TURN Extension for Third Party Authorization

draft-reddy-tram-turn-third-party-authz-00
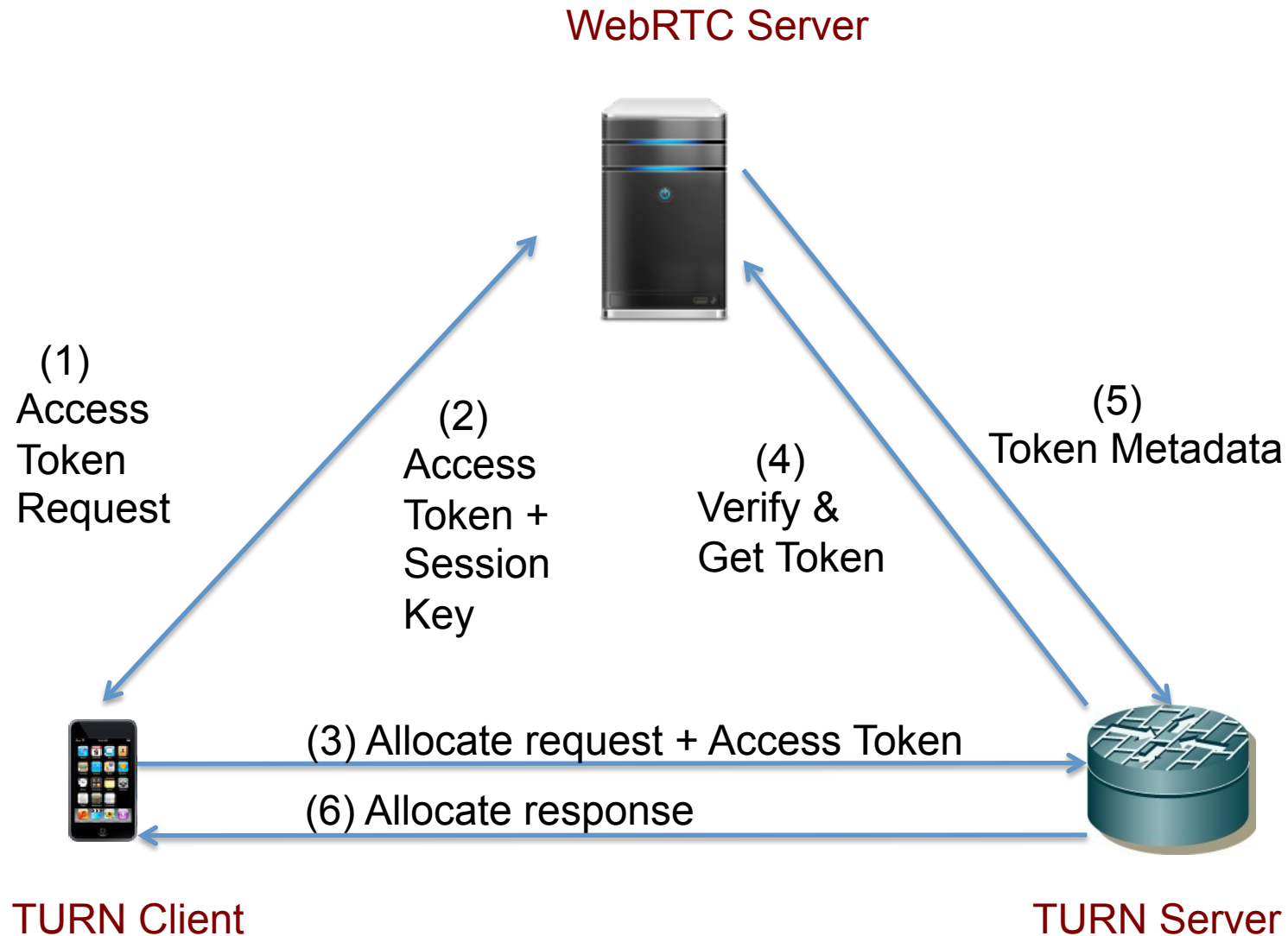
March 2014 IETF 89 Meeting

Authors : T.Reddy, P.Patil, J. Uberti, R.Ram

Problem with STUN Authentication

Problems are discussed in draft-reddy-behave-turn-auth-04

3rd *Party authorization for TURN using OAuth*

WebRTC Server

(1)
Access
Token
Request

(2)
Access
Token +
Session
Key

(4)
Verify &
Get Token

(5)
Token Metadata

(3) Allocate request + Access Token

(6) Allocate response

TURN Client

TURN Server

3rd *Party authorization for TURN using OAuth*

OAuth	TURN
Client	TURN Client
Resource Owner	Authorization Server (e.g.: WebRTC server)
Authorization server	Authorization Server
Resource Server	TURN Server

Advantages

Client sends HTTP request to WebRTC server to get ephemeral token.

- No long-term credentials to keep secret; even if discovered, credential usefulness is limited

- Username contains no externally-identifying information and helps to provide privacy.

- Session Key is machine-generated, to prevent dictionary attacks

Handle Token verses Self-contained token

Handle Token

- Authorization server can revoke the token after the call is terminated.

- Requires communication between TURN server and Authorization server.

- Token is small.

Self-Contained Token

- Large token which would carry session key, lifetime, timestamp etc.

Enhancements required to support the draft

- TURN Protocol
- WebRTC

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Next steps ?