CA Application Performance Management - 10.3

CA APM Release Notes

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ca technologies

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CA APM Release Notes

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APM Team Center

Enterprise Team Center Universe Security

You can configure Universe security for groups, which are defined in LDAP, local users.xml, or passed in a SAML assertion. Enterprise Team Center Universe security validates user and group names using configured realms.

More Information: Universe Permissions (https://docops.ca.com/display/APMDEVOPS103 /Configure+Universes#ConfigureUniverses-UniversePermissions)

Enterprise Team Center Compatibility

The Enterprise Team Center environment supports backward compatibility of Enterprise Team Center providers. You can connect CA APM 10.2 providers to a CA APM 10.3 Enterprise Team Center Master instance.

More Information: Team Center (https://docops.ca.com/display/APMDEVOPS103/APM+Team+Center)

Team Center User Interface Online Help

The Team Center user interface contains online help that links directly to CA APM documentation.

More information: Team Center Dashboard Overview (https://docops.ca.com/display/APMDEVOPS103 /Dashboard)

Team Center Isolation View

When you click Dashboard tile names, a new browser opens displaying the Isolation view of the selected components. The Isolation view shows the map with the components that share the attribute value as an expanded group. The Isolation view applies a transaction path filter enabling the map to display all complete transactions passing through the components.

More Information: Monitor and Isolate Issues in Team Center (https://docops.ca.com/display /APMDEVOPS103/Monitor+and+Isolate+Issues)

Java Agent

JMS 1.1 Support

A new set of agent tracers extends the correlation visibility to include JMS 1.1 applications. Metrics are gathered under Frontends|Messaging Services and Backends|Messaging Services, and these metrics appear as component data within a transaction trace.

Smart Instrumentation

Smart instrumentation now includes cross-process transaction reporting in automatic transaction traces. With this capability, CA APM Java agents can now collect end-to-end transaction traces for problematic transactions.

More Information: Collect and Analyze Transaction Traces (https://docops.ca.com/display /APMDEVOPS103/Collect+and+Analyze+Transaction+Traces#CollectandAnalyzeTransactionTraces-CPTT)

Deploy and Monitor Applications on Cloud Foundry

You can instrument applications that you deploy on Cloud Foundry. Diagnosers and triagers can view the monitored application metrics in Team Center, WebView, and the Workstation. We provide an example deployment using a Java agent.

More Information: Deploy on Cloud Foundry (https://docops.ca.com/display/APMDEVOPS103 /Deploy+on+Cloud+Foundry)

APM Command Center

SAML Support

You can now configure CA APM Command Center to use the same authentication mechanism as WebView and Team Center. The configuration includes SAML-based authentication.

More Information: User Management and Authentication (https://docops.ca.com/display/APMDEVOPS103/User+Management+and+Authentication)

Named Filters

CA APM Command Center now enables you to save and reuse filter expressions.

More Information: CA APM Command Center Online Help

Package Upgrade

You can now upgrade existing 10.2 agent packages to a newer release level. Make the upgrade by changing the version in the CA APM Command Center package. All previously made customizations are preserved.

More Information: Build and Manage Agents (https://docops.ca.com/display/APMDEVOPS103/Build+and+Manage+Agents)

CEM

Define New Alert Criteria

You can now define alert criteria on agent metric and business segment data in WebView. The MOM and Collectors start transaction trace sessions to collect information about transactions that exceed the defined alert criteria.

Disable Transaction Trace for the CEM Incidents

You can now disable transaction trace triggering from a CEM incident, by setting the `Introscope.transactionTrace.enable` property value to false in the `tess-default.properties` file.

Use REST Services to View Geo-Location Metrics

The Geo-location service now runs on the MOM. A Geo-location R EST service is available to all clients that provide a valid access token for every request.

More information: View APM Geo-Location Metrics (https://docops.ca.com/display/APMDEVOPS103 /Install+and+Configure+TIM+for+CA+CEM#InstallandConfigureTIMforCACEM-View_Geo-Location_Metrics)

Enable the Geo-Location Service

The `cem.btsaintroscope.enterprisemanager.hotGeoDeploy.enabled` property is added to the `IntroscopeEnterpriseManager.properties` file to enable and disable the geo-location service.

cem.btstats.geolocation.initializeGeoMap Property Renamed and Moved

The `cem.btstats.geolocation.initializeGeoMap` property is renamed to `introscope.enterprisemanager.geolocation.initializeGeoMap`. The `introscope.enterprisemanager.geolocation.initializeGeoMap` property is moved from the `tess-default.properties` file to the `IntroscopeEnterpriseManager.properties` file.

Enterprise Manager

Management Module Changes

Management modules have been added, updated, and removed.

Default Management Module

The `defaultMM.jar` is the new default management module, replacing `SampleManagementModule.jar` and `DifferentialAnalysisMM.jar.`

The new **Welcome to the APM Dashboards** highlights custom dashboard capabilities when you first click the **Console** tab.

New System Management Module

The new management module for the WebView Home Page is `systemMM.jar.`

Management Modules Have Propagate to Team Center Check Box Set to False

Many management modules include a `Propagate to Team Center` check box, which propagates WebView alerts to Team Center. The management modules are configured so that this check box is now set to `false` by default.

More information: Team Center UI Components (https://docops.ca.com/display/APMDEVOPS103 /UI+Components)

ChangeDetector and CEM BT Stats Management Module Changes

These management modules are no longer deployed by default, and are now located in the Examples directory.

Installer Changes for Management Modules

CA APM Integration for CA Application Delivery Analysis (ADA) and SOA Performance Management are no longer preselected in the installer and installed by default.

New Business Segment Browse Tab

In the WebView Metric Browser tree, a new Browse tab helps you investigate Business Segment data. The new Browse tab provides BlamePoint metrics for investigating defined business-transactions browser performance. For example, metrics for a `Login via <browser_name>` business transaction.

More information: Monitor Browser Response Time (https://docops.ca.com/display/APMDEVOPS103/Monitor+Browser+Response+Time)

Sample, Differential Analysis, and Triage Map Configuration Management Module Changes

New Default Management Modules

For a new installation, the default management modules are Default, Supportability, and System. The Default and System management modules replace the Sample, Differential Analysis, and Triage Map Configuration management modules. The Sample, Differential Analysis, and Triage Map Configuration management modules are no longer provided.

Upgrading from CA APM 10.x to 10.3

When upgrad ing from 10.0, 10.1, or 10.2, the installer moves the Sample, Differential Analysis, Triage Map Configuration, and custom management modules. The installer places the management modules in the *<EM_Home>*/backup directory. This file move ensures that any custom configurations are not lost. The installer also creates a copy of the moved management modules in the *<EM_Home>* /config/modules directory.

To complete the upgrade, manually transfer your custom configurations as directed in the management modules upgrade procedure (https://docops.ca.com/display/APMDEVOPS103 /Upgrade+Introscope+Manually). Verify that your custom management modules appear correctly in the < *EM_Home>*/config/modules directory.

More information: Upgrade Introscope Manually (https://docops.ca.com/display/APMDEVOPS103 /Upgrade+Introscope+Manually)

APM Installer

The APM installer packages these databases:

- PostgreSQL database r9.2.15

- Oracle JRE r1.8u74 for all platforms except AIX

See the CA APM Compatibility Guid (https://support.ca.com/irj/portal/phpsupcontent?
techDocAccess=N&contentID=883df031-705e-425b-9a0e-73130da8a204)e for the most current database
versions that are packaged in the APM installer.

Use APM Installer for PostgreSQL APM Database Upgrade

You can upgrade the PostgreSQL APM database using the CA APM installer. Upgrading using the
installer migrates sch ema and data from CA APM version 9.1 and later to v ersion 10.3. You can also
upgrade the PostgreSQL database and migrate the data manually.

Cross-Enterprise APM

For information about the enhancements for CA Cross-Enterprise Application Performance Management, see Cross Enterprise APM Release Notes. (https://docops.ca.com/display/CCAPM103 /Release+Notes)

APM Products and Resources

For more information about APM products and resources, visit APM Solutions (http://www.ca.com/us /products/application-performance-management.aspx?intcmp=headernav).

Resolved Issues

The following issues were resolved in CA APM 10.3:

DE154807 - Occasional WebView Start Failure When Using WVScript.sh Control Script (AIX 7.1)

Valid for: CA APM 10.2, Enterprise Manager that is installed on AIX 7.1, WebView

Symptom:

When the Enterprise Manager is installed on AIX 7.1, infrequently WebView can fail to start when using the `WVScript.sh` control script.

DE143118 - Browser Agent JavaScript Name Formatter Issue with Transaction Trace

Valid for: CA APM 10.2, Browser Agent, JavaScript extension framework

Symptom:

The Browser Agent allows you to modify the metric path reporting structure. When you use the JavaScript extension framework, the metric path for the Browser Agent metrics is altered. However, the corresponding transaction trace component metric path remains unaffected. This situation causes the transaction trace to be located under a different metric tree branch than expected.

DE142543 - International Characters in Business Transactions Corrupted in WebView

Valid for: CA APM 10.2, Browser Agent

Symptom:

Due to Browser agent issues, when international characters are included in Introscope business transactions WebView displays the incorrect character set.

DE140733 - Google Chrome Page Preload Prevents JavaScript Instrumentation

Valid for: CA APM 10.2, Browser Agent, Google Chrome

Symptom:

Google Chrome pre-loads webpages by predicting the links that you might click, preparing them to load instantly. Several webpages can be loaded before a user visit. The Browser Agent cannot differentiate between a preloaded web page and a user visit. Because the Browser Agent prevents multiple JavaScript instrumentations, a preloaded web page prevents JavaScript instrumentation upon an actual user visit.

