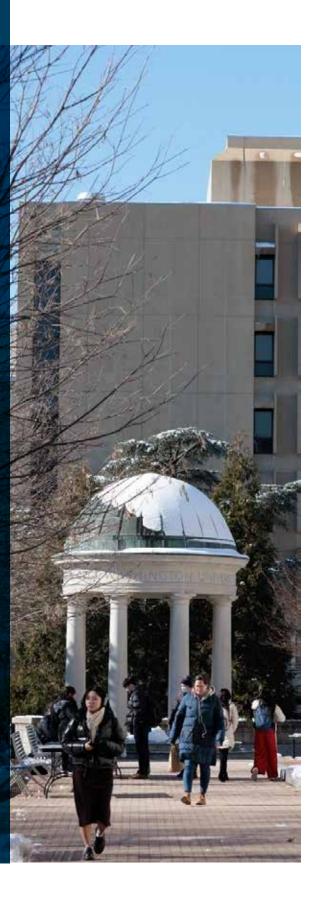


## Information Technology

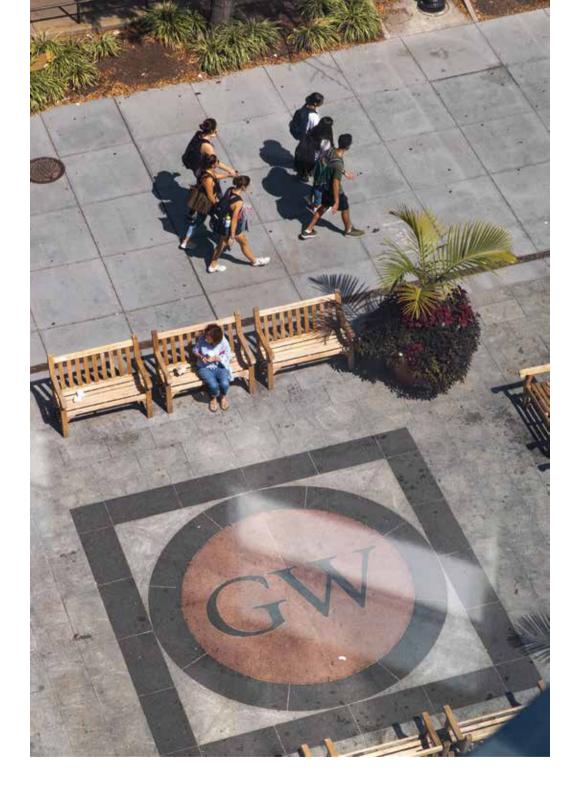


# YEAR IN REVIEW

Fiscal Year 2024 Annual Report

# We're here to help





# Modernize. Secure. Transform.

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Information Technology



#### **Year in Review**

GW Information Technology (GW IT) is proud to share the progress we have made during the 2024 fiscal year and the roadmap for our ongoing efforts to enhance the digital experience at GW. We are committed to providing a seamless technology experience for students, faculty, and staff, and are actively collaborating with our campus partners to empower student success, advance research, and support innovative projects that continue to set GW apart.



- **Geneva Henry** Dean of Libraries and Academic Innovation, Vice Provost for Libraries and Information Technology



