

Oracle® Fusion Middleware

Cache Reference for Oracle WebLogic Portal

10g Release 3 (10.3.4)

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This reference guide lists the available caches for WebLogic Portal that can be managed within the Portal Administration Console.

Caches referenced in this guide can be modified within the Administration Console. Although some caches are not pre-configured within the Administration Console, you can add these caches to the Administration Console.

Note: You can substitute the Oracle Coherence P13N Cache Provider as the default cache provider for WLP. For detailed information, see "Cache Management with Oracle Coherence," in the *Oracle Fusion Middleware Portal Development Guide for Oracle WebLogic Portal*.

This book includes the following sections:

- [Section 1, "Adding a Cache"](#)
- [Section 2, "Weblogic Portal Framework Caches"](#)
- [Section 3, "WSRP Caches"](#)
- [Section 4, "Content and Ad Caches"](#)
- [Section 5, "Oracle WebCenter Content Caches"](#)
- [Section 6, "User Management Caches"](#)
- [Section 7, "Documentation Accessibility"](#)

1 Adding a Cache

If you want to use a cache that is not in the list of configured caches, you must add the cache to the Portal Administration Console. You can also directly edit the file META-INF/p13n-cache-config.xml. [Example 1](#) shows a sample config file.

Example 1 Sample Cache Config File

```
<?xml version="1.0" encoding="UTF-8"?>
<p13n-cache-config xmlns="http://www.bea.com/ns/p13n/90/p13n-cache-config">
<cache>
  <name>nodeCache.MyUcmRepo</name>
  <enabled>true</enabled>
  <time-to-live>600000</time-to-live>
  <max-entries>5000</max-entries>
</cache>
</p13n-cache-config>
```

```

<name>binaryCache.MyUcmRepo</name>
<enabled>true</enabled>
<time-to-live>10000</time-to-live>
<max-entries>2000</max-entries>
</cache>
</p13n-cache-config>

```

To add a cache:

1. Choose **Configuration & Monitoring > Service Administration**.
2. Select **Cache Manager** in the Resource Tree.
3. In the Browse tab, click **Add Cache**.
4. Enter the name of the cache.
5. Optionally, enter or modify the default cache configuration settings.
6. Click **Update**. The cache you added appears in the list of caches.

2 Weblogic Portal Framework Caches

[Table 1](#) through [Table 18](#) detail information on WebLogic Portal framework caches.

Table 1 *CategoryTreeCache*

Part	Description
Cache	CategoryTreeCache
Use	Holds portlet category trees
Key	Web application name
Value	CategoryTree objects
Notes	

Table 2 *communitiesEntityPropertyCache*

Part	Description
Cache	communitiesEntityPropertyCache
Use	Holds community membership capability information for users accessing communities
Key	A combination of community definition ID and the user name
Value	A map of community membership capabilities
Notes	This cache optimizes access to community membership properties for members of a community. Base the cache size on the expected number of users and the expected number of communities that each user would normally access within the same time period. Misses to this cache generally result in one database call per request where the miss occurred.

Table 3 *communitiesMemberActiveCache*

Part	Description
Cache	communitiesMemberActiveCache

Table 3 (Cont.) communitiesMemberActiveCache

Part	Description
Use	Caches information about active status for community members
Key	User name
Value	A String representing the users' community member record active status
Notes	This information is used with status for individual community memberships to determine overall active status. Size this cache proportionately to the number of community users that you expect to be logged in at the same time. Misses to this cache generally result in one database call per request where the miss occurred.

Table 4 portalContentUriCache

Part	Description
Cache	portalContentUriCache
Use	Used to store portal content URIs for a combination of Web application, portal, locale and optional user name
Key	Key is equal to portal path + name of web application
Value	Portal content URI
Notes	Set this cache according the number of portals that have associated content URIs. The default values are recommended. Default values: MaxEntries=500; TimeToLive=-1.

