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This topic covers release information for AppDynamics Pro versions 3.8.x.

If you are reading this in PDF format, many links will open in the product documentation wiki. AppDynamics continuously improves its product documentation. The most current release notes are on the wiki at Release Notes for AppDynamics Pro.

3.8.x Updates

3.8.6.3 Updates

Controller

Corrects an issue causing remediation scripts to be invoked with all historical startup
argument values instead of only the latest startup options and system property values. This
issue could lead to startup failures for remediation script, with an error message indicating
argument list too long.

Resolved Issues in 3.8.6.3

Component	Summary
Controller	Remediation scripts fail to run with argument list too long error

3.8.6.2 Updates

App Agent for Java

 Fixes Java Agent performance problems that occur when JDBC backend naming rules are changed to non-default values.

Resolved Issues in 3.8.6.2

Component	Summary
Agent	Agent backend limit not respected at startup
Agent	Java Agent performance problems related to JDBC backend naming rules
Agent	Spring RMI instrumentation not applied

3.8.6 Updates

Component	Summary
Agent	IndexOutOfBoundsException exception generated due to cross-tier correlation errors when business transaction limit is exceeded
Controller	After a data collector configuration is deleted, errors appear in the dashboard showing any Business Transaction previously associated with the collector
Controller	Open incidents not canceled when their associated violating health rule scheduled period ends

Controller	Slow dashboard loading in the UI due to incorrect cache misses
UI	"All Other Traffic" is labeled APPDYNAMICS_DEFAULT_TX in the End User Experience Management (EUEM) UI

3.8.5.1 Updates (SaaS Only)

SaaS Controller

A problem that was causing the tier dashboard to load very slowly has been fixed.

3.8.5 Updates

App Agent for .NET

 The App Agent for .NET disables correlation of ThreadPoolQueueUserWorkItem for the CLR4 by default. Enable it using the async-tracking node property. See Enable Thread Correlation for .NET.

Web EUM

 Browser usage percentages displayed in browser usage screen previously could occasionally be off by up to 5%. The values are now correct.

Component	Summary
.NET Agent	Disable thread correlation with async fixed.
Agent	HIgh CPU by creating custom exit point fixed.
Controller	Harden Controller Installer.
Controller	Package and Deploy the attributions and licenses txt file in Controller home.
Controller	Event reactor's event queues no longer get stuck under certain error conditions.
Controller	Event Reactor fails to properly calculate the lastRsdEvaluatedId fixed.
Controller	EUM and Mobile APM HRs no longer fail to add the respective entities on runtime leads to NPE in controller log.
Node.js Agent	Fixed 100% CPU usage.

Node.js Agent	Fixed App Crash: Headers already sent.
PHP Agent	Fixed PHP BT metrics not reported after detecting 100 BT names.
PHP Agent	Fixed curl_exec not detected if url does not have a scheme.
PHP Agent	Fixed NuSOAP exit calls detected but not correlated with a downstream Java tier.
PHP Agent	Fixed excludes don't work when more than one exclude rule is present.

3.8.4.1 Updates (SaaS Only)

SaaS Controller

- EUM and Mobile APM HRs no longer fail to add the respective entities on runtime leads to NPE in controller log.
- The event reactor's event gueues no longer get stuck under certain error conditions.

3.8.4 Updates

Controller

- The password you enter during installation for the Controller root user is now used for the Glassfish application server administrator as well. Previously, the password for this user was a preset value and not configurable at installation. This change does not affect upgrades. For more information, see Administrative Users.
- The transaction detection REST API call for importing or exporting auto detected entry points now applies to all auto detected entry point configurations in the Controller, regardless of the app agent they were configured with. Previously, only auto detected entry point configurations for the App Agent for Java could be imported and exported using this command; now Java, .NET, PHP, and Node.js auto detected entry point configurations are also exported or imported. See Import and Export Transaction Entry Point Configurations.
- The Linux version of the modifyJvmOptions utility now prevents you from adding a Java option that has the same name as an existing option in the domain.xml file. Previously, it permitted adding an option with the same name as an existing option as long as their values were different. In practice, this often resulted in unintended redundant entries in domain.xml. You must now remove the existing option before adding an option with the same name. Also, a new command for the Linux version of the utility has been added. It prints the existing options in domain.xml. To use it, enter:

./modifyJvmOptions.sh list

For more information about modifyJvmOptions, see Modify GlassFish JVM Options.

