

TWO-FACTOR AUTHENTICATION PROJECT

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

CREATING THE NEXT



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....



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
- 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

PROJECT PROGRESS

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

PROJECT AHEAD - NEXT STEPS

Phase 6 – forward

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

Current Use:

Approximately over 4000 registered users



PROJECT PROGRESS CONSIDERATIONS

In progress

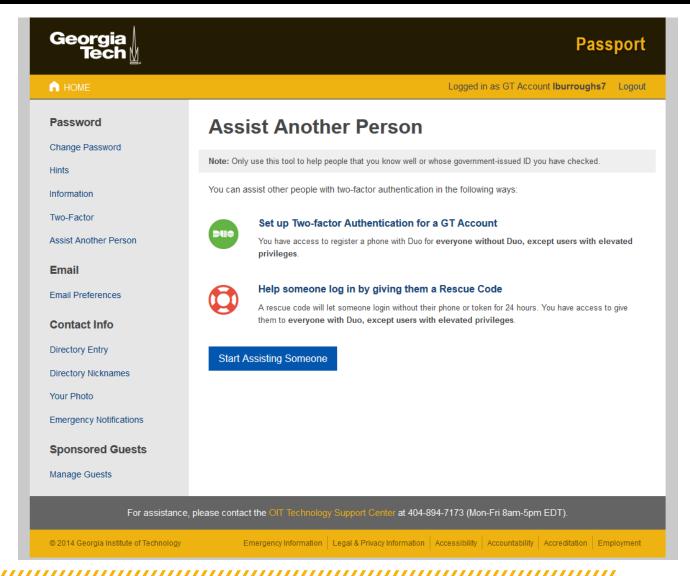
- Change management
- Out-reach to off campus users

NEW FEATURES

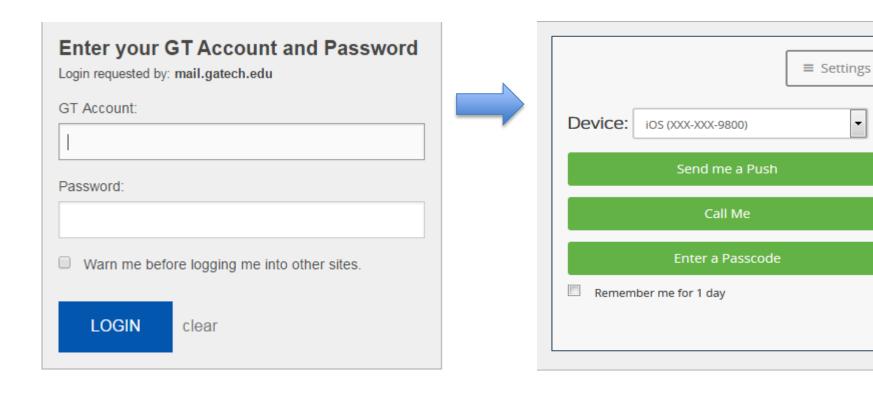
Self-service enablement methods

- Passport
 - Two-factor menu add or change a device
 - Assist Another Person (Web of Trust) (Passport)
 - CAS (<u>login@gatech.edu</u>) status of app

ASSIST ANOTHER PERSON (WEB OF TRUST)



SINGLE SIGN-ON WITH DUO - DEMO



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

Referenced in News Report: Symantec's Internet Security Threat Report

https://www.symantec.com/content/en/us/enterprise/other_resources/21 347933 GA RPT-internet-security-threat-report-volume-20-2015.pdf

QUESTIONS

