Object Management Group

The Object Management Group, or OMG, is a nonprofit international corporation made up of a team of dedicated computer industry professionals from different corporations working on the development of industry guidelines and object management specifications to provide a common framework for distributed application development.

OMG publishes industry guidelines for commercially available object-oriented systems, focusing on areas of remote object network access, encapsulation of existing applications, and object database interfaces. By encouraging industrywide adoption of these guidelines, OMG fosters the development of software tools that support open architecture, enabling multivendor systems to work together.

To define the framework for fulfilling its mission, in 1992 OMG published its Object Management Architecture Guide. This guide provides a foundation for the development of detailed interfaces that will connect to the elemental components of the architecture. Fig. 1 shows the four main components of this architecture:
- The object request broker (ORB) enables objects to make and receive requests and responses in a distributed object-oriented environment.
- Object services is a collection of services with object interfaces that provide basic functions for creating and maintaining objects.
- Common facilities is a collection of classes and objects that provide general-purpose capabilities useful in many applications.
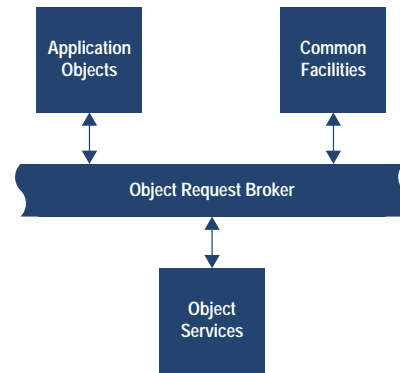- Application objects are specific to particular end-user applications.

Fig. 1. The object management architecture.

The application objects, object services, and common facilities represent groupings of objects that can send and receive messages. The software components in each of these primary components have application programming interfaces that permit their participation in any computing environment that is based on an object technology framework.