# **ADONIS Connect for Power BI**

Version 2.0



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### Scenario Overview

The ADONIS Connect for Power BI enables a connection between the data stored in ADO-NIS and Power BI.

**Note**: This document focuses on the integration with ADONIS. Integration with ADOIT 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 a Process Management Portfolio in ADONIS that shows the most important data regarding your processes in ADO-NIS. By changing the data source in Power BI, the dashboard will automatically be updated with your ADONIS 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 ADONIS 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 ADONIS:



Figure 1: Dashboard in Power BI showing Risks that are connected to Processes in ADONIS

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### 2. Architecture

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

### 3. Setup

#### 3.1. Prerequisites

ADONIS 11.0 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 ADONIS 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 ADONIS metamodel by clicking on the plus. Next, open "Standard RESTtful services" and select "General".



Figure 2: Component Settings - Admin Toolkit

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#### 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.

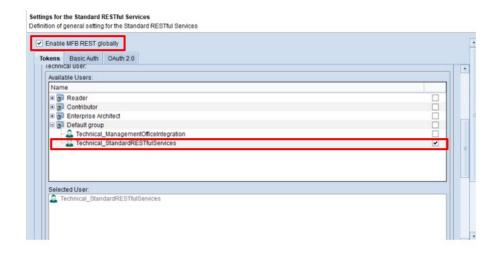


Figure 3: Enable Standard RESTful Services

#### 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

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#### 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">
cproperties>
<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></properties>

<
```

### Test the ADONIS Connect for Power BI

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

Start the services for ADONIS and open ADONIS in the browser. Then copy the Base URL of your ADONIS version, e.g.: <a href="http://localhost:8000/ADONIS13">http://localhost:8000/ADONIS13</a> 0.

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

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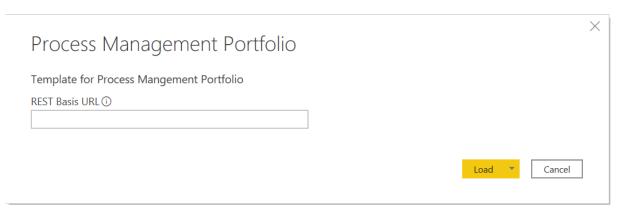


Figure 4: Rest Base URL

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: <a href="http://localhost:8000/ADONIS13\_0/rest/2.0/">http://localhost:8000/ADONIS13\_0/rest/2.0/</a>. Make sure that the ADONIS services are running, as Power BI pulls the ADONIS 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.

## 6. Changes with ADONIS 14.0

Now with ADONIS 14.0 it is even easier to transfer data from ADONIS to Power BI.

You do not have to globally enable or disable basic authentication in a configuration file anymore. Instead, you can define IP addresses and system roles on the Admin Page for access control.

More detailed instructions on how to enable basic authentication can be found in our online help: <a href="https://docs.boc-group.com/adonis/en/docs/14.0/administration\_manual/lbm-000000/#libcs-L7000">https://docs.boc-group.com/adonis/en/docs/14.0/administration\_manual/lbm-000000/#libcs-L7000</a>

You have to allow basic authentication for all IP addresses. The code in the security settings should look like this after editing:

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```
Security
                                                                                        _ 🗆 X
   "basicauth_ip_restrictions": [],
   "basicauth_roles": [],
   "brute-force": {
     "clean_up_period": 60000,
     "clean_up_threshold_ip": 10800000,
     "clean_up_threshold_user": 600000,
     "max_attempts_overall": 150,
     "max_attempts_per_ip": 75,
     "max_attempts_per_username": 15,
     "sleeptime_max_attempts_overall": 30000,
     "sleeptime_max_attempts_per_ip": 60000
   },
   "orgportal_ip_restrictions": [],
   "reauthentication": {
     "brute-force": {
       "clean_up_period": 60000,
       "clean_up_threshold_ip": 10800000,
      "clean_up_threshold_user": 600000,
       "max_attempts_overall": 150,
      "max_attempts_per_ip": 75,
       "max attempts per username": 15,
       "sleeptime_max_attempts_overall": 30000,
       "sleeptime_max_attempts_per_ip": 60000
     },
     "context_validity_seconds": 30,
     "enabled": true
   },
   "rest": {
     "basicauth_ip_restrictions": [
       "allow all"
     "basicauth_roles": [],
     "brute-force": {
       "clean_up_period": 60000,
```

Figure 5: Allow basic authentication as administrator

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