

# webMethods Optimize for Infrastructure 10.2 Readme

April 2018

This is an innovation release. Innovation releases have a much shorter support cycle than standard releases. To learn more, please visit <http://empower.softwareag.com/innovationrelease/>.

This file contains important information you must read before using webMethods Optimize for Infrastructure 10.2. You can find user documentation on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

- webMethods Optimize for Infrastructure 10.2 monitors current and older supported versions of

webMethods products. However, it requires Infrastructure Data Collector 10.2, Analytic Engine 10.2, Universal Messaging 10.2, and My webMethods Server 10.2 for execution.

- When using Broker Basic Authentication, do not set ACL on the Analysis client group.

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WID-1540  
You cannot install Infrastructure Data Collector as a Windows service by applying a Command Central template.  
There is currently no workaround for this issue.
- WID-1631  
The Infrastructure Data Collector server log might contain the following error:  
“StandardWrapper.Throwablejava.lang.IllegalStateException: InjectionManagerFactory not found.”  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- webMethods Broker is deprecated for use with webMethods 10.2. If you are starting development using webMethods 10.2, you should use webMethods Universal Messaging instead of webMethods Broker. If you are upgrading to webMethods 10.2, you should consider migrating to Universal Messaging. If you choose to continue to use webMethods Broker, you will still be fully supported, but only until the announced end-of-life dates for webMethods Broker.
- To maintain the Optimize performance, increase the number of database connections on the Database Pool Connection page in My webMethods. For typical systems, increase the maximum number of connections to 80. To change the number of available database connections, navigate to Administration > System-Wide > Environments > Database Pool Connections, and then on the Pool Settings panel, change the value in the Maximum Connections field from 36 to 80.
- The KPI Summary Page does not support extended display durations. If you want to keep the KPI Summary page active for longer periods without user interaction, add a workspace and use the Refresh Page portlet to keep the page current.
- SSL registration of Analytic Engine web services is not supported.

## 4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### ***Release 10.2***

- OPT\_9.8\_Fix22
- WID\_9.9\_Fix19
- OPT\_9.10\_Fix13
- OPT\_9.12\_Fix12
- OPT\_10.0\_Fix6
- OPT\_10.1\_Fix2
- CMP\_9.8\_Fix5
- CMP\_9.9\_Fix3
- CMP\_9.10\_Fix2
- CMP\_9.12\_Fix3
- CMP\_10.0\_Fix2

### ***Release 10.1***

- OPT\_9.0\_SP1\_Fix16
- OPT\_9.5\_SP1\_Fix16
- OPT\_9.6\_SP1\_Fix12
- OPT\_9.7\_Fix20
- OPT\_9.8\_Fix19
- OPT\_9.9\_Fix15
- OPT\_9.10\_Fix7
- OPT\_9.12\_Fix7
- OPT\_10.0\_Fix4

- CMP\_9.12\_Fix1

### ***Release 10.0***

- OPT\_9.0\_SP1\_Fix15
- OPT\_9.5\_SP1\_Fix14
- OPT\_9.6\_SP1\_Fix10
- OPT\_9.7\_Fix16
- OPT\_9.8\_Fix15
- OPT\_9.9\_Fix12
- OPT\_9.10\_Fix7
- CMP\_9.12\_Fix1

### ***Release 9.12***

- OPT\_9.0\_SP1\_Fix14
- OPT\_9.5\_SP1\_Fix13
- OPT\_9.6\_SP1\_Fix9
- OPT\_9.7\_Fix13
- OPT\_9.8\_Fix11
- OPT\_9.9\_Fix9
- OPT\_9.10\_Fix4
- CMP\_9.10\_Fix1

### ***Release 9.10***

- OPT\_9.0\_SP1\_Fix12
- OPT\_9.5\_SP1\_Fix9
- OPT\_9.6\_SP1\_Fix7
- OPT\_9.7\_Fix7
- OPT\_9.8\_Fix5