Table 5 portalLocalizationLocaleCache

Part	Description
Cache	portalLocalizationLocaleCache
Use	Used to store collection of LocalizationLocale objects (LocalizationLocale specifies language, character encoding, country, and variant)
Key	The key is private static final String called portalLocalizationLocaleCachekey.
Value	A set of LocalizationLocale objects
Notes	Default TTL value should be okay. Max Entries could be set to a number based on the number of rows in the L10N_LOCALE table, i.e. number of supported locales. Default values: MaxEntries=500; TimeToLive=-1.

Table 6 portletControlTreeCache

Part	Description
Cache	portletControlTreeCache
Use	Used to store portlet control trees for floating portlets
Key	The combination portletInstanceId and locale
Value	A portlet control tree

Table 6 (Cont.) portletControlTreeCache

Part	Description
Notes	Default TTL value should be okay, MaxEntries could be set to a number based on number of floatable portlet instances in a portal (including user customized portlets) and number of supported locales. It is recommended that the TTL be left at -1 because the cached default desktop needs to be kept in the cache indefinitely and the cached item for a logged in user is removed when they log out so there is no need to expire a user's cached items. To avoid having the LRU mechanism kick the cached default desktop out of the cache, the MaxEntries should be set to at least (max # of concurrent logged in users + 1) X (# of locales supported). If the cache is too small then LRU will kick out the cached default desktop and the memory saving advantage of this approach will be lost. Default values: MaxEntries=500; TimeToLive=-1.

Table 7 PortletCategoryCache

Part	Description
Cache	PortletCategoryCache
Use	Holds portlet category objects
Key	PortletCategoryDefinitionId
Value	PortletCategoryDefinition objects
Notes	

Table 8 portletPreferencesCache

Part	Description
Cache	portletPreferencesCache
Use	Used to store portlet preferences
Key	An instance of PortletPreferenceId
Value	A map of preferences
Notes	Default TTL and Max Entries values could be set to a value depending on amount of available memory and total number of preferences (at the application level). Defaults: MaxEntries = 500, TimeToLive=60000 (one minute).

Table 9 portalLocalizationResourceCache

Part	Description
Cache	portalLocalizationResourceCache
Use	Used to store localization resources
Key	The localizationIntersection
Value	A LocalizationResource
Notes	Default TTL and MaxEntries values could be set to a value based on total number of localization resources in the system, which is a combination of non-customized and customized localization resources, and the amount of available memory. Default values: MaxEntries=500; TimeToLive=-1

Table 10 *portalControlTreeCache*

Part	Description
Cache	portalControlTreeCache
Use	Used to store portal control trees (only used for streaming portals)
Key	The combination of Web application, portal, desktop, locale and optional user name
Value	A portal control tree
Notes	Default TTL value should be okay. This cache will contain one entry for the default portal, plus one entry for each user who has customized his or her portal. Max Entries could be set to a number based on number of users and available memory. If there are any changes to portal this cache will be flushed. Default values: MaxEntries=500; TimeToLive=-1

Table 11 *portalLayoutDefinitionCache*

Part	Description
Cache	portalLayoutDefinitionCache
Use	Holds LayoutDefinition objects
Key	LayoutDefinitionId
Value	LayoutDefinition objects
Notes	

Table 12 *portalMarkupdefinitionCache*

Part	Description
Cache	portalMarkupdefinitionCache
Use	Used to store MarkupDefinition objects
Key	A MarkupDefintionID
Value	A MarkupDefinition
Notes	Set this according to the number of rows in the PF_MARKUP_Definition. Markup is the blueprint for a portal library resource (desktop, book, page, portlet, placeholder, menu, Look And Feel, layout, shell or theme). Default values: MaxEntries=500; TimeToLive=60000 (one minute).

