Moon Security Router API

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This document list all of the API connectors served by the Moon Security Router application. Here are Moon API with some examples of posted data and returned data. All requests must be prefixed with the host and port, for example: http://localhost:35357/moon/authz/123456789/123456789/servers/list

External API

Those connectors can only be requested from outside, ie by a user like Nova or Swift through the KeystoneMiddleware application.

Intra-Extension API

Configuration

GET /moon/configuration/templates

> List all policy templates.

```
return = {
    "template_id": {
        "name": "name of the template",
        "description": "description of the template",
    }
}
```

GET /moon/configuration/aggregation_algorithms

> List all aggregation algorithms.

```
return = {
    "algorithm_id": {
        "name": "name of the algorithm",
        "description": "description of the algorithm",
```

```
        }
}
```

GET /moon/configuration/sub_meta_rule_algorithms

> List all sub meta rule algorithms.

```
return = {
    "algorithm_id": {
        "name": "name of the algorithm",
        "description": "description of the algorithm",
    }
}
```

Tenants

GET /moon/tenants

> List all tenants.

```
return = {
    "tenant_id": {
        "name": "name of the tenant",
        "description": "description of the tenant",
        "intra_authz_extension_id": "id of the intra extension authz",
        "intra_admin_extension_id": "id of the intra extension authz"
    }
}
```

POST /moon/tenants

> Add a tenant.

```
post = {
    "tenant_name": "name of the tenant",
    "tenant_description": "description of the tenant",
    "tenant_intra_authz_extension_id": "id of the intra extension authz",
    "tenant_intra_admin_extension_id": "id of the intra extension admin"
}
return = {
    "tenant_id": {
        "name": "name of the tenant",
        "description": "description of the tenant",
        "intra_authz_extension_id": "id of the intra extension authz",
        "intra_admin_extension_id": "id of the intra extension authz"
    }
}
```

POST /moon/tenants/{tenant_id}

Show information of one tenant.

```
return = {
    "tenant_id": {
        "name": "name of the tenant",
        "description": "description of the tenant",
        "intra_authz_extension_id": "id of the intra extension authz",
        "intra_admin_extension_id": "id of the intra extension authz"
    }
}
```

POST /moon/tenants/{tenant_id}

Modify a tenant.

```
post = {
    "tenant_name": "name of the tenant",
    "tenant_description": "description of the tenant",
    "tenant_intra_authz_extension_id": "id of the intra extension authz",
    "tenant_intra_admin_extension_id": "id of the intra extension admin"
}
return = {
    "tenant_id": {
        "name": "name of the tenant",
        "description": "description of the tenant",
        "intra_authz_extension_id": "id of the intra extension authz",
        "intra_admin_extension_id": "id of the intra extension authz"
    }
}
```

DELETE /moon/tenants/{tenant_id}

Delete a tenant.

```
return = {}
```

Intra-Extension

GET /moon/intra_extensions/init

Initialize the root Intra_Extension (if needed).

```
return = {}
```

GET /moon/intra_extensions

List all Intra_Extensions.

```
return = {
    "intra_extension_id": {
        "name": "name of the intra extension",
```

```
            "model": "model of the intra extension"
        }
    }
```

POST /moon/intra_extensions

Create a new Intra_Extension.

```
post = {
    "intra_extension_name": "name of the intra extension",
    "intra_extension_model": "model of the intra extension (taken from /configuration/templates
    "intra_extension_description": "description of the intra extension",

}
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/

Show details about one Intra_Extension.

```
return = {
    "id": "intra_extension_id",
    "name": "name of the intra extension",
    "model": "model of the intra extension",
    "genre": "genre of the intra extension",
    "description": "model of the intra extension"
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/

Delete an Intra_Extension.

```
return = {}
```

Intra-Extension Subjects

GET /moon/intra_extensions/{intra_extension_id}/subjects

List all subjects.

```
return = {
    "subject_id": {
        "name": "name of the subject",
        "keystone_id": "keystone id of the subject"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/subjects

List all subjects.

```
post = {
    "subject_name": "name of the subject",
    "subject_description": "description of the subject",
    "subject_password": "password for the subject",
    "subject_email": "email address of the subject"
}
return = {
    "subject_id": {
        "name": "name of the subject",
        "keystone_id": "keystone id of the subject"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/subjects/{subject_id}

Delete a subject.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/subject_categories

List all subject categories.

```
return = {
    "subject_category_id": {
        "name": "name of the category",
        "description": "description of the category"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/subject_categories

Add a new subject category.

