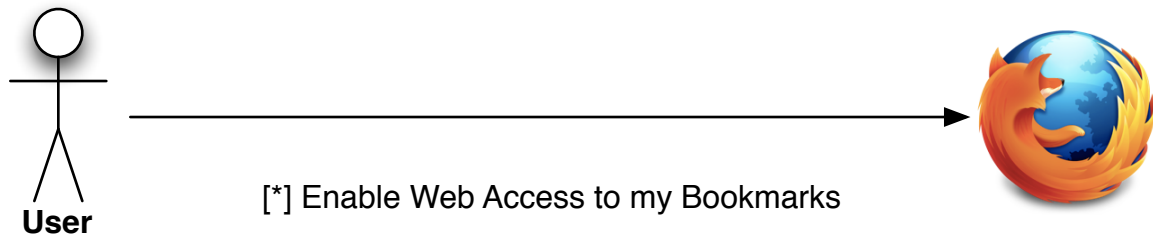# Crypto Proxy

Enable Web Access to Bookmarks
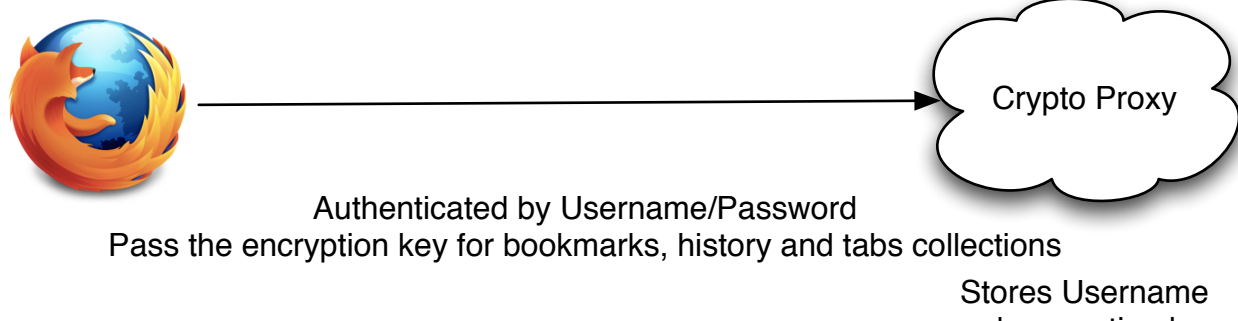
1. User Enables "Web Access" in Firefox's Sync Preferences

User ————————————————→

[*] Enable Web Access to my Bookmarks

2. Firefox changes the key for the bookmarks, history and tabs collections

————————————————→ Sync Service

Replace Sync Data
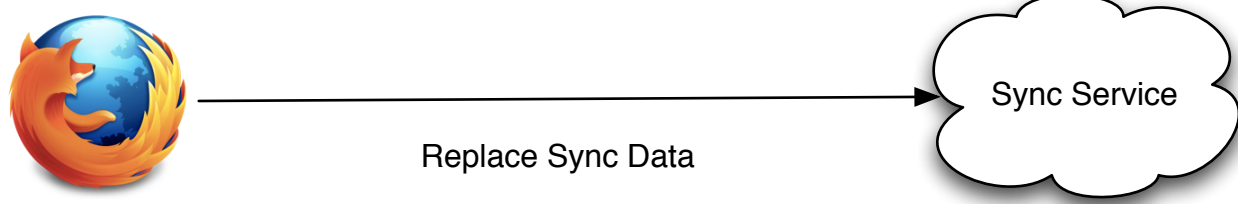
3. Firefox creates an account on the Crypto Proxy

————————————————→ Crypto Proxy

Authenticated by Username/Password
Pass the encryption key for bookmarks, history and tabs collections

Stores Username
and encryption key

4. Crypto Proxy returns an access token for the account
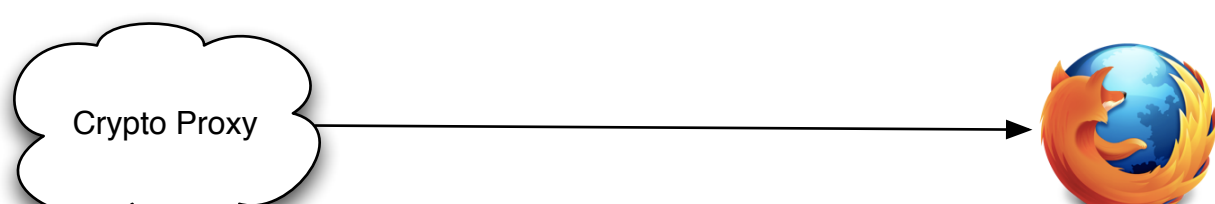
Crypto Proxy ————————————————→

5. Firefox notifies Firefox Home about the account creation

————————————————→ Firefox Home

Authenticated by Username/Password
Pass the crypto proxy access token

Stores Username
and Access Token
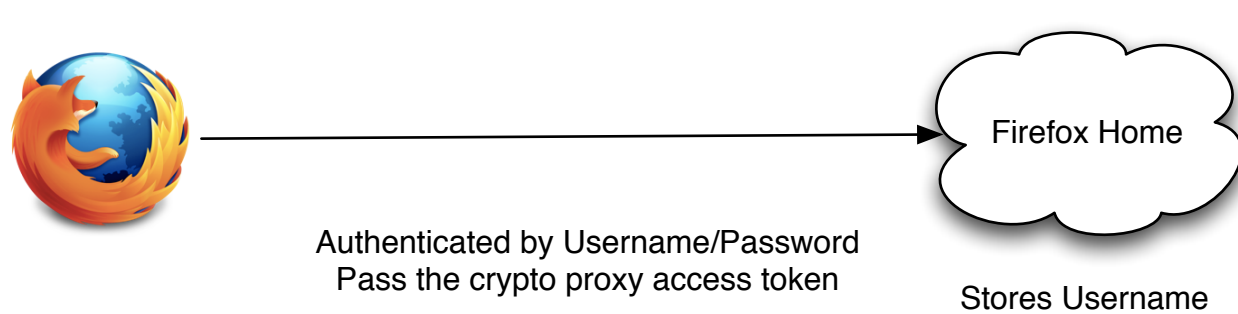
Syncing

