

# Using BigMemory with webMethods Products

Version 10.15

October 2022

This document applies to webMethods 10.15 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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**Document ID: WEBM-TAB-1015-20221015**

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# About this Guide

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This guide explains how webMethods products use Terracotta Ehcache, BigMemory, and the Terracotta Server Array. The guide also describes client-side licensing requirements and provides general instructions for configuring the Terracotta Server Array.

## Document Conventions

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| Convention     | Description  |
|----------------|--|
| <b>Bold</b>    | Identifies elements on a screen.   |
| Narrowfont     | Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.  |
| <i>Italic</i>  | Identifies:<br><br>Variables for which you must supply values specific to your own situation or environment.<br>New terms the first time they occur in the text.<br>References to other documentation sources. |
| Monospace font | Identifies:<br><br>Text you must type in.<br>Messages displayed by the system.<br>Program code.  |
| { }            | Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.   |
|                | Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the   symbol.  |
| [ ]            | Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.  |
| ...            | Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).  |

## Online Information and Support

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### Product Documentation

You can find the product documentation on our documentation website at <https://documentation.softwareag.com>.

In addition, you can also access the cloud product documentation via <https://www.softwareag.cloud>. Navigate to the desired product and then, depending on your solution, go to “Developer Center”, “User Center” or “Documentation”.

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## Product Training

You can find helpful product training material on our Learning Portal at <https://knowledge.softwareag.com>.

## Tech Community

You can collaborate with Software AG experts on our Tech Community website at <https://techcommunity.softwareag.com>. From here you can, for example:

- Browse through our vast knowledge base.
- Ask questions and find answers in our discussion forums.
- Get the latest Software AG news and announcements.
- Explore our communities.
- Go to our public GitHub and Docker repositories at <https://github.com/softwareag> and <https://hub.docker.com/publishers/softwareag> and discover additional Software AG resources.

## Product Support

Support for Software AG products is provided to licensed customers via our Empower Portal at <https://empower.softwareag.com>. Many services on this portal require that you have an account. If you do not yet have one, you can request it at <https://empower.softwareag.com/register>. Once you have an account, you can, for example:

- Download products, updates and fixes.
- Search the Knowledge Center for technical information and tips.
- Subscribe to early warnings and critical alerts.
- Open and update support incidents.
- Add product feature requests.

## Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.





# 1 webMethods Products and Terracotta

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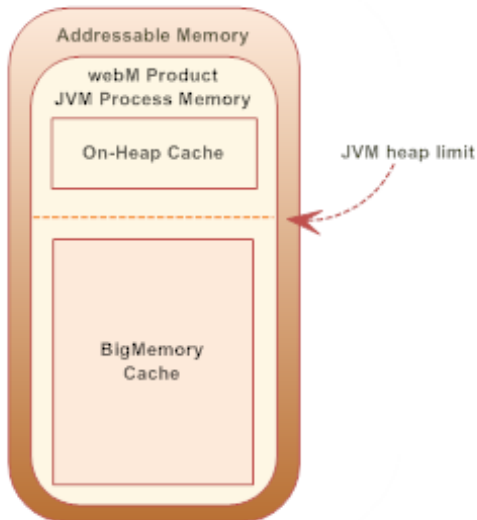
## Overview

Terracotta Ehcache is an open-source, standards-based caching API that enables applications to fetch frequently used data from memory (or another nearby resource) rather than having to retrieve it from a database or other back-end system. Terracotta extends the Terracotta Ehcache API so applications can create very large in-memory caches and share cached data with other applications on the network.

This chapter provides a general overview of how webMethods products use Terracotta Ehcache and, more specifically, how they use the extensions enabled by Terracotta. For more detailed information for a particular product, see the product documentation.

## Using Terracotta to Create Very Large In-Memory Caches with BigMemory

BigMemory is an extension to Terracotta Ehcache that enables you to create caches that reside outside the Java heap. Using BigMemory, you can create much larger caches than with local on-heap memory alone. You can use terabytes for caching, depending on the platform you use. Caches that you create using BigMemory also perform more predictably and consistently than on-heap caches, because they are not subject to the JVM garbage-collection process.

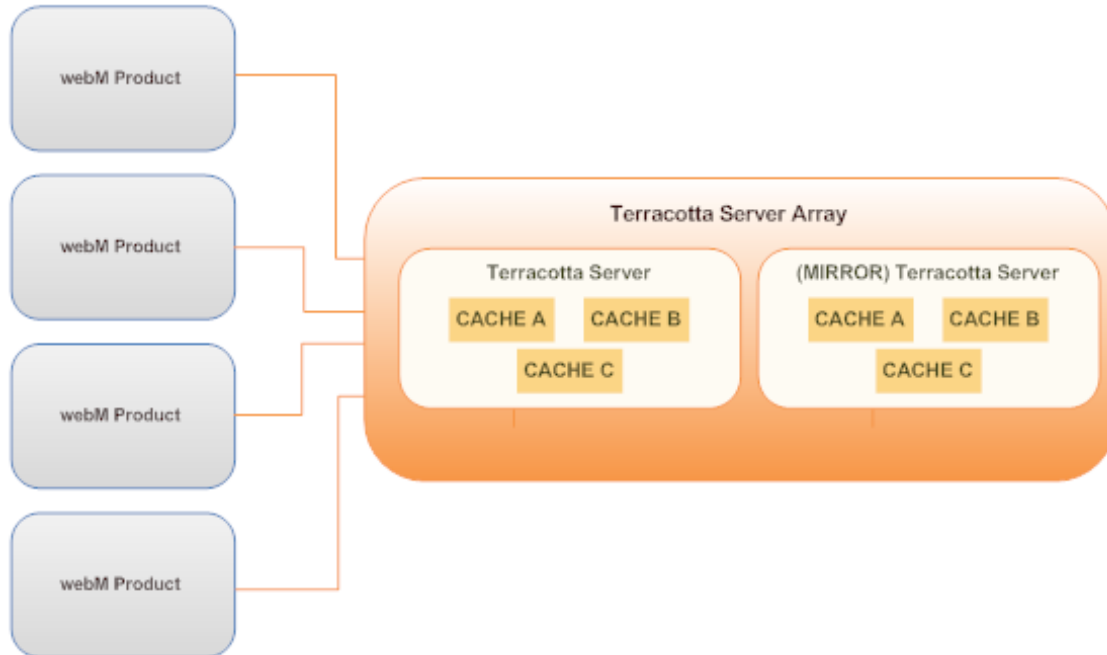


webMethods products that support Terracotta Ehcache for caching also support BigMemory. You must install a Terracotta license on the webMethods product to enable the BigMemory feature.

For additional information about the BigMemory extension to Terracotta Ehcache, see the sections on BigMemory in the Terracotta Ehcache 2.8 documentation available at <http://ehcache.org/>.

## Using a Terracotta Server Array to Share Cached Data Among Applications

Terracotta Server Array is a feature of BigMemory that enables distributed caching; with Terracotta Server Array, you can use a shared cache for multiple applications. As shown in the figure below, a Terracotta Server Array generally consists of an active Terracotta Server and a mirror Terracotta Server for high availability. If you require additional storage, you can obtain licensing to add Terracotta Servers and their mirrors to the array.



Most webMethods products that use Terracotta Ehcache also support the use of a Terracotta Server Array. To use these products with a Terracotta Server Array, you must install a Terracotta license on the webMethods product.

For additional information about the Terracotta Server Array, see the BigMemory Max product documentation for 4.1 at <http://www.terracotta.org/documentation/4.1/bigmemorymax/overview>.

**Important:** webMethods 9.7 products require release 4.1.4 of the Terracotta Server Array. When newer releases of the Terracotta Server Array become available, Software AG may add support for those releases. To check which releases of Terracotta are supported by a webMethods product, see the *BigMemory Compatibility with other Software AG Products* matrix on the Software AG Documentation website at <http://documentation.softwareag.com>.

## System Caches Used by webMethods Products

Many webMethods products cache data for their own internal processes. These internal caches are called *system caches* and are listed in “[System Caches Used by the webMethods Product Suite](#)” on page 29. You can use this information as input for sizing efforts related to BigMemory or the Terracotta Server Array.

## How webMethods Products Use Terracotta

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### Business Process Management

Business Process Management uses Terracotta to create a system cache in which to temporarily store process audit data that cannot be inserted into the process audit database. For more information, see [“System Caches Used by the webMethods Product Suite ” on page 29](#).

### Software AG Common Platform

The Software AG Common Platform uses Terracotta to store information related to security. For more information, see [“System Caches Used by the webMethods Product Suite ” on page 29](#).

### CentraSite

CentraSite caches the registry objects that are returned by search and get operations. Doing this enables CentraSite to quickly retrieve these objects from memory when they are requested again.

If your CentraSite server is equipped with the proper license, you can configure the server to cache registry objects in BigMemory.

**Note:**CentraSite does not support caching on the Terracotta Server Array.

For more information about CentraSite system caches, see [“System Caches Used by the webMethods Product Suite ” on page 29](#).

For information about using Terracotta with CentraSite, see the caching topics in the CentraSite user documentation.

### webMethods CloudStreams

CloudStreams uses Terracotta to cache the virtual services you deploy to a CloudStreams server. It also uses Terracotta to cache many of the artifacts associated with the virtual services (for example, performance metrics, policies, and consumer applications). When you install CloudStreams on a cluster of Integration Servers, CloudStreams maintains these caches on the Terracotta Server Array.

For more information about CloudStreams system caches, see [“System Caches Used by the webMethods Product Suite ” on page 29](#).

**Note:**CloudStreams does not support sharing of Connector Virtual Services, Virtual Services and policies across nodes in a clustered scenario. You must deploy such artifacts to a clustered node on an as-needed basis.

### Software AG Command Central

Command Central uses Terracotta to cache data objects returned by get operations from Platform Manager. Caching enables Command Central to quickly retrieve data objects from memory on

subsequent requests, even when the Platform Manager on the remote installation is not accessible. The caches are also used in different search operations and to improve performance.

If a Command Central Server is equipped with the proper Terracotta licenses, you can configure Command Central to cache registry objects in BigMemory.

**Important:**

Command Central does not support caching on the Terracotta Server Array.

For more information about Command Central system caches, see [“System Caches Used by the webMethods Product Suite” on page 29](#).

## webMethods Event Routing (Deprecated)

webMethods Event Routing uses Terracotta for guaranteed delivery of events.

1. A product such as webMethods Optimize or webMethods BPM emits an event.
2. webMethods NERV stores the event in a persistent cache, delivers the event to the destination endpoints, and then removes the event from the cache.

**Note:**

If the hosting JVM stops before the event is successfully delivered to all destination endpoints, the event is not removed from the cache. Instead, NERV sends the event after the JVM is restarted.

Caches are persistent and are used primarily for write operations. Read operations are performed only upon JVM restart.

For more information about webMethods Event Routing system caches, see [“System Caches Used by the webMethods Product Suite” on page 29](#).