DE139261 - Differential Analysis Stops Working When CDV Connects to Collectors

Valid for: CA APM 10.1, 10.2, Cross-cluster Data Viewer (CDV), Differential analysis

Symptom:

When running differential analysis on a CDV, the differential analysis baseline calculators stop working simultaneously on all the Collectors. The following message is logged:

<time and date> `[INFO] [PO:main Mailman 5] [Manager] Stopping all Baseline Alert Calculators`

DE137979 - Enterprise Manager Unresponsive When Starting

Valid for: CA APM 10.1, 10.2, Enterprise Manager

Symptom:

The Enterprise Manager hangs when many agents connect simultaneously during startup.

DE137396 - Browser Agent WilyCmd=cmdMetrics Content Type Defaults to XML in Firefox

Valid for: CA APM 10.2, Browser Agent

Symptom:

By default, the Browser Agent does not explicitly set the response type to the metric POST request. This behavior causes some browsers to interpret the response as application/XML mime type. As a result, some browsers report a **no element found** error message.

DE132344 - WebView Clients Problems When Using HTTPS to Connect to the WebView Server

Valid for: CA APM 10.0, 10.1, 10.2, WebView client and server

Symptom:
The WebView clients computers have problems because the `certAlias` property is missing from the `webview-jetty-config.xml` file.

DE131224 - Negative Value for Bytes Sent and Received Metrics

Valid for: CA APM 10.3, IBM WebSphere MQ

Symptom:

When monitoring IBM WebSphere MQ, the Bytes Sent and Bytes Received metrics show continuously growing high negative values.

> ⚠️ **Note:** In addition to the defect fix, the IBM WebSphere MQ, the Bytes Sent and Bytes Received metrics are renamed. The new metric names are Bytes Sent per Interval and Bytes Received per Interval.

DE128727 - Null Pointer Error After WebView Log-in

Valid for: CA APM 9.7, 10.0, 10.1, 10.2, WebView, Management Module

Symptom:
Immediately after a user logs in to WebView, a null point error is thrown. The issue occurs when any management module has an SMTP email notification action defined.

DE124351 - Java Agent Does Not Instrument Servlets

Valid for: CA APM 10.1, 10.2, Java agent

Symptom:

The Java agent does not instrument servlets as expected, and frontends do not display.

DE123679 - Web Service and Backend Metrics Explosion Due to Unique Metric Names

Valid for: CA APM 9.5, 9.6, 9.7, 10.1, 10.1, 10.2

Symptom:

URLs include an embedded query parameter that results in unique metric names.

DE118716 - Browser Agent Instrumentation Fails Upon Retry

Valid for: CA APM 10.2, Browser Agent

Symptom:

The Browser Agent instruments a few JavaScript functions when loading a web page. When a specific function is not available, Browser Agent retries the instrumentation a few times. The retry logic fails.

DE49412 - Excessive PHP Agent Resource Usage

Valid for: CA APM 9.7, 10.0, 10.1, 10.2, PHP Agent

Symptom:

Excessive PHP agent memory and CPU consumption result from repeated errors when passing a filter command with \ in the class name.

DE49014 - Defective Dashboard Hyperlinks After Management Module Copying

Valid for: CA APM 9.7, 10.0, 10.1, 10.2, Management Modules, WebView dashboards

Symptom:

WebView dashboard hyperlinks can be unresponsive after a management module is copied to an upgraded or new management module.

DE48948 - Not All .NET Web Services Are Discovered

Valid for: CA APM 9.5, 9.6, 9.7, 10.1, 10.1, 10.2, .NET agent

Symptom:

The .NET agent does not discover all web services client calls. Transaction start points or frontends do not clearly show the web service call on the backend.

DE48902 - Error When Accessing Historical Transaction Traces

Valid for: CA APM 9.7, 10.0, 10.1, 10.2, Transaction Trace Viewer

Symptom:
Users can view transaction trace data only for the current day. A traces list displays when viewing traces in the Traces tab in historical mode or Historical Query Viewer query results. However, selecting a trace for any day before the current day results in a Workstation or WebView error. The WebView error includes a null pointer exception.

DE35125 - EPAgent Errors Do Not Display Invalid Metric Values

Valid for: CA APM 10.1, 10.2, Environmental Performance Agent (EPAgent)

Symptom:

When an invalid metric value is passed to the EPAgent, the EPAgent REST interface returns an error message. However, the error message includes the invalid value index, not the metric value.

DE28664 - MOM Startup Delay

Valid for: CA APM 9.7, 10.0, 10.1, 10.2, MOM, Oracle database

Symptom:

The MOM has slow startup times due to an Oracle database query that queries unrelated tables and returns many rows.

DE28648 - Transaction Trace Issues Due to Clock Skew

Valid for: CA APM 10.2, Browser Agent, Application server

Symptom:

Significant clock skew between the client computer and the application server results in transaction trace discrepancies.

Known Issues

The following topics discuss the Known Issues for this release:

APM Command Center Known Issues and Limitations

APM Command Center has the following known issues:

Defect 350848 - Issue Running Agent Controller on AIX as a User with a Default Shell

Valid for : CA APM 9.7, 10.0, 10.1, 10.2, 10.3, AIX Agent Controller

Symptoms:

On AIX, the Agent Controller scripts do not run when user accounts do not have login shell assigned. For example, when the default shell for the user account is set to /bin/false.

Solution:
The Agent Controller runs as a specified user when the account includes a default shell that allows login. For example, `/usr/bin/bash` or `/usr/bin/ksh`.

Defect 348450 - Last Modified Time Incorrect in the Log File (Windows Server 2008)

Valid for: CA APM 9.7, 10.0, 10.1, 10.2, 10.3, Windows Server 2008

Symptoms:

The "last modified" time in diagnostic reports for CA APM agents running on Windows Server 2008 do not report correctly. The agent controller fetches the agent log file as part of the diagnostic report. The diagnostic report shows an earlier time stamp for the agent log file than the actual log file time stamp. This discrepancy happens because the agent can have the log file open for writing when Command Center fetches the file. Windows Server 2008 does not update the time stamp until the file is closed.

Solution:

Read the Microsoft article titled: *File Times*. (https://msdn.microsoft.com/en-us/library/windows/desktop /ms724290(v=vs.85).aspx) See "When writing to a file, the last write time is not fully updated until all handles that are used for writing are closed."

APM Database Known Issues

The APM database has the following known issue:

- Defect 230159 - Migrating Data from Different Time Zones Is Not Supported (see page 27)

Defect 230159 - Migrating Data from Different Time Zones Is Not Supported

Valid for: CA APM 9.1, 9.5, 9.6. 10.0, 10.1, 10.2, 10.3 (formerly defect 76238), PostgreSQL, Oracle

Symptom:

CA APM does not support data migration or restoration from PostgreSQL to Oracle across different time zones. Attempting to do so causes an incomplete migration or restoration and reported errors.

Browser Agent Known Issues

Defect DE42472 - Business Transaction Trace Issues for the Root Directory

Valid for: CA APM 10.2, CA APM 10.3, WebLogic, Browser Agent

Symptom:

For top-level pages, business transaction matching and transaction trace issues can occur when visiting the root directory. This symptom occurs when your application does not explicitly redirect to the corresponding index page, for example:

```
http://SERVER_HOSTNAME:SERVER_PORTNUMBER/myapp/
```

To:

```
http://SERVER_HOSTNAME:SERVER_PORTNUMBER/myapp/index.html
```

Solution:

When using the `includeURLList` property and you want to include the top-level page, specify both the root directory and the index page, for example:

```
http://SERVER_HOSTNAME:SERVER_PORTNUMBER/myapp/
http://SERVER_HOSTNAME:SERVER_PORTNUMBER/myapp/index.html
```

Failure to include both URLs (or a regular expression that matches both) in the `includeURLList` property can result in only receiving metrics when the index page URL is visited. Use a similar format for the `excludeURLList` property when excluding the top-level page.

Defect DE137799 - Mobile Safari 8 Page Load Metrics Are Not Sent on First Page Load

Valid for: CA APM 10.3 Browser Agent on Mobile Safari 8

Symptoms:

- Browser Agent page load metrics are not sent on the first page load of a new session.

- Inconsistencies of 200-300 ms occur between page load metrics from Mobile Safari 8 and other supported browsers.

Workaround:

This behavior occurs because Mobile Safari 8 does not support the Navigation Timing API. Metrics can be inconsistent upon the first page load of a new browser session. For example, the symptoms can appear when a user invokes a page in a new tab or new browser window.

As a work-around, refresh the page for which the metrics do not appear or are inconsistent.

DE142542 - Instrumentation Ignored When JavaScript Functions Invoked with Timing Event Methods

Valid for: CA APM 10.3, all browsers, Browser Agent

Symptom:

JavaScript function metrics are not reported for functions that are invoked with `setInterval` and `setTimeout` JavaScript APIs.

Problem Description:

JavaScript timing event methods like `setInterval` and `setTimeout` create a context of their own for the invoked function. This design is problematic for the Browser Agent, which cannot obtain these contexts. Therefore, the Browser Agent cannot instrument such JavaScript functions.

Solution:

None

Defect DE154433 - Request Does Not Download Large JavaScript File in WebSphere Root Directory

Valid for: CA APM 10.3, IBM WebSphere, Browser Agent

Symptom:

In the root directory page of WebSphere, the `WilyCmd=cmdJS` request does not download a large JavaScript file in response.

