



Authentication and Authorization

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Authentication Background

Definition: Act of confirming the identity of a requesting entity

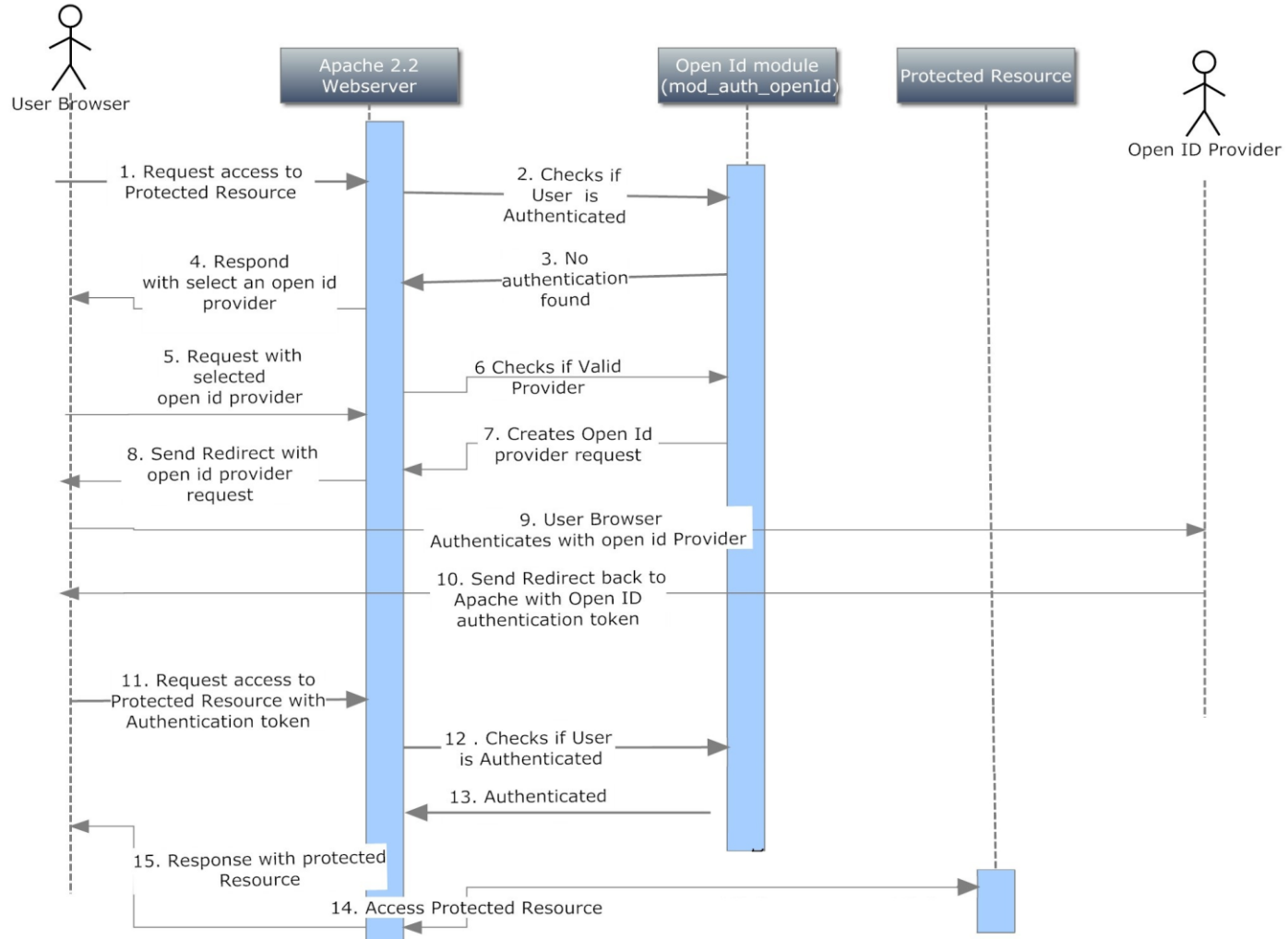
- Non-CS uses
- Network authentication
- Passwords
- Google's 2-factor authentication

Authorization Background

Definition: Act of specifying access rights for an entity

- Goes hand in hand with authentication
 - Logging into Facebook
 - Logging in as Admin
 - Permissions
- Principle of Least Privilege

Sequence Diagram: Open Id Authentication Process



Apache Implementation Steps

1. Create a .htaccess file
2. Select Authentication Type, Provider, and Authorization
3. Create a password file
4. Edit .htaccess file accordingly and place into chosen directory

Issues with P2P Model

- No central server to configure
- Password file is written in plain text
- Malicious peers can imitate legitimate peers to wreak havoc

Implementation

- .htaccess file can
 - Specify which domains to service
 - Which IPs to service
- Peers who download files will automatically download .htaccess file as well
- Each peer acts like its own server

Implementation

AuthType Basic

AuthName "Restricted Files"

AuthBasicProvider file

AuthUserFile /peer/local/apache/passwd/passwords

AuthGroupFile /peer/local/apache/passwd/groups

Order allow,deny

Allow from <domain, IP, ... >

Satisfy all

Require group <GroupName>

Lab 4 Application

1. Place .htaccess files in peers
2. Create interpreters similar to Apache's to recognize directives in .htaccess
3. ???
4. Success!

Remaining Issues

- Password/group files would have to be transmitted to downloading peers
- Spoofing of network addresses
- Performance cost in downloading .htaccess

Thanks for listening!