



APPDYNAMICS

INTERVIEW QUESTIONS

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1. What is APM ?

Application performance management (APM) also known as Application Performance Monitoring allowing monitoring tools for IT Support and Developers to monitor their backend application architecture to resolve performance issues and bottlenecks in a timely manner.

2. What is AppDynamics ?

The AppDynamics APM Platform enables you to monitor and manage your entire application, to view, analyze the request/traffic through your network, backend databases and application servers. AppDynamics APM gives you a single view across your application landscape

3. What are the Languages worked on AppDynamics ?

AppDynamics works with popular programming languages such as Java, .NET, Node.js, PHP, Python, C/C++

4. HOW APPDYNAMICS WORK?

- AppDynamics app agents need to connect to an AppDynamics Controller to retrieve configuration data and send back information about the monitored environment
- This page provides general information about the connections between the agents and Controller
- The connection between the agent and Controller is a ONE-WAY connection initiated by the agent

5. What are AGENTS ?

- Agents are plug-ins or extensions that monitor the performance of your application code, runtime, and behavior.
- The Controller receives metrics from Agents and sends them instructions. Once deployed, Agents immediately monitor every line of code.
- This allows AppDynamics to trace every transaction from start to finish.

6. What is CONTROLLER?

The Controller helps Monitor, Troubleshoot and Analyze your entire application from backend infrastructure to the end user—in one simple interface. Agents collect data from a monitored environment and send it to the Controller. The Controller UI is where you can view, understand, and analyze the data

7. What are the Port numbers for a Controller ?

- For a SaaS Controller, use 80 for HTTP or 443 for HTTPS
- For an on-premises Controller, use 8090 for HTTP or 8181 for HTTPS

8. What is the CPU Consumption for AppDynamics?

0% to 2% additional CPU consumption

9. What is the Heap Size (-Xmx) to accommodate the AppD Agent ?

Maximum heap size (-Xmx): 100 MB in addition to the amount required by the application

10. What is the PermGen space to accommodate the AppD Agent ?

Maximum PermGen (permanent generation) heap size (-XX:MaxPermSize): 20 MB in addition to the amount required by the application

11. What are the Dashboard Layouts available ?

- a. GRID
- b. ABSOLUTE

12. How the connection between Agent and Controller happens ?

The connection between the agent and Controller is a one-way connection initiated by the agent..

13. What is a Business Transaction?

- A Business Transaction is made up of all the required services within your environment that are called upon to fulfill and deliver a response to a user-initiated request.
- These are typically things like login, search, checkout, etc
- A business transaction represents the data processing flow for a request, most often a user request
- AppDynamics automatically discovers Business Transactions

14. What is the Default limit for Business Transaction in AppD?

- Business Application Limits: Each application is limited to 200 registered business transactions.
- App Server Agent Limits: Each agent is limited to 50 registered business transactions.

15. How will you configure Agents for SSL ?

Set these SSL-related properties:

- Set controller-ssl-enabled to true.
- Set the controller-port to the correct value for either on-premises or SaaS Controller.

16. What is the important pre-requirement to install the Agent for an JVM ?

All files should be readable by the user under which the JVM runs. The user must have write privileges to the conf and logs directories in the Java Agent home.

To achieve this is to install the agent as the same user that owns the JVM or as an administrator on the host machine

17. What are the details seen in a simple CONTROLLER.INFO.XML file ?

The following shows a controller-info.xml file with sample configuration values:

```
<controller-info>
  <controller-host>192.168.1.20</controller-host>
  <controller-port>8090</controller-port>
  <application-name>ACMEOnline</application-name>
  <tier-name>InventoryTier</tier-name>
  <node-name>Inventory1</node-name>
</controller-info>
```

18. How will you Verify Java Agent Installation?

“Started AppDynamics Java Agent Successfully” should be seen after installation in agent log in <agent_home>/logs

19. What are the ACTIONS can be executed in Alert & Respond section ?

Actions are

- Send an Email
- Take Thread Dump
- Create or Update a JIRA Ticket
- Make an HTTP Request
- Run a Script or Executable on problematic nodes

20. What are the Report Type options available for AppD?

- a. Application Health
- b. Custom Dashboard
- c. Controller Audit
- d. Home Screen
- e. All Application Summary

21. What is a Transaction Snapshots?

A transaction snapshot gives you a cross-tier view of the processing flow for a single invocation of a transaction.

22. What is Tier Response Time?

The total response time for the call as measured at the calling tier. This includes the processing time on the called tier as well as on any tiers and backends it calls in turn.

23. What is Call Drill Downs?

A call drill down contains details for that business transaction execution on a particular tier. It takes you to the code-level information for the transaction.

24. What is a Call Graph?

A call graph in a transaction snapshot shows you business transaction processing information on a particular tier that participated on the business transaction. A call graph lists the methods in a call stack and provides information about each call

25. How do you enable Server Visibility?

Enable <sim-enabled> to **TRUE** in controller-info.xml under Machine Agent folder

26. How will you enable .NET Compatibility Mode on the agent ?

Set the following options in <machine_agent_home>/conf/controller-info.xml:

```
<dotnet-compatibility-mode>true</dotnet-compatibility-mode>
```

27. What are the Two types of AppDynamics Browser Monitoring?

- Browser Real User Monitoring (Browser RUM)
- Browser Synthetic Monitoring

28. What is EUM in AppD ?

AppDynamics End User Monitoring (EUM) gives you visibility on the performance of your application from the viewpoint of the end user.

29. What are the Parameters analyzed using EUM in AppD?

- What your slowest web/Ajax requests are, and where the problem may lie.
- What your slowest mobile and IoT network requests are, and where the problem may lie.
- How application server performance impacts the performance of your web and mobile traffic
- How performance varies by location, Client type, device, browser and browser version, application and application version, operating system version, device

30. What are the Two files JavaScript Agent consists?

The JavaScript Agent consists of two files: adrum.js and adrum-ext.js.

31. What is Browser Synthetic Monitoring?

Browser Synthetic Monitoring uses geographically distributed Synthetic Agents to continuously test key user workflows in your application. This allows you to monitor the correctness and performance of multi-step flows independently of the user-generated load.

32. What are the two ways of Synthetic Monitoring?

Two types are Scheduled Jobs & On-Demand Snapshots

KEY POINTS TO REMEMBER :

- **App Agent** captures Application related info like Load, Response time etc of the Application
- **Machine Agent** captures Infrastructure details of the host like CPU, Memory etc
- The approximate bandwidth used by a single Java Agent with the default configuration is **five to eight kilobytes per second**
- The maximum length of a **tier name** is 100 characters and the maximum length of a node name is 225 characters for Linux and 500 characters for all other operating systems
- **Infrastructure Visibility** is an add-on module to the Standalone Machine Agent and requires a Server Visibility license on the agent.
- **Network Visibility** features are available for Linux and Windows.. Network Visibility is enabled by default on AppDynamics controllers.
- The **Analytics Agent** collects data from AppDynamics App Agent (app server agent) and log files, and sends it to the Events Service. The Analytics Agent is not enabled by default
- **Automatic injection** is available only for server-side applications built on Jasper-supported JSP (Java), ASP.NET, or ASPX (.NET) frameworks. Thus, only the Java Agent and .NET Agent support automatic injection
- You must allocate the **same number of machine agents as your APM agents**. For example, if you allocate 10 Java agents, 10 .NET agents, and 10 Node.js agents, you must allocate 30 Machine Agent units.