

- Extract valuable patterns from massive streams of data incoming from devices.
- **High developer productivity**
 - Graphical editor to assemble heterogeneous components into composite applications
 - Fully standard, metadata-driven
- **Extreme Performance & Scalability**
 - Unified runtime for eventing and services
 - Runs on Oracle WebLogic Server, the cornerstone of the Oracle cloud application foundation.
 - Supports millions of critical transactions each day at thousands of customers around the world
 - Deployable in high availability (HA) configurations and supports a number of disaster recovery setups (including Active-Active).
- **Pluggable Services**
 - BPEL Process Manager, leading stateful orchestration engine
 - Human workflow
 - Business Rules
 - B2B
 - Business Activity Monitoring
 - Enterprise Scheduler
- **Oracle Service Bus**
 - Multi-protocol Enterprise Service Bus (ESB)
 - Industry's highest performance & scalability
- **Connectivity**
 - Certified with 300+ application adapters for all leading applications, technologies and mainframes
 - Specific B2B adapters for EDI, ebXML, RosettaNet and other industry standards
 - Unifies connectivity between cloud and on-premise applications
- **Unified Management & Monitoring**
 - Enterprise Manager Fusion Middleware Control provides the single pane of glass to manage and monitor integration flow
 - End-to-end instance tracking
 - One-stop solution for systems and business exceptions management

Connectivity

Oracle SOA Suite features a very extensive connectivity layer, enabling connectivity to virtually any data source inside as well as outside the enterprise. Oracle Adapters are available for more than 300 packaged cloud or on-premise applications, technology legacy and mainframes. In addition, B2B & Managed File Transfer capabilities are included to extend processes to external business partners.

Cloud Applications Adapters

A new line of cloud adapters simplifies the task of developing and managing connectivity to popular cloud applications, unifying cloud and on-premise applications in a seamless fashion. Through graphical wizards they reduce the learning curve often associated with native web services integration, abstracting the differences of each cloud application.

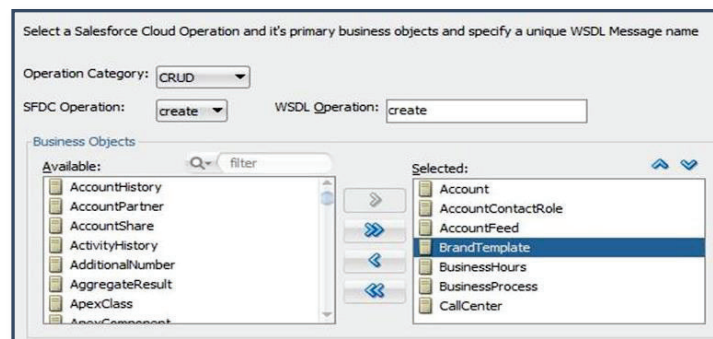


Figure 2. The wizard-driven cloud adapter configuration allows developers to browse available objects & operations

Application and Technology Adapters

Hundreds of off-the-shelf adapters built for Oracle SOA Suite are available to connect to enterprise applications, such as ERP systems or CRM applications from a variety of vendors such as Oracle, SAP, Microsoft, etc. Technology adapters including SOAP, REST, FTP, Files, Database, AQ, Tuxedo, VSAM, CICS, IBM MQ Series and JMS allow you to unlock assets and virtually reach into any IT system.

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Business-to-Business Connectivity

Integration can no longer be restricted to internal systems and needs to include functions provided by business and outsourcing partners. Because the interactions need to extend beyond the firewall they often require specific protocols and technologies. Oracle SOA Suite can leverage two key components in this category: Oracle B2B that handles a variety of protocols and formats such as EDI, ebXML, RosettaNet, etc. and Managed File Transfer (MFT), a new companion product to Oracle SOA Suite that provides a global and centralized infrastructure to manage and monitor file transfers typically handled by FTP today.

Service Virtualization

Oracle Service Bus is an enterprise service bus (ESB) that provides the key virtualization layer required for any sustainable integration architecture. Using Service Bus, organizations can shield service consumers from changes that might occur in the backend. They can also hide from developers the often intricate and complex details of underlying implementations of back-end applications, such as legacy protocols. A service bus is the lynchpin of any multi-channel strategy and more specifically mobile strategy: with just a few clicks, developers can create a standard API for any backend

- A *start node*, which contains the request and response variables introspected from the WSDL operation.
- A *receive node*, to receive incoming request messages.
- A *reply node*, to send response messages.
- A *scope*, which is a container that creates a context that influences the behavior of its enclosed elements.
- A *parallel node*, which is a placeholder for a fixed number of processing branches, each with its own scope.

The available elements can be combined in arbitrary ways to form a tree structure with the start node always (and only) occurring as the root of the tree. The last node is always the reply.

For more information, see [Improving Service Performance with Split-Join](#).

1.3.3 Transports, Adapters, and Bindings

Service Bus provides connectivity to external systems through a variety of transports, each of which is specific to a type of external system. Service Bus supports optimized database queries, and interoperability with web service integration technologies such as .NET, IBM MQ Series, IBM WebSphere, Apache Axis, and iWay adapters. The JCA transport expands the list of supported technologies by letting you connect to external systems using Oracle JCA technology and applications adapters. Additionally, Service Bus supports the REST binding, allowing you to connect to RESTful services using the HTTP transport.

You configure a transport's processing and connectivity information directly within a proxy or business service; you configure Oracle adapters using a configuration wizard specific to each adapter.

For more information, see [Working with JCA Adapters, Transports, and Bindings](#)

1.3.3.1 Supported Transport Protocols

Service Bus supports the following transport protocols:

- DSP (Oracle Data Service Integrator)
- EJB/RMI
- Email (POP/SMTP/IMAP)
- File
- (S)FTP
- HTTP(S)
- JCA
- JEJB
- JMS (including MQ using JMS, and JMS/XA)
- Local (Oracle proprietary for inter-ESB communication)
- MQ (WebSphere MQ)
- SB (RMI support)