



appNGizer User Manual

Matthias Müller

Build Version 1.24.6-SNAPSHOT created 2022-11-03

Table of Contents

1. General	1
1.1. HTTP methods and return codes	1
1.1.1. GET	1
1.1.2. POST	1
1.1.3. PUT	1
1.1.4. DELETE	2
1.2. Schema and namespace	2
2. Home	2
2.1. Show appNGizer Home	2
2.2. Authenticate	2
3. Platform	3
3.1. Database	4
3.1.1. Show database status	4
3.1.2. Initialize database	5
3.2. Reload platform	6
3.3. System environment	7
3.4. System properties	7
3.5. Properties	7
3.5.1. List Properties	8
3.5.2. Create Property	9
3.5.3. Update Property	9
3.5.4. Delete Property	10
4. Applications	10
4.1. List applications	10
4.2. Show application	11
4.3. Update application	12
4.4. Delete application	12
4.5. Roles	13
4.5.1. List roles	13
4.5.2. Show role	13
4.5.3. Create role	14
4.5.4. Update role	14
4.5.5. Delete role	15
4.6. Permissions	15
4.6.1. List permissions	15
4.6.2. Create permission	16
4.6.3. Update permission	16
4.6.4. Delete permission	16

4.7. Properties	16
5. Site	16
5.1. List sites	16
5.2. Show site	17
5.3. Create site	17
5.4. Update site	18
5.5. Delete site	18
5.6. Reload site	19
5.7. Properties	19
5.7.1. List properties	19
5.7.2. Create Property	20
5.7.3. Update Property	21
5.7.4. Delete property	22
5.8. Applications	22
5.8.1. List applications	22
5.8.2. Show application	23
5.8.3. Application properties	24
5.8.4. Showing grants for a site	27
5.8.5. Granting an application for other sites	27
5.8.6. Activate application	28
5.8.7. Deactivate application	28
6. Repository	28
6.1. List Repositories	28
6.2. Create repository	29
6.3. Update repository	30
6.4. Delete repository	30
6.5. Show repository with available packages	31
6.6. Install package	33
6.7. Upload package	33
7. Groups	34
7.1. List Groups	34
7.2. Show group	34
7.3. Create group	35
7.4. Update group	36
7.5. Delete group	36
8. Subjects	36
8.1. List subjects	36
8.2. Show subject	37
8.3. Create subject	38
8.4. Update subject	38
8.5. Delete subject	39

1. General

This document describes the RESTful API for appNGizer, a tool for remote managing appNG installations.

All operations that require a request body must use the HTTP Header **Content-Type application/xml**. The only exception is the POST-request used for authentication (see [Authenticate](#)), where **text/plain** must be used.

1.1. HTTP methods and return codes

1.1.1. GET

Retrieves a resource/ a list of resources.

Return codes:

- **200** (OK) - if the resource has been successfully retrieved
- **404** (Not found) - if such a resource does not exist
- **500** (Internal Server error) - if an error occurred

1.1.2. POST

Creates a new resources.

Return codes:

- **201** (Created) - if everthing went well
- **409** (Conflict) - if such a resource already exists
- **500** (Internal Server error) - if an error occurred

1.1.3. PUT

Updates an existing resources.

Return codes:

- **200** (OK) - if the resource has been updated
- **303** (See Other) - if the location of the resource has changed due to the update
- **404** (Not found) - if such a resource does not exist
- **409** (Conflict) - if such a resource already exists
- **500** (Internal Server error) - if an error occurred

1.1.4. DELETE

Updates an existing resource.

Return codes:

- **204** (No Content) - if the resource has been deleted
- **404** (Not found) - if such a resource does not exist
- **500** (Internal Server error) - if an error occurred

1.2. Schema and namespace

The XSD schema for appNGizer is available at

<http://www.appng.org/schema/appngizer/appngizer.xsd>

The namespace to be used is <http://www.appng.org/schema/appngizer>.

2. Home

2.1. Show appNGizer Home

URL: <http://localhost:8080/appNGizer/>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<appngizer version="0.12.0" self="http://localhost:8080/appNGizer/" xmlns=
"http://www.appng.org/schema/appngizer">
  <links>
    <link name="site" self="http://localhost:8080/appNGizer/site" />
    <link name="application" self="http://localhost:8080/appNGizer/application" />
    <link name="subject" self="http://localhost:8080/appNGizer/subject" />
    <link name="group" self="http://localhost:8080/appNGizer/group" />
    <link name="repository" self="http://localhost:8080/appNGizer/repository" />
    <link name="platform" self="http://localhost:8080/appNGizer/platform" />
  </links>
</appngizer>
```

2.2. Authenticate

The appNG platform property `sharedSecret` is needed to login into appNGizer. The client needs to accept cookies to proceed after login.

URL: <http://localhost:8080/appNGizer/>

Method: POST



The trailing slash is mandatory otherwise the request gets redirected as GET request to that location and the authentication procedure is not performed!

Request Body: (plain text format!)

```
<sharedSecret>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<appngizer version="0.12.0" self="http://localhost:8080/appNGizer/" xmlns=
"http://www.appng.org/schema/appngizer">
  <links>
    <link name="site" self="http://localhost:8080/appNGizer/site" />
    <link name="application" self="http://localhost:8080/appNGizer/application" />
    <link name="subject" self="http://localhost:8080/appNGizer/subject" />
    <link name="group" self="http://localhost:8080/appNGizer/group" />
    <link name="repository" self="http://localhost:8080/appNGizer/repository" />
    <link name="platform" self="http://localhost:8080/appNGizer/platform" />
  </links>
</appngizer>
```

3. Platform

URL: <http://localhost:8080/appNGizer/platform>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<platform xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/platform">
  <links>
    <link name="database" self="http://localhost:8080/appNGizer/platform/database
"/>
    <link name="property" self="http://localhost:8080/appNGizer/platform/property
"/>
    <link name="reload" self="http://localhost:8080/appNGizer/platform/reload"/>
    <link name="system" self="http://localhost:8080/appNGizer/platform/system"/>
    <link name="environment" self=
"http://localhost:8080/appNGizer/platform/environment"/>
  </links>
</platform>
```

