

Password Managers

A Higher Education Information Security Council (HEISC) Resource

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What Is a Password Manager Tool?

A password manager tool is software that helps users encrypt, store, and manage passwords. The tool also helps users create secure passwords and automatically log in to websites.

Who Might Use a Password Manager Tool, and Why?

Users should employ unique passwords for each website or system to help minimize the impact from the breach of one website or system; however, most users cannot remember a separate password for many sites and tend to reuse passwords or write them on a sticky note attached to their computer. Additionally, organizations may have passwords that need to be shared across teams and want a secure method to do so. Password manager tools allow users and teams to more securely manage many distinct passwords and automatically log them in to websites.

The Benefits of Using a Password Manager Tool

Password manager tools enable users to create and securely store unique passwords for websites, applications, and other systems without having to memorize or write them down.

Risks to Consider When Using a Password Manager Tool

Special care should be taken to secure the password tool, as it will grant access to all passwords. The “master” password that grants access to the tool should be very strong and unique, and multifactor authentication should be used if possible. Almost all modern commercial password managers allow users to implement some form of multifactor authentication. You will also need to decide whether you want your password management tool to store passwords locally or in the cloud.

Other Considerations When Thinking About Using a Password Manager

- Does it create strong passwords?
- Does it have multifactor authentication?
- Does it help you assess security across multiple accounts?
- Does it offer you a way to securely share passwords on a team?
- Can you use it across devices?
- Where is data stored and how is it encrypted?

List of Password Manager Technologies and Tools

Below is a list of popular password manager tools for consideration. Depending on financial and/or personnel resources, an institution might select a commercial service or an open-source solution (costs will vary). In addition, some vendors provide enterprise versions, which allow centralized control of all accounts within the organization. Each institution should evaluate which tool will work best for its unique purposes. Neither EDUCAUSE nor HEISC recommends the use of a particular tool; institutions should use these tools at their own risk.

- [1Password](#)
- [Dashlane](#)
- [EnPass](#)
- [KeePass](#) and [KeePassX](#) (open source)
- [Keeper](#)
- [LastPass](#)
- [RoboForm](#)
- [Sticky Password](#)
- [True Key](#)
- [Zoho Vault](#)

Additional Resources

- [Carnegie Mellon University—Information Security Office](#)
- [EDUCAUSE Library—Password Policies](#)
- [Harvard University Information Security](#)
- [Otis College of Art and Design—Password Manager](#)
- [Pepperdine University—Password Managers](#)
- [Stanford University Information Security](#)
- [University of California, Irvine—Password Manager Tools](#)

Sustain and Improve Your Information Security Program

The Higher Education Information Security Council (HEISC) supports higher education institutions as they improve information security governance, compliance, data protection, and privacy programs. The HEISC *Information Security Guide*, created *by practitioners for practitioners*, features toolkits, case studies, effective practices, and recommendations to help jumpstart campus information security initiatives. Don't reinvent the wheel—get the guide at educause.edu/security.

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