The following is a glossary of terms used throughout the ORA document series. The terms found here are commonly defined in more detail within the document text, others are merely cross-linked to this glossary for explanation. In any case the descriptions found here are intended to be concise and generally summarize the Oracle definition of the term when no universally agreed standard definition exists.
Glossary

2PC

see Two-Phase Commit.

4+1 Architectural View Model

4+1 is a view model designed by Philippe Kruchten for describing the architecture of software-intensive systems, based on the use of multiple, concurrent views. The views are used to describe the system in the viewpoint of different stakeholders, such as end-users, developers and project managers. The four views of the model are logical, development, process and physical view. In addition selected use cases or scenarios are utilized to illustrate the architecture serving as the 'plus one' view. Hence the model contains 4+1 views.

ACID

ACID is an abbreviation for Atomic, Consistent, Isolated, and Durable which is used to refer to a type of managed transaction in application and database systems.

Business Process Execution Language (BPEL)

The Business Process Execution Language for Web Services (formerly known as BPEL4WS now WS-BPEL) is a formal, XML-based description language for the orchestration of Web Services to represent, and thereby enable, execution of business processes.

Business Process Modeling Notation (BPMN)

BPMN is a graphical notation system for describing business processes in a Business Process Diagram (BPD).

Cloud Computing

A term used to define computing that occurs remotely in a location accessible via the Internet. Like SaaS, the owner of computing resources usually offers access based on some form of lease terms. SaaS is one form of Cloud Computing. Others include Infrastructure as a Service (IaaS) and Platform as a Service (PaaS). Each provide a means to lease computing capabilities as opposed to owning them.

Coarse Grained

Encapsulating functions, business process, operations, and information, at a level of decomposition that has meaning to relevant stakeholders, thereby improving communication of purpose and supporting manageability. In contrast, fine grained software components (for example those commonly resulting from Object Oriented software engineering) represent atomic operations at the lowest level of decomposition.
**Common Object Requesting Broker Architecture (CORBA)**

CORBA is a standard defined by the Object Management Group (OMG) that enables software components written in otherwise incompatible computer languages to work together in a distributed computing environment.

**Component**

A term broadly referring to units of software that encapsulate some business or IT function. Within the context of SOA the term components is generally used to refer to the building blocks of a Service. In some cases software architectures, such as EJB and DCOM, apply more specific meaning to the term and these software components often become part of the implementation of a Service.

**Composite Application**

An application built using service engineering principles that is composed, (entirely or in part), of Services in a SOA environment.

**Conceptual Architecture**

A model typically used in executive level discussions to represent ideas about the business and its activities without the complexity of how it might be achieved.

**Consumer Contract**

Also referred to as the Usage Agreement, the Consumer Contract refers to the Service contract between the consumer and the SOA (infrastructure or governing body) that specifies the terms of consumption of the Service. This is different from the Producer Contract, which governs the terms between the SOA and the Service provider.

**Digital Rights Management (DRM)**

A technology used to control access to digital media.

**ebXML**

Electronic Business using eXtensible Markup Language is a e-business standard based on the exchange of XML messages between partners.

**Enterprise Java Beans (EJB)**

EJB is a server-side component architecture for modular construction of enterprise applications providing delegation of cross-cutting functions, such as persistence and security, within a managed software container.

**Enterprise Application Integration (EAI)**

An architectural approach for linking otherwise isolated applications together within a single organization, thereby avoiding the need for duplication or radical changes of application functions and data.

**Grid Computing**

The ability to pool and share physical resources. A form of distributed computing that allows software to run on multiple physical machines in order to achieve availability and scalability requirements. Load can be shifted from one physical machine to another in order to optimize the resources at hand. Likewise, the computing footprint can be redistributed in response to changes in demand.

**Interactive Voice Response (IVR)**

A computer interface that uses voice commands or telephone button tones to interact with an application.
**J2EE Connector Architecture (JCA)**

The J2EE Connector architecture provides a Java technology solution to the problem of connectivity between the many application servers and today's enterprise information systems (EIS).

**Java Messaging Service (JMS)**

The Java Message Service (JMS) API is an API for accessing enterprise messaging systems. It is part of the Java 2 Platform, Enterprise Edition (J2EE).

**Java Portlet Specification (JPS)**

JPS is a specification that defines a set of APIs to enable interoperability between portlets and portals, addressing the areas of aggregation, personalization, presentation, and security. JPS is based on JSR 168.

**Java Specification Request (JSR)**

Java Specification Requests are descriptions of proposed and final specifications for the Java platform and its associated extensions. JSR’s are managed by the Java Community Process organization (JCP).

**JSR 168**

JSR-168 Portlet Specification standardizes how components for portal servers are to be developed.

**JSR 268**

JSR 268 is a next generation Java Portlet Specification that aligns the Java Portlet Specification with J2EE 1.4, other JSRs relevant for portlet programming, like JSR 188 and the next version of Web Services for Remote Portlets (WSRP).

**Key Performance Indicator (KPI)**

Key Performance Indicators (KPI) are measures or metrics used to help an organization define and evaluate how successful it is, in terms of making progress towards its short-term and long-term organizational goals.

**Loose Coupling**

Loose coupling means to minimize dependencies, leading to the ease of connecting (and disconnecting) Service assets thus promoting their independent design and other lifecycle aspects; in contrast, a system exhibiting tight coupling becomes difficult to maintain when faced with changing requirements. Loosely coupled assets must establish a shared semantic framework to ensure information exchanges retain a consistent meaning between participants.