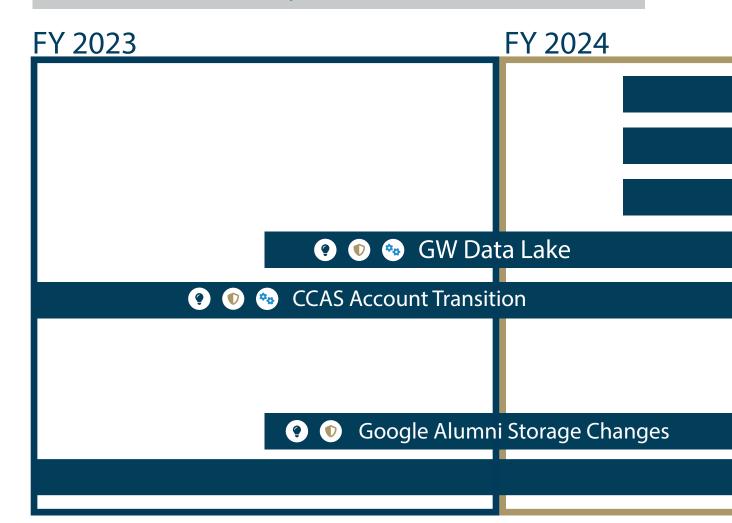
Information Technology

# **GW IT Roadmap**

The roadmap provides a snapshot of key IT projects and initiatives that are currently underway, as well as those completed in fiscal year 2024. While this is not an exhaustive list, it highlights some of the significant initiatives that support GW IT's mission and enhance the digital experience.

#### **GW IT Mission**

GW IT is a trusted partner, enabling the delivery of world-class education, research, and clinical care by providing an efficient, scalable, and secure digital experience to GW faculty, students, and staff.





# **Guiding Principles**

4

#### MODERNIZE & SIMPLIFY SERVICES Build technology roadmaps and plans for execution to deliver services that are efficient, reliable, and scalable SECURE THE ENTERPRISE D Invest resources in the governance, policies, practices, and tools needed to safeguard our data and systems, and mature our compliance position TRANSFORM THE GW EXPERIENCE • Engage with campus partners to optimize services and transform the digital experience for all GW constituents FY 2025 💿 🧠 Accelerate to the Cloud ( • ) **Banner Modernization** ( 🥊 ) \$<mark>0</mark> **Role Based Access (RBAC)** • \$₽ Generative Al \$₽ \*\* **Google Domain Consolidation** Network Infrastructure Upgrades ••• (?) (**(**)

# THE JOURNEY

#### Accelerate to the Cloud



#### The Goal

Deliver a frictionless experience for students, faculty, and staff through cost-efficient, scalable, secure, and compliant cloud services.

# ୪

Wave Migration Planning
 Established Cloud Center of Excellence

Phase 1: Discovery, Assessment & Planning

Established Cloud Center of Excelle

FY 24 Achievements



#### Timeline

- Summer 2024 Fall 2024 Phase 2 Redesign Cloud Infrastructure
- Fall 2024 Phase 3 Cloud migrations

#### **Banner Modernization**



#### The Goal

Streamline and automate as many processes as possible to enhance efficiency and improve the experience for our students, faculty, and staff.



#### **FY 24 Achievements**

- Banner SaaS environment deployed
- Executive Sponsor Briefing
- Project Kickoff



#### Timeline

• Spring 2024 - August 2025





#### Role Based Access (RBAC)



#### The Goal

Implement Role-Based Access Control (RBAC) within GW IT to enhance security, compliance, and operational efficiency by assigning permissions based on role requirements. Improve monitoring and auditing capabilities, ensuring proper control over access to sensitive information and resources.



#### **FY 24 Achievements**

• Completed RBAC Pilot in partnership with HR



#### Timeline

- Summer 2024 Planning & Requirements
- Fall 2024 2028 Configuration & Implementation

#### GW Data Lake



#### The Goal

Provide a comprehensive data management solution that enables seamless integration, efficient warehousing, and insightful analytics. Empower the GW community with the ability to harness diverse data for decision-making, advanced analytics, and machine learning, ultimately enhancing institutional performance.



#### **FY 24 Achievements**

- Planning and proof of concept
- Established infrastructure and security
- Raw data ingestion



#### Timeline

- 2025, quarter 1 Data Refinement, Metadata Ingestion, Testing and Validation
- 2025, quarter 2 Full Deployment

# ON THE HORIZON

## Generative Artificial Intelligence at GW

GW IT is exploring Enterprise AI Solutions to enhance university operations and the digital experience for our community.

#### **Exploration Activities in 2024**

- Evaluating AI capabilities in tools such as Adobe, Box, MS Copilot, and Zoom.
- Team AI skill building through development workshops with our key technology partners and hands-on implementation of open-source AI environments.
- Collaborating with university departments to draft guidelines for the assessment, procurement, and secure use of AI tools, with a focus on responsible use of university data.

