Work Samples

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eLearning

- Links to a couple videos created using Camtasia:
  - https://youtu.be/vjlrVkKVU2s
  - https://youtu.be/nsbvR027GXY
- Links to a tutorial and interactive inforgraphic created using HTML5, CSS, JavaScript:
  - http://www.oracle.com/webfolder/technetwork/tutorials/obe/cloud/sscs/CreateStorageContainer/SOACS_prereq_storageContainers.html
  - http://www.oracle.com/webfolder/technetwork/tutorials/obe/fmw/wls/12c/12c_poster/poster.html

ILT

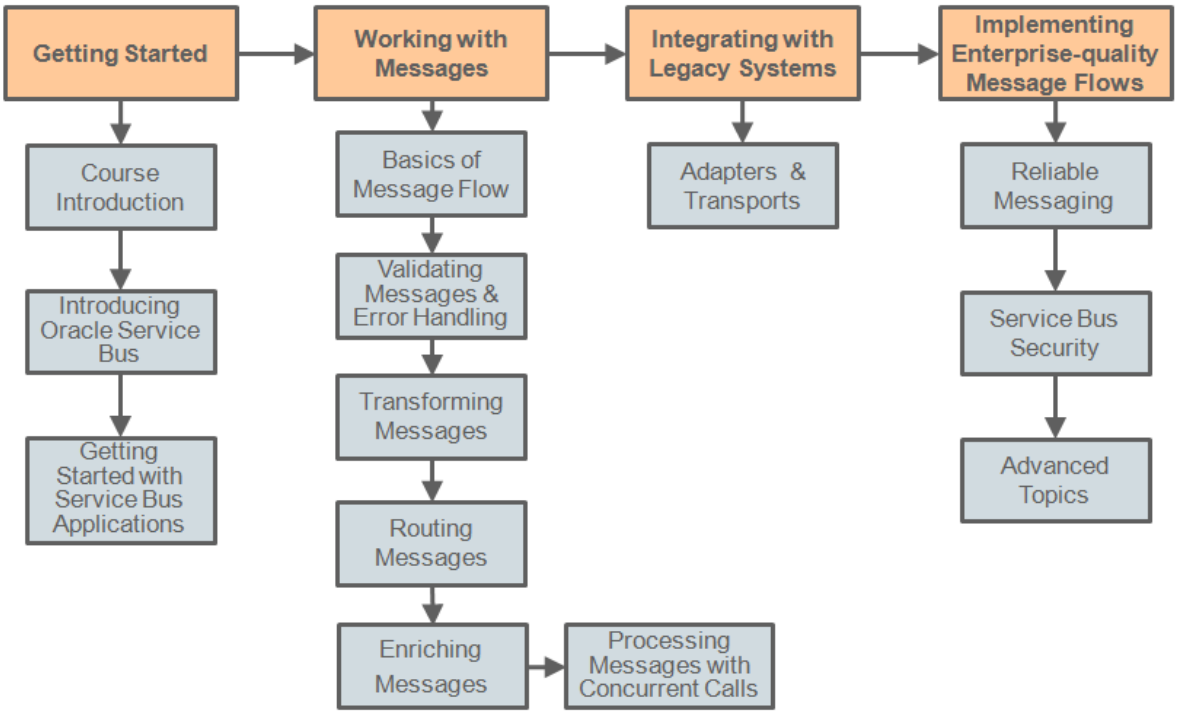
- Comparing the course outline before and after my update

Before

Session	Lesson
Day 1	1: Course Introduction 2: Introduction to Oracle Service Bus 3: Message Flow
Day 2	4: Message Flow Actions 5: Message Flow Best Practices
Day 3	6: Transports in Oracle Service Bus 7: Debugging with Oracle Service Bus 8: Introduction to Oracle Service Bus Security

After

Course Map



- The set-up of a course labs developed using the scenario-based approach

Understanding the Problems

In this course, all practices are based on a case study about a fictitious company, AviTrec, which is experiencing business challenges while adopting SOA. This practice provides a summary of the business challenges and project requirements.

