



appNGizer User Manual

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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

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 is only available if appNGizer is running in the same Tomcat as appNG itself.

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

Method: POST

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>
```

3.3. 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">
  <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. 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

5.8.5. 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-