



Cloudflare Access

Transparent Authentication for Web Applications

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Introduction

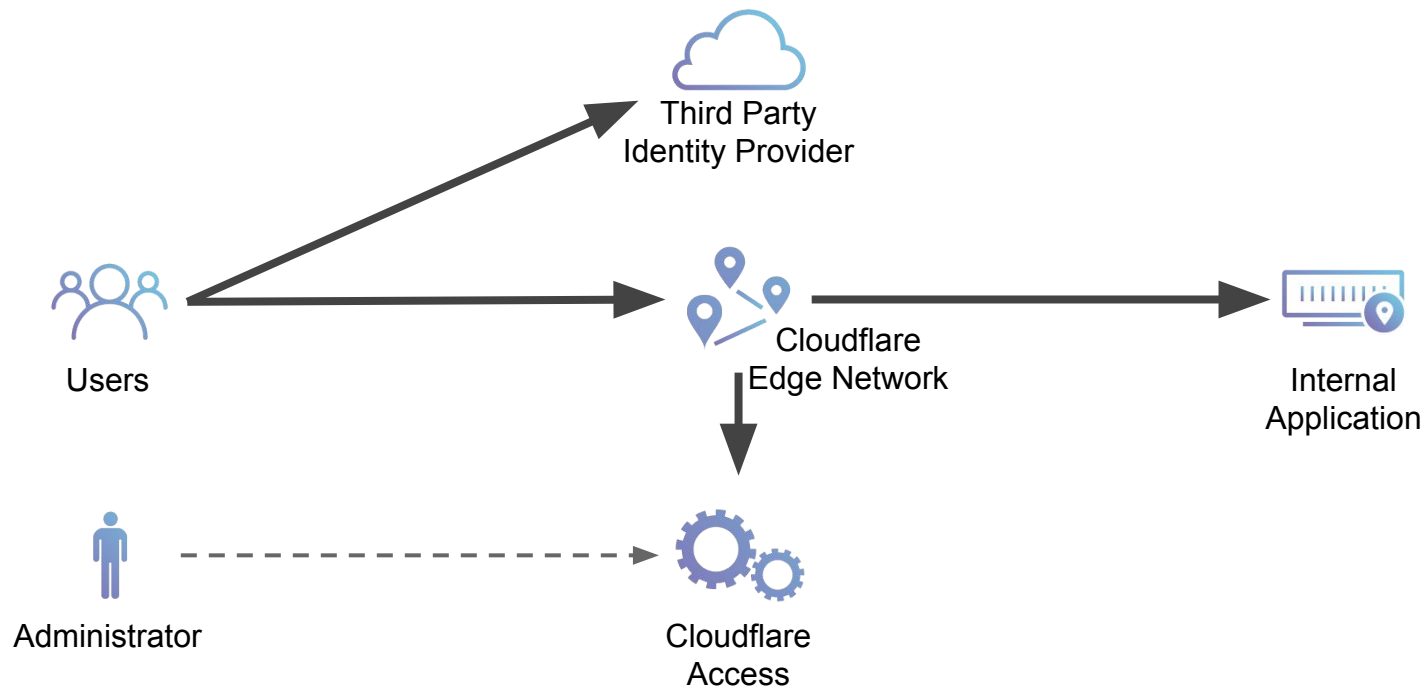
- As companies move their applications to the cloud and BYOD increases, traditional VPNs fail
- Companies want their internal web applications to be available over the open internet
- Each internal application implements it's own authentication and access controls
- It is non-trivial to integrate internal applications into company identity infrastructure

