## IntellIoT component available for OC #2 integration - Details

<table>
<thead>
<tr>
<th>Name</th>
<th>AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible partner(s)</td>
<td>Telecommunication Systems Institute (TSI)</td>
</tr>
<tr>
<td>Brief description</td>
<td>The Authentication, Authorisation, and Accounting (AAA) component provides user, user role and key management, as well as an authentication mechanism for external applications that need to access internal services of the IntellIoT framework. The AAA solution employed is the open-source Identity and Access Management tool, Keycloak. It provides support for authorization, by using the OAuth 2.0 protocol, and authentication, using the OpenID Connect protocol. Both are industry standard protocols with widespread adoption and support.</td>
</tr>
</tbody>
</table>

### Interfacing (I/O)

It can be accessed indirectly through a reverse proxy for automated access of services or directly through Web UI for user logins. Please refer to deliverable D2.6, subsection 2.3.3, for more details regarding interfacing.

### Main interactions

Two main options are available: (i) through the AAA Web UI which is used in order to validate the user credentials and (ii) through an agent automated access process. Deliverable D2.6, subsection 2.2.3, provides for more details regarding main component interactions involving AAA.

### Deployment

The AAA can be deployed in dockerised form. It consists of two containers, one for Keycloak and another for the MySQL database.

### Licensing

The solution is based on open-source tools and therefore the licenses of these tools are preserved. (Keycloak: Apache License 2.0 / Mysql: GPL License / Openresty/Nginx: 2-clause BSD License)

### Deliverable references

Please refer to deliverable D2.6 – “High level architecture (final version)”, subsections 2.1.3, 2.2.3, 2.3.3 & 2.4.3, for more details regarding interfacing & integration of SAP and other trust components & deliverable D4.4 – “Trust mechanisms (first version)”, section 2, for more details on the design and development of the component.