App Agent for .NET

- The App Agent for .NET automatically discovers entry points for ASP.NET web forms with the Async property set to "true" in the Page directive.
- If you use Areas to organize your MVC application, the agent includes the Area name in business transaction name. See Identify MVC Transactions by Controller and Action.
- Use the REST API to import and export .NET transaction detection configurations. See Import and Export Transaction Detection Configuration for .NET.

App Agent for PHP

• The App Agent for PHP supports TNSNAMES.ora for discovery of Oracle backends. Previous versions of the agent did not fully support TNSNAMES.ora.

Component	Summary
.NET Agent	404 calls no longer register a new business transaction when MVC Controller cannot be found
.NET Agent	Improved support for applications using WeakReference
.NET Agent	Resolved a memory leak related to AzureBlobExitInterceptor
.NET Agent	Improved business transaction support for ASP.NET 4.0 pages that use the Page property of Async="true"
.NET Agent, Controller	Resolved an issue with ADO.NET DB exit calls auto-resolving to the tier
Agent	Resolved an issue with EOFException on Sun RMI JRMP result stream
Agent	Now delay AMX booting for GlassFish
Agent	Fixed naming of business transactions for custom match rules of type Servlet that use URI segment naming such that resulting name is patterned after <match rule="">.<uri 1="" segment="">//<uri n="" segment=""></uri></uri></match>
Agent, Controller	No longer correlate when cross-Controller requests are detected
Controller	Resolved a minor issue that caused an IllegalArgumentException: inconsistent range
Controller	Information point method names are no longer truncated at 100 characters; now support up to 500

Controller	For new installations, the app server administration account password is now the same as the Controller root user password
PHP Agent	The agent now supports OCI8 and a connection method which uses the file "tnsnames.ora"
PHP Agent	The RPM installer no longer sets the PHP agent log to /agent.log
PHP Agent	Resolved a NullPointerException in proxy logs during agent startup
Android Agent, iOS Agent, UI	Resolved a UI problem displaying data for iOS and Android
Web EUM	Fetching all Browser Snapshots for extended periods, like a month, could take a very long time, particularly when the underlying data is sparse. The requests for this functionality have been optimized and response time is much improved.

3.8.3 Updates

Controller

- The installation and upgrade procedures have changed as follows:
 - Ouring upgrade, the installer attempts to restart the Controller and database. If it cannot complete the restart within the timeout period, it exits and rolls back the changes. By default, the installer now waits 30 minutes for the startup to complete (previously the timeout was 10 minutes). If the Controller or database take longer to start up (most likely due to a large amount of data in the database), you can increase the timeout before running the upgrade. To increase the timeout, edit the <controller_install_dir>/.install4j/response.varfile by adding the ad-timeout-in-min property (for example, ad-timeout-in-min=50, to increase the timeout to 50 minutes).
 - Instead of rolling back changes, if the timeout expires, the installer exits without rolling back changes. This gives you an opportunity to troubleshoot the issue and remediate before retrying the install or upgrade. You will need to revert the disk changes manually by restoring from the backed up copy of the installation and data directories before retrying the upgrade. See Upgrade the Controller for more information.
- Red Hat Enterprise Linux (RHEL) and CentOS operating systems versions 6.3, 6.4, and 6.5
 have been certified as supported platforms for the Controller. For the complete list of
 supported environments, see Supported Environments and Versions.
- In the Controller UI, custom match rules for entry points now show a priority field with default set to 0.

Mobile APM

 A new version of the AppDynamics plugin for Gradle-based builds of the Android agent (supporting Gradle 1.10 and Android Tools versions 0.7.3,0.8.3, and 0.9.2) is now available. See Instrument an Android Application.

Agent for Node.js

• Distributed transaction correlation for the Agent of Node.js is supported. See Distributed Transactions for Node.js.