Solution:

Use this work-around:

1. Go to *<Agent_Home>*/core/config and open the IntroscopeAgent.profile file in a text editor.

2. Enable and configure the `introscope.agent.browseragent.wilyURL` property to use a static URL, for example:
   http://localhost:5080/myPath?WilyCmd=cmdMetrics

3. Verify that the agent processes this static URL using the `?WilyCmd=cmdMetrics` query string, for example:
   http://localhost:5080/myPath?WilyCmd=cmdMetrics

4. Go to *<Agent_Home>*/core/config and open the `IntroscopeAgent.profile file` in a text editor.

5. Add the `Introscope.agent.browseragent.snippetLocation=<location of snippet.js>` property, for example: S:/sw/ibm/WebSphere85/AppServer/wily_server1 /examples/APM/BrowserAgent/js/snippet.js

6. Save and close the file.

7. Open the `snippet.js` file in a text editor.
   Note: The default snippet.js location is *<Agent_Home>*/wily/examples/APM/BrowserAgent/js /snippet.js.

8. Locate this line:

```
instrumentationLocation : window.location.protocol + "//" + window.location.
host + window.location.pathname,
```

9. Change the line to:

```
instrumentationLocation : "http://localhost:5080/myPath",
```

10. Locate this line:

```
var postURL = window.location.protocol + "//" + window.location.host + window.
location.pathname + "?WilyCmd=cmdMetrics";
```

11. Change the line to:

```
var postURL = "http://localhost:5080/myPath?WilyCmd=cmdMetrics",
```

12. Save and close the file.

13. Restart the application or application server.

Customer Experience Manager Known Issues

The Customer Experience Manager has the following known issues:

- Defect DE148335 (Formerly 302134) - Cannot Access Recording Session Content Types Using PC Cursor (see page 30)
- Defect DE147290 (Formerly 313838) - Data Can Be Lost When the Clock Adjusted for Daylight Savings Time (see page 31)
- Defect DE146809 (Formerly 328240) - Unable to Export Large Numbers of Business Transactions (see page 31)
- Defect DE148733 (Formerly 376119) - Configimport.sh Fails to Import the Configuration in Solaris (see page 31)
- Defect 60056 - Some Report Displays Do Not Match PDF Versions (see page 32)
- Defect 65193 - Original Recorded Values and Patterns Appear in the Wrong Characters (see page 32)
- Defect 73910 - Potential Security Risk with CA Directory (see page 33)
- Defect DE145723 (Formerly 86791 and 250618) - Issue with CEM Stability When the Standalone Environment Is Changed to Cluster (see page 35)

Defect DE148335 (Formerly 302134) - Cannot Access Recording Session Content Types Using PC Cursor

Valid for: CA CEM 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, JAWS screen reader

Symptom:

A problem occurs when you use a JAWS screen reader and PC cursor in Administration, Recording Sessions. You cannot navigate in the Content Types Available and Selected lists.

Solution:

Switch from using a PC cursor to a virtual PC cursor. Use the tab and arrow keys to navigate through the Content Types Content Types Available and Selected lists. You can use the Shift + Tab keys to add or remove the items from the lists.

Defect DE147290 (Formerly 313838) - Data Can Be Lost When the Clock Adjusted for Daylight Savings Time

Valid for: CA CEM 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

When the system time is changed for daylight savings time (DST), some CEM aggregated defect data can be lost. The time change causes CEM to collect data for a time period twice. Some data can be lost for that period. The lost data cannot be displayed as defect data in the CEM console.

Solution:

This issue does not have a work-around.

Defect DE146809 (Formerly 328240) - Unable to Export Large Numbers of Business Transactions

Valid for: CA CEM 9.0, 9.1, 9.5, 9.6, 9.7, 10.1, 10.2, 10.3

Symptom:

On the CA CEM Administration, Business Services, Business Transactions tab, you can select a maximum of 25 business transactions for each export. CA CEM provides no method for performing bulk export.

Solution:

This issue does not have a work-around.

Defect DE148733 (Formerly 376119) - Configimport.sh Fails to Import the Configuration in Solaris

Valid for: CA CEM 10.0, 10.1, 10.2, 10.3

Symptom:
A problem occurs when installing the Enterprise Manager on a Solaris 11 computer, and running the `configimport.sh` command. The `configimport.sh` command fails to import the configuration in Solaris and the following error occurs:

```
java.io.IOException: Cannot run program "sh" (in directory "/opt
/database/postgres/bin"): error=2, No such file or directory
```

Solution:

The `configimport.sh` is failing to import the configuration in Solaris 11 because the default database path is used. The default database path for all the platforms is `/opt/database`, and for Solaris 11 it is `/opt/database/postgres/9.2-pgdg`.

The `createdb-postgres.sh` script is modified to include the new database path for Solaris in the `$PATH env` variable.

Defect 60056 - Some Report Displays Do Not Match PDF Versions

Valid for: CA CEM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

The CEM Console reports do not match the PDF reports in all cases. For example, the CEM, Performance report displays some columns in the Console that do not appear on the PDF report. In the CEM, Service Level Management, Business Value report, large numerical values display differently. Large values that appear in the Console are truncated or missing on the PDF report.

Solution:

Use the CEM console report instead of the PDF report.

Defect 65193 - Original Recorded Values and Patterns Appear in the Wrong Characters

Valid for: CA CEM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

A problem occurs when cookies are encoded in Unicode and the business application uses another character encoding. The original recorded values and the patterns do not appear correctly on the Components page. (Business Services, Business Transactions, Transactions, Components)

For example,

Cookie values are encoded in Unicode and the business application uses EUC-KR character encoding. On the Components page, the recorded values for the cookies appear in their Unicode representation.

Solution:

This issue does not have a work-around.

Defect 73910 - Potential Security Risk with CA Directory

Valid for: CA APM/CEM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CA Directory, CA EEM

Symptom:

A potential risk exists for CA Directory. A vulnerability can allow a remote attacker to cause a denial of service condition. Remediation is available to address the vulnerability.

The vulnerability, CVE-2011-3849, occurs due to insufficient bounds checking. A remote attacker can send an SNMP packet that can cause a crash.

The following products are affected:

- CA Directory r12 SP1-SP7

- CA Directory 8.1

- CA products that bundle CA Directory with the installation media:

- CA Identity Manager

- CA SiteMinder

- CA Single Sign-On

- CA DLP

- CA Clarity PPM

- CA Embedded Entitlements Manager (CA EEM) 8.4.409 (8.4 SP4 CR09) and prior

> ⚠️ **Note:** CA Embedded Entitlements Manager is distributed with the following products:

- CA Aion

- CA APM

- CA Asset Portfolio Management

- CA Audit

- CA Automation Suite for Data Centers

- CA Client Automation

- CA Configuration Automation

- CA Directory

- CA eHealth

- CA Infrastructure Management

- CA Introscope

- CA IT Asset Manager

- CA Process Automation

- CA Service Catalog

- CA Service Desk Manager

- CA Service Metric Analysis

- CA Service Operations Insight

- CA Software Compliance Manager

- CA User Activity Reporting Module

- CA Virtual Automation

- CA Virtual Automation for IM

- CA Workflow

- CA Workload Automation

- CA Workload Control Center

Depending on your specific product implementation, you might or might not use CA Directory by default when CA EEM is installed. When installing one of the products in this list, see the product installation or implementation guide for CA Directory details.

The following CA products are not affected:

- CA Directory r12 SP7 CR1 and higher

- CA Embedded Entitlements Manager r12

To determine if the installation is affected, verify the version of `dxserver` by running `dxserver version` on the command line. All versions before version 6279 are affected.

Solution:

For CA Directory, upgrade to SP7 CR1 (build 6279). CA Directory solutions and patches are available here:

https://support.ca.com/irj/portal/anonymous/phpsupcontent?contentID=%7bED89688A-C7A2-4FE9-85D9-1272D345A658%7d

To secure EEM servers with directory SNMP vulnerability in products that include CA EEM 8.4.409 (8.4 SP4 CR09) and earlier, see this article:

Steps to Secure EEM Servers with Directory SNMP Vulnerability (https://support.ca.com/irj/portal /anonymous/phpsupcontent?contentID=%7b0C234958-A014-4435-9EA9-3A39F2866D48%7d)

The vulnerability is related to CA Directory parsing of SNMP packets. To mitigate the risk, you can disable the SNMP port by removing the `set snmp-port` line from the DSA knowledge configuration section. If you use CA Embedded Entitlements Manager for user management, adopt the approach of disabling the SNMP port.

Defect DE145723 (Formerly 86791 and 250618) - Issue with CEM Stability When the Standalone Environment Is Changed to Cluster

Valid for: CA CEM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, standalone Enterprise Manager, Collector, MOM

Symptom:

When you change the environment from a standalone Enterprise Manager to a cluster, a problem can occur. When you direct a Collector to the MOM during the change, CEM becomes unusable.

Solution:

Delete the ts_entity table contents and restart the Enterprise Manager.

Enterprise Manager and Introscope Known Issues

The Enterprise Manager and Introscope have the following known issues:

- Defect DE177434 - Special Character Restriction in Management Module Element Names (see page 36)
- Defect DE176744 - Public REST API Formatting Error (see page 36)
- Defect DE230035 (Formerly 75115) - Selecting Browse All Customer Experience Metrics from the CE Node Context Menu Is Broken (see page 37)
- Defect DE148750 / DE171521 (Formerly 376134) - Separate JVM for Defect Aggregation Fails to Start (see page 37)
- Defect DE148709 (Formerly 376437) - WebView Console Fatal Error Message Displays in MOM Logs (see page 38)
- Defect: DE147533 (Formerly 327759) - Custom Metric Name Displays Incorrectly (see page 38)
- Defect DE146439 (Formerly 251525 / 85261) - Performance Issue with Aggressive Metric Aging of a High Volume of Metrics (see page 38)
- Defect DE145067 (Formerly 230099 / 75808) - CA APM for IBM CICS Transaction Gateway Data Does Not Display Properly on Application Triage Map (see page 39)

Defect DE177434 - Special Character Restriction in Management Module Element Names

Valid for: CA APM 10.3

Symptoms:

When you create a Management Module element in WebView, you can specify only ASCII alphanumeric characters and white spaces. You cannot use special characters.

