Oracle EBS Assessment

Prepared for:

PORT OF OAKLAND

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1. Executive Summary

Scope of This Assessment
The charter of this Assessment is to:

- Evaluate how the Oracle E-Business Suite (EBS) applications are supporting the Port of Oakland’s business requirements and how the Port is currently using them
- Create recommendations on how the system can be improved to meet current business needs, reduce inefficiencies and decrease the amount of manual effort involved in core business processes – all within the context of a planned EBS upgrade.
- Create recommendations on how the system can better support changing business requirements as the Port’s business evolves
- Establish a roadmap to enable the Port to use EBS to better support the business now and moving forward
- Evaluate the current EBS version and technical architecture to determine how to bring them current and reduce business risk.

System Foundation
The foundations for the current systems need to be updated. The Port’s current version of the Oracle EBS applications will be moved to Oracle’s Extended Support at the end of 2016 and to Sustaining Support at the end of 2019. While Extended Support will likely not greatly increase the Port’s risk, the potential move to sustaining support would increase risk considerably and will need to be avoided. The necessary foundation should include an upgrade to the most current supported version of EBS – 12.2.5 – and an update of the technology infrastructure. Oracle provides an upgrade path from the current version, 12.1.1 to 12.2.5.

The EBS upgrade recommendation to upgrade to version 12.2.5 is discussed in detail in Section 2.1 Upgrade Oracle EBS to Version 12.2.5.

Current Environment
In most areas, the current EBS setup is adequately supporting business processes efficiently. However, in some areas, the system is simply not sufficiently supporting key business requirements. People are doing what they can to run the business and make-do, but they’re not getting much help from the current systems environment. In these areas, this is a broken ERP system that is not supporting the business properly, and the business users are generally frustrated and unhappy with it.

Lease Management, which is supported by the Property Manager application, is experiencing significant issues. These are a result of an inadequate and basic implementation of the module from the beginning, and also from a significant number of unresolved system bugs. Subsequent versions of the Property Manager application significantly improve system functionality and resolve system bug issues. As a result, and upgrade of EBS will considerably benefit the Lease Management business area with better support of business processes and fewer system issues. This area is discussed in detail in Section 5 Property Manager Assessment & Recommendations.
Conversely, in the **Maintenance** Area, the current version of the Enterprise Asset Management application is richly functional, but is not being used to the extent that it should. Based on the requirements of the business, Oracle EBS is a good fit, however critical system capabilities are not being used and have even been worked-around.

Only the most basic business processes were originally implemented and are being supported on the system and many others are being administered manually with the help of outside tools like spreadsheets and databases. Not only does this result in a “reactive” maintenance environment, but it also causes issues downstream for Purchasing, Accounts Payable, Accounting, and “Customers” – groups that utilize maintenance services.

Better unitizing the system can provide significant opportunity for improving the use and value of Oracle eAM at Port of Oakland to move more toward a “proactive” maintenance model. We have recommended a holistic approach that addresses both business process improvements as well as improvements in the setup, data configuration and use of Oracle eAM. The EBS upgrade and additional eAM functionality will make the system more user-friendly to use, but upgrading the system would not be required for implementing most of the recommendations in this area.

This area is discussed in detail in **Section 3 Oracle Enterprise Asset Management (eAM) Assessment & Recommendations**.

Using EBS **Projects and Grants** causes a unique situation for the Port. A significant limitation caused by Grants inhibits the seeded integration between EBS Projects and Project Management. Unfortunately, the upgraded system 12.2.5 will not help resolve the issue. This results in the Port’s inability to utilize seeded Project Management functionality to address considerable pain points in the areas of forecasting, budgeting and scheduling.

It is likely that Project Management functionality would greatly improve the Port’s ability to manage projects, but the link between Projects and Project Management within the context of Grants will need to be addressed – either by extensions that build a “bridge” between the two, or the removal of Grants with an accompanying move of Grants-supported activities to within Projects.

This area is discussed in detail in **Section 4 Projects and Grants Assessment & Recommendations**

In other areas like Human Resources, Payroll and Accounting, where the system is supporting the business well, there are some opportunities to utilize additional current features to improve use of the system. Similarly, there are improvements in the upgraded system that will be useful moving forward. Likewise, there are a few opportunities for training on system features that will also provide benefit by helping
the system users to take advantage of features that they are not currently trained to use.

There is no system documentation and there are no user procedures on how to use the system. No formal training has been provided to any of the current business users. Consequently, system knowledge has been handed down informally across generations of users in a kind of “whisper chain”. As a result, system automation is not being used in key areas, bad practices are common, and users are unaware of why they do what they do in the system. Further, key business users do not know the capabilities of the system and how to use it properly to streamline their work effort. More detail on this is in Section 2.3 Training and Documentation.

Roadmap: The Go-Forward Plan
This assessment provides an understanding of what the system can do for the Port ad provides specific recommendations on what to do. The next significant steps in the process should be how to get there. As discussed in Section 13 Implementation Roadmap we anticipate that the next step will be a formal planning effort of the upgrade project, to most likely include RFP processes. The reality is that this planning process will take some time, and as a result, there will likely be time to implement at least some (if not most) of the recommendations that provide good business value yet are not complex to implement and don’t require functionality form the upgrade.

As a result, we recommend an effort to determine which recommendations can be implemented before the upgrade within the time period created by the upgrade planning and RFP effort. Those recommendations that we are unable to address prior to the upgrade should then be included in the upgrade scope along with the recommendations that necessarily have to be part of the upgrade because of their complexity or because they require functionality from the upgraded EBS release.

Oracle EBS standard functionality is generally a good fit for the Port of Oakland’s business requirements. The future success of the system will depend upon our ability to use the system upgrade as an opportunity to fix broken processes whether they are the result of inherent system issues, lack of training, or oversights during the original implementation that resulted in the inability to fully use the system’s built-in functionality. There are opportunities to realize quick wins by addressing some of the more basic, less complex and more valuable opportunities prior to the upgrade.
2. General Recommendations

2.1. Upgrade Oracle EBS to Version 12.2.5

An upgraded EBS foundation will allow the organization to not only reduce business risk and decrease support costs, but also to:

- Mitigate current business issues
- Re-design key business processes to be more efficient
- Leverage the new capabilities of the latest version of the software where it makes sense
- Provide a foundation to implement additional EBS functionality that may provide additional business value in the future
- Avoid lapsing into an essentially unsupported version in the future

Business Functions Implications

Port of Oakland is currently running version 12.1.1 of the Oracle EBS applications, which is stable but not adequate for meeting basic business needs in certain business areas like Property Management and, to a lesser extent, Enterprise Asset Management, Projects and Grants.

Upgrading to the latest version of EBS, currently 12.2.5, would enable the Port to improve the basic functionality in Property Manager and enable the team supporting leases to operate in a fundamentally more efficient manner. Moreover, new functionality has been added to the Projects, Grants, Payroll, and Enterprise Asset Management functions that would allow the teams supporting those business areas to use the system to operate in an incrementally more efficient manner.

These opportunities are discussed in more detail by functional area later in this document.

Oracle Support Implications

12.1.1 poses potential risks inherent in sticking with a version that is now scheduled to move to Oracle’s Sustaining Support model at the end of 2016 and to Extended Support at the end of 2019.

Below is Oracle’s support policy timeline for the Port’s current release, as well as for 12.2, which is Oracle’s most recent release. Oracle’s support lifecycle is defined by versions of the EBS applications moving to different phases of support as they age. The three phases of support are Premier, Extended and Sustaining. The characteristics of the three phases are also discussed below.
Premier Support:
- Major product and technology releases
- Technical support
- Access to My Oracle Support
- Updates, fixes, security alerts, data fixes, and critical patch updates
- Tax, legal, and regulatory updates
- Upgrade scripts
- Certification with most new third-party products/versions
- Certification with most new Oracle products

Extended Support:
- Major product and technology releases
- Technical support
- Access to My Oracle Support
- Updates, fixes, security alerts, data fixes, and critical patch updates
- Tax, legal, and regulatory updates
- Upgrade scripts
- Certification with most existing third-party products/versions
- Certification with most existing Oracle products
- Extended Support may *not* include certification with some new third-party products/versions.

Sustaining Support:
- Major product and technology releases
- Technical support
- Access to My Oracle Support
- Fixes, updates, and critical patch updates created during the Premier Support stage
• Upgrade scripts created during the Premier Support stage
• Sustaining Support does not include
  • New updates, fixes, security alerts, data fixes, and critical patch updates
  • New tax, legal, and regulatory updates
  • New upgrade scripts
  • Certification with new third-party products/versions
  • Certification with new Oracle products

The main difference between Premier and Extended support is that Oracle will not support certification with some new Oracle or third-party products/versions when a customer is on a version that falls to Extended Support. Clients normally do not have significant issues with this restriction unless they are actively adding to their systems footprint with new applications. Release 12.1.1 is currently scheduled to move to Extended support at the end of 2016.

Conversely, the move to Sustaining Support introduces significantly more risk. Clients on EBS versions that are in Sustaining Support no longer receive new updates, fixes, data fixes, patch updates, or new tax or regulatory updates. This means that Oracle no longer proactively provides support for these clients.

For example, for actively supported versions, Oracle periodically releases patch-sets that are highly recommended and/or required to be applied to the EBS applications to ensure lower risk to ongoing business activities. These periodic patch-sets are no longer provided with Sustaining Support, but are vital in that they:
  • Provide the most stable platform by fixing known software issues
  • Keep the software legislatively updated with regulatory requirements
  • Fix known issues and bugs
  • Provide a baseline from which to effectively work with Oracle Support on Service Requests, including production down issues.

The latter of these is especially significant in that it puts the organization at considerable risk if there is a major issue that results in a production down state, or one that causes a major disruption to normal business activities. Instead of being proactively managed by Oracle, issues will be reactively managed, which could result in greater down-time while critical issues are being resolved.

The Port has a good amount of time to upgrade EBS before the current 12.1.1 version falls into Sustaining Support at the end of 2019.
2.1.1. Upgrade versus Re-Implement

The recommendation includes an Upgrade of the EBS applications (versus a re-implementation). Unlike a re-implementation, an upgrade provides a technical path, supported by Oracle, which moves the applications from 12.1.1 to R12.2.5 without the need to re-configure the application setups or convert data from one system to the other.

Fortunately, the Port’s specific circumstances retain the possibility of leveraging the upgrade path. These requirements include the ability to keep the Chart of Accounts structure, the ability to retain the current Accounting Calendar, and the desire to keep core application data. Without significant need for data cleanup.

2.1.2. Upgrade Can Occur When Optimal

The upgrade can be the first primary step or phase, however, there are a significant number of improvements that can take place before, during or after the upgrade. As discussed in Section 13 Implementation Roadmap, it may make sense to address some of the higher-value, lower complexity recommendations/opportunities while the planning and evaluation for the upgrade are being completed.

2.1.3. Architecture Implications of 12.2

As discussed in Section 11 Technical Architecture, R12.2 is built on Oracle WebLogic Server, which is Oracle’s Strategic Applications Server. It is designed to provide a standards-based, mission critical and secure platform for organizations developing and deploying large-scale, distributed middleware environments. As the strategic application server, the upper-level Fusion Middleware products and Oracle Applications portfolio have adopted it as the foundation of their deployment and integration infrastructure. The bottom line is that the technical and server resource requirements are quite different from 12.1.1.

As a result, the additional infrastructure required to support the architecture could add additional cost to the Port’s hardware hosting costs. The amount of additional cost is currently unknown, but an analysis with the hosting provider should be conducted to determine these additional costs.

2.1.4. Business Benefits

- Lowers business risk of eventually sliding into Sustaining Support where support would be limited for production-down issues or other significant issues that could cause major disruptions to business
• Provides the foundation to address key pain points in the business; leverage new functionality; mitigate manual processes; re-design old processes

2.1.5. Estimated Complexity and Business Benefit

Estimated Change Complexity: 5
Estimated Business Benefit: 5

2.2. Reporting

2.2.1. Implement a Transaction Reporting and Drill-down Solution

Across all areas, system users expressed frustration with the perceived absence of self-service transaction reporting from EBS. Oracle Discoverer is the current self-service reporting tool, but the small number of users with access to Discoverer and those that find it useful are minimal, which essentially renders it ineffective.

For the most part, business users have to go through IT to get new reports developed and existing reports changed or fixed regardless of the complexity of the information being sought. This results in frustration in not being able to access business-critical information in a timely manner, if at all.

The Port should consider a scalable, self-service and user-friendly reporting solution to replace Discoverer and eliminate the existing volume of custom transaction analysis reports. This is especially relevant as decisions are made on which reports need to be retrofitted during the upgrade. If a number of custom reports can be replaced by providing a self-service tool for the business users to create themselves, the complexity, timeline and cost of the upgrade will be reduced.

According to Oracle Business Intelligence Discoverer Statement of Direction published in March 2014, the Premium Support for Oracle Discoverer has ended back in June 2014, and the Extended Support will end in January 2017.

Oracle’s recommended replacement for Discoverer is the Oracle Business Intelligence Foundation Suite (OBIFS), formally known as Oracle Business Intelligence Enterprise Edition (OBIEE). OBIFS is an enterprise business intelligence tool that has a lot of additional features and functionalities in comparison to Discoverer. It is understood that Port of Oakland already has a license to use this software.
An alternative or supplemental approach to OBIFS would be to implement Oracle Application Express (APEX), which is a web-based application development tool that is embedded into the Oracle database. APEX can be used as a platform to provide ad-hoc, self-service access to the business users for EBS information. APEX is already owned by the Port since it is licensed with the Oracle EBS applications.

Once a report template is created, a business user can easily modify it to meet their needs, within controlled boundaries, as well as export the report from the browser to file types such as PDF, CSV or Word. It provides a robust toolset for self-service, drillable reporting. APEX is discussed in more detail in Appendix A: Oracle Application Express (APEX).

Some of that key features of APEX are that it:
- Integrates seamlessly with Oracle E-Business Suite:
  - It accesses the same real time transactional data as EBS
  - It utilizes the same login credentials.
  - It is available from the standard Oracle EBS Navigator menus without requiring a second login.
- Requires no additional licensing as it is embedded into the Oracle database.
- Simple to learn and use; a developer with SQL and PL/SQL skills will find APEX development easy to pick up.
- Can be used to quickly deploy data entry forms with a modern web-based look-and-feel.
- Can be used to deploy REST-based web services for external applications to interact with Oracle Applications.
- Can be used to build interactive reporting pages that allow a user to group, drill and summarize data to their own individual requirements. Data can then be exported to Excel, HTML or to a PDF.

2.2.1.1. Business Benefits
- Reduces the workload on IT to provide reporting
- Enables faster access to transaction information to the business users
- Facilitates an enterprise-wide reporting strategy and standards
- Provides business users with real-time visibility to data that can be acted upon.

2.2.1.2. Special Considerations
- Third-party ad-hoc reporting tools are available, but would require additional licensing costs.
A self-service reporting solution can be slowly introduced into the business with an initial limited footprint, then grown as the business gains experience using it and can better determine where/how to use it better moving forward.

User training is necessary for this tool to be effectively leveraged by the business team.

SmartDog has delivered an initial product demonstration of APEX to the Port’s IT Team.

2.2.1.3. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 4

2.2.2. Implement Oracle Business Intelligence for Analytic Reporting

Across many areas, users expressed a desire for analytical reporting, which differs from ad-hoc transaction reporting discussed in the preceding Section 2.2.1 Implement a Transaction Reporting and Drill-down Solution in that analytics are generally prebuilt solutions that deliver intelligence across an organization and are targeted to users at all levels including front line operational users and senior management.

Oracle’s analytics tools are housed in the Oracle Business Intelligence Foundation Suite (OBIFS), formally known as Oracle Business Intelligence Enterprise Edition (OBIEE).

Since the Port owns licenses to the following Oracle Business Intelligence Analytics, we recommend that you evaluate these modules to determine their usefulness to meeting the declared need for pre-built analytics.

- Oracle Financial Analytics Fusion Edition
- Oracle Procurement & Spend Analytics
- Oracle Project Analytics

Although there were analytical needs expressed in Property Management and Enterprise Asset Management, Oracle currently does not offer pre-built analytics in those areas. Since the teams from both areas expressed a desire for analytical reporting, we recommend an analysis on how best to meet those needs using custom-built Analytics, APEX or a different tool.
2.2.2.1. Business Benefits
- Provide actionable insight that enables more effective actions, decisions, and processes

2.2.2.2. Special Considerations
- Port of Oakland already owns licenses for Financials, Procurement and Projects Analytics.
- Needs of Property Management and Enterprise Asset Management will need to be addressed with custom-built solutions

2.2.2.3. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 4

2.3. Training and Documentation
There is currently no training documentation or user guides. Further, formal training has not been provided to the business users. Training has mainly been provided on an as-needed basis by word-of-mouth. In some areas, the business is 2 or 3 generations removed from users involved in the original implementation. The lack of training or documentation results in:
- Users that are not familiar with how their system interactions affect other parts of the business
- Improper processes and use of the system
- Lack of knowledge of basic functionality that can improve efficiency
- Manual processes in areas that can and should be automated
- Custom processes to support functions that can be supported with standard system functionality.

Formal documentation and training are a necessary prerequisite to the smooth functioning of the system and ensure the future success of the system and the processes that it supports.

We recommend an effort to document proper system use for revised business processes and provide formal training to business end-users. This effort would need to take place concurrently with the Upgrade because the upgrade will include the improvement a number of business processes. Additionally, we recommend an active, ongoing effort to update training and documentation as business processes change/evolve and use of the system changes.

2.3.1. Business Benefits
- Improve efficiency by using the system properly
• Ensure future use of the system is as-designed as employees turn over and new employees start using the system
• Provide a good base of knowledge so users know system capabilities and leverage system features
• Reduce the number of manual processes that can be automated
• Provide more user self-sufficiency and reduce reliance on IT for system support.

2.3.2. Special Considerations
• This recommendation should be implemented with the Upgrade
• The Oracle UPK tool, can be used to more efficiently create training documentation. The number of licenses required will need to be evaluated to determine if licenses will need to be purchased. More information about UPK is included in Appendix D: Oracle User Productivity Kit (UPK).

2.3.3. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 5
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3. Oracle Enterprise Asset Management (eAM) Assessment & Recommendations

3.1. **Executive Summary – Oracle eAM**

Our assessment indicates a significant opportunity for improving the use and value of Oracle eAM at Port of Oakland. Improvements in maintenance and Oracle eAM should result in considerable business benefits in the maintenance organization as well as in other functional areas such as Purchasing and Accounting.

Port of Oakland is struggling to transition from a “Reactive” maintenance approach to a “Proactive” maintenance approach. Making this transition will require changes in organization, processes, practices and culture. Achieving this transition should deliver measurable and significant financial payback along with other benefits such as improved customer service and better coordination with outside parties. Oracle eAM, along with its integration with the rest of the Oracle E-Business Suite, is designed to enable, support and streamline this transition.

We recommend a holistic approach that addresses both business process improvements as well as improvements in the setup, data configuration and use of Oracle eAM. We also recommend that improvement initiatives address business process and application needs in other functional areas affected by maintenance. Examples include Purchasing, Accounts Payable, Accounting, and “Customers” – groups that utilize maintenance services. Finally, we suggest that establishing clear and specific maintenance performance metrics will provide an important control mechanism for managing the transition from “Reactive” to “Proactive” maintenance.

Our assessment shows that less than 30% of the features and functions in Oracle eAM are currently being utilized. We recommend a systematic approach of evaluating the value of each relevant capability in order to define how to achieve full and proper use. Most of our recommendations do not require upgrading Oracle EBS, but they can certainly be accomplished as part of an upgrade project. Each recommendation can be accomplished as an independent milestone, but we recommend addressing them in the order they are listed, because they build on each other.

We suggest that technology such as barcoding and mobile computing can deliver significant productivity improvements. There are also 3rd party applications that should be evaluated to determine whether or not they will streamline processes and enhance the user experience and productivity. The only exception is the Reporting and Analysis recommendation which can stand completely on its own.
3.2. **Current Baseline**

Many features and functions in Oracle eAM are either not being used or are not being fully utilized. We recommend a step-by-step process that includes understanding each feature/function, evaluating its value, and then defining how is can/should be used to achieve business objectives.

3.3. **eAM Customizations**

Other than some limited custom reporting, to our knowledge, no customizations are present or currently in-use for Oracle Enterprise Asset Management. We also do not see a need for any customizations for Oracle eAM. However, we have suggested investigating supplemental technology and tools to accelerate process and productivity improvements (e.g. bar coding, mobile technology and cloud solutions).

3.4. **Recommendations in the eAM Area**

3.4.1. **Establish Foundation for Planned Maintenance**

We recommend Port of Oakland develop and document the business foundation for a planned maintenance management approach. This foundation should minimally include a Maintenance Work Order Process and Policy, a Maintenance Materials Management Process and Policy, and Performance Metrics to measure progress in these areas. Once in place, this business foundation can be used to guide and support improvements in the setup, configuration and use of Oracle eAM along with its integration with Oracle Inventory, Purchasing and Accounting.

3.4.1.1. **Background**

Maintenance is one of the most challenging business processes to manage and control. Unforeseen problems with equipment and facilities along with unknown needs and requests from “Customers of Maintenance” contribute to the challenges of planning and scheduling maintenance work.

Our investigation revealed that some aspects of planned maintenance are in place (such as a basic PM program) and efforts are underway to improve planning (such as improving Job Plans). However, we strongly suggest that developing and documenting clear management processes and policies and communicating them to all involved parties will reinforce and accelerate current efforts. We further advise that establishing maintenance performance metrics with target goals will enable the maintenance organization to monitor progress and manage improvements.
3.4.1.2. Issues Addressed

- Despite efforts to plan and schedule maintenance, Port of Oakland has indicated that they are still “Reactive”.
- It is our understanding that maintenance processes, policies and metrics have not been developed, documented and communicated.
- Our investigation revealed that there is currently no clear “Maintenance Planning” organization or clear “Maintenance Planner” job function.

3.4.1.3. Special Considerations

- This recommendation does not require upgrading Oracle EBS from the current version.
- This recommendation is a prerequisite for all of the other eAM recommendations listed below.
- Consider developing a Business Case to underscore the financial benefits of Planned Maintenance and establish the management motivation required to implement changes.
- Evaluate the need for organizational changes and/or modifications to job descriptions to support a Planned Maintenance Management approach.
- Consider conducting workshops to establish awareness and promote any cultural changes required to adopt Planned Maintenance within the maintenance organization.
- Consider conducting focus groups or other communication efforts with people outside of maintenance so the “Customers of Maintenance” can become part of the solution.

3.4.1.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 5

3.4.2. Improve Maintenance Reporting and Analysis

We recommend Port of Oakland establish an initiative to improve the availability and use of data to manage and improve maintenance activities and outcomes. This initiative should start with a simple, but effective planning process that minimally includes identifying the people that need and use Maintenance-related data, analyzing their needs, documenting requirements, establishing a technical plan, and defining a “short list” of initial reports.

We recommend an approach that produces simple and visible improvements quickly (see Special Considerations below). This “rapid results” approach will not only produce rapid business benefits, but also
improve users’ confidence in the system as well as promote a culture of data-driven decision making.

3.4.2.1. Background

Maintenance personnel at all levels make a myriad of decisions every day that impact both the efficiency and effectiveness of the entire Maintenance organization. The purpose of the maintenance system is to enable all of the right information to be captured and used for data-driven decisions. The out-of-box reports in Oracle eAM are limited and our investigation revealed a clear consensus that more and better maintenance reports are needed.

The current reporting tool currently in use (Oracle Discoverer) is being phased out by Oracle and it is not really designed to meet certain reporting needs such as ad-hoc query, KPI dashboards, data analysis, etc. Per the recommendations in Section 2.2 Reporting, Discoverer may not be the best tool in which to provide this reporting. However, here are other reporting tools that should be evaluated.

