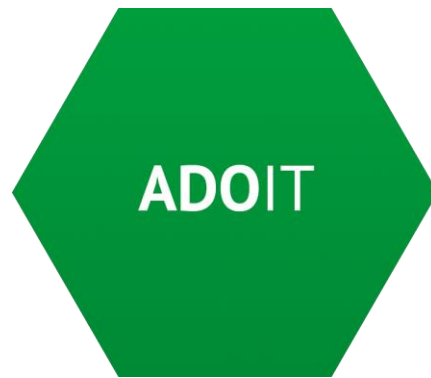


ADOIT Connect for Power BI

Version 1.0



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1. Scenario Overview

The ADOIT Connect for Power BI enables a connection between the data stored in ADOIT and Power BI.

Note: This document focuses on the integration with ADOIT. Integration with ADONIS is also possible with only minor metamodel adjustments.

The current version of the module supports the following features:

- **Dashboard:** There is a predefined dashboard for an Application Portfolio that shows the most important data regarding your applications in ADOIT. By changing the data source in Power BI, the dashboard will automatically be updated with your ADOIT data. The dashboard can also be easily adapted, in case you want to focus on different aspects of your applications.
- **Reports:** It is possible to embed your Power BI dashboard in MS Teams or PowerPoint to keep your colleagues in the loop.
- **Real-time Synchronization:** View your ADOIT data in real-time in Power BI by synchronizing your dashboard.

The following image shows an example of a dashboard in Power BI which contains data retrieved from ADOIT:

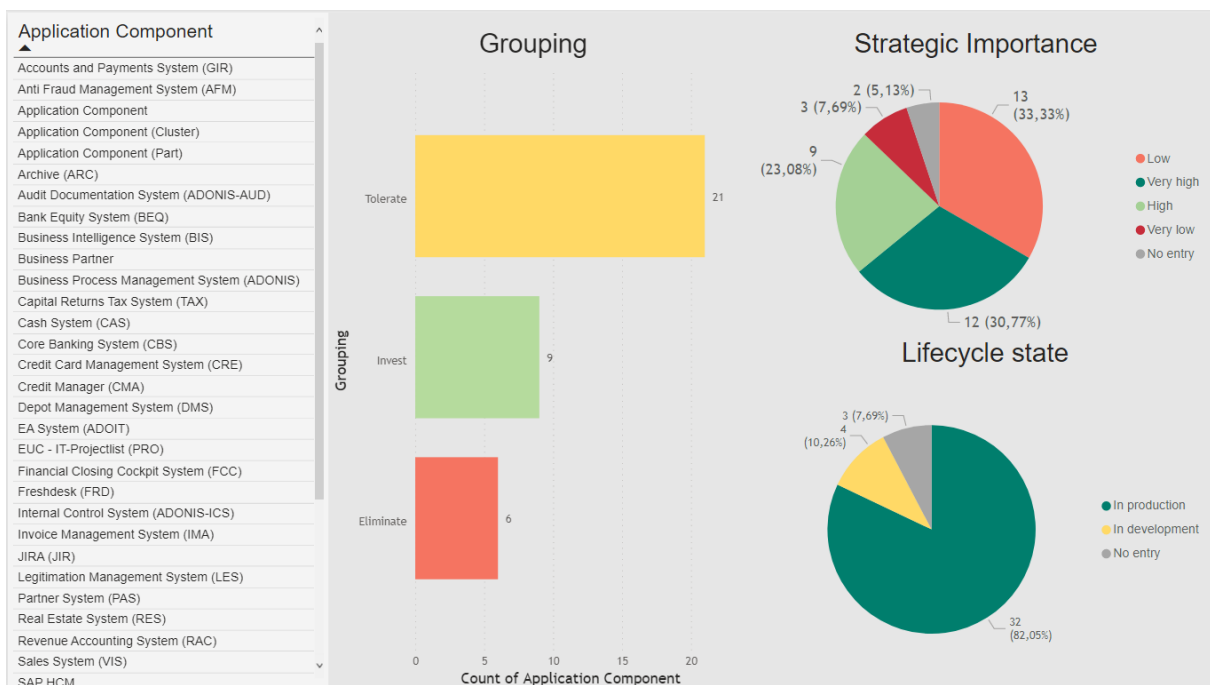


Figure 1: Dashboard in Power BI showing Groupings of Application Components in ADOIT

2. Architecture

Communication between ADOIT and Power BI is realized via a REST-URL. Power BI needs the BASE URL of the ADOIT version that the user is currently using.

3. Setup

3.1. Prerequisites

ADOIT 12.0 or higher and Power BI Desktop 2.9 or higher must be installed.

3.2. Unlock Basic Auth in Admin Toolkit

1. Library Management

To access the ADOIT data in Power BI, Basic Auth must first be allowed in the Admin Toolkit. To do this, open the Admin Toolkit and click on the "Library Management" section. Then click on "Component Settings" and expand the ADOIT metamodel by clicking on the plus. Next, open "Standard RESTful services" and select "General".