Company Background

AviTrec.com is an e-commerce website where people can buy and sell outdoor gear and sporting goods. The company has embarked upon a SOA program to align with its business goals of improving customer satisfaction and increasing market share.

Problem Statement

AviTrec's current ordering system is based on a single-purpose, monolithic application. Some issues with this system are:

- Credit card payments are often denied for various, sometimes minor reasons, such as incorrect expiration date. The fix of the problem is hard to apply across the order entry systems.
- AviTrec plans to expand its business by taking on more online business partners, but its existing system cannot accommodate multichannel business partners.
- AviTrec do not have information about the number of orders approved, received, or rejected.
- It takes a long time to implement a simple change in the business logic.

Business Requirements and Technology Solutions

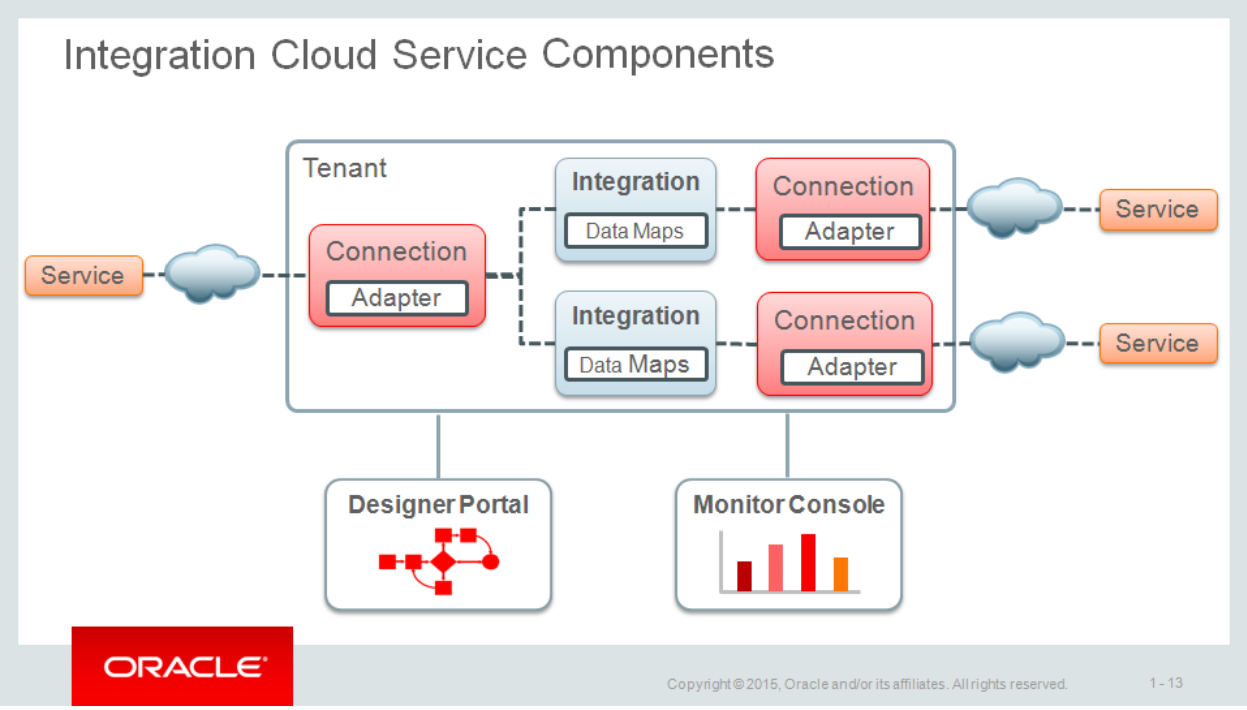
The following table lists the requirements for improving the order management system:

Requirement	Solution
Provide a consistent interface to all order entry applications for credit validation.	
Do not disrupt order processing operations after credit checks are outsourced to a third-party credit provider. (Currently, credit is checked by internal departments.)	
During holiday seasons, allow manual overrides if a customer's total order amount is marginally over the daily limit.	
Ensure that the order processing system is accessible through multiple protocols, data formats, and client types: • Support access through RESTful APIs • Interface with trading partners and provide electronic data interface (EDI) support • Receive orders through a different channel	

as batch CSV files over FTP	
Collect analytic data to gain business insights into customer order requests.	

