

Deploy su JBoss EAP 7.x

Prerequisiti

Per procedere al deploy di un progetto realizzato con entando su JBoss EAP 7.x è necessario adattare il progetto in modo da poter utilizzare:

- Cache infinispn necessaria per lo scaling orizzontale delle istanze
- Volume esterno per l'archiviazione delle risorse e l'indice di Lucene per il motore di ricerca

I requisiti applicativi sono:

- Entando >= 5.1
- Database con già gli schema Port e Serv popolati (magari usare `mvn jetty:run` per generarli)
- JBoss EAP 7.x o Wildfly >= 17.0.1

Modifica di filter-openshit.properties

Verificare che il seguente file `src/main/filters/filter-production-jboss.properties` abbia i seguenti parametri impostati in questo modo:

```
1 profile.jboss.home=[definire il path corretto]
2 ...
3 profile.resources.path=/entando-resources/resources
4 profile.resources.path.protected=/entando-resources/protected
5 profile.index.path=/entando-resources/indexdir
6
7
8 # altro requisito è l'abilitazione del driver del DB che si è deciso di
9 # utilizzare. Tutti gli altri driver possono essere
10 # commentati.
11 # Per esempio se si vuole utilizzare MariaDB come backend è necessario
12 # abilitare questa classe.
13 profile.database.driverClassName=org.mariadb.jdbc.Driver
```

Il path `/entando-resources` viene montato su un volume e/o path esterno rispetto alla struttura di JBoss. Questo path è accessibile a tutte le istanze del portale quando viene fatto lo scaling orizzontale.

Aggiunta del bean CmsResourcesStorageManager

Per fare in modo che il path `/entando-resources` funzioni correttamente è necessario definire un nuovo LocalStorageManager.

Aggiungere la definizione all'interno del seguente path:

`src/main/resources/spring/cmsresources/aps/resourceTypesDef.xml`

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <beans xmlns="http://www.springframework.org/schema/beans"
3       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```

4      xmlns:context="http://www.springframework.org/schema/context"
5      xmlns:jee="http://www.springframework.org/schema/jee"
6      xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans.xsd
7          http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context.xsd
8          http://www.springframework.org/schema/jee
http://www.springframework.org/schema/jee/spring-jee.xsd">
9
10     <bean id="CmsResourcesStorageManager"
class="org.entando.entando.aps.system.services.storage.LocalStorageManager"
11         init-method="init" >
12         <property name="baseURL" >
13             <jee:jndi-lookup jndi-name="java:comp/env/cmsResourceRootURL" />
14         </property>
15         <property name="baseDiskRoot" >
16             <jee:jndi-lookup jndi-
name="java:comp/env/resourceDiskRootFolder" />
17         </property>
18         <property name="protectedBaseDiskRoot" >
19             <jee:jndi-lookup jndi-
name="java:comp/env/protectedResourceDiskRootFolder" />
20         </property>
21         <property name="protectedBaseURL" >
22             <jee:jndi-lookup jndi-
name="java:comp/env/protectedResourceRootURL" />
23         </property>
24     </bean>
25
26     <bean id="CmsResourcesAbstractResource" abstract="true"
27
class="com.agiletec.plugins.jacms.aps.system.services.resource.model.Abstra
ctResource" >
28         <property name="storageManager" ref="CmsResourcesStorageManager" />
29         <property name="protectedBaseURL" >
30             <jee:jndi-lookup jndi-
name="java:comp/env/protectedResourceRootURL" />
31         </property>
32         <property name="metadataIgnoreKeys">
<value>${jacms.imgMetadata.ignoreKeys}</value></property>
33     </bean>
34
35     <bean id="jacmsAttachResource"
class="com.agiletec.plugins.jacms.aps.system.services.resource.model.AttachR
esource" parent="CmsResourcesAbstractResource" >
36         <property name="type" value="Attach" />
37         <property name="folder" value="cms/documents" />
38         <property name="allowedExtensions">
39             <value>${jacms.attachResource.allowedExtensions}</value>
40         </property>
41     </bean>
42
43     <bean id="jacmsImageResource"
class="com.agiletec.plugins.jacms.aps.system.services.resource.model.ImageRe
source" parent="CmsResourcesAbstractResource" >
44         <property name="type" value="Image" />
45         <property name="folder" value="cms/images" />

```

```

46     <property name="allowedExtensions">
<value>${jacms.imageResource.allowedExtensions}</value></property>
47     <property name="imageDimensionReader"
ref="jacmsImageDimensionReader" />
48     <property name="imageResizerClasses">
49         <map>
50             <entry key="DEFAULT_RESIZER">
51
52                 <value>com.agiletec.plugins.jacms.aps.system.services.resource.model.imager
esizer.DefaultImageResizer</value>
53                 </entry>
54                 <entry key="png">
55
56                     <value>com.agiletec.plugins.jacms.aps.system.services.resource.model.imager
esizer.PNGImageResizer</value>
57                     </entry>
58                 </map>
59             </property>
60             <property name="imageMagickEnabled"><value>${imagemagick.enabled}</value></property>
61             <property name="imageMagickWindows"><value>${imagemagick.windows}</value></property>
62             <property name="imageMagickPath"><value>${imagemagick.path}</value></property>
63         </bean>
</beans>

```

Aggiunta della configurazione dei container della cache per infinispn

Aggiungere la configurazione all'interno del seguente path:

```
src/main/resources/spring/[profile.application.name]/aps/managers/infinispnManager
sConfig.xml
```

dove [profile.application.name] è il nome dell'artifactId.

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <beans xmlns="http://www.springframework.org/schema/beans"
3      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4      xmlns:context="http://www.springframework.org/schema/context"
5      xmlns:jee="http://www.springframework.org/schema/jee"
6      xmlns:util="http://www.springframework.org/schema/util"
7      xmlns:cache="http://www.springframework.org/schema/cache"
8      xmlns:p="http://www.springframework.org/schema/p"
9      xmlns:aop="http://www.springframework.org/schema/aop"
10     xmlns:task="http://www.springframework.org/schema/task"
11     xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans-4.0.xsd
12         http://www.springframework.org/schema/context
http://www.springframework.org/schema/context/spring-context-4.0.xsd
13         http://www.springframework.org/schema/jee
http://www.springframework.org/schema/jee/spring-jee-4.0.xsd
14         http://www.springframework.org/schema/util
http://www.springframework.org/schema/util/spring-util-4.0.xsd

