



University of Utah MacAdmins

Bitwarden for Apple Teams and Enterprises

Bitwarden Speakers

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Today's Agenda

- Password manager basics
- Bitwarden Architecture
- What is the best way to share passwords?
- A few Apple-specific tips
- Extra bonus – Bitwarden Send
- Q&A

Password Management Basics



Experts recommend strong and unique passwords for every website you visit



Nearly impossible to do as normal human being



Easy to do with a password manager

What makes a strong password?

Long

Complex

Random

+ unique!

Password managers make this easy



Key choices in picking your password manager

Do we operate cross-platform?

Do we operate across browsers?

Do we prefer open source solutions?

Do we need the option to self-host?

Do we need to integrate with existing systems?



Windows

.exe

Support for Windows 8, 10, and 11



macOS

Mac App Store

Support for MacOS 10.14+ and Safari 14+



Linux

.AppImage

Support for most distributions



Google Chrome



Safari



Mozilla Firefox



Vivaldi



Opera



Brave



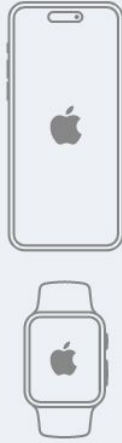
Microsoft Edge



Tor Browser



DuckDuckGo for Mac



Command line

Use the powerful Bitwarden command-line interface (CLI) to write and execute scripts on your vault.



Vaults | Bitwarden Web Vault

vault.bitwarden.com/#/vault

Vaults Send Tools Reports Organizations

US

FILTERS

Search vault

▼ All vaults

- My vault
- GO ORG
- + New organization

All items

Favorites

Trash

▼ TYPES

- Login
- Card
- Identity
- Secure note

▼ FOLDERS













- folder 1
- folder 2
- No folder

▼ COLLECTIONS

- Default Collection

Vault items

+ Add item

<input type="checkbox"/>	 Account 2	Me	⋮
<input type="checkbox"/>	 account.protonmail.com garyo-test	Me	⋮
<input type="checkbox"/>	 Account1	Me	⋮
<input type="checkbox"/>	 AMEX Credit Card *123	GO ORG	⋮
<input type="checkbox"/>	 Authenticator Seed test	GO ORG	⋮
<input type="checkbox"/>	 contentful.com gotest+1@bitwarden.com	Me	⋮
<input type="checkbox"/>	 favoritewebsite.com - Clone user@favoritewebsite.com	Me	⋮
<input type="checkbox"/>	 github.com go-test-12	Me	⋮
<input type="checkbox"/>	 go-test-12 recovery codes	Me	⋮
<input type="checkbox"/>	 Google GO test account	Me	⋮
<input type="checkbox"/>	 Jane Doe Jane Doe	Me	⋮
<input type="checkbox"/>	 Org item 1	GO ORG	⋮

