

Texas Comptroller of Public Accounts

CAPPS Reporting Approach

v4.0

CAPPS Reporting Approach

Contents

- Introduction.....2
- CAPPS Reporting Approach2
 - Enterprise and Statewide Reports.....2
 - Agency-Specific Reports3
 - Agency-Specific Reports in Business Objects3
 - Agency-Specific Reports in CAPPS Production5
 - Enterprise Queries.....5
 - Agency-Specific Queries6
 - CAPPS Recruit Reports (Taleo)7
 - CAPPS Learn Reports (Taleo).....7
- Reports Administration Guidelines8
- CAPPS Agencies: Which Report? Which Reporting Solution?9
 - Reporting Tools 12
 - Strategic Initiatives 13
 - Data Warehouse..... 13
 - Agency Extracts Installation 13
 - Continue Build of Business Intelligence 13
 - Central Report Repository (CRP) 13
 - High Level Roadmap 13
- Summary..... 13
- Appendix A: Definitions..... 14

CAPPS Reporting Approach

Introduction

The CAPPS Reporting Approach is an overview of the reporting tools and environments provided for both the CAPPS Financials and HR/Payroll customers. This document is meant to serve as an overall strategy of CAPPS reporting. The CAPPS Reporting Approach will:

- Serve as a communication document for all CAPPS stakeholders
- Provide details of how the CAPPS Reporting Solution will satisfy Agency reporting requirements
- Describe the various components of the Reporting Solution
- Describe the associated roles and responsibilities of all CAPPS stakeholders
- Describe the strategic initiatives that will enable the CAPPS Reporting Solution to be an enterprise solution

As more and more agencies rely on CAPPS as their financials and HR/Payroll system, it becomes even more important that it uniformly deliver robust, timely information without the need for special report writing or queries. When unique or ad hoc reporting needs are justified, CAPPS customers should have the ability to extract current information via a secure, easy-to-use reporting tool. In summary, the goals of the CAPPS Reporting Strategy are to:

- Provide current data to CAPPS customers for standard and ad hoc reporting
- Standardize the databases and tools used for reporting in order to ensure accuracy across agencies and minimize support costs
- Provide clear and concise policies and procedures to govern CAPPS reporting
- Ensure reporting data is secure and available to users

CAPPS Reporting Approach

CAPPS applications will offer a wide range of reporting possibilities to meet the various needs of CAPPS customers. Agencies can access information through standard delivered PeopleSoft reports, as well as through custom reports generated using tools such as PeopleSoft (PS) Query Manager, Oracle Business Intelligence Publisher (BI Publisher), and Business Objects (BO) Web Intelligence (Webi) reporting tools.

The methods of creating reports and the types of tools used can be described in four categories: Enterprise Reports (including Statewide Reports), Agency Specific Reports, Enterprise Queries and Agency Specific Queries. The differentiating characteristics of each type of reporting category include how it is created and maintained, who has access to use it, and the data source it accesses to produce the output required by the requestor.

Enterprise and Statewide Reports

Solution Description

Enterprise Reports are standardized reports executed on a regular basis for the provision of information to decision makers within an agency organization to support their business operations. Enterprise reports return consistent data and typically can be run for any agency. Examples of Enterprise Reports include vouchers, purchase orders, budget revisions, asset inquiries, Tax Deposit Summaries, 1042 Audit, Taxable Gross Audit and

CAPPS Reporting Approach

others. Statewide Reports are developed specifically to meet statewide (cross-agency) statutory requirements. There are currently 14 specific statewide reports (found in [FMX](#)).

Enterprise Reports present information from the Production CAPPS environments. They may be delivered with the PeopleSoft product, or created by the CPA Reports Team via BI Publisher to meet the requirements of all CAPPS customers. Enterprise reports may be the result of an agency requesting a standard report for all agencies or the result of a report written specifically for a state statute or requirement. The creation or customization of an Enterprise Report must be reviewed and approved through the CAPPS governance process.

