Overview of Duo 2FA implementation

DePriest Dockins, Assistant Director, Identity and Access Management, ITS
Unit Liaison Meeting, May 11
Agenda

● Overview
● Timeline
● Duo Options & Benefits
● Pre-enrollment Planning
● Working Together
● Short Enrollment Demo
● Appendix: Authentication Options & Enrollment Screenshots
New U-M IT Security Strategy

- One university-wide security program
- Focus on the most sensitive information first
- Make security the easy choice
- Promote university-wide security culture and capabilities
- Collaborate with faculty to contribute to the domain
CY2016 2FA Objective & Benefits

To replace MTokens with a new 2FA solution and then expand to U-M restricted and high-sensitivity information

Benefits

● Improve University security posture to secure personal data and sensitive university data
● More flexible system with advanced authentication methods, including smartphone app, SMS text & more
● Use of a single 2FA solution across campus
Two-factor with Duo
## Duo 2FA Options

<table>
<thead>
<tr>
<th>Authentication</th>
<th>Push</th>
<th>Passcodes</th>
<th>SMS Passcodes</th>
<th>Phone Callback</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Duo sends a login request to your phone. Just tap Approve to authenticate.</td>
<td>Generate a passcode when needed using the Duo app.</td>
<td>Receive a batch of passcodes via text message.</td>
<td>Duo calls your phone. Just press any key to authenticate.</td>
</tr>
<tr>
<td><strong>Platforms</strong></td>
<td>iOS</td>
<td>All Push platforms, plus Palm, Windows Mobile</td>
<td>All phones with SMS</td>
<td>All phones</td>
</tr>
<tr>
<td><strong>Usable without WiFi or Cellular Service</strong></td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
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*Hardware tokens are available if you have a specific business need*
Hardware Tokens

- Current MTokens not compatible with Duo solution
- Must be replaced with new Duo hardware tokens
- Units responsible for cost of hard tokens
- Available for purchase at the Computer Showcase ($25)
## 2FA Pre-Enrollment Timeline

<table>
<thead>
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<th>May 16</th>
<th>June</th>
<th>July</th>
<th>Aug-Dec</th>
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<tbody>
<tr>
<td>ITS Pilot</td>
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<td>Expand 2FA across campus</td>
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<tr>
<td>UMHS</td>
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<td></td>
<td>Opt-in enabled for Wolverine Access and M+Google</td>
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<td>Departmental Outreach for Pre-Enrollment of MToken Holders</td>
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<td>Faculty may begin using Duo 2FA for sensitive information</td>
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<td>Transition Unit Servers and Applications to Duo 2FA</td>
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<td>Training and Support for MToken Holders, IT Staff</td>
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- **May 16**: ITS Pilot
- **June**: Other early enrollments
- **July**: Departmental Outreach for Pre-Enrollment of MToken Holders
- **July 20**: Cutover to Duo
- **Aug-Dec**: Transition Unit Servers and Applications to Duo 2FA
- **Aug-Dec**: Training and Support for MToken Holders, IT Staff
- **Aug-Dec**: Expand 2FA across campus
- **Aug-Dec**: Opt-in enabled for Wolverine Access and M+Google
- **Aug-Dec**: Faculty may begin using Duo 2FA for sensitive information
- **Aug-Dec**: Retire RSA vendor Dec 2016
Pre-Enrollment Activities

1. Working with Unit/School/College to
   a. Pre-enroll MToken Holders
   b. Pre-enroll any departmental servers or applications
2. Work with IT, Admin, and IT Security Staff in each area
3. Send notices centrally with option for unit to communicate
4. Provide Communications Toolkit, eg email, digital signs
5. Pre-enrollment drop-in stations around campus
6. Training and online support with videos, how-to’s
Working Together

- Champion the new Duo 2FA option for smartphones, Duo Mobile
- Encourage early enrollment to minimize disruption for your staff
- Coordinate with your area’s NextGen Unit Representative and Security Unit Liaison.
- If you’re interested, volunteer to assist at a pre-enrollment drop-in session in your area.
Questions?