3.1. Database

3.1.1. Show database status

URL: <http://localhost:8080/appNGizer/platform/database>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<database xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/platform/database">
  <links>
    <link name="initialize" self=
"http://localhost:8080/appNGizer/platform/database/initialize"/>
  </links>
  <type>MYSQL</type>
  <dbVersion>MySQL 5.6.29-76.2-log</dbVersion>
  <driver>com.mysql.jdbc.Driver</driver>
  <url>jdbc:mysql://localhost:3306/appng</url>
  <ok>true</ok>
  <versions>
    <version version="2.8.2" state="Success" description="alter sites granted"
checksum="-2124797671" installed="2016-08-01T11:54:08.000+02:00"/>
    <version version="2.8.1" state="Success" description="add repository strict"
checksum="-637161553" installed="2016-08-01T11:54:07.000+02:00"/>
    <version version="2.8" state="Success" description="add template" checksum=
"1443237131" installed="2016-08-01T11:54:07.000+02:00"/>
    <version version="2.7.1" state="Success" description="modify datetime"
checksum="-238501285" installed="2016-08-01T11:54:07.000+02:00"/>
    <version version="2.7" state="Success" description="modify resource name"
checksum="-410225045" installed="2016-08-01T11:54:05.000+02:00"/>
    <version version="2.6" state="Success" description="drop-site-parentId"
checksum="-628397585" installed="2016-08-01T11:54:05.000+02:00"/>
    <version version="2.5" state="Success" description="add quartz sched time"
checksum="-1887151531" installed="2016-08-01T11:54:04.000+02:00"/>
    <version version="2.4" state="Success" description="migrate to platform"
checksum="-356840062" installed="2016-08-01T11:54:04.000+02:00"/>
    <version version="2.3" state="Success" description="add sites granted"
checksum="562840097" installed="2016-08-01T11:54:00.000+02:00"/>
    <version version="2.2" state="Success" description="Add validation query
column" checksum="-406328953" installed="2016-08-01T11:54:00.000+02:00"/>
    <version version="2.1" state="Success" description="Add active column"
checksum="2085895145" installed="2016-08-01T11:54:00.000+02:00"/>
    <version version="2.0" state="Success" description="set subject email
nullable" checksum="-200093527" installed="2016-08-01T11:53:59.000+02:00"/>
    <version version="1.9" state="Success" description="Add remote repository
name" checksum="-1230423146" installed="2016-08-01T11:53:59.000+02:00"/>
    <version version="1.8" state="Success" description="Add managed column"
```

```
checksum="1109092965" installed="2016-08-01T11:53:59.000+02:00"/>
  <version version="1.7" state="Success" description="modify property
description" checksum="-242497654" installed="2016-08-01T11:53:58.000+02:00"/>
  <version version="1.6" state="Success" description="Add Min and
MaxConnections" checksum="-1788286290" installed="2016-08-01T11:53:58.000+02:00"/>
  <version version="1.5" state="Success" description="Add plugin timestamp
appngversion" checksum="1676943241" installed="2016-08-01T11:53:58.000+02:00"/>
  <version version="1.4" state="Success" description="Add DatabaseConnection"
checksum="318992837" installed="2016-08-01T11:53:57.000+02:00"/>
  <version version="1.3" state="Success" description="Set site folder" checksum
="2024773474" installed="2016-08-01T11:53:57.000+02:00"/>
  <version version="1.2" state="Success" description="Let PluginRepository name
be unique" checksum="-743274501" installed="2016-08-01T11:53:56.000+02:00"/>
  <version version="1.1" state="Success" description="Quartz initial setup"
checksum="1726445701" installed="2016-08-01T11:53:56.000+02:00"/>
  <version version="1.0" state="Success" description="appNG initial setup"
checksum="-644756127" installed="2016-08-01T11:53:55.000+02:00"/>
</versions>
</database>
```

3.1.2. Initialize database

URL: <http://localhost:8080/appNGizer/platform/database/initialize>

Method: POST

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<database xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/platform/database">
  <links>
    <link name="initialize" self=
"http://localhost:8080/appNGizer/platform/database/initialize"/>
  </links>
  <type>MYSQL</type>
  <dbVersion>MySQL 5.6.29-76.2-log</dbVersion>
  <driver>com.mysql.jdbc.Driver</driver>
  <url>jdbc:mysql://localhost:3306/appng</url>
  <ok>true</ok>
  <versions>
    <version version="2.8.2" state="Success" description="alter sites granted"
checksum="-2124797671" installed="2016-08-01T11:54:08.000+02:00"/>
    <version version="2.8.1" state="Success" description="add repository strict"
checksum="-637161553" installed="2016-08-01T11:54:07.000+02:00"/>
    <version version="2.8" state="Success" description="add template" checksum=
"1443237131" installed="2016-08-01T11:54:07.000+02:00"/>
    <version version="2.7.1" state="Success" description="modify datetime"
checksum="-238501285" installed="2016-08-01T11:54:07.000+02:00"/>
    <version version="2.7" state="Success" description="modify resource name"
```



```
checksum="-410225045" installed="2016-08-01T11:54:05.000+02:00"/>
  <version version="2.6" state="Success" description="drop-site-parentId"
checksum="-628397585" installed="2016-08-01T11:54:05.000+02:00"/>
  <version version="2.5" state="Success" description="add quartz sched time"
checksum="-1887151531" installed="2016-08-01T11:54:04.000+02:00"/>
  <version version="2.4" state="Success" description="migrate to platform"
checksum="-356840062" installed="2016-08-01T11:54:04.000+02:00"/>
  <version version="2.3" state="Success" description="add sites granted"
checksum="562840097" installed="2016-08-01T11:54:00.000+02:00"/>
  <version version="2.2" state="Success" description="Add validation query
column" checksum="-406328953" installed="2016-08-01T11:54:00.000+02:00"/>
  <version version="2.1" state="Success" description="Add active column"
checksum="2085895145" installed="2016-08-01T11:54:00.000+02:00"/>
  <version version="2.0" state="Success" description="set subject email
nullable" checksum="-200093527" installed="2016-08-01T11:53:59.000+02:00"/>
  <version version="1.9" state="Success" description="Add remote repository
name" checksum="-1230423146" installed="2016-08-01T11:53:59.000+02:00"/>
  <version version="1.8" state="Success" description="Add managed column"
checksum="1109092965" installed="2016-08-01T11:53:59.000+02:00"/>
  <version version="1.7" state="Success" description="modify property
description" checksum="-242497654" installed="2016-08-01T11:53:58.000+02:00"/>
  <version version="1.6" state="Success" description="Add Min and
MaxConnections" checksum="-1788286290" installed="2016-08-01T11:53:58.000+02:00"/>
  <version version="1.5" state="Success" description="Add plugin timestamp
appngversion" checksum="1676943241" installed="2016-08-01T11:53:58.000+02:00"/>
  <version version="1.4" state="Success" description="Add DatabaseConnection"
checksum="318992837" installed="2016-08-01T11:53:57.000+02:00"/>
  <version version="1.3" state="Success" description="Set site folder" checksum
="2024773474" installed="2016-08-01T11:53:57.000+02:00"/>
  <version version="1.2" state="Success" description="Let PluginRepository name
be unique" checksum="-743274501" installed="2016-08-01T11:53:56.000+02:00"/>
  <version version="1.1" state="Success" description="Quartz initial setup"
checksum="1726445701" installed="2016-08-01T11:53:56.000+02:00"/>
  <version version="1.0" state="Success" description="appNG initial setup"
checksum="-644756127" installed="2016-08-01T11:53:55.000+02:00"/>
</versions>
</database>
```