When you update a Management Module element that has special characters in its name, WebView displays an error saying that the update failed.

Workaround:

Use Workstation to create Management Module element names that require special characters.

If you see the update error when you update a Management Module element in WebView, click OK in the error message box. CA APM applies the updates that you specified.

Defect DE176744 - Public REST API Formatting Error

Valid for: CA APM 10.2, 10.3

Symptom:

The Public REST API error in JSON format is inconsistent when the call results in an exception.

Solution:

This issue does not have a work-around.

Defect DE230035 (Formerly 75115) - Selecting Browse All Customer Experience Metrics from the CE Node Context Menu Is Broken

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Application Triage Map, Metric Browser tree, CEM, Investigator

Symptom:

In some CA APM environments, a problem occurs in the Application Triage Map when right-clicking a Customer Experience node. When you select **Browse All Customer Experience Metrics**, the link does not redirect to CEM metrics in the Metric Browser tree. If you look in the log files, you see an error stating that the node is not found.

Solution:

To view the CEM metrics, go directly to the Investigator tab and navigate to the individual node.

Defect DE148750 / DE171521 (Formerly 376134) - Separate JVM for Defect Aggregation Fails to Start

Valid for: CA APM 10.0, 10.1, 10.2, 10.3 Enterprise Manager, AIX, Windows

Symptom:

An error can occur when an Enterprise Manager that is installed on AIX and Windows starts. This error appears in the Enterprise Manager and AIX logs:

```
[DefectAggregation.Thread1] [Manager.com.timestock.tess.services.scheduler.
DefectAggregationTask] Separate JVM for defect aggregation failed to start
```

Solution:

When defect aggregation is working properly, no action is required. Ignore this error because there is not functionality loss.

If defect aggregation is not working, see KB TEC610514 (http://www.ca.com/us/support/ca-support-online /product-content/knowledgebase-articles/tec610514.aspx) to resolve the issue.

Defect DE148709 (Formerly 376437) - WebView Console Fatal Error Message Displays in MOM Logs

Valid for: CA APM 10.1, 10.2, 10.3, WebView, MOM

Symptom:

This fatal error message in MOM logs is not logged as an exception/error:

```
[Fatal Error] :1:1: Content is not allowed in prolog.
```

The message occurs when WebView sessions require restarting. Restart needed when the screen is dimmed and a modal dialog displays the message:

```
 "The server connectivity has been restored. Your session will be restarted. Press OK
to continue"
```

The message appears shortly after clicking **OK**.

Solution:

This issue does not have a work-around. This issue arises from EEM library authentication, and functionality is not affected. Ignore the message.

Defect: DE147533 (Formerly 327759) - Custom Metric Name Displays Incorrectly

Valid for: CA APM 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

Custom name for a metric is not displaying as configured in a `pbd` file. For example, when you change the Errors Per Interval metric in `errors.pbd` to Errors per Interval XZY, the metric displays as Errors Per Interval, not Errors Per Interval XYZ.

Solution:

This issue has no work-around. In new mode, the tracer creates the metric name. The `pbd` file is not used to create the metric name.

Defect DE146439 (Formerly 251525 / 85261) - Performance Issue with Aggressive Metric Aging of a High Volume of Metrics

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

Aggressive metric aging with the following two properties set to low values results in memory growth over a long period:

- **introscope.agent.metricAging.heartbeatInterval**
  Specifies the polling interval. This value is the interval at which the agent checks for metrics that have aged.
  Default: 86400 seconds

- **introscope.agent.metricAging.numberTimeslices**
  Specifies the metric age and is the time that has elapsed after a metric was last reported. This value determines when the metric is eligible to be aged out.
  Default: 180000 timeslices

Solution:

Do not configure the agent to age out metrics frequently. Use the default values or higher for the polling interval and metric age properties in the `IntroscopeAgent.profile`.

Defect DE145067 (Formerly 230099 / 75808) - CA APM for IBM CICS Transaction Gateway Data Does Not Display Properly on Application Triage Map

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CA APM for IBM CICS Transaction Gateway, Application Triage Map

Symptom:

The IBM CICS Transaction Gateway Server can run on a host different from the IBM CICS Transaction Gateway Client host. In this situation, CA APM for IBM CICS Transaction Gateway data does not display properly on the application triage map.

Solution:

This issue does not have a work-around.

Defect DE145053 (Formerly 230214 / 76598) - ResourceMetricMap.properties File Not Retained After Upgrade

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

The installer fails to retain the `ResourceMetricMap.properties` file after an upgrade from APM version 9.1.0.

Solution:

Restore the file from the backup folder.

Defect DE135076 - Handshake Exception in WebView Log While Accessing HTTPS WebView on IE 11

Valid for: CA APM 10.1, 10.2, 10.3, WebView, Internet Explorer 11

Symptom:

The `IntroscopeWebView.log` contains `javax.net` (http://javax.net/)`.ssl.SSLHandshakeException` when accessing WebView using https on Internet Explorer 11. Internet Explorer closes the connection unexpectedly with TLS1.2 protocol and cert chains containing an MD5 hash. After the exception, the connection is downgraded to the TLSv1 protocol. All communication is secure.

Solution:

You can use the ca.com (http://ca.com/) certificate, instead of the legacy Wily certificate. Add `<Set name="certAlias">spprivatekey</Set>` to SSL configuration in the `webview-jetty-config.xml` file.

Defect 85272 - WebView Issue with Upgrade

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, WebView

Symptom:

When upgrading, the new WebView Home Page displays several charts and alert statuses. These statuses were defined in the Triage Map Configurations management module in previous CA APM releases. The older module file, `TriageMapConfigurationsManagementModule.jar`, is not overwritten during the upgrade process.

Solution:

To show the charts and alerts for the WebView **Home Page**, deploy the following new metric groups and alerts that are defined in the CA APM 9.6 `.jar` file:

- New metric groupings: The new alert added is Triage Map Backend Calls Status.

    - APM BT Average Response Time (ms)

    - APM BT Errors and Stalls

    - APM Frontends Average Response Time (ms)

    - APM Frontend Errors and Stalls

The new version of the `TriageMapConfigurationsManagementModule.jar` file is in the modules-upgrade directory. If you have defined Triage Map Alerts from the previous release, deploy the new version of `TriageMapConfigurationsManagementModule.jar` and recreate the alerts. You can also copy the new Home Page-related metric groupings and alerts into the saved copy of the file.

Defect 78714 - Various Dashboard Widgets Not Supported

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Console dashboard, Workstation, WebView

Symptom:

In WebView, various dashboard widgets are not supported in the Console dashboards.

Solution:

Not all dashboard widgets included in the Introscope Workstation are supported in WebView.

Follow these steps:

1. In WebView, click the **Console** tab.

2. Select a dashboard from the drop-down list.

3. View the charts and graphs.

In some cases, you cannot view various widgets. For example, a gauge, a line with arrows, or an equalizer widget.

Defect 74115 - Applying Dashboard Lens Can Incur Data Lag in Dashboard Editing

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Console dashboard

Symptom:

When editing a dashboard to add a new simple alert, a lens is applied to the dashboard. Some time elapses before the new alert displays any status data.

When you navigate to a dashboard without a lens that is applied, the existing alerts display status almost immediately.

Solution:

This issue does not have a work-around.

Defect 66146 - Backend Traces Not Automatically Included

Valid for: CA APM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CEM, Enterprise Manager, SYSVIEW, CA Cross-Application Performance Management

Symptom:

A problem occurs when running an automatic transaction trace from CEM and a transaction matches the filter on the frontend. CEM does not automatically include the backend trace information. This issue occurs because of a performance enhancement that prevents too many traces from overloading the Enterprise Manager.

Solution:

If you want to include backend trace data (for example, from the SYSVIEW extension) with transaction traces, enable them by setting `introscope.agent.transactiontracer.tailfilterPropagate.enable=true` for every agent. Or, if you are running transaction traces from Introscope, you can do a second trace on the backend agent.

If you have installed the SYSVIEW extension, you can also launch a new backend trace from an existing frontend trace. You can prepopulate the Transaction Trace dialog with the pertinent trace details.

> ⓘ
>
> **More information**: *CA Cross-Enterprise Application Performance Management Guide (https://docops.ca.com/display/APMDEVOPS103 /APM+Integration+for+CA+Infrastructure+Management)*

When there are too many transaction traces or too many continuously running, the traces can potentially flood the Enterprise Manager. The Enterprise Manager can stop working.

Defect 64181- Problem with LDAP Default Query for Groups

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Introscope, LDAP

Symptom:

If you configure Introscope to authenticate users via LDAP and no value is explicitly assigned to the `groupMemberQuery` attribute or it is undefined, then by default Introscope uses the following value while authenticating an LDAP user:

```
groupMemberQuery=(&amp;(objectClass=groupOfUniqueNames)(uniquemember={0}))
```

Depending on the LDAP server that is being used, `uniquemember` is not i ndexed and can initiate a complete scan on the LDAP server. This scan can lead to performance issues on both the Enterprise Manager and LDAP side.

Solution:

Change the default value appropriately, based on your server configuration.

Defect 61584 / 59231 - Domain Definition Issues in Clustered Environment

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CEM console, MOM, Collector

Symptom:

You can use the CEM console to set up agent filters to limit the agents participating in a Business Service definition. When you perform this setup and the CEM console is in a cluster, problems occur with business definitions. When domain definitions in the MOM do not match the domain definitions in the Collector. In this situation, business definitions might not get sent to the desired agents.