3.4.2.2. Issues Addressed

- During our discussions, users in maintenance and other functional areas expressed a need for better ways to see, analyze and use maintenance data.
- Better information will allow the maintenance organization to move from a reactive to more of a proactive approach.
- When users are able to get valuable information out of a system they are much more likely to put complete and correct information into the system.

3.4.2.3. Special Considerations

- The Maintenance Performance Metrics in Section 3.4.1 Establish Foundation for Planned Maintenance will provide a starting point for one category of reports. Otherwise this recommendation can be accomplished as a stand-alone initiative and it can be accomplished before or during an upgrade.
- We suggest the initial scope of improving maintenance reporting should be small – the planning process should only take a few weeks and developing the reports on the “short list” should only take a few months.
- Any initiative to improve maintenance reporting should be conducted within the context of any other efforts underway to improve reporting in general as discussed in Section 2.2 Reporting.
- Consider conducting focus groups with different groups of users during planning to understand the decisions they make and
information they need. The different groups may include
Technicians, Supervisors, Planners, Customers of Maintenance,
Purchasing, Accounting, etc.

### 3.4.2.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 4

### 3.4.3. Expand and Improve Use of Integration

We recommend Port of Oakland establish an initiative to understand and
utilize the full benefits of Oracle eAM as an integrated application
within the Oracle E-Business Suite. This initiative should minimally
include a streamlined implementation of Oracle Inventory, full use of
integration with Oracle Purchasing and an evaluation of iProcurement
and iSupplier.

We further suggest that you evaluate the options and current use of
integration with other Oracle modules as well. Our investigation
indicated that many of the challenges in maintenance and outside of
maintenance can be resolved through better exploitation of Oracle
eAM’s integration features.

#### 3.4.3.1. Background

Integration is the primary reason organizations that run Oracle
EBS choose to implement Oracle eAM. The maintenance business
function requires cooperation and information exchange between
and among many other parts of the business. Oracle eAM is fully
integrated with the rest of the Oracle E-Business Suite. Realizing
the benefits of business integration requires proper implementation
and use of the application integration.

#### 3.4.3.2. Issues Addressed

- Currently, the full cost of maintaining equipment, facilities and
infrastructure cannot be determined at the Asset level because
Work Orders do not include material costs.
- Maintenance inventory is currently “off the books” and is not
tracked or managed in any systems. Although the inventory
currently carried is considered unimportant, it still represents a
potential risk of waste, fraud, abuse or theft.
- Maintenance Planners and Supervisors have no visibility into
the on-hand quantity of maintenance materials. Checking
availability of parts thus requires a “walk to the storeroom”.
- As discussed in Section 9.4.3 AP Approvals, Accounts Payable
has an inefficient manual process for matching and paying
maintenance invoices mainly because the purchasing process does not start with planning an Oracle eAM Work Order.

- Maintenance materials do not have an Oracle part number, so Asset Bills of Material (BOMs) and Activity BOMs cannot be built. As a result, usage of materials cannot be tracked in any meaningful way. These constraints place considerable limitations on the ability to plan maintenance work.

### 3.4.3.3. Special Considerations

- The Port owns, but does not currently use, licenses for iProcurement and iSupplier
- Once the Business Baseline is in place (Recommendation 3.4.1), this recommendation can be accomplished as a stand-alone initiative.
- This recommendation can be accomplished before, during or after an upgrade.
- When implementing Oracle Inventory, these are two important considerations
  - Make sure you know the reasons why Oracle Inventory has not already been implemented and you have addressed the reasons.
  - Make sure you investigate practical methods of streamlining and optimizing Inventory processes.
- Consider establishing a policy requirement that all maintenance Purchase Requisitions originate from an eAM Work Order unless it is an emergency or urgent need (which should be minimized).
- Consider evaluating iProcurement and iSupplier to determine their benefits for streamlining and optimizing the maintenance procurement process, including originating Purchase Requisitions from eAM.
- Consider evaluating or reevaluating the detailed options, features and benefits of the integration between eAM and Fixed Assets, Property Management, Projects and OTL.
- Consider evaluating the Work Order billing features in Oracle eAM as a method of managing customer requested maintenance.
- Consider evaluating the Outside Processing and Contingent Worker features in Oracle eAM as a method of managing maintenance that includes contract workers.

### 3.4.3.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 5
3.4.4. Review and Improve Setup and Data Configuration

We recommend Port of Oakland conduct a systematic review of its current Oracle eAM general setups as well as the data configuration of Assets, Activities and PM Schedules. Our research revealed that some features and function of Oracle eAM have been set up and are being used, but others are not being used at all. We suggest an approach that includes training on features and functions, discussion and decisions on “best use” and documenting and implementing appropriate changes. This approach should result in improving the use and value of Oracle eAM and render solid business benefits.

3.4.4.1. Background

Oracle eAM is a complex and full-feature maintenance application. During an initial implementation it is difficult to understand and implement all of its features and functions. It is therefore important to revisit the capabilities that are currently being used as well as reconsidering capabilities that are not being used. Documenting current configuration and use along with any required or desired changes serves as a control mechanism for standardizing current use and managing changes going forward.

3.4.4.2. Issues Addressed

- Better utilizing standard features and functions can result in greater efficiencies and better business processes across the organization.
- Examples of features and functions of Oracle eAM that are not being used include Asset Routes, Asset Criticality, some Value Lists, Meters and Meter-based PM’s.
- Examples of functionality that may be improved include inconsistent data formats, Asset Groups that may be too general, and value lists that may not be used appropriately.

Additionally, we were told that the Oracle eAM setup and data taxonomy has not been defined and documented as well as it could be.

3.4.4.3. Special Considerations

- This recommendation can be accomplished before or during an upgrade, but should be driven by the Foundation for Planned Maintenance established in Recommendation 3.4.1 above to guide changes in setup and configuration.
- Consider establishing a “Steering Committee” that represents a good cross-section of key Oracle eAM users to provide input and make final decisions ion changes and improvements.
- We advise an approach that includes training, discussion, decisions and documentation of standards.
• We suggest creating a Taxonomy document that includes clear definitions of all data elements as well as formats and naming conventions for clean and correct data.
• Consider using automated methods of reviewing, correcting and standardizing large data sets such as Assets, Activities and PM Schedules.
• If significant changes are deemed necessary for setups or data configuration, we recommend making the changes in a test instance and going through a formal testing process before moving the changes into the production instance.

3.4.4.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 4

3.4.5. Improve Maintenance Planning and Work Management
We recommend Port of Oakland use Oracle eAM and its integration with Oracle EBS to support and enable transitioning to the planned maintenance management approach defined in Recommendation 3.4.1 above. All key users from all sites should participate together in a transition process that incorporates process, policy and application use.

3.4.5.1. Background
Improving maintenance planning and work management will produce significant and measureable business benefits. Oracle eAM together with its integration with the rest of the Oracle E-Business suite is designed to support and enable a planned maintenance management approach. Achieving and sustaining improvements requires a good process for managing the change. Training, participative decision making and good communications at all levels will be key to a successful transition.

3.4.5.2. Issues Addressed
• Our research revealed that most Work Orders are not currently being fully planned. A properly planned maintenance job can be accomplished more efficiently and effectively.
• In our discussion we were told that maintenance material requirements are not currently being defined on Work Orders, so material costs are not being tracked at the Asset level. Complete maintenance costs are needed at the Asset level for budgeting, cost control and key decisions (such as continue to maintain or replace Asset).
• As discussed in Section 9.4.3 AP Approvals, Accounts Payable is struggling to efficiently match and pay maintenance related
invoices because they do not always know the source and purpose of the purchase.

- Maintenance materials are not under Inventory control, so the maintenance planner cannot see availability of parts to do work. Visibility into the material availability enables accurate communication of completion dates to Customers and more efficient scheduling of resources.

3.4.5.3. Special Considerations

- This recommendation can be accomplished before, during or after an upgrade.
- This recommendation represents a culmination of all prior eAM recommendations, so they should be considered pre-requisites to successfully completing this recommendation.
- We recommend using a combination of training, experimentation and user feedback to determine “best use” of Oracle eAM and its integration with Inventory and Purchasing.
- Detailed Procedure Documents should be created. These should explain the process and policy along with instructions on how to use the application.

3.4.5.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 5

3.4.6. Additional eAM Recommendations in 12.2.5

We recommend Port of Oakland consider specific capabilities in the latest release of Oracle eAM (currently 12.2.5) and determine which new capabilities will provide additional business value. We also recommend Port of Oakland evaluate specific Oracle Partner solutions that may enhance or streamline the native capabilities of Oracle eAM.

3.4.6.1. Background

Oracle eAM continues to evolve and enhancements are made in each new release. Oracle EBS customers should be aware of continuing enhancements in Oracle eAM and how they will provide additional value. Oracle Partners also offer significant value with products that enhance and complement the native functionality of Oracle eAM.

3.4.6.2. Issues Addressed

- The current version of Oracle eAM is not being fully utilized in part because the current version is not as “user friendly” as some users would like it to be.
• Our investigation revealed that maintenance materials are not tracked in Oracle Inventory in part because the storerooms are small and staff to manage them is limited.
• Our investigation revealed a need (or at least a desire) for a disconnected Mobile eAM solution and Oracle does not offer one.
• Our experience shows that the out-of-box scheduling capability in Oracle eAM does not meet the needs of many customers.

3.4.6.3. Special Considerations
• Consider reviewing the usability enhancements to Oracle eAM in Release 12.2.5 to determine whether they will streamline processes and encourage adoption of Oracle eAM.
• Consider whether Linear Asset, Work Order Defaults and other enhancements in Oracle eAM will deliver business value.
• Consider evaluating Ventureforth’s suite of Maintenance and Inventory automation tools to streamline processes, automate data capture and improve adoption of the planned maintenance approach defined in Recommendation 3.4.1 Establish Foundation for Planned Maintenance.
• Consider implementing a simple, cloud-based scheduling application for Oracle eAM.

3.4.6.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 5
Estimated Business Benefit: 5
4. Projects and Grants Assessment & Recommendations

4.1. Executive Summary – Projects and Grants

Since many projects are sponsored by Federal and State grants, the Port of Oakland uses the Oracle EBS Grants module heavily. EBS Grants works in conjunction with EBS Projects with some benefits and limitations. Grants includes some functionality that enhances Projects, however it also constrains some of Projects’ other functions. For the Port, the Projects functions inhibited by Grants would provide significant business benefit.

As an example, Grants allows Cost Tracking & Capital Projects to get funded and also to facilitate the generation of invoices, however, Grants does not support integration with Financial Plans or integration with Project Management Workplans. As a result, the Operational Planning done by Project Management is not integrated with the Financial Management (i.e. Award Funding & Award Budgets for the Project).

Recommendations for the Port of Oakland need to consider that Award Budgets are by Awards and Projects, limiting them to the funded portion of an Award for a particular project – this results in initial partial funding followed by subsequent stages of funding typically timed by fiscal year. One of the key issues is that the system is not currently configured to be able to handle this business requirement gracefully.

An overall planning of the Project in its entirety could span over multiple awards and/or under multiple award installments. The Port of Oakland would like to have ability to plan, monitor and forecast for an entire Project leveraging their existing Investments in products such as Oracle Project Management (PJT). This will also enable reporting of Metrics across the Project which is not possible in the current System.

4.2. Current Baseline

The different types of Projects that are currently defined are:

1. Capital Projects – used for collecting CIP costs for sponsored/non-sponsored projects
2. Non-Capital, Billable (BTO) Projects – used for collecting indirect costs for sponsored/non-sponsored projects
3. Cost Tracking Projects – used for collecting indirect costs

All Projects are created from standard templates and inherit a standard structure. Additional lower-level tasks could be added based on project requirements but the overall structure is retained. All the projects have shared structures hence the workplan and financial structures are the same. The projects are approved using PA project workflow which has been customized to route approvals as per policy.
The sponsored projects are funded using Grants accounting ‘GMS’ functionality that allows billing and revenue management for capital and indirect projects. Sponsored projects are funded by creating awards maintaining one award per project type of association. Installments are created for Funding that is approved for a fiscal year. Multiyear projects have one installment created for each of the fiscal years it spans through. Currently, installments are entered only for the current fiscal years and not for future years. As a result, they do not reflect the total project funding. In turn, installments are mapped to types of awards through a Descriptive Flexfield.

Government reporting is not generated from Oracle. Additionally, in cases where billability rules are more complex (i.e. only a certain part of some expenditures can be billed), the request for reimbursements (invoices) are generated manually and then entered in Account Receivables directly. As a result, this information does not reflect back in Grants. The BTO Projects are billed to the tenant for which Invoices are generated in Grants for the burdened cost collected.

Award Budgets are entered by fiscal years and mapped to the installments created for the awards. Therefore, any tracking against the budgets is restricted by the fiscal year range and does not reflect the status for the entire Project. Budgets are Baselined using the Standard Budget Workflow which has been customized to route the approvals as required.

In some cases, workplan estimates are entered manually for the entire project Scope of Work. However, these estimates are not used because they do not currently help in identifying the budgets or in generating forecasts.

Changes to the budget, which are relatively rare, are performed using change orders. Multiple change order types are created based on the type of change with each type having its own Approvers. This serves to track of the changes that happen on Projects. The issue and change management workflow have been customized to facilitate this.

Actual costs are comprised of Labor and Expenses. Direct Labor costs are interfaced from EAM, where the timesheets entered by employees are loaded as resource transactions after payroll is processed. Other labor costs come thru Oracle Time and Labor (OTL). Non-labor costs are interfaced directly from EBS Payables. Costs collected for projects are processed based on their types.

For Capital Projects with multiple assets, CIP costs are allocated manually using Excel, and information is manually uploaded into EBS Fixed Assets. For single-asset projects, asset lines are generated in projects by assigning the
assets at the task level (assets need to be manually assigned to the lowest tasks) so that sufficient details are available on the asset lines when they are transferred directly to Fixed Assets. Currently, scripts are run to manually clear the values for expenditure items before generating asset lines, and another is run to reinstate the values after the lines are generated.

Assets are not traced back to the awards for Sponsored Projects. For Cost Tracking Projects, costs get accounted as expenses and, in the case of BTO Projects, are billed to the tenant.

4.3. **Projects and Grants Customizations**

4.3.1. **PA Project Workflow**
Workspace customization to route the project approvals through multiple departments like Project Management, Engineering, and Finance. The only issue identified with this workflow has been that users are not able to see the recipient of open notifications, which would help to expedite approvals.

4.3.2. **PA Budget Workflow**
Workflow customization to route budget approvals through the three project managers. Similar to Project Workflow, an issue identified was ability to see with whom notifications are waiting, which was said to be an inconvenience.

4.3.3. **Issue & Change Management Workflow**
Workflow to route Change Orders through different departments based on the type of change (i.e. budget change or scope revision etc.) This workflow possesses the same issue with viewing where a notification is waiting.

4.4. **Recommendations in the Projects and Grants Area**

4.4.1. **Leverage Project Management features for Projects**
Grants Accounting limits the usage of Project Management. A solution needs to be created that would tie in Project Workplan information with the baselined budgets and leverage it for generating forecasts. This lack of integration is a significant issue for Port of Oakland’s Project Managers. There are three options to facilitating this integration:

a. Using a custom process to integrate Workplans and Award Budgets. This require minimum changes on Grants or existing Projects, but would involve a customization. The Port has previously evaluated this approach and has referred to it as the “functional bridge”.
b. Make Grants the funding module for only a subset of projects that are funded by Grants. Look at making non-sponsored and sponsored non-grants projects independent of Grants so that they can leverage the full functionality of Project Management Module.

c. Take Grants out and replace with Projects functionality, including Project Billing, so that all projects can leverage the full functionality of Project Management module.

4.4.1.1. Background
Project Managers want to use EBS Project Management to track schedules and costs for the Projects. They would also like to leverage the ability to forecast to identify the changes that need to be done to project budgets and schedules in order to achieve project objectives. They need to see the capabilities in versions 12.2.5 to make an informed decision on the options that are available.

4.4.1.2. Issues Addressed
- Integrate project Operational Planning with Financial Management, integrating Workplan schedules with budgets and forecasts.

4.4.1.3. Special Considerations
- Business Users have requested for a demonstration of Project Management functionality.
- The APEX tool, discussed in Section 2.2 Reporting, can be leveraged to create Dashboards that provide an interactive interface to the Project Managers to look up key information about a project and have ability to drilldown into details.
- This can be done in either the current or the upgraded version, doing it in upgraded version is preferable as there are quite a few usability changes so users can be trained only once.

4.4.1.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3 (this could range from 2 – 4 depending on the approach that is chosen).
Estimated Business Benefit: 5

4.4.2. Set the Profile Option ‘CSE: Use Asset Tracking Costing Hook’ to ‘N’
Update the Profile option ‘CSE: Use Asset Tracking Costing Hook’ from Y to N
4.4.2.1. Background

Enterprise Install Base (EIB) has been installed but is not used. As part of Projects integration with EIB there are certain Attribute columns in ‘PA_EXPENDITURE_ITEMS_ALL’ that are populated. These are populated on transactions that are interfaced to Projects from other subledgers like Cost Management. When populated, these attribute values prevent the expenditure items from getting picked up for processing for Capitalization. This is done based on the value that for the profile option suggested.

4.4.2.2. Issues Addressed

- Data fix scripts provided by Oracle need to be executed to be able to generate asset lines on Capital Projects

4.4.2.3. Special Considerations

- Recommendation is based on the Published Oracle Metalink Note: R12 11i Cannot Generate Assets when Attribute 6 to Attribute 10 are Used. (Doc ID 738865.1). In case the issue is not resolved with changing the profile, it can be pursued with an Oracle Service Request (SR).
- This can be done in the current version.

4.4.2.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 1
Estimated Business Benefit: 3

4.4.3. Use Grants Better by Creating Future Installments

When Installments for an award for funded projects are entered in Grants, they could be entered for the entire value of the funding required to execute the projects. The funding expected for Fiscal Years in the future can be entered in a line that has a start date in the future and is active but not billable. This will allow the Approved Cost Budget (baselined budget) definitions to contain the entire Projects cost and not be restricted by fiscal year.

Budget entry methods would have to be by date range so that the amounts are entered for a resource by fiscal year. To continue having the funds check by fiscal years, the budgetary control time phasing can be changed to ‘Year to Date’ and the boundary code changed to ‘Year’.

4.4.3.1. Background

Currently, funding is created for a fiscal year, which restricts budget definition to the same year. Budgetary controls are set to check for project-to-date amounts, which effectively checks for the
amounts entered for the year. This makes the tracking of cost restricted to the year time frame and not useful for overall project cost tracking.

4.4.3.2. Issues Addressed
- To enable overall project cost tracking against a project budget and be able to generate the information available in Project Status Inquiry (PSI).

4.4.3.3. Special Considerations
- Can be also done for existing awards.
- New baselined versions would use the new proposed setups.
- PSI pages would need to be configured to ensure there is an understanding of the metrics configured in all the views.
- Would require testing in non-production instances.
- This can be done in the current version.

4.4.3.4. Estimated Complexity and Business Benefit
- Estimated Change Complexity: 2
- Estimated Business Benefit: 4

4.4.4. Form Personalization and Reports to Provide Award Information on Assets
In Fixed Assets Workbench, the Source Lines Form displays information for Project and Task. Using a Forms Personalization, this information can be made available on the other screens like Asset Details and/or Assets. This assumes that all source lines would point to the same project. As a Sponsored Project is tied to an Award, award information could also be displayed along with it. If this information is needed on reports, they can also be modified to use the project association to fetch the Award information and display it.

4.4.4.1. Background
Currently the users are struggling to trace Award Information for an asset in the Fixed Assets module. Awards are currently not available in any seeded forms and reports in the Fixed Assets Module.

4.4.4.2. Issues Addressed
- Award Visibility on Assets in Fixed Assets

4.4.4.3. Special Considerations
- Oracle allows multiple projects to be used over the lifecycle of an asset to collect costs and send to asset lines.
• Assumption is that all source lines for an asset would be interfaced using one project.
• Assumption is that a project will be funded by one award.
• Reports were not identified in the workshops, so they would have to be identified to be added to the complexity and benefit analysis.
• This can be done in the current version

4.4.4.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 2
Estimated Business Benefit: 4
5. Property Manager Assessment & Recommendations

5.1. Executive Summary – Property Manager

We met with Leasing and Billing personnel for the Port of Oakland to discuss current leasing processes, understand areas of opportunity to better utilize Oracle, and to review the key pain points the people are currently experiencing.

When the module was originally implemented, only the most basic features were configured to allow for leases to be entered, maintained, and billed. Very few, if any, changes or improvements have been made over the years to fix issues or implement additional functionality. Minimal patching has been done to correct bugs and potentially rectify performance issues.

While an upgrade will correct many of the current bugs and performance issues that the Leasing team is dealing with today, there is also opportunity to implement additional features in the Project Manager module allowing the team to more efficiently enter, maintain, bill, and report on leases. An updated analysis of business requirements and system functionalities will help Leasing personnel to better understand the system capabilities and utilize it to the fullest extent.

Unfortunately, to make most of the significant improvements to the use of Property Manager, an EBS Upgrade is required. The upgrade will fix significant systems issues and bugs, and will also provide a foundation of additional functionality to be leveraged.

5.2. Current Baseline

In general, current Property Manager processes are using only the most basic Property Manager functions. The current version of EBS is highly inefficient in crucial areas and has many bugs that have prevented features from being implemented at initial go-live and afterwards. Due to the bugs, certain processes are not working as expected and are being dealt with using inefficient manual workarounds, especially in the customer billing area.

5.3. Property Manager Customizations

Port of Oakland does not have any customizations for processing leases in Property Manager.

5.4. Recommendations for Property Manager

5.4.1. Upgrade to 12.2.5 to Fix Variable Rent

EBS must be upgraded to take advantage of new patches and code fixes making the Variable Rent functionality much more efficient and reducing the manual and system loads required to process. Oracle has
recommended in the past that the Port of Oakland upgrade to version 12.1.3 or higher to fix basic issues and bugs in the software. These fixes and additional functionality will be available in version 12.2.5 upon the upgrade.

5.4.1.1. Background
Variable Rent functionality is currently being used by the different divisions at Port of Oakland. The functionality is working but the system processing is extremely inefficient, sometimes taking hours to process multiple leases. Due to this, the staff often divides the leases up thereby running the process for a limited number per day. This is inefficient and frustrating for them.

5.4.1.2. Issues Addressed
- Increased system processing efficiencies
- Reduced manual tracking and processing
- Ability to run variable rent for all leases at the same time.

5.4.1.3. Special Considerations
- An EBS Upgrade would be required to implement this recommendation

5.4.1.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 5
Estimated Business Benefit: 5

5.4.2. Upgrade to 12.2.5 to Improve Processing of Late Fees
Post upgrade, the Port of Oakland should have a focused training on the seeded Late Fee functionalities in Oracle Receivables to determine the best and most efficient process to utilize. Similar to the situation with Variable Rent in Section 5.4.1, bug fixes and additional updates have been introduced by Oracle to add options for how late fees are calculated and presented to customers.

5.4.2.1. Background
The Port of Oakland needs flexibility to charge late fees to their customers based on a percentage of past due, a fixed rate or a combination of percentage plus a fixed rate. The Port’s current version of EBS and configuration isn’t allowing for this needed flexibility. Often times the current system requires the entry of multiple manual transactions to charge appropriate late fees.
5.4.2.2. Issues Addressed

- Proper systematic calculation and presentation of late fees to customers
- Reduced manual labor
- Allow multiple late charge types (percentage and fixed fee) to be generated and charged systematically

5.4.2.3. Special Considerations

- An EBS Upgrade would be required to implement this recommendation

5.4.2.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 5
Estimated Business Benefit: 4

5.4.3. Resolve Billing Issues

A detailed review of the current Property Manager and Receivables integrations setups and Port of Oakland standard operating processes is needed to ensure customer invoicing allows Port of Oakland to properly account for and bill the leasing customer base in the most efficient manner.