**Logical Architecture**

The Logical Architecture is similar to the Conceptual Architecture, but typically used as a high-level view by architects to represent a complete system and its architectural approach, but without implementation details.

**Mediation**

Mediation can be broadly defined as resolving the differences between two or more systems in order to integrate them seamlessly.

**Message Exchange Pattern (MEP)**

A Message Exchange Pattern describes the pattern of messages required by a communications protocol to establish or use a communication channel.
Message Oriented Middleware (MOM)

MOM is a client/server infrastructure that enables an application to be distributed over multiple heterogeneous platforms and to communicate between its components using various Message Exchange Patterns (typically asynchronous). Specialized software and adapters are required at both ends of the client/server interaction and queues provide temporary storage when one participant becomes unavailable.

Multi-Factor Authentication

The use of multiple challenges in order to perform authentication. The client must successfully respond to each challenge or request for evidence in order to authenticate.

Oracle Reference Architecture (ORA)

Oracle Reference Architecture is a series of documents that provide insight and guidance on many aspects of computing that pertain to solution development in a modern computing environment. It defines a computing environment consisting of enterprise-class applications, processes, and SOA Services, as well as the infrastructure necessary to provide the capabilities and qualities of service they require.

Orchestration

Orchestration achieves course-grained functionality by the arrangement, coordination, and management of finer-grained operations.

Producer Contract

Also known as "Producer Contract" or simply the Service Contract, refers to the Service contract between the provider and the SOA (infrastructure or governing body) that specifies the contract of the Service. The Producer Contract should be able to support the consolidated requirements of all the Consumer Contracts for any given Service.

RosettaNet

A standard for B2B interaction based on XML. RosettaNet is also a consortium of companies working to create and implement e-business process standards.

Secure Sockets Layer (SSL)

Predecessor of TLS, SSL was designed by Netscape to provide confidentiality to data in transit over TCP/IP networks such as the Internet. Network traffic is encrypted at the transport layer.

Service

A Service is a means of packaging reusable software building blocks to provide functionality to users, applications, or other Services; it is an independent, self-sufficient, functional unit of work that is discoverable, manageable, measurable, has the ability to be versioned, and offers functionality that is required by a set of consumers. A Service may be shared, which means that the function offered by the Service is intended for multiple consumers, some known, and others that have not yet been identified.

Service Candidate

A capability that has been proposed as a possible Service but has not yet passed the service justification process.
Service Component Architecture (SCA)
SCA is a technology agnostic, often graphical, software engineering approach to assembling composite applications from Service components.

Service Discovery
Discovery (or "discoverability") is a principle of Service-orientation that refers to a variety of techniques to identify a Service that is available for reuse, and to understand its capabilities.

Service Factory
Service Factory is an efficient organizational model to build enterprise class shared services using a centralized development organization. The Service Factory specializes in designing and building Services at rapid pace.

Service Oriented Architecture (SOA)
Service Oriented Architecture is a strategy for constructing business-focused, software systems from loosely coupled, interoperable building blocks (called Services) that can be combined and reused quickly, within and between enterprises, to meet business needs.

Software as a Service (SaaS)
Software as a Service, is a software licensing and deployment option where customers pay for usage of the software from a provider that owns the license and manages its deployment. Software is provided on demand as a service as opposed to being purchased outright.

Social Computing
At the intersection of social networking and computer technology, Social Computing includes interactive user-centric devices such as blogs, wikis, instant messaging, social bookmarking, and tagging.

Source Code Management (SCM)
Source Code Management (SCM) is the management of changes to documents, programs, and other information artifacts.

Technology Architecture
A commonly recognized subset of enterprise architecture that pertains to the technologies that are leveraged in IT to support business solutions.

Two-Phase Commit (2PC)
A transaction management protocol that communicates with the participants in a transaction to direct agreement on readiness, commit, or roll-back operations.

Universal Description, Discovery and Integration (UDDI)
Universal Description, Discovery and Integration (UDDI) is a platform-independent, XML based, open industry initiative, sponsored by the Organization for the Advancement of Structured Information Standards (OASIS), enabling businesses to publish service listings and discover each other and define how the services or software applications interact over the Internet.

Usage Agreement
Usage Agreement or Consumer Contract refers to the Service contract between the consumer and the SOA (infrastructure or governing body) that specifies the terms of
consumption of the Service. This is different from the Producer Contract, which governs the terms between the SOA and the Service provider.

**Virtualization**

Enables multiple operating system environments to run on a single host computer. The environment contains the operating system and all supporting processes packaged together. Virtual environments can be deployed and migrated between physical machines.

**Web Service Remote Portlet (WSRP)**

WSRP is a Web services standard that enables the plug-and-play of visual, user-facing Web services with portals or other intermediary Web applications. Being a standard, WSRP enables interoperability between a standards-enabled container and any WSRP portal.

**XA**

A specification by the Open Group for distributed transaction coordination in software systems using the two-phase commit protocol. The XA Specification describes the function of a transaction resource manager in supporting transactional access to various resources.

**XPDL**

The XML Process Definition Language (XPDL) is a format standardized by the Workflow Management Coalition (WfMC) to interchange Business Process definitions between different workflow products, ie between different modeling tools and management suites. XPDL defines an XML schema for specifying the declarative part of workflow / business process.