To the best of your knowledge, try to provide the possible solutions here. You are not expected to know all the answers. In the subsequent lessons, you will explore these technologies and learn how to use them to solve AviTrec's business problems.

- Slide and notes for video lectures or ILT courses created using Powerpoint



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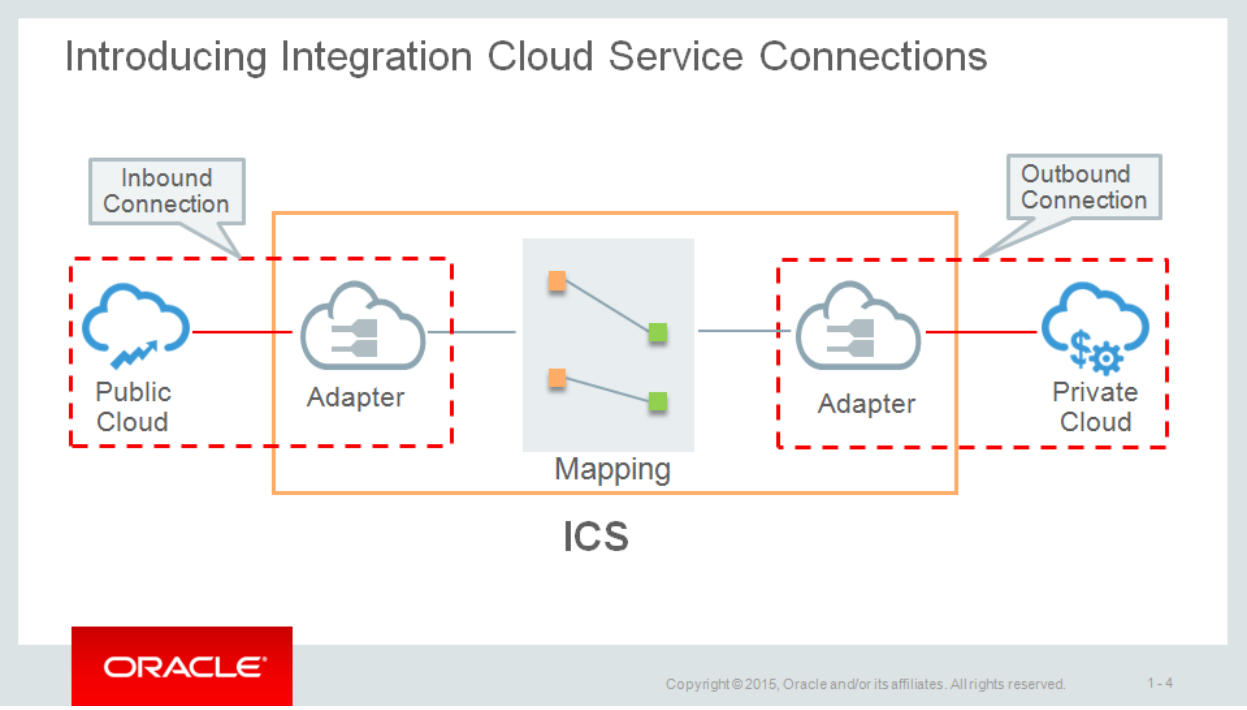