Cloudflare Access

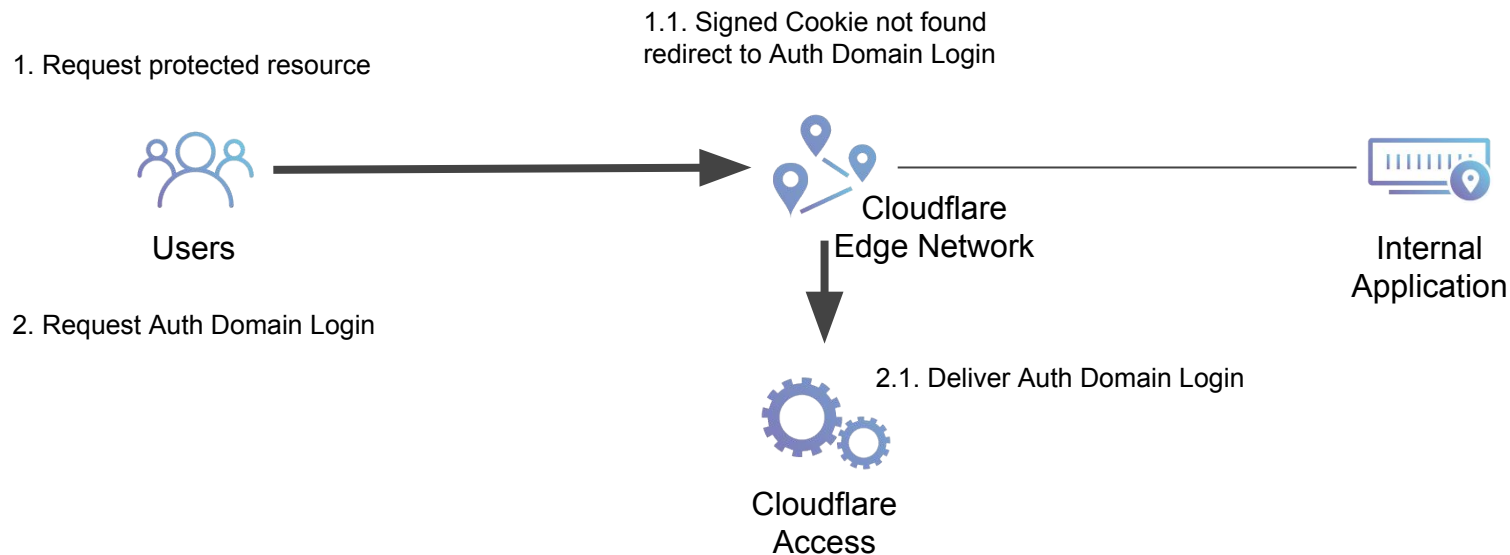
- A secure authenticated gateway in the cloud
- Protects all internal web applications
- Allows employees to use single sign on to access all of their company's resources

Login once via the web and navigate seamlessly across all internal web sites from any device