#### **Opportunities on the Horizon**

- Implementing an everyday AI platform to provide secure, responsible access to the latest large language models.
- Testing generative AI to handle IT service requests more efficiently, enabling staff to focus on more impactful interactions with the GW community.

#### **Google Domain Consolidation**

The Google Domain Consolidation initiative aims to combine the two existing Google Workspace domains, gwmail.gwu.edu and email.gwu.edu, into a single domain. This unified domain will streamline the management of Google Workspace accounts for students, faculty, and staff, by bringing everyone under the email.gwu.edu domain.

This change will enhance collaboration and address the needs of students who also hold staff or faculty positions, eliminating the need for multiple accounts.

Currently in the discovery phase, this initiative is set to begin the design stage in Fall 2024. We will share updates and timelines as we define the project's scope and requirements. We look forward to collaborating with our campus partners to simplify Google access for the GW community.



## PARTNERSHIPS & COLLABORATION

We continue to be committed technical partners in the GW community. This year, we have collaborated on a variety of projects and initiatives to enhance the digital experience.

#### **Change Management Community of Practice**

In Spring 2024, GW IT launched the Change Management Community of Practice (CoP) to foster partnerships and collaboration. This initiative has facilitated knowledge sharing, networking, and professional development, significantly enhancing organizational benefits and supporting GW IT's mission to create a connected and collaborative environment.

#### Slate

In partnership with The Office for Student Success, GW IT is assisting with implementing Slate, a new CRM system for Recruitment and Admissions. Phase I, completed in July 2024, was the successful go live of Undergraduate Admissions for the Applicant Portal and Admissions processes. Phase II will expand to include the Graduate Schools, an Undergraduate Financial Aid Portal, and a Parent Portal for Undergraduate applicants.

#### **Course Dog**

GW IT is collaborating with the Office of the Registrar to implement Coursedog, a system designed to streamline the course and classroom scheduling process. This initiative aims to minimize manual input by automating various aspects of course preparation, such as determining class sizes, assigning instructors, and planning the number of sections offered each semester. The introduction of an approval workflow will further enhance efficiency and accuracy in the scheduling process.

#### Elements

GW IT is assisting the Office of Faculty Affairs to implement a new University-wide faculty information system, Symplectic Elements. Elements will streamline the profile creation including publications, citations, and grants and highlight GW's faculty and scholarly accomplishments to the outside world. Elements will replace Lyterati for the annual review cycle in a phased deployment, with GWSB, SEAS, SON, and SPH in the Fall 2024.

#### Advancement CRM (Customer Relationship Management)

GW IT partnered with Development and Alumni Relations to evaluate our system needs and review the market before selecting Ellucian's CRM Advance as the right solution to replace our legacy system. This new system will modernize how we engage with our constituents, allowing us to match their passions with GW's highest priorities with a robust data infrastructure. The project kicked off in June 2024 and is expected to be an 18-24 month implementation.

#### **Corporate Partnerships**

GWIT works with key corporate partners such as AWS, Microsoft, and Ellucian to deliver on our technology strategy. We are building close relationships with these partners to better align our strategic direction and priorities with their strategic interests. We are aligning our roadmaps where it makes since, upskilling our GWIT staff to work with the latest technologies, connecting with other universities and forming alliances that enable us to help shape products with the functionality we need to fulfill the university's mission. As we align with GW goals such as environmental sustainability, advancing research, and enabling student internships, we are building partnerships the focus on mutual success.

# FY 24 - Year in Review



# Columbian College of Arts & Science (CCAS) Account Transition

In June 2023, GW IT and the Columbian College of Arts & Science migrated CCAS Cloud Accounts to simplify logins and enhance cybersecurity. CCAS Cloud resources, can now be accessed using a GW identity.

• 950+ Workstations Migrated



#### **Alumni Google Storage Changes**

Due to Google's policy change, GW discontinued Google Drive and Calendar for alumni, but retained @gwmail email with a 5GB limit.