3.2. Reload platform



This action will asynchronously restart the whole web-application, making also appNGizer temporarily unavailable!

URL: <http://localhost:8080/appNGizer/platform/reload>

Method: POST

Response Headers: 303 (See other)

3.3. System environment

URL: <http://localhost:8080/appNGizer/platform/environment>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<properties xmlns="http://www.appng.org/schema/appngizer" self="/platform/environment">
  <property name="HOME">
    <value>/home/johndoe</value>
  </property>
  <property name="LANG">
    <value>de_DE.UTF-8</value>
  </property>
</properties>
```

3.4. System properties

URL: <http://localhost:8080/appNGizer/platform/system>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<properties xmlns="http://www.appng.org/schema/appngizer" self="/platform/system">
  <property name="appng.node.id">
    <value>appNG-001</value>
  </property>
  <property name="file.encoding">
    <value>UTF-8</value>
  </property>
  <property name="file.separator">
    <value>/</value>
  </property>
  <property name="java.home">
    <value>/usr/lib/jvm/java-8-openjdk-amd64/jre</value>
  </property>
</properties>
```

3.5. Properties

3.5.1. List Properties

URL: <http://localhost:8080/appNGizer/platform/property>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<properties self="http://localhost:8080/appNGizer/platform/property" xmlns=
"http://www.appng.org/schema/appngizer">
  <property name="applicationDir" self=
"http://localhost:8080/appNGizer/platform/property/applicationDir">
    <value>/applications</value>
    <defaultValue>/applications</defaultValue>
    <description>The folder used for installing file-based-applications, relative
to the webapp-root</description>
  </property>
  <property name="cacheApplicationFolder" self=
"http://localhost:8080/appNGizer/platform/property/cacheApplicationFolder">
    <value>application</value>
    <defaultValue>application</defaultValue>
    <description>The folder for the application-cache, relative to
platform.cacheFolder. Applications might use this
folder to cache temporary data.</description>
  </property>
  <property name="cacheFolder" self=
"http://localhost:8080/appNGizer/platform/property/cacheFolder">
    <value>cache</value>
    <defaultValue>cache</defaultValue>
    <description>The cache folder, relative to WEB-INF. Contains the
platform.cacheFolder and the
platform.cacheApplicationFolder.</description>
  </property>
  <property name="cacheImageFolder" self=
"http://localhost:8080/appNGizer/platform/property/cacheImageFolder">
    <value>image</value>
    <defaultValue>image</defaultValue>
    <description>The folder used for caching images, within the application-
cache</description>
  </property>
  <property name="cachePlatformFolder" self=
"http://localhost:8080/appNGizer/platform/property/cachePlatformFolder">
    <value>platform</value>
    <defaultValue>platform</defaultValue>
    <description>The folder for the platform-cache, relative to
platform.cacheFolder. The platform cache is used by appNG
to cache application resources.</description>
  </property>
</properties>
```

3.5.2. Create Property

URL: <http://localhost:8080/appNGizer/platform/property>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" xmlns="http://www.appng.org/schema/appngizer">
  <defaultValue>42</defaultValue>
  <description>The answer to life, the universe and everything</description>
</property>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<!-- TODO insert example -->
```

3.5.3. Update Property

URL-Scheme: <http://localhost:8080/appNGizer/platform/property/{property-name}>

URL: <http://localhost:8080/appNGizer/platform/property/myCustomProperty>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" xmlns="http://www.appng.org/schema/appngizer">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and
everything</description>
</property>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" self=
"http://localhost:8080/appNGizer/platform/property/myCustomProperty" xmlns=
"http://www.appng.org/schema/appngizer">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and everything</description>
</property>
```

3.5.4. Delete Property

URL-Scheme: <http://localhost:8080/appNGizer/platform/property/{property-name}>

URL: <http://localhost:8080/appNGizer/platform/property/myCustomProperty>

Method: DELETE

Request Body: -none-

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" self=
"http://localhost:8080/appNGizer/platform/property/myCustomProperty" xmlns=
"http://www.appng.org/schema/appngizer">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and everything</description>
</property>
```