```

```
15      http://www.springframework.org/schema/cache
http://www.springframework.org/schema/cache/spring-cache-4.0.xsd
16      http://www.springframework.org/schema/aop
http://www.springframework.org/schema/aop/spring-aop-4.0.xsd
17      http://www.springframework.org/schema/task
http://www.springframework.org/schema/task/spring-task-4.0.xsd">
18
19      <jee:jndi-lookup id="defaultCache" jndi-
name="java:jboss/infinispan/cache/entando/Entando_Cache" />
20      <jee:jndi-lookup id="pageCache" jndi-
name="java:jboss/infinispan/cache/pagecache/Entando_PageManager" />
21      <jee:jndi-lookup id="pageModelCache" jndi-
name="java:jboss/infinispan/cache/pagemodelcache/Entando_PageModelManager"
/>
22      <jee:jndi-lookup id="categoryCache" jndi-
name="java:jboss/infinispan/cache/categorycache/Entando_CategoryManager" />
23      <jee:jndi-lookup id="widgetTypeCache" jndi-
name="java:jboss/infinispan/cache/widgettypecache/Entando_WidgetTypeManager"
/>
24      <jee:jndi-lookup id="configCache" jndi-
name="java:jboss/infinispan/cache/configcache/Entando_ConfigManager" />
25      <jee:jndi-lookup id="roleCache" jndi-
name="java:jboss/infinispan/cache/rolecache/Entando_RoleManager" />
26      <jee:jndi-lookup id="groupCache" jndi-
name="java:jboss/infinispan/cache/groupcache/Entando_GroupManager" />
27      <jee:jndi-lookup id="langCache" jndi-
name="java:jboss/infinispan/cache/langcache/Entando_LangManager" />
28      <jee:jndi-lookup id="cacheInfoCache" jndi-
name="java:jboss/infinispan/cache/cacheinfocache/Entando_CacheInfoManager"
/>
29      <jee:jndi-lookup id="i18lnCache" jndi-
name="java:jboss/infinispan/cache/i18lncache/Entando_I18nManager" />
30      <jee:jndi-lookup id="userProfileCache" jndi-
name="java:jboss/infinispan/cache/userprofilecache/Entando_UserProfileManage
r" />
31      <jee:jndi-lookup id="initializerCache" jndi-
name="java:jboss/infinispan/cache/initializercache/Entando_InitializerManage
r" />
32      <jee:jndi-lookup id="apiCatalogCache" jndi-
name="java:jboss/infinispan/cache/apicatalogcache/Entando_ApiCatalogManager"
/>
33      <jee:jndi-lookup id="keyGeneratorCache" jndi-
name="java:jboss/infinispan/cache/keygeneratorcache/Entando_KeyGeneratorMana
ger" />
34      <jee:jndi-lookup id="dataObjectCache" jndi-
name="java:jboss/infinispan/cache/dataobjectcache/Entando_DataObjectManager"
/>
35      <jee:jndi-lookup id="dataObjectModelCache" jndi-
name="java:jboss/infinispan/cache/dataobjectmodelcache/Entando_DataObjectMod
elManager" />
36      <jee:jndi-lookup id="dataObjectMapperCache" jndi-
name="java:jboss/infinispan/cache/dataobjectmappercache/Entando_DataObjectPa
geMapperManager" />
37      <jee:jndi-lookup id="jacmsContentManagerCache" jndi-
name="java:jboss/infinispan/cache/jacmscontentmanagercache/Entando_jacmsCont
entManager" />
```

```

38     <jee:jndi-lookup id="jacmsContentModelCache" jndi-
name="java:jboss/infinispan/cache/jacmscontentmodelcache/Entando_ContentMode
lManager" />
39     <jee:jndi-lookup id="jacmsContentPageMapperCache" jndi-
name="java:jboss/infinispan/cache/jacmscontentpagemappercache/Entando_Conen
tPageMapperManager" />
40     <jee:jndi-lookup id="jacmsResourceManagerCache" jndi-
name="java:jboss/infinispan/cache/jacmsresourcemanagercache/Entando_Resource
Manager" />
41 </beans>

```

(Opzionale) Undertow handler in caso di link statici su jsp o altro.

Per evitare di dover editare tutti i widget, contenuti, o altro che faccia riferimento a dei path statici (solo nel caso in cui si debba deployare un vecchio progetto su JBoss) si possono utilizzare delle regole di redirect che verranno lette da undertow.

Inserire il file di configurazione sul seguente path:

```
src/main/webapp/WEB-INF/undertow-handlers.conf
```

Di seguito si riporta un esempio relativo ad un progetto generico con contesto applicativo `foo`

```

1 path('/foo/resources') -> redirect('/cmsresources')
2 path('/resources') -> redirect('/cmsresources')

```

Modifica del web.xml

Per il deploy su jboss e l'utilizzo di infinispan e il nuovo handler `/cmsresources` è necessario apportare le seguenti modifiche al web.xml che si trova sul seguente path:

```
src/main/config/jboss/web.xml
```

Come riferimento è stato selezionato il progetto `foo`.

1. Aggiunta del tag `<distributable />` per l'attivazione del clustering. Il tag va inserito tra il tag `<web-pp>` e `<display-name>`

```

1 <web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
2     xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
3     metadata-complete="false" version="3.0">
4     <distributable />
5     <display-name>${profile.application.name} - powered by Entando</display-
name>

```

2. Aggiunta del classpath relativo ai nuovi bean per le risorse del cms e infinispan (Aggiungerli alla fine dell'elenco degli altri classpath).

```

1 # configurazione iniziale
2 classpath:spring/propertyPlaceholder.xml
3 classpath:spring/restServerConfig.xml
4 classpath:spring/baseSystemConfig.xml

```

```

5 classpath:spring/jbossBaseSystemConfig.xml
6 classpath*:spring/aps/**/**/*.xml
7 classpath*:spring/apsadmin/**/**/*.xml
8 classpath*:spring/plugins/**/aps/**/**/*.xml
9 classpath*:spring/plugins/**/apsadmin/**/**/*.xml
10 classpath*:spring/entandocore/aps/**/**/*.xml
11 classpath*:spring/entandocore/apsadmin/**/**/*.xml
12
13 # configurazione finale
14 classpath:spring/propertyPlaceholder.xml
15 classpath:spring/restServerConfig.xml
16 classpath:spring/baseSystemConfig.xml
17 classpath:spring/jbossBaseSystemConfig.xml
18 classpath*:spring/aps/**/**/*.xml
19 classpath*:spring/apsadmin/**/**/*.xml
20 classpath*:spring/plugins/**/aps/**/**/*.xml
21 classpath*:spring/plugins/**/apsadmin/**/**/*.xml
22 classpath*:spring/entandocore/aps/**/**/*.xml
23 classpath*:spring/entandocore/apsadmin/**/**/*.xml
24 classpath*:spring/foo/aps/**/**/*.xml
25 classpath*:spring/cmsresources/aps/**/**/*.xml

```

3. Aggiunta della variabile d'ambiente `cmsResourceRootURL`

```

1 <env-entry>
2     <env-entry-name>cmsResourceRootURL</env-entry-name>
3     <env-entry-type>java.lang.String</env-entry-type>
4     <env-entry-value>/cmsresources/</env-entry-value>
5 </env-entry>