Enterprise Reports are maintained by the CPA and any changes to these reports are handled through the standard Systems Development Life Cycle (SDLC). Oracle Business Intelligence Publisher (BI Publisher is used to create Enterprise reports).

Security and Access

All authorized end users access Enterprise Reports from the reporting drop down menu in CAPPS. Security is requested and monitored by each CAPPS agency and controlled by CPA's Statewide Fiscal Systems security group.

Reports Maintenance

Enterprise Reports are the responsibility of the CPA for any modifications.

Training

No training is provided to the agency users on the development tools used to create Enterprise Reports since they are only available to the CPA. Agency training on how to access and understand the reports will be provided as part of implementation services and will be a component of other module training provided for PeopleSoft Financials or Human Capital Management by CPA and internal agency instruction.

Agency-Specific Reports

Solution Description

Agency Specific Reports are developed specifically to meet an agency's uniquely defined business requirements and may not produce viable data output for any other agency in the enterprise. They are only available for execution by the agency for which they are created. Agency Specific Reports are primarily developed in SAP Business Objects (BO or BOBJ).

Agency-Specific Reports in Business Objects

Business Objects (BO) is a business intelligence tool that provides a web-based interface to access pre-defined reports or create ad hoc queries categorized by agency and module. The data accessed by BO is stored in the Replicated Reporting Database insuring that the data reflects all data inputs into CAPPS within minutes of the point in which the report is run. BO reports and queries are flexible and prompt driven, making it easy for the customer to change their selection criteria to meet their specific business needs. Agency Specific Reports developed in BO are primarily developed during the agency's CAPPS implementation. These reports are based on requirements developed by the agency and refined during the implementation process.

CAPPS Reporting Approach

Each agency will have a unique Business Objects menu item that includes all BO reports for that agency, categorized by module. Although Business Objects reports reside in a separate environment from CAPPS, they are accessible from the Enterprise Portal for convenience.

If a CAPPS agency Power User creates a new BO report, that report can only be executed by that person. If an agency created BO report needs to be accessed by multiple users in that agency, the agency should submit a service request through the standard work management process (ASP) requesting that the report be posted to their Business Objects menu. These service requests will go through the standard work management process as well as a review within CPA to insure that standards have been followed in the creation of the report.

Security and Access

Agency users access BO via a web interface. Security in this environment is controlled by the CPA. Reports and data are limited to the agency and user that is granted access.

Reports Maintenance

Agency Specific Reports and queries created by a CAPPS agency are the responsibility of the CAPPS agency for ongoing maintenance and support. Agency Specific Reports that are developed and delivered by CPA as part of the agency implementation may be transferred to the agency for support and maintenance. Each agency will work with CPA to determine if ongoing support will be addressed by the CAPPS agency or turned over to CPA for maintenance. Any reports maintained and supported by CPA are subject to Governance approval and will follow the CPA system development life cycle.

When a change to an environment occurs, (such as a PeopleSoft upgrade), agency created reports and queries affected by that change will be the responsibility of the agency to update. CPA will support all environments with upgrades to new versions of applications and tools, and provide agencies notice of upcoming PeopleSoft record changes that could impact agencies reports as modifications and fixes are migrated to UAT prior to the Production migration of those modifications and fixes. In order to manage the volume of reports being created, CPA will provide each agency with analysis on all reports that identifies their reports that have not been accessed at certain intervals.

The CPA will publish naming standards in the Reports Administration Guideline to facilitate tracking the ownership and usage of a report.

Training

Agency training on how to access and understand the reports will be provided as part of implementation services and will be a component of other module training provided for PeopleSoft Financials or Human Capital Management by CPA and internal agency instruction.

CPA will also provide Basic Business Objects Overview training in the form of self-paced training materials, which includes but not limited to Videos, PowerPoint presentations, and how-to instructions. If an agency wants to develop their Business Objects reports and queries internally, the agency will need to pursue third-party training.