4. Applications

4.1. List applications

URL: <http://localhost:8080/appNGizer/application>

Method: GET

Response Body:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<applications self="http://localhost:8080/appNGizer/application" xmlns=
"http://www.appng.org/schema/appngizer">
  <application name="appng-manager" self=
"http://localhost:8080/appNGizer/application/appng-manager">
    <displayName>Manager</displayName>
    <core>true</core>
    <fileBased>false</fileBased>
    <hidden>false</hidden>
    <version>0.12.1</version>
  </application>
  <application name="appng-authentication" self=
"http://localhost:8080/appNGizer/application/appng-authentication">
    <displayName>Authentication</displayName>
    <core>true</core>
    <fileBased>false</fileBased>
    <hidden>true</hidden>
    <version>0.11.0</version>
  </application>
  <application name="appng-scheduler" self=
"http://localhost:8080/appNGizer/application/appng-scheduler">
    <displayName>Scheduler</displayName>
    <core>true</core>
    <fileBased>false</fileBased>
    <hidden>false</hidden>
    <version>0.11.2</version>
  </application>
  <application name="appng-webutils" self=
"http://localhost:8080/appNGizer/application/appng-webutils">
    <displayName>Webutils</displayName>
    <core>false</core>
    <fileBased>true</fileBased>
    <hidden>false</hidden>
    <version>0.11.0</version>
  </application>
</applications>

```

4.2. Show application

URL-Scheme: <http://localhost:8080/appNGizer/application/{app-name}>

URL: <http://localhost:8080/appNGizer/application/appng-manager>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<application name="appng-manager" self=
"http://localhost:8080/appNGizer/application/appng-manager" xmlns=
"http://www.appng.org/schema/appngizer">
  <links>
    <link name="role" self="http://localhost:8080/appNGizer/application/appng-
manager/role"/>
    <link name="permission" self=
"http://localhost:8080/appNGizer/application/appng-manager/permission"/>
    <link name="property" self="http://localhost:8080/appNGizer/application/appng-
manager/property"/>
  </links>
  <displayName>Manager</displayName>
  <core>true</core>
  <fileBased>false</fileBased>
  <hidden>false</hidden>
  <version>0.12.1</version>
</application>
```

4.3. Update application

URL-Scheme: <http://localhost:8080/appNGizer/application/{app-name}>

URL: <http://localhost:8080/appNGizer/application/appng-manager>

Method: PUT

Request-Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<application name="appng-manager" xmlns="http://www.appng.org/schema/appngizer">
  <displayName>appNG Manager</displayName>
  <core>false</core>
  <fileBased>true</fileBased>
  <hidden>true</hidden>
  <version>0.12.1</version>
</application>
```

4.4. Delete application

URL-Scheme: <http://localhost:8080/appNGizer/application/{app-name}>

URL: <http://localhost:8080/appNGizer/application/appng-manager>

Method: DELETE

4.5. Roles

4.5.1. List roles

URL-Scheme: <http://localhost:8080/appNGizer/application/{app-name}/role>

URL: <http://localhost:8080/appNGizer/application/appng-manager/role>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<roles self="http://localhost:8080/appNGizer/application/appng-manager/role" xmlns=
"http://www.appng.org/schema/appngizer">
  <role name="Platform Administrator" self=
"http://localhost:8080/appNGizer/application/appng-
manager/role/Platform%20Administrator">
    <application>appng-manager</application>
    <description>Administrator with all permissions</description>
  </role>
  <role name="User Manager" self="http://localhost:8080/appNGizer/application/appng-
manager/role/User%20Manager">
    <application>appng-manager</application>
    <description>A role for managing groups,users and roles with their
permissions</description>
  </role>
  <role name="Site Manager" self="http://localhost:8080/appNGizer/application/appng-
manager/role/Site%20Manager">
    <application>appng-manager</application>
    <description></description>
  </role>
  <role name="Debugger" self="http://localhost:8080/appNGizer/application/appng-
manager/role/Debugger">
    <application>appng-manager</application>
    <description>Enables debugging output</description>
  </role>
</roles>
```

4.5.2. Show role

URL-Scheme: <http://localhost:8080/appNGizer/application/{app-name}/role/{role-name}>

URL: <http://localhost:8080/appNGizer/application/appng-manager/role/Platform%20Administrator>

Method: GET

Response Body:


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<role name="Platform Administrator" self=
"http://localhost:8080/appNGizer/application/appng-
manager/role/Platform%20Administrator" xmlns="http://www.appng.org/schema/appngizer">
  <application>appng-manager</application>
  <description>Administrator with all permissions</description>
  <permissions>
    <permission name="site.databases">
      <application>appng-manager</application>
      <description>Show the site's databases</description>
    </permission>
    <permission name="application.property.edit">
      <application>appng-manager</application>
      <description>Edit a application property</description>
    </permission>
    <permission name="site.application.property.delete">
      <application>appng-manager</application>
      <description>Delete a property for a site's application</description>
    </permission>
  </permissions>
</role>
```

4.5.3. Create role

URL: <http://localhost:8080/appNGizer/application/appng-manager/role>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<role name="Editor" xmlns="http://www.appng.org/schema/appngizer">
  <application>appng-manager</application>
  <description>Editor role</description>
  <permissions>
    <permission name="site.databases" />
    <permission name="subject.list" />
    <permission name="page.subjects" />
  </permissions>
</role>
```

4.5.4. Update role

URL-Scheme: <http://localhost:8080/appNGizer/application/{app-name}/role/{role-name}>

URL: <http://localhost:8080/appNGizer/application/appng-manager/role/Editor>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<role name="Editor" xmlns="http://www.appng.org/schema/appngizer">
  <application>appng-manager</application>
  <description>Editor role</description>
  <permissions>
    <permission name="site.databases" />
    <permission name="application.property.edit" />
    <permission name="site.application.property.delete" />
  </permissions>
</role>
```

4.5.5. Delete role

Returns 501 (Not Implemented)

4.6. Permissions

4.6.1. List permissions

URL-Scheme:

<http://localhost:8080/appNGizer/application/{app-name}/permission>

URL: <http://localhost:8080/appNGizer/application/appng-manager/permission>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<permissions self="http://localhost:8080/appNGizer/application/appng-
manager/permission" xmlns="http://www.appng.org/schema/appngizer">
  <permission name="application.delete">
    <application>appng-manager</application>
    <description>Delete a application</description>
  </permission>
  <permission name="application.dictionary">
    <application>appng-manager</application>
    <description>Show a application's dictionary</description>
  </permission>
  <permission name="application.edit">
    <application>appng-manager</application>
    <description>Edit a application</description>
  </permission>
  <permission name="application.list">
    <application>appng-manager</application>
    <description>List all applications</description>
  </permission>
  <permission name="application.properties">
    <application>appng-manager</application>
    <description>Show a application's properties</description>
  </permission>
</permissions>
```

