

IT at UWM

Report to Faculty Senate
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Overview

- **UWM IT Strategic Initiatives**
 - Renew Networking Infrastructure at Main and Branch Campuses
 - Prioritize Support of 2030 Student Success Technology Projects
 - Support and Enhance Research Computing
 - Enhance Data Management Solutions
 - Support Hybrid/Remote Models of Instruction and Work
- **UW System IT Strategic Initiatives**
 - ATP
 - Deploy a Best Practice Information Security Program
- **Annual Report**
 - <https://uwm.edu/technology/annual-report/>

UWM IT Strategic Initiatives

- Renew Networking Infrastructure at Main and Branch Campuses
- Prioritize Support of 2030 Student Success Technology Projects
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UW IT System Strategic Initiatives

- ATP
 - Ancillary Systems
- Deploy a Best Practice Information Security Program

Information Security

- **Multi-factor Authentication (MFA) standardization**
 - Allowed implementation of new “Identity and Access Management” (IAM) infrastructure
 - 71k Accounts are currently enrolled in MFA
 - MFA protects roughly 970K sign-ins per week

Information Security

- **Enhanced Email Protection:**
 - Each month, UWM's Microsoft 365 email users are sent roughly **17 million email messages**. **Of these, roughly 9 million are now blocked as spam** by layers of sophisticated filtering
 - Number matching for push notifications implemented to combat MFA fatigue attacks on Feb 21, 2023

Information Security

- Expanded Vulnerability Scanning Capabilities
- Successfully underwent 4 separate audits
- Increased effectiveness of identifying and remediating phishing and job scam email campaigns
- Continued to work with UW System on updating and refining UW System Policies

Networking Infrastructure

- All **network equipment and WiFi** replaced in Chapman, Zelazo, Arts Center Lecture, Pearse Hall, Curtain Hall, Golda Meir Library, NWQC 3rd floor and NWQD 2nd, 3rd, 7th and 8th floors.
- **WiFi hardware** replaced in Sabin, Physics
- In total, **103 network switches and 851 wireless access points** were deployed.
- UWM's **(Kenwood Campus) outside plant fiber**, each building across the Kenwood Campus now has redundant single mode fiber links.
- From February 24th to April 9th (45 days), **over 459,000 connections** were made to the new UWM WiFi equipment!

2030 Student Success

- For monitoring student enrollments, applications, and performance: delivered **34 feature improvements or updates** to the **17** shared campus-wide **dashboards**
- For student academic planning: participated in implementation of **EAB “Navigate”**
- For new Student Financial Services Center: **“Call Center”** technology

Research Computing

- Supported 26,723,984 computational hours on campus HPC service, accessed by 150 unique researchers
- Onboarded 80 new researchers across 30 different research groups
- Provided support for upcoming NFS funded CyberCATSS data intensive summer program

Information Systems - PAWS

- Academic Org Structure was completely re-designed for the 2030 project
- A new interface called Fluid for modern devices (smartphones & tablets) is in the works
- 354 programming modifications requiring 3000 work hours made in PAWS in 2022
- PAWS databases are now rearchitected with end-to-end encryption per UWSA and auditor directives

Information Systems - PAWS

- New student records tools are being installed: Academic Planning, course scheduling, course registration, degree audit (Stellic)
- Integration of the Office of Undergraduate Admission's **Slate** CRM and **PAWS**
- PAWS passed the 2022 LAB audit with no issues

Data Management

- The **Student Data Warehouse** process was re-engineered after 4,000+ UITs staff-hours
- **Data Cookbook – 53 data warehouse field definitions** were updated by the Data Integrity and Definitions group as part of an OBIEE dashboard literacy project
- **202,977 ad-hoc or dashboard-driven queries** were processed by the **508 UWM users** in the UW Systemwide Oracle Business Intelligence (OBIEE) tool