Table 13 *portalThemeDefinitionCache*

Part	Description
Cache	portalThemeDefinitionCache
Use	Holds ThemeDefinition objects
Key	ThemeDefinitionId
Value	ThemeDefinition objects
Notes	

Table 14 *netuix.community.definition.cache*

Part	Description
Cache	netuix.community.definition.cache
Use	Holds community definitions
Key	A combination of Web application name, portal path, and desktop path for a community
Value	CommunityDefinition objects
Notes	

Table 15 *netuix.community.id.to.path.cache*

Part	Description
Cache	netuix.community.id.to.path.cache
Use	Maps community definition IDs to the communities' Web application names, desktop path, and portal path
Key	A CommunityDefinitionId
Value	The communities' Web application names, desktop path, and portal path
Notes	

Table 16 *netuix.notification.global*

Part	Description
Cache	netuix.notification.global
Use	Holds notifications targeted to a user, but not targeted to an individual web application
Key	User name
Value	ArrayList of Notification objects
Notes	

Table 17 *wlp.urlCompression.compressed*

Part	Description
Cache	wlp.urlCompression.compressed
Use	Maps compressed URL IDs to the expanded URL
Key	The numeric compressed URL ID
Value	The expanded URL
Notes	

Table 18 *wlp.urlCompression.expanded*

Part	Description
Cache	wlp.urlCompression.expanded
Use	Maps expanded URLs into compressed URL IDs
Key	Expanded (full) URLs

Table 18 (Cont.) *wlp.urlCompression.expanded*

Part	Description
Value	Compressed URL ID
Notes	

3 WSRP Caches

Table 19 through Table 24 detail information on WSRP caches.

Table 19 *remoteProducerInfoCache*

Part	Description
Cache	remoteProducerInfoCache
Use	Caches the metadata for producers added to a consumer application
Key	Name of the consumer web application
Value	A java.util.HashMap containing producer metadata. This map is keyed with the producerHandle of each producer.
Notes	This cache is used to look for producer metadata when a user or administrator is trying to interact with a remote portlet or a producer. Default values: MaxEntries=500; TimeToLive=-1.

Note: The remoteProducerInfoCache is not included in the Administration Console. If you want to manage this cache, you need to add it manually, see [Section 1, "Adding a Cache"](#).

Table 20 *registrationHandleCache*

Part	Description
Cache	registrationHandleCache
Use	Used to store registration handles of all registered consumers, for all producers
Key	The registrationHandle of the consumer
Value	A java.lang.boolean object with a value of true or false
Notes	This cache is used to cache whether or not a particular registrationHandle is valid. Default values: MaxEntries=500;TimeToLive=-1.

Note: The registrationHandleCache is not included in the Administration Console. If you want to manage this cache, you need to add it manually. See [Section 1, "Adding a Cache"](#).

Table 21 *proxyPortletCache*

Part	Description
Cache	proxyPortletCache

Table 21 (Cont.) proxyPortletCache

Part	Description
Use	This caches the ProxyPortlets by proxyportletId
Key	String representing the portlet instance ID
Value	Information from the consumer registry and about the proxy portlet instance (com.bea.wsrp.services.persistence.internal.ProxyPortletInfoInternal.ProxyPortletInfoInternalObject).
Notes	Default values: MaxEntries: 100; TimeToLive = -1.

Table 22 proxyPortletRenderDependenciesCache

Part	Description
Cache	proxyPortletRenderDependencies Cache
Use	This caches render dependencies obtained from remote producers
Key	RenderDependencyCacheKey (the proxy portlet's Unique ID) containing: ▪ Versioned application name ▪ Web application name ▪ Producer handle ▪ WSDL URL ▪ Namespace prefix
Value	Array containing: ▪ List<IRenderDependencyTag> ▪ List<IScriptFragment>
Notes	Used when the cacheRenderDependencies property (in the .portlet file) is true and the portlet is a WSRP proxy portlet. Max entries: 500; TTL: Unlimited.