Component	Summary
App Agent for .NET	Uninstalling the agent no longer results in a cmd prompt on Windows
App Agent for .NET	Resolved issue that could cause the .NET agent to not report properly
App Agent for Java	Improved correlation support using Remote Actors on Akka version 2.3.1
App Agent for Java	Resolved issue with monitoring a Sybase stored procedure
App Agent for Java	Resolved issue with extraneous error message when an already registered rule exception from JDBCRuleApplier is applied
App Agent for Java	Resolved a potential issue that could result in longer startup times for a server
App Agent for Java	Resolved a potential NPE in Agent Proxy
App Agent for Java	Resolved a issue that could result in a custom rule to stop working after upgrading to 3.8
App Agent for Node.js	Added distributed transaction correlation
Controller	Resolved issue with showing most expensive calls for stalled business transactions
Controller	Resolved a problem with health rule messages showing an incorrect JMX metric name
Controller	Resolved an issue with missing tier flow map data for current time range
Controller	Resolved a caching error that could cause metric gaps

Controller	Linux controller installer no longer fails if /tmp is mounted with the 'noexec' option
Controller	Resolved a potential issue that could result in a user's inability to login to AppDynamics through SAML Authentication
Controller	Resolved inconsistency with GC time spent and counts
Controller	Resolved upgrade timeout/rollback issue
UI	Reduced load time for Flash UI components
UI	Widget series now use different colors when adding new series
UI	Updated a confusing error message when exporting an application
UI	Resolved issue with page dashboard graphs not showing up when there is no data in the time range
UI	Improved the formatting of numeric metrics in Page Dashboards
UI	Browser snapshot grid and mobile network request snapshot grids now format dates consistently

3.8.2 Updates

End User Monitoring and Controller

An on-premise Controller with End User Monitoring (EUM) enabled needs to be able to connect to the EUM Cloud aggregator. If the Controller needs to make external connections through an authenticating proxy, you can now specify credentials for the Controller to pass to the proxy.

You configure the credentials using two new Controller Java options:

- appdynamics.controller.http.proxyUser
- appdynamics.controller.http.proxyPasswordFile

The value of proxyPasswordFile should be the location and name of the file that contains the plain text password associated with the user identified by proxyUser. For more information, see Set Up and Configure Web EUM.

Web EUM

End User Response time is displayed in the Metric Browser in terms of percentiles (for this release, P90), regardless of the Controller used.

App Agent for PHP

The App Agent for PHP now supports:

- PHP Web Service as a entry point.
 - This entry point requires a 3.8.2 Controller.
 - If you have distributed business transactions that call Java, .NET, or Node.js tiers from a PHP Web Service entry point, you must upgrade the app agents for those tiers to 3.8.2 to get full stack traces in the distributed call graphs.
- NuSOAP as a PHP Web Service framework.
- OCI8 as a database exit point.
- NuSOAP as a Web Service exit point.

App Agent for Java

• Sun JRMP support is disabled by default. You should test Sun JRMP support in staging before using it on production systems. Enable Sum JRMP support by setting the app agent node property, jrmp-enabled=true. This property defaults to false.

Component	Summary
.NET Agent	Installer Error using MsiExec fixed
Agent	Disable Sun JRMP by default
Agent	Automatic BT identification with parameters should be deferred in certain cases
Agent	JAX-WS BT not detected as WS BT fixed
Agent	Java Agent failure to connect to controller over SSL fixed
Controller	Don't enforce a 6 minute window on event history
Controller	HR evaluations/Alerts stuck at the same stage fixed
PHP Agent	Implemented support for Oracle's OCI8
PHP Agent	Implemented NuSOAP entry point detection
PHP Agent	Implemented NuSOAP exit point detection
PHP Agent	PHP agent causes file_get_contents with custom context to fail fixed

3.8.1 Updates

Controller

- SAML group-to-role mapping
 The Controller now automatically maps groups for a user as identified in SAML responses to roles in the UI. See Configure Authentication Using SAML.
- MySQL version update
 The version of MySQL included with the Controller has been updated from version 5.5.16 to 5.5.37. For Controller upgrades, the installer applies the new MySQL version to your upgraded instance.

Mobile APM

- The following mobile metric names have changed:
 - Network Request Error is re-named HTTP Error.
 - Network Connection Error is re-named Network Error.
- The crashed file and crashed line items in the crash snapshot lists have been combined into a single item.

Web EUM

If a Web EUM instrumented page is associated with a server-side app agent, the cookie that the server-side app agent sets is now named ADRUM_BT instead of ADRUM_X_Y_Z as in previous versions.

App Agent for Java

- HTTP Proxy authentication support
 The App Agent for Java now supports user name and password authentication to an HTTP proxy server.
- New app agent node property capture-spring-bean-names can be used when a class is mapped to multiple spring bean names to display the class name instead of the spring bean name. See App Agent Node Properties Reference.