Bitwarden Architecture

Bitwarden Clients and Bitwarden Cloud / Server

All Vault data end-to-end encrypted with zero knowledge

Bitwarden Clients



Mobile



Browser



Desktop



CLI



Web Vault

Bitwarden server

Cloud or self hosted

Individual Vault on account creation

Adjustable with enterprise policies



All Vault data end-to-end encrypted with zero knowledge

Bitwarden Clients



Mobile



Browser



Desktop



CLI

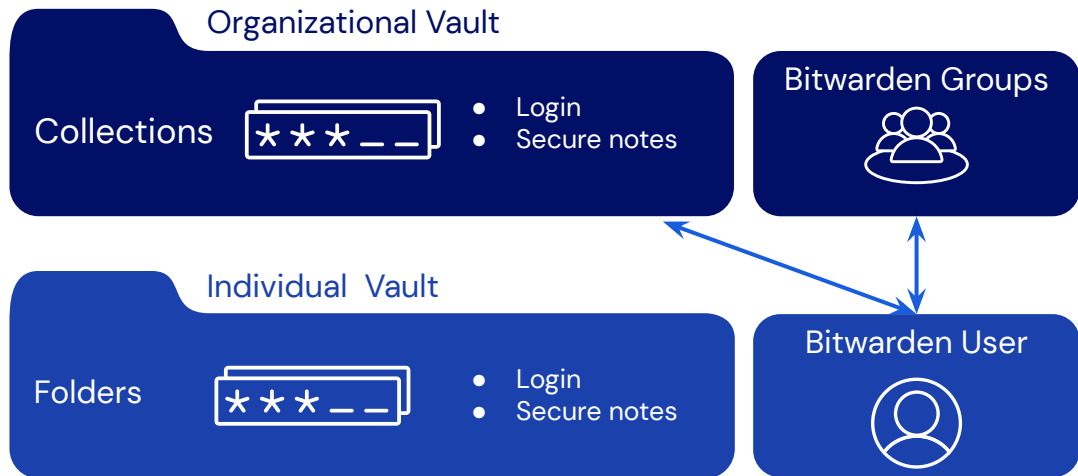


Web Vault

Bitwarden server

Cloud or self hosted

Organization Vaults, Collections, Groups



All Vault data end-to-end encrypted with zero knowledge

Bitwarden Clients



Mobile



Browser



Desktop

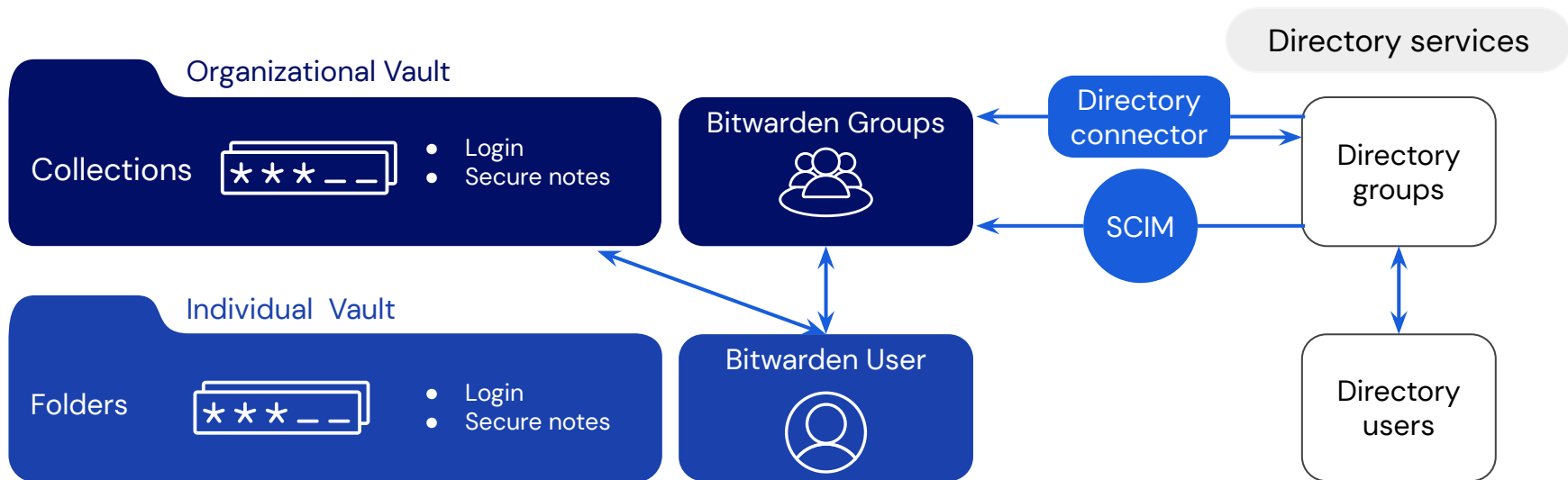


CLI



Web Vault

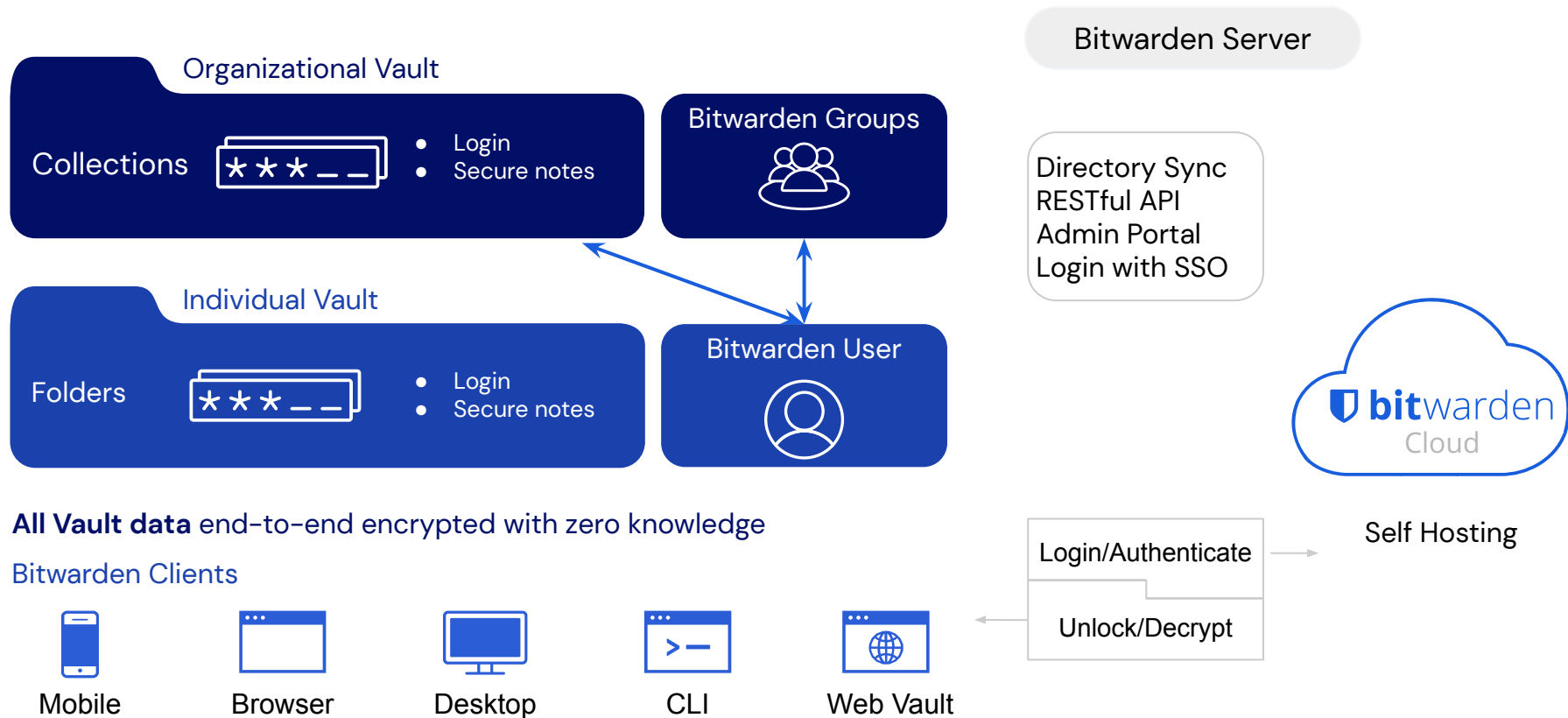
Integrating with Directory Services



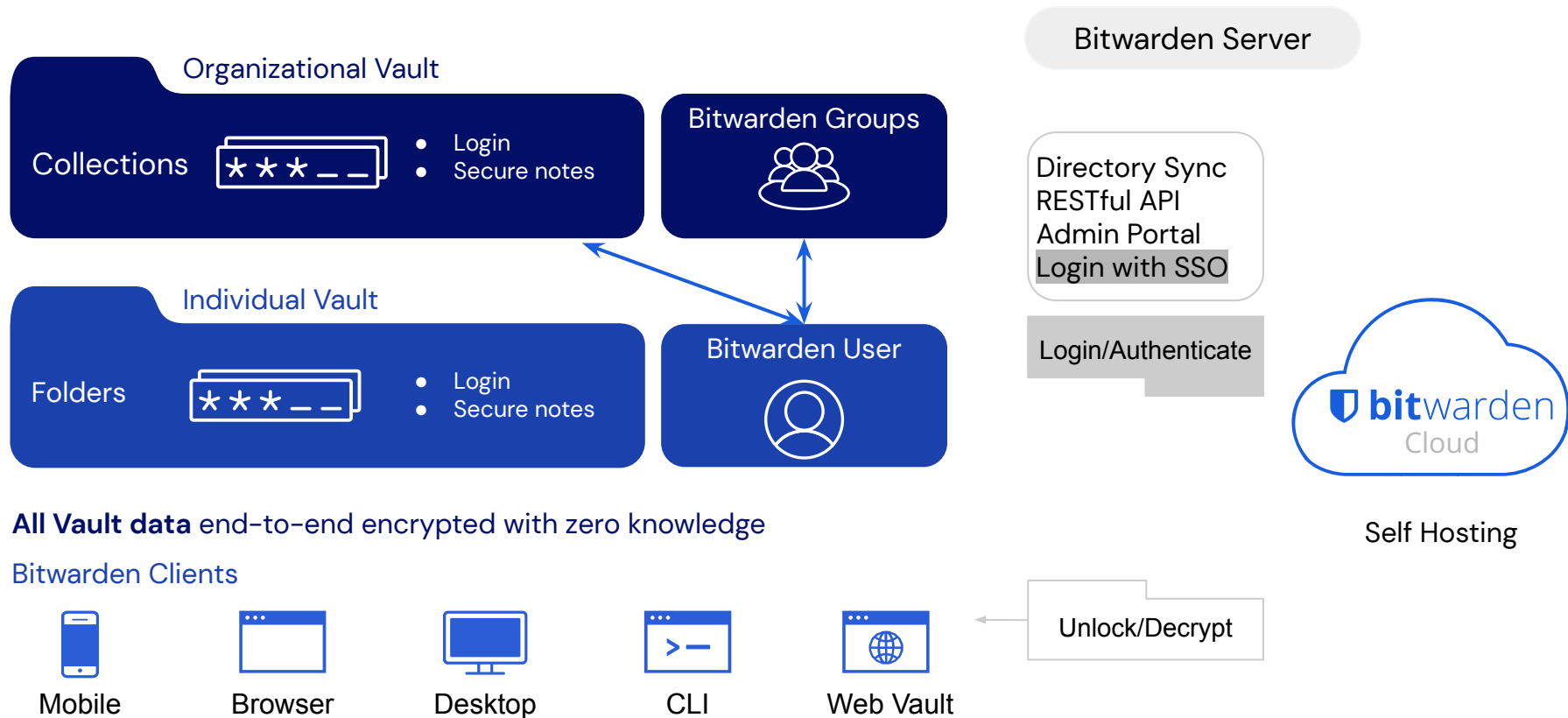
Works with:

- Active Directory
- Azure Active Directory
- G-Suite (Google)
- Okta
- OneLogin
- Any LDAP-based directory

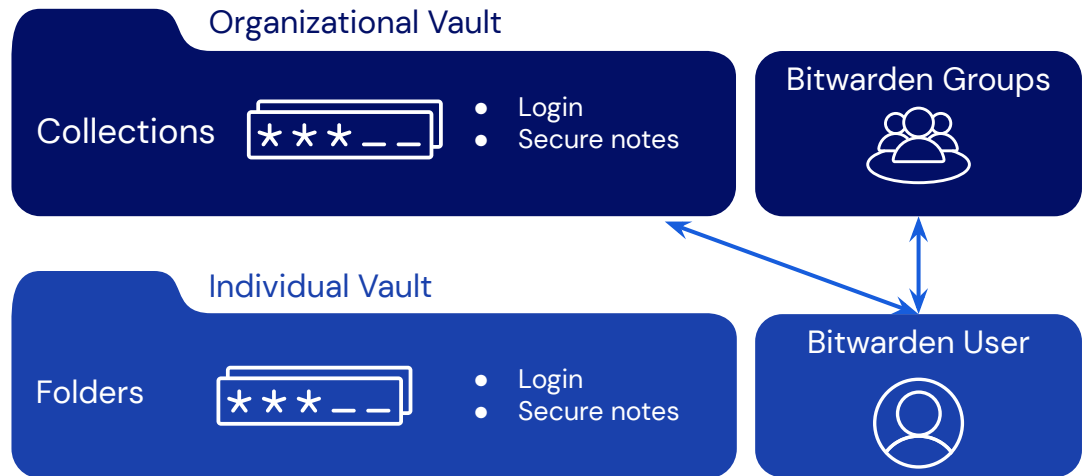
Bitwarden Client, Vault, and Server Architecture



Bitwarden Architecture – Login and Decryption



Administrative Portal for management



All Vault data end-to-end encrypted with zero knowledge

Bitwarden Clients



Mobile



Browser



Desktop



CLI



Web Vault

Admin Portal

- Manage
 - People
 - Collections
 - Groups
 - Policies
 - Single Sign-On
 - Event Logs
- Tools
 - Import Data
 - Export Vault
- Reports
 - Exposed, Reused, Weak Passwords
 - Unsecured Websites
 - Inactive 2FA
- Settings
 - Subscription, Billing