1. Firefox Home makes standard Sync Service API calls to the Crypto Proxy

Firefox Home ————————————————→ Crypto Proxy

Sync API Call

Authenticated by Username and
Access Token
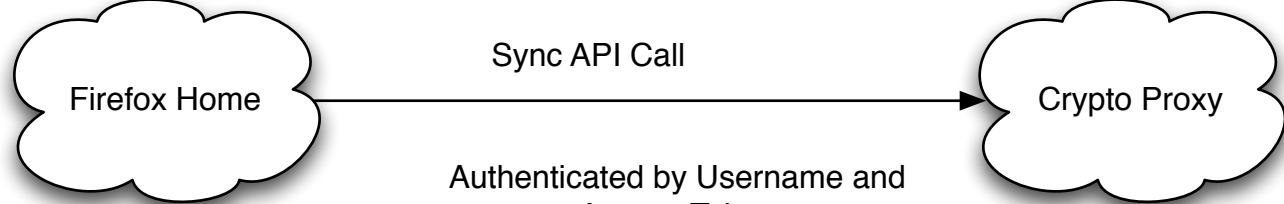
2. Crypto Proxy calls the Sync Service

Crypto Proxy ————————————————→ Sync Service

(Same) Sync API Call

Authenticated by Username
and ??? (Cannot be basic auth)
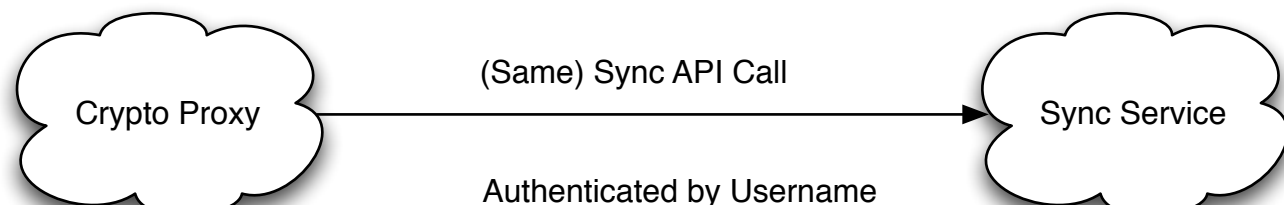
3. Sync Service returns Encrypted sync data back to the Crypto Proxy

Sync Service ————————————————→ Crypto Proxy

Sends back standard encrypted
Sync Service responses

4. Crypto Proxy decrypts the records and returns plain data to Firefox Home

Crypto Proxy ————————————————→ Firefox Home

Sends back standard encrypted
Sync Service responses
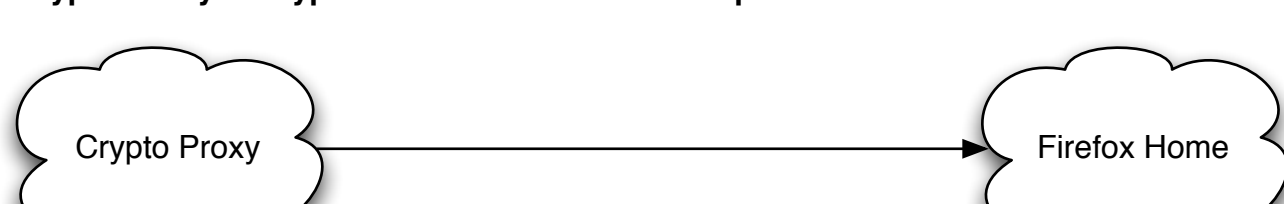
Disable Web Access To Bookmarks

1. User Disabled "Web Access" in Firefox's Sync Preferences

User ————————————————→

[ ] Enable Web Access to my Bookmarks

2. Firefox tells Firefox Home to close the account

————————————————→ Firefox Home

Deletes all user data
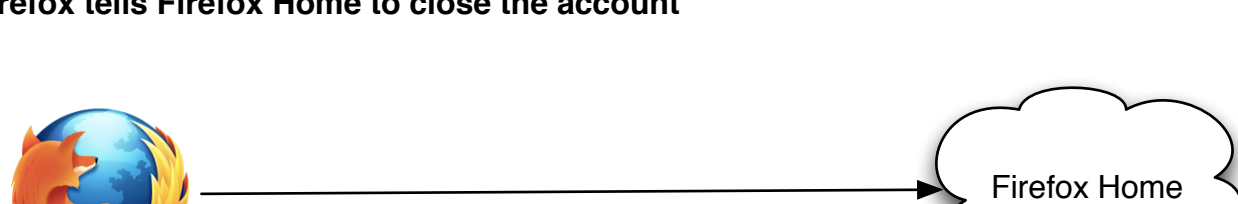
3. Firefox tells Crypto Proxy to close the account

————————————————→ Crypto Proxy

Deletes all user data