5.4.3.1. Background

Port of Oakland currently has several issues regarding billings from Property Manager to Receivables. These issues are requiring personnel to come up with manual work-a-rounds to ensure invoices are capturing all charges and providing the proper details to the customer base.

Users need ability to create and send credits from Property Manager to Receivables. This was allowed for some time but has recently been an issue. Also, the process to update billings once approved is very cumbersome; requiring them to end date, reverse and re-enter billings at times.

Customers receiving billings that don’t properly explain the charges can result in late payments and effect cash flow for the company.

5.4.3.2. Issues Addressed

- Allow for $0 lines and/or invoices to be generated and reflected on customer invoice
- Ability to enter multi-line billings and have these properly transferred to Receivables
• More efficient billing process to reduce manual efforts currently required to generate customer invoices
• Ability to send credit lines from Property Manager to Receivables

5.4.3.3. Special Considerations
• Review of Break Points and Milestone functionalities not currently used

5.4.3.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 2
Estimated Business Benefit: 4

5.4.4. Review and Improve Reporting
A reporting review is needed to ensure that personnel have the appropriate reports to help review and manage leases and billings. There was mention of several new reports needed as well as some that currently exist and are used by one division that other divisions were not aware existed.

5.4.4.1. Background
During the assessment meeting there was mention of several new reports needed that could help to better manage and maintain the leases. There were also requests for reports needed which already exist but were not known by the individual or division. A review of current reporting needs coupled with a plan to document existing reports and potentially develop or update reports would be beneficial to the company.

5.4.4.2. Issues Addressed
• Company-wide understanding of available lease and customer billing reports
• Reporting gaps filled with development of new reports and/or updates to existing reports
• Reduced manual effort to supplement existing reports with additional data not readily available

5.4.4.3. Special Considerations
• The overall reporting approach, including discussion of Discoverer and alternatives is examined in Section 2.2 Reporting.

5.4.4.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 2
Estimated Business Benefit: 3

5.4.5. Implementation of Additional Functionality
A review of Property Manager functionalities should be done with the team to determine fit and potential implementation.

5.4.5.1. Background
The Property Manager module was implemented originally to utilize the most basic functionalities allowing a lease to be entered into the system for maintenance and simple billing purposes only. The module has a number of unutilized features that could potentially assist in making the process of entering and maintaining customer leases more efficient. Some of the items discussed and not being utilized are rent indexes, lease milestones, break points and attachments.

5.4.5.2. Issues Addressed
- Increased understanding of module by leasing personnel
- Reduced manual effort to maintain, account and invoice leases

5.4.5.3. Special Considerations
- Waiting until the Upgrade is recommended in order to ensure that any additional functionality can be implemented without issues or bugs that are inherent in the current version of Property Manager

5.4.5.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 4
Estimated Business Benefit: 4
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6. Oracle Time and Labor & Payroll Assessment & Recommendations

6.1. Executive Summary – Payroll and OTL

The Port of Oakland utilizes Oracle Time and Labor and Payroll. The process includes numerous custom programs as defined in the Customization section. Considering the organization has numerous custom programs and specific data reporting requirements the OTL and PR processes run fairly smoothly. The Payroll team indicated that the business and Oracle processes run like ‘clockwork’ and are reasonably stable with the exception of the CalPERS process. The CalPERS process is currently being modified as a client internal project therefore, not subject to this review.

The organization has recently encountered some payroll reporting issues both of which appeared once the Year-End Phase 2 patches were applied. The company is researching and working Oracle Service Requests currently for those issues.

There are opportunities to improve efficiency by re-evaluating some key processes, taking advantage of functionality available in the current footprint and taking advantage of functionality improvements in R12.

6.2. Current Baseline

6.2.1. Oracle Time and Labor (OTL)

The organization is utilizing OTL timecards with Projects and is transferring that data to the Payroll via BEE processing. The team indicated that the OTL processes in general are working well. They indicated some minor issues with Timecard entry such as scrolling and entering and Timecard Query.

6.2.2. Payroll – Retropay

Currently utilizing the Enhanced Retropay process. The team indicated that they have had some minor issues with the Retropay process, selecting the correct employees, and processing them in a timely manner.

6.2.3. Payroll – QuickPay

The organization is utilizing the standard Oracle QuickPay process. The team indicated that they would like to see an enhancement to the Element selection process. The standard functionality lists all the available elements for that employee and the user will check each checkbox for any element that they want to process in the QuickPay. The team indicated that they would like all the checkboxes to default to
‘selected’ when the user opens the form and then allow them to deselect any element that they do not want to include.

6.2.4. **Payroll – Payroll Runs**
The Port is utilizing the standard Oracle Payroll Run process. The team indicated that the Payroll Run process was in general working well.

6.2.5. **Payroll – Payroll Prepayments**
The Port is utilizing the standard Oracle Payroll Prepayment process. The team indicated that the Prepayment process was in general working well.

6.2.6. **Payroll – Payroll Reports**
The Port is utilizing some standard Oracle Payroll reports as well as a number of custom reports. The team indicated that the Payroll Reports were in general working well with the exception of the Payroll Activity Report and Payroll Register. However, these issues just occurred so they might be patch-related.

6.2.7. **Payroll – Checkwriter, Nacha, Deposit Advice**
The Port is running the Checkwriter, Nacha and Deposit Advice. The team indicated that the Payroll processes were in general working well.

6.2.8. **Payroll – Ceridian**
Payroll uploads the Checkwriter and Deposit Advice files using Ceridian E report, after which Ceridian prints the actual documents. The Payroll team runs the KBACE custom processes for the tax files and then electronically transmits them to Ceridian. The team indicated that the Ceridian processes were in general working well.

6.2.9. **Payroll – CalPERS**
The Port runs custom processes and interfaces for the PERS data. The business process and programs are currently being reviewed and modified by the Port’s internal team.

6.2.10. **Payroll – Costing & General Ledger**
The Port runs the standard Oracle processes for the Payroll costing and then transfers to the General Ledger. The team indicated that the Costing and General Ledger processes were in general working well.

6.2.11. **Payroll – Year-End**
Payroll runs a combination of the standard Oracle processes and custom process to complete the Payroll year-end. The team indicated that the year-end processes were in general working well. The Human Resources group would like to see some enhancement in the PTO.
Carryover process. Currently Payroll is running it 4 times at various intervals. Further review of the Accrual Fast Formulas would be needed to be conducted to provide a recommendation.

6.3. **Customizations**

There are almost 200 customizations in the Payroll and OTL areas for the Port of Oakland to process time per Oracle Time and Labor and Payroll. Appendix B: Payroll and OTL Customizations contains the comprehensive list of customizations for this area. The upgrade to R12.2 is not anticipated to change many requirements for these custom processes except those listed below:

- # 57 on Appendix List: PORT Retro Entries Report (XXPOORETROENT) – R12 has updates to this functionality. Port IT has been sent the Oracle whitepaper for review.
- # 163 on Appendix List: PORT Retro Entries Extract (RetroEntriesExtract_v100.rtf) XML Publisher template - R12 has updates to this functionality. Port IT has been sent the Oracle whitepaper for review.

6.4. **Recommendations for Payroll and OTL**

6.4.1. **Resolve OTL Timecard Viewing / Scrolling Issue**

We recommend that the Port asks to be added to the Oracle’s current enhancement request for Bug 6364042: Need to freeze the hours type column for horizontally long timecards. This is a known issue that would be useful if/when Oracle addresses it.

6.4.1.1. **Background**

Port of Oakland charges a lot of time to projects on the OTL timecards. The team noted that the first few days are fine, but by Thursday they have to scroll to the far left to see the project and then back to the far right (not in same view) to see the accounting.

6.4.1.2. **Issues Addressed**

- Enhanced scrolling capabilities
- Reduction in incorrect entries

6.4.1.3. **Special Considerations**

- None

6.4.1.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 1
Estimated Business Benefit: 3
6.4.2. **Utilize Timekeeper Responsibility**
Terminated Employees’ timecards can be accessed via the Timekeeper responsibility. Payroll can use the Timekeeper Responsibility for Terminated Employee Timecard Access.

6.4.2.1. **Background**
Locating Terminated Employee’s Timecards has been a previous Audit issue for Port of Oakland. Company is trying to locate the Timecard in the Timecard History form in the Authorized Delegate responsibility.

6.4.2.2. **Issues Addressed**
- Inability to locate a Timecard is an Audit issue.

6.4.2.3. **Special Considerations**
- None

6.4.2.4. **Estimated Complexity and Business Benefit**
Estimated Change Complexity: 1
Estimated Business Benefit: 3

6.4.3. **Use “Default Timecard Period” System Preference**
For OTL Timecard retrieval for a specified timecard in the Authorized Delegate responsibility, we recommend checking the system preference “Default Timecard Period” by setting it to the closest period. This will set the timecard entry period LOV where it starts with the latest/current system date therefore allowing the user to narrow down the timecards that are retrieved and minimize scrolling.

6.4.3.1. **Background**
Currently there is no date / period search option on the Time Entry form. The users have to click on the Previous or Next 10 option.

6.4.3.2. **Issues Addressed**
- Time consuming to scroll through in intervals of 10.
- Increase efficiency in quickly locating the specified timecard.

6.4.3.3. **Special Considerations**
- None
6.4.3.4. Estimated Complexity and Business Benefit
 Estimated Change Complexity: 1
 Estimated Business Benefit: 3

6.4.4. Review Added OTL Functionality
 Review documentation for OTL functionality in past and upcoming Release Update Patches (RUP’s). Port of Oakland resources expressed interest in determining if new functionality may be useful. We recommend analyzing the R12 documentation (Readme’s and RCD) as well as requesting functional consulting assistance for any functionality that the Port might be interested in pursuing.

6.4.4.1. Background
 In reviewing the HCM new features, which include the R12.1.3 functionality through the most recent version of Release 12.2, there was interest in the following:

• Rollback Transfer Time from OTL to BEE process (RUP 5)
• Assignment Time information – Web ADI (RUP 7)
• New Projects Layout for Actual Costing (12.2)
• Attachments in Timecards (12.2)

6.4.4.2. Issues Addressed
• Increased flexibility with loading of time and time transfer process

6.4.4.3. Special Considerations
• Patch sequencing applies
• For some of these improvements, an upgrade to12.2.X will be required
• Attachments in Timecards will need modification to custom templates – see R12.2 'Work Based Projects and Payroll Timecard Layout' Missing Attachment Functionality (Doc ID 2033914.1)

6.4.4.4. Estimated Complexity and Business Benefit
 Estimated Change Complexity: 5
 Estimated Business Benefit: 4

6.4.5. Upgrade to Address Retropay Process Issue
 For the Payroll Retropay process issue, we recommend that you review the Enhanced Retropay process that is introduced in R12.2. An Oracle Whitepaper on this issue has been sent to IT. Also please review Oracle note 1482827.1 – EBS HCM – Payroll Retro Pay Advisor which
6.4.5.1. **Background**

The Port is currently running the Enhanced Retropay process and has some issues in the process selecting the correct employees. The process sometimes does not select the employees who are in queue. The internal PR team is currently reviewing the issue.

6.4.5.2. **Issues Addressed**

- Employees in the queue are not always selected for processing.
- 12.2.5 Enhances the query functionality.
- 12.2.5 Eliminates some manual intervention in selecting employees and creating the assignments for processing.

6.4.5.3. **Special Considerations**

- An upgrade to 12.2.5 is required to utilize this functionality
- Patch sequencing applies.
- Custom reports will need to be reviewed and potentially updated or eliminated.

6.4.5.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 5
Estimated Business Benefit: 4

6.4.6. **Complete the CalPERS Review and Improvements**

The Payroll CalPERS processes are currently under review and modification by the internal Payroll team.

6.4.6.1. **Background**

The team indicated that the current Payroll CalPERS processes are not sufficient to support their business processes. An internal project is currently underway at this time.

6.4.6.2. **Issues Addressed**

- Internal project for enhancement/modifications.

6.4.6.3. **Special Considerations**

- NA

6.4.6.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 3
Estimated Business Benefit: 4
6.4.7. Improvements to QuickPay Processing

For Payroll processing of a QuickPay payroll run, we recommend customizing the Element selection form to automatically default to all elements selected for processing during payroll. We recommend consideration of personalizing the form to automatically select all elements.

6.4.7.1. Background

When a one-off QuickPay payroll run is processed, the user is required to select any elements that should be included in the QuickPay. Currently there is no option to default all elements and then deselect any elements that the user does not want to process.

6.4.7.2. Issues Addressed

- Enhance processing of the QP with global default selection.
- Minimize risk of overlooking a required element.

6.4.7.3. Special Considerations

- None

6.4.7.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 3

6.4.8. Work with Oracle to Fix Bugs in Payroll Reports

For the Payroll Activity Report and Payroll Register, we recommend continuing to work with Oracle to resolve per the Service Requests that has been previously logged with Oracle Support.

6.4.8.1. Background

The Payroll Activity Report is running but the totals are not always on the report. This issue has just recently occurred, so the team is researching patching issues and has logged an Oracle Service Request.

The Payroll Register is executing, but it is running for an excessive amount of time. This issue has just occurred, so internal team is researching patching issues and has logged an Oracle Service Request.

6.4.8.2. Issues Addressed

- Inaccurate totals on the Payroll Activity Report.
- Excessive time to run the Payroll Register therefore delaying payroll reconciliation.
6.4.8.3. Special Considerations
• Service Requests have already been logged with Oracle concerning these issues.

6.4.8.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 3

6.4.9. Improve Void and Reversal Process
For the Void and Reversal process, we recommend that review of the Release Update Patch (RUP) 6 enhancement process, which has been applied to the current 12.1.1 instance. There is an unused enhancement that automates the process of running one or more processes as a single flow where the user can void a check and then reissue or cancel the check as a single process.

6.4.9.1. Background
There are currently issues with the cumbersome payroll process to void and reverse checks.

6.4.9.2. Issues Addressed
• May automate the process of running one or more processes as a single flow where the user can void a check and then reissue or cancel the check as a single process.

6.4.9.3. Special Considerations
• None

6.4.9.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 4

6.4.10. Allow Tax Calculation Overrides
Allow tax calculation overrides at time of entry for Manual checks when they are entered into Oracle. There is currently an issue where on occasion the taxes calculated to do a manual check are different than when the manual check is entered into Oracle. The company would like a method to update when entering into Oracle vs. doing a tax balance adjustment after the fact. We recommend a review of the Element Special Inputs Replacement Amount and Additional Amount element which can be used when the information is added to the Oracle system.
6.4.10.1. Background
When a manual check is processed by manually calculating the taxes and then entered into the Oracle system, sometimes the manual tax calculation is incorrect or off by rounding and Oracle does not allow the user to override to match the manual calculation. Currently the user is processing a tax balance adjustment to correct.

6.4.10.2. Issues Addressed
- Updates at time of entry.

6.4.10.3. Special Considerations
- Consideration for time vs. benefits, as a tax balance adjustment is relatively easy and quick to process.

6.4.10.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 2
Estimated Business Benefit: 3

6.4.11. Improvement of Year-End PTO Carryover Process
For the Payroll Year-End PTO Carryover process, we recommend a review of the Accrual Element Fast Formulas to determine if the Fast Formula code can be edited to allow the process to be ran once instead of 4 times during the year end processing. They would include the following: Vacation Accrual Plan, Sick Accrual Plan, Scheduled Holiday Accrual Plan, Protected Vacation Accrual Plan, Comp Time Accrual Plan

6.4.11.1. Background
Payroll is currently running the PTO 4 times on different dates to complete the year-end process.

6.4.11.2. Issues Addressed
- Efficiency in completing the year end processing.

6.4.11.3. Special Considerations
- None

6.4.11.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 3
6.4.12. Review Added Payroll Functionality

Review documentation for Payroll functionality in past and upcoming Release Update Patches (RUP’s). Port of Oakland resources expressed interest in determining if new functionality may be useful. We recommend reading the R12 documentation (Readme’s and RCD) as well as requesting functional consulting assistance for any functionality that the Port might be interested in pursuing.

6.4.12.1. Background

In reviewing the HCM new features which include the R12.1.3 functionality through the most recent release of 12.2, the team addressed interest in the following:

- Void Check process (RUP 7 & 8), Oracle Whitepaper sent to IT.
- Payroll Dashboard (RUP 6)
- Costing of Payment Reports (RUP 8)
- Retro Assignments, Web ADI (12.2.4)
- Retropay Enhanced Results (12.2.6)

6.4.12.2. Issues Addressed

- Enhanced ability to view and process payrolls, retropays, etc.

6.4.12.3. Special Considerations

- Patch sequencing applies
- For some of these improvements, an upgrade to 12.2.X will be required

6.4.12.4. Estimated Complexity and Business Benefit

- Estimated Change Complexity: 5
- Estimated Business Benefit: 4

6.4.13. Upgrade to 12.2.5 for Enhanced Retropay

We would like to recommend updating to Release 12.2.5, RUP 6 to take advantage of the Enhanced Retropay functionality enhancement. Per the Release document, the Rup 6 ‘introduces a new user interface for querying the assignment actions from the Retropay Enhanced process and reviewing the corresponding created retro entries. This enhancement enables users to query all the retro assignment actions for an assignment / payroll between the chosen dates and review the retro entries created and the cause of the retro entries creation.’

6.4.13.1. Background

The current Retropay process is not consistent with selecting and processing the correct employee records as well as the query functionality is cumbersome.
6.4.13.2. Issues Addressed

- Upgrading to 12.2.5 RUP 6 would provide additional reporting on the Retropay transactions.

6.4.13.3. Special Considerations

- Patch sequencing applies
- An upgrade to 12.2.5 will be required

6.4.13.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 5
Estimated Business Benefit: 4
7. Human Resources Assessment & Recommendations

7.1. Executive Summary – Human Resources

The Port of Oakland utilizes Oracle Benefits, Self-Service Human Resources and Human Resources. The process includes numerous custom programs as defined in the Customization section. Considering the organization has numerous custom programs and specific data reporting requirements the Human Resources processes run fairly smoothly. The Human Resources team indicated they would like to see further enhancement in automation of data from 3rd party vendors and maybe eventually replacement of 3rd party vendors with Oracle functionality. They also indicated that they have a few pain points primarily in Benefits.

There are opportunities to improve efficiency by re-evaluating some key processes, taking advantage of functionality available in the current footprint and taking advantage of functionality improvements in R12.

7.2. Current Baseline

7.2.1. Oracle Benefits

The Port is utilizing the standard Oracle benefit functionality and is utilizing multiple benefit plan designs for multiple Person Types.

7.2.2. Oracle Self-Service Human Resources

The Port is utilizing the standard Oracle Self-Service Human Resources and is primarily utilizing SSHR for EE Time and Manager OTL functions.

7.2.3. Oracle Human Resources

The Port is utilizing the standard Oracle Human Resources and is utilizing basic Human Resource Management and Accrual Plans.

7.3. Customizations

There are almost 90 customizations in the Benefit, SSHR and HR areas for the Port of Oakland to process their human resource and benefit information. Appendix C: Human Resources Customizations contains the comprehensive list of customizations for this area. The upgrade to R12.2 is not anticipated to change the requirements for these custom processes.
7.4. **Recommendations for Benefits, Self-Service HR and Human Resources**

7.4.1. **Automate Integration for New Hires**

The Port would like to automate the integration for New Hires from the 3rd party Applicant Tracking system.

7.4.1.1. **Background**

Currently, the Port is using a 3rd Party Applicant system and then manually entering the records into Oracle.

7.4.1.2. **Issues Addressed**

- Reduction in manual entry
- Reduction in incorrect entries

7.4.1.3. **Special Considerations**

- This would require custom programs

7.4.1.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 3
Estimated Business Benefit: 3

7.4.2. **Improve New Hire Approval Workflow**

The Port would like to improve the New Hire Approval workflow for rerouting when approval has not been obtained within a designated timeframe. This would enable the New Hire approval process to not get detained waiting for an approver that is not available.

7.4.2.1. **Background**

Currently, the approval process follows the first level supervisor. When the approver is not available the approval is in queue waiting for the approver to log their approval. This sometimes causes other issues and delays.

7.4.2.2. **Issues Addressed**

- Increased efficiency in approval process.

7.4.2.3. **Special Considerations**

- This would require customization to the workflow process

7.4.2.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 2
Estimated Business Benefit: 3
7.4.3. **Automate Continuous Service Date Entry**
The Port uses TALEO for Performance Management processing. Once the Performance Rating is manually entered, then the Continuous Service Date is manually entered on the Element entry form. The Port would like to automate Continuous Service Date Entry for Promotions from TALEO

7.4.3.1. **Background**
Currently the entire process is manual entry for required information.

7.4.3.2. **Issues Addressed**
- Reduction in manual entries
- Reduction of incorrect entries

7.4.3.3. **Special Considerations**
- This would require custom programs

7.4.3.4. **Estimated Complexity and Business Benefit**
Estimated Change Complexity: 3
Estimated Business Benefit: 3

7.4.4. **Review the User-Defined Eligibility Criteria and Dependent Coverage Eligibility Profiles**
Currently the death of Employee or Retiree is not creating the Life Event trigger.

7.4.4.1. **Background**
When the date of death is entered for an Employee or Retiree, then the system should trigger the defined Life event for benefit eligibility.

7.4.4.2. **Issues Addressed**
- Fix to existing issue

7.4.4.3. **Special Considerations**
- This would require customization
- If updates need to be made, the api available is ‘Dependent Eligibility Criteria’ and ‘Dependent Eligibility Criteria Values’
7.4.4.4. Estimated Complexity and Business Benefit
   Estimated Change Complexity: 2
   Estimated Business Benefit: 3

7.4.5. Automate Employee Request for Vacation Process
   The Port would like to automate the Request for Vacation Process via the Absence Management system using the Leave of Absence forms.

7.4.5.1. Background
   Currently the employee completes an application form that is turned into the Human Resources department. The Port would like to design a system that would allow the employee to enter the vacation time and then automate the approval process.

7.4.5.2. Issues Addressed
   • Increased efficiency and time in processing Employee Vacation requests.

7.4.5.3. Special Considerations
   • This is can be facilitated using Oracle standard functionality.

7.4.5.4. Estimated Complexity and Business Benefit
   Estimated Change Complexity: 2
   Estimated Business Benefit: 4

7.4.6. FTE Report Changes
   The Port would like a report to report FTE head count based on person type so they can select either Employee or Retiree, which could be enabled by customizing FTE Report with a Parameter to select Employee or Retiree. They would also like the ability to extract the data and then manually manipulate the data in Excel.

7.4.6.1. Background
   The Port is currently manually preparing separate reports outside of the system, one for Employees and one for Retirees.

7.4.6.2. Issues Addressed
   • Increased efficiency in reporting.

7.4.6.3. Special Considerations
   • This would require a custom report
7.4.6.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 2
Estimated Business Benefit: 4

7.4.7. Manage Deceased Employees’ Benefits in Oracle

The Port would like to implement Plan Type, Plan, Eligibility Profiles, Rates and Life Event for Deceased Survivors Benefits using Oracle.

7.4.7.1. Background

Currently, the Port is managing the Deceased Employee’s benefits manually in another system. They would like to setup and manage within the Oracle system.

7.4.7.2. Issues Addressed

- Increased efficiency in managing the entire Employee Life cycle of benefits.

7.4.7.3. Special Considerations

- This can be facilitated using standard Oracle functionality.

7.4.7.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 4

7.4.8. Manage Medicare Premium Reimbursement Plan Benefit in Oracle

The Port would like to implement Plan Type, Plan, Eligibility Profiles, Rates and Life Event for Medicare Premium Reimbursement plan in Oracle.

7.4.8.1. Background

Currently, the Port is managing the Medicare Reimbursement plan manually in another system. They would like to setup and manage within the Oracle system.

7.4.8.2. Issues Addressed

- Increased efficiency in tracking, reporting and processing the reimbursement.

