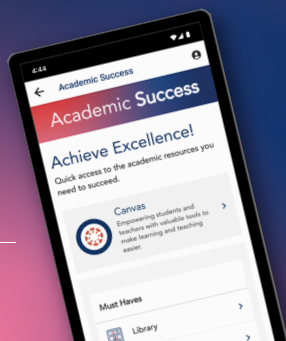Quick access to items like FAU Self-Service, email, and more!
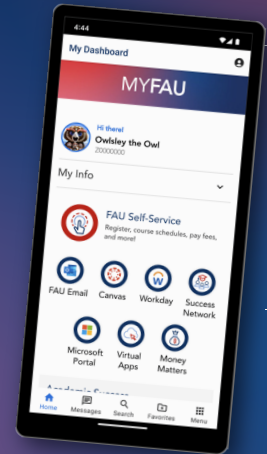
Money Matters
Control your school finances, and learn about fiscal resources.

Academic Success
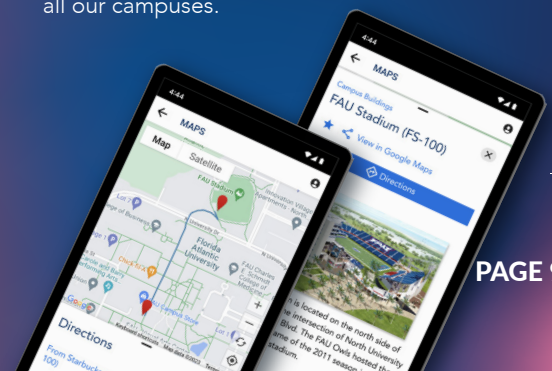Canvas, Success Network, Library, and more!

Health & Wellness
FAU mental and physical well-being resources.

Campus Maps
Find your way around all our campuses.

EAB NAVIGATE: MAKING ACADEMIC ADVISING MORE ACCESSIBLE TO STUDENTS AND FACULTY

FLORIDA ATLANTIC UNIVERSITY

OIT's role:
- Spearheaded the technical software setup
- Set up the daily integration with Canvas and Banner
- Led the historical data conversion from Starfish to Navigate

Connecting Students to a Network of Support at FAU and Beyond

In October 2022, EAB Navigate officially replaced the Starfish Success Network platform with the Navigate Success Network platform. Currently used by more than 500 universities, the Navigate Success Network is an online tool that connects students to faculty, staff, and campus resources. Its mobile-friendly design and dedicated app for students make advising more accessible to all. With its advanced reporting and filtering capabilities, EAB Navigate also allows faculty access to the data they need.

Student Features

- Offers schedule advising and other student support appointments
- Provides access to advising reports, notes, and other information
- Links to key campus services, such as advising, financial aid, career services, health services, and tutoring
- Connects with Study Buddies

Faculty/Staff Features

- Accesses student information, including contact information, grades, course schedule, and more
- Communicates with selected students via email and text
- Schedules and manages appointments
- Provides document advising and other interactions with students, which can then be shared with advisors/ faculty
- Refers students for services or care

EAB Navigate not only replaced Starfish, but its predictive analytics feature also replaced Civitas, thus eliminating technical departmental and redundancy of software.

Florida Atlantic University

NAVIGATE   Explore

- Home
- To-Dos and Events
- Appointments
- Study Buddies   21
- Resources
- Surveys
- Class Schedule
- Favorites
- Help
- Account

