#### Sample UML Diagrams

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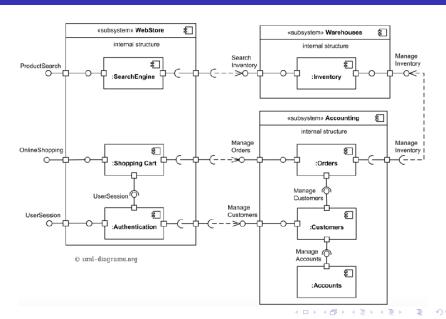
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December 30, 2022

# Sample Scenario- Online shopping UML component diagram example with three related subsystems - WebStore, Warehouses, and Accounting

An e-commerce system is comprised of three related subsystems - Online\_Storage, Accounting, and Warehouses. Online\_Storage subsystem comprises of three components related to e-commerce - Authentication, Search\_Engine, and Item\_Cart. Accounting subsystem comprises of three components related to e-commerce - Orders, Customers, and Accounts. Warehouse subsystem has only one component named Inventory. Search\_Engine component allows to search or browse items by exposing provided interface Product Search and uses required interface Search Inventory provided by Inventory component. Item\_Cart component uses Manage Orders interface provided by Orders component during checkout. Authentication component allows customers to create account, login, or logout and binds customer to some account. Accounting subsystem provides two interfaces - Manage Orders and Manage Customers. Delegation connectors link these external contracts of the subsystem to the realization of the contracts by Orders and Customers components. Warehouses subsystem provides two interfaces Search Inventory and Manage Inventory used by other subsystems and wired through dependencies."

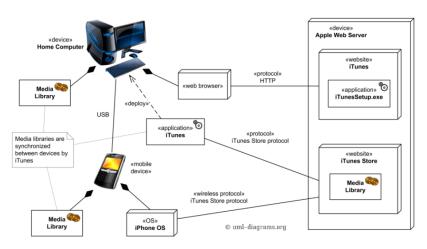
#### Online shopping UML component diagram



### Sample Scenario - UML deployment diagram for Apple iTunes

The iTunes setup application could be downloaded from iTunes website and installed on a home computer. After installation and registration iTunes application could communicate with Apple iTunes Store. Customer can buy and download music, video, TV shows, audiobooks, etc. and store it in media library. Mobile devices like Apple iPod Touch and Apple iPhone could update own media libraries from home computer with iTunes through USB, or could download media directly from Apple iTunes Store using some wireless protocol like Wi-Fi, 3G, or EDGE.

#### UML deployment diagram for Apple iTunes

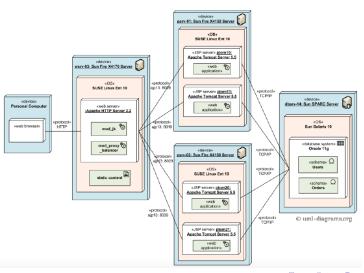


An example of UML deployment diagram for Apple iTunes

### Sample Scenario - Load balanced and clustered deployment of J2EE web application

An example of deployment diagram for J2EE web application with load balancing and clustering which shows specific server instances involved. Incoming HTTP requests are first processed by Apache web server. Static content such as HTML pages, images, CSS, and JavaScript is served by the web server. Requests to JSP pages are load balanced and forwarded to 2x2 Apache Tomcat servers using both vertical and horizontal clustering. All 4 instances of Apache Tomcat servers save/receive data to/from a single instance of Oracle 11g DBMS, which could become a performance bottleneck if web application is data-intensive.

## Load balanced and clustered deployment of J2EE web application



#### References