

Admin Interface for the OSCORE Group Manager

draft-ietf-ace-oscore-gm-admin-08

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Recap

› RESTful admin interface at the OSCORE Group Manager

- Create, (re-)configure and delete OSCORE groups
- Support for both: i) Link Format and CBOR ; ii) CoRAL

› 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 Client
- The Group Manager is the Resource Server
- For secure communication, use transport profiles of ACE

Since IETF 115

- › **Ongoing work presented during two ACE interim meetings**
 - On 2023-01-23 and 2023-02-20
- › **Version -08 submitted before the cut-off**
 - This addresses most points discussed during the interim meetings
- › **Agreed to do a document split, taking out the content about CoRAL [1]**
 - Details in a following slide

Update summary

- › **Added discussion on multiple, concurrent Administrators (Section 4.1)**
- › **Specified atomicity of write operations at the Group Manager**
 - Upon creating/overwriting/updating/deleting a group-configuration resource
- › **Clarified effects of configuration overwriting/updating on group members**
 - The possible retrieval of other group members' public keys should not be “rushed”
- › **Reasons for the Group Manager to deviate from the recommended default values**
 - E.g., the Group Manager does not support those
- › **New ACE Groupcomm Error "Unsupported group configuration"**
 - Guidelines for the Administrator on how to react to that (Section 8)
 - IANA registration (Section 10.2)

Update summary

› Use of CoRAL [1]

- More details on the format of message payloads and on interaction semantics
- Revised all the examples of message exchange with CoRAL (Section 6)
 - › Now written in CBOR diagnostic notation
 - › Using Packed CBOR [2] (shared item tables are in Appendix B)

› Added more security considerations, related to:

- Overwriting/update of group configurations
- The Group Manager
- The Administrators

› Clarifications

- Consistency of parameter names
- Slight content reordering in Sections 3 and 4
- Various editorial improvements

[1] *draft-ietf-core-coral*

[2] *draft-ietf-cbor-packed*

Pending document split

› Rationale and plan

- Avoid delays due to the progress of *draft-ietf-core-coral*
- **Doc 1**: current document minus the CoRAL-related content (use, special features, examples, ...)
- **Doc 2**: new WG document, with revised CoRAL-related content taken out of this ACE document

› History

- Proposal made at the 2023-01-23 ACE interim meeting [1] – No objection
- Checked and confirmed on the ACE mailing list [2] – No objection
- Further confirmed at the 2023-02-20 ACE interim meeting [3]
 - › Agreed to do the split after IETF 116
 - › Agreed name for **Doc 2**: *draft-ietf-ace-oscore-gm-admin-coral*

[1] <https://notes.ietf.org/notes-ietf-interim-2023-ace-01-ace>

[2] <https://mailarchive.ietf.org/arch/msg/ace/-h9Y47rjUHqoPJfaDnyPWjIzpuw/>

[3] <https://notes.ietf.org/notes-ietf-interim-2023-ace-02-ace>

Next steps

› Do the document split

- Create **Doc 2** from *draft-ietf-ace-oscore-gm-admin-08*
- The split is not straightforward: the CoRAL content is well blended

› Submit **Doc 2** as *draft-ietf-ace-oscore-gm-admin-coral-00*

- Expected only simple, consistency updates until *draft-ietf-core-coral* is close to completion
- Note: **Doc 2** is not intended to Obsolete or Update the upcoming **Doc 1**

› Polish and overall revise the resulting **Doc 1**, in particular:

- Consistency of content presentation, following the removal of the CoRAL-related parts
- Review examples (e.g., use of double quotes in message payloads in Link-Format)
- Double-check and ensure consistency with other related documents in ACE and CoRE

› Submit **Doc 1** as *draft-ietf-ace-oscore-gm-admin-09*

- If no issues remain, version -09 might be ready for WG Last Call

Thank you!

Comments/questions?

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

Overview

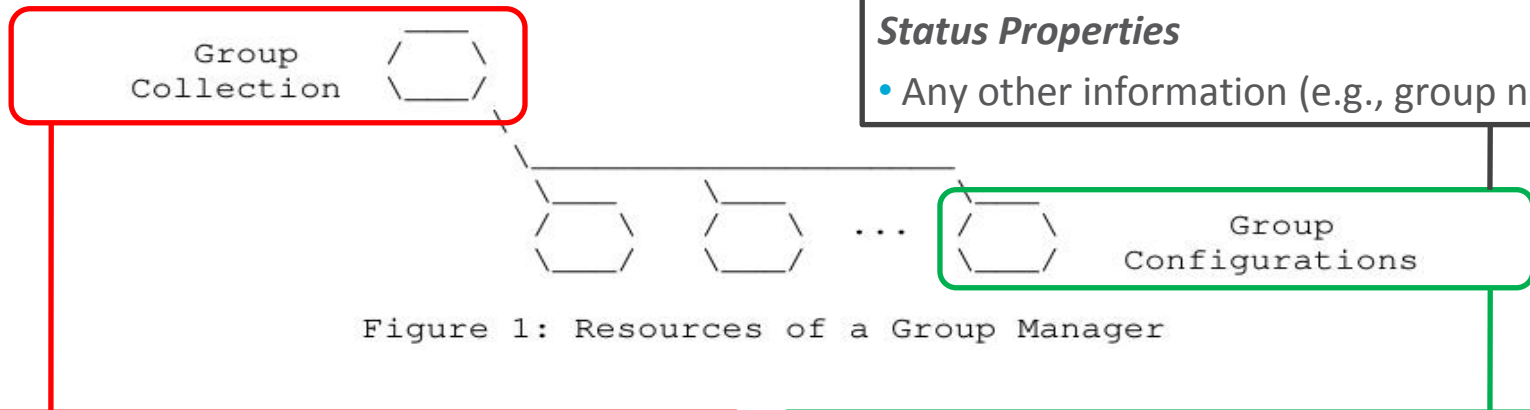


Figure 1: Resources of a Group Manager

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 for joining nodes is also created, see *draft-ietf-ace-key-groupcomm-oscore*

Configuration Properties

- Security algorithms and parameters

Status Properties

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

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 (DELETE)