Table of Contents

Executive Overview ........................................................................................................................................... 3

Releases Prior to Oracle Imaging and Process Management 10gR3 ............................................................. 3

Oracle Imaging and Process Management 11g R1 .......................................................................................... 4

Technology Stack ............................................................................................................................................ 4

Workflow .......................................................................................................................................................... 4
  Migrating from the embedded BPM to Oracle BPM Suite ................................................................. 5

Application Integrations ............................................................................................................................... 6
  AXF-based Integrations .............................................................................................................................. 6
  EIS-based Integrations .............................................................................................................................. 6
  Migrating from EIS-based to AXF-based Integrations .......................................................................... 7

APIs and Programmatic Access ...................................................................................................................... 7

User Experience ............................................................................................................................................... 7

Content Migration ......................................................................................................................................... 8

Summary ......................................................................................................................................................... 8
Executive Overview

Oracle Imaging and Process Management (Oracle I/PM) automates paper intensive business processes by coupling imaging technology with workflow. Oracle I/PM is a very mature product line, having been first released in 1990 by Optika. Since the acquisition of this technology by Oracle (via the Stellent acquisition of Optika and then the Oracle acquisition of Stellent) Oracle I/PM has found a renewed charter within Oracle’s Fusion Middleware offering as the default imaging solution for Oracle’s applications while continuing to provide open APIs and integration tools to enable integrations with third party applications and solutions.

Since the integration of Oracle I/PM into Oracle’s Fusion Middleware offering, the two key focus areas of the product have been:

• Providing the industry’s best integrations with Oracle’s business applications, leveraging other components of Oracle Fusion Middleware, such as Oracle SOA Suite and Oracle Business Process Management Suite, to provide loosely coupled and configurable integrations that are aligned with the strategy of Oracle’s applications.

• Porting the Oracle I/PM product to align with Oracle Fusion Middleware strategy and leverage other components of Oracle Fusion Middleware. This involved both a technology shift – moving from C++/.Net to Java/J2EE – as well as leveraging Oracle Universal Content Management for repository services.

Oracle I/PM 11g is the first release on this new technology stack. While this is a major product release there are a number of actions that can be taken by existing customers of Oracle I/PM to mitigate the risk and cost of the migration to Oracle I/PM 11g. This document will provide guidelines for current deployments of Optika Acorde, Stellent Imaging and Business Process Management and Oracle Imaging and Process Management 10gR3 as they prepare for the 11g release of Oracle Imaging and Process Management.

Releases Prior to Oracle Imaging and Process Management 10gR3

Oracle Imaging and Process Management (and its predecessor releases) is covered like any other Oracle product under Oracle’s lifetime support policy with premier, extended and sustaining support levels depending on the date the product release was generally available. To allow customers sufficient time to plan for the migration to Oracle I/PM 11g, Oracle has extended support\(^1\) for Oracle I/PM 10gR3 to December 2015. Customers are encouraged to upgrade to Oracle I/PM 10gR3. This upgrade provides customers the following benefits:

• Certifications with the latest version of operating systems, database and other system components

• An integration with Oracle BPEL Process Manager\(^2\)

• An updated integration framework for Oracle’s business applications with adapters for Oracle E-Business Suite and PeopleSoft which leverages Oracle Fusion Middleware

• Product enhancements including a re-architected lightweight, cross browser web UI, enhanced high availability capabilities via storage independent volumes and intelligent routing, etc

---

\(^1\) For the latest product support information see the lifetime support policy document: http://www.oracle.com/support/library/brochure/lifetime-support-middleware.pdf

\(^2\) Access to product functionality is governed by a customer’s license agreement. For clarification on the functionality covered in a license agreement customers should contact their sales representative.
• Releases prior to Oracle I/PM 10gR3 are all on sustaining support so no new certifications or patches will be provided for these versions of the software
• The tools that are planned to facilitate migration to Oracle I/PM 11g will only be provided as patches to Oracle I/PM 10gR3.