CAPPS Reporting Approach

Agency-Specific Reports in CAPPS Production

Agency Specific Reports that require a complex programmatic solution may not be good candidates for the BO product suite. In these instances, the creation of these Agency Specific Reports would follow the path of any other requested enhancement to the PeopleSoft system and would require approval from CAPPS governance to allocate resources to the development of this report in the PeopleSoft environment using the tools and processes described for Enterprise Reports. The primary difference between the delivered Enterprise Report and the Agency Specific Report is only the requesting agency can see and execute their Agency Specific Report.

Agency Specific Reports developed in CAPPS are subject to Governance approval and follow the same system development life cycle as fixes and enhancements.

Security and Access

All users access Agency Specific Reports in CAPPS production from the reports drop down menu in CAPPS. Security is controlled by the same PeopleSoft User Based Security that establishes the level of access that each user has in the online PeopleSoft modules.

Reports Maintenance

For Agency Specific Reports that run in CAPPS Production, the CPA is responsible for any modification. Agency Specific Reports developed in CAPPS are subject to Governance approval and follow the same system development life cycle as fixes and enhancements.

Training

Agency training on how to access and understand the reports will be provided as part of implementation services and will be a component of other module training provided for PeopleSoft Financials or Human Capital Management by CPA and internal agency instruction.

Enterprise Queries

Solution Description

Enterprise Queries developed in the CAPPS Replicated Reporting Database are created by the CAPPS functional team as well as agency Power Users leveraging the PS web-based query tool, Query Manager. The PS Query tool is an end user, web-based reporting tool that allows the extraction of precise information from the PS database without having to write SQL code. The tool allows users to select the records and fields to be included in the query and will suggest the necessary database joins. Because this tool is basically a dynamic SQL generator, it is imperative that the Power Users using it have at least a basic understanding of SQL select statements. *Note: Some queries that are run as part of a process are run in Production. Example: Queries run as part of payroll generation.*

Security and Access

Agency users access PS Query Manger via the CAPPS Replicated Reporting Database. Security in this environment is controlled by the CPA. Data access is limited to the agency and user that is granted access. Only the creation of private queries is permitted as there is no method of controlling public queries to a single agency. A private query can only be executed by the user that created the query. However, users will have the ability to copy a private query to another user. Because these queries are created by the CAPPS agency using their agency resources, no approval from CAPPS governance is required.

CAPPS Reporting Approach

Query Maintenance

Enterprise Queries will be created by CAPPS agencies and executed in the CAPPS Replicated Reporting Database, and the CAPPS agency that creates the query is responsible for the maintenance of that query. When a change to that environment occurs, (such as a PeopleSoft upgrade), those queries affected by that change will be the responsibility of the agency to update. CPA will support all environments with upgrades to new versions of applications and tools, and provide agencies notice of upcoming PeopleSoft record changes that could impact agency queries as modifications and fixes are migrated to UAT prior to the Production migration of those modifications and fixes. In order to manage the volume of queries being created, CPA will identify all agency queries that have not been accessed for a period of six months and request if the query can be deleted. The CPA will publish naming standards in the Reports Administration Guideline to facilitate tracking the usage and ownership of the query.

Training

It will be the responsibility of the CAPPS agencies to obtain training on PS Query tools if they wish to pursue this option, procuring third party vendor training in PS Query tools.

Agency-Specific Queries

Solution Description

Agency-Specific Queries developed in the CAPPS Replicated Reporting Database are created by agency report writers leveraging the PS web-based query tool, Query Manager or SAP BO.

Security and Access

Agency users access PS Query Manager via the CAPPS Replicated Reporting Database. Security in this environment is controlled by the CPA. Data access is limited to the agency and user that is granted access. Only the creation of private queries is permitted as there is no method of controlling public queries to a single agency. A private query can only be executed by the user that created the query. Agency users can use Business Objects to create agency queries. The CPA controls security in this environment. Queries and data are limited to the agency and user that is granted access.