## webMethods eStandards Modules

The following webMethods eStandards modules create system caches in which they store transaction-related data and/or configuration information related to the use of the module in a cluster:

- webMethods Module for AS4
- webMethods Chem eStandards Module
- webMethods ebXML Module
- webMethods FIX Module
- webMethods Module for HIPAA
- webMethods RosettaNet Module

When you use these modules in a clustered environment, they maintain their system caches on the Terracotta Server Array.

For more information about eStandards modules system caches, see [“System Caches Used by the webMethods Product Suite”](#) on page 29.

## webMethods Integration Server

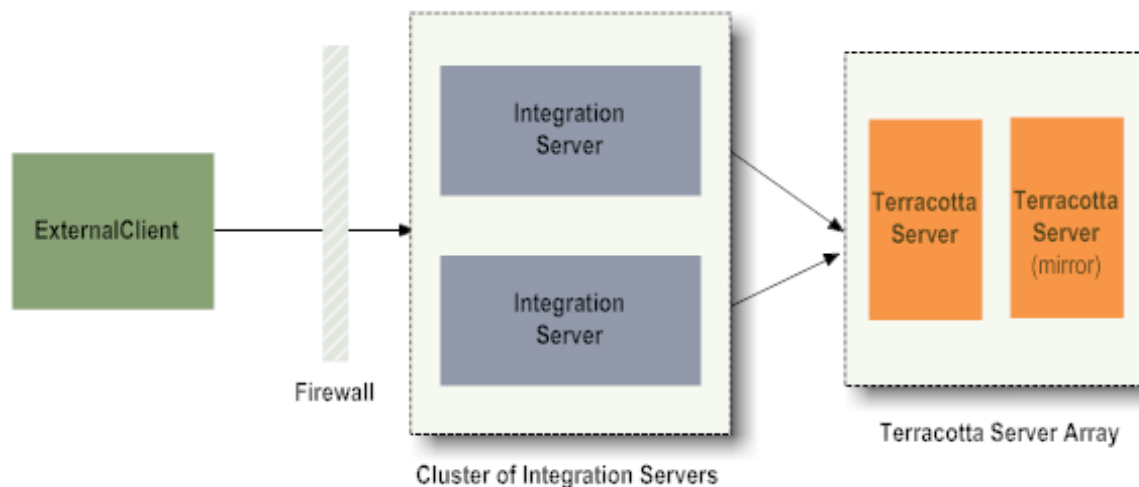
Integration Server uses Terracotta for these purposes:

- **For creating public caches.** Public caches are user-defined caches that integration solutions running your Integration Server can use. Integration Server provides built-in services that you use to build integration solutions that use caching.

If an Integration Server is equipped with the proper Terracotta licenses, you can create public caches that reside in BigMemory or on the Terracotta Server Array.

For more information about how Integration Server uses Terracotta with public caches, see the chapter on Terracotta Ehcache in *webMethods Integration Server Administrator’s Guide*. For more information about the services you use to add caching to an integration solution, see the `pub.cache` services in *webMethods Integration Server Built-In Services Reference*.

- **For clustering.** When you cluster Integration Servers using Terracotta, the members of the cluster share data using caches on the Terracotta Server Array. Each Integration Server in the cluster connects to the Terracotta Server Array to store and retrieve items from the shared caches.



For more information about how Integration Server uses Terracotta for clustering, see *webMethods Integration Server Clustering Guide*.

- **For caching service results.** When you enable a service to cache results, Integration Server saves the service invocation results in the cache for a specified period of time. While the results are in the cache, rather than re-invoking the service, Integration Server can quickly retrieve the service results for subsequent client requests for the service.

### Note:

By default, service results are local to an Integration Server. You can configure service results to use a distributed cache. For more information see "Using a Public Cache for Service Results Caching" in *webMethods Integration Server Administrator's Guide*.

- **For caching data related to the OAuth Authorization Framework (OAuth).** When acting as an OAuth authorization server, Integration Server maintains registered clients, scope definitions, access tokens, and refresh tokens in cache. When running in a clustered environment, Integration Server maintains these caches on the Terracotta Server Array.

For more information about OAuth, see *webMethods Integration Server Administrator's Guide*. For more information about the caches Integration Server uses for OAuth, see "[System Caches Used by the webMethods Product Suite](#)" on page 29.

- **For caching data related to digest authentication.** When you configure HTTP/HTTPS ports on Integration Server to support digest authentication, Integration Server maintains the generated nonces in cache. When running in a clustered environment, Integration Server maintains these caches on the Terracotta Server Array.

For more information about digest authentication, see *webMethods Integration Server Administrator's Guide*. For more information about the caches Integration Server uses for digest authentication, see "[System Caches Used by webMethods Products](#)" on page 11.

- **For Enhanced XML Parsing operations.** If the caching option is enabled for the Enhanced XML Parser, Integration Server uses a cache to manage memory during parsing operations. If your Integration Server is licensed to use BigMemory, you can configure the Enhanced XML Parser to extend the cache to BigMemory. For more information about how the Enhanced XML Parser uses cache, see the *webMethods Integration Server Administrator's Guide*.

**Note:**

How Integration Server uses Terracotta will affect what licenses you will need. For more information about Terracotta licenses and Integration Server, see "[License Requirements for Integration Server](#)" on page 20.

For more information about the system caches that Integration Server uses, see "[System Caches Used by the webMethods Product Suite](#)" on page 29.

## webMethods Mediator

Mediator uses Terracotta to cache the virtual services that you deploy to it. It also uses Terracotta to cache many of the artifacts associated with the virtual services (for example, performance metrics, policies, consumer applications, and registered consumers). When you install Mediator on a cluster of Integration Servers, Mediator maintains these caches on the Terracotta Server Array.

For more information about Mediator system caches, see "[System Caches Used by the webMethods Product Suite](#)" on page 29.

## webMethods Mobile Support

Mobile Support uses the locking and unlocking functionality of Terracotta Ehcache to achieve synchronization. In a clustered environment, Mobile Support maintains its system cache on the Terracotta Server Array.

For more information about Mobile Support system caches, see [“System Caches Used by the webMethods Product Suite ” on page 29](#).

## webMethods OneData

webMethods OneData uses Terracotta to maintain *in-memory databases*. An in-memory database is a cached version of a given data object. When you enable caching for a data object, webMethods OneData stores the records associated with the object in cache as well as in the release area. Caching improves the performance of REST services that use the data object, because the services interact with the cache instead of the database.

**Note:**

Creating in-memory databases using webMethods OneData requires the use of a Terracotta Server Array.

For information about enabling caching for a data object, see the section on in-memory databases in *Developing for webMethods OneData*. For information about configuring webMethods OneData to use a Terracotta Server Array, see *Administering webMethods OneData*. For more information about webMethods OneData system caches, see [“System Caches Used by the webMethods Product Suite ” on page 29](#)

## webMethods Optimize

For maximum performance, Optimize uses Terracotta to cache much of the data it uses in support of business activity monitoring. Data that it caches includes:

- Metadata such as dimension definitions, rule definitions, and KPI definitions
- Raw data that is provided by data collectors for analysis
- Readings, statistics, and other results produced during monitoring
- Messages and notifications related to the handling of events

Optimize also uses Terracotta for Analytic Engine clustering. Analytic Engine clustering distributes the Optimize information processing load across multiple Analytic Engines, either to facilitate system high availability or to maximize Analytic Engine data throughput. When you cluster Analytic Engines, the members of the cluster share data using caches on the Terracotta Server Array. Each Analytic Engine in the cluster connects to the Terracotta Server Array to store and retrieve items from the shared caches.

For more information about how Optimize uses Terracotta for clustering, see the clustering section in *Configuring BAM*. For more information about the caches that Optimize uses during business activity monitoring, see [“System Caches Used by the webMethods Product Suite ” on page 29](#).



## webMethods Trading Networks

Trading Networks uses Terracotta to create a system cache in which it stores session-based query results and assets.

**Note:** Trading Networks maintains this cache locally, even when running in a clustered environment.

For more information about Trading Networks system caches, see [“System Caches Used by the webMethods Product Suite”](#) on page 29.



# 2 Licensing Requirements

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## Installing the Terracotta License

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If your webMethods product is licensed to use BigMemory Max, you received a Terracotta license file called `terracotta-license.key` from Software AG. You must install this file to enable BigMemory Max features in your webMethods product.

When you installed Terracotta, the license was stored in the `Software AG_directory\Terracotta` directory. Copy the license to the `Software AG_directory\common\conf` directory on the machine that hosts the webMethods product.

If the webMethods product is already running, restart it to put the license into effect.

**Important:**

Do not change the name of the license file.

## License Requirements for Integration Server

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The Terracotta license you need for Integration Server depends on how Integration Server will use Terracotta.

The following table gives information about Integration Server, the needed Client License, and Terracotta Server Array License.

| Integration Server   | Client License  | Terracotta Server Array License                                 |
|--|---|---|
| Stand-alone, with system caches or local caches                      | No license needed   | Not applicable  |
| Stand-alone, with system caches or local caches and off-heap storage | Upgraded BigMemory license  | Not applicable  |
| Clustered, with Terracotta Server Array for distributed caching      | BigMemory Max license (provided with Integration Server bundle)             | BigMemory Max license (provided with Integration Server bundle) |
| Clustered, with Terracotta Server Array and off-heap storage         | Upgraded BigMemory license  | Upgraded BigMemory license                                      |
| Distributed custom caches on the Terracotta Server Array             | Upgraded BigMemory license and Integration Server distributed cache license | Upgraded BigMemory license                                      |

# 3 Installing and Configuring the Terracotta Server Array for Use with webMethods Products

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## Installing the Terracotta Server Array

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Install the Terracotta program files and license key on each machine in your array as described in *Installing Software AG Products*. The version of Terracotta software that you install on the Terracotta Server Array must be compatible with the version of the Terracotta client libraries that your webMethods product uses. For compatibility information, see *BigMemory Compatibility with other Software AG Products*. For a list of the platforms supported by Terracotta, see the “Server Information” section in the 4.1 Platform Support document.

## Configuring the Terracotta Server Array for Use with webMethods Product

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The Terracotta license provided with your webMethods product requires the use of BigMemory Hybrid. You must configure your Terracotta Server Array to use the Hybrid extension. The Terracotta Server Array can contain a single stripe with two servers (an active server and a mirror server) to provide high availability. The configuration and behavior of the Terracotta Server Array is specified by parameters in a configuration file called `tc-config`. This file identifies the servers that make up the array and specifies whether the servers are mirrored. This file also contains parameters that relate to the capacity of the server, parameters that control certain behaviors of the clients that connect to the array, and a healthchecker (a process that monitors the connections between the Terracotta Server Array and its clients).