Note: There are direct upgrade paths to Oracle I/PM 10gR3 from each of the prior major releases.

Oracle Imaging and Process Management 11g R1
Oracle Imaging and Process Management 11g represents a significant development effort – it is the result of hundreds of person years of development and has undergone significant testing (functional, stress, high availability, globalization, security etc). The main goal of the Oracle I/PM 11g R1 release was to provide the industry's best solution for application imaging – eliminating paper from business processes to enable their automation – on an Oracle Fusion Middleware technology stack.

Oracle I/PM 11g R1 provides some key enhancements over Oracle I/PM 10g but this first release of Oracle I/PM 11g does not provide all of the functionality provided by Oracle I/PM 10g R3. Lesser used features,(such as OCR for full text searching of images) and those features that didn't fit the themes of the first release (such as COLD support) are not available in Oracle I/PM 11g R1. Oracle intends to continue to build out the functionality provided by Oracle I/PM 11g in future releases to give all existing customers a migration path to Oracle I/PM 11g. For more information on the functionality provided by Oracle I/PM 11g please see the product documentation.

Technology Stack
Oracle I/PM 10g was a Windows based product and as such leveraged the Microsoft technology stack – IIS for the web application, Active Directory for user identities etc. As described earlier Oracle I/PM 11g is a J2EE applications that runs in a WebLogic Server, however Oracle continues to provide support for running Oracle I/PM in a Windows environment. This initially includes the following certifications:

• Windows Server 2003 and Windows Server 2008 for the server OS
• SQL Server 2003 and 2008 for the application’s database
• Active Directory 2003 and 2008 for user identity
• Windows client OS’es
• Standards-based web services accessible from .Net development environments

This will allow customers to continue to leverage their existing infrastructure investment when they migrate to Oracle I/PM 11g.

Workflow
Oracle’s strategy for workflow and process automation is to standardize on the capabilities provided by the Oracle Business Process Management Suite. All product areas within Oracle are leveraging the Oracle BPM Suite for cross-product solutions and increasingly rely on the Oracle BPM Suite for native workflow capabilities.

Oracle I/PM historically has provided a robust business process management capability natively as part of the product. While Oracle intends to continue supporting the embedded business process management capability for existing customers (per the lifetime support policy described above) new
customers are encouraged to leverage the capabilities provided by the Oracle BPM Suite. This gives customers of Oracle I/PM:

- An industry leading, standards based tool for both the human workflow and system integration/process orchestration aspects of business process management
- Much richer functionality than was provided by the embedded business process management capability including a business rules engine, a business activity monitoring dashboard etc.
- A tool that is aligned with the workflow strategy of other Oracle applications and Fusion applications, allowing investment in workflow deployments and skills to service the workflow requirements of other Oracle applications as well

With Oracle I/PM 11g, Oracle will no longer ship an embedded business process management capability with I/PM but will instead rely on Oracle BPM Suite.\(^3\)

**Migrating from the embedded BPM to Oracle BPM Suite**

Oracle BPM Suite is a J2EE and XML based technology. The BPM capability that was embedded in Oracle I/PM is a C++ application which allowed customer actions and forms that also leveraged Microsoft development technologies like .NET, VB etc. Providing an automated migration tool from the embedded BPM capability to Oracle BPM Suite is not technically feasible. Instead, Oracle recommends an incremental approach that takes advantage of inevitable business process changes to incrementally convert to Oracle BPM Suite.

1. Customers should familiarize themselves with Oracle BPM Suite; in particular Oracle BPM Suite supports two standards – BPMN (business user friendly and ideal for long running and more human centric workflows) and BPEL (developer centric and ideal for system integrations and straight through process workflows). Customers should evaluate this solution and determine a strategy for leveraging these capabilities for the breadth of workflows in their organization

2. As customers encounter new workflow requirements, they should consider implementing those workflows in Oracle BPM Suite instead of the embedded BPM capability. This will allow an organization to gain hands-on experience with Oracle BPM Suite.