INSTITUTIONAL EFFECTIVENESS & ANALYSIS: TRACKING METRICS & MANAGING FACULTY ACTIVITY

METRIC TRACKER

Working together with the Registrar and the Data Warehouse team, IEA developed a data analytics tool that tracks several key metrics, including the Performance-Based Funding metrics on retention and graduation rates; the enrollment of upcoming terms for enrollment management; and financial projection. As shown in the screenshot below, these metrics can be drilled down by college and student demographics.
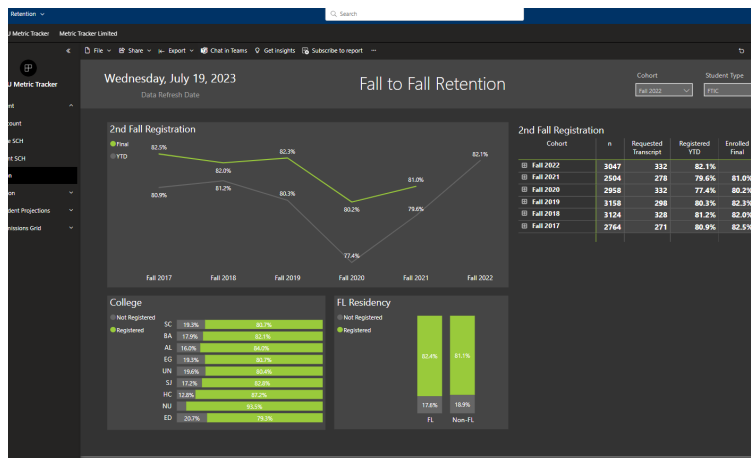
INTERFOLIO FACULTY ACTIVITY REPORTING

The Interfolio Faculty Activity Reporting (FAR) is a new tool for managing faculty assignments and activities.

Its enhanced features allow faculty to download their publications from databases, such as Web of Science, and create reports for annual performance reviews. Interfolio also has workflows that help manage the timing and approving.

IEA supported this important initiative by providing open sessions to both faculty and administrators; publishing guidelines and documents on the IEA website; and addressing questions from the entire campus.

NEW PROJECTS

- Developed a metric tracking dashboard that tracks live enrollment, retention, and graduation for strategic initiatives

- Added a new employee dashboard to the IEA reporting tool with enhanced features and new data points

- Updated documents and definitions posted on the IEA website with the opening of faculty activity reporting (FAR)

- Successfully completed the 2022 College KPI cycle, which supports College planning and goal setting for achieving FAU's strategic plans

- Led projection and calculation of Performance-Based Funding metrics, crucial for student success and budget-planning goal setting

- Prepared and published quarterly and annual reports for the COVID HEERF compliance requirement

- Updated U.S. News Undergraduate Ranking Estimator with most recent data and projection

- Published a Power BI dashboard with access control for faculty accessing historical assignment and activity data

- Supported the Quality Enhancement Plan and its data reporting, required for accreditation purposes and very important for student success

- Tickets completed: 281

- IEA Power BI page views: 18,846

RESEARCH COMPUTING:
EXPANDING STUDENT & RESEARCHER OPPORTUNITIES & TOOLS

In the last fiscal year, Research Computing coordinated with the Colleges of Medicine, Engineering, and Science to enhance and improve researchers' abilities to compete for funding and research opportunities.

Impactful funding opportunities supported included:

- $600,000 deployment of a 25-node Kubernetes cluster containing 20 AMD nodes, 5 ARM nodes, and a total of 3,200 cores and 22 TB of memory to build OwlCloud
- $250,000 NIH Grant for health disparities in underrepresented communities
- $100,000 grant to purchase AI quantum chemistry equipment
- $100,000 OIT investment in new Home Directory and Scratch storage to enhance researcher workflows
- $100,000 OIT investment in the Biomedical Health Research Informatic cores storage and VDI capacity
- UPS replacement in MC19 Data Center

ACTIVE USERS (2022-2023 ACADEMIC YEAR)
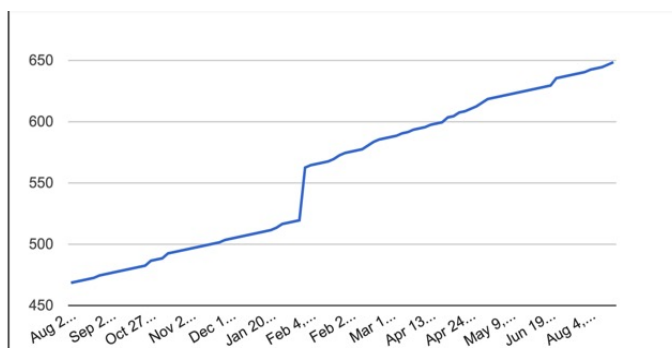
In the last year, Research Computing support of the Colleges of Medicine and Nursing research instruments increased 30%, from ~450 to 650 active users.

OwlCloud:
DOD ARMY GRANT

Hundreds of students in the College of Engineering now use OwlCloud while taking classes.

During the Spring semester students deployed thousands of services as they learned to utilize virtual machines, containers, and other cloud native architecture.