For BigMemory Hybrid, you set the total data capacity of the server. You can find the total allowable data capacity in your `terracotta-license.key` under the `terracotta.serverArray.maxDataStorage` setting. The BigMemory Hybrid server also requires the usage of off-heap storage. The server will utilize the off-heap storage to store the keys associated with all of the cache entries. By default, off-heap storage is configured to use 512MB. For more information, see <http://www.terracotta.org/documentation/4.1/terracotta-server-array/hybrid>.

**Note:**

The off-heap memory required by the Hybrid server is in addition to the heap memory required by the server. If you are upgrading from version 3.7, you will need at least 512MB of additional off-heap memory.

You can set failover behavior to consistency instead of availability (the default). For information, see the section on failover tuning for guaranteed consistency in *BigMemory Max Administrator Guide*.

## Creating the tc-config File

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The `tc-config` file is not installed with the Terracotta program files. You must create this file and configure it for your particular server array.

By default, a Terracotta server expects to find the `tc-config` file in the *Software AG\_directory* `/terracotta/server/bin` directory. If you maintain the `tc-config` file in the default location, you must place an identical copy of the `tc-config` file in the *Software AG\_directory* `/terracotta/server/bin` directory of every server in the array. (Typically, you create the `tc-config` file on one server and then copy it to the other servers in the array.) Alternatively, you can place the `tc-config` file in a

central location where all servers in the array can access it. If you use this approach, you must specify the location of the tcconfig file when you invoke the start-up script on each server.

Below is a sample file you can use as a template to create the tc-config file for your Terracotta Server Array. This sample includes settings in the <tc-properties> and <clients> sections that are required by webMethods products. The <servers> section in this sample defines an array consisting of two mirrored Terracotta servers. Revise this section as needed to define the configuration of your particular server array. For more information about defining the configuration of the Terracotta Server Array, see BigMemory Max product documentation for 4.1 at <http://terracotta.org/documentation/4.1/bigmemorymax/overview>.

For complete information about creating and configuring the tc-config file, see the section on configuring the Terracotta Server Array in the Terracotta product documentation.

```
<tc:tc-config xmlns:tc="http://www.terracotta.org/config">
  <!-- Replace the host and name values for your server -->
  <server host="host" name="name">
    <data>server-data</data> ]
    <logs>server-logs</logs>
    <!-- Adjust the data storage size for the total amount of data -->
    <!-- being stored by the server array up to the maximum allowed -->
    <!-- by your Terracotta license.-->
    <dataStorage size="20g">
      <!-- hybrid mode is required by the Terracotta license provided -->
      <!-- with webMethods products. -->
      <!-- Terracotta server off heap is required to hold the keys -->
      <!-- used for all caches. -->
      <offheap size="2g"/>
      <hybrid/>
    </dataStorage>
  </server>
  <server host="host" name="name">
    <data>server-data</data>
    <logs>server-logs</logs>
    <!-- The data storage settings must be identical for each server -->
    <!-- in the mirror group. -->
```

```
<dataStorage size="20g">
  <offheap size="2g"/>
  <hybrid/>
</dataStorage>
</server>
<!-- This replaces the permanent-store attribute -->
<!-- from the 3.7.X version. This is not required to be enabled. -->
<!-- The setting applies to all servers in the mirror group. -->
<restartable enabled="true"/>
</servers>
<clients>
  <logs>%(com.softwareag.tc.client.logs.directory)</logs>
</clients>
</tc:tc-config>
```

The minimum off-heap memory required for webMethods clustering in hybrid mode is 2GB. For details about the off-heap memory configuration required for non-hybrid deployments, distributed caching and other applications, see the Terracotta product documentation.



# 4 Using Command Central to Manage Terracotta

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## Command Central Commands that Terracotta Supports

Terracotta supports the Command Central commands `sagcc get configuration data`, `sagcc get configuration instances`, `sagcc list configuration instances`, `sagcc get configuration types`, `sagcc list configuration types`, `sagcc get diagnostic logs`, `sagcc get monitoring`, `sagcc get inventory components`, `sagcc list inventory components`, and `sagcc exec lifecycle`.

For general information about the commands, see *Software AG Command Central Help*. For Terracotta-specific information about the `sagcc get configuration data` command, see [“Configuration Types that Terracotta Supports” on page 26](#). For Terracotta-specific information about the `sagcc exec lifecycle` command, see [“Lifecycle Actions for Terracotta” on page 26](#).

## Configuration Types that Terracotta Supports

The Terracotta run-time component supports creating instances of the configuration types listed in the table below.

| Configuration Type | Use to  |
|--------------------|---|
| COMMON-CLUSTER     | View the configuration for a cluster.   |
| COMMON-MEMORY      | Configure the JVM memory settings.  |
| COMMON-PORTS       | View the custom port configuration for a Terracotta Server Array instance.  |
| TC-CONFIG          | Configure the <code>tc-config.xml</code> file.  |
| TC-SERVER-SERVER   | Assign a server name to a Terracotta Server Array instance that matches the server name in the <code>tc-config.xml</code> file. |

## Lifecycle Actions for Terracotta

The table below lists the actions that Terracotta supports with the `sagcc exec lifecycle` command and the operation taken against Terracotta when an action is executed.

| Action  | Description                               |
|---------|---|
| Start   | Start a server instance that has stopped. |
| Stop    | Stop a running server instance.           |
| Restart | Restart a running server instance.        |

### Important:

You must execute all lifecycle operations in the correct order to ensure safe startup, shutdown, and restart for Terracotta Server Array cluster instances. For more information about the correct order of lifecycle operations, see BigMemory Max product documentation for release 4.2.

## Run-time Monitoring Statuses for Terracotta

The table below lists the run-time statuses that the Terracotta run-time component can return in response to the `sagcc get monitoring rntimestatus` and `sagcc get monitoring state` commands, along with the meaning of each run-time status.

| Run-time Status | Meaning  |
|-----------------|--|
| STOPPED         | The server is not running.   |
| ONLINE_MASTER   | The server is running and is the master in its stripe.   |
| ONLINE_SLAVE    | The server is running and is a slave (mirror) in its stripe.   |
| FAILED          | The server was running, but crashed. A possible reason for this failure is that the server did not find the correct license.                                 |
| UNRESPONSIVE    | The server is running, but is not responding on the specified ports. A possible reason for this failure is that the server did not find the correct license. |

## Run-time Monitoring Statuses for Terracotta

In response to the `sagcc get monitoring rntimestate` and `sagcc get monitoring state` commands, the Terracotta run-time component provides information about the key performance indicators (KPIs) listed in the table below:

| KPI                   | Description                                  |
|-----------------------|--|
| Live Object Count     | The number of live objects in the cache.     |
| Offheap               | The off-heap storage capacity for the cache. |
| Write Operations Rate | The rate of write operations for the cache.  |

The KPIs apply to the entire Terracotta Server Array cluster.



# A System Caches Used by the webMethods Product Suite

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## Overview

Many webMethods products cache data for their own internal processes. The caches that they use internally are called *system caches*.

**Note:**

System caches are not meant to be accessed by user applications.

The information in this appendix is intended to be used for sizing efforts related to BigMemory or the Terracotta Server Array. It is provided as a starting point. You will need to test to see how these caches actually behave under typical workloads in your environment and make adjustments as necessary.

## Business Process Management

### SoftwareAG.IS.PE.FailedProcessAudit

Contains process audit records that failed to be inserted into the process audit database. The records are automatically inserted into the process audit database when it becomes available and are removed from the cache.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                  | Element Size | Element Lifetime   | Cache Type | Searchable |
|---------------------------|--------------|--|------------|------------|
| 0 during normal operation | Varies       | Exists in cache until element can be inserted into process audit database. | Local      | No         |

## Software AG Common Platform

### SSOAssertionsCacheManager.SSOAssertionsCache

Contains SAML assertions. Used to verify if SSO Assertion has already been used.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size | Element Lifetime   | Cache Type | Searchable |
|-------------------------------|--------------|--|------------|------------|
| 10000 (default size of cache) | 4 to 10 KB   | Controlled by the <code>timeToIdleSeconds</code> (120, by default) and <code>timeToLiveSeconds</code> (120, by default) settings for the cache | Local      | No         |

## CentraSite

---

### SoftwareAG.CentraSite.model.ObjectCache\_*machine\_name\_port*

Contains CentraSite Registry objects stored as simple Java objects.

The first time CentraSite reads an object, CentraSite places the object into the cache, where it stays until it is removed implicitly or explicitly. If an object is out-of-date, it will be reloaded implicitly by a search.

**Note:**CentraSite uses the transactional cache functionality of Terracotta to add multiple objects to the cache concurrently.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                    | Element Size | Element Lifetime                 | Cache Type | Searchable |
|-----------------------------|--------------|----------------------------------|------------|------------|
| 10,000 (default cache size) | 1 KB or less | Controlled by garbage collection | Local      | No         |

### SoftwareAG.CentraSite.model.TypeCache\_*machine\_name\_port*

Contains types defined in CentraSite stored as simple Java objects.

CentraSite shares the elements among all connections within a JVM.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime      | Cache Type | Searchable |
|----------|--------------|-----------------------|------------|------------|
| 100      | 1 KB or less | Lifetime of the cache | Local      | No         |

## webMethods CloudStreams

---

### SoftwareAg.IS.CloudStreams.ClusterStatusCache

Contains String, Date, and enum objects that indicate CloudStreams clustering status.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size        | Element Lifetime                  | Cache Type  | Searchable |
|----------|---------------------|-----------------------------------|-------------|------------|
| 5 to 10  | Less than 100 bytes | As long as CloudStreams is active | Distributed | No         |

## SoftwareAg.IS.CloudStreams.CollectionKeysCache

Contains CollectionKeys objects for deployed outbound virtual services.

CloudStreams generates this information using input from the Software AG Designer plug-in.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                           | Cache Type | Searchable |
|--------------------------------|----------------|--|------------|------------|
| 1 per deployed virtual service | Less than 1 KB | As long as the virtual service is deployed | Local      | No         |

## SoftwareAg.IS.CloudStreams.ConsumerApplicationsCache

Contains consumer application descriptions in the form of an XML string for each deployed consumer application.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|--|--------------|-------------------------------------|-------------|------------|
| 1 per consumer application deployed to the cluster | 1 to 2 KB    | As long as the consumer is deployed | Distributed | No         |

## SoftwareAg.IS.CloudStreams.IntervalNotificationCache

Contains policy evaluation interval settings as stored in PolicyActionKey and PolicyAction objects. CloudStreams generates this data from deployed virtual service descriptions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size                      | Element Lifetime                           | Cache Type  | Searchable |
|--|-----------------------------------|--|-------------|------------|
| 1 per policy action configured for a virtual service, plus 1 per virtual service | 1 KB per deployed virtual service | As long as the virtual service is deployed | Distributed | No         |



| Elements   | Element Size | Element Lifetime | Cache Type | Searchable |
|--|--------------|------------------|------------|------------|
| virtual service if performance metrics are enabled |              |                  |            |            |

## SoftwareAg.IS.CloudStreams.MetricAccumulatorCache

Contains accumulated service request data for policy evaluation and performance metrics as stored in accumulator objects for each policy action key. CloudStreams generates this data from deployed virtual service descriptions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size                           | Element Lifetime                           | Cache Type  | Searchable |
|--------------------------------|--|--|-------------|------------|
| 1 per deployed virtual service | 1 to 2 KB per deployed virtual service | As long as the virtual service is deployed | Distributed | No         |

## SoftwareAg.IS.CloudStreams.RegisteredConsumerNamesCache

This cache is not currently used by CloudStreams.