3. As an organization’s requirements and business processes change, changes will need to be made to their workflows. Organizations should carefully evaluate whether these changes are sufficient to justify developing a new workflow in Oracle BPM Suite instead of extending the current workflow. Or perhaps a series of smaller changes could prompt the re-evaluation of a business process, which in turn could provide the business justification for developing a new workflow that could be developed in Oracle BPM Suite.

4. Oracle expects there will be organizations that have very complex workflows modeled in the embedded BPM tool. If these customers would like to take advantage of the capabilities of Oracle I/PM 11g they could manage their images in Oracle I/PM 11g while continuing to leverage their existing technology deployment for workflow. Customers would have to:
   - Configure the Oracle I/PM 11g Input Agent to ingest the documents that were previously being processed by the Oracle I/PM 10g Filer server.
   - Maintain the BPM related run-time components of their Oracle I/PM 10g deployment (where their workflows are already deployed).

---

\(^3\) Oracle I/PM includes a restricted use license of Oracle BPM Suite; for more information on this license customers should contact their sales representative.
c. Develop a stub BPEL process which can inject packages into the Oracle I/PM 10g BPM. Contact Oracle Customer Service for code samples that demonstrate this functionality.

d. Configure the Oracle I/PM 11g application to initiate new instances of this BPEL process in response to documents being ingested.

e. Edit workflow process to replace any calls to Oracle I/PM 10g APIs to Oracle I/PM 11g web services. Contact Oracle Customer Service for code samples that demonstrate this functionality.

Application Integrations

Oracle I/PM has provided technology for integrating with business applications since the 1990s. This technology has been provided under several names including Application Link or ERP Integration Suite (EIS). Leveraging this technology Oracle I/PM also included adapters for several business applications including Oracle E-Business Suite, PeopleSoft Enterprise, JD Edwards Enterprise One, SAP as well as a HLLAPI integration for ‘green screen’ applications like JD Edwards World.

Oracle has provided an updated integration technology – now known as the Application Extension Framework (AXF), to support the renewed focus of Oracle I/PM on application integrations, and its incorporation into Oracle Fusion Middleware. The AXF incorporates the lessons learned with customer implementations and takes advantage of the latest technology and architectural best practices – provided as a J2EE application and leveraging web services and BPEL. Similar to the previous integration technology, Oracle is providing productized integrations with various applications that leverage the AXF technology. While the AXF can support integrations with any application, Oracle is focusing on providing integrations with its own applications – Oracle E-Business Suite, PeopleSoft, JD Edwards etc - working very closely with the relevant application teams to provide the best integration of imaging, workflow and content management with these applications.

AXF-based Integrations

With Oracle I/PM 11g, Oracle has updated the AXF infrastructure to leverage the latest version of the technology stack (WebLogic Server, BPM Suite 11g etc) and comply with Oracle software standards for security, globalization, accessibility etc. AXF-based integrations will only be minimally affected by the upgrade to Oracle I/PM 11g. The look and feel of all the web-based tools has been updated to reflect new Oracle user interface standards and some of the customization schemas have been extended to provide additional configuration options. Migration to the new configuration schema is manual process that should be planned for during an upgrade project.

EIS-based Integrations

While Oracle intends to continue supporting the EIS-based integrations for existing customers (per the lifetime support policy described above) new I/PM 10g customers are encouraged to leverage the capabilities provided by the AXF-based integrations. With Oracle I/PM 11g, Oracle will no longer ship EIS-based integrations but will instead rely on AXF-based integrations.

---

4 The integrations are priced separately. For more information customers should contact their sales representative.
Migrating from EIS-based to AXF-based Integrations

Oracle AXF-based integrations leverage J2EE based technologies and Oracle BPM Suite. The EIS-based integrations are based on Microsoft development technologies like C++, .NET, VB, etc. as well as the Oracle embedded BPM. Providing and automated migration tool from EIS to AXF based integrations is not technically feasible. Instead Oracle recommends all new Application Integrations be implemented on Oracle I/PM 11g and a manual migration from EIS-based integrations be planned as part of normal process improvement initiatives.