- Reduced storage by 50%, avoiding future costs in storage.
- Engaged 150,000 alumni and identified and secured 105,000 accounts to enhance security.
- Resolved over 9,000 project tickets and maintained positive ratings.



#### New myGW

The myGW website and mobile app have been refreshed to simplify access to the university's online offerings. The new myGW has a modern design, and includes personalized access to essential GW resources and more!

The new myGW is available at my.gwu.edu or download the mobile app from your app store.



#### **Campus Store Walk-in Support Center**

A New IT Walk-in location was opened Spring 2024 on the lower level of the new Campus Store.

Come see the new space! Monday - Friday 10:00 AM to 6:00 PM.



Information Technology



#### **IT Website Redesign**

The IT website was relaunched with a new design in October of 2023. The new design is the first step in improving navigation and making it easier to find resources and support.

• Reduced URLs by 75% to make the site easier to navigate and removed out-dated information.



#### **SSO Implemented for Finance System**

Single Sign-on (SSO) was implemented on the Enterprise Accounting System (EAS) to streamline access for new users, reduce cybersecurity risks, and prevent the need for additional login credentials for many EAS users.



#### **GW VPN Transition**

GW IT upgraded to a new product, GlobalProtect, for its Virtual Private Network (VPN). This transition enhances the user experience, bolsters security, and enables access using single sign-on (SSO) capabilities.



#### Microsoft Copilot Available to GW

Copilot (formerly Bing Chat Enterprise) is now available to GW faculty, staff and students. Microsoft's Copilot is a chatbot powered by generative AI, and can be used to find information. GW provides access to Copilot with Data Protection, which offers enhanced security.

# GW IT by the Numbers

## Fiscal Year 2024

77,164

General

**Support Requests** 

10.243

Requests related to

Special Projects\*

\*Includes the Google Alumni Storage

Changes & the new VPN.

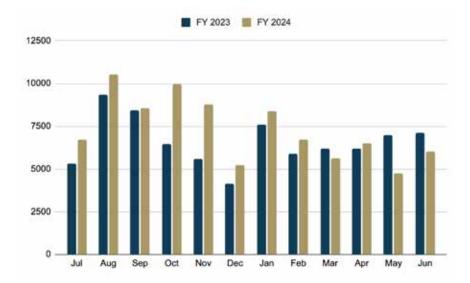
**87,407** Total Annual Support Requests

## FY 23 vs FY 24 IT Support Requests

<u>8.2/10</u>

**Satisfaction Survey** 

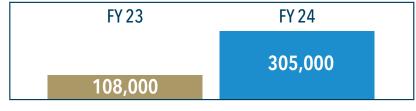
n=3590 responses



## IThelp.gwu.edu Quick Facts



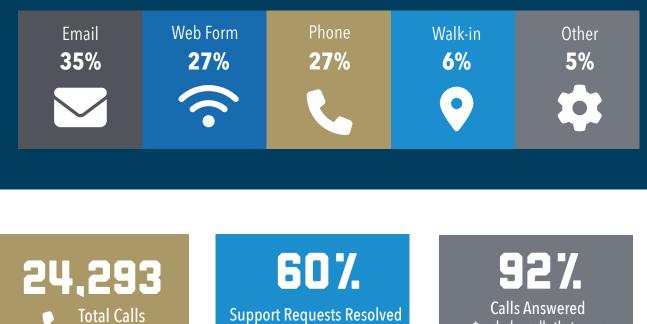
#### Number of Articles Viewed







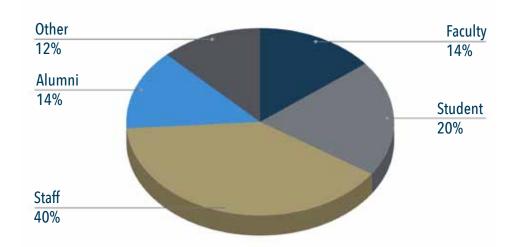
# **Contact Method for Support Requests**



in Initial Contact

Support Requests by Role

in FY24



**GW** Information Technology

\*excludes calls that were

dropped under 15 seconds

## Academic Tech in Action

GW IT is committed to enhancing the learning experience, ensuring student success, and leveraging technology to revolutionize education.