Solution:

Read Defining and mapping agents to a domain (https://docops.ca.com/display/APMDEVOPS103 /Define+and+Configure+Introscope+Domains). Create domain definitions in the `domains.xml` file on the MOM Enterprise Manager and copy this file to each Collector Enterprise Manager in the cluster, then restart each Enterprise Manager.

Defect 61213 - Tree Persistence in Map Tab

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3 Application Triage Map

Symptom:

Nodes can persist in the By Frontends and the Business Services trees in the Triage Map. The nodes can persist after agents that supplied metrics about the applications and business services are stopped.

Solution:

Restart the Enterprise Manager and then the nodes disappear from their respective tree hierarchies.

Defect 60188 / 52556 - Using Alerts to Trigger Shell Actions

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

An error can occur when a shell action calls a batch file, and frequent alerts trigger the action. The error message is similar to this example:

```
Action 'Test' failed to execute shell command 'C:\Introscope9.0\test.bat' with bad
process exit value '1'
```

Solution:

Edit the `IntroscopeEnterpriseManager.properties` file and change the value of `introscope.enterprisemanager.maxConcurrentActions` from the default of 5, which allows too many processes to compete for the shell command, to 1:

```
introscope.enterprisemanager.maxConcurrentActions=1
```

Because there are some potential downsides to this solution, implement this work-around only when you encounter the problem.

Defect 59422 - First Error Sometimes Not Reported or Displayed

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Enterprise Manager, Investigator

Symptom:

After an agent starts, when the first transaction monitored throws an error, the Enterprise Manager does not report the error. The Investigator does not display the error. Subsequent errors after the first error are reported and displayed.

Solution:

This issue does not have a work-around.

Defect 49422 - Misleading Data Occasionally in SOA Dependency Map

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, SOA Dependency Map, Investigator

Symptom:

In the SOA Dependency Map, misleading data for some Investigator nodes can display after switching from live to historical mode. Even if there were no discovered dependencies during the selected historical time period, a map can still display.

This situation applies to selection of any of these Investigator nodes: **Agent, Virtual agent, WebServices, WebServices|Client, WebServices|Server**, or individual services or operations under the **WebServices|Client, WebServices|Server** nodes.

Solution:

This issue does not have a work-around.

Defect 46035 - View Metric Count Chart Only in Live Mode

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

Data for string-based metrics is not stored in SmartStor. This situation results in the Metric Count pie chart and accompanying table not reporting correct metric counts in historical mode.

Solution:

View the Metric Count pie chart only in live mode.

Defect 42368 / 42211 - Labeling Issue on Time Series Bar Charts

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

In reports, time series bar charts can contain misleading data labels. The item label does not have a unique name for identifying a series in a metric group.

Solution:

Avoid using `$agentname` as a key for identifying a series. Use the fully qualified agent name.

Defect 41856 - Accuracy in 'Partial Metrics with Data' Metric

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

Partial Metrics with Data is a supportability metric under the path **CustomMetricAgent|EM|Connection|DataStor|MetaData:Partial Metrics with Data.** Due to the way the Enterprise Manager tracks internal metrics about its own performance, take the value of the **Partial Metrics with Data** metric as an approximate figure only.

Solution:

This issue does not have a work-around.

Extensions and Integrations Known Issues

Extensions and integrations have the following known issues:

Defect 304061 - Unable to Install CA APM for SharePoint Monitor Extension

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, CA APM for SharePoint Monitor using the .NET or Standalone installer wizard

Symptom:

When installing CA APM for SharePoint Monitor using the .NET or Standalone installer wizard, the installation fails. This error message displays:

Server not found. Verify that the specified server exists. The Server name cannot be empty.

Solution:

Ensure that the Computer Browser service is started before you begin installing the extension. If the Computer Browser service cannot be running, install this extension from a command line using silent mode.

Defect 67375 - SharePoint 2010 OSS Secure Store Tickets Metrics Might Not Be Accurate

Valid for: CA APM 9.0 9.1, 9.5 9.6, 9.7, 10.0, 10.1, CA APM for SharePoint

Symptom:

In CA APM for SharePoint, the following SharePoint 2010 OSS Secure Store Tickets metrics can display inaccurate data:

- Tickets issued per second

- Tickets redeemed per second

Solution:

This issue does not have a work-around.

Installation and Upgrade Known Issues

Installation and upgrade have the following known issue:

Defect DE163262 - Single Component Upgrade Prevents Full CA APM Uninstall

Valid for: CA APM 9.5 and later versions

Symptom:

After upgrading one component using the APM installer, problems occur when using the uninstaller to uninstall all CA APM components. The uninstaller removes only the last upgraded component from the *<EM_Home>* directory, and does not remove other installed components.

For example, your environment consists of an Enterprise Manager, WebView, and APM database that were installed in the *<EM_Home>* directory. You run the APM installer to upgrade all the components. During the upgrade, there is an APM database install error. You find the error source, and rerun the installer, selecting only the APM database for upgrade.

Sometime later, you decide to uninstall CA APM. When running the uninstaller, you cannot select any components, because all the components are supposed to uninstall automatically. In this example, you expect the Enterprise Manager, WebView, and APM database to be uninstalled. However, the uninstaller removes only the APM database, which is the last component that you upgraded. The uninstaller does not remove the Enterprise Manager and WebView, from the *<EM_Home>* directory as expected.

Solution:

When upgrading one or more components using the APM installer, select to upgrade (install) all the components for an upgrade version. Install all the components even when some components have already been upgraded.

To perform a database-only upgrade, point to a different installation directory than *<EM_Home>*.

Java Agent Known Issues

The Java agent has the following known issues:

- Defect 275216 - Agent Goes into an Unstable State When the System Time Goes Backwards (see page 48)
- Defect 250819 (Formerly 83982) - introscope.agent.transactiontrace.componentCountClamp Update Requires an Agent Restart (see page 48)
- Defect 229884 (Formerly 73540) - Performance Improvement Clarifications for CA APM (see page 49)
- Defect 84418 - Increase in CPU Utilization with Agent 9.1.1 and Higher on Oracle RAC (see page 49)
- Defect 75901 - Oracle Backend Metrics Appear Under Unexpected Node (see page 49)
- Defect 75900 / 230111 - Metrics Appear Under Single Node for Non Keyword-Value Syntax for Oracle RAC DB (see page 50)
- Defect 75783 - Error Instrumenting JBoss 7 Applications (see page 51)

Defect 275216 - Agent Goes into an Unstable State When the System Time Goes Backwards

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

When the system time is rolled back by more than 20 minutes, a running agent can become unstable. The application being monitored might get affected.

Solution:

Avoid rolling back the system time when the agent is running.

⚠️ **Note:** When the time is restored back to the original time, the agent becomes stable again.

Defect 250819 (Formerly 83982) - introscope.agent. transactiontrace.componentCountClamp Update Requires an Agent Restart

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

The `introscope.agent.transactiontrace.componentCountClamp` property does not get updated when initialized to a value lower than 5000.

Solution:

Restart the agent after specifying the new value.

Defect 229884 (Formerly 73540) - Performance Improvement Clarifications for CA APM

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3

Symptom:

When instrumenting the Sun JVM RHEL with the CA APM Java agent, and the JVM is executing a heavily multi-threaded application, some memory improvements might not occur. In situations where the threads are constantly performing tasks (not waiting on other threads or blocked), then you might not experience some of the memory improvements being delivered in other CA APM environments. However, you still experience improved throughput and response times.

Solution:

This issue does not have a workaround.

Defect 84418 - Increase in CPU Utilization with Agent 9.1.1 and Higher on Oracle RAC

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Oracle RAC

Symptom:

For agent 9.1.1 and higher, you see separate nodes for each instance of an Oracle RAC cluster. This situation can result in a higher CPU utilization.

Solution:

Adding the following property in the agent profile might help reduce the CPU utilization:

```
introscope.agent.sqlagent.cacheConnectionsURLs=true
```

Defect 75901 - Oracle Backend Metrics Appear Under Unexpected Node

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Oracle standalone and RAC databases connecting with Type 2 and Type 4 JDBC drivers

Symptom:

Backends node can metrics display under *Actual_Host_Name*-(Oracle DB) instead of <SID> < *Host_Name*>-port (Oracle DB). This issue occurs when the jdbc URL is specified with a single "host" string. This issue has occurred in Oracle standalone and RAC databases connecting with Type 2 and Type 4 JDBC drivers.

For example:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<hostname>)(PORT=port1))
(CONNECT_DATA=(SERVICE_NAME=<serviceName>)(SERVER=DEDICATED)))
```

> ⚠ **Note:** SID can be replaced with either SID or service name.

Solution:

The jdbc URL must be given in the following format:

For a RAC database

```
jdbc:oracle:[thin/oci]:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<hostnamea>)
(PORT=port1))(ADDRESS=(PROTOCOL=TCP)(HOST= <hostnameb>)(PORT=port2))(ADDRESS=
(PROTOCOL=TCP)(HOST= <hostnamec>)(PORT=port3))(CONNECT_DATA=(SERVER=DEDICATED)
(SERVICE_NAME=<serviceNameAAA)))
```

For a standalone database

```
jdbc:oracle:thin:@hostnamea:port1:sidA
```

Defect 75900 / 230111 - Metrics Appear Under Single Node for Non Keyword-Value Syntax for Oracle RAC DB

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Oracle RAC database, Type 2 and Type 4 JDBC drivers

Symptom:

Metrics under the Backends node display under a single node. This display is regardless of the backend RAC Database node that to which the application is connected. This information is relevant to both Type 2 and Type 4 JDBC drivers.

For example:

```
jdbc:oracle:thin:@<hostname>:port:<SID>
```

Note: SID can be replaced with either SID or service name.

Solution:

The RAC connect string or the URL must be given in the standard RAC URL format. For example:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=<hostnamea>)(PORT=port1))
(ADDRESS=(PROTOCOL=TCP)(HOST= <hostnameb>)(PORT=port2))(ADDRESS=(PROTOCOL=TCP)(HOST=
<hostnamec>)(PORT=port3))(CONNECT_DATA=(SERVER=DEDICATED)
(SERVICE_NAME=<serviceNameAAA)))
```

Defect 75783 - Error Instrumenting JBoss 7 Applications

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, JBoss 7 applications

Symptom:

Users with agents instrumenting JBoss 7 applications might see an error in agent logs such as follows:

```
3/29/12 02:34:11 PM IST [ERROR] [IntroscopeAgent.Agent] A problem
occurred while attempting to Introscope-enable com/test
/SingletonSBean$$$view2: com.wily.diagnos.personality.java.classfile.
constants.DGClassConstant cannot be cast to com.wily.diagnos.
personality.java.classfile.constants.DGUtf8Constant
```

Solution:

This issue does not have a workaround. You can ignore this error message because there is no loss of functionality.

