TWO-FACTOR AUTHENTICATION PROJECT

A QUICK INTRODUCTION TO 2FA AND ITS USE AT GEORGIA TECH
AGENDA

What is Two-Factor Authentication (2FA)?
Why Two-Factor?
Two-Factor Project Goals
Cas + Duo Project Scope
Project Progress
Project Ahead
Project Considerations
Demo
TWO-FACTOR IS:...

SOMETHING YOU KNOW + SOMETHING YOU HAVE
WHAT IS TWO-FACTOR AUTHENTICATION (2FA)?

Computer access control requiring two or more types of authentication factors

1. Knowledge Factor
   - Something you know *(Password/hints)*
   - Typical single factor method
2. Possession Factor
   - Something you own/possess
     - Tokens
3. Inherence Factors
   - Something you are *(Fingerprint(biometric))*
4. Location Factors
5. Time Factors
WHY TWO-FACTOR?

- Because hackers are gonna hack!
- Passwords are not secure
- Successful phishing attacks escalate need for more secure system access
- Administrative Access
  - Data Access Risk
WHY TWO-FACTOR AUTHENTICATION?

• Currently, many critical applications are secured with a single authentication method using CAS

• Early phases of Two-factor Authentication with Duo for specific applications have been successful in limited release

• Institute directive to implement a multi-factor integrated solution on a more comprehensive scale
TWO-FACTOR PROJECT GOALS
TWO-FACTOR PROJECT GOAL

• Maintain the integrity of Institute data and computing resources
• Build a framework for OIT and campus unit resources
• Provide two-factor authentication to faculty, staff, and students
• Leverage familiar access method with added multifactor capability to ease change impact
CAS + TWO-FACTOR PROJECT SCOPE

Slow and Steady!

• First: Experienced Duo users
  • Leverage existing tools for support used today
    – Cas
    – Passport
    – Technology Support Center (TSC)
    – Duo administrators

Identify opportunities for improved deployment in next phase

• President’s Office and Cabinet
• Development Office

Campus Deployment for Administrative Departments in Phases
Deployment has been multi-phased to date:

- **Phase 0**: Campus Multi-Factor Infrastructure and VPN
- **Phase 1**: IT Systems
  - Users Impacted: IT Personnel
- **Phase 2**: Banner Grades
  - Users Impacted: Grade submitters (Limited faculty)
- **Phase 3**: Two-factor VPN for Campus Unit Firewalls
  - Users Impacted: Faculty and Staff
- **Phase 4**: Enforcement of all existing users of two-factor authentication
  - All of OIT
  - Primarily IT personnel on campus
- **Phase 5**
  - Development Office
  - Presidents Office and Cabinet
Phase 6 – forward

- Administration and Finance
- Academic Departments
- Faculty
- Students
- Retirees?

Current Use:

- Approximately over 4000 registered users
In progress

• Change management
• Out-reach to off campus users
NEW FEATURES

Self-service enablement methods

- Passport
  - Two-factor menu – add or change a device
  - Assist Another Person (Web of Trust) (Passport)
  - CAS (login@gatech.edu) status of app
ASSIST ANOTHER PERSON (WEB OF TRUST)

Passport

Password
- Change Password
- Hints
- Information
- Two-Factor
- Assist Another Person

Email
- Email Preferences

Contact Info
- Directory Entry
- Directory Nicknames
- Your Photo
- Emergency Notifications

Sponsored Guests
- Manage Guests

For assistance, please contact the GT Technology Support Center at 404-894-7173 (Mon-Fri 8am-5pm EDT).

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SINGLE SIGN-ON WITH DUO - DEMO

Enter your GT Account and Password
Login requested by: mail.gatech.edu

GT Account: 

Password: 

☐ Warn me before logging me into other sites.

LOGIN  clear

Device: iOS (XXX-XXX-9800)

Send me a Push
Call Me
Enter a Passcode

☐ Remember me for 1 day
RESOURCES

Website
www.twofactor.oit.gatech.edu

FAQ’s
https://faq.oit.gatech.edu/security
https://faq.oit.gatech.edu/duo-2fa
https://faq.oit.gatech.edu/content/using-2-factor-authentication-vpn-windows
https://faq.oit.gatech.edu/content/vpn-2-factor-authentication-osx

Related References
http://www.nbcnews.com/tech/security/universities-become-targets-hackers-n429821

QUESTIONS