7.4.8.3. Special Considerations

- This can be facilitated using standard Oracle functionality.
7.4.8.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 3  
Estimated Business Benefit: 4

7.4.9. **Fix Incorrect Element Processing for Terminated Employees**

The Port IT team is researching the incorrect element processing for terminated employees and is working with the Internal IT team on Payroll Element processing for Terminated Employees

7.4.9.1. **Background**

Currently, some payroll elements are being processed for terminated employees whose Final process date is null when the element definition does not indicate processing based on that final processing date criteria.

7.4.9.2. **Issues Addressed**

- Incorrect payroll calculations

7.4.9.3. **Special Considerations**

- Internal IT team is researching / logging Oracle Service Request if needed.

7.4.9.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 2  
Estimated Business Benefit: 3

7.4.10. **Train on Usage of Special Inputs vs. Adjustment Elements**

The Port has expressed interest in reviewing the element functionality of the Special Input Element vs. an Adjustment Element.

7.4.10.1. **Background**

The Adjustment element is typically used for a one-time adjustment where the Special Inputs elements create and retain element balances that will retained until the parent element is processed again.

7.4.10.2. **Issues Addressed**

- Updates at time of entry.
7.4.10.3. Special Considerations
- None

7.4.10.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 3

7.4.11. Utilize Deductions Report
The Port has expressed interest in running a report that will identify the scheduled deduction and deduction arrearage.

7.4.11.1. Background
On occasion an Employee will not have enough pay to cover a deduction. HR would like to run a report prior to payroll processing to see the Employee scheduled deduction amount and any deduction arrearage.

7.4.11.2. Issues Addressed
- Ability to make adjustments as required prior to running payroll.

7.4.11.3. Special Considerations
- This is standard Oracle functionality

7.4.11.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 3

7.4.12. Implement Self-Service On-line Benefit Enrollment
The Port has expressed interest in utilizing Oracle’s self-service enrollment process in Self-Service Human Resources.

7.4.12.1. Background
Currently, the Human Resources department is entering enrollment benefit processing and they would like to look into the Self-Service functionality.

7.4.12.2. Issues Addressed
- Increased efficiency in processing large number of enrollments.

7.4.12.3. Special Considerations
- The schedule for this would likely need to be coordinated around the Port’s benefits enrollment schedule
7.4.12.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 4
Estimated Business Benefit: 4

7.4.13. Customize Report with a Parameter for EIT type
The Port would like an Extra Information Type (EIT) report. They are specifically interested in reporting on Extra Duty and Extra Pay, and would also like the ability to extract the data and then manually manipulate the data in Excel

7.4.13.1. Background
Currently, the Human Resources department has no viable reporting option for EITs.

7.4.13.2. Issues Addressed
• Increased efficiency in reporting.

7.4.13.3. Special Considerations
• This would be a custom report.

7.4.13.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 2
Estimated Business Benefit: 3

7.4.14. Automate the Appraisal Performance Rating
The Port would like to create a Performance EIT for the Performance Rating and automate the entry process from the 3rd- party system

7.4.14.1. Background
Currently, the Human Resources department is manually entering the Performance Rating.

7.4.14.2. Issues Addressed
• Increased efficiency in entry.

7.4.14.3. Special Considerations
• This would require customizations

7.4.14.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 3
7.4.15. Review the User-Defined Eligibility Criteria and Dependent Coverage Eligibility Profiles

The updating of the Spouse in Human Resources is creating various issues within Benefits. The team is currently trying to locate all of the potential issues.

7.4.15.1. Background

Currently, the Human Resources department is considering turning off the process until all the errors can be identified and causes determined. The Human Resources department is manually trying to fix.

7.4.15.2. Issues Addressed

- Fix the existing issue

7.4.15.3. Special Considerations

- None

7.4.15.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 2
Estimated Business Benefit: 3

7.4.16. Remove the Seniority Date in Self-Service Human Resources

The Port would like to remove the Seniority date in SSHR. The preference would be to hide the date. Preference order is as follows: 1) hide the date, 2) link the correct date in the application, 3) define message to user.

7.4.16.1. Background

Currently, Seniority Date is incorrect. It is the conversion date and not the true Seniority Date.

7.4.16.2. Issues Addressed

- Reduce confusion and calls to the Human Resource Department due to incorrect data

7.4.16.3. Special Considerations

- This may be accomplished by means of Personalization or linking date from application to SSHR or display and create custom tip.
7.4.16.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 3

7.4.17. Manage the Professional Development Entitlement in Oracle

The Port would like to implement Plan type, Plan, Eligibility Profiles, Rates, and Life Event in Benefits for Professional Development Entitlement.

7.4.17.1. Background

Currently, the Port is managing the Professional Development Entitlement manually in another system. They would like to setup the system with balance and limits within the Oracle.

7.4.17.2. Issues Addressed

- Increased efficiency in tracking, reporting and processing the reimbursement.

7.4.17.3. Special Considerations

- This can be accomplished with standard Oracle functionality

7.4.17.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 4

7.4.18. Fix Garnishment Calculation Issue

The Port would like to use the Garnishment Element to compute the Garnishment per the California regulation. They would like to be in compliance with the recent Garnishment Senate Bill 501 effective 7/1/16.

7.4.18.1. Background

Currently, the Port Garnishment element can’t be reused for the proper % to $ calculation. They are setting up a Levy element to use for the Garnishment.

7.4.18.2. Issues Addressed

- Regulatory compliance
- Reduction in element setup
7.4.18.3. Special Considerations
- This may require working with Oracle to address a potential system bug via a Service Request.

7.4.18.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 3

7.4.19. Update Element Names
The Port would like to update Element Names.

7.4.19.1. Background
Currently, the Port has been unsuccessful in updating the Element Name. The Element is ID driven and the documentation indicates that the user should be able to date track to the effective date and update the Element Name.

7.4.19.2. Issues Addressed
- Setup preference

7.4.19.3. Special Considerations
- This may require working with Oracle to address a potential system bug via a Service Request.
- Custom Reports with the Element Name hardcoded will need updated.

7.4.19.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 3

7.4.20. Define Standard Letter Generation to Generate Onboarding Document
The Port would like generate a word document automatically after entry of the New Hire as part of their internal onboarding process. There are three methods to choose from using the Standard Letter Generation:
- Concurrent Processing using Word Processors
- Concurrent Processing using Oracle Reports
- Create Mail Merge Letters using Web ADI.

7.4.20.1. Background
Currently, the Port is manually creating each New Hire onboarding document.
7.4.20.2. Issues Addressed
- Efficiency in processing New Hire entries.

7.4.20.3. Special Considerations
- This can be accomplished using Oracle standard functionality.

7.4.20.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 3

The Port would like a report that details HR transactions by a date range

7.4.21.1. Background
Currently, the Port has no reporting mechanism to review the current day’s (or date range’s) transactions.

7.4.21.2. Issues Addressed
- Efficiency in processing Benefit and Human Resources transactions in timely manner

7.4.21.3. Special Considerations
- This would require a custom report

7.4.21.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 3

7.4.22. Review Added SSHR Functionality for Human Resources and Benefits
Review documentation for Human Resource functionality in past and upcoming Release Update Patches (RUP’s). Port of Oakland resources expressed interest in determining if new functionality may be useful. We recommend reading the R12 documentation (Readme’s and RCD) as well as requesting functional consulting assistance for any functionality that the Port might be interested in pursuing.

7.4.22.1. Background
In reviewing the HCM new features which include functionality through the most recent release of 12.2, the team addressed interest in the following:
• User Defined Criteria for Dependent Eligibility
• View Rate History
• Delete Unrestricted Enrollment
• Control Ability to Designate Participant as Beneficiary
• Updates to COBRA Letters

7.4.22.2. Issues Addressed
• Additional setup and reporting functionality for Benefits

7.4.22.3. Special Considerations
• Patch sequencing applies

7.4.22.4. Estimated Complexity and Business Benefit
  Estimated Change Complexity: 3
  Estimated Business Benefit: 4
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8. General Ledger Cost Allocations Assessment & Recommendations

8.1. Executive Summary – GL Cost Allocations

The discussion regarding General Ledger functions was limited to the topic of Cost Allocations. Currently, all allocations for the divisions are being derived outside of Oracle and uploaded into the secondary ledger as journal entries.

Port of Oakland should consider utilizing Oracle’s Mass Allocation functionality which comes standard in the General Ledger module. A focused training session on this functionality would allow the different divisions a more thorough understanding of what can be done and potentially reduce the effort involved in compiling and calculated the allocation entries; especially for the Aviation division.

8.2. Current Baseline

The General Ledger processes leverage standard basic Oracle functionality. Journals are interfaced from the Oracle sub-ledgers and manual journal entries are entered for financial record keeping and reporting. As mentioned above, the use of the Mass Allocation functionality in Oracle could assist in reducing manual efforts for the different division by allowing the system to calculate and generate the entries for cost allocations.

8.3. GL Cost Allocations Customizations

Port of Oakland does not have any customizations in Oracle related to the cost allocation process.

8.4. Recommendations for GL Cost Allocations

8.4.1. Training for Utilizing Mass Allocations

Focused training on the use of Oracle’s Mass Allocation and Allocation Workbench functionality and forms will allow the GL team to leverage Mass Allocation functionality to reduce the effort required for allocations.

8.4.1.1. Background

During the initial go-live of Oracle EBS, the feeling was that the allocation formulas required for the Port of Oakland were not a great fit and would be difficult using the functionalities provided in Oracle. The process of compiling the data and allocating costs has remained outside of the financial system and is uploaded via journal into Oracle.

Oracle allows for many different types of allocations including:

- Net Allocations
• Step-Down Allocations
• Rate-Based Allocations
• Usage-Based Allocations
• Standard Costing Allocations.

The formula entry in Oracle will allow you to offset the cost pool to a different account and still generate financial reports reflecting the results before and after the allocation has been generated.

8.4.1.2. Issues Addressed
• Greatly reduce manual effort involved in compiling and calculating cost allocations
• Provide single source of truth for audit purposes ~ all information and allocation equations are defined inside Oracle EBS

8.4.1.3. Special Considerations
• The use of STAT accounts should be considered to allow Oracle to use different factors for cost allocation percentages across the different divisions, cost centers, etc...

8.4.1.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 3
9. Accounts Payable Approvals & Accruals
Assessment & Recommendations

9.1. Executive Summary – AP Approvals & Accruals

The discussion regarding Accounts Payable functions was limited to the topics of Invoice Approval and Accruals.

The standard accrual processes in Oracle are run at period end but not utilized, reviewed or posted to the general ledger. The current period end accrual generated by Oracle is at $1.5B which is much higher than the actual posted accrual. Due to this, Accruals are currently tracked offline in a spreadsheet and a manual journal entry is posted at period end for financial reporting purposes.

The Port of Oakland enters approximately 1,700 invoices per period with ¾ of the transactions related to maintenance; accounting for ½ of the total spend. The current process requires PO matching of invoices to gain proper approval before entering and generating payment of the invoice. Today a high percentage of these products and/or services are being acquired prior to the Purchase Order being input in to the system. This requires the payables staff to keep track of the status of the invoice and delay entry into Oracle until such time as the Purchase Order is entered and approved for proper matching of the invoice. This business process is creating a tremendous amount of manual effort to sort and review invoices ensuring the PO approval has been captured in the system prior to matching and payment.

The Port of Oakland should take advantage of and trust the accrual capabilities inherit in Oracle. The recommendation would be to obtain training regarding the accrual process as well as a review and cleanup of the currently accrued records. This would a provide a clean start and trust in the numbers accompanied with the training to understand the reconciliation process and on-going maintenance required.

While the AP approval process could possibly be configured to help alleviate the burden of requiring a purchase order approval prior to invoice entry, the recommendation would be to review and alter this business process so that the approval is obtained prior to the spend occurring. There are many options available to alleviate burden on the requisitioner as well as the Purchasing Buyers.

9.2. Current Baseline

The Payables processes are for the most part leveraging standard basic Oracle functionality regarding invoice entry, matching and payments. The accrual functionality and tolerances need to be reviewed for more efficient and systematic processing.
9.3. **AP Accrual & Approval Customizations**

Port of Oakland does not have any customizations in Oracle related to the cost allocation process.

9.4. **Recommendations for AP Accruals & Approvals**

9.4.1. **Training on Accruals**

Training on the Period End Accrual process and cleanup of the current accrual transaction is needed to gain trust in the system and help alleviate ongoing manual efforts.

9.4.1.1. **Background**

The accrual totals in Oracle are not correct or trusted by the business. Due to this, accruals are currently tracked in spreadsheets and a journal is entered directly into the general ledger. The current accrual total calculated by Oracle is $1.5B. This is most commonly seen when the accrual process is not fully understood or maintained over time in the system.

9.4.1.2. **Issues Addressed**

- Accrual systematically generated
- Ensure underlying transactions are properly maintained in the correct status
- Remove manual efforts to compile and keep track of accrual information outside of system of record

9.4.1.3. **Special Considerations**

- Review of the spend approval process could ensure that all required invoices are entered and properly matched prior to month end; thereby reducing the accrual total and effort required for the reconciliation of these accounts.
- Review of receiving tolerances could help in auto-closure of purchase orders when receiving is within the specified tolerance.

9.4.1.4. **Estimated Complexity and Business Benefit**

Estimated Change Complexity: 2
Estimated Business Benefit: 4

9.4.2. **Utilize Invoice Matching Tolerances**

A review of Invoice matching tolerances is recommended. The current tolerances are set to 0% in the system.
9.4.2.1. **Background**
Very tight invoice matching tolerances in the system can lead to a higher number of systematic matching holds being placed in the system. This has the potential to slow down the payment process and miss earned discounts.

9.4.2.2. **Issues Addressed**
- Less effort reviewing and correcting invoice matching holds
- On-time payment to vendors

9.4.2.3. **Special Considerations**
- Not applicable

9.4.2.4. **Estimated Complexity and Business Benefit**
Estimated Change Complexity: 1
Estimated Business Benefit: 2

9.4.3. **AP Approvals Improvements**
The current process for spend approval needs to be reviewed to see how business process and/or system changes could reduce manual effort involved.

9.4.3.1. **Background**
Today a high percentage of products and/or services are being acquired prior to the Purchase Order being input into the system even though the SOP requires PO matching. This requires the payables staff to keep track of the status of the invoice and delay entry into Oracle until such time as the Purchase Order is entered and approved for proper matching of the invoice. This business process is creating a tremendous amount of manual effort to sort and review invoices ensuring the PO approval has been captured in the system prior to matching and payment.

9.4.3.2. **Issues Addressed**
- Follow best practice to gain spend approval prior to product/service being rendered
- Decreased burden on Payables personnel tracking spend approval
- On-time payment to vendors
- Reduced AP accrual at month end; less effort reconciling

9.4.3.3. **Special Considerations**
- Not applicable
9.4.3.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 2
Estimated Business Benefit: 4

9.4.4. Review Segregation of Duties
Review of responsibility rights and user assignments to ensure correct segregation of duties for Payables personnel.

9.4.4.1. Background
There are 164 users defined in the system that have rights to enter/maintain both supplier records and invoice records.

9.4.4.2. Issues Addressed
- Decreased probability of internal fraud
- Increased audit controls
- Review and cleanup of application users

9.4.4.3. Special Considerations
- Not applicable

9.4.4.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 1
Estimated Business Benefit: 2
10. Purchasing

10.1. Executive Summary – Purchasing

The discussion of purchasing processes was limited to the requisition creation process. In general, the procurement processes are manual. The majority of requisitions are for services and maintenance and inventory items are not used within the organization. From a purchasing perspective, this limits requesters and buyers from being able to automate routine purchases.

All requisitions are created as expense, non-catalog and are entered using Oracle’s Purchasing forms. The category selected on the requisition drives the appropriate accounting. Buyers manually create the purchase order from the approved requisition. Goods and services are received within the system, which ensures that Accounts Payable can match and pay the invoice.

While the process works adequately and there were relatively few issues reported, there are opportunities to improve efficiency and decrease the amount of manual effort and transactions.

10.2. Current Baseline

The majority of spend generated by Port of Oakland is for services and maintenance. Non-catalog requisitions are entered using standard amount or quantity-based lines, which does cause some issues when rate-based services are being requisitioned. Inventory item numbers are not used in any processes across the organization. The standard account generator is used to drive the category based off the employee creating the requisition and the category selected.

Buyers negotiate yearly contract purchase agreements with key suppliers. Requesters typically create the requisition after the material has already been procured to facilitate payment to the supplier. Requisitions are entered in the Purchasing forms and submitted for approval.

The custom approval process leverages Oracle’s Approval Management Engine to generate the approval hierarchy. Buyers create purchase orders for the approved requisitions, which are approved through a custom workflow approval process. There were no issues reported with the approval process, with the exception of being able to identify exceptions. The approval process should be reviewed as part of the upgrade.
10.3. Purchasing Customizations

10.3.1. Requisition Approval
The requisition approval process leverages AME and the position hierarchy for generating the approval hierarchy.

10.3.2. Purchase Order Approval
A custom purchase order approval workflow process is used.

10.3.3. Contract Purchase Order Tax
This customization does not include sales tax in the calculation of the spend amount.

10.4. Recommendations for Purchasing

10.4.1. Consider Implementing Services Procurement
Implementing the Services Procurement module will provide requesters with the capability to enter fixed-price and rate-based line types.

10.4.1.1. Background
Oracle Purchasing provides functionality for amount or quantity values when creating requisition lines. When requesters create requisitions for hourly-based services they must calculate the total amount of the service instead of entering the negotiated rate and number of hours on the requisition. Services Procurement provides the functionality to create rate based requisition lines.

10.4.1.2. Issues Addressed
- Provides capability for requesters to enter in the number of hours
- Provides buyers capability to evaluate spend in terms of hours instead of amount

10.4.1.3. Special Considerations
- Services Procurement requires additional Oracle license

10.4.1.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 4
10.4.2. Review Approval Process for Requisitions & Purchase Orders

The requisition process leverages AME for building the approval hierarchy, but it is challenging to identify when requisitions complete with an error. The purchase order approval process leverages a custom PO approval workflow. AME now supports purchase order approval and this custom workflow could be eliminated.

10.4.2.1. Background

The requisition process leverages AME and the position hierarchy for building the approval hierarchy. Exceptions, which may be caused for any number of reasons, are difficult to identify and the requisitions may become ‘lost’. As part of the upgrade process, the approval process should be reviewed to see if any enhancements to AME may provide tools to reduce the number of exceptions or increase visibility when they do occur. The purchase order approval process leverages a custom workflow. There were no issues identified, however R12.2.5 provides AME support for purchase orders, potentially eliminating the need for a custom workflow.

10.4.2.2. Issues Addressed

- Eliminates need for custom workflow
- Utilize timeout feature to manage exceptions

10.4.2.3. Special Considerations

- This will require functionality provided by the upgrade

10.4.2.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 2
Estimated Business Benefit: 3

10.4.3. Utilize Inventory Items

Create item master records for items which are purchased on a routine basis. By utilizing inventory items, the Port can leverage sourcing rules and blanket purchase orders to streamline creation of purchase orders for routine spend. Inventory items may be leveraged in other applications as well, such as eAM, to add further opportunities for efficiencies.

10.4.3.1. Background

Port of Oakland does not utilize inventory item master records for any purchases or downstream processes. All requisitions are created as non-catalog expense purchases. Item records would
enable Port of Oakland to add automation to the requisition creation process.

10.4.3.2. Issues Addressed
- Reduction in the number of manual transactions required to facilitate the creation of a purchase order for payment.

10.4.3.3. Special Considerations
- Implement inventory items in conjunction with implementing eAM recommendations in Sections 3.4.1 Establish Foundation for Planned Maintenance and 3.4.3 Expand and Improve Use of Integration.

10.4.3.4. Estimated Complexity and Business Benefit
Estimated Change Complexity: 3
Estimated Business Benefit: 4

10.4.4. Implement iProcurement
Implementing iProcurement for creation of requisitions would allow Port of Oakland to streamline the requisition creation process. Preferred pricing agreements are enforced for catalog purchases and smart forms may be used for non-catalog, which would ensure that all required information is collected on the requisition.

10.4.4.1. Background
A majority of requisitions are created after the purchase has been made. Port of Oakland buyers negotiate contracts up-front for pricing with key suppliers. Material is purchased directly by requesters, who must enter transactions in the system to ensure suppliers are paid.

Requisitions are manually created and approved, after which the purchase order is created manually from the approved requisition. A receiving transaction is subsequently created and an invoice is entered, matched and paid. iProcurement can help to streamline these transactions by automatically creating the purchase order.

Desktop receiving allows the requester to quickly acknowledge receipt of the transaction using self-service tools. Accounts Payable can enter and match the invoice for payment to the supplier.
10.4.4.2. Issues Addressed

- Provides some automation to a very manual process required to facilitate payment to suppliers with negotiated pricing
- Reduction in the amount of time required to pay key suppliers

10.4.4.3. Special Considerations

- Port of Oakland should determine if inventory item records will be utilized prior to implementing iProcurement.
- The Port owns licenses for the iProcurement module
- iProcurement will also streamline processes for Maintenance using eAM as described in Section 3.4.3 Expand and Improve Use of Integration.

10.4.4.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 3
Estimated Business Benefit: 3

10.4.5. Descriptive Flexfield Data Cleanup

Port of Oakland utilizes a descriptive flexfield (DFF) on the requisition header to capture information for requisition approval and reporting. The DFF is not utilized in the manner for which it was originally intended and should be reviewed to determine what fields may be eliminated or re-purposed.

10.4.5.1. Background

The DFF on the requisition header includes data fields that are not being utilized by the buyers or management. Requesters are forced to enter data that is not relevant in order to enter a requisition into the system. The DFF structure should be reviewed to determine the usefulness of each field. Data entry points which are no longer being used should be eliminated providing a streamlined data entry process for the requesters.

10.4.5.2. Issues Addressed

- Reduction in the time to create a requisition by reducing required data entry points

10.4.5.3. Special Considerations

- This work may be completed independently of the upgrade process

10.4.5.4. Estimated Complexity and Business Benefit

Estimated Change Complexity: 2
Estimated Business Benefit: 3
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11. Technical Architecture

11.1. Introduction
SmartDog reviewed the current R12 E-Business suite architecture from a performance, stability, availability and future growth perspective as well as to provide recommendations to support a plan to upgrade to Oracle E-business Suite Release 12.2.

The Port provided access to the EBS Test environment (TST) which was a recent clone (cloned on 12th April 2016) of Production environment to carry out this assessment. SmartDog used the TST environment as a reference for querying the required information for assessment review as much as possible and coordinated with Mercury Technology Group (MTG), to gather the additional required information from Production environment (PRD) as necessary.

The purpose of the Technical Architecture Assessment is to:
1. Understand and document the current architecture
2. Determine the broad areas to improve the performance, stability, availability and growth capabilities
3. Provide recommendations to support the future state roadmap assessment

11.2. Current Baseline

11.2.1. Current utilization
Based on performance data shared by MTG the database and both application servers do not appear to be CPU bound or RAM bound. No storage or network performance data was received.

11.2.2. Growth Plans
There are no plans to add a significant number of users. There are no plans to implement new Oracle Applications modules

11.2.3. Other projects
There are plans to roll out an upgrade to –
- Desktop operating systems to MS Windows 7
- MS Office Suite of applications to Office 2016 (32-bit)

11.2.4. System Performance
Overall the current Oracle EBS system is performing satisfactorily
11.2.5. Target Java version

During testing for Java 8, it was identified that Discoverer Plus needed an upgrade for compatibility. The version Discoverer Plus 11.1.1.7 is being tested as a fix. Since Oracle’s Discoverer Product management team has not published an upgrade path beyond release 11.1.1.7, other reporting options are being considered, either as part of this project or another.

11.2.6. Current Architecture

Observations

1. The current architecture can provide hardware redundancy with addition of another database server in production
2. The disaster recovery hardware needs its memory doubled to match production hardware
3. The replication design is using a custom replication mechanism based on archive logs, which precludes certain recovery scenarios available with Oracle Data Guard
4. UPK server is unused and may be decommissioned.
11.3. Recommendations

1. Oracle EBS 12.2 has a heavier memory footprint compared to 12.1 application server. Load testing may be conducted to determine memory needs accurately. Usually it is cheaper to buy more memory than needed compared to cost of load testing. Based on current utilization 128GB should be sufficient.