Defect 75733 - BCI Failing for Some EJB Applications

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, EJB applications

Symptom:

You might see `CLASSCASTEXCEPTION` when instrumenting dynamic proxy classes that the EJB container generates.

Solution:

Skip the classes to avoid the exceptions in the log files. With this solution, there is no loss of functionality.

For example,

Create a PBD file or edit the `jboss4x.pbd` file and add the skip directives of the classes for which you are seeing the errors:

```
SkipClass: org.jboss.as.quickstarts.singleton.Counter$$$view13 SkipClass: com.test.
SingletonSBean$$$view3
```

Defect 75328 - Node Name for JDBC URL Displays Incorrectly If No Optional Keyword Port Is Specified

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Oracle database, JDBC

Symptom:

When accessing Backends node, you might see node names with the following format:

```
<SID>-<HostName>-<port> (Oracle DB)
```

This format is translated to the following format if the port number is not mentioned in the URL:

```
<SID>-<HostName>- (Oracle DB)
```

Solution:

The Oracle database URL or connect string must include the port number.

Defect 72879 - Missing Thread Pool Metrics on Tomcat 6.0.24

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Tomcat application server version 6.0.24 on 32-or 64-bit Windows

Symptom:

Due to a third-party issue, users of the Tomcat application server version 6.0.24 on 32-or 64-bit Windows might experience missing data for some thread pool metrics, and some resource metrics from the `TomcatMonitoring.jar`, `GCMonitor.jar`, and PlatformMonitor.dll extensions.

Solution:

Remove the Tomcat native libraries, contained in the file tcnative-1.dll, from the Tomcat installation.

Defect 63857 / 38868 / 38867 - Frequent Class Redefinition Under Dynamic Instrumentation Can Result in OOM Condition

Valid for: CA APM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, dynamic instrumentation, specific JVMs including Sun HotSpot

Symptom:

When using dynamic instrumentation and redefining a large number of classes under specific JVMs, such as Sun HotSpot, an `OutOfMemoryerrordisplays, and` the application crashes. This error is a result of how `PermGen` is handled in the specific JVM.

Solution:

Increase the amount of memory that is allocated to Perm Gen, or alternatively, turn off dynamic instrumentation. The amount of increased memory depends on your JVM and on the size of your application.

If you continue to encounter these errors, contact CA Support.

Defect 58653 / 49328 / 48885 - Increase Memory to Use Extra Instrumentation with WebSphere 7

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, WebSphere 7, LeakHunter

Symptom:

In WebSphere7, an Out of Memory error can occur when you turn on extra instrumentation such as exception tracing or LeakHunter.

Solution:

Increase the memory available to the JVM. Increase maximum JVM heap size setting on the WebSphere application server to at least 1 GB.

Defect 49146 - ws70x.pbd Does Not Contain Trace Directives for WebSphere 7 Specific Classes

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, WebSphere 7

Symptom:

For WebSphere 7 Installations, the `ws70x.pbd` does not contain trace directives for WebSphere 7 specific classes that implement J2EE classes/interfaces.

Solution:

This issue does not have a workaround.

Defect 39884 - Toggling ManagedSocketTracing During Runtime Can Result in Error

Valid for: CA APM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, dynamic instrumentation

Symptom:

Dynamic Instrumentation does not support changes in Class Substitution which is used by the `ManagedSocketTracing` group. So attempting to toggle `ManagedSocketTracing` during runtime evokes an error message such as follows:

Unsupported change to active AutoProbe configuration. Using existing configuration.

Solution:

Restart the JVM after modifying the `.pbd` file.

Localization Known Issues

Localization has the following known issues:

- Defect DE147642 (Formerly 229766 / 72360) - Localized PDFs Can Contain Garbled Text (see page 54)
- Defect DE147152 (Formerly 254284) - Screen Captures Not Localized (see page 54)
- Defect 230081 (Formerly 75638) - Legend Strings Are Not Localized in APM Reports (see page 55)
- Defect 82709 - Graph in CEM Console Contains Garbled Characters (see page 55)
- Defect 66173 - Some Management Modules Might Appear in English Despite non-English Locale (see page 55)

Defect DE147642 (Formerly 229766 / 72360) - Localized PDFs Can Contain Garbled Text

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Japanese, Korean, Traditional Chinese, or Simplified Chinese PDFs, CEM on Internet Explorer

Symptom:

You might see that the text in some Japanese, Korean, Traditional Chinese, or Simplified Chinese PDFs are garbled. For example, when using CEM on Internet Explorer, right-click the PDF link. When you select **Open in New Window**, some garbled text appears in the PDF.

Solution:

Use Mozilla Firefox.

Defect DE147152 (Formerly 254284) - Screen Captures Not Localized

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, *CA APM for CA SiteMinder Application Server Agents*

Symptom:

Graphics in *CA APM for CA SiteMinder Application Server Agents* are not localized.

Solution:

This issue does not have a workaround.

Defect 230081 (Formerly 75638) - Legend Strings Are Not Localized in APM Reports

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Infrastructure Management Integration, CA Performance Center

Symptom:

In the CA APM and Infrastructure Management integration, a reports problem can occur. When CA APM reports display on CA Performance Center, then the status bar legends are not translated in the local language. The legends remain in English.

Solution:

This issue does not have a workaround.

Defect 82709 - Graph in CEM Console Contains Garbled Characters

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CEM Console, Workstation, Linux, non-English locales

Symptom:

On a Linux system running the Workstation, users might see illegible or garbage characters in some displays.

Solution:

Install a font on the computer for the locale.

Defect 66173 - Some Management Modules Might Appear in English Despite non-English Locale

Valid for: CA APM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Management Modules that are defined with both English and Japanese, Command Line Workstation (CLW)

Symptom:

Management Modules that are defined in both English and Japanese include some sample dashboards. Running a list dashboards CLW command from a Japanese client connecting to an English Enterprise Manager can have problems. The command can return dashboards that appear in English, not in Japanese as expected.

Solution:

This issue does not have a work-around.

NET Agent Known Issues

The .NET agent has the following known issues:

Defect DE146521 (Formerly 231604 / 85251) - Dynamic Instrumentation Not Supported When LeakHunter Is Running

Valid for: CA APM 9.1 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, dynamic instrumentation, LeakHunter in a .NET environment

Symptom:

When you enable Dynamic Instrumentation on a .NET application with the LeakHunter running, the application becomes unstable.

Solution:

This issue has these two work-arounds:

- Comment out the `DoNotSkipMethodForClass: System.Collections.Stack .ctor` tracer in `leakhunter.pbd` .

- Disable Leakhunter by setting introscope.agent.leakhunter.enable=false in the `IntroscopeAgent.profile` when you enable dynamic instrumentation on a .NET application.

Defect DE146048 (Formerly 250619 / 86792) - Issue with LeakHunter on Windows 2003 Server

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, LeakHunter, Windows Server 2003 in a .NET environment

Symptom:

When you enable LeakHunter on Windows Server 2003 in a .NET environment, the application does not start. The following error message displays:

Failed to execute request because the App-Domain could not be created.

Solution:

To work around the issue, perform *one* of the following solutions:

- Disable LeakHunter on Windows Server 2003.

- Use Windows Server 2008.

Defect 52637 - Disconnected Agent Display Can Persist

Valid for: CA APM 9.0, 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, .NET agent, Workstation

Symptom:

When an agent disconnects from the Enterprise Manager, Workstation Metric Browse tree icon turns gray within 4 to 5 seconds. This issue results in about 30 through 45 seconds to inform the Enterprise Manager about the disconnect. These factors can affect the time that it takes to inform the Enterprise Manager about an agent disconnect:

- Network topology

- Amount of network traffic

- TCP/IP configuration on the OS

- Overall load on the agent hardware

- Socket settings of the application that the agent is monitoring (notably Microsoft IIS)

During the wait time, no new data appears in the Workstation, although the agent still appears to be connected.

Solution:

This issue does not have a work-around.

Third-Party Known Issues

Third-party software has the following known issues:

Defect DE139066 - Malformed uxxxx Encoding Error Generated When Launching Installer

Valid for: CA APM 10.2, 10.3, Flexera for InstallAnywhere

Symptom:

This defect is a Flexera known issue for InstallAnywhere. You see the following error message:

```
An internal LaunchAnywhere application error has occured and this application cannot
proceed. (LAX)
```

Stack Trace:

```
java.lang.IllegalArgumentException: Malformed \uxxxx encoding.

  at java.util.Properties.loadConvert(Unknown Source)

  at java.util.Properties.load0(Unknown Source)

  at java.util.Properties.load(Unknown Source)

  at com.zerog.common.java.util.PropertiesUtil.loadProperties(Unknown Source)

  at com.zerog.lax.LAX.<init>(Unknown Source)

  at com.zerog.lax.LAX.main(Unknown Source)
```

Solution:

InstallAnywhere is picking up the TITLEBAR and PS1 variables in the shell environment. Certain values might cause problems in the installer. For example, an issue occurs when the following environment variables are set:

```
TITLEBAR="\[\033]\@\h: w\007]\"
```

```
PS1="${TITLEBAR}[\w]\n\u@\h$ "
```

The PS1 environment variable is responsible for the appearance of the command prompt in the console. The letter 'u' represents the user that is logged-in. When the PS1 environment variable includes a 'u', the installer confuses it with a Unicode character and the installation fails.