Because these queries are created by the CAPPS agency using their agency resources, no approval from CAPPS governance is required.

Query Maintenance

Enterprise Queries will be created by CAPPS agencies and executed in the CAPPS Replicated Reporting Database, and the CAPPS agency that creates the query is responsible for the maintenance of that query. When a change to that environment occurs, (such as a PeopleSoft upgrade), those queries affected by that change will be the responsibility of the agency to update. CPA will support all environments with upgrades to new versions of applications and tools, and provide agencies notice of upcoming PeopleSoft record changes that could impact agency queries as modifications and fixes are migrated to UAT prior to the Production migration of those modifications and fixes. In order to manage the volume of queries being created, CPA will identify all agency queries that have not been accessed for a period of six months and request if the query can be deleted. The CPA will publish naming standards in the Reports Administration Guideline to facilitate tracking the usage and ownership of the query.

CAPPS Reporting Approach

Training

It will be the responsibility of the CAPPS agencies to obtain training on PS Query tools if they wish to pursue this option, procuring third party vendor training in PS Query tools.

CAPPS Recruit Reports (Taleo)

Solution Description

CAPPS Recruiting Reports are available in two different formats. All reports are delivered through Oracle Business Intelligence (OBI), the native reporting tool in the CAPPS Recruiting application. The application has a set of delivered (canned) reports, and a set of custom reports. The custom reports are created and maintained by the CPA. The creation or modification to an existing custom report must be reviewed and approved through the CAPPS governance process.

CAPPS Recruiting Reports contain only data contained in the CAPPS Recruiting module. They may not combine additional data from other modules within the CAPPS framework. *Note: The queries that run to generate the report output are run in the CAPPS Recruiting Production environment.*

Security and Access

Agency users access CAPPS Recruiting OBI via the CAPPS Recruiting application. Security is controlled by the SFS security group via the same PeopleSoft User Based Security that establishes the level of access that each user has in the online CAPPS Recruiting module. Data access is limited to the agency and user that is granted access. Users may only execute the existing reports. There is no ad hoc query capability.

Reports Maintenance

CAPPS Recruiting Reports are the responsibility of the CPA for any modifications.

Training

No training is provided to the agency users on the development tools used to create CAPPS Recruiting Reports since they are only available to the CPA. Agency training on how to access and understand the reports will be provided as part of implementation services and will be a component of other module training provided for CAPPS Recruiting by CPA and internal agency instruction.

CAPPS Learn Reports (Taleo)

Solution Description

CAPPS Learn Reports are standardized, delivered reports. All reports are delivered through Business Intelligence Reporting (BI Reporting), the native reporting tool in the CAPPS Learn application. At this time, the application only has a set of delivered (canned) reports. If needed, in the future, custom reports will be created and maintained by the CPA. The creation of or modification to a custom report must be reviewed and approved through the CAPPS governance process.

Security and Access

Agency users access CAPPS Learn BI Reporting via the CAPPS Learn application. Security is controlled by the SFS security group via the same PeopleSoft User Based Security that establishes the level of access that each user has in the online CAPPS Learn module. Data access is limited to the agency and user that is granted access. Users may only execute the existing reports. There is no ad hoc query capability.

CAPPS Reporting Approach

Reports Maintenance

CAPPS Learn Reports are the responsibility of the CPA for any modifications.

Training

No training is provided to the agency users on the development tools used to create CAPPS Learn Reports since they are only available to the CPA. Agency training on how to access and understand the reports will be provided as part of implementation services and will be a component of other module training provided for CAPPS Learn by CPA and internal agency instruction.

Reports Administration Guidelines

A cross agency functional workgroup by module will evaluate requests for new and enhanced reports, and present their recommendation, assist CPA with preparing the Reports Administration Guideline, to the CAPPS User Group for approval. These workgroups will be established to provide stewardship of the Reporting Strategy and will provide governance and quality processes to govern the environments, data, and reporting. This will also ensure a uniform and shared reporting strategy and process, ensure that all agencies are represented in report requirement gathering, and that stakeholders are kept informed.

