Oracle BPM 11.1.1.7 Release – New Features

Oracle BPM enables business users to take control and drive improvements to their processes. This document discusses how the new features introduced in Oracle BPM 11.1.1.7 product release empowers business to participate effectively in the entire process life cycle starting from definition, feedback, modeling, design through implementation and management of business processes.

In addition, with this release, users have the opportunity to utilize the adaptive case management functionality. Adaptive Case Management (ACM) offers the flexibility needed when a business process is not known at design time and needs to be adaptive according to business needs while managing a case.

Business Led Process Composition

Since the first release of Oracle BPM 11g product, business enablement and empowerment has been a key theme and driving factor for the product roadmap. Oracle BPM enables the business user to define the business processes in BPMN 2.0 and author business rules inside Process Composer, an intuitive, easy to use and web-based modeling tool. The process models replace the traditional requirements document and drive IT implementation. These models also serve as process documentation for dissemination and learning purposes. Further, using Composer, business users can not only define but also review and provide feedback on their business processes.

With the Oracle BPM 11.1.1.7 release, Oracle has further pushed the envelope on what business can achieve in their tooling of choice. In addition to modeling business processes and authoring business rules, business users can now design user interfaces, model business data, discover business services as well as implement and validate their business processes inside Oracle BPM Process Composer with minimal IT involvement.

User Interface Design using Oracle Web Forms

Designing human task user interfaces is just as important as the process definition itself and requires considerable business involvement. The newly introduced Oracle Web Forms component inside Oracle BPM Process Composer allows business users to easily create rich, dynamic, user interfaces for their business processes by dragging and dropping controls from the UI palette. The Oracle Web Forms is based on HTML 5 and AJAX technologies and comes with wide variety of pre-packaged controls such as Date, Money, Phone and Email. It allows grouping of controls in a wide variety of ways such as collapsible sections, tabs, multiple columns etc and easily supports handling repeating items. It provides dynamic behavior via Web Form Rules (Java Script) for computed values, for disabling/enabling UI controls and for performing validations. It can integrate with databases and other backend systems via REST mechanisms. At any point in time, the business user can preview or test the form in a stand-alone fashion.
Once the Web Form is designed, the payload behind the form is automatically inferred and corresponding Business Objects get auto-generated by the underlying platform and added to the Business Catalog. These Web Forms can be easily linked to human task definitions and the human task payload is automatically set to the Web Forms payload. In addition to the Form first scenario where the UI is designed first and the payload is auto-generated, the product also supports using an already existing data definition to generate the form. In the latter case, the Web Forms can be auto-generated from the data definition and further refinements can be done to enhance the layout. These user interfaces once completed and tested can be deployed in production along with the Oracle BPM Project or they can serve as a first version (requirements) that can be further enhanced by IT. Changes to the Web Form look and feel can be controlled by changing the ADF Skins (similar to CSS standards) inside the Oracle BPM Workspace portal. In short, enabling business users to design the user interfaces in their tooling of choice accelerates time-to-market and provides significant cost savings.

Player
This feature enables the Oracle BPM Process Composer user to run and step through the business process in order validate the business flow, the business rules, and the associated user interfaces. It lets users to run the process as if it is being run in production with all data and rule invocations. This helps
business users to ensure the process is behaving the desired way before it is deployed in production environment. The Player feature in combination with the Draft feature that allows stubbing out process steps enables business users to do incremental development and validation of their business processes.

The role of the IT developer in this case is more of a business enabler. They are responsible for population of the Business Catalog (library) with reusable, shared services, data types, and other such implementation artifacts. Tasks such as creation of complex mapping using XSLT or XPATH mechanism, adapter services to integrate with backend applications and scripts to perform custom work are delegated to the IT developers. However, changes made by IT Developers can be shared back to business and viewed inside the business tool for further refinements by business. This seamless round-trip is possible because BPMN 2.0 is a model cum execution language and both Business and IT share the same metadata.

**Modeling Business Objects**

With the Oracle BPM 11.1.1.7 release, users can design data definitions, known as Business Objects, inside Oracle BPM Process Composer. These data definitions can be either defined from scratch or they can be imported if there is an already existing data definition in XSD format. These Business Objects can be hierarchical and default values can be specified.
Modeling Business Indicators

Oracle BPM Process Analytics component captures process-specific data also referred to as Business Indicators in addition to standard workload and process metrics in order to measure business performance. There are three types of business indicators supported and starting with the Oracle BPM 11.1.1.7 release, they can be defined inside Oracle BPM Process Composer by the business user.

- **Measures**: are numerical data that typically signify a value that is interesting in process analytics. For example, the sales total.
- **Dimensions**: specify how process analytic data may be sliced. For example, region, month, and sales total ranges (high, medium, low).
- **Counters**: useful for counting iterations. For example, the number of deals.
Adaptive Case Management

With BPMN processes that are well defined, the business can track and manage processes that require action according to a strictly defined process. However, some processes are not defined ahead of time and instead require a knowledge worker to take a path according to what happens as the case evolves. For this, we need Adaptive Case Management.