- CMP\_9.8\_Fix2
- OPT\_9.9\_Fix2
- CMP\_9.9\_Fix1

### ***Release 9.9***

- OPT\_9.0\_SP1\_Fix9
- OPT\_9.5\_SP1\_Fix7
- OPT\_9.6\_SP1\_Fix4
- OPT\_9.7\_Fix5
- OPT\_9.8\_Fix3
- CMP\_9.8\_Fix1

### ***Release 9.8***

- OPT\_8.2\_SP1\_Fix14
- OPT\_9.0\_SP1\_Fix7
- OPT\_9.5\_SP1\_Fix5
- OPT\_9.6\_SP1\_Fix2
- OPT\_9.7\_Fix2

## **5.0 Other Resolved Issues**

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### ***Release 10.2***

- WID-1596  
Optimize might fail to monitor Integration Server clusters.  
Infrastructure Data Collector might fail to monitor an Integration Server cluster. The issue occurs when all nodes from the cluster were discovered using a non-primary port.  
The issue is resolved.

- **WID-1590**  
When Infrastructure Data Collector monitors a Terracotta Server, the BAM\_EVENT\_TMP and BAM\_EVENT\_TMP\_ATTR tables might become very large. The issue occurs when the Terracotta Server is down.  
The issue is resolved.
- **WID-1573**  
The Optimize Monitored Components page might not display an Integration Server (IS) package.  
The Monitored Components page in My webMethods might not display a discovered IS Package in the list of monitored components. As a result, you might not be able to monitor the IS package. The issue occurs when an IS package does not contain a service.  
The issue is resolved.
- **WID-1554**  
Infrastructure Data Collector might hang during a discovery process.  
Infrastructure Data Collector might hang in "Running" status during a discovery process if uncaught throwable errors occur during the process.  
The issue is resolved.
- **WID-1539**  
Optimize does not display a warning when you delete an asset of type "JMX Configuration".  
In the Discovered Assets panel on the Assets page in My webMethods, when you select an asset of type "JMX Configuration" and click Delete, Optimize does not display a warning message that all associated monitored components and associated KPIs will be deleted from the system.  
The issue is resolved.
- **WID-1486**  
When Infrastructure Data Collector monitors a Universal Messaging realm, and the realm is offline, the wrapper log starts filling with the following exception message:  
"RealmUnreachableException: Realm is currently not reachable".  
The issue is resolved.
- **CMP-73**  
Platform Manager might hang while monitoring a Universal Messaging realm. The issue occurs when the Universal Messaging realm is configured incorrectly, or when the Universal Messaging realm is connected to a remote Universal Messaging realm, which is offline.  
The issue is resolved.
- **CMP-56**  
When Platform Manager is configured to monitor Universal Messaging (UM), the UM log might repeatedly log the same error message.  
When Platform Manager attempts connecting to a Universal Messaging interface using the UM plug-in for Platform Manager, the following error might be logged repeatedly in the nirvana.log file:  
"not authorised to connect on interface".  
The issue occurs when the Allow Client Connections option is unchecked for the Universal

Messaging interface to which Platform Manager connects.  
The issue is resolved.

## **Release 10.1**

- JBP-6470  
Optimize fails to create dimension instances for MashZone NextGen Catalina Server.  
The issue is resolved.
- OBE-9260  
The size of the Analytic Engine log file might grow rapidly.  
Sometimes when you start Analytic Engine after a fresh installation, the Analytic Engine log file grows rapidly. The issue occurs when the Universal Messaging server that is configured for Analytic Engine did not start properly.  
The issue is resolved.

## **Release 10.0**

- WID-1474  
Infrastructure Data Collector fails to monitor Integration Server assets that are configured to use a secure connection (SSL). As a result, no readings are generated for monitored Integration Server KPIs.  
The issue is resolved.
- OBE-8414  
When you change the display name of a measure attribute, the KPIs that are set for this measure stop functioning.  
To work around this issue, set the display name back to the original display name.  
The issue is resolved.
- OBE-8932  
Back-populating rules in Optimize might fail.  
In some cases, when you click the Generate Rule Violations button on the Rule List page, the initiated rule back-population operation fails. Although no error message appears, the status of the back-population job in the Job Audit page, is "Failed".  
The issue is resolved.