App Agent for .NET

 The App Agent for .NET has updated support and configuration for correlation of .NET remoting. See Enable Correlation for .NET Remoting.

App Agent for . Fixed a problem with the agent parsing IIS6 hierarchies . RET Fixed a problem detecting IBM WebSphere message queue exit points . RET App Agent for . Fixed a problem with automatic injection of the EUM Footer . RET App Agent for . Create a white list based agent . Added support for HTTP proxy authentication . App Agent for Java Improved Akka support for Scala with closure methods Java Fixed a problem with service endpoints on a JAX-RS based web service Java Fixed a problem with some node properties not being set . App Agent for Java Fixed a problem with a segmentation fault in Apache 2 . App Agent for PHP Improved Cookie handling . Improved cookie handling . Fixed a problem with a repeating snapshot affecting metric registration . Controller Added support for SAML group assertions . Controller Fixed a problem where the upgrade process created a domain.xml with disabled http listeners . Controller Improved top-level End User Experience dashboard load time . Controller Fixed a problem with exporting applications . Controller Improved URL information for SaaS alerts . Controller, UI, Mobile Improved TLS-1.2 Only (HTTPS) support . Fixed an installation problem on Win32 related to database shutdown .		
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		Fixed a checkbox for enabling mobile APM
Controller Fixed an installation problem on Win32 related to database shutdown	Controller	Improved TLS-1.2 Only (HTTPS) support
	Controller	Fixed an installation problem on Win32 related to database shutdown

Controller	Fixed a problem affecting the MySQL Data Dictionary
UI	Fixed a problem with importing dashboards
UI	Renamed the "Network Connection Error" metric to "Network Error"
UI, Web EUM	Retained filter when navigating from page dashboard to browser snapshot
UI	Updated terminology for HTTP errors and network errors
UI, Web EUM	Page Dashboards no longer show negative numbers for related normal business transaction calls
Web EUM	Improved cookie handling

Security Notes for 3.8.1

 The default security protocol used by the on-premise Controller has changed. For enhanced security, the Controller's secure listener now uses TLS 1.1 and TLS 1.2 instead of TLS v1.0 and SSLv3.

If using the Controller with an older version of the App Agent for Java or .NET framework, you need to be aware of security compatibility implications of the change.

This issue affects you if you have upgraded the Controller to 3.8.1 or later and still have any of the following deployed in your environment:

- App Agents for Java version 3.8.0 or earlier (see Agent Controller Compatibility Matrix for details on SSL compatibility by version)
- App Agents running on .NET Framework versions earlier than 4.5

If you are affected by this issue, AppDynamics recommends that you upgrade the environment, as follows:

- For App Agent for Java, upgrade to the latest version of the App Agent for Java
- For .NET, recompile the application to use the .NET Framework 4.5 and enable TLSv1.2 on the host machine.

If upgrading agents or framework is not possible, you can re-enable TLS v1.0 and SSLv3 on the Controller. For instructions on reenabling the security protocols, see Configure the Security Protocol.

 This release includes an updated version of MySQL. The update to MySQL 5.5.37 fixes several security issues in MySQL.

New and Enhanced Features in 3.8

The following components have new and enhanced features in release 3.8:

Online Documentation Wiki

The online documentation for 3.8 is now publicly available and does not require a login. It can now be indexed by the major search engines. To make comments on the topics, please login with your standard AppDynamics account.

End User Monitoring Updates

New Mobile APM

 AppDynamics introduces the new Mobile APM Agent so you can monitor mobile applications on the iOS and Android platforms.
 See Mobile APM.

Web EUM

- New waterfall page dashboards. See Page, Ajax, and Iframe Dashboards.
- New waterfall browser snapshots. See Browser Snapshots.
- More network timing information. See Web EUM Metrics.
- Health rules for Pages, Ajax requests, iframes are now easier to create. See Health Rules.
- The main JavaScript agent file, adrum.js, now available in a hosted option via Amazon CDN. See Using a Hosted Version of the JavaScript Agent.

Controller Updates

User Interface

- The fonts, colors, and many icons have changed.
- There is a new Home Page. See AppDynamics Home Page.
- The following top-level icons and menu options are now:
 - Settings: The Settings menu is represented by this icon.
 - User: User menu is represented by this icon ,
 The Logout User option is located in this menu.
 - The My Preferences option has moved from the Settings menu to the User menu.
 See Dashboards.