The new infrastructure ran AI workloads, processed videos, and allowed teams to deploy Web services onto the Web in seconds versus the usual days or months.

Wiring the networking for OwlCloud.

DATA & REPORTING SERVICES: IMPROVING REPORTING ACCURACY & QUALITY

The Student Information File (SIF) file is a database containing numerous data points about each student enrolled at FAU. The SIF, which is submitted to the Board of Governors (BOG) annually, serves as an important source of data for the University's performance-based funding metrics and federally mandated IPEDS reports. It is also used internally for reporting and analysis.

Data & Reporting Services developed a new process to prepare the SIF. The existing process to create the SIF file became difficult to troubleshoot and to modify when the BOG requirements changed each year.

The transition process was meticulously reviewed and tested, with detailed questions to ensure the accuracy of the data reported.

- The new process runs faster and is more accurate and easier to maintain.
- It now takes only 30 minutes to run a new file as opposed to 3–4 hours.
- The turnaround time for addressing script fixes has improved, which in turn has diminished the number of errors to resolve.

The process was used successfully for the first time to create the Spring 2023 file submission.

FAU DATA WAREHOUSE ENHANCEMENTS

Several new data sources that can be used for reporting analysis were added to the FAU data warehouse. These include data from:

- FAU's advising system (EAB Navigate)
- Faculty 180, the faculty activity reporting system
- Slate, the new Admissions processing system, scheduled to be live in early 2024


WORKDAY REPORTING GOVERNANCE

In the last year Data & Reporting Services took several steps to improve the quality of Workday reporting at FAU:

- The Reporting Governance Group was reestablished in March 2023. This group, which now meets monthly, consists of key Workday report writers who establish and enforce standards for Workday reports; share information about new report writing functionality and best practices; and discuss the myriad of issues impacting Workday reporting.
- A new curriculum was created to train new report writers in the basics of Workday report writing.
- The group established formal processes to better administer reporting, including the clean-up of unused and orphaned (i.e., reports owned by users no longer working at FAU) reports; the deletion of unused calculated fields; and the replacement of deprecated reporting fields.

HELP DESK TECHS & CONSULTANTS:
QUESTIONS & ISSUES THEY ADDRESS

### Typical questions and issues FAU Help Desk Techs handle daily:

"I can't log in to Canvas/MyFAU!" "I can't add email to my mobile device?" Need new laptop setup Activate new cell phone for employee "I have a new cell phone and need a new DUO activate code!" "I need help connecting to Wi-Fi!" Transfer tickets to other departments/colleges for further assistance Create courtesy and departmental accounts Implement FAUNet ID changes
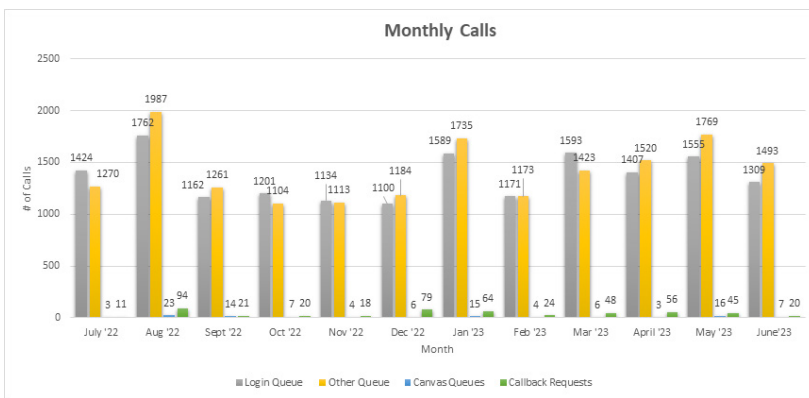
From July 2022 to June 2023, the Help Desk handled over 34,000 calls.

Typical requests and issues FAU Desktop Support Consultants handle daily:

Set up new desktop/laptop for employee   Set up new printer/scanner   Connect new monitor(s) Troubleshoot printer issues: Printer not responding, can't print, wireless printing   Install software Troubleshoot computer issues (PC and Mac): Cannot log in, receiving error message, blue screen Troubleshoot application issues: Can't receive/send email, Outlook slow responding   Set up user profile Troubleshoot network connectivity issues Install software, new memory, hard drive
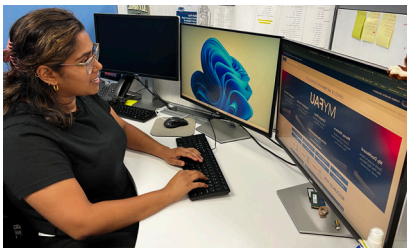
From July 2022 to June 2023, the Desktop Support team handled over 1,500 tickets.