## SoftwareAg.IS.CloudStreams.RuntimePolicyCache

Contains policy details for deployed virtual services as stored in PolicyInfo objects. CloudStreams generates this data from deployed virtual service descriptions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size                      | Element Lifetime                           | Cache Type | Searchable |
|--------------------------------|-----------------------------------|--|------------|------------|
| 1 per deployed virtual service | 1 KB per deployed virtual service | As long as the virtual service is deployed | Local      | No         |

## SoftwareAg.IS.CloudStreams.VirtualServicesCache

Contains virtual service descriptions. This data is persisted on the file system of each CloudStreams cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                           | Cache Type | Searchable |
|--------------------------------|--|--|------------|------------|
| 1 per deployed virtual service | 5 to 10 KB per deployed service; varies by service WSDL, number and complexity of the virtual service's policies, and whether the virtual service references external XML schema files | As long as the virtual service is deployed | Local      | No         |

## Software AG Command Central

The size of most Command Central cache elements can be measured in tens of bytes. The size of most caches depends on these factors:

- **Number of managed nodes in the landscape.** This number can vary from a few nodes to up to hundreds or even thousands for very large installations.
- **Number of managed components on each node.** This number typically varies from a few managed components to tens of managed components.
- **Number of configuration instances for each component and node.** Although there are typically only tens of configuration instances for each node, there can be hundreds of configuration instances for larger installations.

It is expected that all data resides in memory. If the caches are not large enough, severe performance degradation can occur.

### com.softwareag.plm.cce.cache.alert

Contains information about monitoring alerts for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|--|-------------------|--------------------------------------|------------|------------|
| 1 per alert; can have several alerts per run-time component in the landscape | Measured in bytes | As long as Command Central is active | Local      | Yes        |

### com.softwareag.plm.cce.cache.attributes

Contains information about Command Central attributes for run-time components, nodes, and environments.

The cache is a system of record. The information that the cache contains is not persisted anywhere else.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size                   | Element Lifetime  | Cache Type | Searchable |
|---|--------------------------------|---|------------|------------|
| 1 per attribute name/value; number of attributes could be tens per run-time component, node, or environment | Measured in bytes to kilobytes | As long as Command Central is active; must remain active during a restart of Terracotta Ehcache and the Terracotta Server Array | Local      | Yes        |

### **com.softwareag.plm.cce.cache.basicmonitoringstatecached**

Contains basic Command Central monitoring data for run-time status and state.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|--|-------------------|--------------------------------------|------------|------------|
| 1 per run-time state, including 3 KPI metrics for each run-time component in the landscape | Measured in bytes | As long as Command Central is active | Local      | Yes        |

### **com.softwareag.plm.cce.cache.configurationDataInfo**

Contains the data stored for each configuration instance and the node alias of each configuration instance for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size                   | Element Lifetime                     | Cache Type | Searchable |
|---|--------------------------------|--------------------------------------|------------|------------|
| 1 per configuration instance; number is the same as for the configurationInstanceInfo cache | Measured in bytes to kilobytes | As long as Command Central is active | Local      | Yes        |

## com.softwareag.plm.cce.cache.configurationInstanceInfo

Contains information about the configuration instances and the node alias of each configuration instance for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|--|-------------------|--------------------------------------|------------|------------|
| 1 per configuration instance; up to hundreds for each run-time component | Measured in bytes | As long as Command Central is active | Local      | Yes        |

## com.softwareag.plm.cce.cache.configurationTypeInfo

Contains information about the configuration types and the node alias of each configuration type for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|--|-------------------|--------------------------------------|------------|------------|
| 1 per configuration type; expected to be less than 20 per run-time component, but could be up to 100 | Measured in bytes | As long as Command Central is active | Local      | Yes        |

## com.softwareag.plm.cce.cache.environment

Contains the environments data for Command Central.

The cache is a system of record. The information that the cache contains is not persisted anywhere else.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size      | Element Lifetime  | Cache Type | Searchable |
|---|-------------------|---|------------|------------|
| 1 per environment; expected to be less than 100 | Measured in bytes | As long as Command Central is active; must remain active during a restart of Terracotta Ehcache and the Terracotta Server Array | Local      | Yes        |

## com.softwareag.plm.cce.cache.fixInfo

Contains information about the fixes that have been applied along with the node alias for nodes where fixes have been applied for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|--|-------------------|--------------------------------------|------------|------------|
| 1 per fix; expected to be less than 100 per node | Measured in bytes | As long as Command Central is active | Local      | Yes        |

## com.softwareag.plm.cce.cache.licenseKeyContainer

Contains the contents of a Software AG license key.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements          | Element Size        | Element Lifetime                     | Cache Type | Searchable |
|-------------------|---------------------|--------------------------------------|------------|------------|
| 1 per license key | Between 1KB and 5KB | As long as Command Central is active | Local      | No         |

## com.softwareag.plm.cce.cache.licenseMeteringReport

Contains the contents of a Command Central license report by license manifest.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size  | Element Lifetime                     | Cache Type | Searchable |
|--|---|--------------------------------------|------------|------------|
| 1 per report; expected to be less than 100 reports | Depends on number of installation nodes and number of products installed on each node; typically between 10KB and 500KB | As long as Command Central is active | Local      | No         |

## com.softwareag.plm.cce.cache.licenseMeteringAggregateReport

Contains the contents of a Command Central aggregated license report by license manifest.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                     | Cache Type | Searchable |
|---|--|--------------------------------------|------------|------------|
| 1 per report, 1 report per month; expected to be less than 24 reports | Depends on number of installation nodes and number of products installed on each node; typically between 10MB and 15MB | As long as Command Central is active | Local      | No         |

---

### **com.softwareag.plm.cce.cache.licenseMeteringConfigurationAggregationStatus**

Contains information on whether customer has manually turned on license aggregation.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|----------|-------------------|--------------------------------------|------------|------------|
| 1        | Measured in bytes | As long as Command Central is active | Local      | No         |

---

### **com.softwareag.plm.cce.cache.licenseMeteringRequiredStatus**

Contains information on whether one of the active license manifests requires license aggregation.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|----------|-------------------|--------------------------------------|------------|------------|
| 1        | Measured in bytes | As long as Command Central is active | Local      | No         |

---

### **com.softwareag.plm.cce.cache.manifest**

Contains the contents of a Software AG license manifest.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements               | Element Size   | Element Lifetime                     | Cache Type | Searchable |
|------------------------|--|--------------------------------------|------------|------------|
| 1 per license manifest | Depends on number of product licenses; about 1KB per product | As long as Command Central is active | Local      | No         |

---

## com.softwareag.plm.cce.cache.node

Contains the installation node data for Command Central.

The cache is a system of record. The information that the cache contains is not persisted anywhere else.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size      | Element Lifetime  | Cache Type | Searchable |
|---|-------------------|---|------------|------------|
| 1 per node; expected to be less than 10,000 and typically less than 100 | Measured in bytes | As long as Command Central is active; must remain active during a restart of Terracotta Ehcache and the Terracotta Server Array | Local      | Yes        |

## com.softwareag.plm.cce.cache.platformInfo

Contains information about the Platform Manager instances installed for the manageable products, along with the node alias they belong to for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|---|-------------------|--------------------------------------|------------|------------|
| 1 per platform instance; equals the number of nodes | Measured in bytes | As long as Command Central is active | Local      | Yes        |

## com.softwareag.plm.cce.cache.productInfo

Contains information about the products installed in the landscape and the node alias of each product for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|---|-------------------|--------------------------------------|------------|------------|
| 1 per product; number of products per node is less than 300 | Measured in bytes | As long as Command Central is active | Local      | Yes        |

## com.softwareag.plm.cce.cache.repositories

Contains the repositories data for Command Central.

The cache is a system of record. The information that the cache contains is not persisted anywhere else.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size      | Element Lifetime  | Cache Type | Searchable |
|--|-------------------|---|------------|------------|
| 1 per repository; number of repositories is typically 10 to 30 | Measured in bytes | As long as Command Central is active; must remain active during a restart of Terracotta Ehcache and the Terracotta Server Array | Local      | Yes        |

---

## com.softwareag.plm.cce.cache.runtimeComponentInfo

Contains information about the run-time components installed in the landscape and the node alias of each run-time component for Command Central.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size      | Element Lifetime                     | Cache Type | Searchable |
|---|-------------------|--------------------------------------|------------|------------|
| 1 per run-time component; number is the same as for the runtimeMetadata cache | Measured in bytes | As long as Command Central is active | Local      | Yes        |

---

## com.softwareag.plm.cce.cache.runtimeMetadata

Contains the run-time components metadata for Command Central.

The cache is a system of record. The information that the cache contains is not persisted anywhere else.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size      | Element Lifetime  | Cache Type | Searchable |
|---|-------------------|---|------------|------------|
| 1 per component; number of components per node is | Measured in bytes | As long as Command Central is active; must remain active during a | Local      | Yes        |

---



| Elements  | Element Size | Element Lifetime  | Cache Type | Searchable |
|---|--------------|---|------------|------------|
| approximately 1 to 5 for each supported managed product on the node |              | restart of Terracotta Ehcache and the Terracotta Server Array |            |            |

## webMethods Enterprise Gateway

### SoftwareAG.IS.Core.NonceCache

Contains the nonces generated during authentication of a new user.

- The cache is used only if authentication is enabled at the Enterprise Gateway side and the authentication type is digest authentication.
- The information held in the cache is temporary. The cache is not persisted.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                   | Element Size   | Element Lifetime  | Cache Type | Searchable |
|----------------------------|----------------|---|------------|------------|
| One per authenticated user | Less than 1 KB | From the time a user logs in until the user logs out, or the interval specified in the <code>watt.server.clientTimeout</code> parameter, whichever is shorter | Local      | No         |

## webMethods eStandards Modules

### webMethods Module for AS4

#### SoftwareAG.IS.AS4. Duplicate\_Detection

Contains data required to identify duplicate transactions (that is, business document IDs).

