**References in blue are to the 3.4.2 appdynamics docs**

**Call Graph FAQ:**

This topic lists questions and answers about configuring and using call graphs to monitor and troubleshoot business applications.

**Q. What is "self time" in a call graph?**

Self time is the total time that was taken for executing the call minus the time for total calls for all children of that node.

**Q. How do I get thread dump for the call?**

The thread name and ID for a stalled request is displayed on the Summary tab.

**Q. A method X invokes method Y 1000 times. However, method Y takes only very short time to complete. How is this displayed in**

**AppDynamics?**

With the default configuration, if the method Y is taking less than 10ms in each iteration (see Configure Call Graphs), it will be filtered out and will not show up in the call graph. Only the method X will show in call graph and by knowing that the method X is too slow, you can analyze the code to diagnose the root cause. For example, you may find that the root cause of a slow method is a bad loop.

**Q. How do I use call graphs to monitor the data from custom exit calls?**

All data collected for the custom exit points is displayed as Custom in the call graph. All data captured in the User Data section is configured using data collectors.

**Q. What should I do about call graph limit messages?**

The Informational Events browser may display a message such as:

Global callgraph limit reached 15 times in last 15 minutes. Limit trackers for current minute Snapshot Reporter Queue size [100846], originatingInflightSnapshotCount [6],

inflightSnapshotCount [6], currentMinuteSnapshotCount [1].

You may need to modify your policies or limits. This type of message is informational (INFO) does not indicate any error in your environment. If you want to change these limits, contact the AppDynamics Support Team.

**Q. Why can't I see all parameters for an SQL statement?**

Enabled the **Capture Raw SQL** option in the call graph settings. For details see Configure Call Graphs

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**Q. In our distributed environment, we do not have the complete call graph due to an execution in another thread. How do we get a complete call graph?**

To handle multi-threaded scenarios AppDynamics recommends using the AppDynamics API and customizing the transactions. For details see Trace Distributed Transactions.

**Q. Does AppDynamics have a function for gathering SQL statistics?**

AppDynamics captures SQL statements independent of each other. Therefore a direct count of how many times a statement such as "select \* from table where a=?" was executed is not captured. AppDynamics captures the execution time of the SQL statement (with a configurable minimum threshold of 10ms) and records the statement with or without parameters, based on the SQL settings selected. For more information see Configure Call Graphs.

**Q. Can I track JDBC ResultSets in the call graph?**

Starting with 3.4, AppDynamics reports JDBC ResultSet iteration time and count values in the call graph JDBC Calls list. ResultSets are tracked for all statement.executeQuery and preparedstatement.executeQuery() calls that take more than 10 ms and those that are captured as part of a call graph. Any ResultSets that take > 10 ms to iterate are shown as a JDBC call in the call graph irrespective of whether the corresponding statement that generated the ResultSet took > 10ms or not. AppDynamics expects that ResultSets are closed after they are iterated through; therefore ResultSet tracking is limited to 10. If 10 ResultSets are currently not closed then the 11th will not be tracked and will be simply ignored.



**This topic provides FAQs about managing Business Transactions.**

**Can I rename the discovered Business Transaction names?**

Yes. To rename a Business Transaction:

1. In the left navigation panel, click **Monitor -> Business Transaction**. AppDynamics lists all the Business Transactions for that application.

2. Select the Business Transaction you want to rename.

3. Right-click on the selected transaction and select **Rename**.

For details see Rename a Business Transaction.

**How do I exclude some of the Business Transactions?**

There are two options for excluding a Business Transaction:

You can configure AppDynamics to exclude a particular Business Transaction. For details see Exclude a Business Transaction

.You can use a custom exclude rule to eliminate multiple URLs. For details see Exclude Unwanted URI Patterns.

**Can I retrieve excluded Business Transactions?**

Yes, you can retrieve the excluded transactions. For more details see Exclude a Business Transaction.

**Are the excluded Business Transaction counted towards the limit?**

The transactions that are excluded directly from the Business Transactions List are not counted towards the Business Transaction limit.

However, transactions that are excluded using a custom Exclude Rules are counted towards the Business Transaction limit.

**Are the deleted Business Transactions counted towards the limit?**

Yes, the deleted transactions are counted towards the Business Transaction limit.

**What is the difference between excluding and deleting a Business Transaction?**

The Exclude operation ensures that the transaction do not come back into the Business Transactions list, whereas the delete operation only purges the runtime data for a Business Transaction, such as its response time, call rate, etc.

After deletion, if the Agent discovers the Business Transaction again, AppDynamics will display it again on the Business Transactions list.

After an exclude, the transaction will not be displayed even if there is traffic for the particular requests. For details see Exclude Versus Delete Operations.

**How do I delete a large number of Business Transactions?**

When there are many Business Transactions to be deleted, AppDynamics recommends that you reset the App Server Agent. An agent reset **purges all data** and resets the Business Transaction limit to zero. To reset an agent see Reset Java App Agents.

**Why do I get a "threads blocking on sun.management.ThreadImpl.getThreadTotalCpuTime0(Native Method)" error?**

This error is the result of a Sun JDK 1.6 problem on Linux. The workaround is to add the following Java HotSpot VM option:

-XX:+UseLinuxPosixThreadCPUClocks

**Policy FAQs**

**How do I define policies at the tier level?**

To define policies at the tier level:

1. In the Overview page of the Policy Wizard, select Business Transaction Performance as the policy type.

2. In the Affects page of the Policy Wizard, select Business Transactions within the specified tiers in the drop-down menu. Then move the tiers to be affected by the policy into the Selected Tiers list

.

**How do I define an event for an EJB call that has varying response times depending on a parameter?**

First create a Business Transaction based on the EJB call that has different response times depending on the content of a certain parameter.

