

Forget triggers and custom code, Use Oracle Business Events with BPEL

Introduction

Oracle E-Business Suite comes with a Business Events mechanism, which is a service delivered as part of Oracle workflow. The Business Event system leverages the Oracle Advanced queuing infrastructure to communicate between systems. This business event mechanism can be combined with BPEL to create a very potent combination for building highly robust and scalable interfaces.

Why Business Events?

There are numerous reasons which advocate the use of the Business Events mechanism as compared to the other conventional methods – namely Triggers, Alerts or even Polling of tables. Interfaces built based on Business Events are very robust and at the same time highly scalable. This solution can be achieved literally with zero coding; thus resulting in minimal maintenance. For these reasons, Oracle highly recommends this solution, as there is no customizations involved which would get affected by an upgrade.

Conventional interfaces built using triggers or by polling tables require lot of maintainable code and needs some level of PL/SQL expertise. Also, it creates an overhead over the resources which might affect the overall performance as well.

BPEL's Oracle Application Adapter

Oracle's BPEL adapter for E-business Suite provides the foundation required to build this robust solution. The adapter wizard is totally declarative and very simple to configure, it also supports APIs and Concurrent Programs. It establishes the appropriate subscriptions to the respective Business Events. The only pre-requisites is to enable the corresponding Business Events and in case of Inventory transactions, the System Profile option 'EDR:E-records and E-Signatures' needs to be set to Yes.

Building the BPEL Process

The actual build of this interface involves the following

- Building the BPEL process
- Deploying the BPEL process
- Testing the process

The build starts with creating an 'empty' BPEL process and configuring the Oracle's e-business suite adapter. Upon completion of the adapter wizard, an actual subscription is registered against the respective Business Event. Let's consider the Item creation Business Event, whenever an Item is created in EBS, the appropriate Business Event fires off and publishes the basic Item information into the AQ. Any BPEL process subscribed to this event, instantiates immediately and gets the Item Id as its input parameter. We then take this unique Item identifier and query up the entire Item information.

This item information can be transformed into any required format and passed on to the other system or partner; there by synchronizing the two systems with the same Item information.

Conclusion

Oracle Business Events mechanism provides a comprehensive platform and toolkit for Application to Application as well as Business to Business integration. Its unique publish-and-subscribe integration methodology provides for rapid and reusable interface specification focused at the functional semantics instead of programming. Also, upgrade of any specific application does not directly impact other applications or interfaces. Using BPEL interfaces can be built quickly, evolved easily, reused freely and managed centrally.