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements          | Element Size  | Element Lifetime                           | Cache Type  | Searchable |
|-------------------|---------------|--|-------------|------------|
| 1 per transaction | Less than 1KB | Controlled by the <code>checkWindow</code> | Distributed | No         |

### SoftwareAG.IS.AS4. MPC\_pmode\_map

Contains data required to map the MPC and PMode of the business transaction.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements          | Element Size  | Element Lifetime                | Cache Type  | Searchable |
|-------------------|---------------|---------------------------------|-------------|------------|
| 1 per transaction | Less than 1KB | As long as the module is active | Distributed | No         |

---

### SoftwareAG.IS.AS4. Default\_Cache

Contains TPA data for improved performance.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size  | Element Lifetime                | Cache Type  | Searchable |
|-----------|---------------|---------------------------------|-------------|------------|
| Unlimited | Less than 1KB | As long as the module is active | Distributed | No         |

---

## webMethods Chem eStandards Module

### SoftwareAG.IS.Chem.CHEMModelSessionCache

Contains data required to complete business transactions (that is, original business document data for response transactions, including TPA data and data related to instances and failure scenarios).

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime   | Cache Type  | Searchable |
|----------|--------------|--|-------------|------------|
| 5 to 10  | 5 KB or less | Controlled by the Time to Live and Time to Idle cache settings | Distributed | No         |

---

## webMethods ebXML Module

### SoftwareAG.IS.ebXML.EBXML

Contains TN partner and agreement, profile, and inbound and outbound message data. Each type of data uses a separate java.util.Hashtable in the cache.

**Note:**

Caching is optional for the ebXML Module but is recommended for optimization.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                      | Cache Type  | Searchable |
|----------|--------------|---------------------------------------|-------------|------------|
| 5 to 10  | 5 KB         | As long as the ebXML Module is active | Distributed | No         |

## webMethods FIX Module

### SoftwareAG.IS.FIX.FIXCache

Contains the ID of the Integration Server cluster node that is connected to the Appia engine.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size        | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|---------------------|-------------------------------------|-------------|------------|
| 1 per configured session | Less than 100 bytes | As long as the FIX Module is active | Distributed | No         |

## webMethods Module for HIPAA

### SoftwareAG.IS.HIPAA.CodeSourceCache

Contains all code source used in HIPAA messages for validation.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                           | Cache Type  | Searchable |
|----------|--------------|--|-------------|------------|
| 50000    | 1KB          | As long as the HIPAA application is active | Distributed | No         |

### SoftwareAG.IS.HIPAA.DefaultCache

Contains cached code source and transaction information relating to retry functionality for HIPAA core transactions, such as business document ID.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                           | Cache Type  | Searchable |
|----------|--------------|--|-------------|------------|
| 50000    | 1 bytes      | As long as the HIPAA application is active | Distributed | No         |

---

## webMethods RosettaNet Module

### SoftwareAG.IS.RosettaNet.RNModelSessionCache

Contains data required to complete business transactions (that is, original business document data required in response transactions, including TPA data and data related to instances and failure scenarios).

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                                     | Cache Type  | Searchable |
|----------|--------------|--|-------------|------------|
| 5 to 10  | 5 KB or less | Controlled by Time to Live and Time to Idle settings | Distributed | No         |

---

## webMethods Event Routing (Deprecated)

---

### *eventTypeQName*

Contains events that have not yet been sent. Used to ensure guaranteed delivery of those events.

Each event type has a corresponding cache. The name of the cache matches the event type's unique identifier, in the format `{namespace}localName` (for example, `{http://namespaces.softwareag.com/EDA/WebM/Sample/CableboxMonitoring}CableboxHealth`).

When the hosting JVM is restarted, NERV delivers any events that were not removed from the cache before the JVM was stopped.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size  | Element Lifetime                                   | Cache Type | Searchable |
|---|---|--|------------|------------|
| Up to 1,000 (configurable) and varies depending on the speed of the event bus | Varies from 1 KB to several megabytes depending on use case | Events are removed when they are sent successfully | Local      | No         |

---

## webMethods Integration Server

### SoftwareAG.IS.Core.ActiveOpenIDRequests

Contains the URI and name of the OpenID provider for requests that are in the process of being authenticated.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                    | Element Size  | Element Lifetime  | Cache Type  | Searchable |
|-----------------------------|---|---|-------------|------------|
| 1 per active OpenID request | Typically less than 1 KB (32-character UUID + 1 character delimiter + OpenID Provider name) | Maximum of 60 seconds. If the end-user is authenticated by the OpenID provider in less than 60 seconds, the element will be removed sooner. | Distributed | No         |

### SoftwareAG.IS.Core.ClusterMembers

Contains the list of cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size | Element Lifetime                           | Cache Type  | Searchable |
|------------|--------------|--|-------------|------------|
| 1 per node | 4 KB         | As long as the node is part of the cluster | Distributed | No         |

### SoftwareAG.IS.Core.IteratorHandles

The cache contains an element comprising the collection of handles that reference each of the iterator service result cache entries for a given request.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                    | Element Size   | Element Lifetime  | Cache Type  | Searchable |
|-----------------------------|--|---|-------------|------------|
| 1 per iterator service call | Element size is determined by the number of elements in the IteratorResults cache for a given request. | All elements for a given iterator service request will be removed from the cache upon delivery of the last result batch, an | Distributed | No         |

| Elements | Element Size | Element Lifetime  | Cache Type | Searchable |
|----------|--------------|---|------------|------------|
|          |              | error, or expiration of the time to live for elements in the cache. |            |            |

---

## SoftwareAG.IS.Core.IteratorResults

Contains the batched results that the iterator service returns to the caller.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size  | Element Lifetime  | Cache Type  | Searchable |
|---|---|---|-------------|------------|
| n per iterator service call; depends on the size of the IData[] result set and the batch size | Element size is determined by the batchSize parameter as input to the iterator service. | All elements for a given iterator service request will be removed from the cache upon delivery of the last result batch, an error, or expiration of the time to live for elements in the cache. | Distributed | No         |

---

## SoftwareAG.IS.Core.OnceCache

Contains the nonces generated during authentication of a new user.

The information held in this cache is temporary. This cache is not persisted.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime   | Cache Type  | Searchable |
|--------------------------|----------------|--|-------------|------------|
| 1 per authenticated user | Less than 1 KB | From the time a user logs in until the user logs out, or the interval specified by the watt.server.clientTimeout parameter, whichever is shorter | Distributed | No         |

---

## SoftwareAG.IS.Core.OAuthAccessTokens

Contains OAuth access tokens generated by the OAuth authorization server.

The information held in this cache is persisted to the ISInternal database. When clustering is enabled, this cache is distributed to provide consistent data access on all cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                        | Element Size   | Element Lifetime  | Cache Type                          | Searchable |
|---------------------------------|----------------|---|-------------------------------------|------------|
| 1 per active OAuth access token | Less than 1 KB | Varies by client application; controlled by the expiration interval specified on the <b>OAuth Client Registration</b> screen. An element will also be removed from this cache if an access token is manually deleted. | Distributed when clustering enabled | No         |

## SoftwareAG.IS.Core.OAuthAuthCodes

Contains OAuth authorization codes that are issued for the OAuth authorization code grant flows.

The information held in this cache is temporary. This cache is not persisted.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                                   | Element Size   | Element Lifetime  | Cache Type  | Searchable |
|--|----------------|---|-------------|------------|
| 1 per authorization code grant in progress | Less than 1 KB | From the time an access request is approved by the resource owner until the time an access token is issued, or the interval specified by the <code>wattserver.oauth.authCode.expirySeconds</code> parameter, whichever is shorter | Distributed | No         |

## SoftwareAG.IS.Core.OAuthClients

Contains information about each registered OAuth client application.

The information held in this cache is persisted to the ISInternal database. When clustering is enabled, this cache is distributed to provide consistent data access on all cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime   | Cache Type                          | Searchable |
|-------------------------------------|--|--|-------------------------------------|------------|
| 1 per registered client application | 2 KB, up to 9 KB if custom Approval Page parameters are defined for a client | As long as a client application remains registered with the OAuth application server | Distributed when clustering enabled | No         |

## SoftwareAG.IS.Core.OAuthRefreshTokens

Contains OAuth refresh tokens generated by the OAuth authorization server.

The information held in this cache is persisted to the ISInternal database. When clustering is enabled, this cache is distributed to provide consistent data access on all cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                   | Element Size   | Element Lifetime  | Cache Type                          | Searchable |
|----------------------------|----------------|---|-------------------------------------|------------|
| 1 per active refresh token | Less than 1 KB | Varies by client application; controlled by the refresh count specified on the <b>OAuth Client Registration</b> screen. An element will also be removed from this cache if a refresh token is manually deleted. | Distributed when clustering enabled | No         |

---

## SoftwareAG.IS.Core.OAuthScope

Maps scope names to folders and services in the Integration Server namespace.

The information held in this cache is persisted to the ISInternal database. When clustering is enabled, this cache is distributed to provide consistent data access on all cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                  | Element Size   | Element Lifetime                                       | Cache Type                          | Searchable |
|---------------------------|--|--|-------------------------------------|------------|
| 1 for every defined scope | Less than 1 KB, or larger if there is a list of folders and services | As long as the scope defined on the application server | Distributed when clustering enabled | No         |

---

## SoftwareAG.IS.Core.OAuthTokens

Contains information common to both OAuth access tokens and refresh tokens.

The information held in this cache is persisted to the ISInternal database. When clustering is enabled, this cache is distributed to provide consistent data access on all cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.



| Elements                                    | Element Size   | Element Lifetime   | Cache Type                          | Searchable |
|---|----------------|--|-------------------------------------|------------|
| 1 per active access token and refresh token | Less than 1 KB | Varies by client application; controlled by the expiration interval and refresh count on the <b>OAuth Client Registration</b> screen. An element will also be removed from this cache if an access token or refresh token is manually deleted. | Distributed when clustering enabled | No         |

## SoftwareAG.IS.Core.SessionStore

Contains session objects that provide data about active sessions on cluster nodes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime   | Cache Type  | Searchable |
|-------------------------------------|--|--|-------------|------------|
| 1 per active session in the cluster | Less than 1 KB plus any additional state saved by the client application | Controlled by the Time To Idle element level setting, which is taken from the Session Timeout clustering setting | Distributed | No         |

## SoftwareAG.IS.Core.XMLParser.Partitions

Provides off-heap storage for XML documents processed by the Enhanced XML Parser. The cache contains one or more document-encoded partitions for each document the Enhanced XML Parser processes. The cache is managed by the Enhanced XML Parser and is not visible to other webMethods components.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                          | Element Size   | Element Lifetime  | Cache Type | Searchable |
|-----------------------------------|--|---|------------|------------|
| 1 per off-heap document partition | Varies according to the size of the XML document being parsed and the current memory demands of the system. As a rule of thumb, the combined size of all partitions for a given document will be approximately three times | Exists until parsed XML document is no longer referenced by a running service | Local      | No         |

| Elements | Element Size                             | Element Lifetime | Cache Type | Searchable |
|----------|--|------------------|------------|------------|
|          | the size of the raw XML document itself. |                  |            |            |

## SoftwareAG.IS.Services.ServiceResults

Holds the contents of the pipeline that result from the execution of a service.