The Guideline will address the following:

- Formalize data models, data definitions, a data stewardship program, data governance and data quality processes,
- Define & communicate data quality expectations,
- Document and manage a Centralized Report Repository,
- Create and conduct report training, and
- Establish naming conventions and development standards for all reports.

The workgroups will make recommendations to the CAPPS user group. The CAPPS user group will provide a recommendation to CPA for a determination.

CAPPS Reporting Approach

CAPPS Agencies: Which Report? Which Reporting Solution?

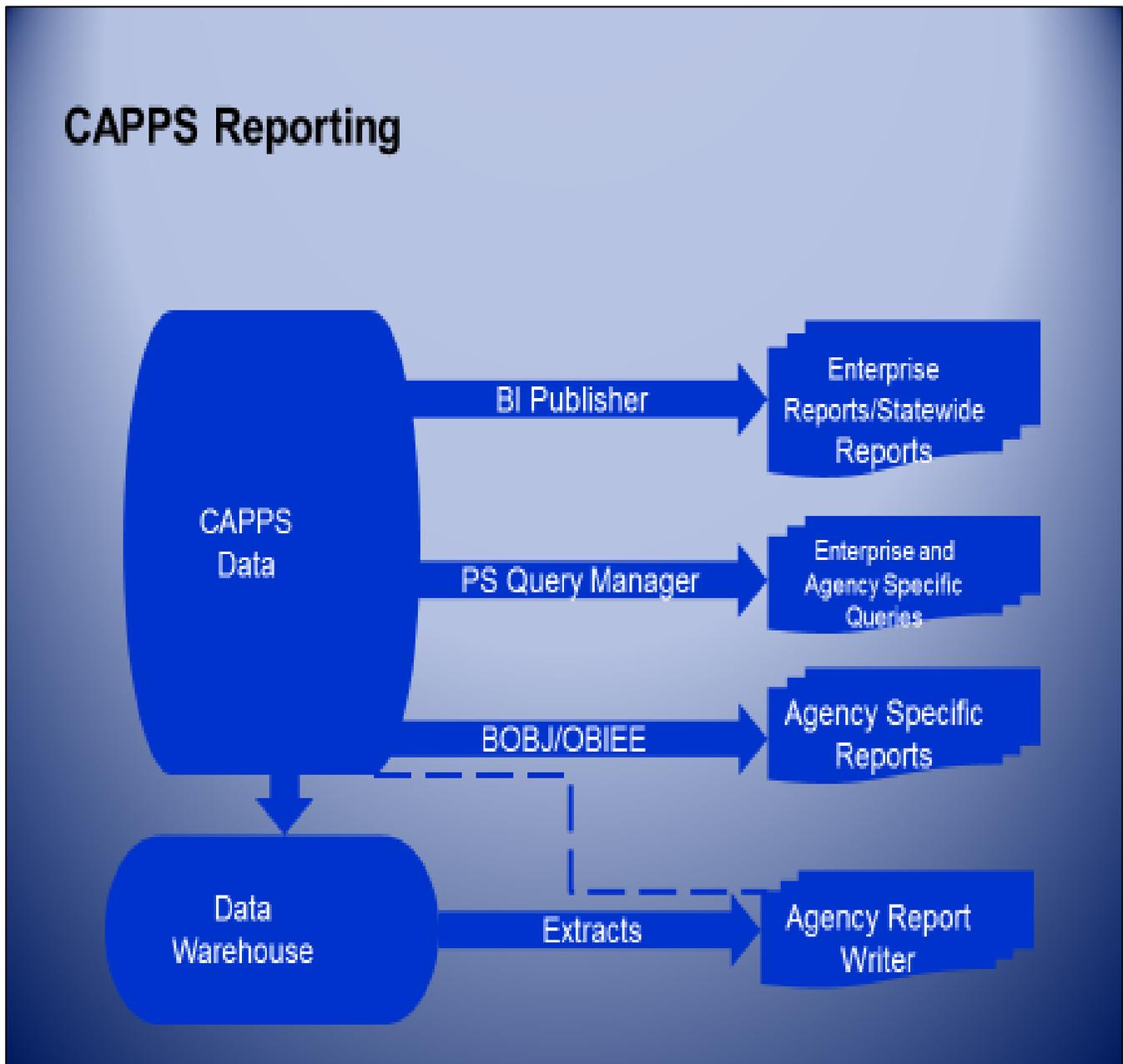
With multiple options for getting information out of CAPPS, how does an agency know which is the best approach for their business needs? Most agencies will probably select two or more approaches for creating reports. Many reports are delivered with the baseline PeopleSoft system and many others have been developed by CPA and the CAPPS agencies that have been using PeopleSoft for several years.