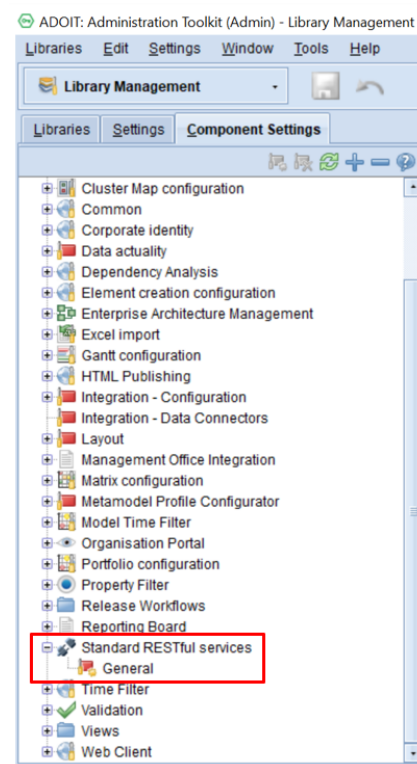


Figure 2: Component Settings – Admin Toolkit

2. Settings Standard RESTful Services

The next step is to enable MFB REST globally in the “Token” tab and activate a technical user from the default group.

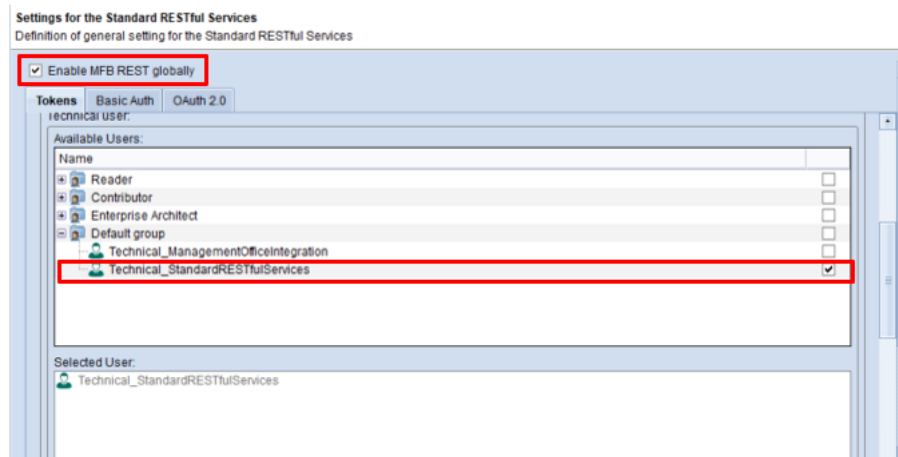


Figure 3: Enable Standard RESTful Services

3. Basic Auth

Then go to the "Basic Auth" tab and enable all repository scenarios. When all steps are done, click "OK" and restart the application server.



Figure 4: Enable Repository Scenarios

3.3. Allow authentication in the web application

Under the path `webapps/<ADO>/WEB-INF/rest/RESTAuthorization.xml` authentication must be allowed in the web application. To do this, one must remove the comments around `<entry key="REST_BASIC_AUTHENTICATION">true</entry>`. Open the file in a program where you can edit (e.g. Notepad). Then delete the comments as mentioned above.

The code should look this in the end:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
<comment>Trusted RESTful callers with their secret key</comment>
<!-- True of the rest authentication secret is encrypted, otherwise false -->
<entry key="ENCRYPTED">true</entry>

<!-- The key and its secret.
If the ENCRYPTED flag is set to true then the secret must be encoded via ADOxx API
ado.util.encrypt (recommended). -->
<!--<entry key="%KEY%">%SECRET%</entry>-->

<entry key="REST_BASIC_AUTHENTICATION">true</entry>
</properties>
```

4. Test the ADOIT Connect for Power BI

Perform the following steps to test the ADOIT Connect for Power BI

Start the services for ADOIT and open ADOIT in the browser. Then copy the Base URL of your ADOIT version, e.g.: http://localhost:8000/ADOIT12_0.

Then open the predefined template. A window should pop up asking you to enter your Base URL.

Figure 4: Rest Base URL

Then enter the rest base URL you copied earlier and add /rest/2.0/ at the end. Your input should then look something like this: http://localhost:8000/ADOIT12_0/rest/2.0/. Make sure that the ADOIT services are running, as Power BI pulls the ADOIT data directly from the web.

Once all these steps have been completed, the template should be filled with your data and your data will be visualised in Power BI.

5. Security

The fact that Basic Authentication has to be permitted for Power BI means that it is also generally enabled.

However, this should not cause any security problems, as the user's credentials as well as the repository and query ID are also required to gain access to the data.