**Important:**

Do not make this cache a distributed cache. Doing so will cause Integration Server to fail during startup. Set the Eternal parameter setting to true and do not specify Time To Live (TTL) and Time To Idle (TTI) parameter settings for the cache.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size   | Element Lifetime  | Cache Type | Searchable |
|--|--|---|------------|------------|
| 1 per set of input data for a service. Will vary according to: <ul style="list-style-type: none"> <li>Number of services configured to cache results</li> <li>Input passed to execute the service</li> </ul> | Varies according to the services whose results you cache | Controlled by the Cache expire property in Software AG Designer and the <code>watt.server.cache.flushMins</code> and <code>watt.server.cache.gcMins</code> configuration parameters | Local      | No         |

## webMethods Mediator

### SoftwareAg.IS.Mediator.APIKeysCache

Contains descriptions for deployed API-based consumers. Each description includes the API key for a given consumer along with other consumer details. This data is persisted on the file system of each Mediator cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size | Element Lifetime                     | Cache Type  | Searchable |
|--|--------------|--------------------------------------|-------------|------------|
| 1 per API-based consumer deployed to the cluster | 1 to 2 KB    | As long as the consumer is deployed. | Distributed | No         |

## SoftwareAG.IS.Mediator.APIPortalCommunicationCache

Contains information to connect Mediator with API Portal. This data is persisted in a properties file of each Mediator cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements         | Element Size  | Element Lifetime              | Cache Type  | Searchable |
|------------------|---|-------------------------------|-------------|------------|
| 1 per API Portal | Less than 5 KB; varies by number of API Portal destinations added | As long as Mediator is active | Distributed | No         |

## SoftwareAG.IS.Mediator.ClusterStatusCache

Contains String, Date, and enum objects that indicate Mediator clustering status.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size        | Element Lifetime              | Cache Type  | Searchable |
|----------|---------------------|-------------------------------|-------------|------------|
| 5 to 10  | Less than 100 bytes | As long as Mediator is active | Distributed | No         |

## SoftwareAG.IS.Mediator.ConsumerApplicationsCache

Contains consumer application descriptions in the form of an XML string for each deployed consumer application. This data is persisted on the file system of each Mediator cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|--|--------------|-------------------------------------|-------------|------------|
| 1 per consumer application deployed to the cluster | 1 to 2 KB    | As long as the consumer is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.ESCommunicationCache

Contains information to connect Mediator with Elasticsearch destination. This data is persisted in a properties file of each Mediator cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements       | Element Size   | Element Lifetime              | Cache Type  | Searchable |
|----------------|----------------|-------------------------------|-------------|------------|
| 1 per Mediator | Less than 5 KB | As long as Mediator is active | Distributed | No         |

## SoftwareAG.IS.Mediator.IntervalNotificationCache

Contains policy evaluation interval settings as stored in PolicyActionKey and PolicyAction objects. Mediator generates this data from deployed virtual service descriptions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size                      | Element Lifetime                           | Cache Type  | Searchable |
|---|-----------------------------------|--|-------------|------------|
| 1 per policy action configured for a virtual service, plus 1 per virtual service if performance metrics are enabled | 1 KB per deployed virtual service | As long as the virtual service is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.MetricAccumulatorCache

Contains accumulated service request data for policy evaluation and performance metrics as stored in accumulator objects for each policy action key. Mediator generates this data from deployed virtual service descriptions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size                           | Element Lifetime                           | Cache Type  | Searchable |
|--------------------------------|--|--|-------------|------------|
| 1 per deployed virtual service | 1 to 2 KB per deployed virtual service | As long as the virtual service is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.OAuth2TokensCache

Contains an extension of consumer application descriptions in the form of an XML string for each deployed OAuth2 consumer application. The extension consists of an additional OAuth2 client ID of the consumer. This data is persisted on the file system of each Mediator cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                                      | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|---|--------------|-------------------------------------|-------------|------------|
| 1 per OAuth2 consumer deployed to the cluster | 1 to 2 KB    | As long as the consumer is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.RegisteredConsumerNamesCache

Contains registered consumer names in the form of an XML string for each deployed virtual service that has registered consumers. This data is persisted on the file system of each Mediator cluster node.

**Note:**

Consumer names are registered to support SLA policies. Not all services have registered consumer names.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size                           | Element Lifetime                           | Cache Type  | Searchable |
|--|--|--|-------------|------------|
| 1 per deployed virtual service with at least one registered consumer | 1 to 2 KB per deployed virtual service | As long as the virtual service is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.RuntimeAliasesCache

Contains runtime aliases in the form of an XML string. This data is persisted on the file system of each Mediator cluster node.

**Note:**

Not all virtual services have runtime aliases.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size  | Element Lifetime                         | Cache Type  | Searchable |
|------------------------------|---|--|-------------|------------|
| 1 per deployed runtime alias | 2 KB and up; varies by number of runtime aliases deployed | As long as the runtime alias is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.RuntimeAliasesServicesAssociationCache

Contains association details between runtime aliases and virtual services that are deployed in the form of an XML string. This data is persisted on the file system of each Mediator cluster node.

**Note:**

Not all virtual services have runtime aliases.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size  | Element Lifetime  | Cache Type  | Searchable |
|--|---|---|-------------|------------|
| 1 per deployed virtual service and runtime alias | 2 KB and up; varies by number of runtime aliases deployed | As long as the virtual service and runtime alias are deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.RuntimePolicyCache

Contains policy details for deployed virtual services as stored in PolicyInfo objects. Mediator generates this data from deployed virtual service descriptions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size                      | Element Lifetime                           | Cache Type  | Searchable |
|--------------------------------|-----------------------------------|--|-------------|------------|
| 1 per deployed virtual service | 1 KB per deployed virtual service | As long as the virtual service is deployed | Distributed | No         |

## SoftwareAG.IS.Mediator.VirtualServicesCache

Contains virtual service descriptions. This data is persisted on the file system of each Mediator cluster node.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size  | Element Lifetime                           | Cache Type  | Searchable |
|--------------------------------|---|--|-------------|------------|
| 1 per deployed virtual service | 5 to 10 KB per deployed virtual service; varies by service WSDL, number, and complexity of virtual service's policies, and whether virtual service references external XML schema files | As long as the virtual service is deployed | Distributed | No         |

## webMethods Mobile Support

### SoftwareAG.IS.MobileSupport.RecordLocker

Facilitates locking and unlocking of records for mobile data synchronization across Integration Servers in a cluster. No data is stored in this cache.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime | Cache Type  | Searchable |
|----------|----------------|------------------|-------------|------------|
| 0        | Not applicable | 100 seconds      | Distributed | No         |

## webMethods OneData

### SoftwareAG.OneData.core.cacheName

Contains the data associated with a data object in the webMethods OneData release area. The data in the cache includes master/reference data from the tables associated with the data object. The cache also contains configuration metadata, which occupies a minimal amount of space in the cache.

The name of the cache is constructed dynamically as follows:  
`D0#objectid#repositoryid#projectid#clientid#schemaid .`

This cache always resides on a Terracotta Server Array.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size  | Element Lifetime  | Cache Type  | Searchable |
|---|---|---|-------------|------------|
| 1 per record in the release area for associated data object | Varies because caches are dynamically generated based on the number of data objects (tables) that need to be cached. (Elements in a cache containing records for a sample customer master data object, for example, are approximately 2,550 bytes each. A million records of customer master data may occupy 2 GB of space in the cache.) | As long as the webMethods OneData application is active | Distributed | Yes        |

## webMethods Optimize

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### Metadata Caches

webMethods Optimize maintains metadata in the following caches. When Optimize runs in clustered mode, these caches reside on the Terracotta Server Array.

All metadata caches are created programmatically based on the “defaultCache” settings in the `sag.opt.clusterable.caches.xml` file.

#### **sag.opt.clusterable.caches.deployed/dimensiondef**

Contains all the deployed Dimension definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size  | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|---|-------------------------------------|-------------|------------|
| 1 per deployed dimension definition | 1 KB and up; varies according to the number of defined attributes | Exists until deleted by application | Distributed | Yes        |

---

#### **sag.opt.clusterable.caches.deployed/dimensiondef-BASE\_TYPE**

Contains index mappings between a Dimension definition base type and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

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#### **sag.opt.clusterable.caches.deployed/dimensiondef-DISPLAY\_NAME**

Contains index mappings between a Dimension definition display name and its definition name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.



| Elements                            | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/dimensiondef-ID**

Contains index mappings between a Dimension definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/dimensiondef-NAME**

Contains index mappings between a Dimension definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/dimensionfilter**

Contains all the deployed Dimension Filter definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                        | Element Size  | Element Lifetime                    | Cache Type  | Searchable |
|---------------------------------|---|-------------------------------------|-------------|------------|
| 1 per deployed dimension filter | 1 KB and up; varies according to the number of instance IDs in the filter | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/dimensionjoin**

Contains all the deployed Dimension Join definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension join | 1 KB         | Exists until deleted by application | Distributed | Yes        |

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### **sag.opt.clusterable.caches.deployed/dimensionjoin-DISPLAY\_NAME**

Contains index mappings between a Dimension Join definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension join. | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

---

### **sag.opt.clusterable.caches.deployed/dimensionjoin-ID**

Contains index mappings between a Dimension Join definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension join | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

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### **sag.opt.clusterable.caches.deployed/dimensionjoin-NAME**

Contains index mappings between a Dimension Join definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension join | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

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### **sag.opt.clusterable.caches.deployed/dimensionsubscriber**

Contains all the deployed Dimension Subscriber definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                             | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed dimension subscriber. | 1 KB and up; varies according to the number of instance IDs associated with the subscriber | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/eventmap**

Contains all the deployed Event Map definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed event map | 2 KB and up; varies according to the number of defined attributes in the event map | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/eventmap-BASE\_TYPE**

Contains index mappings between an Event Map definition base type and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/eventmap-DISPLAY\_NAME**

Contains index mappings between an Event Map definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/eventmap-ID**

Contains index mappings between an Event Map definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/eventmap-NAME**

Contains index mappings between an Event Map definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/hierarchydef**

Contains all the deployed Dimension Hierarchy definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed dimension hierarchy | 1 KB and up; varies according to the number of levels defined in the hierarchy | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/hierarchydef-DISPLAY\_NAME**

Contains index mappings between a Dimension Hierarchy definition display name and name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension hierarchy. | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/hierarchydef-ID**

Contains index mappings between a Dimension Hierarchy definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension hierarchy | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/hierarchydef-NAME**

Contains index mappings between a Dimension Hierarchy definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed dimension hierarchy | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/ilink**

Contains all the deployed Intelligent Link definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                        | Element Size  | Element Lifetime                    | Cache Type  | Searchable |
|---------------------------------|---|-------------------------------------|-------------|------------|
| 1 per deployed Intelligent Link | .5 KB and up; varies according to number of user-defined parameters | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.deployed/kpidef**