## **Release 9.10**

- WID-1221  
The Asset page fails to display status "Refused" for Integration Server assets.  
In My webMethods Server, on the Applications > Administration > Analytics > Infrastructure Components > Assets page, when you edit the connection parameters for an Integration Server asset and you accidentally enter an invalid password, the status of the asset is not updated to "Refused" but remains "Accepted," even though no new KPI readings are collected from this asset

because of the invalid password.  
This issue has been resolved.

- OBE-7017  
The Analytics Overview page continues to display KPI instances for deleted assets.  
In My webMethods Server, after you delete an asset from the Applications > Administration > Analytics > Infrastructure Components > Assets page and you go to the Applications > Monitoring > System-Wide > Analytics Overview page, you can still see KPI data for the removed asset.  
This issue has been resolved.
- OBE-7145  
Data remains unprocessed in the Universal Messaging JMS queues when an Analytic Engine node is down.  
When the Analytic Engine is running in a clustered environment, and some of the nodes are down, the data that is pushed to the respective Universal Messaging queue is not processed until the nodes come back up again.  
This issue has been resolved.
- OBE-7597  
On the KPI Instance Detail page, when you plot KPIs with collection intervals of 2, 4, or 8 hours, the graph displays incorrect times for reading values.  
In My webMethods Server, when you plot KPIs on the KPI Instance Detail page with collection intervals of 2, 4, or 8 hours, the KPI reading values that are displayed on the graph are plotted at incorrect times.  
This issue has been resolved.
- OBE-7536  
The Advanced search tab on the Problems page does not return correct results.  
In My webMethods Server, on the Applications > Monitoring > System-Wide > Problems page, when you use the Advanced search tab to filter problems setting the "Field Name" to "Duration" and selecting "Greater Than" or "Less Than" as operators, your search might be misleading, since they also contain problems with duration that is equal to the selected value.  
This issue has been resolved. The "Greater Than" and "Less Than" operators no longer return problems with Duration equal to the selected filter Value. Also, the following operators have been added when filtering by duration:  
"Greater Than or Equal To" and "Less Than or Equal To"
- OBE-7511  
An error prevents you from editing or copying an instant rule with no user specified.  
In My webMethods Server, on the KPI Instance Detail page, when you create an instant rule without specifying a user for the Send Alert To drop-down list, and then you navigate to the Applications > Administration > Analytics > Rules > Rule List Page, you cannot edit or copy the rule. The following error is displayed in the Alerts panel on the Add/Edit/Copy Rule page:  
User is unknown or email address is undefined.  
This issue has been resolved.



- OBE-7990  
 The Define Environments page allows you to create an environment with no name.  
 In My webMethods Server, on the Administration > System-Wide > Environments > Define Environment page, when you click Add Environment, you can save your environment with no value for Environment Name.  
 This issue has been resolved.
- OBE-7491  
 The KPI Instance Detail page incorrectly aggregates KPIs of type Sum or Count to the beginning of the hour.  
 In My webMethods Server, on the KPI Instance Detail page, when you plot KPIs of type Sum or Count, the KPI data values are incorrectly aggregated to the beginning of the hour, instead of the end.  
 This issue has been resolved.
- OBE-7485  
 The Select All icon on the Database Pool Configuration page does not select all listed pools.  
 In My webMethods Server, on the Applications > Administration > System-Wide > Environments > Database Pool Configuration, when you click the Select All icon, not all listed pools are selected.  
 This issue has been resolved.

## **Release 9.9**

- WID-1189  
 IS Terracotta Cluster component fails to collect readings.  
 This issue is now resolved.
- WID-1196  
 Modifying the MWS discovery credentials to an invalid user/password should result in a discovery failure.  
 This issue is now resolved.