To define the event:

1. Define an Information Point based on the content of the parameter and apply the match condition. For more information see Configure Information Points.

2. Define another Information Point for the second response and apply a match condition accordingly.

3. Add a policy based on the condition. In the Metrics Browser, Information Points will be available and you can create a policy for a particular Information Point.

These settings will create two different policies for the same Business Transaction.

**How do I trigger diagnostic sessions on policy violations?**

In the Actions to Take if the condition is violated section of the Condition page of the Policy Wizard, check Create Diagnostic Session check box to start a diagnostic session on a policy violation.

**How do I create a policy for the rate of free disk space?**

For example, when debugging is accidentally on and the log is very active, disk space could suddenly fill up. You can use the KB written/sec disc write metric and create a policy to generate an alert whenever that threshold is violated.

**How do I create a security policy for the rate of invalid logins?**

For example, a sudden increase in the rate of invalid logins may indicate an attempted attack. You can use the Errors per Minute metric and create a policy on your login exception to generate an alert whenever a threshold is violated.

**Information Points FAQ’s**

**Q. Why am I not able to see the Information Points that are configured for the "java.lang.\*" class?**

System classes like java.lang.\* are by default excluded by AppDynamics. However, if you want to configure Information Points for a system class, you can enable the instrumentation.

1. Open the <Agent\_Installation\_Directory>/conf/app-agent-config.xml file for those nodes where you want to enable the Information Point.

2. Add the fully-qualified system class name to the override exclude section in the XML file. For example, to configure the Information Point for the java.lang.Socket class connect method, modify following element: <override-system-exclude filter-type="equals" filter-value="java.lang.Socket"/>.

3. Restart those JVMs for which you have modified the XML file.

**Q. What is the overhead of configuring Information Points for the system classes?**

The overhead is based on the number of calls. AppDynamics recommends that you apply this configuration to only a small number of nodes and monitor the performance for these nodes before adding this configuration to all the nodes in your system.

**Q. Is there a way to configure thresholds within AppDynamics to show those methods that returned data less than some value?**

In certain situations, your method might return data in the form of object, for example, XML files. You can use Information Points to track the returned data for such methods.

1. Create an Information Point based on the class and method name. If the method is overloaded, specify the details for the parameters.

**Download FAQ’s**

**Q. Which Agent files should I download?**

The table given below lists the AppDynamics Agents that are available for download:

**AppDynamics Java App Server Agent AppDynamics, .Net App Server Agent AppDynamics Machine Agent**

**Q. How do I download AppDynamics from a Linux shell?**

Use the following parameters for your wget utility: wget --content-disposition '<URL\_TO\_FILE>?username=<USERNAME>&password=<PASSWORD>'

Ensure that the URL enclosed by single quotes, for example: wget --content-disposition

'http://download.appdynamics.com/onpremise/public/AppDynamics\_GA/latest/controller\_64bit\_linux\_v3.1.3.sh?username=user1@The --content-disposition option saves a file with a proper name that does not have the query string attached to the file name. On some Linux environments, wget may not have the content-disposition option. In this case, use following parameters for wget:

Wget '[http://download.appdynamics.com/onpremise/public/

AppDynamics\_GA/latest/controller\_64bit\_linux\_v3.1.3.sh?username=

**Q. How do I download old releases of AppDynamics?**

Go to AppDynamics Download Center.

For On-Premise installations: Go to "AD Pro-OnPremise".

For SaaS installations: Go to "AD Pro-SaaS".

**Controller install FAQ**

**Q. What should I do if I forget the credentials during Controller installation?**

The information that you provide during Controller installation creates an "admin" user in the system. This is the information that you

use to access the AppDynamics User Interface (UI) for the first time. If you lose this information, contact AppDynamics Support Team to

reset the password for the admin user.

**Can I install the Controller on a virtual machine?**

The AppDynamics Controller can be installed on virtual machines. However, make sure that the virtual machine meets the hardware

resource requirements equivalent to physical machines. The virtualized storage subsystem must provide the required I/O capacity. To

verify the I/O capacity, you can run Disk I/O rate tests. For details see Controller System Requirements.

**Do I need a multi-tenant installation?**

You can configure the AppDynamics Controller in either single-tenant (single account) or multi-tenant (multiple account) modes.

AppDynamics recommends single-tenant mode for most installations. For more details, see Controller Tenant Mode.

You choose the tenancy mode when you run the Controller installer. If you need to modify the tenancy mode later, see Controller

Tenant Mode.

**Q. What is Controller High Availability mode and when should I choose it?**

When using AppDynamics you may need to ensure the availability of the Controller. Availability refers to the ability to cope with and if

necessary recover from hardware or software failures.

A high availability mode configuration is two machines, both running the AppDynamics Controller. If the primary machine is brought

down, the secondary machine assumes the workload.

Configure HA mode for the Controller in either of the following situations:

When you want to ensure that any critical software or hardware failure cannot disrupt Controller operations.

When you want to avoid the complexity of performing hot backups.

For more information see Manage Controller High Availability.

**Q. Is the Controller upgrade seamless or will the existing data get purged?**

The Controller upgrade is seamless and retains all the existing client configurations, data, and reports.

See Controller Upgrade.

**Q. Will my current license work during an upgrade?**

If you are moving from an older version to a newer version and have a license for the older version, then that license should work when

upgrading the Controller to a new version.

However, if you had a temporary license for the old version and now have a new license, then this new license will not work on the old

Controller. In this case, you should upgrade the Controller to the latest version.

**Q. How do I upgrade a Controller installed as a Windows service?**

To upgrade a Controller that is installed as a Windows service:

1. Uninstall the Windows service by running the <Controller\_Installation\_Directory>/bin/uninstallControllerSvcs script.

2. Restart the host system.