Contains all the deployed KPI definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per deployed KPI definition | 1.3 KB       | Exists until deleted by application | Distributed | Yes        |

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**sag.opt.clusterable.caches.deployed/kpidef-DISPLAY\_NAME**

Contains index mappings between a KPI definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed KPI definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

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**sag.opt.clusterable.caches.deployed/kpidef-EVENT\_MAP\_NAME**

Contains index mappings between an event map name and a list of KPI names and versions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|--|--------------|-------------------------------------|-------------|------------|
| 1 per defined event map associated with one or more KPIs | 6 KB         | Exists until deleted by application | Distributed | Yes        |

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**sag.opt.clusterable.caches.deployed/kpidef-ID**

Contains index mappings between a KPI definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed KPI definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/kpidef-NAME**

Contains index mappings between a KPI definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed KPI definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/rule**

Contains all the deployed Rule definitions that the engine uses during operations.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed rule definition | 1 KB and up; varies according to the complexity of the rule expression | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/rule-DISPLAY\_NAME**

Contains index mappings between a Rule definition display name and name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed rule definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/rule-ID**

Contains index mappings between a Rule definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed rule definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.deployed/rule-NAME**

Contains index mappings between a Rule definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed rule definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensiondef**

Contains all the latest Dimension definitions for display in the customer user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|--|-------------------------------------|-------------|------------|
| 1 per defined dimension definition | 1 KB and up; varies according to the number of user-defined attributes | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensiondef-BASE\_TYPE**

Contains index mappings between a Dimension definition base type and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensiondef-DISPLAY\_NAME**



Contains index mappings between a Dimension definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensiondef-ID**

Contains index mappings between a Dimension definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensiondef-NAME**

Contains index mappings between a Dimension definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensionfilter**

Contains all the latest Dimension Filter definitions for display in the customer user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size  | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|---|-------------------------------------|-------------|------------|
| 1 per defined dimension filter | 1 KB and up; varies according to the number of instance ids in the filter defined by the user | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/dimensionjoin**

Contains all the latest Dimension Join definitions for display in the customer user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per defined dimension join | 1 KB         | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/dimensionjoin-DISPLAY\_NAME**

Contains index mappings between a Dimension Join definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension join | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/dimensionjoin-ID**

Contains index mappings between a Dimension Join definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension join | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/dimensionjoin-NAME**

Contains index mappings between a Dimension Join definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension join | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/dimensionsubscriber**

Contains all the latest Dimension Subscriber definitions for the user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                           | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------------|--|-------------------------------------|-------------|------------|
| 1 per defined dimension subscriber | 1 KB and up; varies according to the number of instance IDs associated with the subscriber | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/eventmap**

Contains all the latest Event Map definitions for the user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                | Element Size  | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------|---|-------------------------------------|-------------|------------|
| 1 per defined event map | 2 KB and up; varies according to the number of attributes defined by the user | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/eventmap-BASE\_TYPE**

Contains index mappings between an Event Map definition base type and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/eventmap-DISPLAY\_NAME**

Contains index mappings between an Event Map definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

---

### **sag.opt.clusterable.caches.latest/eventmap-ID**

Contains index mappings between an Event Map definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

---

### **sag.opt.clusterable.caches.latest/eventmap-NAME**

Contains index mappings between an Event Map definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined event map | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

---

### **sag.opt.clusterable.caches.latest/hierarchydef**

Contains all the latest Dimension Hierarchy definitions for the customer's user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                          | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-----------------------------------|--|-------------------------------------|-------------|------------|
| 1 per defined dimension hierarchy | 1 KB and up; varies according to the number of levels defined in the hierarchy | Exists until deleted by application | Distributed | Yes        |

---

**sag.opt.clusterable.caches.latest/hierarchydef-DISPLAY\_NAME**

Contains index mappings between a Dimension Hierarchy definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                          | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-----------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension hierarchy | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/hierarchydef-ID**

Contains index mappings between a Dimension Hierarchy definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                          | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-----------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension hierarchy | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/hierarchydef-NAME**

Contains index mappings between a Dimension Hierarchy definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                          | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-----------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined dimension hierarchy | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.latest/ilinkdef**

Contains all the latest Intelligent Link definitions for display in the user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|--|-------------------------------------|-------------|------------|
| 1 per defined Intelligent Link | .5 KB and up; varies according to the number of parameters the user defined for the Intelligent Link | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/kpidef**

Contains all the latest KPI definitions for display in the customer's user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per defined KPI definition | 1.3 KB       | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/kpidef-DISPLAY\_NAME**

Contains index mappings between a KPI definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined KPI definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/kpidef-EVENT\_MAP\_NAME**

Contains index mappings between an event map name and a list of KPI names and versions.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|--|--------------|-------------------------------------|-------------|------------|
| 1 per defined event map associated with one or more KPIs | 6 KB         | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/kpidef-ID**

Contains index mappings between a KPI definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined KPI definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/kpidef-NAME**

Contains index mappings between a KPI definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined KPI definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/rule**

Contains all the latest Rule definitions for display in the customer's user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--|-------------------------------------|-------------|------------|
| 1 per defined rule definition | 1 KB and up; varies according to the complexity of the rule expression | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/rule-DISPLAY\_NAME**

Contains index mappings between a Rule definition display name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined rule definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.latest/rule-ID**

Contains index mappings between a Rule definition ID and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined rule definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

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### **sag.opt.clusterable.caches.latest/rule-NAME**

Contains index mappings between a Rule definition name and a name and version number.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per defined rule definition | Less than 1 KB | Exists until deleted by application | Distributed | Yes        |

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## **Operational Caches**

webMethods Optimize maintains the following caches for operational data. When Optimize runs in clustered mode, these caches reside on the Terracotta Server Array.

### **sag.opt.clusterable.caches.AcceptedJMSMessageIdsCache**

Contains the String identifiers for the lists of events the Analytic Engine has consumed.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size  | Element Lifetime   | Cache Type  | Searchable |
|----------|---|--|-------------|------------|
| 100,000  | Less than 1 KB; varies according to number of messages received in dca_event JMS queue per minute | Controlled by the TimeToLiveSeconds setting; initially set to 60 seconds | Distributed | No         |

---

### **sag.opt.clusterable.caches.deleteAllKPIsCache**

Contains all identified KPI instance IDs to be deleted.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.



| Elements   | Element Size   | Element Lifetime                                      | Cache Type  | Searchable |
|--|----------------|---|-------------|------------|
| Depends on number of KPI instances user specifies for deletion | Less than 1 KB | Until removed by application (typically within a day) | Distributed | No         |

### **sag.opt.clusterable.caches.kpiComplnstStateCache**

Contains readings awaiting aggregation into composite KPI readings.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                     | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per composite KPI instance | 1 KB         | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.kpiInstStateCache**

Contains data awaiting aggregation into KPI readings.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | 1 KB and up; varies according to number of events received in aggregation interval for each KPI instance | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.KPIISID2ID\_IndexCache**

Contains index mappings between a String ID and a monitor instance ID.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.kpiLastProcTimeCache**

Contains data that Optimize uses to coordinate the generation of readings among the members of a cluster.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|----------|----------------|-------------------------------------|-------------|------------|
| 1        | Less than 1 KB | Exists until deleted by application | Distributed | No         |

---

### **sag.opt.clusterable.caches.kpiLockCache**

Contains information that Optimize uses to manage the creation and loading of KPI instances.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|---|----------------|-------------------------------------|-------------|------------|
| 0; lock is made on key value while no element is in cache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

---

### **sag.opt.clusterable.caches.KPIN2IIDS\_IndexCache**

Contains index mappings between a KPI name and a collection of KPI instance state object IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed KPI definition | 1 KB and up; varies according to the number of monitors per KPI definition | Exists until deleted by application | Distributed | No         |

---

### **sag.opt.clusterable.caches.KPIN2MIDS\_IndexCache**

Contains index mappings between a KPI name and a collection of Monitor object IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed KPI definition | 1 KB and up; varies according to number of monitors per KPI definition | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.LIID2CIID\_IndexCache**

Contains index mappings between a leaf KPI instance ID and a collection of composite KPI instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|---|----------------|-------------------------------------|-------------|------------|
| 1 per KPI instance that participates in a composite KPI | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.lockCache**

Contains information used to provide a distributed locking mechanism that is used during internal operations of the Analytic Engine. No data is stored in the cache.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|---|----------------|-------------------------------------|-------------|------------|
| 0; lock is made on key value while no element is in cache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.metadataDefinitionLoadLockCache**

Contains information used to provide a distributed locking mechanism during metadata loading.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|---|----------------|-------------------------------------|-------------|------------|
| 0; lock is made on key value while no element is in cache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.metadataOpsLockCache**

Contains information used to facilitate definition changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|---|----------------|-------------------------------------|-------------|------------|
| 0; lock is made on key value while no element is in cache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.monitorCache**

Contains the KPI state information that Optimize displays in the user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                         | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|----------------------------------|--------------|-------------------------------------|-------------|------------|
| 100 plus number of licensed KPIs | 1.2 KB       | Exists until deleted by application | Distributed | Yes        |

### **sag.opt.clusterable.caches.monitorChangeInFlightCache**

Contains the processing-complete count for a newly changed monitor.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime  | Cache Type  | Searchable |
|----------|----------------|---|-------------|------------|
| 100,000  | Less than 1 KB | Controlled by the TimeToLiveSeconds setting; initially set to 300 seconds | Distributed | No         |

### **sag.opt.clusterable.caches.monitorLastReadingTimeCache**

Contains information that Optimize uses to distribute readings among threads and cluster members.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.OptAECClusterMemberCache**

Contains information for coordinating changes in cluster membership.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime           | Cache Type  | Searchable |
|----------|----------------|----------------------------|-------------|------------|
| Up to 20 | Less than 1 KB | 125 seconds unless renewed | Distributed | No         |

**sag.opt.clusterable.caches.optimizeAlgorithmStateCache**

Contains data that Optimize uses to track trending information.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--------------|-------------------------------------|-------------|------------|
| 8 per element in monitorCache | 1 KB         | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.optimizeDiagnosesCache**

Contains the current collection of diagnoses for individual monitors.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 8 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.optimizeDimensionEnabledStateCache**

Contains one Boolean enabled flag for all known dimension instances.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                                   | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--|----------------|-------------------------------------|-------------|------------|
| 1 per element in optimizeDiMensionOpsCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.optimizeDimensionIndexByStringIdCache**

Contains index mappings from a unique string ID to an object holding a dimension name and instance ID.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                                   | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|--|--------------|-------------------------------------|-------------|------------|
| 1 per element in optimizeDimensionOpsCache | 1 KB         | Exists until deleted by application | Distributed | No         |

---

**sag.opt.clusterable.caches.optimizeDimensionOpsCache**

Contains all known dimension instances (as Dimension objects.)

