Admin Interface for the OSCORE Group Manager

draft-ietf-ace-oscore-gm-admin-10

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Recap

› **RESTful admin interface at the OSCORE Group Manager**
  – Create, (re-)configure, and delete OSCORE groups

› **Two new types of resources at the Group Manager**
  – A single *group-collection* resource, at /manage
  – One *group-configuration* resource per group, at /manage/GROUPNAME

› **Using ACE for authentication and authorization**
  – The Administrator is the ACE Client
  – The Group Manager is the ACE Resource Server
  – For secure communication, use transport profiles of ACE
**Overview**

- **Group-collection resource**
  - Retrieve the list of OSCORE groups
    - All groups (GET)
    - Group selected by filters (FETCH)
  - Create a new OSCORE group (POST)
    - A group-configuration resource is created
    - A group-membership resource for joining nodes is also created, see *draft-ietf-ace-key-groupcomm-oscore*

- **Group-configuration resource**
  - Retrieve the group configuration (GET)
  - Retrieve part of the group configuration (FETCH)
  - Overwrite the group configuration (PUT)
  - Update the group configuration (PATCH/iPATCH)
  - Delete the group configuration (DELETE)
    - The group-membership resource is also deleted

**Configuration Properties**
- Security algorithms and parameters

**Status Properties**
- Any other information (e.g., group name)

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*Figure 1: Resources of a Group Manager*
Editors improvements and fixes

Removed remnants from old text on the use of CoRAL (draft-ietf-core-coral)
  - That content was split out to draft-ietf-ace-oscore-gm-admin-coral

Cleaned-up text on 4.03 (Forbidden) error responses from the Group Manager
  - Not meant to convey additional error information per draft-ietf-ace-key-groupcomm

Clarified behavior when overwriting a group configuration
  - PUT handler for the group configuration resource
  - Already said: the PUT request MUST NOT include four specific parameters
  - Added text: such parameters do not change in the configuration (no default values)
Updates in v -10

Naming a new group – **Unchanged content**
- The POST request for creating a new group includes a **proposed** group name
- The Group Manager (GM) might reject that name (e.g., it’s already in use)
- The GM may pick up an alternative, valid name and assign it to the new group

Choice of alternative name at the GM – **Simplified and improved content**
- The GM might not be able to find an alternative name, or give up in the process
  - s/MUST find an alternative name/MUST try to determine an alternative name
  - Error code 11: s/"No available group names"/"Unable to determine a group name"
- Rephrased high-level rationale for selecting a valid, alternative group name
  - Compared to the proposed name, the Administrator must neither lose nor gain permissions
  - Consistent, updated guidelines for an Administrator receiving a response with Error code 11
Summary and next steps

› The authors believe that v -10 is ready for WG Last Call
   – Raised already for v -09; now the document has been further improved

› Implementation based on Eclipse Californium
   – Next to the Group Manager interface of draft-ietf-ace-key-groupcomm-oscore
   – https://bitbucket.org/marco-tiloca-sics/ace-java/src/master/

› Side note: need fix for the draft Github repo
   – https://github.com/ace-wg/ace-oscore-gm-admin
   – The Editor’s Copy builds but it is not deployed as an HTML page
   – Can anyone with admin privileges fix the related Github Action?
Thank you!

Comments/questions?

https://github.com/ace-wg/ace-oscore-gm-admin