Bitwarden for Business AND Personal use

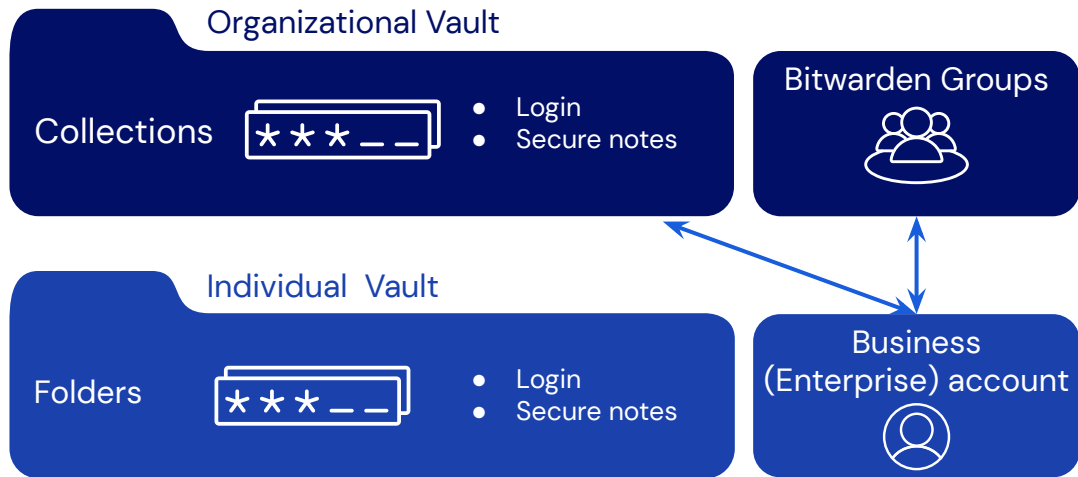
Business Account



Personal Account



Business users have Organization and Individual Vaults



All Vault data end-to-end encrypted with zero knowledge

Bitwarden Clients



Mobile



Browser



Desktop

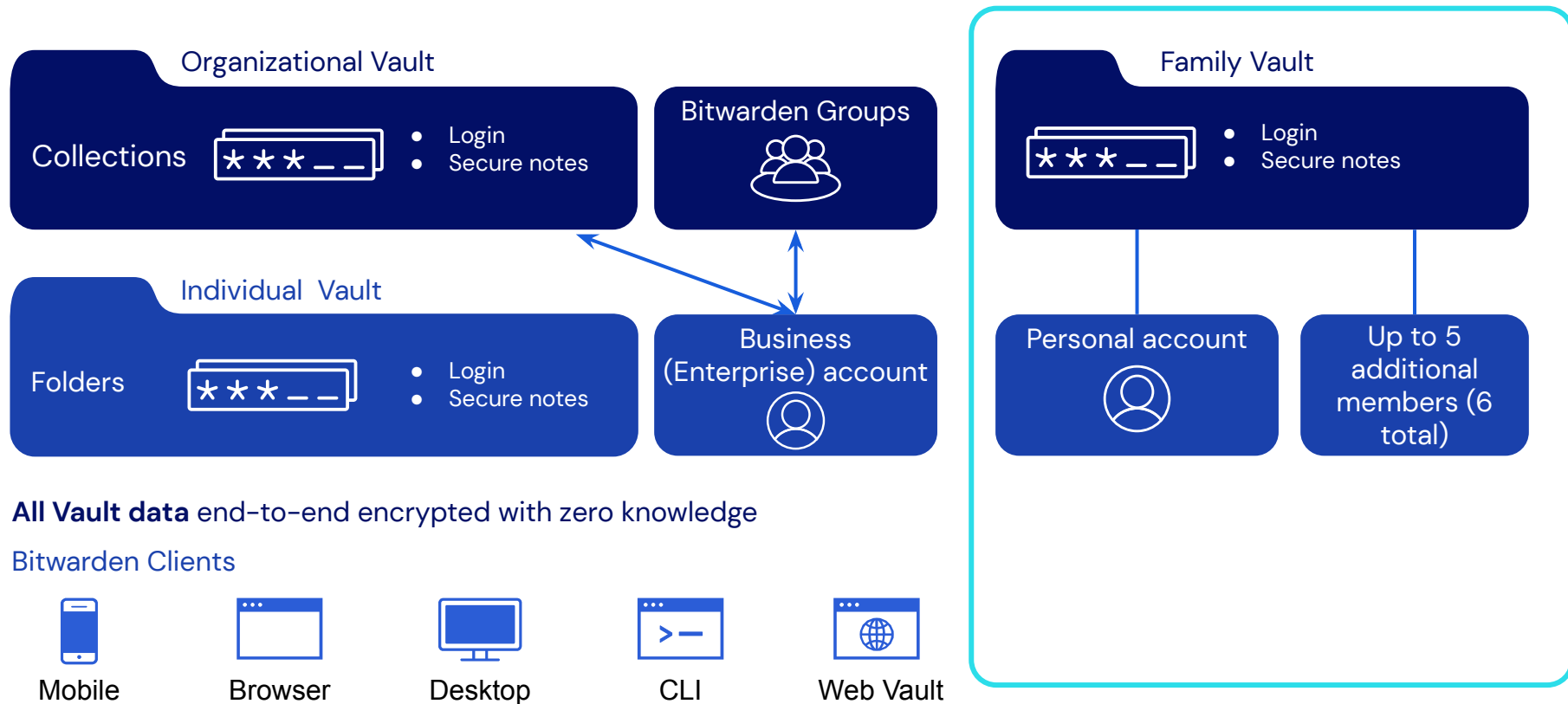


CLI

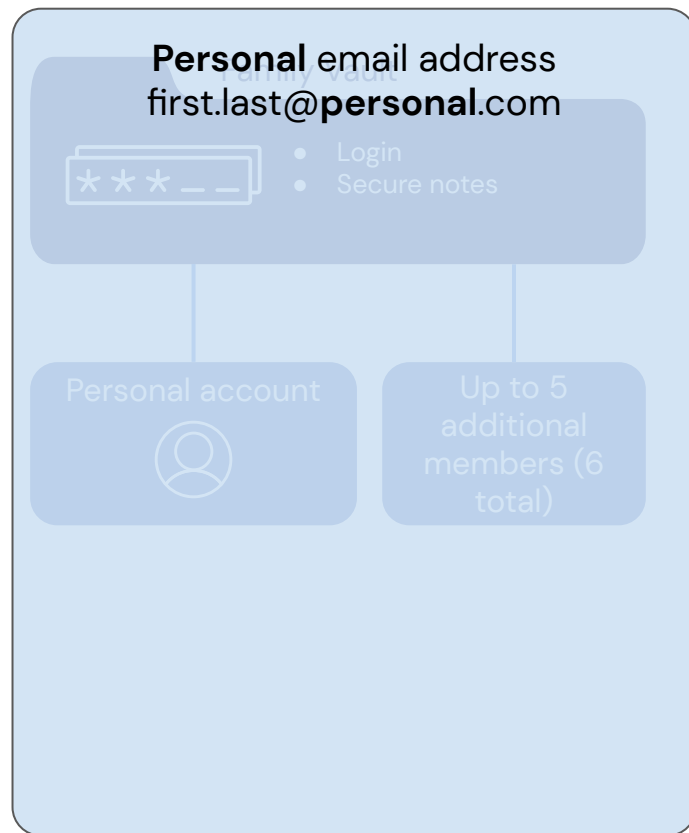
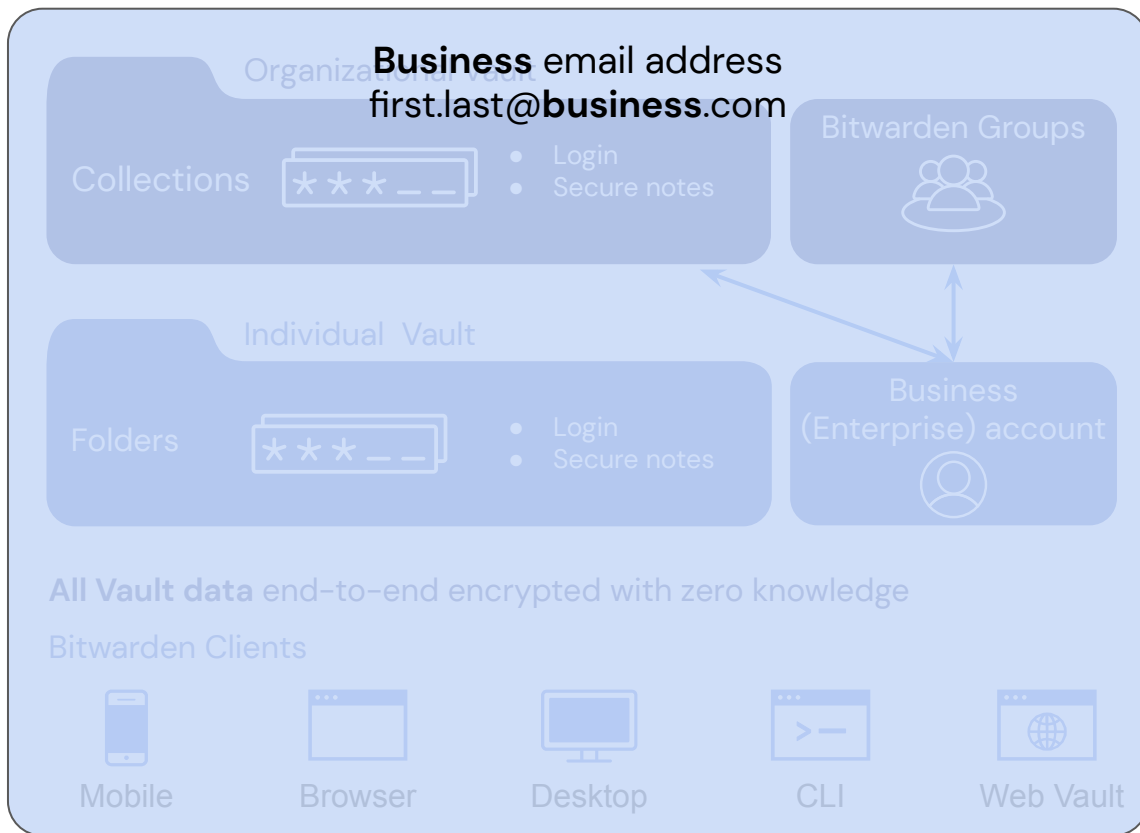