```
post = {
    "subject_category_name": "name of the category",
    "subject_category_description": "description of the category"
}
return = {
    "subject_category_id": {
        "name": "name of the category",
        "description": "description of the category"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/subject_categories/{subject_categor

Delete a subject category.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/subject_scopes/{subject_category_id}

List all subject scopes for a specific subject category.

```
return = {
    "subject_scope_id": {
        "name": "name of the scope",
        "description": "description of the scope"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/subject_scopes/{subject_category_id}

Add a new subject scope for a specific subject category.

```
post = {
    "subject_scope_name": "name of the scope",
    "subject_scope_description": "description of the scope"
}
return = {
    "subject_scope_id": {
        "name": "name of the scope",
        "description": "description of the scope"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/subject_scopes/{subject_category_i

Delete a subject scope.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/subject_assignments/{subject_id}/{subj

List all subject assignments for a subject and for a subject category.

```
return = [
    "subject_assignment_id1", "subject_assignment_id2"
]
```

POST /moon/intra_extensions/{intra_extension_id}/subject_assignments

Add an assignment.

```
post = {
    "subject_id": "id of the subject",
    "subject_category_id": "id of the category",
    "subject_scope_id": "id of the scope"
}
return = [
    "subject_assignment_id1", "subject_assignment_id2"
]
```

DELETE /moon/intra_extensions/{intra_extension_id}/subject_assignments/{subject_id}/{

Delete a subject assignment.

```
return = {}
```

Intra-Extension Objects

GET /moon/intra_extensions/{intra_extension_id}/objects

List all objects.

```
return = {
    "object_id": {
        "name": "name of the object",
        "keystone_id": "keystone id of the object"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/objects

List all objects.

```
post = {
    "object_name": "name of the object",
    "object_description": "description of the object"
}
return = {
    "object_id": {
        "name": "name of the object",
        "keystone_id": "keystone id of the object"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/objects/{object_id}

Delete a object.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/object_categories

List all object categories.

```
return = {
    "object_category_id": {
        "name": "name of the category",
        "description": "description of the category"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/object_categories

Add a new object category.

```
post = {
    "object_category_name": "name of the category",
    "object_category_description": "description of the category"
}
return = {
    "object_category_id": {
        "name": "name of the category",
        "description": "description of the category"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/object_categories/{object_category_

Delete a object category.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/object_scopes/{object_category_id}

List all object scopes for a specific object category.

```
return = {
    "object_scope_id": {
        "name": "name of the scope",
        "description": "description of the scope"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/object_scopes/{object_category_id}

Add a new object scope for a specific object category.

```
post = {
    "object_scope_name": "name of the scope",
    "object_scope_description": "description of the scope"
}
return = {
    "object_scope_id": {
        "name": "name of the scope",
        "description": "description of the scope"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/object_scopes/{object_category_id}

Delete a object scope.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/object_assignments/{object_id}/{object

List all object assignments for a object and for a object category.

```
return = [
    "object_assignment_id1", "object_assignment_id2"
]
```

POST /moon/intra_extensions/{intra_extension_id}/object_assignments

Add an assignment.

```
post = {
    "object_id": "id of the object",
    "object_category_id": "id of the category",
    "object_scope_id": "id of the scope"
}
return = [
    "object_assignment_id1", "object_assignment_id2"
]
```

DELETE /moon/intra_extensions/{intra_extension_id}/object_assignments/{object_id}/{ob

Delete a object assignment.

```
return = {}
```

Intra-Extension Actions

GET /moon/intra_extensions/{intra_extension_id}/actions

List all actions.

```
return = {
    "action_id": {
        "name": "name of the action",
        "keystone_id": "keystone id of the action"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/actions

List all actions.

```
post = {
    "action_name": "name of the action",
    "action_description": "description of the action",
    "action_password": "password for the action",
    "action_email": "email address of the action"
}
return = {
    "action_id": {
        "name": "name of the action",
        "keystone_id": "keystone id of the action"
```

```
        }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/actions/{action_id}

Delete a action.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/action_categories

List all action categories.

```
return = {
    "action_category_id": {
        "name": "name of the category",
        "description": "description of the category"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/action_categories

Add a new action category.

