[FE][T802] Open Source

[FE][T802] Open Source

Which of the following is the most appropriate explanation of the deployment diagram defined in UML 2.x (including 2.0 and later versions)?

- a) It addresses the dynamic view of the system. In other words, it is drawn for a single class to show the lifetime behavior of a single object.
- b) It describes the types of objects in the system and the various kinds of static relationships that exist among them.
- c) It shows a static view of the run-time configuration of processing nodes, such as servers and clients, as well as the components that run on these nodes.
- d) It shows the organizations and dependencies among a set of pieces that are independently purchasable and upgradeable, and addresses the static implementation view of the system.

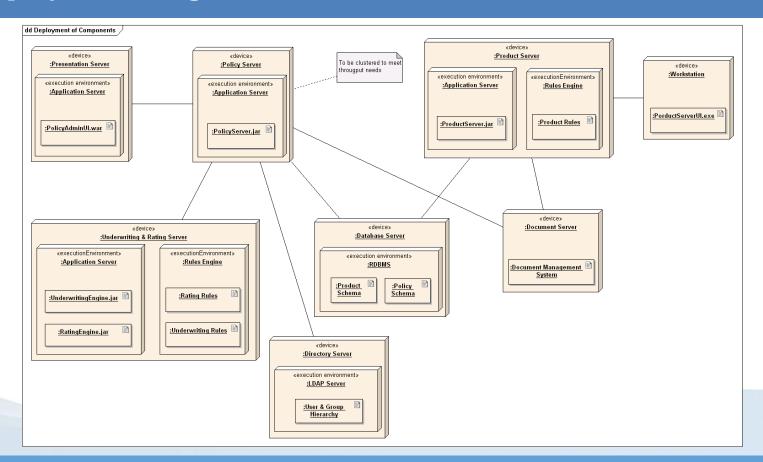
Source: Q46, ITEEFE-BD October 2016

Deployment diagram

A deployment diagram in the Unified Modeling Language models the physical deployment of artifacts on nodes. To describe a web site, for example, a deployment diagram would show what hardware components ("nodes") exist (e.g., a web server, an application server, and a database server), what software components ("artifacts") run on each node (e.g., web application, database), and how the different pieces are connected (e.g. JDBC, REST, RMI).

The nodes appear as boxes, and the artifacts allocated to each node appear as rectangles within the boxes. Nodes may have sub-nodes, which appear as nested boxes. A single node in a deployment diagram may conceptually represent multiple physical nodes, such as a cluster of database servers.

Deployment diagram



Deployment diagram

There are two types of Nodes:

- Device Node
- 2. Execution Environment Node

Device nodes are physical computing resources with processing memory and services to execute software, such as typical computers or mobile phones. An execution environment node (EEN) is a software computing resource that runs within an outer node and which itself provides a service to host and execute other executable software elements.

Correct Answer

Answer <c>