Web Vault

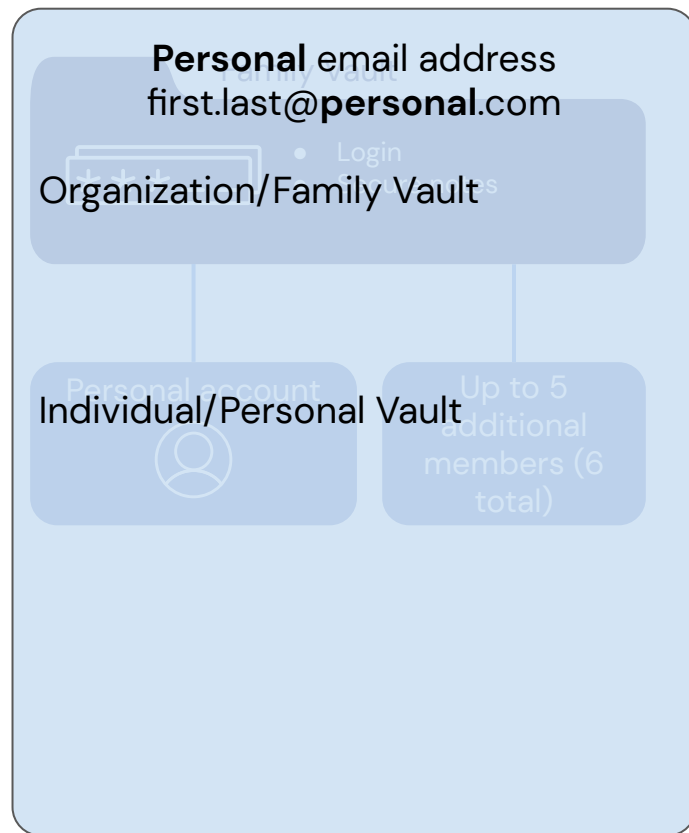
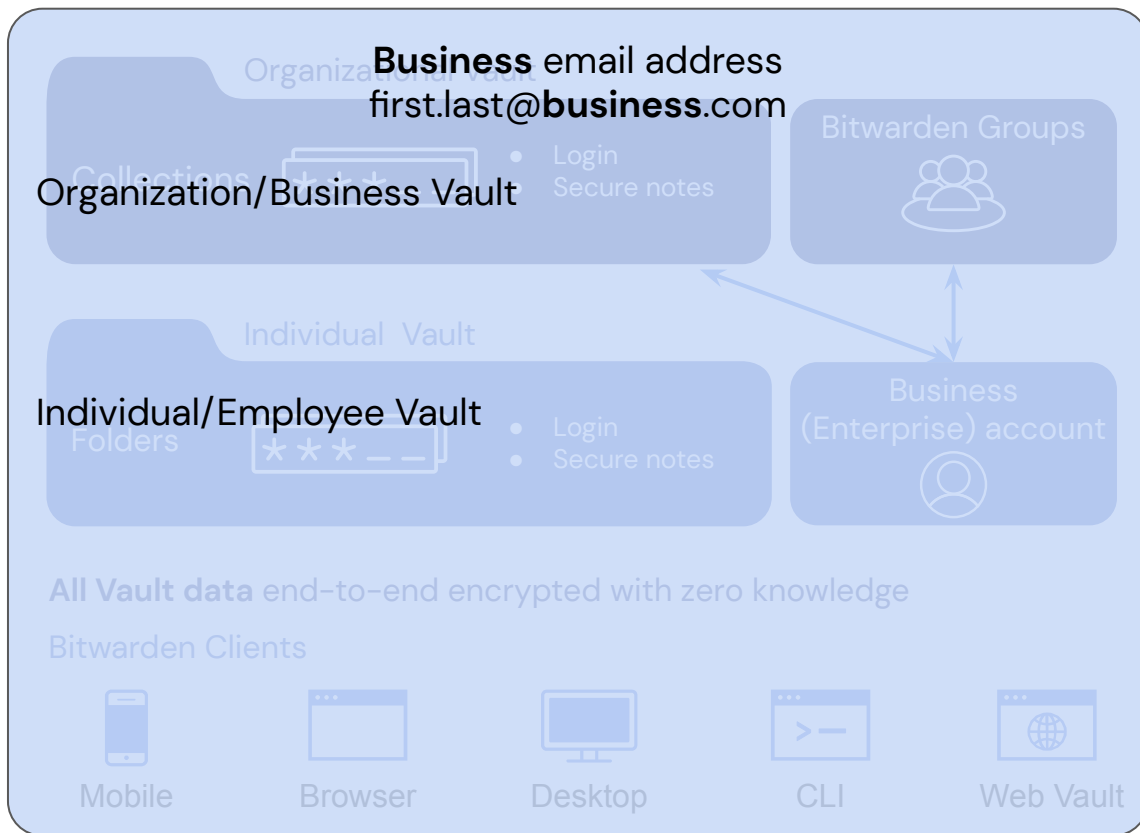
Add a Personal Account and optional Family Vault