```

4. Aggiunta della configurazione dei container della cache per infinispn. Alla fine del web.xml

```

1 <!-- cache per cluster -->
2
3     <resource-env-ref>
4         <resource-env-ref-name>defaultCache</resource-env-ref-name>
5         <resource-env-ref-type>org.infinispn.Cache</resource-env-ref-
6 type>
7         <lookup-
8 name>java:jboss/infinispn/cache/entando/Entando_Cache</lookup-name>
9         </resource-env-ref>
10        <resource-env-ref>
11            <resource-env-ref-name>pageCache</resource-env-ref-name>
12            <resource-env-ref-type>org.infinispn.Cache</resource-env-ref-
13 type>
14            <lookup-
15 name>java:jboss/infinispn/cache/pagecache/Entando_PageManager</lookup-
16 name>
17        </resource-env-ref>
18        <resource-env-ref>
19            <resource-env-ref-name>pageModelCache</resource-env-ref-name>
20            <resource-env-ref-type>org.infinispn.Cache</resource-env-ref-
21 type>
22            <lookup-
23 name>java:jboss/infinispn/cache/pagemodelcache/Entando_PageModelManager</
24 lookup-name>

```

```
17     </resource-env-ref>
18     <resource-env-ref>
19         <resource-env-ref-name>categoryCache</resource-env-ref-name>
20         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
21         <lookup-
name>java:jboss/infinispan/cache/categorycache/Entando_CategoryManager</lo
okup-name>
22     </resource-env-ref>
23     <resource-env-ref>
24         <resource-env-ref-name>widgetTypeCache</resource-env-ref-name>
25         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
26         <lookup-
name>java:jboss/infinispan/cache/widgettypecache/Entando_WidgetTypeManager
</lookup-name>
27     </resource-env-ref>
28     <resource-env-ref>
29         <resource-env-ref-name>configCache</resource-env-ref-name>
30         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
31         <lookup-
name>java:jboss/infinispan/cache/configcache/Entando_ConfigManager</lookup
-name>
32     </resource-env-ref>
33     <resource-env-ref>
34         <resource-env-ref-name>roleCache</resource-env-ref-name>
35         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
36         <lookup-
name>java:jboss/infinispan/cache/rolecache/Entando_RoleManager</lookup-
name>
37     </resource-env-ref>
38     <resource-env-ref>
39         <resource-env-ref-name>groupCache</resource-env-ref-name>
40         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
41         <lookup-
name>java:jboss/infinispan/cache/groupcache/Entando_GroupManager</lookup-
name>
42     </resource-env-ref>
43     <resource-env-ref>
44         <resource-env-ref-name>langCache</resource-env-ref-name>
45         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
46         <lookup-
name>java:jboss/infinispan/cache/langcache/Entando_LangManager</lookup-
name>
47     </resource-env-ref>
48     <resource-env-ref>
49         <resource-env-ref-name>cacheInfoCache</resource-env-ref-name>
50         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
51         <lookup-
name>java:jboss/infinispan/cache/cacheinfocache/Entando_CacheInfoManager</
lookup-name>
52     </resource-env-ref>
53     <resource-env-ref>
```

```
54     <resource-env-ref-name>i18lnCache</resource-env-ref-name>
55     <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
56     <lookup-
name>java:jboss/infinispan/cache/i18lnCache/Entando_I18nManager</lookup-
name>
57     </resource-env-ref>
58     <resource-env-ref>
59         <resource-env-ref-name>userProfileCache</resource-env-ref-name>
60         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
61     <lookup-
name>java:jboss/infinispan/cache/userprofilecache/Entando_UserProfileManag
er</lookup-name>
62     </resource-env-ref>
63     <resource-env-ref>
64         <resource-env-ref-name>initializerCache</resource-env-ref-name>
65         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
66     <lookup-
name>java:jboss/infinispan/cache/initializercache/Entando_InitializerManag
er</lookup-name>
67     </resource-env-ref>
68     <resource-env-ref>
69         <resource-env-ref-name>apiCatalogCache</resource-env-ref-name>
70         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
71     <lookup-
name>java:jboss/infinispan/cache/apicatalogcache/Entando_ApiCatalogManager
</lookup-name>
72     </resource-env-ref>
73     <resource-env-ref>
74         <resource-env-ref-name>keyGeneratorCache</resource-env-ref-name>
75         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
76     <lookup-
name>java:jboss/infinispan/cache/keygeneratorcache/Entando_KeyGeneratorMan
ager</lookup-name>
77     </resource-env-ref>
78     <resource-env-ref>
79         <resource-env-ref-name>dataObjectCache</resource-env-ref-name>
80         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
81     <lookup-
name>java:jboss/infinispan/cache/dataobjectcache/Entando_DataObjectManager
</lookup-name>
82     </resource-env-ref>
83     <resource-env-ref>
84         <resource-env-ref-name>dataObjectModelCache</resource-env-ref-
name>
85         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
86     <lookup-
name>java:jboss/infinispan/cache/dataobjectmodelcache/Entando_DataObjectMo
delManager</lookup-name>
87     </resource-env-ref>
88     <resource-env-ref>
```

```

89     <resource-env-ref-name>dataObjectMapperCache</resource-env-ref-
name>
90     <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
91     <lookup-
name>java:jboss/infinispan/cache/dataobjectmappercache/Entando_DataObjectP
ageMapperManager</lookup-name>
92     </resource-env-ref>
93     <resource-env-ref>
94     <resource-env-ref-name>jacmsContentManagerCache</resource-env-ref-
name>
95     <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
96     <lookup-
name>java:jboss/infinispan/cache/jacmscontentmanagercache/Entando_jacmsCon
tentManager</lookup-name>
97     </resource-env-ref>
98     <resource-env-ref>
99     <resource-env-ref-name>jacmsContentModelCache</resource-env-ref-
name>
100    <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
101    <lookup-
name>java:jboss/infinispan/cache/jacmscontentmodelcache/Entando_ContentMod
elManager</lookup-name>
102    </resource-env-ref>
103    <resource-env-ref>
104    <resource-env-ref-name>jacmsContentPageMapperCache</resource-env-
ref-name>
105    <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
106    <lookup-
name>java:jboss/infinispan/cache/jacmscontentpagemappercache/Entando_Conte
ntPageMapperManager</lookup-name>
107    </resource-env-ref>
108    <resource-env-ref>
109    <resource-env-ref-name>jacmsResourceManagerCache</resource-env-
ref-name>
110    <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
111    <lookup-
name>java:jboss/infinispan/cache/jacmsresourcemanagercache/Entando_Resourc
eManager</lookup-name>
112    </resource-env-ref>
113    <!-- fine cache per cluster -->

