Team Learning Session Meeting Notes: **CACHING AND MDB's**

TOPICS DISCUSSED:

S.NO	Topic
1	Caching
2	Different types and their importance
3	MDB's

Date	07-02-2015
Topics Covered by:	Manju, Sudipta, Ramesh
Document Compiled by:	Krishna Bodduluri
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➢ Main purpose of ehcache.xml?

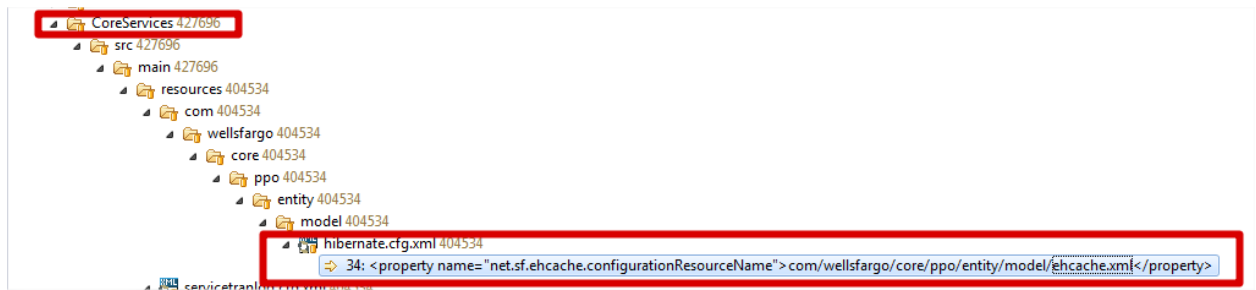This cache caches data related to ReferenceData and PriceBlastReadOnlyData.

```xml
1  <?xml version="1.0" encoding="UTF-8"?>
2
3  <ehcache xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="ehcache.xsd" name="ehcache-coreservice">
4      <diskStore path="java.io.tmpdir" />
5      <defaultCache maxElementsInMemory="10000" eternal="false" timeToIdleSeconds="1" timeToLiveSeconds="1" overflowToDisk="false"
6          diskPersistent="false" diskExpiryThreadIntervalSeconds="120" memoryStoreEvictionPolicy="LRU" />
7      <cache name="ReferenceData" maxElementsInMemory="100000" eternal="false" timeToIdleSeconds="0" timeToLiveSeconds="43200" overflowToDisk="false"
8          diskPersistent="false" diskExpiryThreadIntervalSeconds="3600" memoryStoreEvictionPolicy="LRU" />
9      <cache name="PriceBlastReadOnlyData" maxElementsInMemory="100000" eternal="false" timeToIdleSeconds="0" timeToLiveSeconds="300" overflowToDisk="false"
10         diskPersistent="false" diskExpiryThreadIntervalSeconds="3600" memoryStoreEvictionPolicy="LRU" />
11 </ehcache>
12
```