INSTRUCTIONAL TECHNOLOGIES:
USING NEW DIGITAL SIGNAGE TO KEEP FAU INFORMED

The FAU Digital Signage Committee has chosen Appspace software to supersede Four Winds software.

- FAU has entered into a three-year contract with Appspace.
- After extensive communication with various FAU departments and individuals across the University to set up the platform correctly, Appspace is now the signage platform that many FAU departments are using.
- OIT and Marketing groups from Business, Engineering, the Library, Nursing, Partner Campuses IT, Public Affairs, Science, and Student Affairs (including the Student Union, Housing, the Breezeway, etc.), are now all using this system to deploy content onto their digital signs.
- The Appspace integration with the FAU Alerting process has been fully tested.

Praise for Appspace

The Appspace platform's intuitive interface and streamlined content management have empowered our team to effortlessly create, update, and schedule captivating displays.

Appspace's user-friendly design has brought newfound efficiency and vibrancy to our campus communication, enhancing engagement and leaving a lasting positive impact.

— Technology Services
College of Business

INSTRUCTIONAL TECHNOLOGIES:
LET'S TALK NUMBERS

LMS TEAM

Simple Syllabus
- Available for faculty use in Spring 2023.
- The current deadline for all IFP courses to be in Simple Syllabus is Fall 2023.

Below shows the adoption rate for IFP courses using Simple Syllabus (as of September 27, 2023):

Term	Published	Total IFP courses	Percent Complete
Spring 2023	1	679	0.1%
Summer 2023	162	309	52.4%
Fall 2023	693	856	81.0%

Faculty Activity Reporting (FAR) System
- As of July 17, 556 unique users have attended a single FAR training.

AUDIOVISUAL SERVICES/CLASSROOM TECHNOLOGIES & COMPUTER LABS

Audiovisual Services/Classroom Technologies
- Completed audiovisual (AV) installations for new STEM Building at the Jupiter campus.
- Design work is ongoing for Henderson School Phase 2 construction project.
- All items ordered for the 2023 Tech Fee classroom projects are expected for delivery no later than January 2024.

Computer Lab Upgrades
- OIT upgraded a total of 14 instructional computer labs, general purpose open labs, and departmental/college labs on the FAU Boca Raton campus at the end of the Spring 2023 semester.
- The University saved over $90,000 by combining equipment purchases through OIT.

VIDEO SERVICES

Mediasite (used for Lecture Capture and general video recordings)
- Generated more than 17 TB of video (just shy of 10,000 presentations or about 330,000 hours)
- Includes LCAP, LCVS, COB, and MyMediasite

Zoom (last 12 months)
- 5,470 active users
- 24,571 meetings that lasted 746,508 hours with 882,432 participants
- 102 Webinars, including 1 full-blown, multi-day Zoom Event
- The Zoom BAA Agreement for HIPAA compliance is complete.

Webex was retired
- Blog posts to LMS blog: Webex Farewell, Zoom Best Practices

INSTRUCTIONAL TECHNOLOGIES:
UNIVERSITY-WIDE COMPUTER INSTALLATIONS & REPURPOSING

A total of 291 new computers were installed in facilities on the Boca Raton campus in late April/early May 2023, before the start of the summer semester.

- Math Emporium (SE150): 135
- Writing Lab (GS215): 12
- Math Learning Center (GS211): 23

- SAM Lab (GS207): 36
- Instructional Computer Lab (IS113): 39
- Instructional Computer Lab (SO200): 46

Old computers from SO200 and IS113 were used to upgrade the Housing and Open Labs.

Housing Labs:
- HP118: 10 computers upgraded
- IR111: 10 computers upgraded
- IV126: 7 computers upgraded
- PH120: 7 computers upgraded

Open Labs:
- BU201: 12 computers upgraded
- LY201: 9 computers upgraded
- SF148: 20 computers upgraded

# PARTNER CAMPUSES: TECH SOLUTIONS FOR THE STILES-NICHOLSON BRAIN INSTITUTE

The most significant new construction on the FAU campuses in the last fiscal year was the Stiles–Nicholson Brain Institute on the MacArther campus in Jupiter. The Brain Institute, or STEM Building, presented unique construction and IT challenges to Boca and Partner Campuses IT, who responded as a team to address the special demands of the complex structure.