Data Management

- A new data governance tool in collaboration with UWSA called Collibra is being installed to replace Data Cookbook
- Work is progressing to integrate the Student Data Warehouse into the UWSA data lake as part of the EAP (Enterprise Analytics Platform)
- Data Governance Custodial Committee (DGCC) is working to streamline access to data
- Retiring Hyperion and OBIEE within the next two years – this work dovetails with Workday/ATP

Testing Center

- The Testing Center has been moved to UITs
- A new Teaching Evaluation software is being evaluated for purchase, with efficiency, outreach, and standardization as the main goals
- Test grading is being re-architected for efficiency and response

Supporting Services

- Help Desk
- Microsoft Teams
- Support of Instruction
- Managed Computers
- IT Purchasing
- Tech Training and Outreach

Help Desk

- In 2022, the UWM Help Desk handled **over 33,000 requests** for technical assistance
- The UWM Help Desk also offers a searchable **KnowledgeBase** with over **1,500 articles**
 - In 2022, over 2 million views of KnowledgeBase articles
 - More than 70% of KnowledgeBase articles updated to comply with current federal ADA standards, with 100% compliance target of 6/1/2023

Microsoft Teams

- **Use at UWM**
 - From October 2022-April 2023 **over 103,000 Teams meetings** organized, over **2.5 million chat messages**, and over **172,000 1 to 1 calls**
 - Currently **about 12,000 Teams Channels**
 - **Over 54 million files** are stored in OneDrive which **equals 202TB of data**
- **Teams Telephony:** over 3,400 traditional lines now “ported,” and a further 700+ lines disconnected
 - in 2022, 633 numbers were removed from Centrex

Support of Instruction

- **Classrooms, labs and meeting rooms**
 - Approximately 700 spaces supported across campuses
 - Nearly all locations have at least basic AV presentation technology
 - Most spaces have basic to advanced camera and mic capabilities
 - 321 are managed on the campus network for support
- **Computers**
 - Over 2200 computers are supported across all campuses for instructional and lab use
 - MKE campus has over 60 regularly scheduled computer labs
 - Additional labs are also supported at the UW-WAK, UW-WSH, SCE, and ZSPH locations
 - Instructional and lab computers managed with access to available licensed software and consistency of user experience

Support of Instruction

- **AV system updates across campus**
 - Basic AV systems
 - Approximately 60% of GA Classrooms now have a simple, similar AV system
 - Department classrooms and CGS adopting similar technology
 - Standardized touch panel user interfaces and functionality of AV systems where possible
 - Advanced AV systems
 - Cameras, mics for recording and distance education
 - Active learning classrooms with flexible presentation technology
 - Lecture halls with large venue projection capability
 - Supported through capital projects, collaboration with vendors, and UWM staff projects
- **Deferred maintenance projects**
 - NWQD Active Learning Classrooms
 - Projectors and other peripheral AV equipment in various locations
 - Update of computers with new SSD drives
 - Continued review of all instructional and lab computers to update as resources are available
 - Continued review of all AV technology to update as resources are available

Desktop and Mobile Computing

- Over **11,000 UWM computers** used by faculty, staff, and students are supported and secured by CTS
 - Over 9000 Windows Devices
 - Over 1,650 Macs
 - Over 550 iPads & iPhones
- Enhanced self-service tools for Mac and Windows now keep systems secure and updated anywhere in the world while giving increased flexibility for individual schedules

Tech Training and Outreach

- 17 online TechTraining courses were offered on 6 topics in 2022
 - 100% of those who submitted feedback rated the course they took as “Useful”.
- Over 7000 hours of content were consumed on LinkedIn Learning, which breaks down to 150,000 videos viewed. The most popular topics included Excel, HTML, Project Management, Business Intelligence and Big Data
- UWM IT interacted with over 1700 new students, parents and guests during UWM orientation events
- UWM IT also interacted with over 2300 people during Cybersecurity Awareness Month in October; this includes both in-person events and social media outreach