You can use these workarounds:

- Change PS1 to its default value.

- Omit the 'u' key.

- Run `unset` on both environment variables before installing.
  Keep in mind that if PS1 is unset, then the shell prompt is invisible.

For example: `PS1=">" TITLEBAR="Install" ./workstation-installer-unix`

Defect DE48850 (Formerly 381879) - Cannot Launch Enterprise Manager 10.0 Installer on Solaris in Localized Environment

Valid for: CA APM 10.0, 10.1, 10.2, 10.3, APM installer, Solaris, Flexera for InstallAnywhere 2014

Symptom:

When launching the installer on localized environment of Solaris (for example, Japanese, Korean, Chinese) installer exits abruptly. This problem is a Flexera known issue for InstallAnywhere 2014.

Solution:

You can set the environment variable `DO_NOT_FORK=1` before launching the installer to avoid this issue.

Defect DE46275 (Formerly 378661) - Windows Edge: Team Center Map Texts Disappearing with Hover Changes

Valid for: CA APM 10.1, 10.2, 10.3, Windows 10, Windows Edge browser, Team Center

Symptom:

When viewing the Team Center Map using Windows 10 and Windows Edge browser, unusual behaviors can occur. A vertex and the connected vertices highlight when you h over over them. When you go away from the vertex, the descriptive texts disappear. An item appears when you hover over it again. Sometimes items 'jump' to the side and are shown aligned as they were, shifted far away from their original position.

Microsoft recognizes this problem as bug ID: 1567173

Solution

This issue has no work-around. Awaiting a bug fix from Microsoft.

Defect 362274 - Navigating the Timeline by Clicking the Time Value Does Not Work in Internet Explorer 10

Valid for: CA APM 10.0, 10.1, 10.2, 10.3, Team Center, Internet Explorer 10

Symptom:

Due to a `vis.js` library issue, navigating the timeline by clicking the time value does not work in Internet Explorer 10.

Solution:

You can use another supported browser to view APM Team Center. For a list of supported browsers, see the APM Compatibility Guide.

Defect 361105 - Google Chrome Fixed Heap Size Limitation Affects Team Center Map

Valid for: CA APM 10.0, 10.1, 10.2, 10.3, Team Center, Google Chrome

Symptom:

Google Chrome has a design limitation on the fixed heap size. This limit results in a Team Center Map containing more than 80,000 nodes does not display in Google Chrome.

Solution:

You can use another supported browser to view APM Team Center. For a list of supported browsers, see the APM Compatibility Guide.

Defect 348610: WebView Console Dashboards Do Not Load on AIX

Valid for: CA APM 10.0, 10.1, 10.2, 10.3, WebView, AIX

Symptom:
WebView dashboards do not load. The following error message is recorded:

```
2/05/15 04:17:41.379 PM GMT-06:00 [ERROR] [WebView] Failed to get dashboard with id:
AESEID: type=Dashboard serial=1454148251319


java.lang.ClassCastException: org.apache.xml.dtm.ref.DTMManagerDefault incompatible
with org.apache.xml.dtm.DTMManager


at org.apache.xml.dtm.DTMManager.newInstance(DTMManager.java:137)


at org.apache.xpath.XPathContext.<init>(XPathContext.java:102)


at org.apache.xpath.XPathAPI.eval(XPathAPI.java:225)


at org.apache.xpath.XPathAPI.selectNodeList(XPathAPI.java:167)


at org.apache.xpath.XPathAPI.selectNodeList(XPathAPI.java:147)


at
com.ca.apm.introscope.workstation.webapp.server.utilities.mm
 (http://com.ca.apm.introscope.workstation.webapp.server.utilities.mm/).DashboardManager.
fixColors(DashboardManager.java:592)


at
com.ca.apm.introscope.workstation.webapp.server.utilities.mm
 (http://com.ca.apm.introscope.workstation.webapp.server.utilities.mm/).DashboardManager.
getDashboardXML(DashboardManager.java:202)
```

```
at
com.ca
 (http://com.ca/).apm.introscope.workstation.webapp.server.models.DashboardDetailsModel.
receiveMessage(DashboardDetailsModel.java:92)


at
com.ca
 (http://com.ca/).apm.introscope.workstation.webapp.server.models.
ModelManager$ModelRequestThread$1.run(ModelManager.java:483)


at java.lang.Thread.run(Thread.java:780)
```

Solution:

Use the following workaround:

1. Open the `Introscope_WebView.lax` file in the *<EM_Home>* directory.

2. Add the `-Dorg`.osgi.framework.bootdelegation=org.apache.xpath property in the `lax.nl.java.option.additional` section.

Defect 347157 - WebStart Workstation Startup Exception with Java 1.7

Valid for: CA APM 10.0, 10.1, 10.2, 10.3, Windows, WebStart Workstation, Java 1.7 updates 71 and 72

Symptom:

When the WebStart Workstation launches, a javax.script.ScriptException displays in the Console. The exception occurs when the Java version is Java 1.7 update 71 or 72.

Solution:

A Java known issue causes this problem. Upgrade to a Java 1.7 version later than update 72.

Defect 323929: webMethods Integration Server Does Not Start on AIX

Valid for: Java agent, CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, webMethods Integration Server running on AIX

Symptom:

The JVM launch process fails when trying to start the webMethods Integration Server running on AIX. JVM launch and configuration problem error messages display The wrapper stops.

Solution:

When webMethods uses the java wrapper service to start the Integration server, by default the USE_WRAPPER= field is set to yes in the `server.sh` file.

To work around this issue, in the `server.sh` file, set the `USE_WRAPPER` property to `no` as shown:

```
USE_WRAPPER=no
```

Defect 307028: Enterprise Manager Startup Failure on AIX

Valid for: CA APM 9.5. 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, IBM JVM, Enterprise Manager, AIX

Symptom:
Enterprise Manager startup can fail with the following error message when trying to load management modules:

```
8/01/14 02:43:29.531 PM CEST [DEBUG] [main] [Manager] Error starting up EM

com.wily.introscope.server.enterprise.EnterpriseManagerCannotStartException: An error
occurred while loading the Management Modules.

at com.wily.introscope.server.enterprise.EnterpriseServer.initialize(EnterpriseServer.
java:685)


....


....


Caused by:


javax.xml.transform.TransformerConfigurationException: com.ibm.xtq.xslt.jaxp.
HandledRuntimeException: [ERR 0614] The processor has encountered an internal error
condition. Please report the problem and provide the following information: Method
not found: class = interface org.apache.xml.serializer.SerializationHandler method =
startAttribute args = [class java.lang.String]


at com.ibm.xtq.xslt.jaxp.AbstractTransformerFactory.newTemplates(Unknown Source)


at com.wily.util.xml.converter.XMLConverter.getTemplates(XMLConverter.java:200)


.
```

Solution:
Use the following workaround:

1. Open the `Introscope_Enterprise_Manager.lax` file in the *<EM_Home>* directory.

2. Append this property in the lax.nl (http://lax.nl/).java.option.additional section:
   -Djavax.xml.transform.TransformerFactory=org.apache.xalan.processor.
   TransformerFactoryImpl

Defect 266900 - Issue with Introscope Monitoring OpenJPA Based Application on Java 7

Valid for: CA APM 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Introscope Agent, OpenJPA based application on Java 7

Symptom:

When the Introscope agent monitors OpenJPA based application on Java 7, Introscope byte code instrumentation can expose validation problems. The problems occur in the code that OpenJPA adds. The issue occurs because in Java 7, byte code validation is stricter.

Solution:

Perform one of the following work-arounds:

- In the JVM startup argument, ensure that the -javaagent option of the Introscope agent appears before any other framework or OpenJPA -javaagent option

- Skip the offending methods for Introscope EJB tracing with the following line in the PBD file:
  `SkipMethodForFlag: EntityBean3Tracing pcReplaceStateManager`

Defect 265667 / 73579 - CA APM Database Related Logs Contain Junk Characters

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, PostgreSQL installer, CA APM database installation logs in Chinese, Japanese, and Korean

Symptom:

Because of PostgreSQL Installer behavior, CA APM database installation logs in Chinese, Japanese, and Korean locales might contain junk characters.

Solution:

The log files with this issue are only copies of PostgreSQL temporary files, and do not indicate a problem. You can safely ignore these files.

Defect 256775 - Agent Installer Issue with Java 1.6

Valid for: CA APM 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Windows, Java 1.6, InstallAnywhere

Symptom:

An agent installer problem occurs due to an InstallAnywhere issue. By default the agent installer does not launch on Windows if the server JRE is 1.6.

Solution:

Override the bundled JVM by passing the java path using the variable `LAX_VM` to the installer. For example:

```
install.exe LAX_VM <path to java>/java.exe
```

Defect 253953 (Formerly 85324) - Issue with IIS 7.5 Default Installation

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CA APM for Web Servers, IIS 7.5

Symptom:

If IIS 7.5 is not installed with IIS6 Management Compatibility role, an issue occurs. A problem occurs with CA APM for Web Servers monitoring IIS 7.5.

Solution:

Select IIS7.5 to work in the IIS6 Management Compatibility role during the installation of IIS7.5.