```

Di seguito si riporta la configurazione completa:

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
3     xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
4     metadata-complete="false" version="3.0">
5     <distributable />
6     <display-name>${profile.application.name} - powered by
Entando</display-name>

```

```

7      <description>${profile.application.name} - powered by
Entando</description>
8      <context-param>
9          <param-name>contextConfigLocation</param-name>
10         <param-value>
11             classpath:spring/propertyPlaceholder.xml
12             classpath:spring/restServerConfig.xml
13             classpath:spring/baseSystemConfig.xml
14             classpath:spring/jbossBaseSystemConfig.xml
15             classpath*:spring/aps/**/**/*.xml
16             classpath*:spring/apsadmin/**/**/*.xml
17             classpath*:spring/plugins/**/aps/**/**/*.xml
18             classpath*:spring/plugins/**/apsadmin/**/**/*.xml
19             classpath*:spring/entandocore/aps/**/**/*.xml
20             classpath*:spring/entandocore/apsadmin/**/**/*.xml
21             classpath*:spring/foo/aps/**/**/*.xml
22             classpath*:spring/cmsresources/aps/**/**/*.xml
23         </param-value>
24     </context-param>
25     <context-param>
26         <param-name>Struts2Config</param-name>
27         <param-value>struts-default.xml, struts-
plugin.xml, struts.xml, entando-struts-plugin.xml, japs-struts-plugin.xml
28     </param-value>
29 </context-param>
30 <context-param>
31     <param-
name>org.apache.tiles.definition.DefinitionsFactory.DEFINITIONS_CONFIG</pa
ram-name>
32     <param-value>/WEB-INF/apsadmin/tiles.xml, /WEB-
INF/plugins/**/apsadmin/**tiles.xml</param-value>
33 </context-param>
34 <context-param>
35     <param-name>contextClass</param-name>
36     <param-
value>org.entando.entando.aps.system.XmlWebApplicationContext</param-
value>
37 </context-param>
38 <filter>
39     <filter-name>struts2</filter-name>
40     <filter-
class>com.agiletec.apsadmin.system.dispatcher.StrutsPrepareAndExecuteFilte
r</filter-class>
41 </filter>
42 <filter>
43     <filter-name>XSSFilter</filter-name>
44     <filter-class>org.entando.entando.aps.servlet.XSSFilter</filter-
class>
45 </filter>
46 <filter>
47     <filter-name>CharacterEncodingFilter</filter-name>
48     <filter-
class>org.springframework.web.filter.CharacterEncodingFilter</filter-
class>
49     <init-param>
50         <param-name>encoding</param-name>
51         <param-value>UTF-8</param-value>
52     </init-param>

```

```

53     <init-param>
54         <param-name>forceEncoding</param-name>
55         <param-value>true</param-value>
56     </init-param>
57 </filter>
58 <filter-mapping>
59     <filter-name>struts2</filter-name>
60     <url-pattern>/do/*</url-pattern>
61 </filter-mapping>
62 <filter-mapping>
63     <filter-name>struts2</filter-name>
64     <url-pattern>/struts/*</url-pattern>
65 </filter-mapping>
66 <filter-mapping>
67     <filter-name>XSSFilter</filter-name>
68     <url-pattern>*.wp</url-pattern>
69 </filter-mapping>
70 <filter-mapping>
71     <filter-name>XSSFilter</filter-name>
72     <url-pattern>*.page</url-pattern>
73 </filter-mapping>
74 <filter-mapping>
75     <filter-name>XSSFilter</filter-name>
76     <url-pattern>/pages/*</url-pattern>
77 </filter-mapping>
78 <filter-mapping>
79     <filter-name>CharacterEncodingFilter</filter-name>
80     <url-pattern>*</url-pattern>
81 </filter-mapping>
82 <listener>
83     <listener-
class>org.entando.entando.apsadmin.system.tiles.EntandoStrutsTilesListener
</listener-class>
84 </listener>
85 <listener>
86     <listener-
class>org.entando.entando.aps.servlet.StartupListener</listener-class>
87 </listener>
88 <listener>
89     <listener-
class>org.springframework.web.context.request.RequestContextListener</list
ener-class>
90 </listener>
91 <servlet>
92     <servlet-name>ControllerServlet</servlet-name>
93     <servlet-
class>org.entando.entando.aps.servlet.ControllerServlet</servlet-class>
94     <load-on-startup>1</load-on-startup>
95 </servlet>
96 <servlet>
97     <servlet-name>PreviewControllerServlet</servlet-name>
98     <servlet-
class>org.entando.entando.aps.servlet.PreviewControllerServlet</servlet-
class>
99     <load-on-startup>1</load-on-startup>
100 </servlet>
101 <servlet>
102     <servlet-name>ResourceControllerServlet</servlet-name>

```

```

103     <servlet-
class>org.entando.entando.aps.servlet.ProtectedResourceWardenServlet</serv
let-class>
104     <load-on-startup>1</load-on-startup>
105 </servlet>
106 <servlet>
107     <servlet-name>Struts2ExtServlet</servlet-name>
108     <servlet-
class>org.entando.entando.aps.internalservlet.system.dispatcher.Struts2Ser
vletDispatcher
109     </servlet-class>
110 </servlet>
111 <servlet>
112     <display-name>API Servlet</display-name>
113     <servlet-name>APIServlet</servlet-name>
114     <servlet-
class>org.apache.cxf.transport.servlet.CXFServlet</servlet-class>
115     <load-on-startup>1</load-on-startup>
116 </servlet>
117
118 <servlet>
119     <servlet-name>springDispatcher</servlet-name>
120     <servlet-
class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
121     <init-param>
122         <param-name>contextConfigLocation</param-name>
123         <param-value>classpath:spring/web/servlet-context.xml</param-
value>
124     </init-param>
125     <load-on-startup>1</load-on-startup>
126 </servlet>
127 <servlet-mapping>
128     <servlet-name>ControllerServlet</servlet-name>
129     <url-pattern>*.wp</url-pattern>
130 </servlet-mapping>
131 <servlet-mapping>
132     <servlet-name>ControllerServlet</servlet-name>
133     <url-pattern>*.page</url-pattern>
134 </servlet-mapping>
135 <servlet-mapping>
136     <servlet-name>ControllerServlet</servlet-name>
137     <url-pattern>/pages/*</url-pattern>
138 </servlet-mapping>
139 <servlet-mapping>
140     <servlet-name>PreviewControllerServlet</servlet-name>
141     <url-pattern>/preview/*</url-pattern>
142 </servlet-mapping>
143 <servlet-mapping>
144     <servlet-name>Struts2ExtServlet</servlet-name>
145     <url-pattern>/ExtStr2/do/*</url-pattern>
146 </servlet-mapping>
147 <servlet-mapping>
148     <servlet-name>ResourceControllerServlet</servlet-name>
149     <url-pattern>/protected/*</url-pattern>
150 </servlet-mapping>
151 <servlet-mapping>
152     <servlet-name>springDispatcher</servlet-name>
153     <url-pattern>/api/*</url-pattern>

```