## **Release 9.8**

- WID-1075/WID-1116  
 Service request counts for Integration Server count KPI may show negative values.  
 The Infrastructure Data Collector Integration Server Is Service long Count KPI may return negative values.  
 This issue has been resolved.
- OBE-6734  
 Central Configuration - Define Environment allows an empty environment to be created.  
 Central Configuration - Define Environment allows an empty environment to be created if a user presses the ENTER key before entering any value in the name field.  
 This issue has been resolved.

- OBE-6282  
KPI Instance Detail graph is incorrectly plotting data points where a given data point is comprised of multiple events with the exact timestamp down to the millisecond.  
This issue has been resolved.
- OBE-4182  
Threshold rule expressions might fail if the underlying event map is renamed.  
If the event map referenced by with a threshold rule expression was renamed, in some cases the threshold rule evaluation will fail.  
This issue has been resolved.

## 6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 10.1**

- The “Managing webMethods Optimize Environments” chapter of the *Configuring BAM* guide has been updated with information about configuring JMX resource module settings.
- The “Discovery Assets and Monitoring Components” chapter of the *Administering webMethods Optimize* guide has been updated with information about adding JMX assets for discovery.
- The “Discovery Assets and Monitoring Components” chapter of the *Administering webMethods Optimize* guide has been updated with information about setting the monitoring of MashZone NextGen Server components (10.1 release only).
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about System Component Monitoring for Integration Server KPI definitions and System Component Monitoring for Infrastructure Data Collector KPI definitions.
- The information about the Integration Server KPI definitions and the Universal Messaging cluster KPI definitions in the “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated.
- Information about the Integration Server Long Running Thread rule has been added to the “Built-In Rules” chapter of the *Administering webMethods Optimize* guide.

### **Release 10.0**

- The “Using Command Central to Manage Optimize” chapter has been moved from the

*Administering webMethods Optimize* guide to the *Configuring BAM* guide. The chapter has been updated with procedures for configuring Optimize through Command Central.

- The “Managing webMethods Optimize Environments” chapter of the *Configuring BAM* guide has been updated with information about configuring Digital Event Services resource module settings.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about Digital Event Services KPI definitions.
- The information about the Universal Messaging KPI definitions in the “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated.
- The “Configuring the SNMP Data Collector” chapter of the *Administering webMethods Optimize* guide has been updated with information about monitoring memory consumption and processor load.
- The “Discovery Assets and Monitoring Components” chapter of the *Administering webMethods Optimize* guide has been updated with information about adding Digital Event Services assets for discovery.
- The “Discovery Assets and Monitoring Components” chapter of the *Administering webMethods Optimize* guide has been updated with information about setting a root context for My webMethods Server assets.
- The information about the Infrastructure Data Collector Queue Size KPI definitions in the “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated.

## **Release 9.12**

- A new “Using Command Central to Manage Optimize” chapter has been added to the *Administering webMethods Optimize* guide. This chapter is moved from the *Software AG Command Central Help*. The chapter describes the currently supported operations in Command Central for managing Optimize.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about KPI definitions for Event Routing.
- The “Built-In Rules” chapter of the *Administering webMethods Optimize* guide has been updated with information about Event Routing rules.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about KPI definitions for Universal Messaging named objects.
- The “Adding Terracotta Server and Terracotta Server Array Assets for Discovery” section of the

*Administering webMethods Optimize* guide has been updated with information about monitoring Terracotta Server and Terracotta Server Array assets over HTTPS.

- The “The Assets Page” section of the *Administering webMethods Optimize* guide has been updated with information about monitoring My webMethods Server with a root context.
- The “Managing webMethods Optimize Environments” chapter of the *Configuring BAM* guide has been updated with information about configuring in-process event publication.

## **Release 9.10**

- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide has been updated with information about KPI definitions for MashZone NextGen, UM Cluster, and Presto delta KPIs.
- The “Monitored KPI Definitions” chapter of the *Administering webMethods Optimize* guide now contains information about newly added diagnostic KPIs about the following component types: InfrastructureDataCollector, ApamaCorrelator, BrokerServer, SNMP, IntergrationServer, ISCluster, MyWebMethodsServer, Presto, Universal Messaging Realm, and TerracottaConnection.
- The “Adding an Asset” section of the *Administering webMethods Optimize* guide now contains information about adding Universal Messaging Cluster and MashZone NextGen assets.

