REMOVE-Upgrading from WSO2 EI 6.1.0

This page walks you through the process of upgrading to WSO2 Enterprise Integrator (WSO2 EI) 6.1.1 from WSO2 EI 6.1.0. This will cover the steps for upgrading all of the following profiles in WSO2 EI:

- **Integration** profile
- **Message Broker** profile
- **Business Process** profile
- **Analytics** profile

ⓘ For information on the default ports in WSO2 EI profiles, see Default ports of WSO2 EI.

See the following topics for details:

Preparing to upgrade

The following prerequisites must be completed before upgrading:

- Create a backup of the databases in your WSO2 EI 6.1.0 instance.
- Copy the `<EI_6.1.0_HOME>` directory to back up the product configurations.
- Download WSO2 EI 6.1.1 from http://wso2.com/integration.

ⓘ The downtime is limited to the time taken for switching databases in the production environment.

Upgrading the databases

In WSO2 EI 6.1.1, you can use the same databases that you used for the profiles in WSO2 EI 6.1.0. Therefore, you can simply restore the backup of the existing Carbon databases to use with WSO2 EI 6.1.1.

Migrating the configurations

⚠ Configurations should not be copied directly between servers.

Migrating configurations of the Integration profile

Follow the steps given below:

1. Copy the database connector JAR files stored in the `<EI_HOME>/lib` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
2. Copy the keystores and truststores used in the Integration profile of WSO2 EI 6.1.0 from the `<EI_HOME>/repository/resources/security` directory of WSO2 EI 6.1.0 to the same directory in WSO2 EI 6.1.1.

3. Update the configuration files:
   a. Update the configuration files with information of the migrated keystores and truststores. See Configuri ng Keystores in WSO2 products for more information.
   b. Go to the `<EI_HOME>/conf/datasources` directory and update the Carbon datasource configuration in the `master-datasources.xml` file with the details of the Carbon database.
   c. Go to the `<EI_HOME>/conf` directory and update the datasource references in the `user-mgt.xml` a nd `registry.xml` files to match the updated configurations in the `master-datasources.xml` file.
4. If you have secondary user stores created for the Integration profile of WSO2 EI 6.1.0, you need to copy the 'userstore' folder in the `<EI_6.1.0_HOME>/repository/deployment/server/` directory to the same directory in WSO2 EI 6.1.1.
5. Check for any other configurations that were done for WSO2 EI 6.1.0 based on your solution, and update the configurations in WSO2 EI 6.1.1 accordingly. For example, configurations related to external user stores, caching, mounting, transports, etc.
6. If there are any third-party libraries used with WSO2 EI 6.1.0 that you want to migrate, copy the relevant libraries from WSO2 EI 6.1.0 to WSO2 EI 6.1.1:
   - If you have used JMS libraries, JDBC libraries, etc., copy the contents from `<EI_HOME>/lib`.
   - If you have used OSGi bundles such as SVN kit etc., copy the contents from `<EI_HOME>/dropins.`

Migrating configurations of the Message Broker profile

Follow the steps below:

1. Copy the database connector JAR files stored in the `<EI_HOME>/lib` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
2. Copy the keystores and truststores used in the Message Broker profile of WSO2 EI 6.1.0 from the `<EI_HOME>/wso2/broker/repository/resources/security` directory of WSO2 EI 6.1.0 to the same directory in WSO2 EI 6.1.1.
3. Update the configuration files.

   a. Update the configuration files with information of the migrated keystores and truststores. See Configuri ng Keystores in WSO2 products for more information.
   b. Go to the `<EI_HOME>/wso2/broker/conf/datasources` directory and update the Carbon datasource configuration in the `master-datasources.xml` file.

   > ⓘ Note that you need to update the datasource details for the Carbon database as well as the broker-specific database in the `master-datasources.xml` file.

   c. Go to the `<EI_HOME>/wso2/broker/conf` directory and update the datasource references in the `us er--mgt.xml` and `registry.xml` files to match the updated configurations in the `master--datasources.xml` file.
   d. Check for any further configurations that were done for the Message Broker profile in WSO2 EI 6.1.0 based on your solution and update the following configuration files in EI 6.1.1 accordingly:
      - `broker.xml`
      - `metrics.xml`
      - `metrics-properties.xml`
      - `messaging-event-broker.xml`
4. If you have secondary user stores created for the Message Broker profile of WSO2 EI 6.1.0, you need to copy the 'userstore' folder in the `<EI_6.1.0_HOME>/wso2/broker/repository/deployment /server/` directory to the same directory in WSO2 EI 6.1.1.
5. Check for any other configurations that were done for the Message Broker profile of WSO2 EI 6.1.0 based on your solution and update the configurations in WSO2 EI 6.1.1 accordingly. For example, configurations related to external user stores, caching, mounting, transports etc.