APIs and Programmatic Access

An imaging or transactional content management solution is intended to be deployed as a supporting service embedded into workflow processes and business applications. Oracle I/PM 10g provided a range of integration mechanisms including web services, COM APIs (with .NET interops) and URL tools. Oracle I/PM 11g has embraced web services and URL tools as the primary mechanisms of integrating imaging functionality into custom applications and will no longer be providing COM APIs; customers should evaluate the Oracle I/PM 10g web services and URL tools and leverage them where possible to smooth the transition to Oracle I/PM 11g.

Oracle I/PM 11g provides very comprehensive web service APIs that will allow developers and integrators to access most of Oracle I/PM’s functionality (end user and administrative) programmatically. The web services are accessible in any environment that is capable of processing the WSDL’s provided with Oracle I/PM’s web services and generating native implementation classes; this includes the .NET environment that will be familiar to many customers of Oracle I/PM 10g.

For more information on the web services as well as other integration tools like the URL tools or the RESTful document rendition APIs, please refer to the Oracle Imaging and Process Management Developer’s Guide.

User Experience

For end users Oracle I/PM 10g provided both a native desktop user interface as well as web based interfaces – the web express client with support for multiple browsers but with only the core subset of the most common functionality and a more fully featured web based application. With Oracle I/PM 11g all user access to the application will be via a web user interface. New deployments of Oracle I/PM 11g should default to deploying the web express client to their end users to enable a smaller transition to the Oracle I/PM 11g UI.

Oracle I/PM 11g continues to provide a browser based document viewer with support for over 400 document types as well as support for annotations and redactions. In 11g this viewer is delivered as a java applet enabling it to be used on more browsers and deployed more easily in environments with restrictive desktop security policies.

Oracle I/PM 10g provided a range of desktop applications for administration including the primary desktop application (with additional functions exposed based on permissions), the Filer UI, a general configuration tool etc. With Oracle I/PM 11g all administration will also be performed through a modern web UI.
Content Migration

Oracle I/PM 11g leverages Oracle Universal Content Management as its repository. Customers who have deployments of previous releases will have to go through a migration process.

Migrating documents to Oracle I/PM 11g from Oracle I/PM 10g will involve several steps:

- In Oracle I/PM documents are stored in applications; applications manage the fields that will be associated with each document and their versioning behavior. Additionally most configurations in Oracle I/PM – workflow integration, security, storage etc are configured at the application level. Customers will have to re-configure their applications in Oracle I/PM 11g using the provided administrative interfaces

- Oracle plans to provide tools to automate the migration of content from Oracle I/PM 10g to Oracle I/PM 11g. These tools will be provided as patches to Oracle I/PM 10g and will push content from the 10g repository to the 11g repository depending on the configuration. The migration tools will provide configurations like the following:
  - Mapping of 10g application fields to 11g input files
  - Mapping from 10g annotations to 11g annotations e.g. from 10g annotation security levels to one of the three 11g annotation permissions
  - Whether migrated content should be deleted
  - A search that controls how the tool selects documents for migration e.g. images associated with unpaid invoices, the most recent documents in an application etc

Once the documents have been migrated to 11g, customers will also have to re-create the searches in 11g that users will execute to access the migrated documents and adjust the searches in 10g as appropriate to prevent user confusion.

Summary

Oracle expects customers to migrate to Oracle I/PM 11g in a phased manner moving workflows and documents to 11g as business events occur with which the infrastructure changes can be coordinated. Organizations should prepare a plan for migrating to Oracle Imaging and Process Management 11g – the plan will need to cover the Oracle I/PM specific steps as described above as well as the preparation that is required for any software deployment e.g. ensuring OSs are upgraded to the correct versions.

---

5 For assistance with migrating content prior to the availability of the migration tools please contact Oracle Consulting Services or another systems integrator that is experienced with Oracle I/PM
The preceding was intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions.

The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.