- We are currently working to standardize technology across academic spaces to streamline maintenance and support and ensure a consistent, high-quality learning environment.
- In the past year, GW IT initiated a six-year cycle to upgrade academic technology across all campuses to
  ensure learning spaces are reliable and flexible. This strategy involves regular reviews, maintenance, timely
  updates, and the replacement of outdated equipment, all aimed at maintaining the highest standards of
  teaching and learning.

#### Empowering Research & Education Supporting classroom technology in

700+ academic spaces across campuses

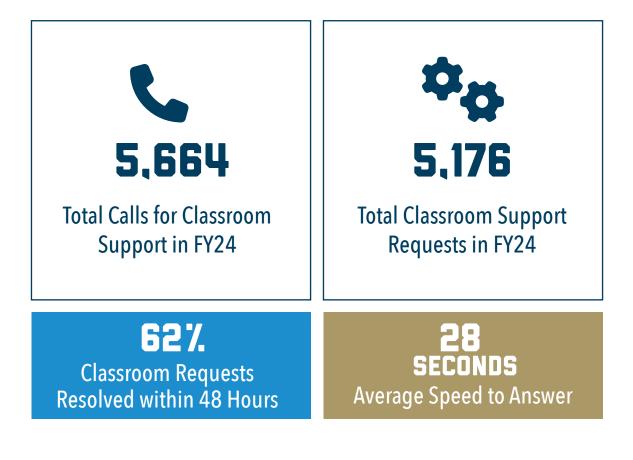
## FY 24 Classroom Updates

classrooms had full tech refreshes

**200+** Classrooms had 1+ tech upgrades



# Academic Tech Support





Information Technology

# **Network Services by the Numbers**



## 326,000+

unique devices connected to wireless networks



## 70+

TB of data passed through GW networks daily, which is equal to about 35,000 hours of video



## 27%

of network switches were upgraded across campus



## 6,882

total access points upgraded



## 164

buildings on three campuses in Virginia and Washington, D.C. have upgraded access points. Access point upgrades are 100% complete.

## **Most Connected Locations**







# Modernizing GW Networks

As part of our comprehensive network strategy, we continued our lifecycle refresh of the network technology, improving reliability and introducing new features to GW networks. This proactive strategy ensures up-to-date hardware and software, minimizes disruptions, and anticipates future demands.

#### **KEY HIGHLIGHTS**

#### Summer 2023

• Implemented hardware upgrades, including new features for Wi-Fi access, enhancing smart device communication, and providing an at-home network experience.

#### Spring 2024

- Piloted GWdevice for West Hall residents, officially launched in Summer 2024 for residential use.
- Began reducing the number of network names (SSIDs) to minimize confusion. By the end of 2024, only three SSIDs will remain: eduroam, GWdevice, and GWguest

#### Summer 2024

- Replacement of the next cycle of network switches, as part of our lifecycle program that replaces 20% of our 1,100 Access switches annually.
- Completed the final phase of our 5-year plan to upgrade network infrastructure, replacing 16 distribution nodes that form the backbone of the GW network.

#### Fall 2024

• Planned retirement of GWconnect and GWireless.

These efforts ensure stable network services, spread investments, and minimize impact. Our commitment to continuous improvement enhances the user experience and ensures reliable network services.



# **Research Technology Services**

Research Technology Services (RTS) support and enhance research activities at GW. These services provide a robust infrastructure that can handle specialized and intensive computational tasks, facilitating smooth and efficient research processes.

