MFA/SSO Update 2021
(... and what Neil lied about last year)

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Agenda

• What is MFA?
• Lie #1: Pistol Pete (NMSU Aggie) hacked Lucy Lobo’s account
• Lie #2: Azure MFA will become THE MFA provider UNM
  • This virtually eliminates the $10 per day telephony charge with Duo
• Lie #3: Azure MFA eliminates the provisioning delay
• Lie #4: We will enforce MFA only if it is truly required (conditionally)
• Lie #5: By the end of 2020, we will apply Azure MFA to O365
• Interesting facts about the Spring 2021 MFA rollout
• Applications added to SSO (Azure AD) in 2020-2021
Special shout out to the UNM IT Service Desk and UNM Learn Service Desk

- We could not have rolled out MFA without your dedication and support
- Many, many thanks for your time, patience, and assistance on the front lines
What is MFA?

• Enhanced form of authentication, based on “factors” like “something you know” (your password) and “something you have” (your mobile device, landline phone, etc.)

• If you’ve seen these login screens, you’ve seen MFA in action:
A “cheesy” metaphor

- Similarly, to the “Swiss Cheese Model of Pandemic Defense”, here is the “Swiss Cheese Model of Account Compromise Defense”:

- 73 percent of passwords are duplicates!
- MFA is 99.9% effective at preventing account compromise
Lie #1: Pistol Pete (NMSU Aggie) hacked Lucy Lobo’s account

• This was fake news – apologies to our friends and colleagues down south
Lie #2: Azure MFA will become THE MFA provider UNM

- It “sort of did” – for everyone besides Information Technologies employees
- Some privileged services (accessed primarily by IT employees) still use Duo for MFA
- All web applications that use Azure AD are now secured by Azure MFA (Learn, Office 365/Lobomail, Loboweb, Zoom, TouchNet, Adobe, etc.)
Side Note: What do I mean by Azure AD?

- In short, these login pages:

- Anywhere you see these login pages, you know the application is using Azure AD to authenticate.
Lie #3: Azure MFA eliminates the provisioning delay

- Also “sort of” true – the provisioning delay for UNM users is now 4 hours or less

- BUT the provisioning delay for some HSC users can still be 24 hours

- Beats 48 hours, but still not perfect
Lie #4: We will enforce MFA only if it is truly required (conditionally)

- Complete course change

- Azure MFA is required across the board for all applications in Azure AD and there are no conditions/exceptions

- Cost/licensing decision – “per user” Azure MFA is included with all Microsoft licenses we own, whereas “conditional MFA” required an additional purchase (cost) of ~$90K/year
**Lie #5:** By the end of 2020, we will apply Azure MFA to O365

- This did not happen, as evidenced by the following (just in February/March 2021):
Lie #5: By the end of 2020, we will apply Azure MFA to O365

• Instead, Azure MFA was applied to Office 365 (really, all applications using Azure AD) on March 23, 2021

• Just a few months late

• Hopefully, you’ve noticed fewer fake internship, pet sitter, etc. opportunities circulating through email
Interesting facts: Duo vs. Azure MFA for Direct Deposit, Tax Forms, Benefits, etc.

- Authentications by factor: 65% Phone call, 27% Text message, 8% Other, 0% Mobile app

- Authentications by factor: 10% Phone call, 87% Text message, 3% Mobile app, 0% Other
Interesting facts: Duo vs. Azure MFA
for Direct Deposit, Tax Forms, Benefits, etc.

• Average authentication cost per day (telephony): $10
• Average authentication cost per day (telephony): $0

Projecting based on current Azure MFA usage; our Duo telephony costs would have been at least $50 per day if we did not move to Azure MFA.
Interesting facts: Duo vs. Azure MFA
for Direct Deposit, Tax Forms, Benefits, etc.

- Authentication failure rate: 10% for Phone call, 20% for Text message, 0% for Mobile app
- Authentication failure rate: 28% for Phone call, 5% for Text message, 21% for Mobile app

![Success rate and Fail rate graphs for Duo and Azure MFA]
Interesting facts: Duo vs. Azure MFA

for Direct Deposit, Tax Forms, Benefits, etc.

- Remembered device usage rate: 7%
- Remembered device/stay signed in usage rate: 88%

MFA Completed
- Remember device for 14 days
- Don't ask again for 365 days
Applications added to SSO (Azure AD) in 2020-2021

- Adobe (thanks Max)
- AppTree (thanks Desiree)
- Brand Asset (thanks Ethan)
- Copy Center (thanks Jennie)
- Event Calendar (thanks Matt)
- Famis (thanks Desiree)
- Handshake (thanks Keith)
- Loboweb Direct Deposit, Tax Forms, Benefits (thanks Bryant)
- Office of Sponsored Projects proposal review appointment (thanks Wisam)
- Target X (thanks Lachlan)
- TouchNet (thanks Daniel)
- UNM Benefits open enrollment (thanks John)
- UNM Cohort Analytics (thanks Wisam)
- UNM COVID-19 Reporting (thanks Wisam)
- UNM Jobs (thanks Gabe)
- UNM Learn (thanks Jon)
- Xfinity on Campus (thanks John)
- Zoom (thanks Max)
Thank You!

Questions?
(find me on Teams or via email)