Note: Not all UI changes are currently reflected in the documentation.

Browsers

Support for IE 8.x is deprecated.

Snapshot Waterfall View

• New user interface for viewing business transaction snapshots. See Transaction Snapshots.

Custom Dashboards

- Export and Import: You can now export a Custom Dashboard to a file and import it into another Controller environment. See Use a Custom Dashboard.
- HTML5-based UI for the Dashboard Editor.
- The icons used on the dashboards are refreshed.

Policies and Alerts

- New Health Rule templates for creating health rules, covering more entities. See Health Rules.
- Ability to create health rules based on custom metrics over multiple entities. See Configure Health Rules.
- New JVM crash event. See Configure Policies.

Integrations

AppDynamics for Databases

 Improved JDBC Correlation with Oracle Databases for the App Agent for Java with AppDynamics For Databases 2.8. From a business transaction snapshot flow map, you can link to AppDynamics for Databases to the exact SQL that was running during the originating snapshot.

Compute Clouds

 Compute cloud extensions are no longer packaged with AppDynamics. Download cloud connector extensions from the AppDynamics Exchange.

REST API

 Usernames that contain certain characters are not authenticated for REST API calls. See In valid Characters for Usernames.

Installation and Platform Changes

- The bundled JDK is updated to version 1.7.
- Database user password changes:

- Previously the installer generated the password that the Controller uses to log in to the MySQL database automatically. The Controller installer now presents a prompt for the Controller's database user password.
- The default storage location of the database password has changed to <Controller_Installation_dir>/db/.rootpw.
- The Controller can retrieve the database user password using other mechanism as well, including from an environment variable or from a command line prompt.

See Controller Data and Backups for more information. See Upgrade the Controller for upgrade information relating to the database user password.

App Agent for Java Updates

- Developer Monitoring Level
 - Oevelopers can choose to relax monitoring constraints to capture more information about their applications while in development. Safeguards are in place to ensure an automation switch back to Production monitoring when the number of transactions tracked exceeds specified limits. See Monitoring in a Development Environment.
- MBean Browser Enhancements
 - MBean Browser now allows invocation of mBean operations, supports the viewing and editing of complex attributes, and a new JMX entry in the left navigation menu allows another point of entry to JMX Metrics and the MBean Browser. See Monitor JMX MBeans.
- JVM Guard
 - Automated detection of JVM Crashes. Create an event that detects and reports on the JVM crashes, then for example, initiate an action, such as JVM restart. See JVM Crash Guard.
- Service Endpoints
 - Create tier-level entry points for capturing service KPIs. See Service Endpoint Monitoring.
- SSL chain validation through controller-info.xml property. For more information, see Enable SSL for Java and App Agent For Java.
- New Frameworks support. For more information, see Supported Environments and Versions for Java.
 - Akka
 - Apache Synapse. To enable correlation, set node property, "enable-soap-header-correlation=true". For more information about this new node property, see Enable Soap Header Correlation.
 - Apple WebObjects
 - Coherence JMX metrics preconfigured. For more information, see Configure JMX Metrics from MBeans and Monitor JMX MBeans.
 - Google Web Toolkit (GWT)
 - Infinispan
 - Mule ESB support improvements
 - Plav for Scala
 - Java RMI over JRMP
- Tighter Integration with AppDynamics for Databases Oracle Collectors

• From a Transaction Snapshot Flow Map, where the exit call is to an Oracle database, you can link to AppDynamics for Databases 2.8 to see and analyze the exact SQL that was running at the time of the transaction snapshot. To enable this functionality, for the node containing the Oracle database, you must set the App Agent for Java node property jdbc-dbcam-integration-enabled=true. For more information, see Integra te and Use AppD4DB with AppDynamics Pro.

See Supported Environments and Versions.

App Agent for .NET Updates

- The App Agent for .NET automatically detects MVC 5 business transactions without additional configuration.
- The App Agent for .NET automatically discovers RabbitMQ remote services. Monitor RabbitMQ Backends for .NET.
- You can configure the App Agent for .NET to discover HTTP, Web Services, and WCF async remote services. Monitor Async Transactions for .NET.
- Oracle ODP.NET database backends integrate with AppDynamics for Databases. See Monit or Oracle Backends for .NET with AppDynamics for Databases.
- An updated installer package removes the requirement to uninstall for future upgrades and includes integrated user access control. Install the App Agent for .NET.