#### **Research-Specific Computing**

- CAAREN
- Globus
- High-Performance Computing (HPC)

#### **Research Data Services**

- REDCap
- Research Cloud
- Research Storage

#### **KEY INVESTMENTS IN RESEARCH TECHNOLGY**

- 2 PB expansion of the Research Network-Attached Storage (NAS)
- Launched the cutting edge Gracehopper Nvidia SuperChip platform to support Deep Learning research
- Introduced the Teaching Cluster for HPC
- Expanded HPC infrastructure to provide additional resources and redundancy

#### **FUTURE INTIATIVES & INVESTMENTS**

- 20% Expansion of HPC
- Introduction of newer GPU for HPC
- Upgrade of 100GB network Infrastructure
- Inclusion of HPC resources into Opensource Science Grid

#### HIGH PERFORMANCE COMPUTING - PEGASUS STATS

1,116,835

**Total Jobs Run** 

## 48,417,825

Total Core Hours used to Support Advanced Research Computing

## FAST FACTS RESEARCH TECHNOLOGY SERVICES



875 TB of data storage on Research NAS





47 attendees



**93** research groups used Research Technology Services



Supported **18** projects across the research cloud



# **Cybersecurity & Safe Computing**

In the past year, GW IT has made significant strides in enhancing our cybersecurity posture.

#### CYBERSECURITY AWARENESS AND TRAINING

We have updated our cybersecurity awareness program to include online training, workshops, and regular communications to share best practice. Currently all IT Staff are required to complete this training, we will be expanding the availability of cybersecurity training for the GW community in the future.



#### THIRD PARTY AND APPLICATION RISK MANAGEMENT

These proactive security assessments allow GW IT to evaluate existing services as well as technology that is to be procured to ensure the proper controls are available to protect GW data. FY 2024 saw a 30% increase in assessments with Vendor assessments up to 203 from 155 and application risk assessments up to 54 from 52 in FY 2023. The team continues to monitor the risk register, documenting new risks identified and updating as risks are mitigated.

#### **INCIDENT RESPONSE**

Our incident response team actively investigates and remediates incidents identified through a combination of security alerts and user reporting. Major incident response activities resulting from sophisticated compromises of GW user accounts and devices totaled eight in FY 2024. The team will be expanding our incident response capacity with student employees in FY 2025. 21,000+

reports of suspicious email to abuse.gwu.edu resulting in identification of approximately

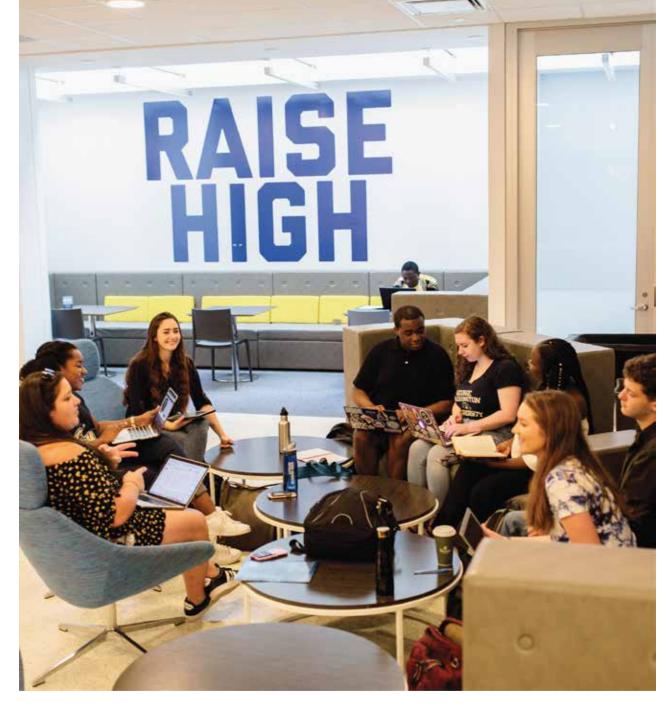
unique attack campaigns

#### **FUTURE PLANS**

- Modernize cybersecurity tools to enhance protections for workstations and servers against malicious software.
- Transition data protection to cloud-based solutions to increase security for cloud storage and email.
- Expand vulnerability monitoring capabilities to allow for continuous monitoring of web servers, on-premise, and cloud infrastructure.
- Continuously improve the overall cybersecurity program to mature processes and focus on a risk-based security model.



Information Technology



# NEED HELP?



Visit it.gwu.edu/support for support options



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