

Passkey authentication - The result

FOSDEM'24

Iker Pedrosa
Senior Software Engineer



Introduction

Zero Trust Architecture memorandum



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

January 26, 2022

M-22-09

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Shalanda D. Young
Acting Director

A handwritten signature in black ink that reads "Shalanda D. Young". The signature is written in a cursive style.

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



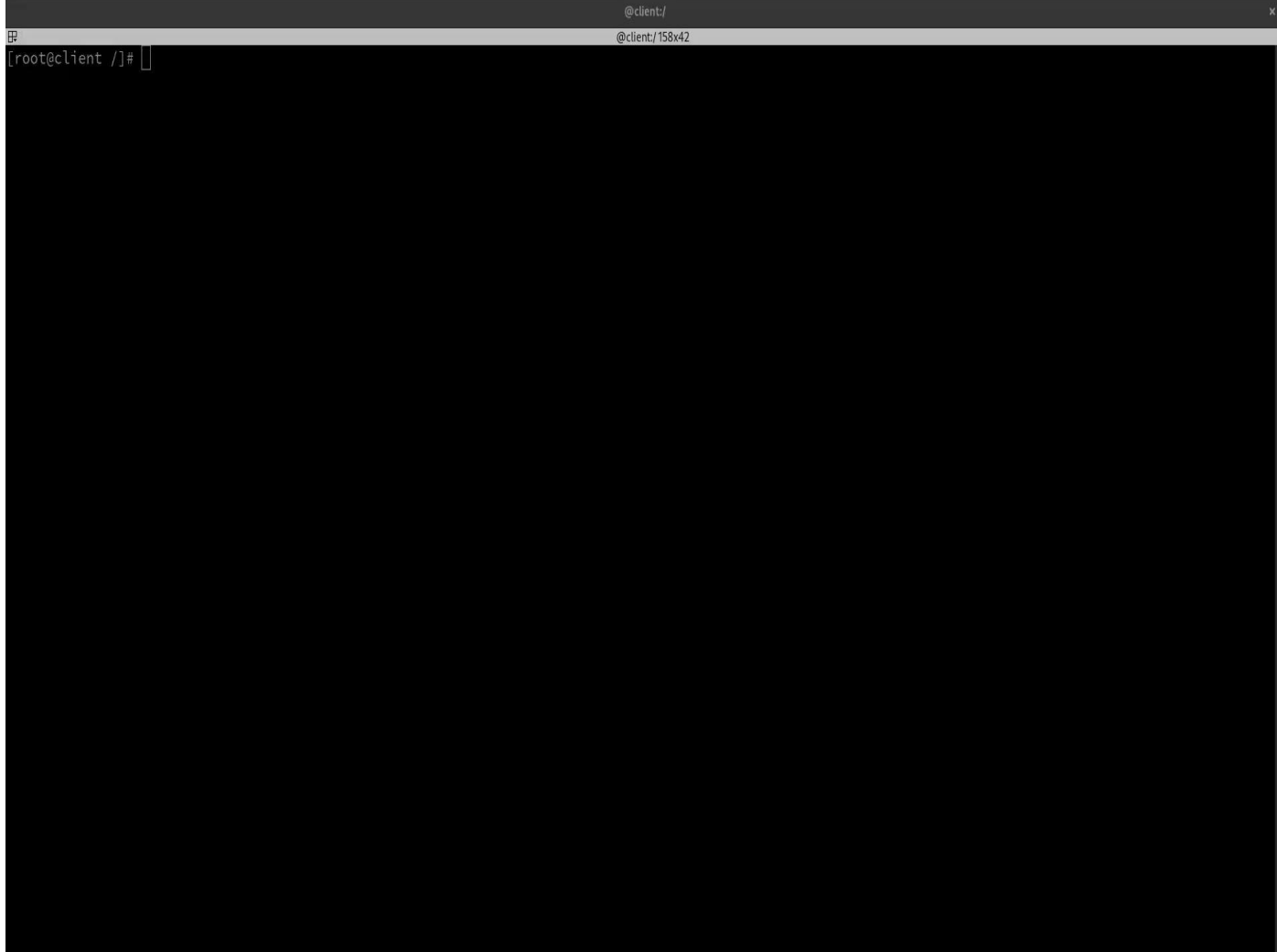
- FIDO2/WebAuthn
- SSSD
- LDAP server (i.e. IPA)
- Kerberos

More details

- [FOSDEM - Enabling FIDO2/WebAuthn support for remotely managed users](#)
- [DevConf - FIDO2 authentication for centrally managed users](#)

Demo

Demo(gorgon)

A terminal window with a dark background. The title bar at the top shows "@client/" on the left and "@client/158x42" on the right. The terminal content shows a root shell prompt "[root@client ~]#" followed by a cursor. The rest of the terminal is empty.

```
@client/ @client/158x42 [root@client ~]#
```


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!