While companies have reaped substantial benefits and ROI by automating structured, repeatable process flows even greater benefits can be realized by taming dynamic, unstructured, ad-hoc processes. These non-linear processes are knowledge intensive and often performed by skilled workers also referred to as knowledge workers to coordinate the tasks. The outcome of the process is determined by knowledge worker rather than the system. In order to achieve better business outcomes, knowledge workers require greater flexibility, adaptability, and control of their tasks as well as ability to collaborate with other experts for guidance. These types of processes are broadly referred to as case processes or simply, case.

Traditional BPM platforms require a process definition and suited to handle only structured step-by-step process execution that are repeatable. Flexibility in traditional BPM platforms is limited to business rule controls and task-reassignments and makes it harder to implement case worker based, ad-hoc processes. Adaptive or advanced case management platforms are specifically designed to support automation and streamlining of all aspects of a case. With release 11.1.1.7 of Oracle BPM, the platform provides first class support for dynamic case management. The case management plus BPMN offering from Oracle is unique as a single platform providing both structured and unstructured processes working together as desired.

Design-time support for Case Management

Using the Oracle BPM 11.1.1.7, users can define a Case and associate it with a set of Case Activities. In addition to Case activities, the Case definition consists of case data, case documents, case rules, case events, case milestones, case stakeholders, and case outcomes. The progression of a case is indicated via case milestones. A case milestone signifies completion of a stage in a case and is useful as it provides high-level snapshots for management to validate the progress of a case. A case is said to be complete when a case outcome is reached.
The case activities could be BPMN based processes or human workflow tasks or notifications or could be even an automated system step. These activities could be mandatory or optional and become available to the case worker at various points as the case progresses. The activation of a case activity can be manual or automatic based on case rules or case events or reaching of a case milestone. In addition to pre-defined case activities, the platform also supports creation of case activities by a case worker.
**Content Integration**

Cases are document intensive and a Case is usually associated with different types of documents including unstructured content and media. To address the content requirements of a Case, the Oracle BPM 11.1.1.7 integrates case with the Oracle Web Center Content product component. The case documents are stored in the embedded content management system under case instance specific folders. Oracle BPM 11.1.1.7 also supports integration with 3rd party content management systems via CMIS (Content Management Interoperability Services) interfaces.

**Case Events**

Case events are a big part of the dynamic aspect of cases. With Oracle BPM 11.1.1.7, the case events can be internal to the case (case reaching a specific milestone, case activity being completed, case rule being activated) or they can be external events on the Event Delivery Network (EDN) as well. These events can alter the progress of the case and can change data, the timeline, reset a milestone, or even cancel and terminate a case. A case event can also be tied to a case document being added to the specific case instance folder.
API Support for Case Interfaces
Lastly, all these artifacts are surfaced to the case worker through a case interface. The case interface provides a 360 degree view of the case and displays the history or the progression of the case. Oracle BPM 11.1.1.7 comes with well defined APIs for generating custom case interfaces. Samples will also be shipped with the product that highlight the use of these Case APIs for building rich case interfaces.

Collaborative and Powerful work management Capabilities
New and Improved BPM Workspace
Significant usability and functional enhancements have been added to Oracle BPM Workspace in the Oracle BPM 11.1.1.7 release. The skin and the layout have been changed to provide a cleaner, nicer, clutter-free, business appealing look. The Applications, Views and Links are now hidden in a floating panel and you can hide or pin them to the home page. The process instances table and process instance audit trail in the Process Tracking page provide a way for the business user to track the status of his tasks as well as the associated process instance. With this release, users can easily navigate from a task item in the Task Inbox of the Home page to the corresponding process instance in the Process Tracking table by clicking on the Process name. This version also allows inline editing and changing certain aspects of the Task such as Priority right inside the Task Table.

Custom Views and Customizations
Users can also easily customize the Task Inbox as well as the Process Instance table by adding columns based on Task Flex fields and Process level flex fields using wizards. Creation of custom is a commonly used feature within Oracle BPM Workspace to organize tasks. With this release, custom views can be made as the default Inbox view and Task List portlets for embedding within Oracle WebCenter or other third-party portals can be tied to Task Views. The Task Views as well as other customizations can be easily shared with other users or groups.
Simplified Wizard for Reassign Tasks, Vacation Rules and Delegation Tasks

Oracle BPM Suite provides power and flexibility to business users to perform dynamic work assignment. Business can re-assign, delegate, as well as re-route their tasks to others. With release 11.1.1.7, the Reassign Task wizard has been enhanced to include roles participating in the process. The Vacation and Delegation Rule Editors inside Oracle BPM Workspace have also been simplified. With this wizard, the user can do multiple searches to select multiple users for reassign and delegation.

Robust Process Management & Controls

With Oracle BPM 11g PS4 FP release, process definitions could be changed and in-flight instances could be patched to the new definition. In addition to instance patching, in the 11.1.1.7 release in-flight
instances can be migrated from an older version to a newer version. You can either choose to migrate all or selective in-flight process instances. Using ant, you can create a migration plan for bulk migration and run feasibility report to identify which instances can be migrated.