2. Microsoft Windows 7 is certified with EBS 12.2 (both 32-bit and 64-bit). As part of Win 7 project please review Oracle Support Doc ID 389422.1 – Recommended Browsers for Oracle E-Business Suite Release 12

3. Microsoft Office 2016 is currently certified with EBS 12.1.3 and EBS 12.2.5. As part of MS Office upgrade project, please review Oracle Support Doc ID 1077728.1 – Microsoft Office Integration with Oracle E-Business Suite 11i and R12

4. Consider multi-node architecture avoiding single points of failure

5. Schedule and perform disaster recovery testing to confirm continued viability and identify/fix any gaps

6. Consider hardware upgrade depending on age/lease on the hardware. Typically replacing after 3-5 years offers best returns.

7. Consider upgrading Oracle Enterprise Linux to at least version 6 if not 7 depending on hosting and other infrastructure support.

8. Consider options around having at least one non-production environment in the production data center so that in case DR site has a catastrophic failure, you can continue production support activities in a limited fashion.

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12. Applications Technical

12.1. Executive Summary

The assessment indicates a significant opportunity for utilizing different tools to avoid issues and to make support easier from a technical perspective.

Port of Oakland does not seem to have a source code control in place. We recommend a source code control system be put in place to avoid issues, versioning problems between instances and make reverting back to older version easier.

Port of Oakland does not have documentation for custom code in place. We suggest the documentation be created for any RICE object moving forward. This would reduce the dependency for support and would also provide approach to any future developments.

Additionally, as discussed in Section 2.2 Reporting the Port is using Discoverer for some of its reporting requirements. Oracle currently has extended support for Discoverer until June 2017. APEX and OBIEE that should be considered as an alternative to Discoverer.

- Oracle Application Express (APEX) is a web-based application development tool that is embedded into the Oracle database. Oracle APEX requires no additional licensing as it is embedded into the Oracle database. Oracle APEX can be used to build interactive reporting pages that allow a user to group, drill, and summarize data to their own individual requirements. Data can be exported to Excel, HTML or PDF.
- Oracle Business Intelligence Foundation Suite (OBIFS) is a comprehensive business intelligence and analytics platform that delivers capabilities like interactive dashboards, ad hoc queries, notification and alerts. It supports highest workloads and most complex deployments. Note, Port of Oakland already has licenses for specific OBIFS products.

Last, there are 12.2 compliance recommendations that should be reviewed and resolved prior to the upgrade. There are steps that can be taken in the current system, such as moving custom tables out of the APPS schema and using synonym names instead of OWNER.TABLE_NAME. This action will save time and effort when upgrading to 12.2.x.

Following the above recommendations would decrease the time and effort it takes to implement new reports and decrease the effort in resolving technical issues and upgrading to new versions of Oracle.
12.2. Background

Port of Oakland’s Oracle Applications R12.1.1 system was assessed and baselined in relation to a planned upgrade to R12.2.X. This section contains the findings and recommendations arising from the assessment of custom development work and processes.

As part of the assessment, SmartDog’s proprietary Bloodhound analysis tool was run against the TST environment to identify custom code and system configuration. Follow-up discussions were held with the developers who support the Port of Oakland system to discuss customizations in key areas of the business.

- 4/25/2016 – Maritime Tenant Revenue – Pulin Doshi
- 4/25/2016 – Financials – Angela Yuen
- 4/26/2016 – HR/Payroll – Sashikanth Sabnavis

The deliverable of the development assessment consists of this document and the output of the Bloodhound tool.

12.3. Technical Overview

12.3.1. Versions

Bloodhound was run in the TST environment.

- Database Version -> Oracle Database 11g Enterprise Edition Release 11.2.0.4.0 - 64bit Production
- Oracle EBS Version-> R12.1.1
- Database Size -> 327.35 GB

12.3.2. Customization Metrics

Review of the Bloodhound assessment shows the following customization metrics:

- 473 Concurrent Programs. These break down as follows:
  - 5 Shell Scripts
  - 128 PL/SQL Programs
  - 1 SQL Scripts
  - 36 SQL*Loader Control Files
  - 320 Oracle Reports
  - 5 BI Publisher Data Definition Reports
- 251BI Publisher Templates
- 12 BI Publisher Data Templates
- 68 Forms Personalization
- 8 Forms
- 25 Alerts

Further analysis is recommended to refine the list to current programs and to produce a consolidated RICE list. This step is key to performing
patch impact analysis and understanding the effort involved in upgrading to the next EBS release.

12.3.3. Database Objects
Review of the Bloodhound assessment shows the following custom database objects:
- 355 Tables
- 16 Views
- 184 Packages
- 2 Procedures
- 6 Functions
- 2 Triggers
- 17 Business Areas

12.3.4. Reporting
The following solutions are being utilized for reporting at Port of Oakland.

Concurrent Manager Reports
There are 204 concurrent programs defined using Oracle Reports. Many of these provide Excel output using BI Publisher templates. It appears that some of these are variations on a theme, for example:
- Multiple reports for AR Aging with slight variations like summary by Activity Type, Customer Category, etc.
- Multiple reports for GL Reconciliation like AR-GL Customer Reconciliation, AR-GL Receipt Reconciliation, etc.

Discoverer
Oracle Discoverer is installed at Port of Oakland. It is installed in the EUL10_US schema and includes the following custom business areas:
- PORT ATTENDANCE
- PORT HR BENEFIT
- PORT HR Define
- PORT HR PERSONAL
- PORT OTL
- PORT PAYROLL
- Port EAM
- Port EAM BA
- Port Funding Source BA
- Port General Ledger BA
- Port HRMS BA
- Port Payables BA
- Port Projects BA
- Port Property Manager BA
- Port Purchasing
• Port Purchasing BA
• Port Purchasing BA 1

Discoverer reports are discussed in detail in the following section.

**Manual Extracts**
Developers provide ad-hoc Excel spreadsheet extracts to users in response to any special requests.

### 12.3.5. Discoverer
Discoverer is being used for reporting in Port of Oakland. Some of the major areas of reports created in Discoverer are:

- Work Orders
- Fixed Asset
- Project Status
- Employee Details, Compensation, overtime, timecard, etc.

There are 207 Discoverer workbooks present out of which only the below 9 show in the history as having been run in the past year.

- AA-Project Status Report by TASK_AA
- Operating Revenue by Dept, Account and Tenant
- Port AR Billing Summary by Revenue Division
- Port Checks Cleared Report
- Port EAM WO Cost Report
- Port Invoice Distribution Detail Report
- Port Merit Pay Report
- Port Operating Revenue by Dept, Tenant, and Account – V2 (2-26-2016)
- Port Project Status Report - PV
### 12.3.1. Interfaces

#### 12.3.1.1. Master Interface List

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<th>Direction</th>
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<td>HR</td>
<td>Delta Dental</td>
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<td>Vision insurance provider</td>
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<td>Access DB from HR Dept.</td>
<td>AP</td>
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<td>ACOM</td>
<td>Outbound</td>
<td>AP</td>
<td>ACOM</td>
<td>ACOM is check-printing software</td>
</tr>
<tr>
<td>W2 Mate</td>
<td>Outbound</td>
<td>AP</td>
<td>W2 Mate</td>
<td>W2 Mate is 1099 printing software</td>
</tr>
</tbody>
</table>
12.3.1.1. HR/Payroll Interfaces

**Diagram:**

- **ORACLE**
  - Deltas (Health Insurance Provider)
  - VSP
  - CalPERS (Retirement Systems)
    - Cardbase (for W-2s and AC3)
    - PayFlex FSA
    - Empower (Deferred Comp Admin)
12.3.1.2. Accounts Payable Interfaces
12.3.1.3. Accounts Receivable Interfaces
12.3.1.4. Manual Interfaces

Every year a file is received from CalPERS (California Public Employees’ Retirement System) with zip codes for all the service areas. Scripts are being created every time to manually delete or add new zip codes and rates in Oracle. These have not been developed as concurrent programs.

12.3.2. Code Migration

Currently MTG is responsible for migration of custom objects to Production.

- An MTG email address has been created and assigned to The Port.
- An email is sent to this address when a migration needs to occur.
- MTG verify that the sender is an approved sender before processing the migration request.
- The email consists of scripts, executables and instructions to the DBA on steps to migrate.

12.4. Recommendations

12.4.1. Documentation Management

The following documentation is usually held in a project library:

- MD050 Functional Design documents listing the purpose and functionality of each customization.
- MD070 Technical Design documents describing how the customization was built and defined in Oracle.
- TE020 Test Plan documents containing detailed test steps and the expected results of each step.
- MD120 Migration Deployment documents defining the detailed steps required to deploy a customization in a new environment.

With minor exceptions, there was no existing documentation provided for review and it is believed that this is sparse at best.

**SmartDog recommends that full documentation be generated for all new RICE items and held in a project library for future reference.**

For existing RICE items, the Bloodhound output shows the detail technical components but cannot show the intent and purpose; if and when amendments are made to existing RICE items, documentation could be put together at that time.
12.4.2. Identify Obsolete Programs

Out of the 473 custom concurrent programs identified, 274 had not been run in the prior month in the test system. While some of these may be run infrequently, or on a yearly basis, it is likely that many are unused and unlikely to be run in the future.

Examples of programs that are obsolete are conversion programs used when converting data from external sources into Oracle at the time of go-live cutover.

SmartDog’s recommendation is that the program list should be reviewed in order to identify programs (or other customizations) that are no longer required, and that these should be disabled.

The benefits of doing this are that:

- The list of customizations becomes shorter; this helps quantify how much code needs to be supported. This is a key input into any future system upgrade; it defines the scope of any remediation work and regression testing. Note, any subsequent Bloodhound run would take this into account and only show enabled programs.
- Obsolete programs no longer appear when users submit concurrent requests using SRS; this saves them time finding the program they want to run and reduces the possibility of selecting the wrong program.

12.4.3. Implement Source Code Control

There is no source code control system in place at Port of Oakland. SmartDog recommends that a Source Code Control system be put in place.

The benefits are as follows:

- Code control systems allow quick review of the changes made to code over time, listing comments and the developers who checked changes in.
- It is easy to revert to a prior version of the code if an issue arises.
- Code is automatically backed-up and cannot be accidentally deleted.
- Multiple developers can work on code simultaneously and changes merged together into a final script.

Best practice for the use of code control would be:

- Ensure that everybody uses it; partial code control is no code control.
- Commit code into the code control system as it is being built; don't wait until the code is complete. In practice, this means at least daily; more frequently if many changes are being made.
Developers modifying a standard script should check in the original version and lock it before starting work. This enables the source code control system to identify changes made compared to the original.

Changes should be checked in with a reference to the RICE item being worked on.

Subversion and Github are examples of source code control systems that are widely used and SmartDog has found them both to be very effective.

The output of the Bloodhound tool can be used for the initial population of code into source code control; alternatively, the scripts on the EBS server could be used, but this assumes that these match the code held in the database.

12.4.4. Implement Standards that Streamline Upgrade to 12.2

An upgrade to Oracle R12.2 requires that the objects in the database adhere to strict standards; they include the following:

- Custom tables should not be created in the APPS schema.
- Custom table names should be 28 characters or less.
- Custom table names should not contain the “#” character.
- Custom code should refer to table without a schema prefix, i.e. refer to AP_INVOICES_ALL instead of AP.AP_INVOICES_ALL or APPS.AP_INVOICE_ALL.

Oracle provides scripts that identify areas that need to be corrected before their upgrade process can be run (adzdpman, documented here:

- https://docs.oracle.com/cd/E26401_01/doc.122/e48839/T579510T580325.htm

An initial review showed that 18 custom tables owned by the APPS schema. These are mainly backup tables from datafix scripts.

SmartDog recommends that any new technical items be built to be compliant with R12.2 standards.

In addition, simple, low-impact corrections can be made now, for example moving the custom tables owned by APPS to the custom XXPOO schema.
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13. Implementation Roadmap

13.1. Implementing the Assessment Recommendations – Phasing

The core recommendation of this assessment is an upgrade from 12.1.1 to 12.2.5. However, the upgrade may not be the most logical first step. There are a number of recommendations in this assessment that are of lower complexity to implement, but would provide significant business value. We will call these “quick-wins”. As a result, of the time between this assessment and when the upgrade can realistically begin, a number of these quick-wins should be implemented.

The reality is that the planning, RFP and evaluation process required for a project the size of the upgrade will take time – probably a matter of months. This may allow time for the Port to address some of the quick-win opportunities while the upgrade planning is taking place.

For Phase 1, we recommend that the Port determine how much time should be allotted for upgrade planning and RFP activities, and based on the time available, determine which quick-win recommendations can be implemented prior to the upgrade.

The list of recommendations that can be considered as quick-wins are listed in Section 13.1.2 Recommendations that Should Be Addressed Prior to the Upgrade. Additionally, there are some recommendations that are of a little higher complexity that can also be considered depending on the amount of time allowed. These can be found in Section 13.1.3 Recommendations that Should Be Evaluated to be Addressed Prior to the Upgrade.

We recommend an effort to determine which of these opportunities to address during a Phase 1 effort that would happen before the Upgrade.

Phase 2 would be the execution project to upgrade the EBS applications and technical infrastructure while concurrently implementing the remaining recommendations that:

- Fix core design flaws
- Logically fit into the scope and activities that encompass the Upgrade effort
- Provide business value by addressing key pain points, driving efficiencies, improving existing functionality, leveraging new functionality, and eliminating manual processes
- Provide a platform and foundation for follow-on recommendations.

The Upgrade is an outstanding opportunity to improve the way that the Port of Oakland is using the Oracle EBS applications to better support the business.
As a result, we are recommending that most of the more complex findings and recommendations take place as part of the Phase 2 Upgrade. Additionally, many of these opportunities and improvements require the enhanced functionality in 12.2, so they must be completed during or after the Upgrade.

13.1.1. Mapping Recommendations by Complexity and Business Value

In determining which preferred recommendations we suggested to include before and during the Upgrade effort, SmartDog analyzed the estimated complexity and business value for each recommendation. Those with relatively low to medium complexity and higher business value are candidates to be addressed before the upgrade. Those that did not require upgraded system functionality and addressed core design flaws, significant pain points, process inefficiencies relative to their complexity were especially considered.

Below is a table containing the comprehensive list of recommendations in this assessment. Note that the electronic version of this document allows the reader to quick-link to the section referenced by placing the mouse on the section and Ctrl+Click to follow the link.

13.1.1.1. Consolidated Table of Functional Recommendations

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated Complexity</td>
</tr>
<tr>
<td>General</td>
<td>2.1 Upgrade Oracle EBS to Version 12.2.5</td>
</tr>
<tr>
<td>General</td>
<td>2.2.1 Implement a Transaction Reporting and Drill-down Solution</td>
</tr>
<tr>
<td>General</td>
<td>2.2.2 Implement Oracle Business Intelligence for Analytic Reporting</td>
</tr>
<tr>
<td>General</td>
<td>2.3 Training and Documentation</td>
</tr>
<tr>
<td>eAM</td>
<td>3.4.1 Establish Foundation for Planned Maintenance</td>
</tr>
<tr>
<td>eAM</td>
<td>3.4.2 Improve Maintenance Reporting and Analysis</td>
</tr>
<tr>
<td>eAM</td>
<td>3.4.3 Expand and Improve Use of Integration</td>
</tr>
<tr>
<td>eAM</td>
<td>3.4.4 Review and Improve Setup and Data Configuration</td>
</tr>
<tr>
<td>eAM</td>
<td>3.4.5 Improve Maintenance Planning and Work Management</td>
</tr>
<tr>
<td>eAM</td>
<td>3.4.6 Additional eAM Recommendations in 12.2.5</td>
</tr>
<tr>
<td>Projects/Grants</td>
<td>4.4.1 Leverage Project Management features for Projects</td>
</tr>
<tr>
<td>Projects/Grants</td>
<td>4.4.2 Set the Profile Option ‘CSE: Use Asset Tracking Costing Hook’ to ‘N’</td>
</tr>
</tbody>
</table>
## ATTACHMENT A – OAK ASSESSMENT DOCUMENT

| Projects/Grants | 4.4.3 Use Grants Better by Creating Future Installments | 2 | 4 | N |
| Projects/Grants | 4.4.4 Form Personalization and Reports to Provide Award Information on Assets | 2 | 4 | N |
| Property Manager | 5.4.1 Upgrade to 12.2.5 to Fix Variable Rent | 5 | 5 | Y |
| Property Manager | 5.4.2 Upgrade to 12.2.5 to Improve Processing of Late Fees | 5 | 4 | Y |
| Property Manager | 5.4.3 Resolve Billing Issues | 2 | 4 | N |
| Property Manager | 5.4.4 Review and Improve Reporting | 2 | 3 | N |
| Property Manager | 5.4.5 Implementation of Additional Functionality | 4 | 4 | Y |
| Payroll/OTL | 6.4.1 Resolve OTL Timecard Viewing / Scrolling Issue | 1 | 3 | N |
| Payroll/OTL | 6.4.2 Utilize Timekeeper Responsibility | 1 | 3 | N |
| Payroll/OTL | 6.4.3 Use “Default Timecard Period” System Preference | 1 | 3 | N |
| Payroll/OTL | 6.4.4 Review Added OTL Functionality | 5 | 4 | Y |
| Payroll/OTL | 6.4.5 Upgrade to Address Retropay Process Issue | 5 | 4 | Y |
| Payroll/OTL | 6.4.6 Complete the CalPERS Review and Improvements | 3 | 4 | N |
| Payroll/OTL | 6.4.7 Improvements to QuickPay Processing | 3 | 3 | Y |
| Payroll/OTL | 6.4.8 Work with Oracle to Fix Bugs in Payroll Reports | 1 | 3 | N |
| Payroll/OTL | 6.4.9 Improve Void and Reversal Process | 1 | 4 | N |
| Payroll/OTL | 6.4.10 Allow Tax Calculation Overrides | 2 | 3 | N |
| Payroll/OTL | 6.4.11 Improvement of Year-End PTO Carryover Process | 3 | 3 | N |
| Payroll/OTL | 6.4.12 Review Added Payroll Functionality | 5 | 4 | Y |
| Payroll/OTL | 6.4.13 Upgrade to 12.2.5 for Enhanced Retropay | 5 | 4 | Y |
| HR | 7.4.1 Automate Integration for New Hires | 3 | 3 | N |
| HR | 7.4.2 Improve New Hire Approval Workflow | 2 | 3 | N |
| HR | 7.4.3 Automate Continuous Service Date Entry | 3 | 3 | N |
| HR | 7.4.4 Review the User-Defined Eligibility Criteria and Dependent Coverage Eligibility Profiles | 2 | 3 | N |
| HR | 7.4.5 Automate Employee Request for Vacation Process | 2 | 4 | N |
| HR | 7.4.6 FTE Report Changes | 2 | 4 | N |
| HR | 7.4.7 Manage Deceased Employees’ Benefits in Oracle | 3 | 4 | N |
| HR | 7.4.8 Manage Medicare Premium Reimbursement Plan Benefit in Oracle | 3 | 4 | N |
| HR | 7.4.9 Fix Incorrect Element Processing for Terminated Employees | 2 | 3 | N |
| HR | 7.4.10 Train on Usage of Special Inputs vs. Adjustment Elements | 1 | 3 | N |
| HR | 7.4.11 Utilize Deductions Report | 1 | 3 | N |
| HR | 7.4.12 Implement Self-Service On-line Benefit Enrollment | 4 | 4 | N |
| HR | 7.4.13 Customize Report with a Parameter for EIT type | 2 | 3 | N |
| HR | 7.4.14 Automate the Appraisal Performance Rating | 3 | 3 | N |
| HR | 7.4.15 Review the User-Defined Eligibility Criteria and Dependent Coverage Eligibility Profiles | 2 | 3 | N |
| HR | 7.4.16 Remove the Seniority Date in Self-Service Human Resources | 3 | 3 | N |
| HR | 7.4.17 Manage the Professional Development Entitlement in Oracle | 3 | 4 | N |
| HR | 7.4.18 Fix Garnishment Calculation Issue | 1 | 3 | N |
| HR | 7.4.19 Update Element Names | 1 | 3 | N |
| HR | 7.4.20 Define Standard Letter Generation to Generate Onboarding Document | 3 | 3 | N |
| HR | 7.4.21 Summarization Report of Daily Human Resource Transactions | 3 | 3 | N |
| HR | 7.4.22 Review Added SSHR Functionality for Human Resources and Benefits | 3 | 4 | N |
| GL | 8.4.1 Training for Utilizing Mass Allocations | 1 | 3 | N |
| AP | 9.4.1 Training on Accruals | 2 | 4 | N |
| AP | 9.4.2 Utilize Invoice Matching Tolerances | 1 | 2 | N |
| AP | 9.4.3 AP Approvals Improvements | 2 | 4 | N |
| AP | 9.4.4 Review Segregation of Duties | 1 | 2 | N |
| Purch | 10.4.1 Consider Implementing Services Procurement | 3 | 4 | Y |
| Purch | 10.4.2 Review Approval Process for Requisitions & Purchase Orders | 2 | 3 | Y |
| Purch | 10.4.3 Utilize Inventory Items | 3 | 4 | N |
| Purch | 10.4.4 Implement iProcurement | 3 | 3 | N |
| Purch | 10.4.5 Descriptive Flexfield Data Cleanup | 2 | 3 | N |

The mapping of these recommendations in 13.1.1.2 Diagram: Recommendations Heat Map on the following page charts these Assessment Recommendations by their estimated business value (vertical axis) against their relative business and technical complexity (horizontal axis). To assist in implementation planning, the recommendations have been segmented into categories using the Heat Map. Note that recommendations that require an upgrade are highlighted in red text.
13.1.1.2. Diagram: Recommendations Heat Map
<table>
<thead>
<tr>
<th>Business Value</th>
<th>Complexity</th>
<th>MEDIUM-LOW</th>
<th>MEDIUM</th>
<th>MEDIUM-HIGH</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDIUM</td>
<td>LOW</td>
<td>2.1. Upgrade to 12.2.5</td>
<td>3.4.8. Upgrade for eAM Recommendations</td>
<td>5.4.1. Upgrade for Variable Rent</td>
<td>6.4.2. Upgrade for Late Fees</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>LOW</td>
<td>2.2.1. User Reporting</td>
<td>2.2.2. Analytics</td>
<td>10.4.3 Utilize Inventory Items</td>
<td>10.5. Property Mgr Upgrade Additions</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>2.3. Training &amp; Documentation</td>
<td>3.4.5. Maintenance Planning &amp; Work Mgmt</td>
<td>3.4.6. Complete CalPERS Improvements</td>
<td>4.4.1. Project Mgmt for Projects</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>MEDIUM-LOW</td>
<td>3.4.1. Planned Maintenance</td>
<td>3.4.3. Maintenance Integration</td>
<td>6.4.5. Property Mgr Upgrade Additions</td>
<td>6.4.6. Complete CalPERS Improvements</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>3.4.2. Maintenance Reporting</td>
<td>4.4.2. Asset Costing Hook</td>
<td>6.4.11. Year-End PTO Carryover</td>
<td>6.4.8. Payroll Reports Bugs</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>3.4.3. Grants Future Installments</td>
<td>4.4.4. Award Information on Assets</td>
<td>6.4.4. Upgrade for OTL Functionality</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.5. Property Mgr Reporting</td>
<td>5.4.4. Property Mgr Reporting</td>
<td>7.4.13 EIT Type Report</td>
<td>9.4.3. AP Approvals Improvements</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.7. Payroll Reports Bugs</td>
<td>5.4.7. Medicare Reimbursement Plan in Oracle</td>
<td>7.4.15 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.4. Award Information on Assets</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>4.4.8. Payroll Reports Bugs</td>
<td>5.4.8. Medicare Reimbursement Plan in Oracle</td>
<td>7.4.16 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.3. Grants Future Installments</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.9. Payroll Reports Bugs</td>
<td>5.4.9. Element Processing for Terminated Employees</td>
<td>7.4.17 Professional Development Entitlement in Oracle</td>
<td>6.4.1. Award Information on Assets</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>4.4.10. Payroll Reports Bugs</td>
<td>5.4.10. Property Mgr Reporting</td>
<td>7.4.18 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.11. Payroll Reports Bugs</td>
<td>5.4.11. Property Mgr Reporting</td>
<td>7.4.19 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.1. Award Information on Assets</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.13. Payroll Reports Bugs</td>
<td>5.4.13. Property Mgr Reporting</td>
<td>7.4.21 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.1. Award Information on Assets</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.15. Payroll Reports Bugs</td>
<td>5.4.15. Property Mgr Reporting</td>
<td>7.4.23 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.1. Award Information on Assets</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>4.4.16. Payroll Reports Bugs</td>
<td>5.4.16. Property Mgr Reporting</td>
<td>7.4.24 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.17. Payroll Reports Bugs</td>
<td>5.4.17. Property Mgr Reporting</td>
<td>7.4.25 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.1. Award Information on Assets</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>4.4.18. Payroll Reports Bugs</td>
<td>5.4.18. Property Mgr Reporting</td>
<td>7.4.26 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.19. Payroll Reports Bugs</td>
<td>5.4.19. Property Mgr Reporting</td>
<td>7.4.27 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>4.4.20. Payroll Reports Bugs</td>
<td>5.4.20. Property Mgr Reporting</td>
<td>7.4.28 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>MEDIUM-LOW</td>
<td>MEDIUM</td>
<td>4.4.21. Payroll Reports Bugs</td>
<td>5.4.21. Property Mgr Reporting</td>
<td>7.4.29 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
<tr>
<td>LOW</td>
<td>LOW</td>
<td>4.4.22. Payroll Reports Bugs</td>
<td>5.4.22. Property Mgr Reporting</td>
<td>7.4.30 Eligibility Criteria &amp; Dependent Coverage Eligibility</td>
<td>6.4.2. Timekeeper Responsibility</td>
</tr>
</tbody>
</table>
13.1.2. Recommendations that **Should** Be Addressed Prior to the Upgrade

The chart demonstrates that a number of the recommendations provide medium to high business value at lower to medium complexity – characteristics that lead to these types of items to sometimes being characterized as “quick-wins”. In essence, they give the Port quick improvements in a short period of time. As a result, we are generally suggesting that these recommendations should be addressed before the Upgrade, while planning for the Upgrade is taking place.