```
154 </servlet-mapping>
155 <servlet-mapping>
156     <servlet-name>APIServlet</servlet-name>
157     <url-pattern>/legacyapi/*</url-pattern>
158 </servlet-mapping>
159
160 <session-config>
161     <session-timeout>30</session-timeout>
162 </session-config>
163 <welcome-file-list>
164     <welcome-file>index.jsp</welcome-file>
165     <welcome-file>adminindex.jsp</welcome-file>
166 </welcome-file-list>
167 <error-page>
168     <error-code>404</error-code>
169     <location>/404.jsp</location>
170 </error-page>
171 <error-page>
172     <error-code>500</error-code>
173     <location>/error.jsp</location>
174 </error-page>
175 <error-page>
176     <exception-type>java.lang.Exception</exception-type>
177     <location>/error.jsp</location>
178 </error-page>
179
180 <!-- envs used by jBoss : start -->
181 <env-entry>
182     <env-entry-name>logActiveFileOutput</env-entry-name>
183     <env-entry-type>java.lang.String</env-entry-type>
184     <env-entry-value>${profile.log.activeFileOutput}</env-entry-value>
185 </env-entry>
186 <env-entry>
187     <env-entry-name>logName</env-entry-name>
188     <env-entry-type>java.lang.String</env-entry-type>
189     <env-entry-value>${profile.application.name}.log</env-entry-value>
190 </env-entry>
191 <env-entry>
192     <env-entry-name>logFileRotatePattern</env-entry-name>
193     <env-entry-type>java.lang.String</env-entry-type>
194     <env-entry-value>${profile.log.file.rotatePattern}</env-entry-
value>
195 </env-entry>
196 <env-entry>
197     <env-entry-name>logFilePrefix</env-entry-name>
198     <env-entry-type>java.lang.String</env-entry-type>
199     <env-entry-value>${profile.log.file.prefix}</env-entry-value>
200 </env-entry>
201 <env-entry>
202     <env-entry-name>logLevel</env-entry-name>
203     <env-entry-type>java.lang.String</env-entry-type>
204     <env-entry-value>${profile.log.level}</env-entry-value>
205 </env-entry>
206 <env-entry>
207     <env-entry-name>logFileSize</env-entry-name>
208     <env-entry-type>java.lang.String</env-entry-type>
209     <env-entry-value>${profile.log.file.size}</env-entry-value>
210 </env-entry>
```

```
211 <env-entry>
212     <env-entry-name>logFilesCount</env-entry-name>
213     <env-entry-type>java.lang.String</env-entry-type>
214     <env-entry-value>${profile.log.file.count}</env-entry-value>
215 </env-entry>
216 <env-entry>
217     <env-entry-name>configVersion</env-entry-name>
218     <env-entry-type>java.lang.String</env-entry-type>
219     <env-entry-value>${profile.config.version}</env-entry-value>
220 </env-entry>
221 <env-entry>
222     <env-entry-name>applicationBaseUrl</env-entry-name>
223     <env-entry-type>java.lang.String</env-entry-type>
224     <env-entry-
value>${profile.application.baseUrl.protocol}://${profile.application.base
url.hostname}${profile.application.baseUrl.port.separator}${profile.applic
ation.baseUrl.port}/${profile.application.name}</env-entry-value>
225 </env-entry>
226 <env-entry>
227     <env-entry-name>resourceRootURL</env-entry-name>
228     <env-entry-type>java.lang.String</env-entry-type>
229     <env-entry-value>/${profile.application.name}/resources/</env-
entry-value>
230 </env-entry>
231 <env-entry>
232     <env-entry-name>cmsResourceRootURL</env-entry-name>
233     <env-entry-type>java.lang.String</env-entry-type>
234     <env-entry-value>/cmsresources/</env-entry-value>
235 </env-entry>
236 <env-entry>
237     <env-entry-name>protectedResourceRootURL</env-entry-name>
238     <env-entry-type>java.lang.String</env-entry-type>
239     <env-entry-value>/${profile.application.name}/protected/</env-
entry-value>
240 </env-entry>
241
242 <env-entry>
243     <env-entry-name>resourceDiskRootFolder</env-entry-name>
244     <env-entry-type>java.lang.String</env-entry-type>
245     <env-entry-value>${profile.resources.path}</env-entry-value>
246 </env-entry>
247 <env-entry>
248     <env-entry-name>protectedResourceDiskRootFolder</env-entry-name>
249     <env-entry-type>java.lang.String</env-entry-type>
250     <env-entry-value>${profile.resources.path.protected}</env-entry-
value>
251 </env-entry>
252 <env-entry>
253     <env-entry-name>indexDiskRootFolder</env-entry-name>
254     <env-entry-type>java.lang.String</env-entry-type>
255     <env-entry-value>${profile.index.path}</env-entry-value>
256 </env-entry>
257
258 <env-entry>
259     <env-entry-name>portDataSourceClassName</env-entry-name>
260     <env-entry-type>java.lang.String</env-entry-type>
261     <env-entry-value>${profile.portDataSourceClassName}</env-entry-
value>
```

```

262     </env-entry>
263     <env-entry>
264         <env-entry-name>servDataSourceClassName</env-entry-name>
265         <env-entry-type>java.lang.String</env-entry-type>
266         <env-entry-value>${profile.servDataSourceClassName}</env-entry-
value>
267     </env-entry>
268     <!-- envs used by jBoss : end -->
269     <!-- cache per cluster -->
270     <resource-env-ref>
271         <resource-env-ref-name>defaultCache</resource-env-ref-name>
272         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
273         <lookup-
name>java:jboss/infinispan/cache/entando/Entando_Cache</lookup-name>
274     </resource-env-ref>
275     <resource-env-ref>
276         <resource-env-ref-name>pageCache</resource-env-ref-name>
277         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
278         <lookup-
name>java:jboss/infinispan/cache/pagecache/Entando_PageManager</lookup-
name>
279     </resource-env-ref>
280     <resource-env-ref>
281         <resource-env-ref-name>pageModelCache</resource-env-ref-name>
282         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
283         <lookup-
name>java:jboss/infinispan/cache/pagemodelcache/Entando_PageModelManager</lo
lookup-name>
284     </resource-env-ref>
285     <resource-env-ref>
286         <resource-env-ref-name>categoryCache</resource-env-ref-name>
287         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
288         <lookup-
name>java:jboss/infinispan/cache/categorycache/Entando_CategoryManager</lo
okup-name>
289     </resource-env-ref>
290     <resource-env-ref>
291         <resource-env-ref-name>widgetTypeCache</resource-env-ref-name>
292         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
293         <lookup-
name>java:jboss/infinispan/cache/widgettypecache/Entando_WidgetTypeManager
</lookup-name>
294     </resource-env-ref>
295     <resource-env-ref>
296         <resource-env-ref-name>configCache</resource-env-ref-name>
297         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
298         <lookup-
name>java:jboss/infinispan/cache/configcache/Entando_ConfigManager</lookup-
name>
299     </resource-env-ref>
300     <resource-env-ref>
301         <resource-env-ref-name>roleCache</resource-env-ref-name>

```