## **Release 9.9**

The *Administering webMethods Optimize* guide has been revised as follows:

- The “Monitored KPI Definitions” chapter has been updated with information about KPI definitions for Apama, Presto Catalina, Presto UM, IS File Polling, and Terracotta monitoring.
- The “Adding an Asset” section of the guide now contains information about adding Apama, Presto, Terracotta, SNMP3, and Terracotta assets.
- The “Configuring and Using the Infrastructure Data Collector” section of the guide now contains information about configuring Infrastructure Data Collector for clustering.
- The “Configuring and Using the Infrastructure Data Collector” section also contains information about changing the Infrastructure Data Collector ports.
- The “Configuring Event Routing Settings for Optimize” section in this guide has also been updated with details regarding the setup of Software AG Event Routing in your Optimize system.

The *webMethods Optimize User’s Guide* now includes information about using the “Investigate” button to jump to Process Performance Manager and further investigate process-related intrinsic data from Optimize. You will also find information about creating an alert in Optimize from the PPM user interface.

The *Software AG Command Central* help contains information about administering the Optimize Analytic Engine using the Command Central user interface.

## Release 9.8

- **Universal Messaging Delta KPIs** - Appendix A “Monitored KPI Definitions” of the “*Administering Optimize*” PDF publication now contains the “Universal Messaging KPI Definitions” section that lists and explains KPIs for monitoring Universal Messaging Servers has been updated with additional KPIs.
- **Presto KPIs** - Appendix A “Monitored KPI Definitions” of the “*Administering Optimize*” PDF publication now contains the “Presto KPI Definitions” section that lists and explains KPIs for monitoring Universal Messaging Servers has been updated with additional KPIs.
- **Terracotta KPIs** - Appendix A “Monitored KPI Definitions” of the “*Administering Optimize*” PDF publication now contains the “Terracotta KPI Definitions” section that lists and explains KPIs for monitoring Universal Messaging Servers has been updated with additional KPIs.

## 7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 10.1

Added Item	Description
JMX monitoring	The provider can connect to a JMX service and retrieve a set of mbeans' information. The user defines the mbean set in an mbean type filter. Different mbean sets require different filters (names).
Infrastructure Data Collector JMX	<p>The System Component discovery for Infrastructure Data Collector happens automatically when Infrastructure Data Collector starts. No input is needed from the user.</p> <p>The monitoring is using Infrastructure Data Collector JMX agent. The JMX port is retrieved through the Infrastructure Data Collector bundle context.</p>

Added Item	Description
Integration Server JMX	<p>The System Component discovery for Integration Server happens automatically with the Integration Server discovery. No additional input is needed from the user.</p> <p>The monitoring is using Integration Server JMX agent. The JMX port is retrieved through the WmISExtDC package.</p>
Integration Server “Long Running Threads” KPI	This KPI counts long-running service threads in Integration Server. By default it counts service threads that are running for more than 60000 milliseconds.
UM KPI additions	<p>boolean HasQuorum - Indicates if the cluster can form a quorum.</p> <p>boolean IsOnline - Indicates if the cluster is online.</p>
MashZone NextGen Server 10.1 monitoring	<p>The following lines must be added to the wrapper.conf file.</p> <pre> wrapper.java.additional.200=-Dcom.sun.management.jmxremote #wrapper.java.additional.201=- Dorg.tanukisoftwares.wrapper.WrapperManager.mbean=TRUE #wrapper.java.additional.202=- Dorg.tanukisoftwares.wrapper.WrapperManager.mbean.testing=TRUE wrapper.java.additional.203=- Dcom.sun.management.jmxremote.port=9088 wrapper.java.additional.204=- Dcom.sun.management.jmxremote.authenticate=false wrapper.java.additional.205=- Dcom.sun.management.jmxremote.ssl=false </pre>

## **Release 10.0**

Added Item	Description
Digital Event Services	Monitoring DES events.
SNMP provide sum average functions	A mechanism to do a sum or average across multiple PDUs. This is necessary for calculation of CPU or memory utilization when the values are represented per CPU or per running application.
Universal Messaging detects stale queues	Monitoring Universal Messaging queues capability is enhanced to detect the age of messages in the queue. When a message has been on a queue longer than a specified amount of time, a report or an alert can be sent.