Table 23 complexProducerPortletHandleToIdCache

Part	Description
Cache	complexProducerPortletHandleToIdCache
Use	The complex producer (WSRP) uses this cache to look up the portlet's primary instance ID
Key	The remote portlet's handle
Value	The remote portlet's primary instance ID
Notes	Should be sized to fit the number of remote portlets in concurrent use. Default values: Size: 1000; TTL: 1 hour.

Table 24 complexProducerPortletIdToDefinitionLabel

Part	Description
Cache	complexProducerPortletIdToDefinitionLabel
Use	The complex producer (WSRP) uses this cache to look up the portlet's definition label
Key	The remote portlet's ID
Value	The remote portlet's definition label

Table 24 (Cont.) complexProducerPortletIdToDefinitionLabel

Part	Description
Notes	Should be sized to fit the number of remote portlets in concurrent use. Default values: Size: 1000; TTL: 1 hour.

4 Content and Ad Caches

Table 25 through Table 43 detail information for content and ad caches.

Table 25 adServiceCache

Part	Description
Cache	adServiceCache
Use	Used to store the results of searches for content rendered in a placeholder (ads). Used by the AdHelper to increase the speed of ad queries.
Key	The ad query (java.lang.String)
Value	A Content []
Notes	Set this according to the number of ad queries and the amount of content expected to be retrieved. Consider basing the maximum size on the total number of ad queries. If the ads returned from a particular query do not change, consider increasing the TTL. Default values: MaxEntries=100; TimeToLive=3600000 (1 hour).

Table 26 nodePathCache.repository_name

Part	Description
Cache	nodePathCache.repository_name
Use	Used to store a list of nodes for a repository based on a path
Key	A String (Node path)
Value	A node
Notes	Set according to the number of nodes in a repository. Default values: MaxEntries=200; TimeToLive= 2*60*1000 (2 minutes).

Table 27 binaryCache.repository_name

Part	Description
Cache	binaryCache.repository_name
Use	Used to store binary property values for a repository node
Key	String (node ID + Property ID)
Value	A byte array associated with the binary property
Notes	Set this according to the number and size of binary property values. The maximum size in bytes of a binary cache entry is specified in the repository configuration entry named <code>binary-cache-max-entry-size</code> . The default size is 100*1024 (100 kb). Default values: MaxEntries: 50; TimeToLive: 5*60*1000 (five minutes).

Table 28 *nodeCache.repository_name*

Part	Description
Cache	<i>nodeCache.repository_name</i>
Use	Used to store a list of nodes for a repository based on an ID
Key	An ID (NodeID)
Value	A node
Notes	Set according to the number of nodes in a repository. Default values: MaxEntries=200; TimeToLive=2*60*1000 (two minutes).

Table 29 *repositoryConfigCache*

Part	Description
Cache	<i>repositoryConfigCache</i>
Use	VCR cache; caches repository configuration information
Key	(String) repository name
Value	RepositoryConfig object associated with that repository name
Notes	MaxEntries=20; TimeToLive: -1 (forever)

Table 30 *repo.explicitPropertyCache*

Part	Description
Cache	<i>repo.explicitPropertyCache</i>
Use	WLP repository cache; caches explicit property information for all WLP repositories
Key	(String) repository name
Value	Collection of repository property definition information for explicit properties in that WLP repository.
Notes	MaxEntries=50; TimeToLive=5*60*60*1000 (5 hours)

Table 31 *repo.nodeIdCache.repository_name*

Part	Description
Cache	<i>repo.nodeIdCache.repository_name</i>
Use	WLP repository cache; caches node information for a specific WLP repository instance
Key	Node ID
Value	Repository node data
Notes	Defaults: MaxEntries=1000; TimeToLive=60*1000 (1 minute)

Table 32 *repo.nodePathCache.repository_name*

Part	Description
Cache	<i>repo.nodePathCache.repository_name</i>
Use	WLP repository cache; caches node information for a specific WLP repository instance

Table 32 (Cont.) *repo.nodePathCache.repository_name*

Part	Description
Key	Node path
Value	Repository node data
Notes	Defaults: MaxEntries=1000; TimeToLive=60*1000 (1 minute)