4.6.2. Create permission

4.6.3. Update permission

4.6.4. Delete permission

4.7. Properties

See [\[Create Role\]](#) ==== List properties ==== Create property ==== Update property ==== Delete property

5. Site

5.1. List sites

URL: <http://localhost:8080/appNGizer/site>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<sites self="http://localhost:8080/appNGizer/site" xmlns=
"http://www.appng.org/schema/appngizer">
  <site name="appng" self="http://localhost:8080/appNGizer/site/appng">
    <active>true</active>
    <host>localhost</host>
    <domain>http://localhost:8080</domain>
  </site>
  <site name="localhost" self="http://localhost:8080/appNGizer/site/localhost">
    <active>true</active>
    <host>127.0.0.1</host>
    <domain>http://127.0.0.1:8080</domain>
    <description>I am local!</description>
  </site>
</sites>
```

5.2. Show site

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}>

URL: <http://localhost:8080/appNGizer/site/localhost>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<site name="localhost" self="http://localhost:8080/appNGizer/site/localhost" xmlns=
"http://www.appng.org/schema/appngizer">
  <active>true</active>
  <host>localhost</host>
  <domain>http://localhost:8080</domain>
  <properties self="http://localhost:8080/appNGizer/site/localhost/property"/>
  <applications self="http://localhost:8080/appNGizer/site/localhost/application"/>
</site>
```

5.3. Create site

URL: <http://localhost:8080/appNGizer/site>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<site name="localhost" xmlns="http://www.appng.org/schema/appngizer">
  <active>true</active>
  <host>127.0.0.1</host>
  <domain>http://127.0.0.1:8080</domain>
  <description>I am local!</description>
</site>
```

Response Body: -none-

5.4. Update site

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}>

URL: <http://localhost:8080/appNGizer/site/localhost>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<site name="localhost" xmlns="http://www.appng.org/schema/appngizer">
  <active>true</active>
  <host>127.0.0.2</host>
  <domain>http://127.0.0.2:8081</domain>
  <description>I am local, man!</description>
</site>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<site name="localhost" self="http://localhost:8080/appNGizer/site/localhost" xmlns=
"http://www.appng.org/schema/appngizer">
  <active>true</active>
  <host>127.0.0.2</host>
  <domain>http://127.0.0.2:8081</domain>
  <description>I am local, man!</description>
</site>
```

5.5. Delete site

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}>

URL: <http://localhost:8080/appNGizer/site/localhost>

Method: DELETE

Request Body: -none-

Response Body: -none-

5.6. Reload site

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/reload>

URL: <http://localhost:8080/appNGizer/site/localhost/reload>

Method: PUT

Request Body: -none-

Response Body: -none-

5.7. Properties

5.7.1. List properties

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/property>

URL: <http://localhost:8080/appNGizer/site/localhost/property>

Method: GET

Request Body: -none-

Response Body:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<properties xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/site/manager/property">
  <property name="appendTabId" self=
"http://localhost:8080/appNGizer/site/manager/property/appendTabId">
    <value>>false</value>
    <defaultValue>>false</defaultValue>
    <description>If set to true, the name of the currently selected tab is being
appended to the URL as a get-parameter. Addresses the issue that IE loses the anchor
on a redirect.</description>
  </property>
  <property name="assetsDir" self=
"http://localhost:8080/appNGizer/site/manager/property/assetsDir">
    <value>/assets</value>
    <defaultValue>/assets</defaultValue>
    <description>A semicolon-separated list of folder-names (relative to 'wwwDir')
containing static resources such as images or pdfs</description>
  </property>
  <property name="authApplication" self=
"http://localhost:8080/appNGizer/site/manager/property/authApplication">
    <value>appng-authentication</value>
    <defaultValue>appng-authentication</defaultValue>
    <description>The name of the application which is responsible for the
authentication</description>
  </property>
  <property name="authLoginPage" self=
"http://localhost:8080/appNGizer/site/manager/property/authLoginPage">
    <value>webform, digestlogin</value>
    <defaultValue>webform</defaultValue>
    <description>The names of the login-pages (comma-separated) within the
application defined in 'authApplication'. The number of comma-separated pages must be
the same as in 'authLoginRef', because 'authLoginRef[n]' refers to
'authLoginPage[n]!'</description>
  </property>
  <property name="authLoginRef" self=
"http://localhost:8080/appNGizer/site/manager/property/authLoginRef">
    <value>webform, login</value>
    <defaultValue>webform</defaultValue>
    <description>The action names (comma-separated) for the pages defined in
{@link #AUTH_LOGIN_PAGE}. The number of comma-separated names must be the same as in
'authLoginPage', because 'authLoginRef[n]' refers to 'authLoginPage[n]!'</description>
  </property>
</properties>

```

5.7.2. Create Property

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/property>

URL: <http://localhost:8080/appNGizer/site/localhost/property>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" xmlns="http://www.appng.org/schema/appngizer">
  <defaultValue>42</defaultValue>
  <description>The answer to life, the universe and everything</description>
</property>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property xmlns="http://www.appng.org/schema/appngizer" name="myCustomProperty" self=
"http://localhost:8080/appNGizer/site/localhost/property/myCustomProperty">
  <value>42</value>
  <defaultValue>42</defaultValue>
  <description>The answer to life, the universe and everything</description>
</property>
```

5.7.3. Update Property

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/property/{property-name}>

URL: <http://localhost:8080/appNGizer/site/localhost/property/myCustomProperty>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" xmlns="http://www.appng.org/schema/appngizer">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and
everything</description>
</property>
```

Response Body:


```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property xmlns="http://www.appng.org/schema/appngizer" name="myCustomProperty" self=
"http://localhost:8080/appNGizer/site/localhost/property/myCustomProperty">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and everything</description>
</property>
```

5.7.4. Delete property

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/property/{property-name}>

URL: <http://localhost:8080/appNGizer/site/localhost/property/myCustomProperty>

Method: DELETE

Request Body: -none-

Response Body: -none-

5.8. Applications

5.8.1. List applications

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application>

URL: <http://localhost:8080/appNGizer/site/appng/application>

Method: GET

Response Body:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<applications self="http://localhost:8080/appNGizer/site/appng/application" xmlns=
"http://www.appng.org/schema/appngizer">
  <application name="appng-authentication" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-authentication">
    <displayName>Authentication</displayName>
    <core>true</core>
    <fileBased>false</fileBased>
    <hidden>true</hidden>
    <version>0.11.0</version>
  </application>
  <application name="appng-manager" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-manager">
    <displayName>Manager</displayName>
    <core>true</core>
    <fileBased>false</fileBased>
    <hidden>false</hidden>
    <version>0.12.1</version>
  </application>
  <application name="appng-scheduler" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-scheduler">
    <displayName>Scheduler</displayName>
    <core>true</core>
    <fileBased>false</fileBased>
    <hidden>false</hidden>
    <version>0.11.2</version>
  </application>
</applications>

```

5.8.2. Show application

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<application name="appng-authentication" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-authentication" xmlns=
"http://www.appng.org/schema/appngizer">
  <links>
    <link name="role" self="http://localhost:8080/appNGizer/application/appng-
authentication/role" />
    <link name="permission" self=
"http://localhost:8080/appNGizer/application/appng-authentication/permission" />
    <link name="property" self=
"http://localhost:8080/appNGizer/site/localhost/application/appng-
authentication/property" />
    <link name="grants" self=
"http://localhost:8080/appNGizer/site/localhost/application/appng-
authentication/grants" />
  </links>
  <displayName>Authentication</displayName>
  <core>true</core>
  <fileBased>false</fileBased>
  <hidden>true</hidden>
  <version>0.11.0</version>
</application>
```

5.8.3. Application properties

List application properties

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}/property>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication/property>

Method: GET

Response Body:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<properties self="http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property" xmlns="http://www.appng.org/schema/appngizer">
  <property name="digestMaxValidity"
    self="http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property/digestMaxValidity">
    <value>3</value>
    <defaultValue>3</defaultValue>
    <description>the maximum validity of a login digest in minutes</description>
  </property>
  <property name="enableDeeplinks"
    self="http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property/enableDeeplinks">
    <value>true</value>
    <defaultValue>true</defaultValue>
    <description>set to true to forward the user to the originally requested
page</description>
  </property>
  <property name="mailFrom" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property/mailFrom">
    <value>support@aiticon.de</value>
    <defaultValue>support@aiticon.de</defaultValue>
    <description>the sender address for emails send during password
retrieval</description>
  </property>
  <property name="successPage"
    self="http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property/successPage">
    <value>/appng-manager</value>
    <defaultValue>/appng-manager</defaultValue>
    <description>The path the user is forwarded to after successfull
login</description>
  </property>
</properties>

```

Create application property

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}/property>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication/property>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" xmlns="http://www.appng.org/schema/appngizer">
  <defaultValue>42</defaultValue>
  <description>The answer to life, the universe and everything</description>
</property>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property xmlns="http://www.appng.org/schema/appngizer" name="myCustomProperty" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property/myCustomProperty">
  <value>42</value>
  <defaultValue>42</defaultValue>
  <description>The answer to life, the universe and everything</description>
</property>
```

Update application property

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}/property/{property-name}>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication/property/myCustomProperty>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property name="myCustomProperty" xmlns="http://www.appng.org/schema/appngizer">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and
everything</description>
</property>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<property xmlns="http://www.appng.org/schema/appngizer" name="myCustomProperty" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-
authentication/property/myCustomProperty">
  <value>57</value>
  <defaultValue>42</defaultValue>
  <description>The real answer to life, the universe and everything</description>
</property>
```

Delete application property

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}/property/{property-name}>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication/property/myCustomProperty>

Method: DELETE

Request Body: -none-

Response Body: -none-

5.8.4. Showing grants for a site

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}/grants>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication/grants>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<grants xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-authentication/grants">
  <grant site="site-a">false</grant>
  <grant site="site-b">true</grant>
  <grant site="site-c">true</grant>
</grants>
```

5.8.5. Granting an application for other sites

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}/grants>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication/grants>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<grants xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-authentication/grants">
  <grant site="site-a">false</grant>
  <grant site="site-b">true</grant>
  <grant site="site-c">true</grant>
</grants>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<grants xmlns="http://www.appng.org/schema/appngizer" self=
"http://localhost:8080/appNGizer/site/appng/application/appng-authentication/grants">
  <grant site="site-a">false</grant>
  <grant site="site-b">true</grant>
  <grant site="site-c">true</grant>
</grants>
```

5.8.6. Activate application

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication>

Method: POST

5.8.7. Deactivate application

URL-Scheme: <http://localhost:8080/appNGizer/site/{site-name}/application/{app-name}>

URL: <http://localhost:8080/appNGizer/site/appng/application/appng-authentication>

Method: DELETE

6. Repository

6.1. List Repositories

URL: <http://localhost:8080/appNGizer/repository>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<repositories self="http://localhost:8080/appNGizer/repository" xmlns=
"http://www.appng.org/schema/appngizer">
  <repository name="Remote" self="http://localhost:8080/appNGizer/repository/Remote
">
    <remoteName>pdev0-all</remoteName>
    <uri>http://appng.s-ait-p-dev0.aitintra.de/service/appng/appng-
manager/soap/repositoryService</uri>
    <enabled>true</enabled>
    <strict>false</strict>
    <published>false</published>
    <type>REMOTE</type>
    <mode>ALL</mode>
  </repository>
  <repository name="Local" self="http://localhost:8080/appNGizer/repository/Local">
    <remoteName></remoteName>
    <uri>file:///local/repo/path</uri>
    <enabled>true</enabled>
    <strict>false</strict>
    <published>false</published>
    <type>LOCAL</type>
    <mode>ALL</mode>
  </repository>
</repositories>
```

6.2. Create repository

URL: <http://localhost:8080/appNGizer/repository>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<repository name="Local" xmlns="http://www.appng.org/schema/appngizer">
  <remoteName></remoteName>
  <uri>file:///local/repo/path</uri>
  <enabled>true</enabled>
  <strict>false</strict>
  <published>false</published>
  <type>LOCAL</type>
  <mode>ALL</mode>
</repository>
```