The STEM Building houses learning and research spaces, including:

- The Center for Brain Disease Modeling, which investigates brain disorders, including Alzheimer's, autism, addiction, and brain cancer;
- The Laboratory for Neurobehavioral Analysis, which affords research and educational opportunities for undergraduate, graduate, and postdoctoral fellows;
- The Center for Cellular Neuroimaging, where state-of-the-art cellular and brain circuit visualization merges with computational and virtual reality that afford deep insight into the brain;
- The Center for Computational Neuroscience, which provides an active learning space for dry lab activity and supercomputing that explores large data sets.

The Brain Institute partners with the Max Planck Florida Institute for Neuroscience and the Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, both long established on the Jupiter campus.
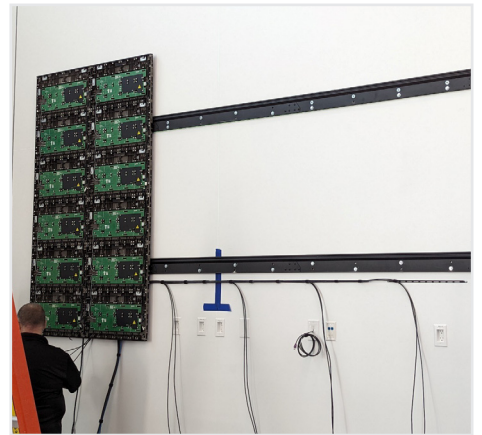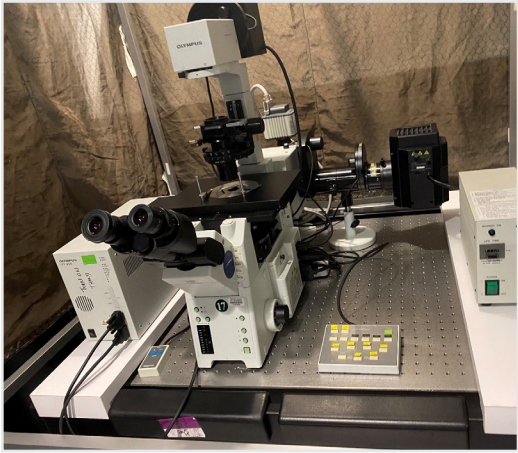
Boca and Partner Campuses IT outfitted the STEM Building with technology specific to scientist and researcher needs, including the following:

- The Multipurpose Room features a 165-inch direct view LED video wall for presentations.
- The lobby includes a 164-inch LCD video wall to highlight research projects and programs.
- The network was set up with fiber to the desktop in designated areas and a 100 Gb data-center-grade building switch to service data transfer to research clusters that are now at 100 Gb.
- This 100 Gb service is also provided to the electron microscopes installed by Zeiss so films can be stored in high-speed repositories and recalled without delay.
- Several special systems for water/air and vibration were installed to give optimal lab conditions for experimentation.
- Most of the air/water systems are online and controlled over the network, which is a newer way to implement these lab requirements.
- The facility was set up with specialized water-feeding systems that distribute water to lab animals. These systems also service specialized washrooms and care areas for animals. The water-feeding system is network monitored and controlled by onsite staff.

Partner Campuses Event Support

In FY2022–2023 Partner Campuses IT supported 148 events on the Jupiter and Broward Campuses.

Jupiter IT supported numerous STEM-related meetings, presentations, and other events at the Brain Institute, many of which took place in the first-floor lobby and interactive auditorium.

Typical events focused on community engagement; curriculum development for at-risk students; and academic research and networking.

JUPITER CAMPUS: JUNIOR NEUROSCIENTIST GRADUATION FOR THE ASCEND AFTER-SCHOOL PROGRAM

Palm Beach County middle-school students who participated in the after-school ASCEND (Advancing STEM Community Engagement through Neuroscience Discovery) program graduated as Junior Neuroscientists at a May 23, 2023 ceremony.