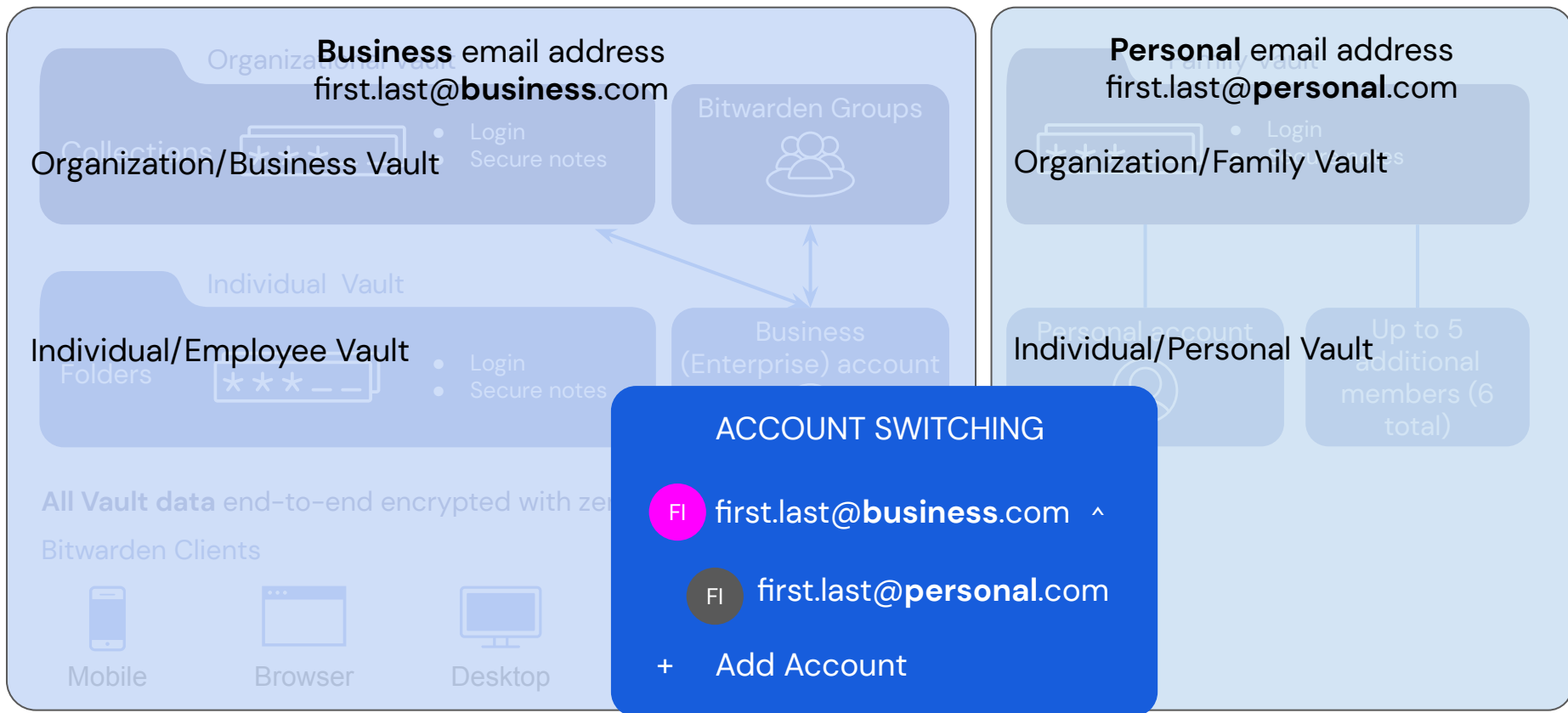
Use different emails for business and personal



Each account can have Organization and Individual Vaults

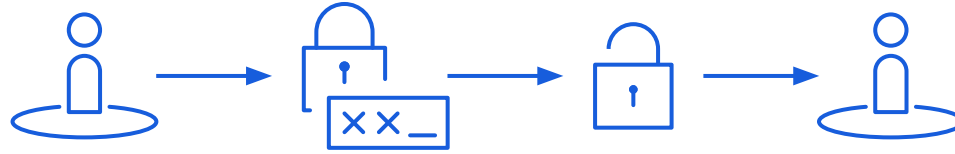


Use Account Switching to toggle between accounts

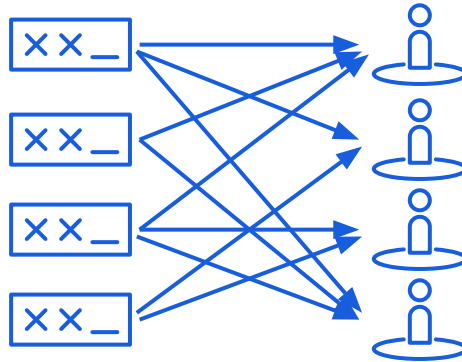


What is the best way to share
passwords?

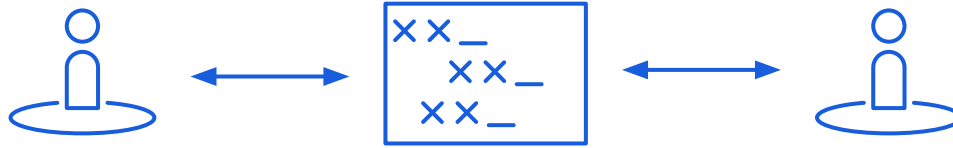
Basic approach of secure sharing



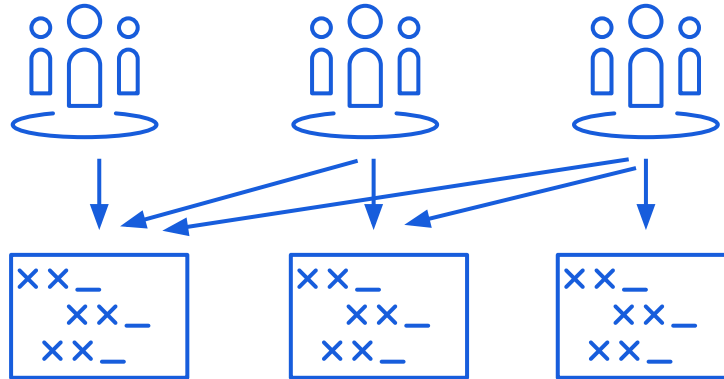
But the basic approach lacks scale



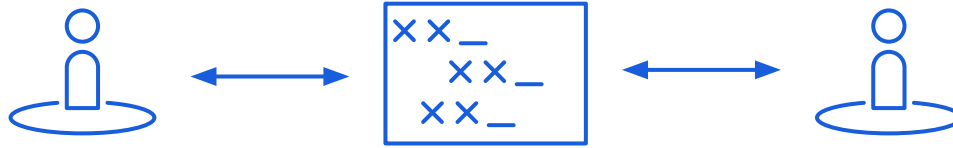
Sharing with collections



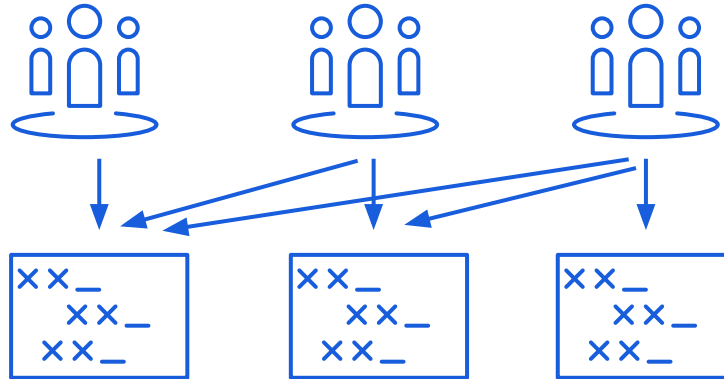
Collections scale within an organization