Whether an agency identifies an existing report that can be configured for their use or requires the creation of a new Agency Specific Report, that request for support would follow the standard work management processes already in place for requesting CAPPS enhancements.

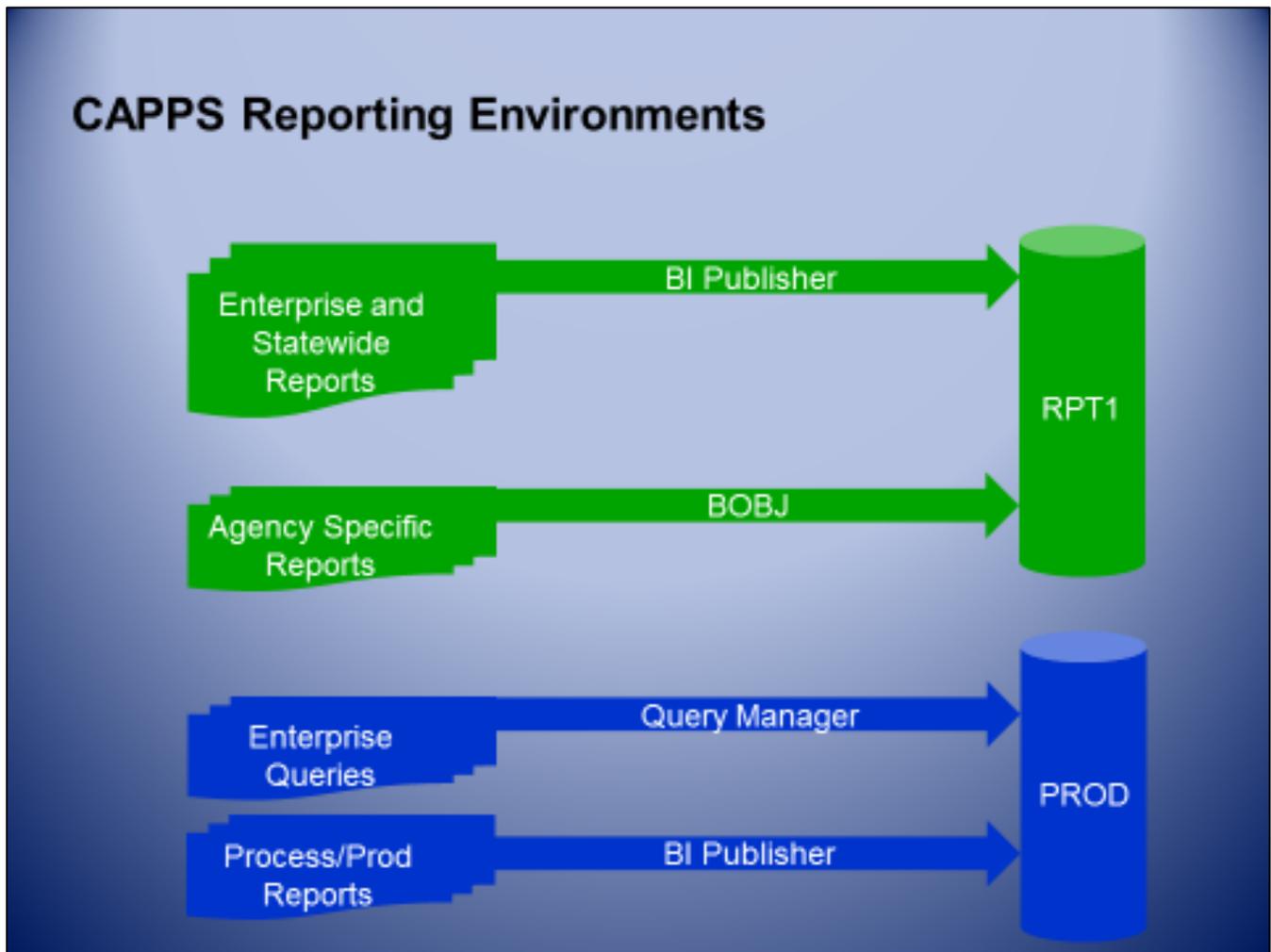
The following table and graphs provide the Reporting Approach at a high-level.

