



# A.A.A.R. Manual Installation

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## Index

<b>OVERVIEW.....</b>	<b>3</b>
<b>INSTALLATION STEPS.....</b>	<b>4</b>
Create DataMart and Kettle schemas.....	4
Configure DataMart schema to change Alfresco parameters.....	4
Configure JNDI datasource in Pentaho Data Integration to connect to Kettle schema.....	5
Configure JNDI datasource in Pentaho BI to connect to DataMart schema.....	5
Configure Pentaho Data Integration repository.....	6
Load AAAR repository structure.....	8
Load Data using the Extract procedure.....	8
Access to main AAAR Dashboard.....	9
(Optional) Test Publish procedure.....	9



## Overview

This guide has been created to give an alternative way to install A.A.A.R application in all the cases the standard wizard could not work. Below are examples of cases where it could be useful to do a manual installation:

1. When you have a distributed environment (Eg. when DBMS is on a machine other than the Pentaho BI Server machine)
2. When you want to understand what the wizard does more deeply

The guide takes the following application stack as reference on Linux environment:

- Alfresco 5.1
- MySQL 5.6
- Pentaho BI Server 6.1
- Pentaho Data Integration 6.1
- AAAR 4.3

Depending on the version of your environment you could change some steps in order to complete successfully the installation also with other supported applications (Eg. for DBMS PostgreSQL or for different versions of Pentaho and Alfresco, please see the [compatible matrix](#) for details of application version supported)

This guide uses the same nomenclature adopted from Francesco Corti in his guide, so the terms and the paths should be maintained (as well as <biserver-ce> path etc.). Moreover, assume that you have already developed all the steps described in the online guide "[How to Install A.A.A.R](#)" until Get A.A.A.R, so it is intended to replace only the step **Install A.A.A.R.**



# Installation steps

In order to do a manual installation you have to download the MySQL Client package on the Pentaho BI Server machine

## Create DataMart and Kettle schemas

This task creates two new database schema called AAAR\_DataMart and AAAR\_Kettle on your remote database MySQL (hostname: <mysql-host>).

Go to <biserver-ce>/pentaho-solution/system/AAAR/endpoints/kettle/src/Alfresco\_5\_1/MySql/ and execute the following statements:

### Create AAAR\_DataMart

```
mysql -h <mysql-host> -uroot -p < AAAR_DataMart.sql
```

### Create AAAR\_Kettle

```
mysql -h <mysql-host> -uroot -p < AAAR_Kettle_v6.sql
```

and for each statement insert the mysql root password when prompt

## Configure DataMart schema to change Alfresco parameters

### Alfresco URL and credentials

Connect to mysql server using

```
mysql -h <mysql-host> -uroot -p
```

insert the mysql root password when prompt and modify parameters according your Alfresco installation:

```
use AAAR_DataMart
```

```
UPDATE dm_dim_alfresco SET login='<alfresco-admin-login>', password='<alfresco-admin-password>', url='<alfresco-url>'
```

Eg. <alfresco-admin-login>: admin, <alfresco-admin-password>: admin, <alfresco-url>: http://<alfresco-host>:8080

### Alfresco FTP

```
UPDATE dm_reports SET pentaho_url='<pentaho-url>', alfresco_ftp='<alfresco-ftp-ip>', alfresco_port='<alfresco-ftp-port>';
```



Eg <alfresco-ftp-ip>:172.18.0.2, <alfresco-ftp-port>:1121, <pentaho-url>:  
http://localhost:8080/pentaho

## Configure JNDI datasource in Pentaho Data Integration to connect to Kettle schema

Open file <data-integration>/simple-jndi/jdbc.properties

Add the following lines (changing properly the mysql host, and password params):

```
# A.A.A.R. - Alfresco Audit Analysis and Reporting - AAAR_DataMart.  
AAAR_DataMart/type=javax.sql.DataSource  
AAAR_DataMart/driver=com.mysql.jdbc.Driver  
AAAR_DataMart/url=jdbc:mysql://<mysql-host>:3306/AAAR_DataMart  
AAAR_DataMart/user=root  
AAAR_DataMart/password=<mysql-root-password>  
# A.A.A.R. - Alfresco Audit Analysis and Reporting - AAAR_Kettle.  
AAAR_Kettle/type=javax.sql.DataSource  
AAAR_Kettle/driver=com.mysql.jdbc.Driver  
AAAR_Kettle/url=jdbc:mysql://<mysql-host>:3306/AAAR_Kettle  
AAAR_Kettle/user=root  
AAAR_Kettle/password=<mysql-root-password>
```

## Configure JNDI datasource in Pentaho BI to connect to DataMart schema<sup>1</sup>

Open file <biserver-ce>/tomcat/webapps/pentaho/WEB-INF/web.xml

Insert the following code after last resource-refs:

```
<!-- insert additional resource-refs -->
```

```
<resource-ref>  
  <description>AAAR_DataMart</description>  
  <res-ref-name>jdbc/AAAR_DataMart</res-ref-name>  
  <res-type>javax.sql.DataSource</res-type>  
  <res-auth>Container</res-auth>  
</resource-ref>
```

```
<resource-ref>  
  <description>AAAR_Kettle</description>  
  <res-ref-name>jdbc/AAAR_Kettle</res-ref-name>  
  <res-type>javax.sql.DataSource</res-type>  
  <res-auth>Container</res-auth>
```

