OAuth 2.0 Security Best Current Practice

draft-ietf-oauth-security-topics

IETF-106, 20.11.2019, Singapore Daniel Fett, John Bradley, Andrey Labunets, Torsten Lodderstedt

Status

- Decided to move draft forward to publication and to start work on solution for "PKCE Chosen Challenge Attack" in subsequent version of the BCP (Call 04.11.2019)
- Draft is in WGLC since 06.11.2019
- Received some review feedback
- Mostly editorial and requests for clarifications
- "Alice and Bob Collusion" was brought up again
- Open issue on later slide

Communities using the OAuth Security BCP

- Financial-grade API (FAPI) working group (OpenID Foundation)
 - Alignment towards BCP ongoing
 - Provides profiles for security sensitive applications with stronger requirements on top of BCP
- NextGenPSD2 (aka Berlin Group)
 - Refers to BCP in recently released security bulletin
 - Service providers in Rumania (namely IT Smart Systems) recommend Security BCP to banks
 - PBZ (Privredna banka Zagreb d.d.) in Croatia uses Security BCP
- HelseID (eHealth) in Norway uses Security BCP
- Cloud Signature Consortium (CSC) refers to Security BCP
- JS libraries (e.g. angular-oauth2-oidc) now support code+PKCE and vendors start to adapt their documentation (e.g. Identity Server)

Next Steps

- Rework Introduction to clearly state relationships to RFC 6749, 6750 & 6819 and clean up language
- Move Attacker Model (Section 2)
 after Recommendations (Section
 3) easier to read for people only
 interested in following the
 recommendations
- Make PKCE mandatory for AS

1.	Introduction	· <u>3</u>
	<u>1.1</u> . Structure	· 4
	1.2. Conventions and Terminology	· 4
2.	The Updated OAuth 2.0 Attacker Model	· 4
2 3	Recommendations	. 6
	3.1. Protecting Redirect-Based Flows	. 6
	3.1.1. Authorization Code Grant	· <u>7</u>
	3.1.2. Implicit Grant	. 8
	3.2. Token Replay Prevention	. 8
	3.3. Access Token Privilege Restriction	. 9
	3.4. Resource Owner Password Credentials Grant	. 3 4 . 4 . 6 . 6 . 7 . 8 . 8 . 9 . 10
	3.5. Client Authentication	. 10
	3.6. Other Recommendations	. 10
4.	Attacks and Mitigations	
	4.1. Insufficient Redirect URI Validation	
	4.1.1. Redirect URI Validation Attacks on Authorization Cod	ie
	Grant	. 11
	4.1.2. Redirect URI Validation Attacks on Implicit Grant .	. 12
	4.1.3. Proposed Countermeasures	
	4.2. Credential Leakage via Referrer Headers	. 14
	4.2.1. Leakage from the OAuth Client	
	4.2.2. Leakage from the Authorization Server	. 14
	4.2.3. Consequences	
	4.2.4. Proposed Countermeasures	
	4.3. Attacks through the Browser History	
	4.3.1. Code in Browser History	
	4.3.2. Access Token in Browser History	. 16
	4.4. Mix-Up	
	4.4.1. Attack Description	
	4.4.2. Countermeasures	
	4.5. Authorization Code Injection	
	4.5.1. Attack Description	
	4.5.2. Discussion	
	4.5.3. Proposed Countermeasures	
	4.6. Access Token Injection	
	4.6.1. Proposed Countermeasures	
	4.7. Cross Site Request Forgery	23
	4.7.1. Proposed Countermeasures	23
	4.8. Access Token Leakage at the Resource Server	24
	4.8.1. Access Token Phishing by Counterfeit Resource Server	

Open

- Hans Zandbelt raised the question re SHOULD NOT or MUST NOT for implicit again (and Rob Otto supported it on the list)
- Here is the current text:

In order to avoid these issues, clients SHOULD NOT use the implicit grant (response type "token") or any other response type issuing access tokens in the authorization response, such as "token id_token" and "code token id_token", unless the issued access tokens are sender-constrained and access token injection in the authorization response is prevented.

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