Response Body: -none-

6.3. Update repository

URL-Scheme: <http://localhost:8080/appNGizer/repository/{repository-name}>

URL: <http://localhost:8080/appNGizer/repository/Local>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<repository name="Local" xmlns="http://www.appng.org/schema/appngizer">
  <remoteName></remoteName>
  <uri>file:///local/path</uri>
  <enabled>>false</enabled>
  <strict>>true</strict>
  <published>>false</published>
  <type>LOCAL</type>
  <mode>STABLE</mode>
</repository>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<repository name="Local" self="http://localhost:8080/appNGizer/repository/Local"
xmlns="http://www.appng.org/schema/appngizer">
  <remoteName></remoteName>
  <uri>file:///local/path</uri>
  <enabled>>false</enabled>
  <strict>>true</strict>
  <published>>false</published>
  <type>LOCAL</type>
  <mode>STABLE</mode>
</repository>
```

6.4. Delete repository

URL-Scheme: <http://localhost:8080/appNGizer/repository/{repository-name}>

URL: <http://localhost:8080/appNGizer/repository/Local>

Method: DELETE

Request Body: -none-

Response Body: -none-

6.5. Show repository with available packages

URL-Scheme: <http://localhost:8080/appNGizer/repository/{repository-name}>

URL: <http://localhost:8080/appNGizer/repository/Local>

Method: GET

Response Body:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<repository name="Remote" self="http://localhost:8080/appNGizer/repository/Remote"
xmlns="http://www.appng.org/schema/appngizer">
  <remoteName>pdev0-all</remoteName>
  <uri>http://appng.s-ait-p-dev0.aitintra.de/service/appng/appng-
manager/soap/repositoryService</uri>
  <enabled>true</enabled>
  <strict>false</strict>
  <published>false</published>
  <type>REMOTE</type>
  <mode>ALL</mode>
  <packages>
    <package self="http://localhost:8080/appNGizer/repository/Remote/appng-
authentication">
      <name>appng-authentication</name>
      <displayName>Authentication</displayName>
      <installed>true</installed>
      <release>0.11.0</release>
      <type>application</type>
    </package>
    <package self="http://localhost:8080/appNGizer/repository/Remote/appng-
manager">
      <name>appng-manager</name>
      <displayName>Manager</displayName>
      <installed>true</installed>
      <snapshot>0.12.2-SNAPSHOT</snapshot>
      <release>0.12.1</release>
      <type>application</type>
    </package>
    <package self="http://localhost:8080/appNGizer/repository/Remote/appng-
scheduler">
      <name>appng-scheduler</name>
      <displayName>Scheduler</displayName>
      <installed>true</installed>
      <snapshot>0.11.3-SNAPSHOT</snapshot>
      <release>0.11.2</release>
      <type>application</type>
    </package>
    <package self="http://localhost:8080/appNGizer/repository/Remote/appng-
template">
      <name>appng-template</name>
      <displayName>appng</displayName>
      <installed>false</installed>
      <snapshot>0.14.3-SNAPSHOT</snapshot>
      <release>0.14.2</release>
      <type>template</type>
    </package>
  </packages>
</repository>

```

6.6. Install package

URL-Scheme: <http://localhost:8080/appNGizer/repository/{repository-name}/install>

URL: <http://localhost:8080/appNGizer/repository/Remote/install>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<package xmlns="http://www.appng.org/schema/appngizer">
  <name>appng-authentication</name>
  <displayName>Authentication</displayName>
  <version>0.11.0</version>
  <timestamp>20170601-0751</timestamp>
</package>
```

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<package xmlns="http://www.appng.org/schema/appngizer" name="appng-authentication"
self="http://localhost:8080/appNGizer/repository/Local/appng-authentication/0.9.3">
  <name>appng-authentication</name>
  <displayName>Authentication</displayName>
  <installed>true</installed>
  <release>0.11.0</release>
  <type>application</type>
</package>
```

6.7. Upload package

URL-Scheme: <http://localhost:8080/appNGizer/repository/{repository-name}/upload>

URL: <http://localhost:8080/appNGizer/repository/Local/upload>

Method: POST

Request A **multipart/form-data** encoded request with a parameter named **file** that contains the package archive.

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<package xmlns="http://www.appng.org/schema/appngizer" name="appng-authentication"
self="http://localhost:8080/appNGizer/repository/Local/appng-authentication/0.9.3">
  <name>appng-authentication</name>
  <displayName>Authentication</displayName>
  <installed>false</installed>
  <release>0.11.0</release>
  <type>application</type>
</package>
```

Response Code:

- **405** (method not allowed) - if the repository is not a local repository
- **400** (bad request) - if the file is not a valid archive

7. Groups

7.1. List Groups

URL: <http://localhost:8080/appNGizer/group>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<groups self="http://localhost:8080/appNGizer/groups" xmlns=
"http://www.appng.org/schema/appngizer">
  <group name="Administrator" self=
"http://localhost:8080/appNGizer/group/Administrator">
    <description>appNG administrator group</description>
  </group>
  <group name="Editor" self="http://localhost:8080/appNGizer/group/Editor">
    <description>group for editors</description>
  </group>
</groups>
```