See Supported Environments and Versions.

App Agent for PHP Updates

- The App Agent for PHP supports the PHP Command Line Interface (CLI) as an entry point. See Configure PHP Command Line Interface (CLI) Entry Points.
- The App Agent for PHP supports PHP tiers in distributed business transactions both as originating tiers and as downstream tiers. See Distributed Transactions for PHP.
- The App Agent for PHP supports RabbitMQ as an exit point. See Monitor RabbitMQ Backends for PHP.

App Agent for Node.JS Beta

AppDynamics introduces the beta version of the new App Agent for Node.JS. See AppDynamics for Node.js Beta.

AppDynamics Pro Trial Edition Changes

Previously, when the trial license expired for the AppDynamics Pro trial, it meant that you could no longer use the AppDynamics Pro instance. Now when the trial license expires, the AppDynamics Pro trial transitions to the free edition of the product, AppDynamics Lite.

For more information about the free edition of the product, see AppDynamics Lite.

Agent-Controller Compatibility Matrix

 The Controller supports older Agents. Newer Agents will not work with an older Controller version. See the Agent - Controller Compatibility Matrix.

Security Notes

The following section lists general security information for AppDynamics. For release-specific security information, see the update notes for that release.

SSL Certificate Monitoring Extension

The SSL Certificate Monitoring Extension is a new extension on the AppDynamics eXchange that r eports the expiration date of SSL certificates on the machine as a metric to the Controller. The extension reports the certificate expiration date metric for the domains and at the interval you configure.

For more information, see the SSL Certificate - Monitoring Extension listing.

Controller Notes

- Install the Controller if you are not using the AppDynamics SaaS Controller Service. If you
 are using the SaaS Controller, skip the Controller installation.
- Obtain the Controller for your operating system from the AppDynamics Download Center.
- Known Issue: you may see an exception about a missing apache .jar file in the logs on startup. It is harmless.
- Known Issue: in some instances an exception may occur when exporting an application configuration.
- Known Issue: installing or upgrading the Controller on any Windows system that does not use English as its system language will fail. For the workaround, see Non-English Language Setting Workaround.
- Known Issue: After an upgrade of an on-premise Controller to version 3.8.1 or later, App Agents that use SSL may not be able to connect to the Controller. See Security Notes for 3.8.1 for more information.

Installation Notes for the Controller

 Before you install or upgrade the Controller, validate the hardware requirements as listed at Controller System Requirements. The sizing requirements have been updated and now include recommendations based on metrics per minute in addition to the number of nodes

- in the installation. Features such as monitoring asynchronous threads and End User Monitoring increase the number of metrics per minute flowing to the Controller.
- AppDynamics strongly recommends that you install the Controller on a dedicated machine for adequate stability and performance.
- The disk space requirements differ for each of the Controller performance profiles. Verify the disk space requirements for your performance profile at Controller System Requirements
- If installing on Windows, note the operational and configuration guidelines listed in Install
 the Controller on Windows for preventing the possibility of Controller data corruption due to
 conflicts with existing Windows processes. Also note the workaround if installing or
 upgrading a Windows machine that does not use English for its regional settings, see NonEnglish Language Setting Workaround.
- Known issue: .NET 3.5 features are required in some cases to install the Controller as a
 Windows service. (.NET 4.0 installation alone may not be sufficient.) If you try to install the
 Controller as a service, the following error appears: "The following feature couldn't be
 installed: .NET Framework 3.5".

This occurs on the following versions of Windows Server:

- Server 2012
- Server 2012 R2

The following instructions assume the use of Windows Server operating systems (which have the Windows Server Manager). If you encounter this issue on a non-server version, such as Windows 8, you need to download the .NET 3.5 executable and perform the equivalent installation.

To install .NET 3.5 features:

- 1. As a user in the Administrators group on the local computer, open Windows Server Manager.
- 2. Select "Add Roles and Features" and click Next.
- 3. Click Next until you get to the Server Selection screen.
- 4. Select the server on which you want to install the Controller as a service.
- 5. Click Next in the Server Roles.
- 6. In the Select features screen, expand .NET Framework 3.5 Features and select .NET Framework 3.5. Keep the .NET Framework 4.0 option selected.
- 7. Click Install.