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements   | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--|--|-------------------------------------|-------------|------------|
| Sum of number of dimension instances for each dimension definition | 1 to 2 KB; varies according to number of attributes defined in each dimension definition and on average size of value for each attribute | Exists until deleted by application | Distributed | No         |

---

**sag.opt.clusterable.caches.optimizeDimensionOpsIndexByDimKeyCache**

Contains index mappings from a Dimension name and instance ID to a collection of objects holding a Dimension name, attribute name and attribute value.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                                   | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|--|--------------|-------------------------------------|-------------|------------|
| 1 per element in optimizeDimensionOpsCache | 1 KB         | Exists until deleted by application | Distributed | No         |

---

**sag.opt.clusterable.caches.optimizeDimensionOpsIndexByDimNameCache**

Contains index mappings from a Dimension name to a collection of objects holding a Dimension name and instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                            | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------------|--|-------------------------------------|-------------|------------|
| 1 per deployed dimension definition | 2 KB; size varies according to the number of instances for each dimension definition | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.optimizeDimensionOpsIndexByIdentityCache**

Contains index mappings from a Dimension name, Attribute name and Attribute value to a Dimension name and instance ID.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|---|--------------|-------------------------------------|-------------|------------|
| At least 1 per element in optimizeDimensionOpsCache | 1 KB         | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.optimizeROStatsOpsCache**

Contains completed statistics.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                                    | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|---|--------------|-------------------------------------|-------------|------------|
| Number of elements in monitorCache * 33 * 7 | 1 KB         | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.optimizeStatsAccumulationOpsCache**

Contains the data that Optimize uses to calculate values for a statistical bucket.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | 1 KB         | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.OreEvaluatorCache**

Contains Rule evaluator objects.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|--------------|-------------------------------------|-------------|------------|
| 1 per element in OreStubCache | 4 KB         | Exists until deleted by application | Distributed | Yes        |

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**sag.opt.clusterable.caches.OreEvaluatorIndex\_EMID2RIIDS**

Contains index mappings between a monitor ID and a collection of Event Rule instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

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**sag.opt.clusterable.caches.OreEvaluatorIndex\_ET2RIIDS**

Contains index mappings between an Event Type and a collection of Rule instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                 | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed event map | Less than 1 KB | Exists until deleted by application | Distributed | No         |

---

**sag.opt.clusterable.caches.OreEvaluatorIndex\_KMID2RIIDS**

Contains index mappings between a monitor ID and a collection of KPI Rule instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

---



**sag.opt.clusterable.caches.OreStubCache**

Contains the Rule instance state information that Optimize displays in the user interface.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size | Element Lifetime                    | Cache Type  | Searchable |
|---|--------------|-------------------------------------|-------------|------------|
| 2 times the number of elements in monitorCache (allows for each KPI definition to be referenced in the rule expression in two deployed rules definitions) | 2 KB         | Exists until deleted by application | Distributed | Yes        |

**sag.opt.clusterable.caches.OreStubCache\_RDID2RIID**

Contains index mappings between a Rule definition name and a collection of Rule instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                       | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|--------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per deployed rule definition | Less than 1 KB | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.OreStubCache\_RISID2RIID**

Contains index mappings between a unique String ID and a Rule instance ID.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in OreStubCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

**sag.opt.clusterable.caches.OreStubIndex\_EMID2RIIDS**

Contains index mappings between a monitor ID and a collection of event rule instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.OreStubIndex\_KMID2RIIDS**

Contains index mappings between a monitor ID and a collection of KPI rule instance IDs.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements                      | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-------------------------------|----------------|-------------------------------------|-------------|------------|
| 1 per element in monitorCache | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.pt\_cluster\_member\_cache**

Contains information about the cluster member heartbeats.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|----------|----------------|-------------------------------------|-------------|------------|
| 500      | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.pt\_partitionTableCache**

Contains information about the assignment of data partitions to the Analytic Engine cluster members.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|----------|----------------|-------------------------------------|-------------|------------|
| 1        | Less than 1 KB | Exists until deleted by application | Distributed | No         |

### **sag.opt.clusterable.caches.ScheduledKPIInstanceDeletionJobs**

Contains information for coordinating the deletion of KPI instances.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements  | Element Size   | Element Lifetime                    | Cache Type  | Searchable |
|-----------|----------------|-------------------------------------|-------------|------------|
| Up to 100 | Less than 1 KB | Exists until deleted by application | Distributed | No         |

## Locally Persistent Operational Caches

webMethods Optimize maintains certain kinds of operational data in persistent caches. These caches are maintained locally, even when Optimize runs in a clustered configuration.

### **sag.opt.eventhandling.caches.EventsForStorage**

Contains data used to guarantee the storage of received events to the fact table.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 500,000  | 1 KB and up  | Exists until deleted by application | Local      | No         |

### **sag.opt.eventhandling.caches.PendingEventLists**

Contains data to guarantee handling of received events.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size  | Element Lifetime                    | Cache Type | Searchable |
|----------|---------------|-------------------------------------|------------|------------|
| 25,000   | 100 KB and up | Exists until deleted by application | Local      | No         |

### **sag.opt.eventhandling.caches.TaskObserver\_MessagesCache**

Contains data used to guarantee publication of process notifications for received events.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime                    | Cache Type | Searchable |
|----------|----------------|-------------------------------------|------------|------------|
| 500,000  | Less than 1 KB | Exists until deleted by application | Local      | No         |

### **sag.opt.eventhandling.caches.TaskObserver\_TasksCache**

Contains data used to guarantee the publication of process notifications for received events.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size   | Element Lifetime                    | Cache Type | Searchable |
|----------|----------------|-------------------------------------|------------|------------|
| 500,000  | Less than 1 KB | Exists until deleted by application | Local      | No         |

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### **sag.opt.eventhandling.caches.TempEventsForStorage**

Contains data used to guarantee the storage of received events to the event temp table.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 500,000  | 1 KB and up  | Exists until deleted by application | Local      | No         |

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### **sag.opt.jmscommunication.caches.JMSCommunicationResendCache**

Contains messages waiting to be published to JMS.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 100,000  | 1 KB and up  | Exists until deleted by application | Local      | No         |

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### **sag.opt.notifications.caches.dimensionDefNotificationsCache**

Contains notification objects for delivery to subscribers of Dimension definition changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

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### **sag.opt.notifications.caches.dimSubscriberNotificationsCache**

Contains notification objects for delivery to subscribers of Dimension instance subscription changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

### **sag.opt.notifications.caches.eventMapNotificationsCache**

Contains notification objects for delivery to subscribers of Event Map definition changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

### **sag.opt.notifications.caches.kpiDefNotificationsCache**

Contains notification objects for delivery to subscribers of KPI definition changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

### **sag.opt.notifications.caches.monitorChangeNotificationsCache**

Contains notification objects for delivery to subscribers of Monitor instance state changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

### **sag.opt.notifications.caches.ptRoutingTableNotificationsCache**

Contains notification objects for delivery to subscribers of Process Tracking responsibility changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

## sag.opt.notifications.caches.ruleDefNotificationsCache

Contains notification objects for delivery to subscribers of Rule definition changes.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime                    | Cache Type | Searchable |
|----------|--------------|-------------------------------------|------------|------------|
| 10,000   | 1 KB and up  | Exists until deleted by application | Local      | No         |

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## webMethods Trading Networks

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### SoftwareAG.IS.TN.TNDocAttribute

Contains elements for all document attributes required to process documents.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements      | Element Size | Element Lifetime  | Cache Type | Searchable |
|---------------|--------------|---|------------|------------|
| 0 (unlimited) | 1KB to 10KB  | Element exists in cache until deleted by the application. | Local      | Yes        |

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### SoftwareAG.IS.TN.TNDocType

Contains elements for all document types required for EDI, flat files, and XML.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements      | Element Size | Element Lifetime  | Cache Type | Searchable |
|---------------|--------------|---|------------|------------|
| 0 (unlimited) | 1KB to 10KB  | Element exists in cache until deleted by the application. | Local      | Yes        |

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### SoftwareAG.IS.TN.TNProfile

Contains elements for profiles of all corporations who are trading partners in your network. By default, this cache does not contain all partner profiles. Instead, it uses the lazy loading approach.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime  | Cache Type | Searchable |
|----------|--------------|---|------------|------------|
| 50       | Up to 1MB    | Element exists in cache until deleted by the application. However, if the cache is full, element is evicted if using LRU (Least Recently Used) eviction policy. | Local      | No         |

## SoftwareAG.IS.TN.TNProfileId

Contains elements for the profile IDs of all profiles present in your network.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements      | Element Size | Element Lifetime  | Cache Type | Searchable |
|---------------|--------------|---|------------|------------|
| 0 (unlimited) | 1KB to 10KB  | Element exists in cache until deleted by the application. | Local      | No         |

## SoftwareAG.IS.TN.TNProfileSummary

Contains elements for all profile summaries. A profile summary is a subset of profiles.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements      | Element Size | Element Lifetime  | Cache Type | Searchable |
|---------------|--------------|---|------------|------------|
| 0 (unlimited) | 1KB to 10KB  | Element exists in cache until deleted by the application. | Local      | Yes        |

## SoftwareAG.IS.TN.TNProfileSummaryByDispName

Contains elements for the profile IDs of all profiles in your network.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements      | Element Size | Element Lifetime  | Cache Type | Searchable |
|---------------|--------------|---|------------|------------|
| 0 (unlimited) | 1KB to 10KB  | Element exists in cache until deleted by the application. | Local      | No         |

## SoftwareAG.IS.TN.TNQueryResults

Contains session-based query results (in a page-wise manner). Factors that affect this cache include query frequency and query result size.

- The cache is impacted by the query frequency and the size of the query results.
- The cache is local, even when Trading Networks is running in a cluster.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size  | Element Lifetime   | Cache Type | Searchable |
|----------|---|--|------------|------------|
| 5000     | 1 to 10 KB; varies by data type and configured page size (20 rows by default) | Controlled by Time to Live and Time to Idle cache settings | Local      | No         |

## SoftwareAG.IS.TN.TNTPA

Contains elements for trading partner agreements between various partners in your network.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements | Element Size | Element Lifetime  | Cache Type | Searchable |
|----------|--------------|---|------------|------------|
| 1000     | 3KB          | Element exists in cache until deleted by the application. However, if the cache is full, element is evicted if using FIFO (First In First Out) eviction policy. | Local      | No         |

## SoftwareAG.IS.TN.TNTPAId

Contains elements for the TPA IDs of all the trading partner agreements between various partners in your network.

The following table shows the number of elements, their size, lifetime, cache type, and if they are searchable or not.

| Elements      | Element Size | Element Lifetime  | Cache Type | Searchable |
|---------------|--------------|---|------------|------------|
| 0 (unlimited) | 1KB          | Element exists in cache until deleted by the application. | Local      | No         |