Migration Steps (Dev to Prod)

Add accelerator pack to ssd:

Edit build.properties and set:

deployAcceleratorPack to “true”

acceleratorPackVersion to the Accelerator Pack version, e.g. “2.2.0”

Steps

1. **Update the target.properties file**
   1. All the variables, whose value is supposed to change from environment to environment need to be stored in the target.properties file
   2. There will be multiple target.properties file, each for a specific environment. Example, dev, uat, prod etc.
   3. Using the target.properties file, first all the XML files need to be exported
      1. This will generate the new XML files where the variable values will be converted to the variable names
      2. Then same XML files need to be committed to the SSB structure present in Github
      3. Once the war file is generated from that SSB structure, based on the selected environment, variable names will be replaced with the environment specific variable values

So, when we are generating war file for prod, it will contain production environment specific data

* 1. Example – Active Directory Domain Name, Application connection parameters, Servicenow connection parameters, task server ip/name etc.

1. **Generate the war file through SSB**
   1. First, we need to update all the XML files with the target.properties variable names
   2. After that we need to make sure that, for the required environment, all the properties files are correctly updated. Example – iiq.properties, iiqCustom.properties, target.properties etc.
   3. Update the servers.properties file and add the machine name before the required environment name.
   4. Run this command from the base folder of SSB using CMD –

|  |
| --- |
| build clean war |

* 1. Rename the war file by adding the environment and release information to it and copy it over to a dedicated location

1. **Set up tomcat**
   1. Install pre-requisites such as java, notepad++ etc
      1. Care need to be taken to make sure that each of the software are of the same version across the environments
      2. Tomcat version – 9.0
      3. Java version – 1.8.0\_212
   2. Add path for each of the tomcat & java in the environment variable of the machine
   3. Install the tomcat by running the exe file
   4. Run/extract the exe file to install tomcat
   5. Update the login configuration of tomcat service with correct user credentials
   6. Create a folder for logs, file path should match with log4j2.properties file. And provide required access for the IIQ user (RW).
2. **Set up SSL in tomcat**
   1. A keystore file should be provided by the client for SSL configuration. This Key store file will contain one public and a corresponding private key file. Public key must be signed by a valid certificate authority. FQDN of the public key should be the load balanced URL to be used for IIQ.
   2. We need to place that keystore file in a specific location
   3. In the server.xml file of tomcat, the file path and password for the keystore need to be updated

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| --- |
| <Connector port="8080" protocol="HTTP/1.1"             redirectPort="8443"             disableUploadTimeout="false"/>  <Connector port="8443" protocol="HTTP/1.1" SSLEnabled="true"            maxThreads="150" scheme="https" secure="true"            keystoreFile="%tomcat\_home%\certs\keystore.pfx"  keystorePass="tomcat"            clientAuth="false" acceptCount="100"/> |

* 1. Also, web.xml needs to be updated by adding below lines for HTTP to HTTPS redirection –

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| --- |
| <!-- automatic redirect from HTTP to HTTPS -->  <security-constraint>  <web-resource-collection>  <web-resource-name>Entire Application</web-resource-name>  <url-pattern>/\*</url-pattern>  </web-resource-collection>  <user-data-constraint>  <transport-guarantee>CONFIDENTIAL</transport-guarantee>  </user-data-constraint>  </security-constraint> |

1. **Import ServiceNow certificates**
   1. Go to %JAVA\_HOME%\jdk1.8.0\_211\jre\lib\security
   2. Run below command for each of the certificates and provide a unique name for them as well–

|  |
| --- |
| keytool -importcert -keystore cacerts -storepass changeit -file C:\Development\cert\rootca.cer -alias "smwedev-servicenow-rootca" |

1. **Deploy war file in tomcat**
   1. Stop tomcat from services or shutdown.bat file
   2. Go to %TOMCAT\_HOME%\webapps
   3. Create a folder called “identityiq”
   4. Copy the war file and unzip it under identityiq folder and then delete only the war file
   5. Start the tomcat