

Admin Interface for the OSCORE Group Manager

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

Marco Tiloca, RISE
Rikard Höglund, RISE
Peter van der Stok
Francesca Palombini, Ericsson

ACE WG Interim Meeting, June 5th, 2023

Status update

› Completed document split

› Doc 1: To be *draft-ietf-ace-oscore-gm-admin-09*

- <https://github.com/ace-wg/ace-oscore-gm-admin>
- Removed all the content related to CoRAL (*draft-ietf-core-coral*)
- Use of the pairwise mode changed to be “true” by default
- Clarified what group members do when learning of a group configuration change
- Editorial improvements and fixes

› Doc 2: To be *draft-ietf-ace-oscore-gm-admin-coral-00*

- <https://github.com/ace-wg/ace-oscore-gm-admin-coral>
- Complete and stable

What's left?

- › **The Shepherd review of *draft-ietf-core-oscore-groupcomm* is under processing**
 - This stimulated two new open points for *draft-ietf-ace-oscore-gm-admin*

- › **Open point #1 is on the actual protocol**
 - Valid all along; the revision of Group OSCORE just put light on it

- › **Open point #2 is a consistency fix**
 - Triggered by the revision of Group OSCORE

Open point #1

› Section 6.6.2 “Effects on Group Members”

- ... Following the overriding of a group configuration with a PUT request

› The Administrator might change the encryption algorithms used in the group

- Result of a change to the values of “sign_enc_alg” and “alg”

- This may change the max size of the OSCORE Sender IDs usable in the group

- The max size of the Sender IDs depends on the size of the AEAD nonce of the two algorithms

› Proposal: if the maximum size of the OSCORE Sender IDs changes ...

- Evict the group members whose Sender ID has a size larger than the new maximum size

- Rekey the group accordingly (see *draft-ietf-ace-key-groupcomm-oscore*)

- The same silently applies in Section 7.6.2, where the update is selective with a PATCH request

- No changes to *draft-ietf-ace-oscore-gm-admin-coral*, since this is silently inherited

Open point #2

- › Use updated names, consistent with renaming in *draft-ietf-core-oscore-groupcomm*
- › Signature Encryption Algorithm → Group Encryption Algorithm
- › `sign_enc_alg` → `gp_enc_alg`
 - To be fixed also in *draft-ietf-ace-oscore-gm-admin-coral*
- › Add an Editor's Note
 - The new naming is consistent with *draft-ietf-core-oscore-groupcomm-18* (upcoming)
 - Old names are still used in *draft-ietf-ace-key-groupcomm-oscore* (to be fixed later the AD review)

Next steps

1. **Next weeks: submit a new version of *draft-ietf-core-oscore-groupcomm***
 - This will also use the new naming
 - Remaining points to process should not have an impact on this document
2. **Submit *draft-ietf-ace-oscore-gm-admin-09* addressing the new open points**
3. **Submit *draft-ietf-ace-oscore-gm-admin-coral-00* referring *-oscore-gm-admin***
4. ***draft-ietf-ace-oscore-gm-admin-09* should be ready for WG Last Call**

Thank you!

Comments/questions?

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

Backup

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

Overview

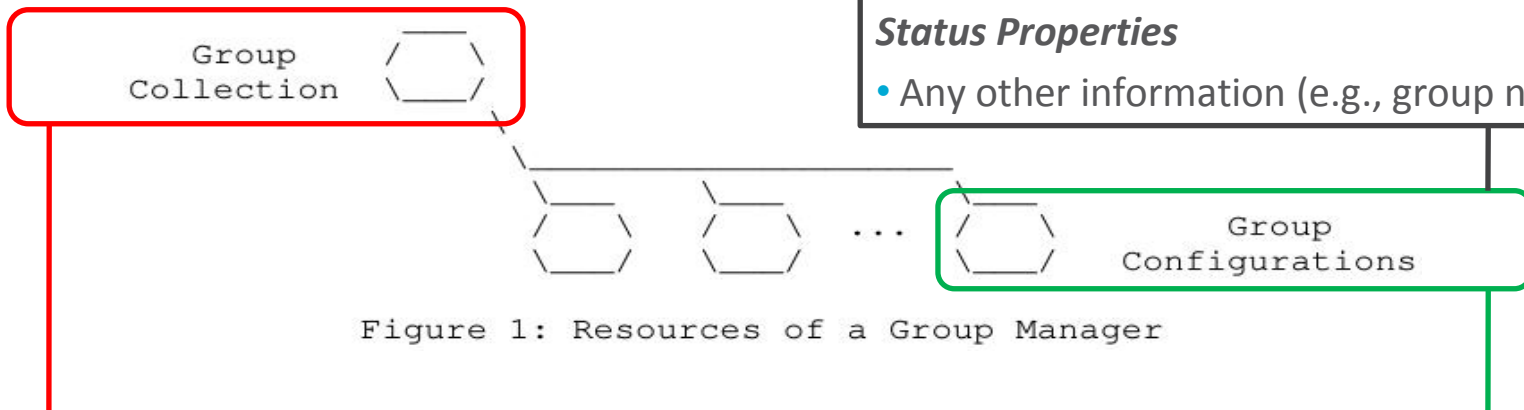


Figure 1: Resources of a Group Manager

Configuration Properties

- Security algorithms and parameters

Status Properties

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

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*

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)