Similarly, there are some outliers that provide medium to lower business benefit with lower complexity. Since these items are low complexity, it also makes sense to include them as before-upgrade candidates since they do provide business value.

Because of the value to the organization and/or pressing business issues compared to the relatively lower complexity, we are recommending that the Port address the following recommendations before the Upgrade while the Upgrade planning is taking place. Details for each of the recommendations are included throughout the Assessment document and are quick-linked (ctrl-click) from their associated entry in the List.

Press Ctl+Click to follow the links.

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Recommendation</th>
<th>Estimated Complexity</th>
<th>Estimated Benefit</th>
<th>Upgrade Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects/Grants</td>
<td>4.4.2 Set the Profile Option ‘CSE: Use Asset Tracking Costing Hook’ to ‘N’</td>
<td>1</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>Projects/Grants</td>
<td>4.4.3 Use Grants Better by Creating Future Installments</td>
<td>2</td>
<td>4</td>
<td>N</td>
</tr>
<tr>
<td>Projects/Grants</td>
<td>4.4.4 Form Personalization and Reports to Provide Award Information on Assets</td>
<td>2</td>
<td>4</td>
<td>N</td>
</tr>
<tr>
<td>Property Manager</td>
<td>5.4.3 Resolve Billing Issues</td>
<td>2</td>
<td>4</td>
<td>N</td>
</tr>
<tr>
<td>Property Manager</td>
<td>5.4.4 Review and Improve Reporting</td>
<td>2</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>Payroll/OTL</td>
<td>6.4.1 Resolve OTL Timecard Viewing / Scrolling Issue</td>
<td>1</td>
<td>3</td>
<td>N</td>
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<tr>
<td>Payroll/OTL</td>
<td>6.4.2 Utilize Timekeeper Responsibility</td>
<td>1</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>Payroll/OTL</td>
<td>6.4.3 Use “Default Timecard Period” System Preference</td>
<td>1</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>Payroll/OTL</td>
<td>6.4.6 Complete the CalPERS Review and Improvements</td>
<td>3</td>
<td>4</td>
<td>N</td>
</tr>
<tr>
<td>Payroll/OTL</td>
<td>6.4.8 Work with Oracle to Fix Bugs in Payroll Reports</td>
<td>1</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>Payroll/OTL</td>
<td>6.4.9 Improve Void and Reversal Process</td>
<td>1</td>
<td>4</td>
<td>N</td>
</tr>
<tr>
<td>Payroll/OTL</td>
<td>6.4.10 Allow Tax Calculation Overrides</td>
<td>2</td>
<td>3</td>
<td>N</td>
</tr>
<tr>
<td>HR</td>
<td>7.4.2 Improve New Hire Approval Workflow</td>
<td>2</td>
<td>3</td>
<td>N</td>
</tr>
</tbody>
</table>
13.1.3. Recommendations that Should Be Evaluated to be Addressed Prior to the Upgrade

There are a number of recommendations that provide medium to high business value, but are of medium complexity. This means that, although they provide considerable business value, they may take more time and effort and should therefore be vetted to be implemented before the Upgrade. The reality is that there may not be the time required to do so. Consequently, these recommendations fall into a class where they may be addressed either before or during the Upgrade.

Because of the value to the organization and/or pressing business issues compared to the medium complexity, we are recommending that the Port evaluate the following recommendations to possibly be addressed before the Upgrade during the time that planning for the Upgrade is taking place. Details for each of the recommendations are included throughout the Assessment document and are quick-linked (ctrl-click) from their associated entry in the List.

Press Ctl+Click to follow the links.
<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Recommendation</th>
<th>Estimated Complexity</th>
<th>Estimated Benefit</th>
<th>Upgrade Required?</th>
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<tr>
<td>General</td>
<td>2.2.1 Implement a Transaction Reporting and Drill-down Solution</td>
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<td>2.2.2 Implement Oracle Business Intelligence for Analytic Reporting</td>
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<td>eAM</td>
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<td>eAM</td>
<td>3.4.3 Expand and Improve Use of Integration</td>
<td>3</td>
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<tr>
<td>eAM</td>
<td>3.4.4 Review and Improve Setup and Data Configuration</td>
<td>3</td>
<td>4</td>
<td>N</td>
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<tr>
<td>eAM</td>
<td>3.4.5 Improve Maintenance Planning and Work Management</td>
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<td>Projects/Grants</td>
<td>4.4.1 Leverage Project Management features for Projects</td>
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<td>Payroll/OTL</td>
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<td>7.4.1 Automate Integration for New Hires</td>
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<td>7.4.3 Automate Continuous Service Date Entry</td>
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<td>HR</td>
<td>7.4.7 Manage Deceased Employees’ Benefits in Oracle</td>
<td>3</td>
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<td>HR</td>
<td>7.4.8 Manage Medicare Premium Reimbursement Plan Benefit in Oracle</td>
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<td>7.4.14 Automate the Appraisal Performance Rating</td>
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<td>7.4.20 Define Standard Letter Generation to Generate Onboarding Document</td>
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<tr>
<td>Purch</td>
<td>10.4.4 Implement iProcurement</td>
<td>3</td>
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</table>

### 13.1.4. Recommendations to be Included in Upgrade

There are a number of recommendations that provide high benefit at high complexity. These tend to be more complex or foundational like the EBS upgrade, or they require functionality present in the upgraded version of the system. Below is a list of the specific recommendations, by area, that should be included with the R12.2.5 Upgrade.

**Important note:** recommendations from the preceding sections that are not implemented prior to the upgrade should also be added to this list and included with the upgrade

- **Section 13.1.2 Recommendations that Should Be Addressed Prior to the Upgrade**
ATTACHMENT A – OAK ASSESSMENT DOCUMENT

- **Section 13.1.3: Recommendations that Should Be Evaluated to be Addressed Prior to the Upgrade**

Details for each of the recommendations are included throughout the Assessment document and are quick-linked (ctrl-click) from their associated entry in the list below.

Press Ctl+Click to follow the links.

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<tr>
<th>Functional Area</th>
<th>Recommendation</th>
<th>Estimated Complexity</th>
<th>Estimated Benefit</th>
<th>Upgrade Required?</th>
</tr>
</thead>
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<td>General</td>
<td>2.1 Upgrade Oracle EBS to Version 12.2.5</td>
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<tr>
<td>General</td>
<td>2.3 Training and Documentation</td>
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<td>5</td>
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</tr>
<tr>
<td>eAM</td>
<td>3.4.6 Additional eAM Recommendations in 12.2.5</td>
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<tr>
<td>Property Manager</td>
<td>5.4.1 Upgrade to 12.2.5 to Fix Variable Rent</td>
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<td>Property Manager</td>
<td>5.4.2 Upgrade to 12.2.5 to Improve Processing of Late Fees</td>
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<td>Property Manager</td>
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<td>6.4.4 Review Added OTL Functionality</td>
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<td>Payroll/ OTL</td>
<td>6.4.7 Improvements to QuickPay Processing</td>
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<td>6.4.13 Upgrade to 12.2.5 for Enhanced Retropay</td>
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<td>7.4.22 Review Added SSHR Functionality for Human Resources and Benefits</td>
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<td>Purch</td>
<td>10.4.2 Review Approval Process for Requisitions &amp; Purchase Orders</td>
<td>2</td>
<td>3</td>
<td>Y</td>
</tr>
</tbody>
</table>

**13.1.5. Recommendations to be Addressed After the Upgrade**

There are two recommendations that should be addressed after the upgrade.

1. The recommendation in *Section 7.4.12 Implement Self-Service On-line Benefit Enrollment* will require close coordination and scheduling along with the Port’s benefits selection periods. This timing would most likely be different than what the Upgrade would require.

2. The recommendation in *10.4.1 Consider Implementing Services Procurement* would require additional licenses and the implementation of a completely new module.

**13.2. Training**

Additionally, Phase 2 (the Upgrade) should contain a significant training effort for both the business’ power users, as well as the end-users, as
discussed in Section 2.3 Training and Documentation. It’s important to note that the power users will gain knowledge transfer by participating in project implementation activities like design, testing and sign-off. End-users will be trained using more formal training using updated training materials in the period preceding the project go-live.

Subject Matter Experts/Power Users Training
SME’s will be an integral component throughout the project. As such, they play a key role in training. The plan is for the SME’s to be trained via intensive workshops at the beginning of a Design Phase. These workshops will focus on the specific differences between R12.2.5 and the current Oracle version 12.1.1 where significant differences occur or where new functionality will be leveraged.

SME training will be reinforced throughout the project as they participate fully in project activities including:

- Requirements Gathering Workshops
- Systems Design Workshops
- Future Process Flow Creation
- Test Script Creation
- Testing
- Issues Resolution

By the end of the UAT, the SME’s should be experts on Oracle EBS within the Port’s business environment, which is a prerequisite for their transformation to power users and their participation in End-User Training.

End-User Training
In contrast to SME Training, End-User Training will occur after UAT and before Go-Live with a more formal training approach. The plan calls for SmartDog consultants and Port SME’s to share responsibility for delivering End-User Training – SDS Consultants as the Oracle experts and Port SME’s as the business process experts.

The formal training approach will include a Training Plan and creation of training materials. This formal training, conducted prior to go-live, will be delivered via the appropriate training delivery method for each training subject according to the Training Plan. These delivery methods can include formal classroom training, informal one-on-one training, job aides, recorded tutorials, etc.

13.3. Timeline for Design and Execution Plan
The timeline for the execution of the pre-upgrade recommendations, as well as for the Upgrade will be driven by the amount of time required for the Upgrade planning activities, including the creation and evaluation of the sourcing of the implementation partner.
The time allotted to this activity will determine which recommendations can be addressed prior to the Upgrade. Press Ctrl+Click to follow the links.

13.3.1. Phase 1 (Pre-Upgrade) Initiatives

We recommend the following pre-upgrade initiatives, which are a logical grouping and sequencing of recommendations:

**Initiative 1: Projects and Grants Basic Improvements**
These are low-complexity improvements to the current Projects and Grants applications that could likely be implemented quickly. This initiative should be completed before the upgrade and consists of the following three recommendations:

- 4.4.2 Set the Profile Option ‘CSE: Use Asset Tracking Costing Hook’ to ‘N’
- 4.4.3 Use Grants Better by Creating Future Installments
- 4.4.4 Form Personalization and Reports to Provide Award Information on Assets

**Initiative 2: Property Manager Basic Improvements**
Although most of the benefit to Property Manager will result from added functionality and bug fixes in the upgrade applications, there are two low-complexity improvements to the current Property Manager applications that could likely be implemented quickly. This initiative should be completed before the upgrade.

- 5.4.3 Resolve Billing Issues
- 5.4.4 Review and Improve Reporting

**Initiative 3: Payroll and OTL Bug Fixes and Basic Improvements**
These are low-complexity improvements to the current Payroll and Time & Labor applications that could likely be implemented quickly. There are also a number of bug fixes that can be addressed. Note that Recommendation 6.4.6 Complete the CalPERS Review and Improvements is not included in this initiative since it is an ongoing current project. This Payroll and OTL initiative should be completed before the upgrade and consists of the following seven recommendations:

- 6.4.1 Resolve OTL Timecard Viewing / Scrolling Issue
- 6.4.2 Utilize Timekeeper Responsibility
- 6.4.3 Use “Default Timecard Period” System Preference
- 6.4.8 Work with Oracle to Fix Bugs in Payroll Reports
- 6.4.9 Improve Void and Reversal Process
- 6.4.10 Allow Tax Calculation Overrides
- 6.4.11 Improvement of Year-End PTO Carryover Process
Initiative 4: Accounting & Purchasing Training and Basic Improvements
These are low complexity improvements in the accounting area, including some opportunities for training that will help improve efficiency. This consists of the following five recommendations:

- 8.4.1 Training for Utilizing Mass Allocations
- 9.4.1 Training on Accruals
- 9.4.2 Utilize Invoice Matching Tolerances
- 9.4.3 AP Approvals Improvements
- 9.4.4 Review Segregation of Duties
- 10.4.5 Descriptive Flexfield Data Cleanup

Initiative 5: Human Resources Basic Improvements
These are low-complexity improvements to the current HR and Benefits applications that could likely be implemented quickly. This initiative should be completed before the upgrade and consists of the following eleven recommendations:

- 7.4.2 Improve New Hire Approval Workflow
- 7.4.4 Review the User-Defined Eligibility Criteria and Dependent Coverage Eligibility Profiles
- 7.4.5 Automate Employee Request for Vacation Process
- 7.4.6 FTE Report Changes
- 7.4.9 Fix Incorrect Element Processing for Terminated Employees
- 7.4.10 Train on Usage of Special Inputs vs. Adjustment Elements
- 7.4.11 Utilize Deductions Report
- 7.4.13 Customize Report with a Parameter for EIT type
- 7.4.15 Review the User-Defined Eligibility Criteria and Dependent Coverage Eligibility Profiles
- 7.4.18 Fix Garnishment Calculation Issue
- 7.4.19 Update Element Names

Initiative 6: Reporting
Self-service user reporting was communicated as a pervasive issue across many of the business areas. Similarly, there was also communicated the need for analytical reporting tools. The Port already own licenses for APEX, which can be used for ad-hoc transactional reporting, and also for specific OBIEE modules, which could facilitate at least basic analytical reporting out of the box. While implementing the basics of these two initiatives may not cover 100% of the need, the basic implementations may provide the foundation for future activities. This initiative consists of two recommendations:

- 2.2.1 Implement a Transaction Reporting and Drill-down Solution
• 2.2.2 Implement Oracle Business Intelligence for Analytic Reporting

Initiative 7: Enterprise Asset Management Improvements
This initiative contains improvements to use of the eAM systems and processes that don’t require an Upgrade, but are more complex and therefore require more time and effort. It also contains Purchasing recommendations that align with eAM recommendations. Since the potential business benefit is high, it is recommended that this initiative be implemented prior to the Upgrade if time permits. This initiative consists of the following five recommendations:
• 3.4.1 Establish Foundation for Planned Maintenance
• 3.4.2 Improve Maintenance Reporting and Analysis
• 3.4.3 Expand and Improve Use of Integration
• 3.4.4 Review and Improve Setup and Data Configuration
• 3.4.5 Improve Maintenance Planning and Work Management
• 10.4.3 Utilize Inventory Items
• 10.4.4 Implement iProcurement

Initiative 8: Project Management
The lack of project management capabilities is a significant pain point in the projects business area. A demonstration of Oracle’s Project Management capabilities has been scheduled and the recommendation to incorporate it into the current business processes is a project that should be included in pre-upgrade initiatives if time allows.
• 4.4.1 Leverage Project Management features for Projects

Initiative 9: Moving Functions into Oracle Human Resources
This initiative contains the absorption of functions currently performed outside of Oracle manually or via spreadsheets or external systems. It utilized standard Oracle functionality to “insource” business functions and processes. Since there is potential business benefit, it is recommended that this initiative be implemented prior to the Upgrade if time permits. This initiative consists of the following three recommendations:
• 7.4.7 Manage Deceased Employees’ Benefits in Oracle
• 7.4.8 Manage Medicare Premium Reimbursement Plan Benefit in Oracle
• 7.4.17 Manage the Professional Development Entitlement in Oracle

Initiative 10: Human Resources Custom Improvements
This initiative contains improvements to use of the HR and Benefits systems and processes that don’t require an Upgrade, but are more complex and therefore require more time and effort. This group of recommendations requires customizations to facilitate things like
integration and new reporting. Since there is potential business benefit, it is recommended that this initiative be implemented prior to the Upgrade if time permits. This initiative consists of the following six recommendations:

- 7.4.1 Automate Integration for New Hires
- 7.4.3 Automate Continuous Service Date Entry
- 7.4.14 Automate the Appraisal Performance Rating
- 7.4.16 Remove the Seniority Date in Self-Service Human Resources
- 7.4.20 Define Standard Letter Generation to Generate Onboarding Document
- 7.4.21 Summarization Report of Daily Human Resource Transactions

13.3.2. Phase 2 Upgrade Recommendations

Section 13.1.4 Recommendations to be Included in Upgrade contains the list of recommendations to be included in the Upgrade. Any recommendations that are not implemented before the upgrade should also be included with the upgrade.

The following page contains a consolidated table of the Phase 1 (Pre-Upgrade) and Phase 2 (Upgrade) initiatives. Press Ctrl+Click to follow the links.
### 13.3.2.1. Phase 1 and 2 Initiatives

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<thead>
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<th>Initiative Number</th>
<th>Title</th>
<th>Included Recommendations</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Projects and Grants Basic Improvements</td>
<td>• 4.4.2 Set the Profile Option “CSE: Use Asset Tracking Costing Hook” to ‘N’</td>
<td>Phase 1: Before Upgrade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 4.4.3 Use Grants Better by Creating Future Installments</td>
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<td>• 4.4.4 Form Personalization and Reports to Provide Award Information on Assets</td>
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<tr>
<td>2</td>
<td>Property Manager Basic Improvements</td>
<td>• 5.4.3 Resolve Billing Issues</td>
<td>Phase 1: Before Upgrade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 5.4.4 Review and Improve Reporting</td>
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<td>3</td>
<td>Payroll and OTL Bug Fixes and Basic Improvements</td>
<td>• 6.4.1 Resolve OTL Timecard Viewing / Scrolling Issue</td>
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<td>Accounting &amp; Purchasing Training and Basic Improvements</td>
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<td>7.4.21 Summarization Report of Daily Human Resource Transactions</td>
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<tr>
<td>Upgrade</td>
<td>Recommendations Concurrent with Upgrade</td>
<td>2.1 Upgrade Oracle EBS to Version 12.2.5</td>
<td>Phase 2: With Upgrade</td>
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<td></td>
<td>2.3 Training and Documentation</td>
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<td>3.4.6 Additional eAM Recommendations in 12.2.5</td>
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<td></td>
<td>5.4.1 Upgrade to 12.2.5 to Fix Variable Rent</td>
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<td>5.4.2 Upgrade to 12.2.5 to Improve Processing of Late Fees</td>
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<td>5.4.5 Implementation of Additional Functionality</td>
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<td>6.4.4 Review Added OTL Functionality</td>
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<td>6.4.5 Upgrade to Address Retropay Process Issue</td>
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<td>6.4.7 Improvements to QuickPay Processing</td>
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<td>6.4.12 Review Added Payroll Functionality</td>
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<td>6.4.13 Upgrade to 12.2.5 for Enhanced Retropay</td>
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<td>7.4.22 Review Added SSHR Functionality for Human Resources and Benefits</td>
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<td>10.4.2 Review Approval Process for Requisitions &amp; Purchase Orders</td>
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<tr>
<td>Post-Upgrade</td>
<td>Recommendations to take place after the Upgrade</td>
<td>7.4.12 Implement Self-Service On-line Benefit Enrollment</td>
<td>Phase 3: After the Upgrade</td>
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<tr>
<td></td>
<td>10.4.1 Consider Implementing Services Procurement</td>
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</table>
13.4. Implementing the Assessment Recommendations – Project Approach

SmartDog uses a comprehensive upgrade and implementation methodology that has been successfully utilized for a number of our customers. This AIM (Oracle’s Application Implementation Methodology) and OUM (Oracle’s Unified Method)-based methodology provides a baseline that we have customized based on years of experience with Oracle EBS. It provides us the ability to successfully meet our customers’ unique requirements while ensuring that key activities are not overlooked.

Following is a discussion of our implementation methodology, which is divided into phases:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Objectives</th>
<th>Main Activities</th>
</tr>
</thead>
</table>
| Planning      | - Evaluate the scope of the upgrade from a technical and functional perspective  
                - Determine if the upgrade can be leveraged to increase value to the organization  
                - Determine Project Goals  
                - Validate Scope and Approach  
                - Project Phasing  
                - Evaluate technical environment including automated diagnostics  
                - Determine condition of upgrade prerequisites and evaluate upgrade versus re-implement  
                - Analyze infrastructure, current state apps footprint, high-level RICE, and current state foundation structure  
                - Conduct High-Level Functional Workshops –  
                    • Determine pain points  
                    • Understand future growth plans  
                    • High-level fit/gap analysis  
                    • High-level process design/redesign requirements  
                - Design future-state R12 functional foundation  
                - Provide Resource Plan and Cost Estimates  
                - Verify Scope, Objectives and Approach |
<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Objectives</th>
<th>Main Activities</th>
</tr>
</thead>
</table>
|               | • Functional Design of Applications Configurations to Meet Business Requirements  
• Functional Design of Interfaces, Conversions and other RICE  
• Determine final development scope | • Create Project Management Plan and Work-plan  
• Conduct detailed Business Process Workshops  
• Document detailed functional requirements  
• Identify functional requirements gaps & determine dispositions  
• Create future business process flows  
• Perform initial technical upgrade and internal CRP  
• Create RICE functional designs |
| Build         | • Technical Development of Interfaces, Conversions and Reports  
• Conference Room Pilot  
• Refine and Finalize Application Setups | • Conduct configuration of CRP environment  
• Identify Test Scenarios and Test Scripts for Conference Room Pilot (CRP)  
• Conduct CRP (walk-through and testing of core applications setup decisions)  
• RICE technical design, development and unit testing |
| Integration Test | • First test of end-to-end business processes  
• First test to include RICE, including converted data and interfaces to external systems  
• Initial look at Upgrade time requirements and downtime requirements | • Configuration of environment for Integration Test  
• Conduct Integration Test  
• Conduct Integration Test issues mitigation  
• Revise test conditions and test scripts for use in User Acceptance Test (UAT)  
• Create detailed Cutover Plan |
| User Acceptance Test (UAT) | • Last full test of system  
• Mock Cutover  
• User certification of system for Go-Live | • Configuration of UAT Environment  
• Execute Mock Cutover  
• Conduct UAT  
• Conduct UAT issues mitigation  
• Go/No Go decision |
| Transition    | • Prepare for Go-Live  
• End-User training  
• Cutover to Oracle EBS | • Train end-users  
• Configuration of Production system  
• Go-Live |
### Project Phase

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Objectives</th>
<th>Main Activities</th>
</tr>
</thead>
</table>
| Production Support | • Stabilize Production System  
• Ensure production system is meeting business needs  
• Provide ongoing support as needed  
• Complete knowledge-transfer process and training | • Support Production System  
• Issues Monitoring and Mitigation  
• Training Follow-Up As Needed  
• Develop Ongoing Support Plan  
• Hand over production support Solution Center |

#### 13.5. Critical Success Factors

The execution and deployment of the upgrade and associated recommendations, will require re-evaluating the EBS systems in relation to almost every business process. As such, it is vital that the experts from the business be heavily involved in the project. Activities include learning about new systems functionality and making future process decisions during the design phases, helping create test scripts to ensure that the system is properly tested, and participating in the testing and acceptance of the system.