Table 33 *repo.typeBinaryCache.repository_name*

Part	Description
Cache	<i>repo.typeBinaryCache.repository_name</i>
Use	WLP repository cache; caches node binary property information for a specific WLP repository instance
Key	Node UID + binary property UID
Value	Byte[]
Notes	Defaults: MaxEntries=100; TimeToLive=60*1000 (1 minute)

Table 34 *repo.typeIdCache.repository_name*

Part	Description
Cache	<i>repo.typeIdCache.repository_name</i>
Use	WLP repository cache; caches node type information for a specific WLP repository instance
Key	Type (objectclass) ID
Value	Repository type data
Notes	Defaults: MaxEntries=100; TimeToLive=60*1000 (1 minute)

Table 35 *repo.typeNameCache.repository_name*

Part	Description
Cache	<i>repo.typeNameCache.repository_name</i>
Use	WLP repository cache; caches node type information for a specific WLP repository instance.
Key	Type (objectclass) name
Value	Repository type data
Notes	Defaults: MaxEntries=1000; TimeToLive=60*1000 (1 minute)

Table 36 *searchCache.repository_name*

Part	Description
Cache	<i>searchCache.repository_name</i>
Use	Used to store an array of IDs for nodes that satisfy a content search. This cache is configured on a repository-specific basis – individual repositories have different settings for their search cache. This flexibility allows, for example, repositories to have different expiration settings.
Key	A Search, which contain parameters for a query

Table 36 (Cont.) searchCache.repository_name

Part	Description
Value	An ID array of nodes in this repository that satisfy a query.
Notes	Default values: MaxEntries=500; TimeToLive=300000 (five minutes). Set the MaxEntries according to the amount of content expected to be retrieved. Set Time To Live according to how fresh you want the content.

Table 37 typeCache.repository_name

Part	Description
Cache	typeCache.repository_name
Use	VCR cache, caches Type (ObjectClass) information
Key	ObjectClass ID
Value	ObjectClass object
Notes	Default Values: MaxEntries=200; TimeToLive=10*60*1000 (10 minutes)

Table 38 typeNameCache.repository_name

Part	Description
Cache	typeNameCache.repository_name
Use	VCR cache, caches Type (ObjectClass) Name --> TypeID mapping
Key	ObjectClass Name
Value	ObjectClass ID
Notes	Default Values: MaxEntries=200; TimeToLive=10*60*1000 (10 minutes)

Table 39 searchExpressionPathCriteriaCache

Part	Description
Cache	searchExpressionPathCriteriaCache
Use	A federated cache used to quickly determine the set of repositories an expression-based search applies.
Key	A search Expression
Value	A list of path criteria
Notes	Default values: maxEntries=500; TimeToLive=60*60*1000 (1 hour)

Table 40 searchFTSPathCriteriaCache

Part	Description
Cache	searchFTSPathCriteriaCache
Use	A federated cache used to quickly determine the set of repositories an full-text-search applies
Key	A FullTextSearch
Value	A list of path criteria
Notes	Default values: maxEntries=500; TimeToLive=60*60*1000 (1 hour)

Table 41 *virtualNodeCache*

Part	Description
Cache	virtualNodeCache
Use	A federated cache for quick access to VirtualNode objects. Only used when library services are enabled.
Key	Node ID
Value	VirtualNode
Notes	Default values: maxEntries=500; TimeToLive=10*60*1000 (10 minutes)

Table 42 *versionCache*

Part	Description
Cache	versionCache
Use	A federated cache for quick access to Version objects. Only used when library services are enabled.
Key	nodeId + ":" + versionName
Value	Version
Notes	Default values: maxEntries=1500; TimeToLive=10*60*1000 (10 minutes)

Table 43 *adBucketServiceCache*

Part	Description
Cache	adBucketServiceCache
Use	A personalization cache that stores a set of content associated with a given user and placeholder.
Key	A combination of userId and placeholderName
Value	A list of ad information objects
Notes	Default values: MaxEntries=100, TimeToLive=60*60*1000 (1 hour)

5 Oracle WebCenter Content Caches

For details on WebCenter Content caches, see the *Oracle WebLogic Portal UCM VCR Adapter Guide for Oracle WebLogic Portal*.