```
302     <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
303     <lookup-
name>java:jboss/infinispan/cache/rolecache/Entando_RoleManager</lookup-
name>
304     </resource-env-ref>
305     <resource-env-ref>
306         <resource-env-ref-name>groupCache</resource-env-ref-name>
307         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
308     <lookup-
name>java:jboss/infinispan/cache/groupcache/Entando_GroupManager</lookup-
name>
309     </resource-env-ref>
310     <resource-env-ref>
311         <resource-env-ref-name>langCache</resource-env-ref-name>
312         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
313     <lookup-
name>java:jboss/infinispan/cache/langcache/Entando_LangManager</lookup-
name>
314     </resource-env-ref>
315     <resource-env-ref>
316         <resource-env-ref-name>cacheInfoCache</resource-env-ref-name>
317         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
318     <lookup-
name>java:jboss/infinispan/cache/cacheinfocache/Entando_CacheInfoManager</
lookup-name>
319     </resource-env-ref>
320     <resource-env-ref>
321         <resource-env-ref-name>i18lnCache</resource-env-ref-name>
322         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
323     <lookup-
name>java:jboss/infinispan/cache/i18lncache/Entando_I18nManager</lookup-
name>
324     </resource-env-ref>
325     <resource-env-ref>
326         <resource-env-ref-name>userProfileCache</resource-env-ref-name>
327         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
328     <lookup-
name>java:jboss/infinispan/cache/userprofilecache/Entando_UserProfileManag
er</lookup-name>
329     </resource-env-ref>
330     <resource-env-ref>
331         <resource-env-ref-name>initializerCache</resource-env-ref-name>
332         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
333     <lookup-
name>java:jboss/infinispan/cache/initializercache/Entando_InitializerManag
er</lookup-name>
334     </resource-env-ref>
335     <resource-env-ref>
336         <resource-env-ref-name>apiCatalogCache</resource-env-ref-name>
337         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
```

```
338     <lookup-  
name>java:jboss/infinispan/cache/apicatalogcache/Entando_ApiCatalogManager  
</lookup-name>  
339     </resource-env-ref>  
340     <resource-env-ref>  
341         <resource-env-ref-name>keyGeneratorCache</resource-env-ref-name>  
342         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-  
type>  
343     <lookup-  
name>java:jboss/infinispan/cache/keygeneratorcache/Entando_KeyGeneratorMan  
ager</lookup-name>  
344     </resource-env-ref>  
345     <resource-env-ref>  
346         <resource-env-ref-name>dataObjectCache</resource-env-ref-name>  
347         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-  
type>  
348     <lookup-  
name>java:jboss/infinispan/cache/dataobjectcache/Entando_DataObjectManager  
</lookup-name>  
349     </resource-env-ref>  
350     <resource-env-ref>  
351         <resource-env-ref-name>dataObjectModelCache</resource-env-ref-  
name>  
352         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-  
type>  
353     <lookup-  
name>java:jboss/infinispan/cache/dataobjectmodelcache/Entando_DataObjectMo  
delManager</lookup-name>  
354     </resource-env-ref>  
355     <resource-env-ref>  
356         <resource-env-ref-name>dataObjectMapperCache</resource-env-ref-  
name>  
357         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-  
type>  
358     <lookup-  
name>java:jboss/infinispan/cache/dataobjectmappercache/Entando_DataObjectP  
ageMapperManager</lookup-name>  
359     </resource-env-ref>  
360     <resource-env-ref>  
361         <resource-env-ref-name>jacmsContentManagerCache</resource-env-ref-  
name>  
362         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-  
type>  
363     <lookup-  
name>java:jboss/infinispan/cache/jacmscontentmanagercache/Entando_jacmsCon  
tentManager</lookup-name>  
364     </resource-env-ref>  
365     <resource-env-ref>  
366         <resource-env-ref-name>jacmsContentModelCache</resource-env-ref-  
name>  
367         <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-  
type>  
368     <lookup-  
name>java:jboss/infinispan/cache/jacmscontentmodelcache/Entando_ContentMod  
elManager</lookup-name>  
369     </resource-env-ref>  
370     <resource-env-ref>
```

```

371     <resource-env-ref-name>jacmsContentPageMapperCache</resource-env-
ref-name>
372     <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
373     <lookup-
name>java:jboss/infinispan/cache/jacmscontentpagemappercache/Entando_Conte
ntPageMapperManager</lookup-name>
374     </resource-env-ref>
375     <resource-env-ref>
376     <resource-env-ref-name>jacmsResourceManagerCache</resource-env-
ref-name>
377     <resource-env-ref-type>org.infinispan.Cache</resource-env-ref-
type>
378     <lookup-
name>java:jboss/infinispan/cache/jacmsresourcemanagercache/Entando_Resourc
eManager</lookup-name>
379     </resource-env-ref>
380     <!-- fine cache per cluster -->
381 </web-app>

```

Configurazione di JBoss

Il file di configurazione di JBoss deve essere configurato correttamente per l'utilizzo di:

- Handler /cmsresources da parte di Undertow
- Cache infinispan
- Headers per la sicurezza

Per il funzionamento di infinispan è necessario utilizzare come minimo il profilo standalone-ha.xml in quanto contiene dei moduli necessari a JGroups che non sono presenti sullo standalone.xml. Nel caso in cui si debba/voglia utilizzare la modalità dominio il profilo utilizzato dovrà essere come minimo l' ha.

Configurazione sottosistema Undertow (handler e haeders)

```

1  <subsystem xmlns="urn:jboss:domain:undertow:7.0" default-server="default-
server" default-virtual-host="default-host" default-servlet-
container="default" default-security-domain="other" statistics-
enabled="${wildfly.undertow.statistics-enabled:${wildfly.statistics-
enabled:false}}">
2      <buffer-cache name="default"/>
3      <server name="default-server">
4          <ajp-listener name="ajp" max-post-size="1048576000" socket-
binding="ajp"/>
5          <http-listener name="default" max-post-size="1048576000"
socket-binding="http" redirect-socket="https" enable-http2="true" proxy-
address-forwarding="true"/>
6
7          <host name="default-host" alias="localhost">
8              <location name="/" handler="welcome-content"/>
9              <!-- INIZIO CONFIGURAZIONE PER ENTANDO -->
10             <location name="/cmsresources" handler="cmsresources"/>
11             <location name="/resources" handler="cmsresources"/>

```