The semester-long neuroscience program, led by scientists from the Brain Institute, Max Planck, and UF Scripps, addressed the national shortage in STEM career-oriented students through hands-on activities, scientific experiments, and discussions.

Partner Campuses Stats

148 events supported
- 60 Broward Campuses
- 88 Jupiter Campus

1,253 Help Desk tickets resolved
- 633 Broward Campuses
- 620 Jupiter Campus

FORT LAUDERDALE CAMPUS: GOOGLE COLLABORATION WITH FAU SCHOOL OF ARCHITECTURE

Broward IT supported a series of meetings from August 2022 to January 2023 between Google executives and students from the FAU School of Architecture to engage the public directly within outdoor public spaces. School of Architecture director Joseph Choma led a student research studio that created a composite fiberglass prototype "pop-up" structure that could be folded for easy transport and installation on site.

Such structures would be collaboratively designed and fabricated within the local communities for community engagement initiatives around the world.

DAVIE CAMPUS: 12TH ANNUAL BROWARD STUDENT RESEARCH SYMPOSIUM
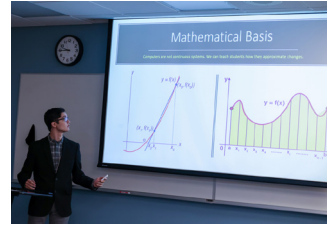
The Broward Student Research Symposium featured the work of graduate and undergraduate students, who shared their research projects and artistic works with faculty, peers, and the local community.

FACILITY UPGRADES

During the last fiscal year 51 spaces were upgraded with different technologies on the Partner Campuses. Upgrades were both full and partial.

Campus	GC	ICL	OCL	CR	DOC	Totals
Davie	17	1	1	1	11	31
Fort Lauderdale	3	2	-	-	2	7
Jupiter	4	1	-	3	5	13
Totals	24	4	1	4	18	51

GC = General Classroom
ICL = Instructional Computer Lab
OCL = Open Computer Lab
CR = Conference Room
DOC = Display Outside Classroom

Fort Lauderdale Campus: HEC-608 Instructional Computer Lab

The new CODAT signature program on the Fort Lauderdale campus focuses on design in architecture, graphic design, and multimedia studies. The Architecture and Multimedia Studies departments needed larger monitors and more robust computers. Those departments, Broward Administration, and Broward Technology Services combined funding to upgrade this general use classroom, which benefits the more than 400 students enrolled in these programs. Total cost was more than $100,000.

A total of 27 new Dell Precision 3650 computers with large monitors were purchased, together with new furniture and audiovisual equipment. Student desks and the professor's podium were replaced. Two 86-inch displays with wall-mounted speakers were added to the front of the room. Students can now more efficiently produce smoother 3D modeling, rendering, and simulations.

Jupiter Campus: AD-122 Instructional Computer Lab

This instructional computer lab was upgraded with 18 new Apple iMacs and three 86-inch displays with wall-mounted speakers. This classroom is heavily used by Honors College fine arts courses, primarily graphic design classes. Students and faculty can now use the latest graphic design software packages.

HARBOR BRANCH OCEANOGRAPHIC INSTITUTE: HIGH-TECH FLOATING *DISCOVERY* FIELD LAB

The Indian River Lagoon, one of the most biologically diverse estuaries in North America, extends 156 miles from Ponce de Leon Inlet in Volusia County, Florida, to Jupiter Inlet in Palm Beach County, Florida. The lagoon is home to more than 5,000 plant and animal species, including 50 threatened or endangered species, more than any other estuary in North America.

As part of its mission to conserve and protect the lagoon, Harbor Branch Oceanographic Institute

Lagoon and to give a live feed of a submersible controlled from the boat in real time. "Marine scientists for the day," both young and old, have the opportunity to:

- Experience a live feed of HBOI's Gladius Remotely Operated Vehicle, an underwater drone controlled from the boat in real time
- Conduct a zooplankton tow, then use portable microscopes to identify what was collected and discuss the importance of the organisms
- Understand water quality testing, plankton

> With direct access to the Indian River Lagoon, students will have the opportunity to explore an estuary of national significance, while learning about a wide array of habitats and wildlife, anthropogenic threats, stewardship practices and vital research underway.
>
> —*Dr. Gabby Barbarite*
> *Director, HBOI Outreach & Engagement*

(HBOI) now offers students and the public at large the opportunity to explore the lagoon as "marine scientists" aboard HBOI's pontoon tour boat, the *Discovery*.