6 User Management Caches

[Table 44](#) through [Table 49](#) detail information on user management caches.

Table 44 *entityIdCache*

Part	Description
Cache	entityIdCache
Use	Caches the ID for an entity (user or group ID)
Key	A com.bea.p13n.property.PropertyLocator. PropertyLocator is based on a user or group name (ENTITY.ENTITY_NAME) and entity type (ENTITY.ENTITY_TYPE).

Table 44 (Cont.) entityIdCache

Part	Description
Value	The entity ID (java.lang.Long)
Notes	Use the ENTITY table as a guide for the maximum size. The object being stored is a Long, which is fairly small. Therefore, it might be possible to set this cache's maximum size to the number of entries in the ENTITY table. Consider how often the ENTITY table might change when setting the TTL. Default values: MaxEntries=500;TimeToLive=600000.

Table 45 jndiNameCache

Part	Description
Cache	jndiNameCache
Use	Stores the JNDI names of entity property managers and UUP managers
Key	An entity ID
Value	The home name, which is a string value
Notes	Set this according the combination of the number of entity property managers and the number of UUP managers. Default values: MaxEntries=500;TimeToLive=600000.

Table 46 entityPropertyCache

Part	Description
Cache	entityPropertyCache
Use	Caches property values for users and groups
Key	A com.bea.p13n.property.PropertyLocator. PropertyLocator is based on the user or group name (ENTITY.ENTITY_NAME), entity type (ENTITY.ENTITY_TYPE, user or group) and property set type (PROPERTY_KEY.PROPERTY_SET_TYPE, usually USER).
Value	A com.bea.p13n.property.EntityPropertyCache object. This object contains a Map that stores property values keyed off the property set name and property name.
Notes	The larger you can afford to make this cache, the better. Use the ENTITY table as a guide for maximum size. The number of entries in this table should be the maximum number of cache entries that would ever be created. In most cases, there will be more entries here than you would want for a maximum cache size. So consider the average number of users you expect to be using your application at the same time. Consider a TTL based on how often new properties will be added to the property sets. If they are not being modified often, then a higher TTL might be appropriate. Default values: MaxEntries=500;TimeToLive=600000.

Table 47 profileTypeCache

Part	Description
Cache	profileTypeCache
Use	Caches user profile types that are used to look up the appropriate user manager profile manager when retrieving a user profile

Table 47 (Cont.) profileTypeCache

Part	Description
Key	A String (the user name)
Value	A String (the profile type)
Notes	This should be set based on the number of concurrent users. Set the TimeToLive never to expire. Default values: MaxEntries=100;TimeToLive=3600000.

Table 48 propertyKeyIdCache

Part	Description
Cache	propertyKeyIdCache
Use	Caches the unique ID associated with a property set type, property set and property name combination (primary key in the PROPERTY_KEY database table).
Key	Based on a property set type, property set, and property name combination (inner class called PropertyKeyLocator).
Value	The ID (java.lang.Long).
Notes	Maximum size should be set with an eye towards the maximum number of properties in the application (use the PROPERTY_KEY table as an indicator). Consider a TTL based on how often these unique ID combinations are likely to change. Default value: MaxEntries=500;TimeToLive=600000.

Table 49 credentialEntry Cache

Part	Description
Cache	credentialEntryCache
Use	Caches credential vault entries with encrypted credential.
Key	com.bea.p13n.security.management.credentials.internal.CredentialEntryLocator
Value	com.bea.p13n.security.management.credentials.CredentialEntry.
Notes	Default values: Max Entries=100; Time To Live=1 hour.

7 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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