Added Item	Description
Infrastructure Data Collector queue sizes	Monitoring Universal Messaging queue sizes which are used by Infrastructure Data Collector.
Optimize is configurable through Command Central.	You can now configure Optimize for Process and Optimize for Infrastructure through Command Central.
Support for MWS Root Context	The Optimize for Process and Optimize for Infrastructure user interfaces now support the MWS Root Context capability.

## ***Release 9.12***

Added Item	Description
EDA	Event routing framework is embedded in products like IS, Optimize, MWS etc. Monitoring of EDA to these products will be through a JMX port
MWS root context	Monitoring MWS with root context defined
Universal Messaging named objects	Monitoring of UM name objects
Terracotta HTTPS	Monitoring of Terracotta over HTTPS

## ***Release 9.10***

Added Item	Description
UM Cluster Monitoring	Monitoring of UM Cluster Nodes
Ability to delete Key Performance Indicators by date and name	You are now able to delete KPIs by date and name.

Changed Item	Description
Presto 9.10 only	Name changed to MashZone Next Gen

## ***Release 9.9***

Added Item	Description
Presto Catalina JMX	Presto Catalina monitoring
Presto UM	Presto UM monitoring
Apama	Apama monitoring

Added Item	Description
Integration Server File Polling	File Polling port monitoring
MWS HTTPS	MWS running HTTPS port enabled. Monitoring secure port.
SNMP v3 Support	SNMP v3 monitoring
Changing Infrastructure Data Collector ports after configuration	The properties file and location of the Infrastructure Data Collector port assigned during installation has been changed. See documentation on how to modify the Infrastructure Data Collector port after startup/configuration has completed.
Aesthetic enhancements for Process Dashboards	Aesthetic improvements have been made to the Process dashboards including: Principle picker now uses enter key to submit form when entering keyword characters, general control alignment and styling
Command Central integration for Analytic Engine	User can now start, stop, restart and receive the status for the Analytic Engine using Command Central. This includes configuring event routing for the Analytic Engine
Performance and scalability improvements	<ul style="list-style-type: none"> <li>▪ 100 times improvement in clustered Analytic Engine throughput performance</li> <li>▪ 2 times faster Analytic Engine startup</li> <li>▪ 500 percent increase in dimensional handling throughput</li> <li>▪ 30% throughput improvement in State engine</li> </ul>

## **Release 9.8**

Added Item	Description
Universal Messaging Delta KPI's	New Universal Messaging Delta KPI's. The difference between the last 2 reading values of the target KPI.
Presto Monitoring	Presto Monitoring.



Added Item	Description
Terracotta Monitoring	Enhanced Terracotta monitoring to include Cache, Cache Manager, TSA, TSA Server, Terracotta Connection. Discover TMS by Group Name or discover Direct by TSA Name.
Intrinsic Stage Metrics available in the UI	The intrinsic metrics associated with Stages are now available for use in the Analytics Overview.
New KPI type - Counter	A new KPI type, called Counter, has been added. This KPI counts the number of data points received for a specific fact over a fixed aggregation period.
New Rule Violation/Resolution EDA event	Optimize now is able to emit Rule Violation/Resolution EDA events

Removed Item	Replacement, if any
Terracotta Monitoring	Removed TMC Connection for Terracotta Server.

Deprecated Item	Replacement, if any
Removal of BAM_AGG_... database tables	The BAM_AGG_... database tables usage is being removed from future releases. These tables are currently used for Optimize Only UI support and will no longer be used.

## 9.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

## 10.0 Copyright Information

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## 11.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

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