SmartDog brings consulting experts who know the Oracle EBS applications and have experience implementing them at a variety of customers in a number of industries. This knowledge, combined with the business knowledge of the Port’s Subject Matter Experts (SME’s) will be a required cornerstone to the success of the effort.

In part, because of the inefficiencies caused by the shortcomings of the existing systems environment, the Port of Oakland’s key business users who would be candidates to participate on the project as SME’s may have issues providing the time required to the project while at the same time addressing their day-to-day job responsibilities.

With past customers, we have found that addressing this issue up-front by identifying the SME team members and assigning most of their daily responsibilities to others is the most effective way to ensure that they are able to provide the time required to make the upgrade a success.

Additionally, as with any project of this magnitude, we have found that there is always a measure of resistance to change. At the Port, we have initially found a general willingness to change processes because many of them are viewed as inefficient and manually intensive. For the most part, systems users are looking forward to getting a system that will better support their needs. However, in some cases, people have been conditioned to do things the wrong
way over a number of years, so there will still be resistance. Executive leadership will be key in supporting the design decisions that will be required for a net improvement.

13.6. Upgrade Timeline

Based on SmartDog’s considerable experience with Release 12 upgrades from both a technical and functional perspective, we would expect a 7-month effort to upgrade the Port’s systems and implement the recommendations that should go along with the upgrade. Note that this timeline does not include the time required to plan for the upgrade, including activities like RFP and selection processes.

Since the Port has a staff of experienced Oracle developers, they should be able to take responsibility for the project’s technical development activities. As a result, the outside services budget would be able to exclude the development effort that would be required to update reports, interfaces, or extensions that may need to be retrofitted for R12.
Appendix A: Oracle Application Express (APEX)

What is Oracle Application Express (APEX)?
- Database-centric, Rapid Application Development (RAD) Tool
- No cost feature of the Oracle Database
- 100% Browser-Based and Declarative (Limited Coding)
- Use SQL Workshop to create and manage DB objects
- Use Application Builder to create Web 2.0 Applications
- Leverage SQL skills to build reports, charts and data entry forms
- Out-of-the-box Excel import and export capabilities
- No additional development tools needed to get started
- Fully Secure, Browser-based Access
- Easy-to-Use Interface
- Utilizes Existing EBS Responsibilities
- Can be viewed on PC, Tablet, and Smart Phone
- Enables Access to all EBS Transaction Information
- Allows for End-User ad-hoc Manipulation
- Enables you to Quickly Build New Reports
- No License Fees Required

APEX with E-Business Suite
- Utilizes seeded EBS responsibilities and allows you to navigate back and forth between EBS into the Analytics Reporting System.
- Allows end-users to customize reports in many different ways.
- Customize the layout of the data by choosing the columns in which the users are interested.
- Column or Row filters that limit the base results.
- User can define breaks, aggregations, different charts, data formats, and their own computations.
- Users can create multiple variations of the report and save them as named private or public reports.
- Reports can be downloaded to EXCEL, HTML, Email, XLS, RTF, and PDF documents.
- The Text Area allows users to enter case-insensitive search criteria (no need for wild cards).
- The Rows drop-down list allows you to select the number of records to display per page.
- Ability to highlight rows based on specific criteria in your report
- Leverage RESTful web services, like Google Maps or 3rd Party Applications, using your data
- Search across the data in a report with a single search box.
‘Column Header’ links allow user to sort by the column, filter by selecting a column value, hide the column, create a control break using the column, and view help text for the column.
Appendix B: Payroll and OTL Customizations

1. Port: Payment Method Load Validation (XXPOOPMLD)
2. PORT: Payment Method Validation (XXPOOPMVL)
3. PORT: W4 Info Validation Load (XXPOOW4LD)
4. PORT: W4 Info Validation (XXPOOW4VL)
5. PORT: Leave Balance Validation (XXPOOLBVL)
6. Port: Payroll History Transaction report FLSA (XXPOO_PAY_HIST_FLSA_REP)
7. PORT: Deferred Compensation Plan 457(b) Interface Process (XXPOODEFCOMPOBINT)
8. PORT: Payroll to Projects Cost Interface (XXPOOPAYPROJINT)
9. PORT: Payroll to Projects Cost Report (XXPOOPAYPROJRPT)
10. PORT: Garnishments Deductions Report (XXPOO_PAY_DED_REP)
11. Mass Balance Extraction (Initial Balances) (XKBIBET)
12. Mass Balance Extraction Thread (XKBMBET)
13. Mass Balance Extraction (BF) Thread (XKBMBFT)
14. KBACE Regenerate Balance (KBDXREGEN)
15. KBACE Mass Balance Extraction (XKBMBE)
16. KBACE CTS XML Interface (KBDXCTSINT)
17. KBACE CTS Tax Details Report (KBDXCTSDETRPT)
18. KBACE CTS XML Interface Thread (KBDXCTSINTT)
19. KBACE CTS XML Interface Rollback (KBDXCTSRB)
20. PORT: Update Element Link (XXPOO_ELE_LINK_CONV_PRG)
21. PORT: Payroll Time History Report (XXPOOTIMEHISTRPT)
22. PORT: Balance Limits Update Script (XXPOOBALUPDSCRPT)
23. PORT: Load Payroll Time Data (XXPOOTIMELDR)
24. PORT: Load Time Mapping Data (XXPOOTIMEMAPPINGLDR)
25. PORT: Payroll Time Entry Process (XXPOOTIMEENTRYAPI)
26. PORT: Calpers Payroll Outbound Data Extract (XXPOOCALPERSEXT) – currently engaged in an internal project to modify the Calpers project.
27. PORT: Calpers Edit Report (XXPOOCALEDTRPT) – currently engaged in an internal project to modify the Calpers project.
28. PORT: Calpers Payroll Outbound Generate File (XXPOOCALPERSGENFILE) – currently engaged in an internal project to modify the Calpers project.
29. PORT: Payroll Time Entry Export Process (XXPOOTIMEEXPORT)
30. PORT: Balance Conversion batch headers (XXPOOBTHDR)
31. PORT: Create Batch Balance Lines (Term) (XXPOOPBTHDL)
32. PORT: Payroll Balance (Term) Validations (XXPOOPBTVL)
33. PORT: Load Time Export Mapping Loader (XXPOOTIMEEXPORTMAPPINGLDR)
34. PORT SDUI Deductions Report (PORT_SDUI_REP)
35. PORT : SEIU (Local 1021) Deductions Report (XXPOOSEUIREP)
36. PORT COLA VARIABLE UPDATE PROCESS (XXPOO_COLA_VAR_UPDATE)
37. Port : TimeCard Status Report By Dept (XXPOOMISTC_DEPT)
38. Port Cola Salary Details Report (XXPOOCOLASALARY)
39. Port: Merit Pay Process (XXPOOMERIT)
40. PORT Payroll Distribution Report (XXPOOPAYDIST)
41. Port Vacation Balance Report (Annual) (XXPOOVACNBALANCE)
42. PORT Balance Adjustment (XXPOOBALADJ)
43. PORT Leave Accrual Report (XXPOO_HR_VAC_SICK_REP_CR002)
44. Port Calpers Data Conversion (XXCALCONV) – client is currently engaged in an internal project to modify the Calpers project
45. Port Calpers Data Load (XXCALDATALOAD) – currently engaged in an internal project to modify the Calpers project
46. PORT: XML Calpers Payroll Outbound Data Extract (XXPOOCALPERSXML) – currently engaged in an internal project to modify the Calpers project
47. PORT Employees with no Union Dues (PORT_EMP_NO_UNION_DUE)
48. PORT Negative Leave Accrual Report (PORT_NEG_LVE_ACCR_RPT)
49. PORT LTD Insurance Report (XXPOO_LTD_HR0009)
50. PORT Insurance Basic and ADD Report (XXPOO_HRMS_LIF_ADD_CR009)
51. PORT Scheduled Holiday Earned Program (PORT_SCHED_HOL_ERND_PGM)
52. Port BEE Comp Time Hours Update and Transfer (PORT_BEE_COMP_HRS)
53. PORT VSP and Dental Report (XXPOOHR_VSP_DEN_REP_CR009)
54. PORT: XML Calpers Generation Program (XXPOO_XML_PAY_CALPERS_GEN) – currently engaged in an internal project to modify the Calpers project
55. PORT: XML Calpers Proof Report (XXPOO_XML_CALPERS_PROOF_REP) – currently engaged in an internal project to modify the Calpers project
56. PORT PTO Accrual Balance Report (XXPOO_PTO_ACC_BAL_RPT)
57. PORT Retro Entries Report (XXPOORETROENT) – R12 has updates to this functionality. Client has been sent the Oracle whitepaper for review.
58. PORT Negative Gross Earnings Report (XXPOONEGGROSS)
59. PORT Payroll History Report (By Pay Period Entered into System) (XXPOOPAYACT)
60. PORT Sick Leave Bonus Report (XXPOO_SICK_LVE_BONUS_PGM)
61. PORT Payroll History Report (By Pay Period Entered into System)(Excel Sort) (XXPOOPAYACTN)
62. PORT Sick Leave Bonus Detail Report (XXPOO_SICK_BONUS_DTL_PGM)
63. PORT Sick Leave Conversion Report (XXPOO_SICK_LVE_CONV_PGM)
64. Port PERS Contributions Report (XXPOOPERSCONTRN2)
66. PORT Leave Accrual Report by Rep Unit (XXPOO_VAC_SICK_R_UNIT_REP)
67. PORT Prof Dev Reimb Exp Report (XXPOO_PROF_DEV_REIMB_PGM)
68. Port PERS Contributions Report (Excel Sort)(After Aug 1 2012)
69. Port: Net Pay Report (XXPOONETPAY)
70. Port: Manual Check Report (XXPOOMANCHECK)
71. Port Payroll Turn on/off OTL (XXPOO_PAYROLL_RESP_ONOFF)
72. Port: Days Worked Report (XXPOODAYSWRKD)
73. PORT PERS Details Report (XXPOO_PERS_DTL_RPT)
74. Port: W2 Tax Balance Report (XXPOOW2TAXBAL)
75. Port: Salary Schedule Report (XXPOOGSPSAL)
76. PORT Employee Acting/Extra Duty Pay Report (XXPOOHRACTEXTRADUTY)
77. PORT Employee Acting/Extra Duty Pay Report -ALL (XXPOOHRACTEXTRADUTYALL)
78. PORT Employees Leave Balance Report-MANAGER (XXPOO_PTO_ACCRUALBALANCE_REP)
79. Port: Timecard Audit Package (XXPOOTCAUDPKG)
80. Port: Timecard Audit Report (XXPOOTCAUDRPT)
81. Port PAY-GL Employee Reconciliation Detail Extract (XXPOOPAYGLEMPDET_XML)
82. Port PAY-GL Reconciliation Account Summary Extract (XXPOOPAYGLACCTSUM_XML)
83. Port PAY-GL Reconciliation Dept-Account Summary Extract (XXPOOPAYGLDEPTSUM_XML)
84. Port: Sick Leave Occurrence Report (XXPOOLVOCCRPT)
85. Port PAY-GL Reconciliation Account-Element Summary Extract (XXPOOPAYGLELEMSUM.XML)
86. Port: Approve Timecards Process (XXPOOAPPRTC)
87. Port Pending Acting Pay / Extra Duty Processes (XXPOOACEDPEN_XML)
88. Port Active Acting / Extra Duty Pay Extract (XXPOOACEDALL_XML)
89. PORT Payflex Outbound FTP Process (XXPOO_PAYFLEX_FTP_OUT_PGM)
90. PORT Payflex Outbound FTP Process (XXPOO_PAYFLEX_FTP_OUT_PGM)
91. Port PAY-GL PERS Reconciliation Department Extract (XXPOOPAYGLPERSDEPTEXT_XML)
92. Port PAY-GL PERS Reconciliation Employee Detail Extract (XXPOOPAYGLPERSEMPTEXT_XML)
93. Port PAY-GL PERS Reconciliation Summary Extract (XXPOOPAYGLPERSSUMEXT_XML)
94. PORT Payflex FSA deductions Interface (XXPOO_BEN_PAYFLEX_FSA_DED_PGM)
95. Port: Payroll History Report (Managers) (XXPOOPAYACTM)
96. Port Positive Pay File Encryption Script (XXPOO_IBY_PSP_FILE_SH)
97. Port Positive Pay File Process (XXPOO_IBY_PSP_PRC)
98. Port CA SDU Child Support Extract (XXPOOCA.sducus_XML)
99. PORT Supplemental Life Report (XXPOO_BEN_SUPP_LIFE_RPT)
100. PORT Leave Exception Report (XXPOOLEAVEXEMPTREP.XML)
102. HCM Technical Analyzer Tool (HCM_ANALYZER_SQL)
103. KBACE CTS Tax Details by Creation Date (KBDXCTSCRDET)
104. KBACE CTS Diagnostics (KBDXCTSDIA)
105. PORT SCO Details Report (XXPOO_PAY_SCO_DTL_RPT)
106. PORT Payroll Union Report (XXPOO_PAY_UNION_RPT_PGM)
107. PORT Payroll Union Details Report (XXPOO_PAY_UNION_DTL_RPT_1)
108. PORT ACA Ceridian Extract (XXPOO_BEN_ACA_CERIDIAN_EXT)
109. Port: Commercial Drive Time Log Report (XXPOOCDLRPT)
110. Port: Commercial Drive Time Log Report (XXPOOCDLRPT)
111. Port: Commercial Drive Time Log Report with Hours Worked (XXPOOCDLWKhRS)
112. Port: Commercial Drive Time Log Report with Hours Worked TC (XXPOOCDLWKhRSSTT)
113. Port: Drive Time Log Report (XXPOOCDLWOLIC)
114. Port: Drive Time Log Report with Hours Worked (XXPOOCDLWHRWOLIC)
115. PORT Payflex Deductions Outbound Interface Request Set
116. PORT Payroll State Controller's Report Set Request Set
117. PORT Payroll Union Details Report Set Request Set
118. Combined Person & Assignment Form (PERWSHRG) Forms Personalization
119. Enter Assignment (PERWSEMA) Forms Personalization
120. OTL Assignment Time Information (HXTAAI00) Forms Personalization
121. People Folder (PERWSFPE) Forms Personalization
122. PORT Scheduled Holiday Earned Program
   (PORT_SCHED_HOL_HRS_ENRD_TMP.rtf) XML Publisher template
123. PORT_SDUI_REP (XXPOO_SDUI_REP29OCT10.rtf) XML Publisher template
124. Port Active Acting / Extra Duty Pay Extract (XXPOOACEDALL.XML.rtf)
   XML Publisher template
125. Port Pending Acting Pay / Extra Duty Processes
   (XXPOOACEDPEN.XML.rtf) XML Publisher template
126. XXPOO_PAY_CALPERS_TT (XXPAY_CALPERS_EDIT_en_US.rtf) XML Publisher template - currently engaged in an internal project to modify the Calpers project
127. Port CA SDU Child Support Extract (XXPOOCASDUCS.XML_v110.rtf)
   XML Publisher template
128. XXPOOCOLASALARY (XXPOOCOLASALARY.rtf) XML Publisher template
129. Port: Commercial Drive Time Log Report (XXPOOCDLRPT.rtf) XML Publisher template
130. Port: Drive Time Log Report with Hours Worked
    (XXPOOCDLWHRWOLIC.rtf) XML Publisher template
131. Port: Commercial Drive Time Log Report with Hours Worked
    (XXPOOCDLWKhRSSTT.rtf) XML Publisher template
132. Port: Commercial Drive Time Log Report with Hours Worked TC (XXPOOCDLWKHRS.rtf) XML Publisher template
133. Port: Drive Time Log Report (XXPOOCDLWOLIC.rtf) XML Publisher template
134. Port: Days Worked Report (XXPOODAYSWRKD.rtf) XML Publisher template
135. Port: Higher Earner Wage Tracking Report (XXPOOHHIGHERCAP.rtf) XML Publisher template
136. PORT Employee Acting/Extra Duty Pay Report -ALL (XXPOOHRACTEXTRADUTYALL.rtf) XML Publisher template
137. PORT Employee Acting/Extra Duty Pay Report (XXPOOHRACTEXTRADUTY.rtf) XML Publisher template
138. Port: Sick Leave Occurrence Report XXPOOLVOCCRPT.rtf) XML Publisher template
139. Port: Manual Check Report (XXPOOMANCHECK.rtf) XML Publisher template
140. Port: Missing Holiday Pay Report (XXPOOMISSHOLPAYN.rtf) XML Publisher template
141. PORT: Time Card Report (XXPOOMISTC.rtf) XML Publisher template
142. Port: TimeCard Status Report by Dept (XXPOOMISTC.rtf) XML Publisher template
143. PORT Negative Gross Earnings Report (XXPOONEGGROSS.rtf) XML Publisher template
144. Port: Sick Leave Occurrence Report XXPOOLVOCCRPT.rtf) XML Publisher template
145. Port Net Pay Report (XXPOONETPAY.rtf) XML Publisher template
146. PORT Payroll Activity Report (XXPOOPAYACT.rtf) XML Publisher template
147. Port: Payroll History Report (Managers) (XXPOOPAYACTM.rtf) XML Publisher template
148. PORT Payroll Activity Report (Excel Sort) (XXPOOPAYACTN.rtf) XML Publisher template
149. Port Payroll Distribution Summary Report - PDF (XXPOOPAYROLDIST_Summary.rtf) XML Publisher template
150. Port Payroll Distribution Details Report – EXCEL XML Publisher template
151. Port PAY-GL Reconciliation Account Summary Extract (XXPOOPAYGLACCTSUM_XML.rtf) XML Publisher template
152. Port PAY-GL Reconciliation Dept-Account Summary Extract (XXPOOPAYGLEDPTSUM.XML.rtf) XML Publisher template
153. Port PAY-GL Reconciliation Account-Element Summary Extract (XXPOOPAYGLELEMSUM.XML.rtf) XML Publisher template
154. Port PAY-GL Employee Reconciliation Detail Extract (XXPOOPAYGLEMPDET.XML.rtf) XML Publisher template
155. Port PAY-GL PERS Reconciliation Department Extract (XXPOOPAYGLPERSDEPTEXT.XML.rtf) XML Publisher template
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<tr>
<th>Number</th>
<th>Description</th>
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<tr>
<td>156.</td>
<td>Port PAY-GL PERS Reconciliation Employee Detail Extract (XXPOOPAYGLPERSEMPEXT.XML) XML Publisher template</td>
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<tr>
<td>157.</td>
<td>Port PAY-GL PERS Reconciliation Summary Extract (XXPOOPAYGLPERSSUMEXT.XML) XML Publisher template</td>
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<td>158.</td>
<td>XXPOO_PAY_PROJ_TEMPLATE (PROJ_RPT_TEMPLATE.rtf) XML Publisher template</td>
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<td>159.</td>
<td>Port: PEPRA Wage Tracking Report (XXPOOPEPRACAP.rtf) XML Publisher template</td>
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<td>160.</td>
<td>Port PERS Contributions Report (Excel Sort) (After Aug 1 2012) (XXPOOPERSCONTREX.rtf) XML Publisher template</td>
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<tr>
<td>161.</td>
<td>Port PERS Contributions Report (XXPOOPERSCONTRN2.rtf) XML Publisher template</td>
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<tr>
<td>162.</td>
<td>PORT Retro Entries Report (RetroEntries_v120.rtf) XML Publisher template - R12 has updates to this functionality. Client has been sent the Oracle whitepaper for review.</td>
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<td>163.</td>
<td>PORT Retro Entries Extract (RetroEntriesExtract_v100.rtf) XML Publisher template - R12 has updates to this functionality. Client has been sent the Oracle whitepaper for review.</td>
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<tr>
<td>164.</td>
<td>PORT: SEIU (Local 1021) Deductions Report (XXPOOSEUIREP.rtf) XML Publisher template</td>
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<td>165.</td>
<td>XXPOO_PAY_TIMEHISTORY_TT (TimeHistoryTemplate2.rtf) XML Publisher template</td>
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<tr>
<td>166.</td>
<td>Port: Timecard Audit Report (XXPOOTCAUDRPT.rtf) XML Publisher template</td>
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<tr>
<td>167.</td>
<td>Port Vacation Balance Report (Annual) (XXPOOVACNBALANCE.rtf) XML Publisher template</td>
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<td>168.</td>
<td>Port: W2 Tax Balance Report (XXPOOW2TAXBAL.rtf) XML Publisher template</td>
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<td>169.</td>
<td>PORT Contract Costing Reports Template (XXPOO_HRMS_COSTING_CR008_REP.rtf) XML Publisher template</td>
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<td>170.</td>
<td>PDF summary and Detail-PORT Leave Accrual Report (POO_VAC_SICK_REP_DETAIL_SUMMARY_PDFCR002_1.rtf) XML Publisher template</td>
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<td>171.</td>
<td>EXCEL-PORT Leave Accrual Report (POO_VAC_SICK_REP_EXCEL_HRMSscr002.rtf) XML Publisher template</td>
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<td>172.</td>
<td>XXPOO_PAY_DED_REP (PORT_DED_REP_v1.rtf) XML Publisher template</td>
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<td>173.</td>
<td>XXPOO_PAY_HIST_FLSA_REP (PORT_DED_REP_v1.rtf) XML Publisher template</td>
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<td>174.</td>
<td>PORT SCO Details Report (XXPOO_PAY_SCO_RPT_1.rtf) XML Publisher template</td>
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<td>175.</td>
<td>PORT Payroll Union Details Report (XXPOO_PAY_UNION_RPT_1.rtf) XML Publisher template</td>
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<td>176.</td>
<td>XXPOO_PAY_HIST_FLSA_REP (PORT_DED_REP_v1.rtf) XML Publisher template</td>
</tr>
</tbody>
</table>
177. PORT PERS Details Report Template (PORT_PERS_DTL_RPT.rtf) XML Publisher template
178. PORT PTO Accrual Balance Report Template (PORT_PTO_ACC_BAL_RPT_TMP.rtf) XML Publisher template
179. PORT PTO Accrual Balance Report -PDF (XXPOO_PTO_ACCRUALBALANCE_TMP_JOB_TITLE.rtf) XML Publisher template
180. PORT Sick Leave Bonus Detail Report Template (PORT_SICK_LEAVE_BONUS_DTL_TMPL.rtf) XML Publisher template
181. PORT Sick Leave Bonus Report (PORT_SICK_LEAVE_BONUS_SUMM_TMPL.rtf) XML Publisher template
182. PORT Sick Leave Conversion Report Template (PORT_SICK_LEAVE_CONV_TMPL.rtf) XML Publisher template
183. Excel-PORT Leave Accrual Report by Rep Unit (POO_VAC_SICK_REP_DETAIL_SUMMARY_PDF.rtf) XML Publisher template
184. PORT XML CALPERS Proof Report (XXPOO_CalPERS_Proof_RPT_en_US.rtf) XML Publisher template – currently engaged in an internal project to modify the Calpers project
185. PORT Payroll Union Details Report (XXPOO_PAY_UNION_RPT.xml) XML Publisher Data Definition
186. XXPOO: Pay Calpers Report (XXPOO_PAY_CALPERS_EDIT_RPT.XML) XML Publisher Data Definition – currently engaged in an internal project to modify the Calpers project
187. XXPOO: Payroll Time History Report (XXPOO_PAY_TIME_HIST_RPT3.XML) XML Publisher Data Definition
188. XXPOO_FSA_REP (XXPOO_PARK_FSA_v110.xml) XML Publisher Data Definition
189. PORT SCO Details Report (XXPOO_PAY_SCO_RPT.xml) XML Publisher Data Definition
190. PORT Payroll Union Details Report 1 (XXPOO_PAY_UNION_RPT.xml) XML Publisher Data Definition
Appendix C: Human Resources Customizations