7.2. Show group

URL-Scheme: <http://localhost:8080/appNGizer/group/{group-name}>

URL: <http://localhost:8080/appNGizer/group/Administator>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<group name="Administrator" self="http://localhost:8080/appNGizer/group/Administrator"
xmlns="http://www.appng.org/schema/appngizer">
  <description>appNG administrator group</description>
  <roles>
    <role name="Platform Administrator" self=
"http://localhost:8080/appNGizer/application/appng-
manager/role/Platform%20Administrator">
      <application>appng-manager</application>
      <description>Administrator with all permissions</description>
    </role>
    <role name="Users" self="http://localhost:8080/appNGizer/application/appng-
authentication/role/Users">
      <application>appng-authentication</application>
      <description>General role for all users</description>
    </role>
    <role name="Scheduler Admin" self=
"http://localhost:8080/appNGizer/application/appng-scheduler/role/Scheduler%20Admin">
      <application>appng-scheduler</application>
      <description>a super administrator with all permissions</description>
    </role>
  </roles>
</group>
```

7.3. Create group

URL: <http://localhost:8080/appNGizer/group>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<group name="Editor" xmlns="http://www.appng.org/schema/appngizer">
  <description>group for editors</description>
  <roles>
    <role name="Platform Administrator" >
      <application>appng-manager</application>
    </role>
    <role name="Users">
      <application>appng-authentication</application>
    </role>
    <role name="Scheduler Admin">
      <application>appng-scheduler</application>
    </role>
  </roles>
</group>
```

Response Body: -none-

7.4. Update group

URL-Scheme: <http://localhost:8080/appNGizer/group/{group-name}>

URL: <http://localhost:8080/appNGizer/group/Administator>

Method: PUT

Response Body:

7.5. Delete group

URL-Scheme: <http://localhost:8080/appNGizer/group/{group-name}>

URL: <http://localhost:8080/appNGizer/group/Administator>

Method: DELETE

Response Body: -none-

8. Subjects

8.1. List subjects

URL: <http://localhost:8080/appNGizer/subject>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subjects self="http://localhost:8080/appNGizer/subjects" xmlns=
"http://www.appng.org/schema/appngizer">
  <subject name="admin" self="http://localhost:8080/appNGizer/subject/admin">
    <realName>appNG Administrator</realName>
    <email>admin@appng.org</email>
    <description>foo!</description>
    <timeZone>Europe/Berlin</timeZone>
    <language>en</language>
    <type>LOCAL_USER</type>
  </subject>
  <subject name="editor" self="http://localhost:8080/appNGizer/subject/editor">
    <realName>appNG Editor</realName>
    <email>editor@appng.org</email>
    <description>bar!</description>
    <timeZone>Europe/Berlin</timeZone>
    <language>de</language>
    <type>LOCAL_USER</type>
  </subject>
</subjects>
```

8.2. Show subject

URL-Scheme: <http://localhost:8080/appNGizer/subject/{subject-name}>

URL: <http://localhost:8080/appNGizer/subject/Admin>

Method: GET

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subject name="editor" xmlns="http://www.appng.org/schema/appngizer">
  <realName>appNG Editor</realName>
  <email>editor@appng.org</email>
  <description>bar!</description>
  <digest>$2a$13$GkdFoQDajx73NJMUoyb4mOWKQ7XtIbPnioVXHeJTn3oMPuaJX1iCu</digest>
  <timeZone>Europe/Berlin</timeZone>
  <language>de</language>
  <type>LOCAL_USER</type>
  <groups>
    <group name="Administrator" />
  </groups>
</subject>
```


8.3. Create subject

URL: <http://localhost:8080/appNGizer/subject>

Method: POST

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subject name="editor" xmlns="http://www.appng.org/schema/appngizer">
  <realName>appNG Editor</realName>
  <email>editor@appng.org</email>
  <description>bar!</description>
  <digest>$2a$13$GkdFoQDajx73NJMUoyb4mOWKQ7XtIbPnioVXHeJTn3oMPuaJX1iCu</digest>
  <timeZone>Europe/Berlin</timeZone>
  <language>de</language>
  <type>LOCAL_USER</type>
  <groups>
    <group name="Administrator" />
  </groups>
</subject>
```



The `<digest>` needs to be a valid [Bcrypt](#) hash of the user's password. Implementations of Bcrypt are available for many programming languages. When using Java, you can use the implementation of [Spring Security](#). For Python, there's also a [bcrypt package](#) available.



If the digest starts with the Bcrypt-prefix `$2a$`, it will be taken as is. Otherwise, it will be encrypted by appNGizer. If omitted, the user's digest remains unchanged.

Response Body: -none-

8.4. Update subject

URL-Scheme: <http://localhost:8080/appNGizer/subject/{subject-name}>

URL: <http://localhost:8080/appNGizer/subject/admin>

Method: PUT

Request Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subject name="admin" xmlns="http://www.appng.org/schema/appngizer">
  <realName>appNG Admin</realName>
  <email>admin@appng.org</email>
  <description>bar!</description>
  <digest>$2a$13$GkdFoQDajx73NJMUoyb4mOWKQ7XtIbPnioVXHeJTn3oMPuaJX1iCu</digest>
  <timeZone>Europe/Madrid</timeZone>
  <language>es</language>
  <type>LOCAL_USER</type>
  <groups>
    <group name="Administrator" />
    <group name="Editor" />
  </groups>
</subject>
```



The same rules for the `<digest>` apply as for creating subjects. The response will always contain the encrypted version.

Response Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<subject name="admin" self="http://localhost:8080/appNGizer/subject/admin" xmlns=
"http://www.appng.org/schema/appngizer">
  <realName>appNG Admin</realName>
  <email>admin@appng.org</email>
  <description>bar!</description>
  <digest>$2a$13$GkdFoQDajx73NJMUoyb4mOWKQ7XtIbPnioVXHeJTn3oMPuaJX1iCu</digest>
  <timeZone>Europe/Madrid</timeZone>
  <language>es</language>
  <type>LOCAL_USER</type>
  <groups>
    <group name="Administrator" self=
"http://localhost:8080/appNGizer/group/Administrator">
      <description>appNG administrator group</description>
    </group>
    <group name="Editor" self="http://localhost:8080/appNGizer/group/Editor">
      <description>group for editors</description>
    </group>
  </groups>
</subject>
```

8.5. Delete subject

URL-Scheme: <http://localhost:8080/appNGizer/subject/{subject-name}>

URL: <http://localhost:8080/appNGizer/subject/admin>

Method: DELETE

Response Body: -none-