Java SE 8, Java SE 11 and OpenJDK support for CAST AIP

CAST AIP relies on the use of the Java Runtime Environment (JRE) or the Java Development Kit (JDK) to function and CAST therefore fully understands that the change in **Oracle's licensing policy**, will have a significant impact on you, our customers. In short, CAST will continue to support the use of **Oracle Java SE 8** for CAST AIP, but CAST will also offer you the option to use **Java SE 11** either through **Oracle** or an **OpenJDK provider**. In detail:

Java SE 8

CAST will continue to support the use of **Oracle Java SE 8** for all supported releases of CAST AIP (both existing and future) for customers that are committed to using this version.

> ⓘ Note that CAST includes Java SE 8 OpenJDK from **https://adoptopenjdk.net** with **CAST AIP 8.3.10** and **CAST AIP 8.2.16** as the embedded JRE - previous releases of CAST AIP included Java SE 8 from Oracle.

Java SE 9 and 10

Java SE 9 and 10 are already end-of-life. Neither of these are Long Term Supported (LTS) versions, therefore CAST has no plans to support them either through Oracle or an OpenJDK provider.

Java SE 11 and OpenJDK

CAST will support the use of Java SE 11 either through Oracle Java or an OpenJDK provider for all supported releases of CAST AIP (both existing and future).

However, one hurdle to overcome when using Java SE 11 is that the **Java Network Launch Protocol** (JNLP) is no longer supported neither through Oracle nor an OpenJDK provider: JNLP is implemented in CAST AIP when operating the legacy CAST Delivery Manager Tool (DMT) via the legacy CAST AIC Portal (AICP). An explanation of how to use the legacy CAST Delivery Manager Tool via the legacy CAST AIC Portal without recourse to JNLP is provided below.

Using the legacy CAST Delivery Manager Tool with Oracle Java SE 11 / OpenJDK 11 (without JNLP)

> ⓘ Launching the legacy CAST Delivery Manager Tool directly from the CAST Management Studio does not use the JNLP protocol and is therefore not impacted.

There are two ways to use the legacy CAST Delivery Manager Tool without JNLP support. The method you choose depends on the security constraints in your environment. Each method is described below:

DMT in standalone mode with network share access to the Delivery folder via a UNC path

This method does not use the CAST AIC Portal/Delivery Manager Tool via HTTP/HTTPS, instead, the legacy CAST Delivery Manager Tool is launched on the Delivery Manager's workstation in standalone mode and will directly access the Delivery folder over a network share using a UNC path. Note that these instructions assume that an Application has been created and already exists in the Delivery folder:

Copy the CAST Delivery Manager Tool and jre binaries from the CAST AIP installation folder over to the Delivery Manager's workstation. You will need to copy these two folders:

```
%PROGRAMFILES%\CAST\<version>\DeliveryManagerTool
%PROGRAMFILES%\CAST\<version>\jre
```

Paste these folders into an empty folder on the Delivery Manager's workstation, for example:

```
C:\CAST\DeliveryManagerTool
C:\CAST\jre
```

Identify the UUID of the Application you are delivering source code for - this UUID is used in the command line mentioned at the end of these instructions. This UUID can be found in the following file in the Delivery folder:

```
Delivery\data\index.xml
```

For example, the UUID for the Application "MEUDON" is highlighted below:

Click to enlarge

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
  <comment/>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_c037115d-35e7-4d14-9839-31007d897ed9.entity.xml_checksum">19206908c97ad66f01fabf65344c3375</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_c037115d-35e7-4d14-9839-31007d897ed9.entity.xml_lastModified">1550677282763</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_c037115d-35e7-4d14-9839-31007d897ed9.entity.xml_length">2457</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_mngtId">96180463</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_name">MEUDON</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_syncId">15</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_type">delivery.Application</entry>
  <entry key="c037115d-35e7-4d14-9839-31007d897ed9_uuid">c037115d-35e7-4d14-9839-31007d897ed9</entry>
</properties>
```

Finally launch the CAST Delivery Manager Tool in standalone mode using the following command line:

```
DeliveryManagerTool.exe  -oneApplicationMode <application_uuid> -StoragePath
<shared_delivery_folder_location> -logFilePath c:/temp/dmtstandalone.castlog2
```

For example:

```
DeliveryManagerTool.exe  -oneApplicationMode c037115d-35e7-4d14-9839-31007d897ed9 -StoragePath S:
\CAST\Delivery -logFilePath c:/temp/dmtstandalone.castlog2
```

DMT in connected mode with access to the Delivery folder via the CAST AIC Portal using HTTP/HTTPS protocols

This method uses the CAST AIC Portal/Delivery Manager Tool via HTTP/HTTPS but it circumvents use of the JNLP protocol by manually copying the CAST Delivery Manager Tool binaries over to the Delivery Manager's workstation. Note that these instructions assume that an Application has been created and already exists in the Delivery folder:

Identify the UUID of the Application you are delivering source code for - this UUID is used in the command line mentioned at the end of these instructions. This UUID can be found in the address bar of the CAST AIC Portal:
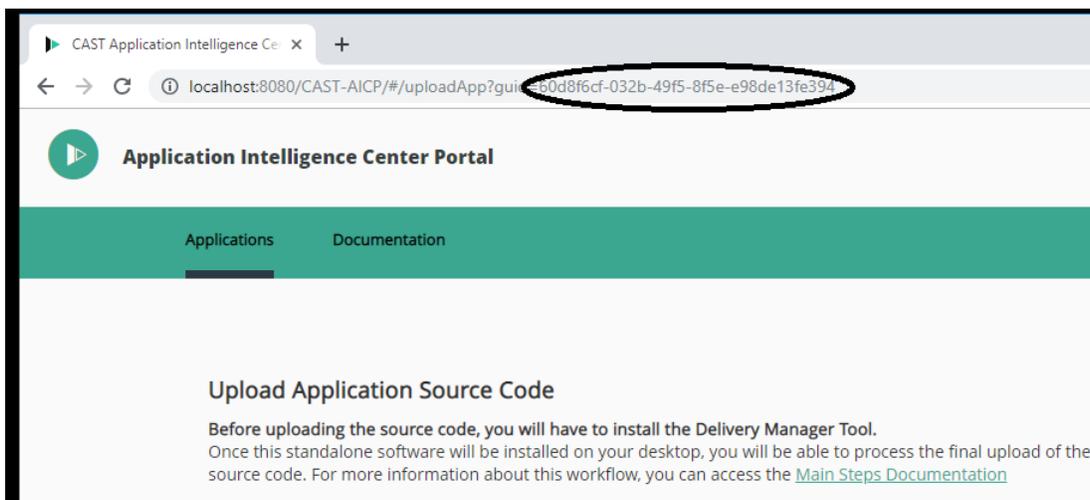
Copy the CAST Delivery Manager Tool binaries from the CAST AIC Portal deployment folder over to the Delivery Manager's workstation. You will need to copy the content of this folder, which is located **on the machine hosting the application server running the CAST AIC Portal**:

```
%CATALINA_HOME%\webapps\CAST-AICP\WEB-INF\apps\DeliveryManagerTool
```
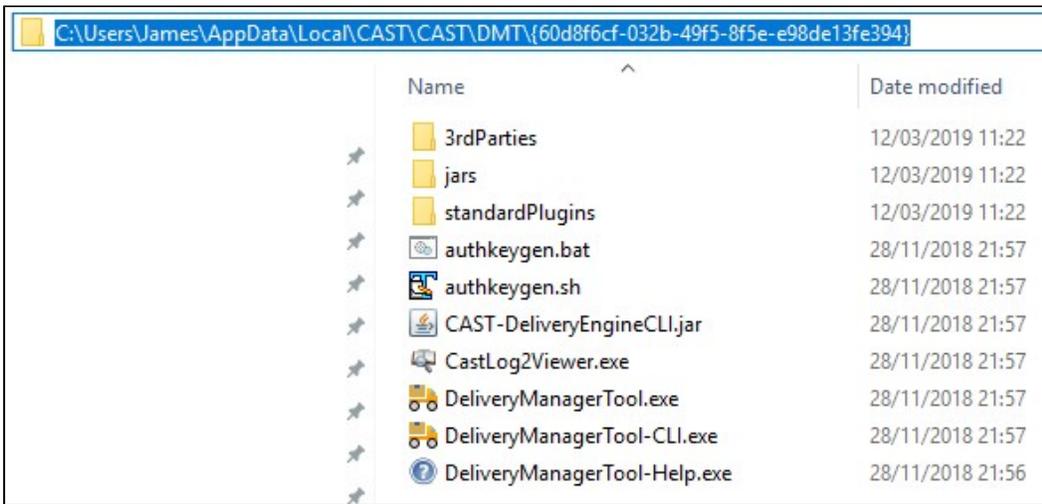
Paste this content into the %LOCALAPPDATA% folder **located on the Delivery Manager's workstation**. You may need to create this folder structure yourself - note the required **curly braces** around the application UUID:

```
%LOCALAPPDATA%\CAST\CAST\DMT\{application_uuid}
```

For example:

```
%LOCALAPPDATA%\CAST\CAST\DMT\{60d8f6cf-032b-49f5-8f5e-e98de13fe394}
```
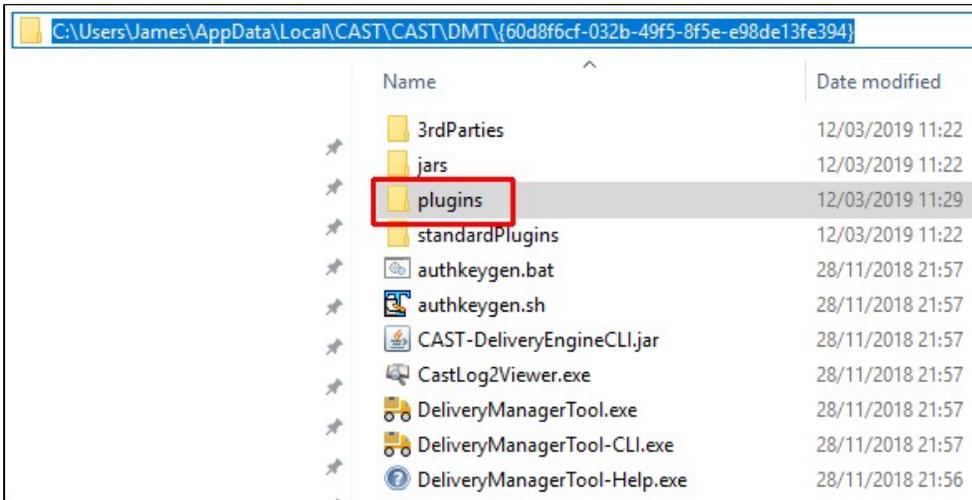
This should give you this file hierarchy:

Now copy the **plugins** folder from the **Delivery folder** over to the **Delivery Manager's workstation**. You will need to copy this folder:

```
S:\CAST\Delivery\plugins
```

Paste this folder into the same %LOCALAPPDATA% folder as previously described:

```
%LOCALAPPDATA%\CAST\CAST\DMT\{60d8f6cf-032b-49f5-8f5e-e98de13fe394}
```

This should give you this file hierarchy:

Finally create a file called **url.dat** under %LOCALAPPDATA%\CAST\CAST\DMT with the following content:

- In the **<entry key="url.1.directory">** element, paste in the UUID of Application you are delivering source code for, surrounded by curly braces
- In the **<entry key="url.1.url">** element, paste in the URL to the CAST AIC Portal

For example:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
        <comment/>
        <entry key="url.1.directory">{60d8f6cf-032b-49f5-8f5e-e98de13fe394}</entry>
        <entry key="url.1.url">http://my_host_name:8080/CAST-AICP</entry>
</properties>
```

Finally launch the CAST Delivery Manager Tool in connected mode using the following command line:

```
DeliveryManagerTool.exe -serverUrl <CAST_AIC_Portal_url> -oneApplicationMode <application_uuid>
```

For example:

```
DeliveryManagerTool.exe -serverUrl http://my_host_name:8080/CAST-AICP -oneApplicationMode 60d8f6cf-032b-49f5-
8f5e-e98de13fe394
```