1. PORT Load Benefit Zipcodes (XXPOO_LOAD_BEN_ZIPS)
2. Port: Grade Conversion (XXPOO_GRADECONV)
3. Port: Position Conversion (XXPOO_POSITIONCONV)
4. Port: Job Conversion (XXPOO_JOBCONV)
5. PORT health Inset Default lines--Step3 (XXPO_BEN_1_ADD_DEF_LINES)
6. PORT health upload initial lines--Step1 (XXPO_BEN_1_INIT_LINES)
7. PORT health validate lines--Step2 (XXPO_BEN_1_VAL_LINES)
8. PORT health transfer lines--Step4 (XXPO_BEN_1_XFER_LINES)
9. PORT Health upload Enrollments--Step7 (XXPOO_BEN_1_ENROLL_HEALTH)
10. PORT health check life event Step5 (XXPOO_BEN_1_LIFE_HEALTH)
11. PORT Health ptln life--Step7 (XXPOO_BEN_3_PTNL_HEALTH)
12. PORT FSA upload initial lines--Step1 (XXPO_BEN_3_INIT_LINES)
13. PORT FSA insert Default Plans--Step3 (XXPO_BEN_3_INS_DEF)
14. PORT FSA validate lines--Step2 (XXPO_BEN_3_VAL_LINES)
15. PORT FSA validate stage--Step5 (XXPO_BEN_3_VAL_STG)
16. PORT FSA transfer lines--Step4 (XXPO_BEN_3_XFER_LINES)
17. Port: Employee Conversion (XXPOO_EMPCONV)
18. Port: Employee Address Conversion (XXPOO_EMPADDRESSCONV)
19. PORT FSA upload Enrollments--Step7 (XXPOO_BEN_3_ENROLL_FSA)
20. PORT FSA Check life event Step6 (XXPOO_BEN_3_LIFE_FSA)
21. PORT FSA ptln life--Step6 (XXPOO_BEN_3_PTNL_FSA)
22. PORT Parking upload initial lines--Step1 (XXPO_BEN_2_INIT_LINES)
23. PORT Parking validate lines--Step2 (XXPO_BEN_2_VAL_LINES)
24. PORT Parking validate stage--Step4 (XXPO_BEN_2_VAL_STG)
25. PORT Parking transfer lines--Step3 (XXPO_BEN_2_XFER_LINES)
26. PORT Parking upload Enrollments--Step6 (XXPOO_BEN_2_ENROLL_PARK)
27. PORT Parking main life event Step5 (XXPOO_BEN_2_LIFE_EVENT)
28. PORT:LOAD DATA to FSA INIT TABLE (XXPO_BEN_LOAD_FSA_DATA)
29. PORT:LOAD DATA to HEALTH INIT TABLE (XXPO_BEN_LOAD_HEALTH_DATA)
30. PORT:LOAD DATA to PARK INIT TABLE (XXPO_BEN_LOAD_PARK_DATA)
31. PORT: EIT Conversion (XXPO_HR_CONV_EIT_DATA)
32. Port: active assignment Conversion (XXPOO_ACTIVEASSINGCONV)
33. Port: Employee Emergency Contact Conversion (XXPOO_EMERGENCNV)
34. Port: Employee Performance Rating Conversion (XXPOO_PERRATINGNNG)
35. Port: Terminated Assignment Conversion (XXPOO_TERMASSINGCONV)
36. PORT Grade Step Progression Report (XXPOO_GSP_REP)
37. PORT: Load Sick/Vacation Proration Elements (XXPOOPRORATIONAPI)
38. PORT: Delete Park Enrollments (XXPOO_DEL_PARK)
39. PORT Employees with Medical Reimbursement and Medical Enrollment
40. Port Employee Details Report (XXPOOEMPDETEILS)
41. PORT Missing Beneficiary Designations Report  
   (XXPOO_NO_DSG_BNFCRY)
42. Port: Employee Promotion Report (XXPOOPROMRPT)
43. Port Separated Employees Extract (XXPOOSEPEESEXT_XML)
44. Port: EEO 1 Report (XXPOOEEO1RPT)
45. Port: EEO New Hire Report (XXPOOEEXONHIRE)
46. Port Employee Contacts Extract (XXPOOEMPCONT_XML)
47. PORT Payflex FSA Eligibility Interface  
   (XXPOO_BEN_PAYFLEX_FSA_ELIG_PGM)  
48. Port Active Employees Listing Report (XXPOOACEELIST_XML)
49. Port Employee Address Report (XXPOOEMPADDR_XML)
50. Port: Employee Audit Report (XXPOOEMPAUDSTD)
51. PORT Grade Step Process Request Set
52. PORT Payflex Eligibility Outbound Interface Request Set
53. Combined Person & Assignment Form (PERWSHRG) Forms Personalization
54. Enter Assignment (PERWSEMA) Forms Personalization
55. People Folder (PERWSFPE) Forms Personalization
56. PORT Total Compensation Statement (PORTBENTCSRPT14.rtf) XML Publisher template
57. Port: Benefit Enrollment Confirmation (BENSSCNF1.rtf) XML Publisher template
58. Port Active Employees Listing Report (XXPOOACEELIST_XML_v110.rtf) XML Publisher template
59. Port: EEO 1 Report (XXPOOEEO1RPT.rtf) XML Publisher template
60. Port: EEO New Hire Report (XXPOOEEXONHIRE.rtf) XML Publisher template
61. Port Employee Address Report (XXPOOEMPADDR_XML.rtf) XML Publisher template
62. Port: Employee Audit Report (XXPOOAUDRPTSTD.rtf) XML Publisher template
63. Port Employee Contacts Extract (XXPOOEMPCONT_XML.rtf) XML Publisher template
64. Port Employee Details Report (XXPOOEMPDETAILS.rtf) XML Publisher template
65. Port Employee Details for EF Extract (XXPOOEMPDETAILSEF_XML.rtf) XML Publisher template
66. Detail-By Dept PORT EAP Insurance Report  
   (XXPOOHREAP_CR009_DETAIL_TMP.rtf) XML Publisher template
67. Summary-PORT EAP Insurance Report  
   (XXPOO_HRMS_MED_INS_CR009_DEPT_DETAIL_TMP.rtf) XML Publisher template
68. Detail-By Dept PORT Medical Insurance Report  
   (XXPOO_HRMS_MED_INS_CR009_DEPT_DETAIL_TMP.rtf) XML Publisher template
69. Detail-By Employee PORT Medical Insurance Report  
(XXPOO_HRMS_MED_INS_CR009_EMP_DETAIL_TMP.rtf) XML Publisher template

70. Summary-PORT Medical Insurance Report  
(XXPOO_HRMS_MED_INS_CR009_SUMMARY_TMP.rtf) XML Publisher template

71. Detail-By Dept PORT VSP and Dental Report  
(XXPOO_HRMS_VSP_DEN_CR009_DEPT_DETAIL_TMP.rtf) XML Publisher template

72. Summary-PORT VSP and Dental Report  
(XXPOO_HRMS_VSP_DEN_CR009_SUMMARY_TMP.rtf) XML Publisher template

73. Port: Job Class EEO Report (XXPOOJOBCLASSEEO.rtf) XML Publisher template

74. Port: Employee Promotion Report (XXPOOPROMRPT.rtf) XML Publisher template

75. Port Separated Employees Extract (XXPOOSEEPEESEXT_XML.rtf) XML Publisher template

76. PORT Supplemental Life Detail Report Template  
(PORT_SUPP_LIFE_DTL_RPT.rtf) XML Publisher template

77. PORT Supplemental Life Report Template  
(XXPOO_BEN_SUPP_LIFE_RPT_TMPL_V2.rtf) XML Publisher template

78. XXPOO_FSA_REP (XXPOO_PARK_FSA_v110.rtf) XML Publisher template

79. XXPOO_GSP_REP (XXPOO_GSP_REPORT.rtf) XML Publisher template

80. Detail-By Dept PORT Insurance Basic and ADD Report  
(XXPOO_HRMS_LIF_ADD_CR009_DEPT_DETAIL_TMP.rtf) XML Publisher template

81. Summary-PORT Insurance Basic and ADD Report  
(XXPOO_HRMS_LIF_ADD_CR009_SUMMARY_TMP.rtf) XML Publisher template

82. Detail By Unit-PORT Insurance Basic and ADD Report  
(XXPOO_HRMS_LIF_ADD_CR009_UNIT_DETAIL_TMP.rtf) XML Publisher template

83. Detail-By Dept PORT LTD Insurance Report  
(XXPOO_HR_LTD_CR009_DEPT_DETAIL_TMP.rtf) XML Publisher template

84. Detail-By Unit PORT LTD Insurance Report  
(XXPOO_HR_LTD_CR009_UNIT_DETAIL_TMP.rtf) XML Publisher template

85. Summary-PORT LTD Insurance Report  
(XXPOO_HR_LTD_CR009_DEPT_SUMMARY_TMP.rtf) XML Publisher template

86. PORT Missing Beneficiary Report Template  
(PORT_MISSING_BNFCRY_TMP.rtf) XML Publisher template
Appendix D: Oracle User Productivity Kit (UPK)

From http://www.oracle.com/technetwork/middleware/upk/overview/index.html

Capture, retain, and disseminate critical organizational process knowledge to ensure the success of your enterprise applications, accelerate user adoption, and prepare your organization to be productive the first day with Oracle UPK.

Through knowledge transfer, Oracle UPK drives user productivity and mitigates risk through all phases of the project lifecycle. UPK provides a simple and comprehensive content development, deployment, and maintenance platform specifically designed for project team members and line of business owners. With UPK, the project team will dramatically reduce the time to deployment and ensure end user adoption - the single biggest barrier to enterprise application success. Supporting applications from Oracle, SAP, and Microsoft as well as all other enterprise applications, Oracle UPK will help organizations achieve the highest return on their enterprise application investment.

Oracle UPK provides a collaborative development environment to create system-related assets which are used throughout the project lifecycle. With the ability to produce multiple outputs through a single recording session, Oracle UPK reduces content development time and cost. Rapidly produce materials for all phases of the software lifecycle – from test scripts, system process documents, and interactive simulations, to job aids, instructor manuals, and in-application performance support. Oracle UPK is the key to capturing knowledge, increasing productivity and reducing overall software implementation costs.

Benefits
- Maximize ROI and Mitigate Risk—fast recovery of upfront investment through accelerated user adoption.
- Drive user adoption and productivity—Capture and disseminate critical organizational process knowledge with multiple learning methods and just-in-time performance support.
- Streamline Implementation—Pre-built model business process documents and pre-built content for Oracle applications speed time to deployment.

UPK can be instrumental to companies who are:
- Implementing new enterprise applications or upgrading to new releases
- Documenting business practices for various compliance initiatives
- Consolidating systems due to merger or acquisition
- Capturing organizational knowledge and ensuring workforce effectiveness
# Appendix E: Workshop Schedule and Participants

<table>
<thead>
<tr>
<th>Subject Process</th>
<th>Topics</th>
<th>Duration (Hours)</th>
<th>Date</th>
<th>Time (Pacific)</th>
<th>Port of Oakland Participants</th>
<th>SmartDog Leaders</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Property Management | Property Management Topics:  
- Leasing Overview  
- Lease Types (Gross Lease/Net Lease, Parent/Child Leases)  
- Breakpoints: How Different breakpoints are calculated within PM  
- Services Provided  
- Lease Milestones  
- Rent Increase Process (indexes)  
- Info captured on leases  
- Current Issues / Pain Points | 4 | Monday, April 25, 2016 | 1:00 PM | Doug Johnson - Aviation Properties  
Dorin Titiun - CRE  
Lisa Franco - Maritime  
Leslie Gulyard Johnson - Aviation Properties  
Brandon Mark - Avi Prop  
Michael Guzman - IT  
Angela Yuen - IT | Brent Daniel  
Casey Curtis |  
Two-part workshop.  
First part will focus on EAM usage in Aviation & Harbor Facilities (i.e. work requests, work orders, preventative maintenance.)  
Second part to focus on FA, cost collection, capitalization, etc. |

| Enterprise Asset Management (eAM) 1:  
Aviation & Harbor Facilities Topics | Harbor and Aviation Facilities Topics:  
- Work Requests  
- Work Orders  
- Preventive Maintenance | 3 | Tuesday, April 26, 2016 | 9:00 AM | Vanessa Valderrama - Aviation Facilities  
Eric Fan - Harbor Facilities  
Todd Killmon - Harbor  
Kamar Niblet - Aviation  
Renu Bhatia - IT  
Khoa Nguyen - IT  
Angela Yuen - IT  
Kyle Mobley - Acting IT Director | Jay West  
Casey Curtis |  
Two-part workshop.  
First part will focus on EAM usage in Aviation & Harbor Facilities (i.e. work requests, work orders, preventative maintenance.)  
Second part to focus on FA, cost collection, capitalization, etc. |
<table>
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<th>SmartDog Leaders</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Human Resources | Human Resources Topics:  
- Employee Maintenance  
- Employee Assignment and setup  
- HR / PR elements  
- Benefit Plans  
- Open Enrollment  
- HR Hierarchies  
- Accrual Plans  
- HR Security  
- Performance Management  
--- Appraisals, Competencies, etc.  
- Compensation Workbench  
--- ICD, Compensation Plans, etc.  
- Self Service HR EE / Manager | 3 | Tuesday, April 26, 2016 | 1:00 PM | Stacie Chestnut - HR  
Sara Everett-Boyer - HR  
Gishela Portugal - HR  
Stan Tanaka - Payroll/Finance  
Co Chu - IT  
Michael Guzman - IT  
Angela Yuen - IT | Colleen Hunington  
Casey Curtis |
| Payables | Payables Topics:  
Approvals  
Accruals | 2 | Wednesday, April 27, 2016 | 9:00 AM | Cecilia Ravare - Finance  
Julie Lam - Finance  
Michele Luong - Finance  
Gunnar Niemi - IT  
Khoa Nguyen - IT  
Angela Yuen - IT | Brent Daniel  
Casey Curtis |
| Receivables | Customer Setups & Communications Topics:  
- Review current customer structure  
- Discuss TCA architecture  
- Customer Communications Requirements | 2 | Wednesday, April 27, 2016 | 1:00 PM | Cecilia Ravare - Finance  
Julie Lam - Finance  
Andy Denoga - Finance  
Khoa Nguyen - IT  
Angela Yuen - IT  
Michael Guzman - IT | Kara Kosslow  
Brent Daniel  
Casey Curtis |
| General Ledger | General Ledger Topic:  
Cost Allocations | 2 | Wednesday, April 27, 2016 | 3:00 PM | Cecilia Ravare - Finance  
Julie Lam - Finance  
Betsy Kwok - Finance  
Khoa Nguyen - IT  
Angela Yuen - IT | Brent Daniel  
Casey Curtis |
<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>Requisitions &amp; Line Types&lt;br&gt;-Current requisition creation process&lt;br&gt;-Existing requisition approval process&lt;br&gt;-Current usage of line types&lt;br&gt;-Pain points and opportunities for improvement</td>
<td>2</td>
<td>Thursday, April 28, 2016</td>
<td>8:30 AM</td>
<td>John Banisadr - Purchasing&lt;br&gt;Eva Chiu - Purchasing&lt;br&gt;Nick Sioson - Purchasing&lt;br&gt;Renu Bhatia - IT&lt;br&gt;Khoa Nguyen - IT&lt;br&gt;Angela Yuen - IT</td>
<td>Kara Kosslow&lt;br&gt;Casey Curtis</td>
<td>Two-part workshop. First part will focus on EAM usage in Aviation &amp; Harbor Facilities (i.e. work requests, work orders, preventative maintenance.) Second part to focus on FA, cost collection, capitalization, etc. Cecilia, Julie, Brent to attend for Fixed Assets integration discussion. Imee, Angelica, Steve, Sameer to attend for Project &amp; Grant integration discussion.</td>
</tr>
<tr>
<td>Enterprise Asset Management (eAM) 2</td>
<td>EAM Topics:&lt;br&gt;-Asset naming conventions&lt;br&gt;-Integration with FA and Projects &amp; Grants&lt;br&gt;-Cost collection and capitalization of assets&lt;br&gt;-Asset tracking hierarchy</td>
<td>3</td>
<td>Thursday, April 28, 2016</td>
<td>1:00 PM</td>
<td>Vanessa Valderrama - Aviation Facilities&lt;br&gt;Eric Fan - Harbor Facilities&lt;br&gt;Cecilia Ravare - Finance (for FA)&lt;br&gt;Julie Lam - Finance (for FA)&lt;br&gt;Alan Lum - Finance (FA)&lt;br&gt;Imee Osantowski - Engineering (for P&amp;G)&lt;br&gt;Angelica Avalos - Finance (for P&amp;G)&lt;br&gt;Steve Low - Engineering (for P&amp;G)&lt;br&gt;Renu Bhatia - IT&lt;br&gt;Khoa Nguyen - IT&lt;br&gt;Angela Yuen - IT&lt;br&gt;Kyle Mobley - IT</td>
<td>Jay West&lt;br&gt;Brent Daniel&lt;br&gt;Sameer Raleraskar&lt;br&gt;Casey Curtis</td>
<td>Two-part workshop. First part will focus on EAM usage in Aviation &amp; Harbor Facilities (i.e. work requests, work orders, preventative maintenance.) Second part to focus on FA, cost collection, capitalization, etc. Cecilia, Julie, Brent to attend for Fixed Assets integration discussion. Imee, Angelica, Steve, Sameer to attend for Project &amp; Grant integration discussion.</td>
</tr>
<tr>
<td>Technical Architecture</td>
<td>Initial meeting to understand high-level view of architecture and plan where follow-on meetings need to occur.</td>
<td>1</td>
<td>Thursday, April 28, 2016</td>
<td>4:00 PM</td>
<td>Angela Yuen - IT&lt;br&gt;Michael Guzman - IT&lt;br&gt;Renu Bhatia - IT&lt;br&gt;Co Chu - IT&lt;br&gt;Khoa Nguyen - IT&lt;br&gt;Gunnar Niemi - IT&lt;br&gt;Satish Donepudi - MTG</td>
<td>Vijay Singh&lt;br&gt;Casey Curtis</td>
<td></td>
</tr>
</tbody>
</table>
### Projects & Grants 1

<table>
<thead>
<tr>
<th>Topics</th>
<th>Duration (Hours)</th>
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<th>Time (Pacific)</th>
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<th>SmartDog Leaders</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management&lt;br&gt;Topics:&lt;br&gt;- Project Types &amp; Project Structure for each Type&lt;br&gt;- Project Creation and Approval Process&lt;br&gt;- Budget Definitions and Entry Actual Cost &amp; Commitments on Projects&lt;br&gt;- Cost Processing on Projects by types&lt;br&gt;- Change Management Processes&lt;br&gt;- Key Reports&lt;br&gt;- Pain Points</td>
<td>3</td>
<td>Friday, April 29, 2016</td>
<td>9:00 AM</td>
<td>Imee Osantowski - Engineering&lt;br&gt;Steve Low - Engineering&lt;br&gt;Angelica Avalos - Finance (optional)&lt;br&gt;Julie Lam - Finance (optional)&lt;br&gt;Tatiana Starostina - Finance&lt;br&gt;Renu Bhatia - IT&lt;br&gt;Khoa Nguyen - IT&lt;br&gt;Angela Yuen - IT</td>
<td>Sameer Raleraskar&lt;br&gt;Casey Curtis</td>
<td>Two-part workshop. First part of the workshop can be on project management, i.e. how project managers create and maintain projects (Imee and Steve to attend). Second part of the workshop should on Grants – Julie and Angelica to attend.</td>
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### Projects & Grants 2

<table>
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<tr>
<th>Topics</th>
<th>Duration (Hours)</th>
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<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants Management&lt;br&gt;Topics:&lt;br&gt;- Award Definition and Entry&lt;br&gt;- Project Funding&lt;br&gt;- Defining Award and Project Budgets&lt;br&gt;- Revenue and invoicing&lt;br&gt;- Key Reports&lt;br&gt;- Pain Points</td>
<td>3</td>
<td>Tuesday, May 3, 2016</td>
<td>2:00 PM</td>
<td>Angelica Avalos - Finance&lt;br&gt;Julie Lam - Finance&lt;br&gt;Imee Osantowski - Engineering (optional)&lt;br&gt;Steve Low - Engineering (optional)&lt;br&gt;Tatiana Starostina - Finance&lt;br&gt;Renu Bhatia - IT&lt;br&gt;Khoa Nguyen - IT&lt;br&gt;Angela Yuen - IT</td>
<td>Sameer Raleraskar&lt;br&gt;Casey Curtis</td>
<td>Two-part workshop. First part of the workshop can be on project management, i.e. how project managers create and maintain projects (Imee and Steve to attend). Second part of the workshop should on Grants – Julie and Angelica to attend.</td>
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<td>SmartDog Leaders</td>
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<tr>
<td>Payroll</td>
<td><strong>Timecard Topics:</strong>&lt;br&gt;-Timecard Submission&lt;br&gt;-Transfer Time from OTL to BEE&lt;br&gt;-Port Bee Comp Time Hours Update &amp; Transfer&lt;br&gt;&lt;br&gt;<strong>Payroll Topics:</strong>&lt;br&gt;-Retro pay&lt;br&gt;-Payroll Process&lt;br&gt;-Ceridian System business process&lt;br&gt;-Cal PERS Reports&lt;br&gt;-Payroll Costing business process&lt;br&gt;-Transfer to SLA&lt;br&gt;-Payroll Archive&lt;br&gt;-Void and Reversals&lt;br&gt;-Year-End (PR/HR)</td>
<td>3</td>
<td>Wednesday, May 4, 2016</td>
<td>2:00 PM</td>
<td>Stacie Chestnut - HR Stan Tanaka - Payroll/Finance Co Chu - IT Michael Guzman - IT Angela Yuen - IT</td>
<td>Colleen Hunnington Casey Curtis</td>
</tr>
</tbody>
</table>
**Glossary of Acronyms:**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AIM</td>
<td>Oracle’s Application Implementation Methodology</td>
</tr>
<tr>
<td>APEX</td>
<td>Oracle Applications Express</td>
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<tr>
<td>CRP</td>
<td>Conference Room Pilot</td>
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<tr>
<td>DFF</td>
<td>Descriptive Flexfield</td>
</tr>
<tr>
<td>eAM</td>
<td>Enterprise Asset Management</td>
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<tr>
<td>EBS</td>
<td>Oracle E-Business Suite</td>
</tr>
<tr>
<td>FSG</td>
<td>Financial Statement Generator</td>
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<tr>
<td>OUM</td>
<td>Oracle Unified Method</td>
</tr>
<tr>
<td>RICE</td>
<td>Reports, Interfaces, Conversions, and Extensions – applications customization/development activities</td>
</tr>
<tr>
<td>UPK</td>
<td>Oracle’s User Productivity Kit</td>
</tr>
</tbody>
</table>