```
post = {
    "action_category_name": "name of the category",
    "action_category_description": "description of the category"
}
return = {
    "action_category_id": {
        "name": "name of the category",
        "description": "description of the category"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/action_categories/{action_category_

Delete a action category.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/action_scopes/{action_category_id}

List all action scopes for a specific action category.

```
return = {
    "action_scope_id": {
        "name": "name of the scope",
        "description": "description of the scope"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/action_scopes/{action_category_id}

Add a new action scope for a specific action category.

```
post = {
    "action_scope_name": "name of the scope",
    "action_scope_description": "description of the scope"
}
return = {
    "action_scope_id": {
        "name": "name of the scope",
        "description": "description of the scope"
    }
}
```

DELETE /moon/intra_extensions/{intra_extension_id}/action_scopes/{action_category_id}

Delete a action scope.

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/action_assignments/{action_id}/{action

List all action assignments for a action and for a action category.

```
return = [
    "action_assignment_id1", "action_assignment_id2"
]
```

POST /moon/intra_extensions/{intra_extension_id}/action_assignments

Add an assignment.

```
post = {
    "action_id": "id of the action",
    "action_category_id": "id of the category",
    "action_scope_id": "id of the scope"
}
return = [
    "action_assignment_id1", "action_assignment_id2"
]
```

DELETE /moon/intra_extensions/{intra_extension_id}/action_assignments/{action_id}/{ac

Delete a action assignment.

```
return = {}
```


Intra-Extension Rules

GET /moon/intra_extensions/{intra_extension_id}/aggregation_algorithm

List aggregation algorithm for an intra extension.

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```
return = {
    "aggregation_algorithm_id": {
        "name": "name of the aggregation algorithm",
        "description": "description of the aggregation algorithm"
    }
}
```

POST /moon/intra_extensions/{intra_extension_id}/aggregation_algorithm

Set the current aggregation algorithm for an intra extension.

```
post = {
    "aggregation_algorithm_id": "id of the aggregation algorithm",
    "aggregation_algorithm_description": "description of the aggregation algorithm"
}
return = {
    "aggregation_algorithm_id": {
        "name": "name of the aggregation algorithm",
        "description": "description of the aggregation algorithm"
    }
}
```

GET /moon/intra_extensions/{intra_extension_id}/sub_meta_rules

Show the current sub meta rules.

```
return = {
    "sub_meta_rule_id": {
        "name": "name of the aggregation algorithm",
        "algorithm": "algorithm of the aggregation algorithm",
        "subject_categories": ["subject_category_id1", "subject_category_id2"],
        "object_categories": ["object_category_id1", "object_category_id2"],
        "action_categories": ["action_category_id1", "action_category_id2"]
    }
}
```

```
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/rule/{sub_meta_rule_id}

Set the current sub meta rule.

```
post = {
    "sub_meta_rule_name": "name of the sub meta rule",
    "sub_meta_rule_algorithm": "name of the sub meta rule algorithm",
    "sub_meta_rule_subject_categories": ["subject_category_id1", "subject_category_id2"],
    "sub_meta_rule_object_categories": ["object_category_id1", "object_category_id2"],
    "sub_meta_rule_action_categories": ["action_category_id1", "action_category_id2"]
}
return = {}
```

GET /moon/intra_extensions/{intra_extension_id}/rule/{sub_meta_rule_id}

List all rules.

```
return = {
    "rule_id1": ["subject_scope_id1", "object_scope_id1", "action_scope_id1"],
    "rule_id2": ["subject_scope_id2", "object_scope_id2", "action_scope_id2"]
}
```

POST /moon/intra_extensions/{intra_extension_id}/rule/{sub_meta_rule_id}

Add a new rule.

```
post = {
    "subject_categories": ["subject_scope_id1"],
    "object_categories": ["object_scope_id1"],
    "action_categories": ["action_scope_id1"],
    "enabled": True
}
return = {}
```

DELETE /moon/intra_extensions/{intra_extension_id}/rule/{sub_meta_rule_id}/{rule_id]

Delete a rule.

```
return = {}
```

Logs

GET /moon/logs/{options}

List all logs. Options can be:

- filter=<filter_characters>
- from=<show logs from this date>
- to=<show logs to this date>
- event_number=<get n logs>

Time format is '%Y-%m-%d-%H:%M:%S' (eg. "2015-04-15-13:45:20")

```
return = [
    "2015-04-15-13:45:20 ...",
    "2015-04-15-13:45:21 ...",
    "2015-04-15-13:45:22 ...",
    "2015-04-15-13:45:23 ..."
]
```