This ehcache file is being referred from hibernate.cfg.xml file. Hibernate is using thie ehcache file as second-level cache.

```xml
28      <property name="hibernate.show_sql">false</property>
29      <property name="hibernate.id.new_generator_mappings">true</property>
30
31      <!-- cache -->
32      <property name="hibernate.cache.region.factory_class">org.hibernate.cache.ehcache.EhCacheRegionFactory</property>
33      <property name="hibernate.cache.use_second_level_cache">true</property>
34      <property name="net.sf.ehcache.configurationResourceName">com/wellsfargo/core/ppo/entity/model/ehcache.xml</property>
35
36      <!-- mappings -->
37      <mapping resource="com/wellsfargo/core/ppo/entity/model/priceblast/priceblast.hbm.xml"/>
38  </session-factory>
39 </hibernate-configuration>
40
```
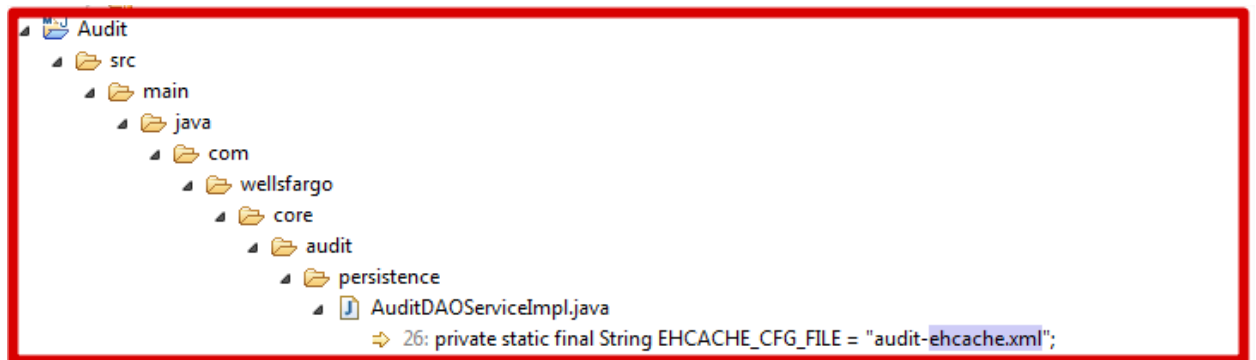
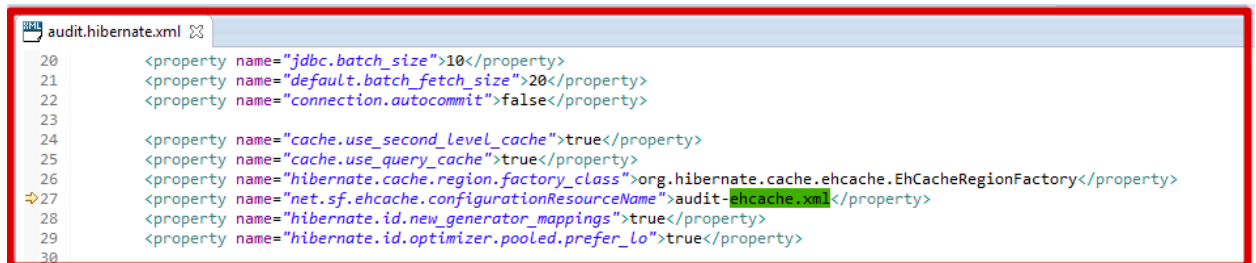I have to confirm if this hibernate file is being used at all or not.

➢ Purpose of audit-ehcache.xml?

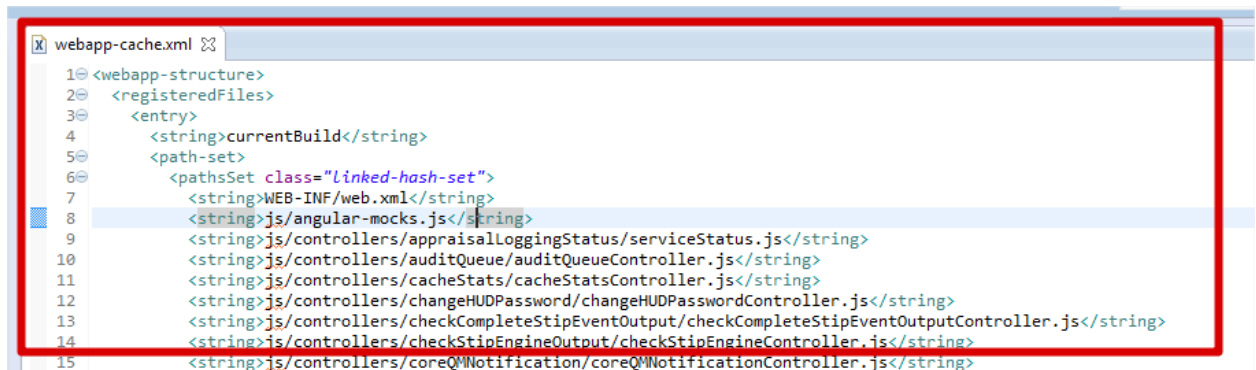audit-ehcache.xml is being used ONLY in Audit application.

