Passkey authentication - The result

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Introduction
Zero Trust Architecture memorandum

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MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

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SUBJECT: Moving the U.S. Government Toward Zero Trust Cybersecurity Principles

This memorandum sets forth a Federal zero trust architecture (ZTA) strategy, requiring agencies to meet specific cybersecurity standards and objectives by the end of Fiscal Year (FY) 2024 in order to reinforce the Government’s defenses against increasingly sophisticated and persistent threat campaigns. Those campaigns target Federal technology infrastructure, threatening public safety and privacy, damaging the American economy, and weakening trust in Government.
Why FIDO2/WebAuthn?

- Passwordless
- Enables strong authentication
- Reduces the risk of a data breach
- Reduces phishing threads
Design

- FIDO2/WebAuthn
- SSSD
- LDAP server (i.e. IPA)
- Kerberos
More details

- **FOSDEM** - Enabling FIDO2/WebAuthn support for remotely managed users
- **DevConf** - FIDO2 authentication for centrally managed users
Demo
Demo(gorgon)
Conclusion
Availability

- sssd-2.9.4
- FreeIPA 4.11.0
- Fedora 39
- CentOS Stream 9
Reference links

- Design pages
  - SSSD design page for local passkey authentication
  - SSSD design page for Kerberos integration
  - FreeIPA design page for passkey authentication
- Testing
  - Fedora magazine article (chinese version)
  - sssd-ci-containers (make up-passkey)
Thank you!