Follow these steps:

1. Launch Server Manager.

2. Select Roles, Web Server(IIS), and Add Role Services.

3. Install the following IIS6 Management Compatibility roles:

   - IIS6 Metabase Compatibility

   - IIS6 WMI Compatibility

   - IIS6 Scripting tools

   - IIS6 Management Console

Defect 250664 (Formerly 83106) - No Warning or Shutdown If 64-Bit Linux EM System Clock Time Moved Backward

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Linux, Enterprise Manager

Symptom:

On 64-bit Linux Enterprise Managers, a problem can occur when the system clock time is moved backward. In this situation, the Enterprise Manager does not issue a warning or shut down. Java JVM defect JDK-6900441 (http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6900441) causes this behavior.

Solution:

Do not change the system time after an Enterprise Manager has started. Stop the Enterprise Manager before resetting the system time.

Defect 231255 (Formerly 82840) - Error When Installing PostgreSQL

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, APM database, Postgres SQL

Symptom:

When installing PostgreSQL DB as the APM database, administrators can see an error similar to the following message:

```
Execute ANT Script: Status: ERROR

Additional Notes: ERROR - C:\Program Files\CA APM\Introscope<Version_Number>\install\db.installer.exec.xml:22: Timeout: killed the sub-process
```

Solution:

The message can be ignored because it has no functional impact.

Defect 85045 - Issue with queue.filter.includeonly.regex Expression for MQ Extension

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CA APM for WebSphere MQ

Symptom:

Due to a third-party issue, the `queue.filter.includeonly.regex` expression that is used in the `MQMonitor.properties` for the MQ extension can accept only * and | special characters.

For example

```
QM1@hostname.queue.filter.includeonly.regex=TEST*|ABC*|WILY*
```

Solution:

This issue does not have a workaround.

Defect 82689 - Introscope Custom Service Fails to Start After Upgrading WebSphere Application Server 7

Valid for: CA APM 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, WebSphere Application Server 7

Symptom:

After upgrading WebSphere Application Server 7, you might see a `java.security.` `AccessControlException` thrown when starting Introscope Custom Service.

Solution:

Perform *one* of the following tasks:

- Modify <*WAS_Home*>/properties/server.policy to allow Java security permissions.

- Clear the `Use Java 2 security to restrict application access to local` `resources` option in the WebSphere Admin console.

This issue does not have a workaround.

Defect 78313 - MQ Monitor / WebSphere MQ Agent Does Not Monitor Queue Managers by Default

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CA APM for WebSphere MQ, WebSphere MQ 7.1

Symptom:

By default, WebSphere MQ agent does not monitor the queue managers on WMQ 7.1because the client channel authentication is enabled.

Solution:

To monitor the queue manager, follow the configuration steps in IBM Technote 1577137 (http://www-01.ibm.com/support/docview.wss?uid=swg21577137),

Note: You can disable the client channel authentication with the following command:

```
ALTER QMGR CHLAUTH(DISABLED)
```

Defect 76104 - APAR R044532 Needed for SYSVIEW R13.5 for CTG Channel Tracing

Valid for: CA APM 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, CA APM for IBM CICS Transaction Gateway Channel Tracing, SYSVIEW R13.5, Workstation

Symptom:

A problem occurs when CA APM for IBM CICS Transaction Gateway (CTG) Channel Tracing works with SYSVIEW R13.5. The Workstation does not generate or collect transaction traces.

Solution:

Apply APAR R044532 on SYSVIEW R13.5 to view CTG Channel Traces appropriately.

Defect 72467 - Negative Values for PMI Metrics on WebSphere 7

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, IBM WebSphere 7, PMI

Symptom:

Users running IBM WebSphere 7 may see negative values for the PMI metrics.

Solution:

Consult IBM bug and upgrade to IBM WebSphere Application Server 7.0.0.15 or upgrade to Fix Pack 15.

Defect 66629 - Issue Starting Introscope Workstation on Vista and Later OS

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Workstation on Windows Vista and later releases

Symptom:

Due to a change implemented by Microsoft in Windows Vista and later releases, a problem occurs. Introscope Workstation cannot launch when installed in the Program Files folder. This problem occurs even when your `userid` is part of the Administrators group.

Solution:

Follow these steps:

1. Right-click Workstation.exe.

2. Select Run as Administrator.

If you are not part of Administrators Group, then Workstation must be installed outside the Program Files folder.

Defect 63210 - OOM Error Requires Update to JVM 1.6u25

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, JVM 1.6u25

Symptom:

Due to a third-party issue, users can encounter an error as follows:

java.lang.OutOfMemoryError: unable to create new native thread

Solution:

Update your JVM to 1.6u25 or higher. For more information, see http://bugs.sun.com/view_bug.do?bug_id=6478317

> ⓘ
> **More information**: Sun bug 6478317 (http://bugs.sun.com/view_bug.do?bug_id=6478317)

Defect 62360 - OOM Error on Sun JVM 1.6.0_16 Can Require JVM Upgrade

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Sun JVM 1.6.0_16 or lower

Symptom:

Due to a third-party defect, an out of memory error can on Sun JVM 1.6.0_16 or lower.

Solution:

Upgrade to a Sun JVM that contains the fix for Sun defect 6423256 (http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6423256). Also consider upgrading to either of these JVMs:

- Linux JVM that supports a heap size more than 1.3 GB.

- 64-bit JVM if already encountering limitations on your 32-bit JVM

Defect 59363 - Issues Starting Agent on WebSphere-Linux Platform

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, IBM WebSphere Application Server 6.1 on 32-bit or 64-bit Red Hat Linux

Symptom:

When running IBM WebSphere Application Server 6.1 on 32-bit or 64-bit Red Hat Linux, a start-up problem can occur. Due to a third-party issue, the Introscope agent can have difficulty starting on the application server.

Solution:

Apply WebSphere Application Server Java SDK 1.5 SR12 or apply WSAS APAR PM05658. Both SR12 and WSAS APAR PM05658 can be downloaded from the IBM Fix Central web site.

Defect 58986 - Dynamic Instrumentation with JBoss or Tomcat App Servers Using Java 5 Not Supported

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, JBoss or Tomcat application servers using Java 5 (1.5.x)

Symptom:

CA APM does not support dynamic instrumentation with JBoss or Tomcat application servers using Java 5 (1.5.x).

If the startup class (`WebAppSupport.jar`) is configured, Dynamic Instrumentation is automatically disabled on these application servers, even if the `introscope.agent.remoteagentdynamicinstrumentation.enabled` property is set to `true`.

If Dynamic Instrumentation is not disabled and `WebAppSupport.jar` is not configured, erratic behavior can result while using Tomcat or JBoss with Java 5.

Solution:

Dynamic instrumentation works on JBoss or Tomcat with Java 6.

Defect 58070 / 52642 - Classic JVM No Longer Supported for Agent on OS/400 (IBMi)

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Introscope agent Classic JVM 1.5 and 1.6 on OS/400 (IBMi), 64-bit JVM for WebSphere Application server 7.0

Third-party issues exist with Classic JVM 1.5 and 1.6 on OS/400 (IBMi). CA APM has stopped supporting Classic JVM for the Java agent on OS/400. To continue using the 64-bit JVM for WebSphere Application Server 7.0, switch to using J9 64-bit JVM.

Defect 55622 / 47451/ 47067 - Java Agent on IBM JDK 1.5 Requires JDK Upgrade

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Introscope Java agent with IBM JDK 1.5, Java agent with WebSphere Application Server 6.1

Due to a third-party defect, if you use the Java agent with IBM JDK 1.5, install SR10 update or higher. When using the Java agent with WebSphere Application Server 6.1, install the following fixpacks:

- WebSphere 6.1 fixpack 27

- WebSphere SDK fixpack 27, which contains SR10

Defect 53425 - Using Java Agent with IBM JDK 1.6 Requires JDK Upgrade

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, Introscope Java agent with IBM JDK 1.6

Due to a third-party defect, if you use Java Agent with IBM JDK 1.6 install SR6 update or higher. When using the Java Agent with WebSphere Application Server 7.0, install WebSphere 7.0 fixpack 7. Also install WebSphere SDK fixpack 7, which contains SR6.

Defect 27492 / 27489 - Stalled Stateless Plugins Might Not Stop Properly

Valid for: CA APM 9.0 9.1, 9.5, 9.6, 9.7, 10.0, 10.1, 10.2, 10.3, stalled stateless plugins, EPAgent

Symptom:

Due to a JRE issue, stalled stateless plugins are not properly killed on some platforms. The stateless plugins continue to consume resources after the EPAgent has been stopped.

Solution:

These orphan processes must be stopped manually.

Transaction Impact Monitor Limitation

The Transaction Impact Monitor (TIM) has the following limitation:

- Flex Message Payload Size Limitation (see page 71)

Flex Message Payload Size Limitation

The Transaction Impact Monitor (TIM) uses the following properties to limit the message payload size when monitoring Flex applications. The message payload maximum request and response size limit is 200,000.

- `MaxFlexRequestBodySize`
  Default: 10000
  Maximum: 200000

- `MaxFlexResponseBodySize`
  Default: 10000
  Maximum: 200000

This limit avoids TIM processing and memory overhead when Flex has large binary payloads.

Support and Compatibility

The CA APM product page on the CA Support website provides the following resources:

- Software and documentation for all releases.

- System information and supported versions, see the CA APM Compatibility Documentation (https://support.ca.com/irj/portal/phpsupcontent?techDocAccess=N&contentID=883df031-705e-425b-9a0e-73130da8a204).

System requirements for CA APM Command Center are described in the Installation Prerequisites (https://docops.ca.com/display/APMDEVOPS103/Installation+Prerequisites) section.