Migrating configurations of the Business Process profile

Follow the steps below:

1. Copy the database connector JAR files stored in the `<EI_HOME>/lib` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1. For example, the JAR for the Oracle database (`ojdbc7.jar`) can be copied.
2. Copy the keystores and truststores used in the Business Process profile of WSO2 EI 6.1.0 from the `<EI_HOME>/wso2/business-process/repository/resources/security` directory of WSO2 EI 6.1.0 to the same directory in WSO2 EI 6.1.1.
3. Update the configuration files.
   a. Update the configuration files with information of the migrated keystores and truststores. See Configuring Keystores in WSO2 products for more information.
   b. Go to the `<EI_HOME>/wso2/business-process/conf/datasources` directory and update the Carbon datasource configuration in the `master`-datasources.xml file with the details of the Carbon database.
   c. Go to the `<EI_HOME>/wso2/business-process/conf` directory and update the datasource references in the `user--mgt.xml` and `registry.xml` files to match the updated configurations in the `master--datasources.xml` file.
   d. Go to the `<EI_HOME>/wso2/business-process/conf/datasources` directory and update the `activiti-datasources.xml` file with details of the datasource connection to the BPMN database.
   e. Go to the `<EI_HOME>/wso2/business-process/conf/datasources` directory and update the `bps-datasources.xml` file with details of the datasource connection to the BPEL database.
   f. Open the `<EI_HOME>/wso2/business-process/conf/humantask.xml` file and change `GenerateDdl` to `false`. You can see the deployed humantask packages with the version in the console. A migration success message is printed once the migration completes successfully.

      ```
      <GenerateDdl>false</GenerateDdl>
      ```

   g. Check for any further configurations that were done for the Business Process profile of WSO2 EI 6.1.0 based on your solution and update the following configuration files in EI 6.1.1 accordingly:
      - `humantask.xml`
      - `axis2.xml`
      - `bps.xml`
      - `Activiti.xml`
      - `Tenant-mgt.xml`
      - `b4p-coordination-config.xml`
      - `process-cleanup.properties`
4. If you have secondary user stores created for the Business Process profile of WSO2 EI 6.1.0, you need to copy the 'userstore' folder in the `<EI_6.1.0_HOME>/wso2/business-process/repository/deployment/server/` directory to the same directory in WSO2 EI 6.1.1.
5. Check for any other configurations that were done for the Business Process profile of WSO2 EI 6.1.0 based on your solution and update the configurations in WSO2 EI 6.1.1 accordingly. For example, configurations related to external user stores, caching, mounting, transports etc.

Migrating configurations of the Analytics profile

Follow the steps given below.

1. Copy the database connector JAR files stored in the `<EI_HOME>/lib` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
2. Copy the keystores and truststores used in the Analytics profile of WSO2 EI 6.1.0 from the `<EI_HOME>/wso2/analytics/repository/resources/security` directory of WSO2 EI 6.1.0 to the same directory in WSO2 EI 6.1.1.
3. Update the configuration files.
   a. Update the configuration files with information of the migrated keystores and truststores. See Configuring Keystores in WSO2 products for more information.
   b. Go to the `<EI_HOME>/wso2/analytics/conf/datasources` directory and update the Carbon datasource configuration in the `master`-datasources.xml file with the details of the Carbon database.
   c. Go to the `<EI_HOME>/wso2/analytics/conf/datasources` directory and update the datasource configuration in the `analytics`-datasources.xml file with the details of the Analytics-specific databases.

d. Go to the `<EI_HOME>/wso2/analytics/conf` directory and update the datasource references in the `user-mgt.xml` and `registry.xml` files to match the updated configurations in the `master-datasources.xml` file.

e. Go to the `<EI_HOME>/wso2/analytics/conf/analytics/` directory and update the `rdbms-config.xml` file according to the configurations in the same file of your previous Analytics installation.

f. Go to the `<EI_HOME>/wso2/analytics/conf/data-bridge` directory in WSO2 EI 6.1.1 and update the configuration files according to the configurations in the previous installation.

g. Go to the `<EI_HOME>/wso2/analytics/conf` directory and update the `event-processor.xml` file according to the configurations in the previous installation.