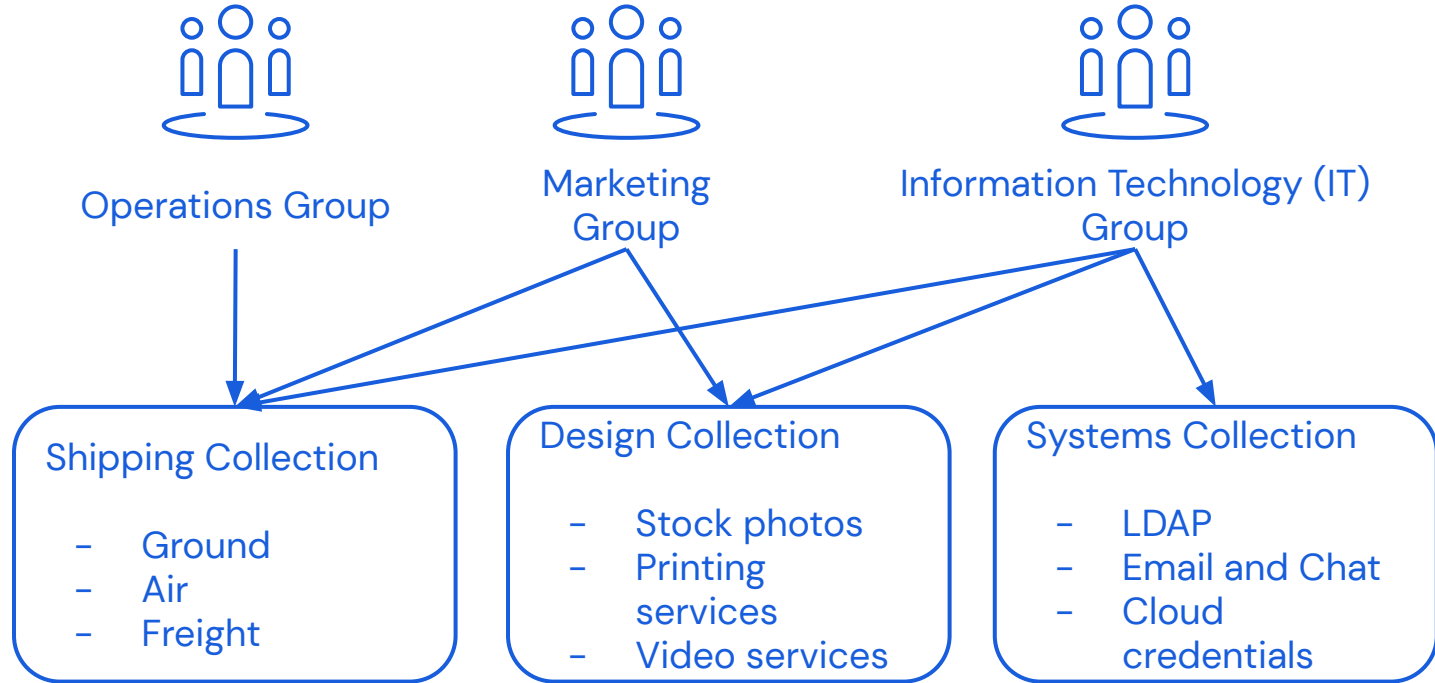
Sharing with collections



Collections scale within an organization



Secure scalable sharing with groups and collections



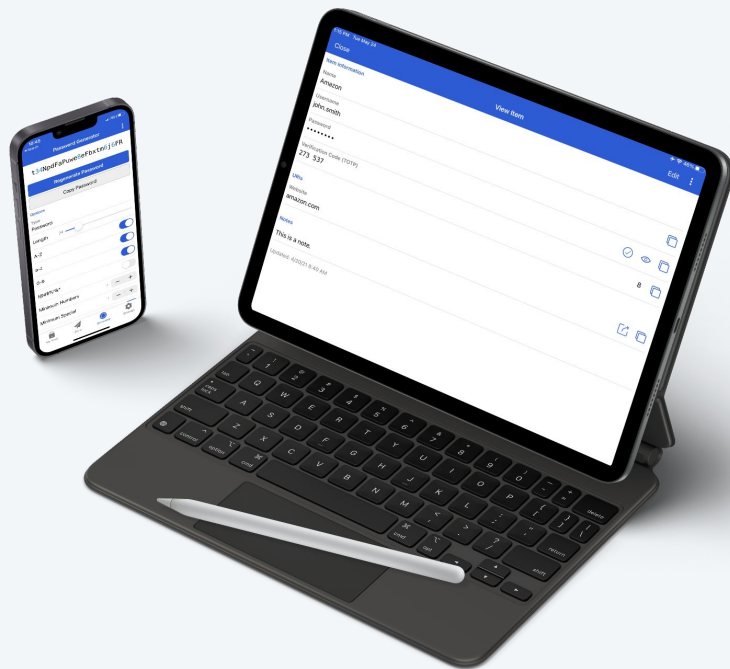
A few Apple-specific tips

Bitwarden on Apple Watch

 **bitwarden**



Set Bitwarden to the default for iOS browsers instead of Keychain



Desktop options

Start, close, and minimize to menu bar is Mac specific, and helps clean up the Dock

✓ APP SETTINGS (ALL ACCOUNTS)

☒ Show menu bar icon

Always show an icon in the menu bar.

☒ Minimize to menu bar

When minimizing the window, show an icon in the menu bar instead.

☒ Close to menu bar

When closing the window, show an icon in the menu bar instead.

☒ Start to menu bar

When the application is first started, only show an icon in the menu bar.

☒ Start automatically on login

Start the Bitwarden desktop application automatically on login.

☐ Always show in the Dock

Show the Bitwarden icon in the Dock even when minimized to the menu bar.