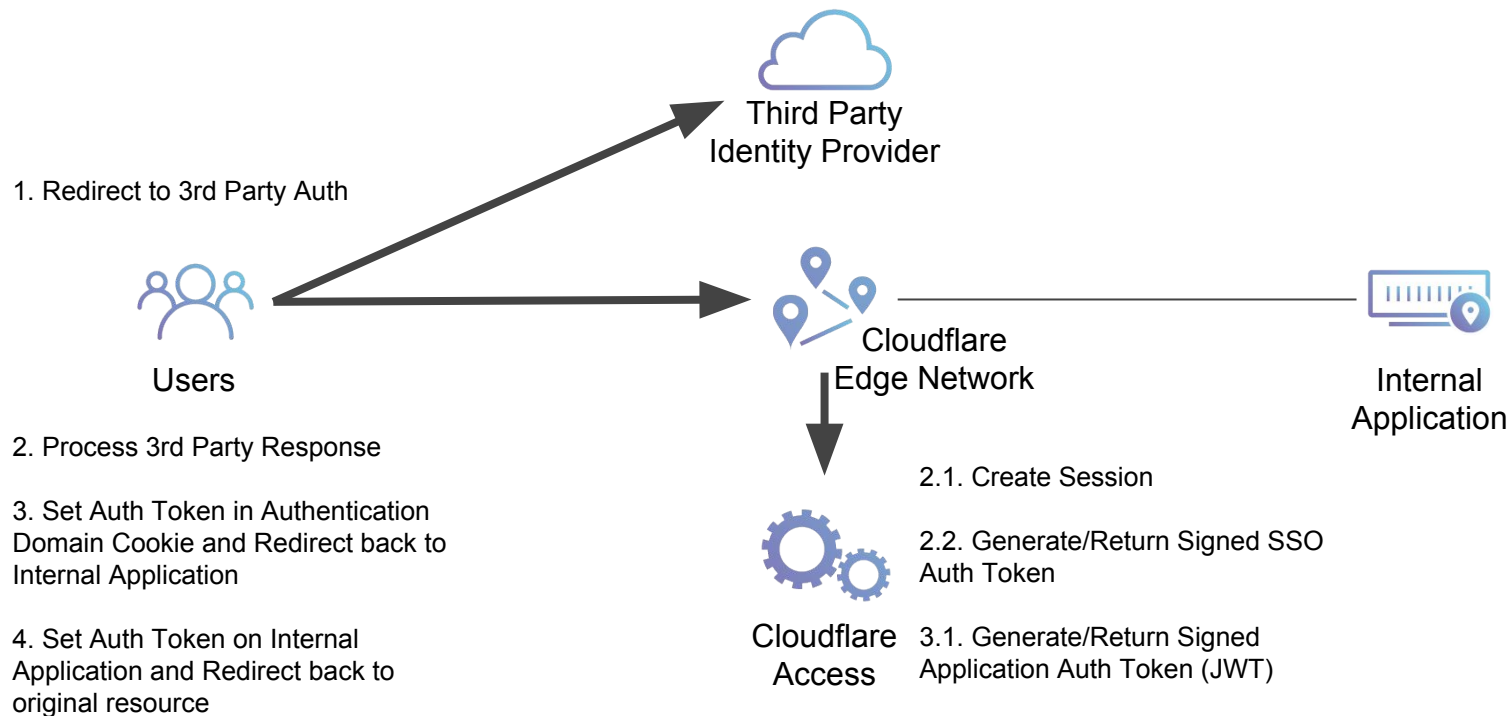
System Architecture



Initial Resource Request



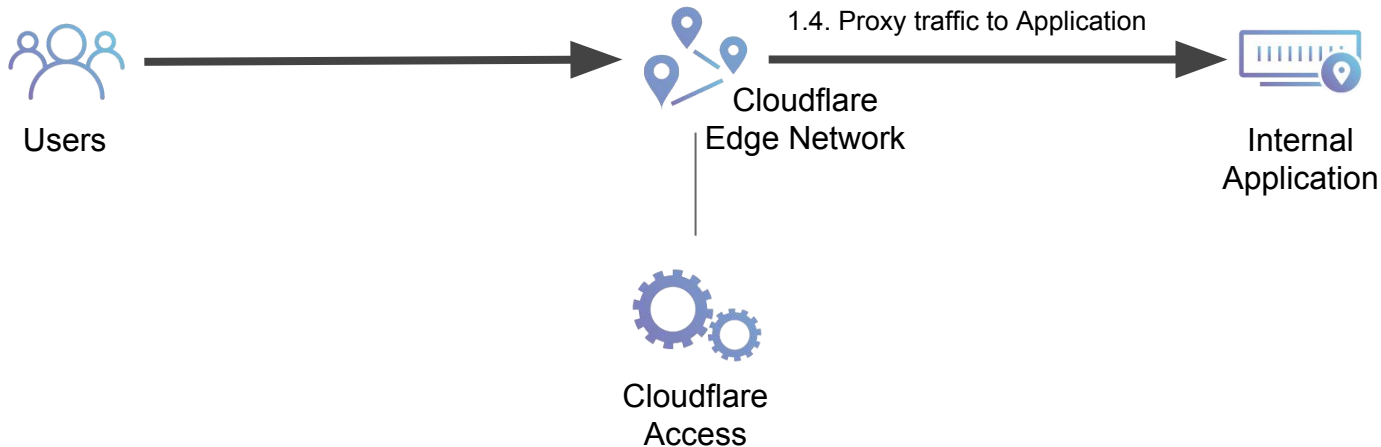
3rd Party Authentication



Authorized Resource Access

1. Request Protected
Application Resource with
Signed Auth Token

1.1. Validate Signature
1.2. Verify Target Application
1.3. Validate Expiration



Conclusion

- Cloudflare Access leverages the work of OAuth and JSON Web Tokens in conjunction with our Edge Network to provide a transparent authentication mechanism for web resources
- By marrying this to a pluggable system for delegating authentication to 3rd party identity providers, the result is a flexible system for integrating authentication across internal web applications

Questions