2FA.Project.Contact@umich.edu

New 2FA Option From Duo
http://www.itcs.umich.edu/identity/2factor/

MFA Project Website:
http://its.umich.edu/projects/mfauth/
Appendix

Authentication Methods & Enrollment Screenshots
Authentication Methods
Push Authentication

Easy, One-Tap Authentication
Users can quickly approve an auth request by pressing a single button. Or, report fraud to admins by tapping the red button.

Generate Codes for Any Two-Factor Service.
The application generates TOTP passcodes for login and can receive push notifications for easy, one-tap authentication on your iPhone, iPad, or Apple Watch.

This is the preferred method, and easiest to use!
Passcodes

Generate bypass codes with Duo’s administrative interface or API - no internet or data connection required. Single, event or time-based codes can also be generated for temporary contractors that may only need one-time or limited access.

To ensure security, codes expire after being used the allowed number of times or after 12 hours.
For users without Internet connectivity, authenticate easily with Duo Security’s SMS passcode method. After completing primary authentication, Duo’s service sends you a one-time passcode via SMS on your phone.

Simply type in the passcode and press enter to authenticate and access your accounts. Users can have new passcodes sent to their phones at any time.
Telephony

For users without a smartphone, authenticate easily with Duo Security’s phone callback method. Call any phone registered to a user and let them authenticate by pressing a key.

Use smartphones, mobile phones or landlines to authenticate.
Enrollment Screenshots
Enrollment in the Duo Mobile App

- Choosing and Changing a Secure UMICH Password
- What Is My UMICH Password?
- What Is a Level-2 Password?
- Password Security Checklist
- Two-Factor Management
Enrollment in the Duo Mobile App

Protect Your University of Michigan Test Account

Two-factor authentication enhances the security of your account by using a secondary device to verify your identity. This prevents anyone but you from accessing your account, even if they know your password.

This process will help you set up your account with this added layer of security.

Start setup
Enrollment in the Duo Mobile App

What type of device are you adding?
- Mobile phone RECOMMENDED
- Tablet (iPad, Nexus 7, etc.)
- Landline

[What is this?] [Add a new device] [My Settings & Devices] [Need help?]

Powered by Duo Security
Enrollment in the Duo Mobile App

[Image of the Duo Mobile App enrollment screen]

- Enter your phone number
- United States
- +1 734-555-1212
- (734) 555-1212 This is the correct number.

What is this? Need help?

Powered by Duo Security
Enrollment in the Duo Mobile App

What type of phone is 734-555-1212?

- IPhone
- Android
- BlackBerry
- Windows Phone
- Other (and cell phones)

What is this? Need help?
Powered by Duo Security

Back Continue
Enrollment in the Duo Mobile App

1. Launch the Google Play Store app and search for "Duo Mobile".
2. Tap "Install" to install the app.

What is this? Need help?

Powered by Duo Security

Back I have Duo Mobile installed
Enrollment in the Duo Mobile App
Enrollment in the Duo Mobile App

Activate Duo Mobile for Android

1. Open Duo Mobile.
2. Tap the "+" button.
3. Scan this barcode.

Or, have an activation link emailed to you instead.

What is this? Need help?

Powered by Duo Security

Back  Continue
Enrollment in the Duo Mobile App

My Settings & Devices

My default device is:

- Android (XXX-XXX-6845)

Automatically send me a:

- Duo Push
- Phone Call

This device can automatically receive a request when you need to log in with two-factor authentication.

My Devices

Device successfully added!
Authentication with the Duo Mobile App

Authentication Required

Please enter your Login ID (uniqname or Friend ID) and password to continue.

Need a Login ID?

Create a Login ID now

Important Security Tips
Authentication with the Duo Mobile App

Choose an authentication method

- Duo Push (Used automatically)
- Call Me
- Enter a Passcode

What is this?  Add a new device  My Settings & Devices  Need help?

Powered by Duo Security
Authentication with the Duo Mobile App