NAME	Enterprise (and Statewide) Reports	Agency-Specific Reports	Enterprise Queries	Agency-Specific Queries
TYPE	REPORT	REPORT	Query	Query
Audience	All Agencies	1 Agency only	All Agencies	1 Agency only
Tool	1) PeopleSoft BI Publisher 2) Oracle Business Intelligence (Taleo)	1. BOBJ-Webi 2. PeopleSoft BI Publisher (CPA will develop these reports as needed)	PS Query with Query Manager	1) PS Query 2) BOBJ-Webi
Created By	CPA	1. BOBJ created by Agency 2. BI Publisher created by CPA	CPA	Agency
Maintained By	CPA	1. BOBJ maintained by Agency 2. BI Publisher maintained by CPA	CPA	Agency
Data Pulled From	RPT Exceptions apply for some reports that must run as a part of process.	RPT	RPT Exceptions apply for some reports that must run as a part of process.	RPT
Governance Required?	Fix-No Enhancement- Yes	yes-for BI Publisher reports	Fix-No Enhancement- Yes	Not supported by CAPPS Help Desk
Security	1) Administered by CPA 2) Requested by Agency	1. BOBJ reports-Limited only to the individual creating query by default. 2. BI Publisher administered by CPA	1) Administered by CPA 2) Requested by Agency	Limited only to the individual creating query by default.

CAPPS Reporting Approach



CAPPS Reporting Approach



CAPPS Reporting Approach

Reporting Tools

Table 1, *Reporting Tools*, provides a listing of the tools utilized to support reports.

Table 1: Reporting Tools			
No	Tool	Description	Remarks
1	PS Query Manager	PS Query Manager is a web-based graphical SQL generator and offers fast access to data. This desktop tool is intuitive and the data can be sorted and summed as much as standard SQL will allow. The output can be displayed on the screen or exported to Excel.	PS Query Manager is useful for ad hoc reporting for Power Users who are well versed in the underlying PeopleSoft table structures and have a basic understanding of SQL
2	Business Objects (BO) Web Intelligence (Webi)	Web Intelligence (Webi) is an ad hoc query and reporting environment within the SAP Business Objects suite of products. Fundamentally, it is an environment that provides operational reporting and self-service access to data.	System (universe) changes needed in the Business Objects environment are done by the CPA Business Intelligence team according to the data requirements of agencies. Security - The CPA sets up the security for agencies within the Business Objects environment.
3	Oracle Business Intelligence Publisher (BI Publisher)	<i>Oracle Business Intelligence Publisher</i> is Oracle Corporation's Business Intelligence application.	This is a developer tool and is used in CAPPS Report and Production Environments by the CPA Reporting Team. This product was previously referred to as XML Publisher but has been renamed to BI Publisher.
4	Oracle Business Intelligence Enterprise Edition (OBIEE)	<i>OBIEE</i> is Oracle's additional Business Intelligence Application	OBIEE is a developer/user tool that is part of the Taleo functionality to provide reporting and BI functionality for those modules.
5	PS Application Engine	Application Engine programs are PeopleSoft's batch processing technology. This tool can be used to perform complex data processing and call a reporting tool such as Oracle BIP to present the data results.	This is a developer tool and is used in a CAPPS Production Environment only by the CPA Maintenance Team.