```

12         <http-invoker security-realm="ApplicationRealm"/>
13         <filter-ref name="x-frame-options"/>
14         <filter-ref name="x-xss-protection"/>
15         <filter-ref name="x-content-type-options"/>
16         <filter-ref name="content-security-policy"/>
17         <filter-ref name="strict-transport-security"/>
18         <filter-ref name="Access-Control-Allow-Origin"/>
19         <filter-ref name="Access-Control-Allow-Methods"/>
20         <filter-ref name="Access-Control-Allow-Headers"/>
21         <filter-ref name="Access-Control-Allow-Credentials"/>
22         <filter-ref name="Access-Control-Max-Age"/>
23         <!-- FINE CONFIGURAZIONE PER ENTANDO -->
24     </host>
25 </server>
26 <servlet-container name="default">
27     <jsp-config trim-spaces="true" generate-strings-as-char-
28 arrays="true" optimize-scriptlets="true"/>
29     <websockets/>
30 </servlet-container>
31 <handlers>
32     <file name="welcome-content"
33 path="{jboss.home.dir}/welcome-content"/>
34     <!-- INIZIO CONFIGURAZIONE PER ENTANDO -->
35     <file name="cmsresources" path="/entando-
36 resources/resources"/>
37     <!-- FINE CONFIGURAZIONE PER ENTANDO -->
38 </handlers>
39 <filters>
40     <!-- INIZIO CONFIGURAZIONE PER ENTANDO -->
41     <response-header name="x-frame-options" header-name="X-
42 Frame-Options" header-value="SAMEORIGIN"/>
43     <response-header name="x-xss-protection" header-name="X-XSS-
44 Protection" header-value="1; mode=block"/>
45     <response-header name="x-content-type-options" header-
46 name="X-Content-Type-Options" header-value="nosniff"/>
47     <response-header name="content-security-policy" header-
48 name="Content-Security-Policy" header-value="script-src 'unsafe-inline' *
49 ;"/>
50     <response-header name="strict-transport-security" header-
51 name="Strict-Transport-Security" header-value="max-age=31536000;
52 includeSubDomains;"/>
53     <response-header name="Access-Control-Allow-Origin" header-
54 name="Access-Control-Allow-Origin" header-value="http://appbuilder-entando-
55 portal.cloudapps.entando.org"/>
56     <response-header name="Access-Control-Allow-Methods" header-
57 name="Access-Control-Allow-Methods" header-value="GET, POST, OPTIONS, PUT"/>
58     <response-header name="Access-Control-Allow-Headers" header-
59 name="Access-Control-Allow-Headers" header-value="accept, authorization,
60 content-type, x-requested-with"/>
61     <response-header name="Access-Control-Allow-Credentials"
62 header-name="Access-Control-Allow-Credentials" header-value="true"/>
63     <response-header name="Access-Control-Max-Age" header-
64 name="Access-Control-Max-Age" header-value="1"/>
65     <!-- FINE CONFIGURAZIONE PER ENTANDO -->
66 </filters>
67 </subsystem>

```

***Nota:** * il `max-post-size="1048576000"` è stato definito in questo modo per consentire upload fino a 1GB.

Configurazione sottosistema infinispán

```
1 <subsystem xmlns="urn:jboss:domain:infinispan:7.0">
2   <cache-container name="server" aliases="singleton cluster"
3   default-cache="default" module="org.wildfly.clustering.server">
4     <transport lock-timeout="60000"/>
5     <replicated-cache name="default">
6       <transaction mode="BATCH"/>
7     </replicated-cache>
8   </cache-container>
9   <cache-container name="web" default-cache="repl"
10  module="org.wildfly.clustering.web.infinispan">
11     <transport lock-timeout="60000"/>
12     <replicated-cache name="repl">
13       <file-store/>
14     </replicated-cache>
15     <distributed-cache name="dist">
16       <file-store/>
17     </distributed-cache>
18   </cache-container>
19   <cache-container name="ejb" aliases="sfsb" default-
20  cache="repl" module="org.wildfly.clustering.ejb.infinispan">
21     <transport lock-timeout="60000"/>
22     <replicated-cache name="repl">
23       <locking isolation="REPEATABLE_READ"/>
24       <object-memory size="10000"/>
25       <transaction mode="BATCH"/>
26       <file-store/>
27     </replicated-cache>
28     <distributed-cache name="dist">
29       <locking isolation="REPEATABLE_READ"/>
30       <transaction mode="BATCH"/>
31       <file-store/>
32     </distributed-cache>
33   </cache-container>
34   <cache-container name="hibernate" default-cache="local-query"
35  module="org.infinispan.hibernate-cache">
36     <transport lock-timeout="60000"/>
37     <local-cache name="local-query">
38       <object-memory size="10000"/>
39       <expiration max-idle="100000"/>
40     </local-cache>
41     <invalidation-cache name="entity">
42       <transaction mode="NON_XA"/>
43       <object-memory size="10000"/>
44       <expiration max-idle="100000"/>
45     </invalidation-cache>
46     <replicated-cache name="timestamps"/>
47   </cache-container>
```

```

44     <!-- INIZIO CONFIGURAZIONE PER ENTANDO -->
45     <cache-container name="entando" default-cache="Entando_Cache">
46         <transport/>
47         <replicated-cache name="Entando_Cache">
48             <locking acquire-timeout="60000"/>
49             <transaction locking="OPTIMISTIC" mode="BATCH"/>
50             <object-memory size="100000"/>
51             <expiration interval="120000" lifespan="600000" max-
idle="600000"/>
52         </replicated-cache>
53     </cache-container>
54     <cache-container name="pagecache" default-
cache="Entando_PageManager">
55         <transport/>
56         <replicated-cache name="Entando_PageManager">
57             <locking acquire-timeout="60000"/>
58             <transaction locking="OPTIMISTIC" mode="BATCH"/>
59         </replicated-cache>
60     </cache-container>
61     <cache-container name="pagemodelcache" default-
cache="Entando_PageModelManager">
62         <transport/>
63         <replicated-cache name="Entando_PageModelManager">
64             <locking acquire-timeout="60000"/>
65             <transaction locking="OPTIMISTIC" mode="BATCH"/>
66         </replicated-cache>
67     </cache-container>
68     <cache-container name="categorycache" default-
cache="Entando_CategoryManager">
69         <transport/>
70         <replicated-cache name="Entando_CategoryManager">
71             <locking acquire-timeout="60000"/>
72             <transaction locking="OPTIMISTIC" mode="BATCH"/>
73         </replicated-cache>
74     </cache-container>
75     <cache-container name="widgettypecache" default-
cache="Entando_WidgetTypeManager">
76         <transport/>
77         <replicated-cache name="Entando_WidgetTypeManager">
78             <locking acquire-timeout="60000"/>
79             <transaction locking="OPTIMISTIC" mode="BATCH"/>
80         </replicated-cache>
81     </cache-container>
82     <cache-container name="configcache" default-
cache="Entando_ConfigManager">
83         <transport/>
84         <replicated-cache name="Entando_ConfigManager">
85             <locking acquire-timeout="60000"/>
86             <transaction locking="OPTIMISTIC" mode="BATCH"/>
87         </replicated-cache>
88     </cache-container>
89     <cache-container name="rolecache" default-
cache="Entando_RoleManager">
90         <transport/>
91         <replicated-cache name="Entando_RoleManager">
92             <locking acquire-timeout="60000"/>
93             <transaction locking="OPTIMISTIC" mode="BATCH"/>
94         </replicated-cache>

```