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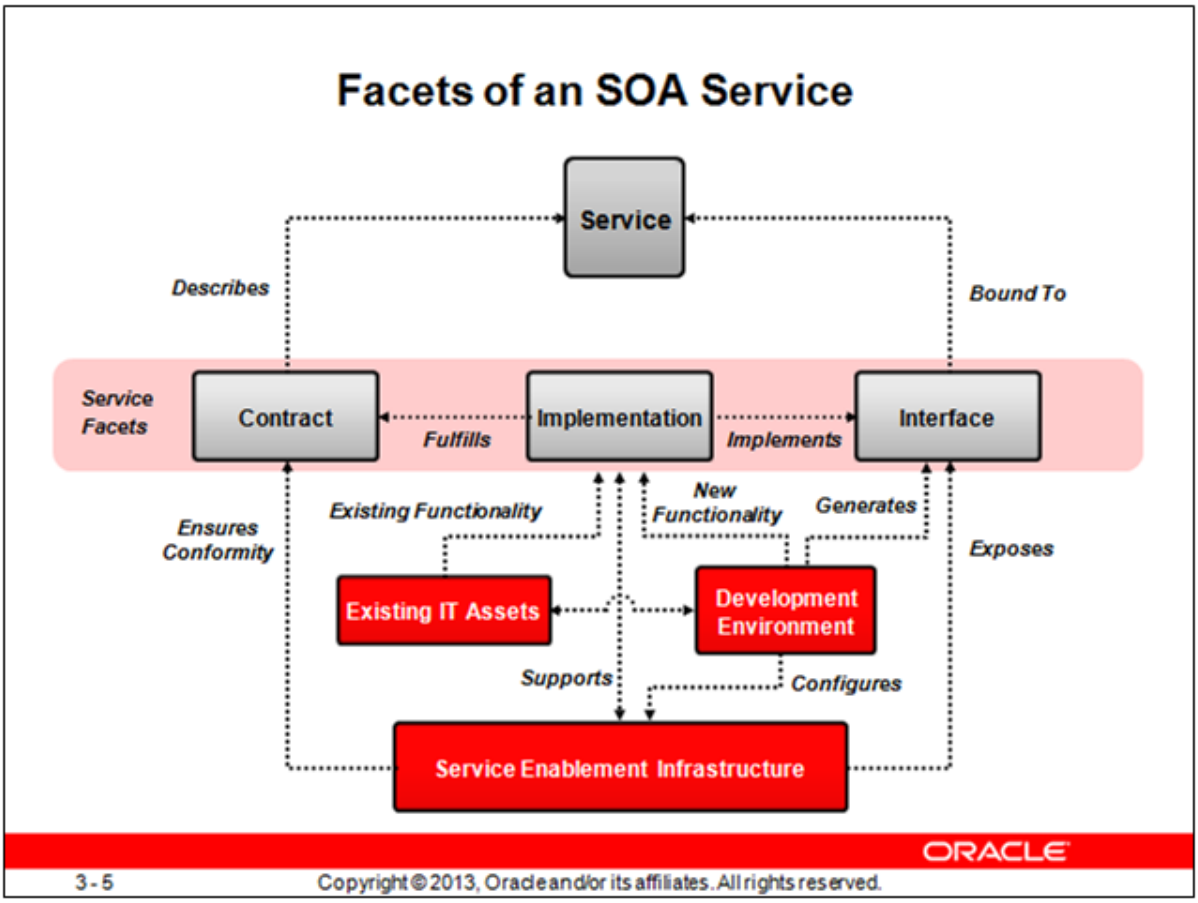
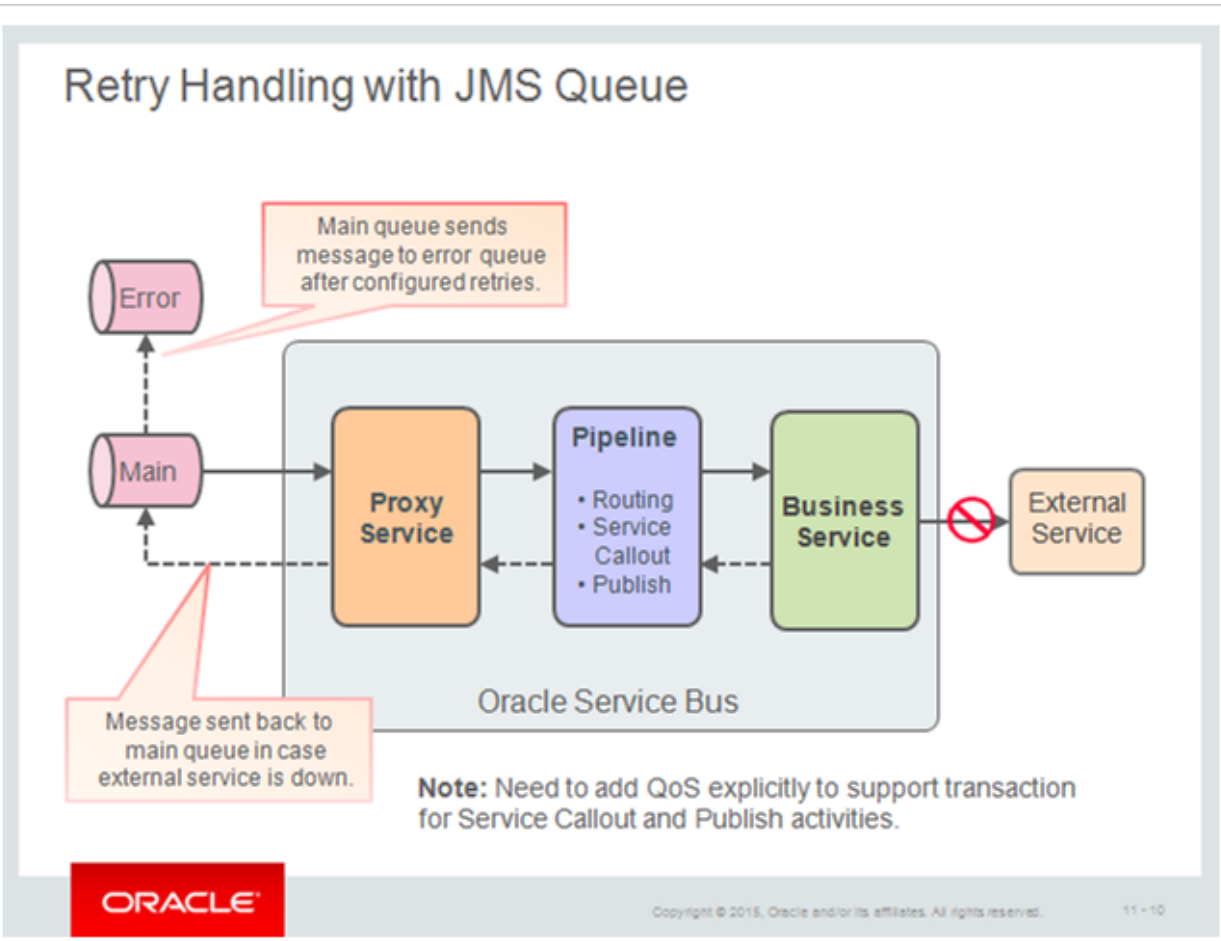