HBOI equipped the *Discovery* with 14 marine-grade displays to display information about how scientists monitor water quality in the Indian River

tows, and benthic surveys
- Discuss marine debris and its impacts on coastal ecosystems
- Learn about the turtle, manatee, dolphin, and fisheries research HBOI conducts
- Explore habitats like mangroves, reefs, and seagrass beds, and the fish and invertebrates that populate them

WHO ARE THE *DISCOVERY*'S PASSENGERS?

- Dr. Gabby Barbarite, Director of Outreach & Engagement at HBOI, received a grant from the U.S. Environmental Protection Agency's South Florida Initiative Program to support a new Indian River Lagoon school field trip program aboard the *Discovery*.

- In the summer of 2023, 400 campers from the Boys & Girls Club of St. Lucie County went out on boat field trips.

- Both middle school and high school students are scheduled for Fall 2023 field trips.

- The general public can enjoy a fun-filled and educational 1.5-hour excursion aboard the *Discovery*. An expert guide explains the wildlife encountered in the lagoon. Approximately 500 guests of all ages have taken these boat tours, available on Friday and Saturday.

DISCOVERY TECH CHALLENGES

- **Issue:** The boat needed durable displays that could be seen in full sunlight. The monitors had to be strong enough so that they would not break if bumped or grabbed by guests getting in and out of their seats.
- **Solution:** Twelve-inch Xenarc rugged monitors were used. These marine-grade displays are water resistant and bright enough to be seen during full sunlight. The touch screens are optically bonded for added ruggedness, meaning that the outer touch panel is bonded to the LCD with resin rather than having a gap between them. HBOI's Small Boats team installed the monitors using industrial brackets mounted to the back of the seats.

- **Issue:** The guide needed to walk around the boat while presenting from a tablet computer, controlling what is seen by the guests.
- **Solution:** A product called ScreenBeam was utilized. ScreenBeam allowed OS-agnostic wireless display on any modern device, eliminating cables. The submersible's video is cast to the tablet computer, and in turn, this video is simultaneously wirelessly streamed to the ScreenBeam, then carried to all 14 monitors in real-time using SDI cable technology.

- **Issue:** Because of Coast Guard restrictions on hired vessels, HBOI IT was not allowed to tie into the pontoon boat's electrical system.
- **Solution:** Large rechargeable batteries were installed in the back of the boat just for the monitors and system(s) to broadcast content to each display. An inverter was used to match the different electrical requirements for all devices.

- **Issue:** The cabling presented another challenge. There was not enough room to run connections to each monitor.
- **Solution:** Boca IT recommended using SDI cables to run one thin cable for multiple monitors, which allowed the monitors to be daisy chained.

PARTING SHOTS: FOSTERING OIT TEAM BUILDING THROUGH TABLE TENNIS

In Spring of 2023 the Communication Infrastructure team spearheaded a two-month-long table tennis tournament that brought together individuals from OIT departments and organizations. The round-robin tournament was structured to last two months, allowing sufficient time for players to strengthen existing connections and form new relationships. The goal was to create an environment where participants from diverse areas of expertise within OIT could bond, communicate, and work together in a friendly yet competitive setting.

As the tournament progressed, players cheered for teammates and rivals alike. Teams collaborated both at and away

from the ping-pong table. Players organized mini-workshops and networking events alongside the games, where participants shared insights and experiences. The event helped break down silos and created an environment where individuals felt comfortable reaching out to colleagues outside their regular circles.

By the tournament's conclusion, the benefits of the exercise were evident across OIT. Collaboration between teams improved, communication lines were opened, and efficient problem-solving became a collective effort. The success of the table tennis tournament paved the way for future team-building exercises and set a remarkable example of how inclusivity and shared experiences can lead to a stronger, more cohesive organization, and enhance overall job satisfaction.

THE EVENT HELPED BREAK DOWN SILOS AND CREATED AN ENVIRONMENT WHERE INDIVIDUALS FELT COMFORTABLE REACHING OUT TO COLLEAGUES OUTSIDE THEIR REGULAR CIRCLES.

2022–2023
ANNUAL REPORT
Office of Information Technology
Florida Atlantic University