```
95     </cache-container>
96     <cache-container name="groupcache" default-
cache="Entando_GroupManager">
97         <transport/>
98         <replicated-cache name="Entando_GroupManager">
99             <locking acquire-timeout="60000"/>
100             <transaction locking="OPTIMISTIC" mode="BATCH"/>
101         </replicated-cache>
102     </cache-container>
103     <cache-container name="langcache" default-
cache="Entando_LangManager">
104         <transport/>
105         <replicated-cache name="Entando_LangManager">
106             <locking acquire-timeout="60000"/>
107             <transaction locking="OPTIMISTIC" mode="BATCH"/>
108         </replicated-cache>
109     </cache-container>
110     <cache-container name="cacheinfocache" default-
cache="Entando_CacheInfoManager">
111         <transport/>
112         <replicated-cache name="Entando_CacheInfoManager">
113             <locking acquire-timeout="60000"/>
114             <transaction locking="OPTIMISTIC" mode="BATCH"/>
115         </replicated-cache>
116     </cache-container>
117     <cache-container name="i18nlnocache" default-
cache="Entando_I18nManager">
118         <transport/>
119         <replicated-cache name="Entando_I18nManager">
120             <locking acquire-timeout="60000"/>
121             <transaction locking="OPTIMISTIC" mode="BATCH"/>
122         </replicated-cache>
123     </cache-container>
124     <cache-container name="userprofilecache" default-
cache="Entando_UserProfileManager">
125         <transport/>
126         <replicated-cache name="Entando_UserProfileManager">
127             <locking acquire-timeout="60000"/>
128             <transaction locking="OPTIMISTIC" mode="BATCH"/>
129         </replicated-cache>
130     </cache-container>
131     <cache-container name="initializercache" default-
cache="Entando_InitializerManager">
132         <transport/>
133         <replicated-cache name="Entando_InitializerManager">
134             <locking acquire-timeout="60000"/>
135             <transaction locking="OPTIMISTIC" mode="BATCH"/>
136         </replicated-cache>
137     </cache-container>
138     <cache-container name="apicatalogcache" default-
cache="Entando_ApiCatalogManager">
139         <transport/>
140         <replicated-cache name="Entando_ApiCatalogManager">
141             <locking acquire-timeout="60000"/>
142             <transaction locking="OPTIMISTIC" mode="BATCH"/>
143         </replicated-cache>
144     </cache-container>
```

```
145         <cache-container name="keygeneratorcache" default-
cache="Entando_KeyGeneratorManager">
146             <transport/>
147             <replicated-cache name="Entando_KeyGeneratorManager">
148                 <locking acquire-timeout="60000"/>
149                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
150             </replicated-cache>
151         </cache-container>
152         <cache-container name="dataobjectcache" default-
cache="Entando_DataObjectManager">
153             <transport/>
154             <replicated-cache name="Entando_DataObjectManager">
155                 <locking acquire-timeout="60000"/>
156                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
157             </replicated-cache>
158         </cache-container>
159         <cache-container name="dataobjectmodelcache" default-
cache="Entando_DataObjectModelManager">
160             <transport/>
161             <replicated-cache name="Entando_DataObjectModelManager">
162                 <locking acquire-timeout="60000"/>
163                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
164             </replicated-cache>
165         </cache-container>
166         <cache-container name="dataobjectmappercache" default-
cache="Entando_DataObjectPageMapperManager">
167             <transport/>
168             <replicated-cache
name="Entando_DataObjectPageMapperManager">
169                 <locking acquire-timeout="60000"/>
170                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
171             </replicated-cache>
172         </cache-container>
173         <cache-container name="jacmscontentmanagercache" default-
cache="Entando_jacmsContentManager">
174             <transport/>
175             <replicated-cache name="Entando_jacmsContentManager">
176                 <locking acquire-timeout="60000"/>
177                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
178             </replicated-cache>
179         </cache-container>
180         <cache-container name="jacmscontentmodelcache" default-
cache="Entando_ContentModelManager">
181             <transport/>
182             <replicated-cache name="Entando_ContentModelManager">
183                 <locking acquire-timeout="60000"/>
184                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
185             </replicated-cache>
186         </cache-container>
187         <cache-container name="jacmscontentpagemappercache" default-
cache="Entando_ContentPageMapperManager">
188             <transport/>
189             <replicated-cache name="Entando_ContentPageMapperManager">
190                 <locking acquire-timeout="60000"/>
191                 <transaction locking="OPTIMISTIC" mode="BATCH"/>
192             </replicated-cache>
193         </cache-container>
```

```
194         <cache-container name="jacmsresourcecachemanagercache" default-  
cache="Entando_ResourceManager">  
195             <transport/>  
196             <replicated-cache name="Entando_ResourceManager">  
197                 <locking acquire-timeout="60000"/>  
198                 <transaction locking="OPTIMISTIC" mode="BATCH"/>  
199             </replicated-cache>  
200         </cache-container>  
201         <cache-container name="jpnewsletternewslettermanagercache"  
default-cache="Entando_INewsLetterManager">  
202             <transport/>  
203             <replicated-cache name="Entando_INewsLetterManager">  
204                 <locking acquire-timeout="60000"/>  
205                 <transaction locking="OPTIMISTIC" mode="BATCH"/>  
206             </replicated-cache>  
207         </cache-container>  
208         <!-- FINE CONFIGURAZIONE PER ENTANDO -->  
209     </subsystem>
```

Generazione del WAR

Per consentire il deploy del progetto entando su JBoss / Wildfly è necessario generare il WAR con il filtro corretto (filter-production-jboss.properties). Procedere quindi in questo modo:

```
mvn clean package -Pproduction-jboss -DskipTests
```

Il file generato(nome-progetto.war) si troverà all'interno della cartella `target` .