☒ Allow browser integration

Used for biometrics in browser.

☒ Require verification for browser integration

Add an additional layer of security by requiring fingerprint phrase confirmation when establishing a link between your desktop and browser. This requires user action and verification each time a connection is created.

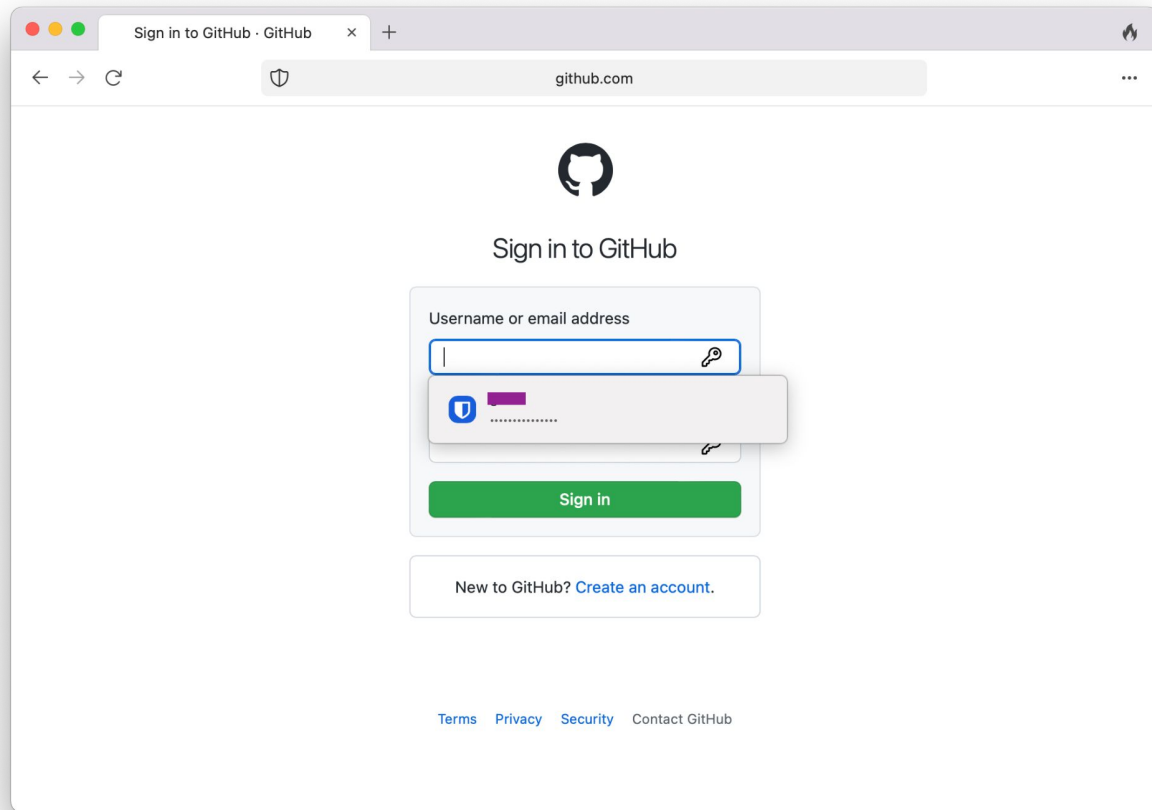
☒ Allow DuckDuckGo browser integration

Use your Bitwarden vault when browsing with DuckDuckGo.

Desktop Application can remain in
locked state for browser/biometrics

DuckDuckGo Browser

Bitwarden is the first password manager to launch with the new DuckDuckGo browser (beta for Mac)



Keyboard Shortcuts!



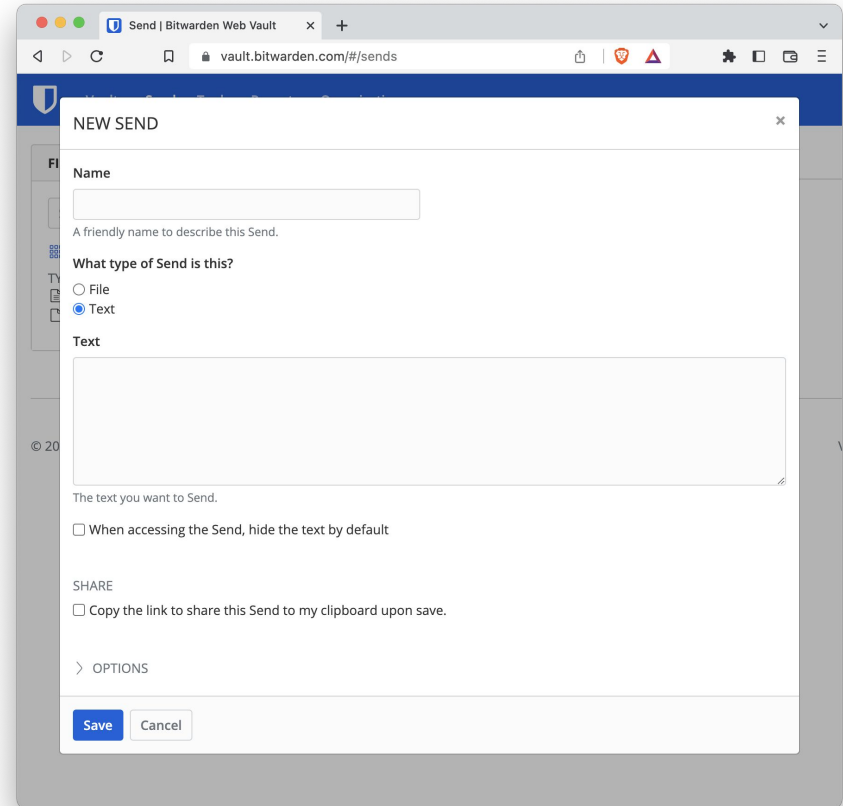
Extra bonus – Bitwarden Send



Bitwarden Send

End-to-end encrypted sharing with anyone!

Transmit text or files in a snap!



The screenshot shows a web browser window with the Bitwarden Send interface. A modal dialog titled "NEW SEND" is open. It contains the following fields and options:

- Name:** A text input field with a placeholder "A friendly name to describe this Send."
- What type of Send is this?:** Two radio button options: "File" and "Text". The "Text" option is selected.
- Text:** A large text area with a placeholder "The text you want to Send."
- ☐ When accessing the Send, hide the text by default.
- SHARE:** ☐ Copy the link to share this Send to my clipboard upon save.
- OPTIONS:** A section header with a right-pointing chevron.
- Buttons:** "Save" (blue) and "Cancel" (white) buttons at the bottom.

Thank you!

Q&A





bitwarden