This file is also being used as second-level cache Hibernate(audit-hibernate.xml). We can see the hibernate configuration below.

➢ Purpose of webapp-cache.xml?
This is an auto-generated file by MAVEN.

➢ Purpose of wf-ehcache.xml?

This is one of the key cache files. This is being used in "BaseFramework" and "CORESharedLib" projects. This file used to cache application related stuff. We have an option in Core Tools to clear cache stored by this file.

```
wf-ehcache.xml
62          overflowToDisk="false" diskPersistent="false"/>
63
64      <cache name="HOLIDAY_USAGE_CACHE" maxElementsInMemory="10000"
65          eternal="false" timeToIdleSeconds="0" timeToLiveSeconds="86400"
66          overflowToDisk="false" diskPersistent="false" diskExpiryThreadIntervalSeconds="3600" memoryStoreEvictionPolicy="LRU" />
67
68      <cache name="GROUPNAME_IS_EMPTY_CACHE" maxElementsInMemory="20000"
69          eternal="false" timeToIdleSeconds="0" timeToLiveSeconds="28800" overflowToDisk="false"
70          diskPersistent="false" diskExpiryThreadIntervalSeconds="80450" memoryStoreEvictionPolicy="LRU"/>
```

➢ Purpose of wf-app-ehcache.xml?

This cache file used to save the application related cache and loads from CommonUtil Project. We can find this file under "C:\core-dev\modules\configurations\main\resources". This Cache file is used to cache more commonly used generic stuff like ReferenceDataLable, UISecurity, EmailTemplateCache etc..

```
wf-app-ehcache.xml
1      <?xml version="1.0" encoding="UTF-8"?>
2
3      <ehcache xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4          xsi:noNamespaceSchemaLocation="ehcache.xsd"
5          name="wf-app-ehcache">
6
7      <diskStore path="java.io.tmpdir"/>
8
9      <defaultCache maxElementsInMemory="10000" eternal="false" timeToIdleSeconds="1" timeToLiveSeconds="1" overflowToDisk="false" diskPersistent="false" diskExpiryThreadIntervalSeconds="120" memoryStoreEvictionPolicy="LRU"/>
```

➢ Purpose of wf-entity-ehcache.xml?

This wf-entity-ehcache is used to cache "Relationships", "Query", most commonly used entities, GenericData.

```
wf-entity-ehcache.xml
1      <?xml version="1.0" encoding="UTF-8"?>
2
3      <ehcache xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4          xsi:noNamespaceSchemaLocation="ehcache.xsd"
5          name="wf-entity-ehcache">
6
7      <diskStore path="java.io.tmpdir"/>
8
9      <defaultCache maxElementsInMemory="10000" eternal="false" timeToIdleSeconds="1" timeToLiveSeconds="1"
       overflowToDisk="false" diskPersistent="false" diskExpiryThreadIntervalSeconds="120" memoryStoreEvictionPolicy=
       "LRU"/>
```

➢ There are some EJB stuff in the project. Are we using them for messaging stuff?

Yes. Most of the EJB's are under ServicesEJB and AsyncMessagingApp. These applications deployed on same server(WAS) as other applications. Earlier there was a demand to make these 2 applications separated and hosted on different server, but for right now these are hosted on same server as other apps.

➢ For pub/sub- JMS, EJB should be required with our project?

Yes. We are still using EJB's to develop any MDB's. All the EJB/MDB stuff gets deployed to WAS. Even for any new applications that has to have EJB/MDB's, they will be deployed to WAS. There are several examples of MDB's in AsyncMessagingApp.