A service is comprised of three parts: the *implementation* (deployed code and configuration of infrastructure), the *interface* (means by which the service is invoked), and the *contract* (a description of what the service provides and its constraints).

A useful metaphor for the breakdown of a service in this way can be seen in the example of a power company. In this example, the implementation would be the methods used to generate power (such as coal, solar, or nuclear) and the distribution grid that makes the power widely available. Users of power do not need to know how it is generated or even where it comes from. They simply need to be able to interface with the grid.

The interface for power is the outlet. To enable many types of consumers (many different devices) to use electrical power, a standard outlet configuration and voltage specification has been established.

Finally, a consumer must enter into a contract with the power company. The contract in this case is the agreement to pay for electricity at a certain rate, on a certain schedule. The power company and consumer may negotiate quality of service (QoS) and service-level agreements (SLAs) as part of the contract for certain users of power.



Consider a typical scenario where an application puts message to JMS queue; the proxy service listens on the queue; the business service routes message to an external service. In some situations it could be possible that the external service is not available. When the service is down, you want Service Bus to abort the complete transaction, redeliver the original message to the queue and pick up the message at a later moment.

The diagram in the slide shows when a proxy service reads a message from the main queue and there is an error somewhere in the process, the message will be rolled back and stays on the queue. WebLogic will detect this and wait for retry interval time configured before the proxy service can consume it again. If this fails after the retry count, then WebLogic will move the message automatically to the error queue. Such an error queue can be monitored for new messages through the WebLogic diagnostic module. An administrator might be able to solve the problem and remove the message or move it back into the original queue.

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