> (i) If you enable the HA mode for the Anlytics profile by setting the `<mode name="HA" enable="true">` property in the `event-processor.xml` file, state persistence is enabled by default. If there is no real-time use case that requires any state information after starting the cluster, you should disable event persistence by setting the `persistence` attributeto `false` in the same file as shown below.
>
> ```
> <persistence enable="false">
>     <persistenceIntervalInMinutes>15</persistenceIntervalInMinutes>
>     <persisterSchedulerPoolSize>10</persisterSchedulerPoolSize>
>     <persister class="org.wso2.carbon.event.processor.core.internal.
> persistence.FileSystemPersistenceStore">
>         <property key="persistenceLocation">cep_persistence<
> /property>
>     </persister>
> </persistence>
> ```

4. If you have secondary user stores created for the Analytics profile of WSO2 EI 6.1.0, you need to copy the 'userstore' folder in the `<EI_6.1.0_HOME>/wso2/analytics/repository/deployment/server/` directory to the same directory in WSO2 EI 6.1.1.

5. Check for any other configurations that were done for the Analytics profile of WSO2 EI 6.1.0 based on your solution and update the configurations in WSO2 EI 6.1.1 accordingly. For example, configurations related to external user stores, caching, mounting, transports etc.

Migrating artifacts

Follow the steps given below to migrate the artifacts related to the separate profiles in WSO2 EI.

Migrating artifacts of the Integration profile

You should manually deploy the Composite Application Archive (CAR) files that you have in WSO2 EI 6.1.0 to WSO2 EI 6.1.1. If you have a mediator packed in a CAR, all the artifacts using that mediator should also be included in the same CAR. See Deploying Composite Applications in the Server in the WSO2 Admin Guide for further details.

- To migrate deployment artifacts including message flow configurations, copy the required Synapse artifacts from the `<EI_HOME>/repository/deployment/server/synapse-configs/default` directory of WSO2 EI 6.1.0 to 6.1.1.
- To migrate connector artifacts:
    - Create a folder named `synapse-libs` in the `<PRODUCT_HOME>/repository/deployment/server/synapse-configs/default/` directory of WSO2 EI 6.1.1, and copy the JARs from the directory by the same name in WSO2 EI 6.1.0. Note that this directory will not exist in your WSO2 EI 6.1.0 distribution if no connectors are used.
    - Copy the JARs from the `<PRODUCT_HOME>/repository/deployment/server/synapse-configs/default/imports` directory in WSO2 EI 6.1.0 to the same directory in WSO2 EI 6.1.1.

- To migrate the data service artifats, copy the `<EI_HOME>/repository/deployment/server/`dataservic es directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
- If you have custom artifacts created in the `<EI_HOME>/repository/deployment/server/` directory of WSO2 EI 6.1.0, copy them to the same directory in WSO2 EI 6.1.1.

Migrating artifacts of the Business Process profile

Follow the steps given below:

- Copy the BPEL .zip packages in the `<EI_HOME>/wso2/business-process/repository/deployment /server/bpel` directory of WSO2 EI 6.1.0 to 6.1.1.
- Copy the BPMN .bar packages in the `<EI_HOME>/wso2/business-process/repository/deployment /server/bpmn` directory of WSO2 EI 6.1.0 to 6.1.1.
- Copy the humantask .zip packages in the `<EI_HOME>/wso2/business-process/repository /deployment/server/humantasks` directory of WSO2 EI 6.1.0 to 6.1.1.
- If you have custom artifacts created in the `<EI_HOME>/wso2/business-process/repository /deployment/server/` directory of WSO2 EI 6.1.0, copy them to the same directory in WSO2 EI 6.1.1.

Migrating tenant artifacts

If multitenancy is used, copy the tenant artifacts from WSO2 EI 6.1.0 to WSO2 EI 6.1.1 as follows:

- **Integration** profile: Copy the `<EI_HOME>/repository/tenants` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
- **Message Broker** profile: Copy the `<EI_HOME>/wso2/broker/repository/tenants` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
- **Business Process** profile: Copy the `<EI_HOME>/wso2/business-process/repository/tenants` dire ctory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.
- **Analytics** profile: Copy the `<EI_HOME>/wso2/analytics/repository/tenants` directory of WSO2 EI 6.1.0 to WSO2 EI 6.1.1.

Starting the profiles

You can now start the WSO2 EI 6.1.1 product. See Running the Product for instructions on starting each of the profiles in the product.