Support of fragmentation of RADIUS packets

draft-perez-radext-radius-fragmentation

IETF85 – RADEXT

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Status

• -05 submitted for WG adoption review
• Comments addressed in -06
  – Though not published yet
• Including
  – Comments to the fragmentation mechanism description
  – Clearer discussion on the addressed use cases and alternatives in the introduction
  – Satisfy ABFAB requirements on supporting chunked data transfer prior to the authentication flow
WG Adoption

• Comments on the problem statement and the rest of the text addressed in replies through the mailing list
  – And a solution acceptable to ABFAB discussed among authors

• -06 is updated according to this replies

• Shall we consider this is enough for rough consensus on WG adoption?
AuthN and AuthZ

- A RADIUS conversation is decomposed in three phases:
  1. RADIUS pre-authentication authorization (like a SAML request expressing a required LoA)
  2. RADIUS authentication (like standard RADIUS-EAP)
  3. RADIUS authorization (like a SAML response)
     - Phases are bound through *references* (e.g. State attribute).
     - Phase (1) finishes with a token which is used in the Access-Request for phase (2).
     - Phase (2) finishes with a token in the Access-Accept, which refers to phase (3).
- Fragmentation is supported in phases 1 and 3
  - Phase 2 is unaltered
- Fragmentation is based on Access-Request/Access-Accept rounds
Implementation Goals

• Implement draft-perez-radext-radius-fragmentation
  – Serve as a proof of feasibility
  – Provide on-the-wire feedback for the specification

• Proof of concept
  – Intended for validating the fragmentation mechanism

• Open source
  – Source code contributed to FreeRADIUS and available upon request
Implementation Details

• Based on FreeRadius 2.1.12
  – Client based on FreeRadius radcapclient
• Currently implements -04
  – Will be updated accordingly once consensus is reached
• Works through out-of-the-box FreeRadius proxies
  – No need of RADIUS fragmentation support on existing/deployed proxies