CAPPS Reporting Approach

Strategic Initiatives

The overall CAPPS Reporting Strategy contains several initiatives that will be implemented over time. The strategic initiatives that will be implemented are:

1. Data Warehouse
2. Agency Extracts Installation
3. Continue build of Business Intelligence
4. Creation of Central Report Repository
5. Creation of High Level Roadmap

Data Warehouse

The CPA (CAPPS) Data Warehouse Solution is SAP Business Objects. The CPA data warehouse is a robust data platform, which includes development of an enterprise ready data warehouse environment with change data capture capabilities, structured Operational data stores for Application development, Standardized architecture for Data integration, Data Quality, Metadata management and Security.

Agency Extracts Installation

Once requirements for the Standard Agency Extract are defined, approved by the CAPPS user group and extract processes created, the database will be available for file transfer or via database links. This will allow CAPPS agencies to load CAPPS information into their data warehouse or applications. These data extracts or links will require approval by CAPPS governance prior to the creation of the extract process.

Continue Build of Business Intelligence

CAPPS will continue to develop and leverage BI systems to better use available data to make easier business decisions. CAPPS utilizes SAP Business Objects as the primary business intelligence platform.

Central Report Repository (CRP)

CAPPS CRP online via FMX (or SharePoint) will contain listing of available reports, descriptions and examples of each report available.

High Level Roadmap

A High Level Roadmap will provide a summary view of the timeline for implementation of Reporting initiatives that will occur during the implementation of the CAPPS Reporting Strategy.

Summary

It is the goal of the CPA CAPPS Reporting Approach to make vital business information available to CAPPS agencies as efficiently and cost effectively as possible with enough flexibility to accommodate the many varied needs of the CAPPS agencies.

CAPPS Reporting Approach

Appendix A: Definitions

Reporting Definitions provides definitions of the terms used in this document.

Reporting Definitions	
Term	Definition
Agency Specific Reports	Report written specifically to meet an agency's defined requirements and are unique to that particular agency and won't produce viable data output for any other agency in the enterprise.
Centralized Report Repository (CRR)	Central Report Repository serves as a database inventorying all reports and specific details related to the reports.
Enterprise Reports	Standardized statewide reports produced on a regular basis for the provision of information to decision makers within an agency organization to support their business operations. Enterprise Reports return consistent data and typically can be run for any agency
Power User	<p>Represents users with an expert understanding of the system online functionality as well as underlying data structures. Power Users often serve as a resource for their agency business customers when system related questions or issues arise.</p> <p>In the context of reporting, the term is used to distinguish those who know a query language and uses it to create specialized extracts and reports.</p> <p>Characteristics of a CAPPS Power User:</p> <ul style="list-style-type: none"> • Prepares reports on demand for all levels of management • Possesses a working knowledge of basic SQL • Understands the meaning of the data elements and can determine necessary criteria to select a subset of large databases • Usually does not approve transactions or make decisions related to policies or procedures • Downloads data and executes reports or queries for business customers
Private Query	Custom PeopleSoft Queries created by an agency Power User that are limited to that agency or individual user.
PeopleSoft (PS) Query Manager	PS Query Manager is a SQL generation tool with a graphical interface that is used by Power Users for ad hoc data extracts.
Public Query	Predefined PS Queries that cannot be modified by an agency user and can be used by all PeopleSoft users that have access to the query.
Reports Maintenance	Refers to changes to a report once it is placed in production or in a position of use by the Agency.