OAuth Use Cases

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Outline

• Why use cases?

Present set in the draft draft-zeltsan-oauth-use-cases-02 by George Fletcher (gffletch@aol.com), Torsten Lodderstedt (torsten@lodderstedt.net), and Zachary Zeltsan (zachary.zeltsan@alcatel-lucent.com)

• Overall list and supported use cases, template for a use case

• Reviews

Proposal

Back-up

• Cases not supported in OAuth 2.0
• Relations to other organizations
• Web server (abbreviated example)
Why use cases?

The questions regarding the use cases is frequently asked:

- Google’s search "use cases" site:http://www.ietf.org/mail-archive/web/oauth/current/ returns more than 60 email messages

- We need to understand
  - the high-level view of the function
  - why a certain protocol feature is there (and this is easy to forget!)
  - the relation of the low level detail to the original concept and need

- We need to explain to a broader community what we want to achieve

Development of a draft on the use cases was requested (suggested?) by Peter at the OAuth meeting at the IETF
Overall list and supported use cases, template for a use case

- Web server *
- User-agent *
- In-App-Payment (based on Native Application)
- Native Application *
- Device
- Client password credentials *
- Assertion *
- Content manager
- Access token exchange
- Multiple access tokens
- Gateway for browser-based VoIP applets
- Signed Messages
- Signature with asymmetric secret

* cases supported in OAuth 2.0

Template for a use case:
- Description
- Pre-conditions
- Post-conditions
- Requirements
Reviews

Thanks to the reviewers of the version -01

- Melinda Shore (sent to the list http://www.ietf.org/mail-archive/web/oauth/current/msg06161.html)
- Thomas Hardjono (sent to the editors and WG Chairs)

The received comments have been addressed, version -02 was published
Proposal

• (Try to) adhere to top-down design, preferably driven by use cases

• Maintain the use case list and publish as Informational RFC to accompany each protocol release
Back-up
Cases *not* supported in OAuth 2.0

- **Content manager** (requires re-delegation)
- **Access token exchange** (requires issuance of the multiple access tokens; e.g., one to the client for access to resource server 1, another to the resource server 1 for access to resource server 2)
- **Multiple access tokens** (requires issuance of the multiple access tokens for access to several resource servers by the client)
- **Gateway for browser-based VoIP applets** (requires adaptation of OAuth for SIP)
- **Signed messages** (requires signatures that allow to verify that an access token was issued by an application A to an application B with the owner’s authorization)
- **Device** (requires display of URL of the Authorization Endpoint and Authorization Code in a user-friendly format)
- **Signature with asymmetric secret** (relies on the use of asymmetric cryptography)
Relations to other organizations

- Wholesale Application Community (WAC)
  
The In-App-Payment (based on Native Application) use case has been approved by WAC

- Kantara initiative, User-Managed Access (UMA) use cases
  
The use cases have not had a significant consideration
Web server (abbreviated example)

**Description:**

Alice accesses an application running on a web server at www.printphotos.example.com and instructs it to print her photographs that are stored on a server www.storephotos.example.com. The application at www.printphotos.example.com receives Alice's authorization for accessing her photographs without learning her authentication credentials with www.storephotos.example.com.

**Pre-conditions:**

- Alice has registered with www.storephotos.example.com to enable authentication

...  

**Post-conditions:**

Procedure results in the application www.printphotos.example.com receiving an authorization code from www.storephotos.example.com ...

**Requirements:**

- The server www.printphotos.example.com, which hosts an OAuth client, must be capable of issuing the HTTP redirect requests to Alice's user agent - a browser

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