---

<sup>1</sup> For some Pentaho version is possible to configure JNDI datasource for BI in the way of data-integration modifying <home>/pentaho/simple-jndi/default.properties and add the same properties inserted in data-integration



</resource-ref>

Open file <biserver-ce>/tomcat/webapps/pentaho/WEB-INF/web.xml

Add the following code:

```
<Resource name="jdbc/AAAR_DataMart" auth="Container" type="javax.sql.DataSource"
    factory="org.apache.commons.dbcp.BasicDataSourceFactory" maxTotal="20" maxIdle="5"
    maxWaitMillis="10000" username="root" password="<mysql-root-password>"
    driverClassName="com.mysql.jdbc.Driver" url="jdbc:mysql://<mysql-host>:3306/AAAR_DataMart"
validationQuery="select 1"/>
```

```
<Resource name="jdbc/AAAR_Kettle" auth="Container" type="javax.sql.DataSource"
    factory="org.apache.commons.dbcp.BasicDataSourceFactory" maxTotal="20" maxIdle="5"
    maxWaitMillis="10000" username="root" password="<mysql-root-password>"
    driverClassName="com.mysql.jdbc.Driver" url="jdbc:mysql://<mysql-host>:3306/AAAR_Kettle"
validationQuery="select 1"/>
```

## Configure Pentaho Data Integration repository

Create, if doesn't exists, a file repositories.xml in <home>/.kettle/repositories.xml

Add the following code:

```
<?xml version="1.0" encoding="UTF-8"?>
<repositories>
  <connection>
    <name>AAAR_Kettle</name>
    <server/>
    <type>MYSQL</type>
    <access>JNDI</access>
    <database>AAAR_Kettle</database>
    <port>-1</port>
    <username/>
    <password>Encrypted </password>
    <servername/>
    <data_tablespace/>
    <index_tablespace/>
    <attributes>
      <attribute><code>FORCE_IDENTIFIERS_TO_LOWERCASE</code><attribute>N</attribute></attribute>
      <attribute><code>FORCE_IDENTIFIERS_TO_UPPERCASE</code><attribute>N</attribute></attribute>
      <attribute><code>IS_CLUSTERED</code><attribute>N</attribute></attribute>
      <attribute><code>PORT_NUMBER</code><attribute>-1</attribute></attribute>
      <attribute><code>PRESERVE_RESERVED_WORD_CASE</code><attribute>N</attribute></attribute>
      <attribute><code>QUOTE_ALL_FIELDS</code><attribute>N</attribute></attribute>
      <attribute><code>SUPPORTS_BOOLEAN_DATA_TYPE</code><attribute>Y</attribute></attribute>
      <attribute><code>SUPPORTS_TIMESTAMP_DATA_TYPE</code><attribute>N</attribute></attribute>
    </attributes>
  </connection>
</repositories>
```



```
<attribute><code>USE_POOLING</code><attribute>N</attribute></attribute>
</attributes>
</connection>
<repository>    <id>KettleDatabaseRepository</id>
    <name>AAAR_Kettle</name>
    <description>AAAR_Kettle</description>
    <connection>AAAR_Kettle</connection>
</repository>  </repositories>
```



## Load AAAR repository structure

Connect to pentaho user console

Click on browse

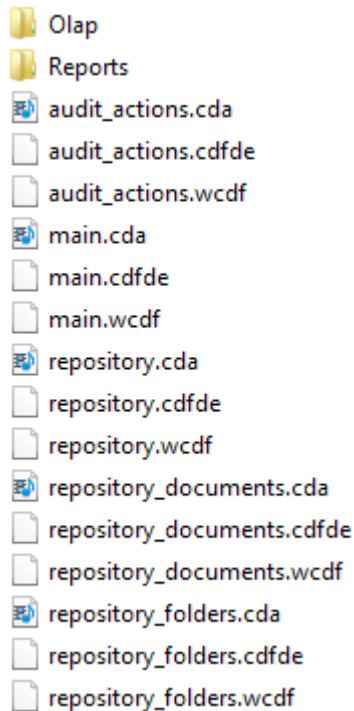
Click on Public folder

Create a folder named **AAAR**

Replicate the whole structure defined in `<biserver-ce>/pentaho-solution/system/AAAR/endpoints/kettle/src/Alfresco_5_1/MySql/Repository`. At the end you should have a following structure:

Public

AAAR



## Load Data using the Extract procedure

Access to `<biserver-ce>/pentaho-solution/system/AAAR/endpoints/kettle/script` folder using pentaho user and execute

```
./AAAR_Extract.sh
```

Control log if the procedure has been executed successfully

For additional information to execute the procedure see [Extract](#)





## Access to main AAAR Dashboard

If you do all the steps, you should be able to access to main AAAR Dashboard.  
So access to Pentaho User console and go to Tools → AAAR and that's it!

## (Optional) Test Publish procedure

If want you can upload in Alfresco the executed reports from AAAR.

In order to do this, access to `<biserver-ce>/pentaho-solution/system/AAAR/endpoints/kettle/script` folder using pentaho user and execute  
`./AAAR_Publish.sh`

Control log if the procedure has been executed successfully

For additional information to execute the procedure see [Publish](#)