You can now install the Controller as a service as described in the documentation.

Upgrade Notes for the Controller

- For all major upgrades, AppDynamics recommends that you upgrade both the Controller and Agents. This ensures that you get all the latest Agent features and fixes.
- If you are upgrading both the Controller and the Agents, first upgrade the Controller then upgrade the Agents.
- Make sure that you have saved a backup of the following files before starting the upgrade procedure:
 - Controller_Installation-Directory>/db/db.cnf

- <Controller_InstallationDirectory>/appserver/glassfish/domains/domain1/config/domain.
 xml
- <Agent_Installation_Directory>/conf/controller-info.xml
- If you are applying the upgrade by passing a response file to the installer, you must pass the response file generated by the installer at first installation. This response file is at . install4j/response.varfile under the Controller home directory. Make sure that the settings in the file reflect any configuration changes you have made since installation.
- Known issue: An issue prevents you from changing the database port number at upgrade time if using a response file. If you set a different database port in the response file, response.varfile, from the one used by the Controller, the installation times out while attempting to start the database.
- Known Issue: In certain scenarios, the Controller upgrade on Windows may fail with an
 error message of "Unable to restore JVM options." This happens if the modifyJVMOptions.
 bat utility has been previously used to modify domain.xml settings on the Controller
 instance. If you encounter this error on an attempted upgrade, contact AppDynamics
 Support for the workaround.

For more information, see Upgrade the Controller.

Non-English Language Setting Workaround

When installing or upgrading the Controller on Windows systems that use a regional and language setting other than English (United States), the Controller installation or upgrade fails. The error message may indicate that the Controller database failed to start or that the setup processes failed to reach the Controller. The error occurs when the installer is attempting to start the Controller, and causes the installer to abort the installation or upgrade.

To work around this issue:

- 1. Change the regional and language setting on the system to English (United States).
- 2. Perform the upgrade or installation.
- 3. When the upgrade or installation is finished, edit the <Controller_installation_directory>\bin\controller.bat and replace the following line:

```
IF %TIME% == %START_TIMEOUT% (
```

With:

```
IF "%TIME%" == "%START_TIMEOUT%" (
```

This line appears in the :startControllerDB section of the file. Notice the addition of quotes around both values used in the value comparison.

- 4. Save your changes.
- 5. Change the regional and language settings back to its original value.

Mobile APM Notes

- Known Issue: the Mobile Geo Dashboard may time out if there are a large number of apps and large amounts of data.
- The Mobile APM Agent increases the number of metrics reported, which may affect the hardware requirements for an on-premise controller. See Additional Sizing Requirements.

App Agent for Java Notes

Obtain the AppDynamics App Agent for Java download for your system from the AppDynamics Download Center:

- For Sun and JRockit JVMs, download AppServerAgent-x.x.x.zip
- For IBM JVMs, download AppServerAgent-ibm-x.x.x.zip

For more information see:

- Install the App Agent for Java
- Java Server-Specific Installation Settings
- App Agent for Java Configuration Properties

Known Issues:

- The new JVM Guard feature may not consistently report JVM crashes.
- As of 3.8.3, support for correlation over Sun RMI over JRMP has been temporarily suspended.

App Agent for .NET Notes

Obtain the AppDynamics App Agent for .NET download for your system from the AppDynamics Download Center:

- For Windows 32-bit, download dotNetAgentSetup.msi
- For Windows 64-bit, download dotNetAgentSetup64.msi

For more information see:

- Install the App Agent for .NET
- App Agent for .NET Configuration Properties
- Resolve App Agent for .NET Installation and Configuration Issues
- Configure the .NET Machine Agent

Resolved Issues in 3.8.0

Controller	Fixed a problem with delays in backend discover configuration
Controller	Fixed a problem with node based health rules being evaluated for a node not in the list
UI, App Agent for PHP	Fixed a problem with the RabbitMQ icon not displaying
EUMCloud, UI	Fixed a problem with alerts when page view limit was reached

Components	Summary
App Agent for Java	Fixed a problem with some node properties not being set
Controller	Improved performance of the EUM dashboard
Controller, UI	Fixed a potential issue that prevented dashboards created with 3.7 from being import/exported