

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 3
2. AMENDMENT/MODIFICATION NO.: 0002	3. EFFECTIVE DATE 12 December 2003	4. REQUISITION/PURCHASE REQ. NO. W81W3G-3289-3499	PROJECT NO. (If applicable)	
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			X	9B. DATED (SEE ITEM 11) 17 NOV 03
				10A. MODIFICATION OF CONTRACT/ ORDER NO.
				10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ___ is extended X is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER No. ITEM 10A
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR43.103(b)
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ___ is not, ___ is required to sign this document and return ___ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
IDIQ Service Contract for Project Controls Support Contract for the Baltimore District

Solicitation

Section C "Scope of Services"

Paragraph 4.2-The web link provided for further information on P2 is no longer available to sources outside of The Department of Defense therefore the attached document entitled "Preparing for P2" is provided for your information.

Section J "List of Documents, Exhibits and other Attachments"

Exhibit A – "Proposal Submittal Instructions", revised 4 December 2003

Paragraph 4 entitled Price Proposal Requirements

Sentence (1) should read "The offer, Standard Form 33.

Attachment: Preparing for P2

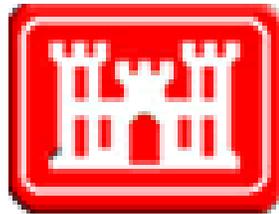
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
BY _____ (signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)	

Preparing for P2

**Project Management Business
Process (PMBP) Initiative**

**Official Version 9
17 November 2003**



Introduction

The purpose of the Preparing for P2 Guide is to provide users with a ready reference guide to help prepare for the deployment and implementation of P2. P2 is the Automated Information System (AIS) that supports the doctrine of ER 5-1-11 and enables compliance with the PMBP Business Process Manual, and the culture of a learning organization. This guide is not intended to be a P2 User's Manual, which will be provided when the P2 application is deployed at the respective sites.

To date, the PMBP Initiative program has responded to many questions that have been asked during the development of the business processes and P2. For additional information, a list of those questions with corresponding answers has been posted on the PMBP Frequently Asked Questions tab located on the [Project Management Business Process \(PMBP\) Portal](#).

Who Will Use This Document?

All USACE employees participating in Phase I of P2 deployment and implementation should use this Guide as a reference tool to prepare for P2 deployment. Phase I includes HQUSACE/MSC/Center/District resources from the Military, Civil Works, Environmental, Research and Development and International and Interagency Services mission areas.

The USACE employees who have the most to gain from this Guide fall into these categories:

- **District/Division Commanders** who need to possess a high-level understanding about what P2 requires for their organizations from a leadership perspective.
- **P2 Deployment and Implementation team members** who are responsible for preparing HQUSACE, MSCs, centers and districts for the deployment and implementation of P2.

P2 Deployment is defined as the activities including P2 System Hands-on training, PROMIS Data Conversion, installation of the P2 system and production support and is the responsibility of the P2 Deployment team with assistance from the local P2 point of contact.

P2 Implementation is defined as the on-going process the local management goes through to determine the best way to use the P2 system to accomplish work according to the site's standard local operating procedures. The local management teams are responsible for the on-going implementation of P2 at their local site.

This group includes:

- **Regional P2 Points of contact** who are responsible for the deployment and implementation of P2 in their local organizations
- **PMBP Regional Working Group (RWG)** members who will be helping their organizations prepare to implement P2

- **Information Management Office (IMO)** staff who are responsible for preparatory work including ensuring that desktop and LAN requirements are met. The IMO will also assist the P2 Deployment team with technical issues.
- **Project Delivery Team (PDT) members** including:
 - **Project and Program Managers** who are responsible for managing the project or program delivery teams and ensuring the customer's requirements are met and that the project/program is accurately input and maintained in P2.
 - **PDT members** who are responsible for establishing and updating project schedule and budget data in P2.
 - **P2 Local Configuration Managers (LCM)** who are responsible for initiating new projects in P2, and maintaining overall data integrity (formerly known as Local System Administrators)
 - **Resource Providers** who are responsible for determining the availability of and providing resources for project delivery teams or program delivery teams
- Others that the local site deems appropriate to be involved with P2 deployment

For a summary listing of the job roles ("actors") outlined in the PMBP Manual, refer to the [Desk Manual](#). For a detailed explanation of the roles and responsibilities of each "actor," refer to the [Roles and Responsibilities](#) reference document in the PMBP Manual.

How to Use this Guide

This Preparing for P2 Guide should be used for the following purposes:

- to understand how P2 functions as the supporting AIS of the Project Management Business Process (PMBP)
- to understand the relationship between P2 and other USACE automated information systems
- to educate the local Command about the new P2 product being deployed in the near future
- to better understand and prepare for the technical requirements that must be met to successfully deploy and implement the P2 software.
- to better understand and prepare for the technical requirements that must be met to successfully implement the P2 software.

How This Guide Is Organized

This Guide consists of nine parts.

- Part I: What P2 Will Do For You
- Part II: P2 Interfaces With USACE Information Systems

- Part III: USACE Automated Information Systems Being Replaced By P2
- Part IV: Your Hardware, Software and Connectivity Needs
- Part V: P2 Roles and Responsibilities
- Part VI: Training You Need to Use P2
- Part VII: How P2 Will Be Delivered to You
- Part VIII: How You Will Get Help
- Part IX: How P2 Will Be Updated and Maintained

Acknowledgements

The P2 Project Delivery Team would like to thank the PROMIS team for the idea of the conceptual outline of the "How To Get Ready for PROMIS" Guide. The original framework of the Preparing for P2 Guide was built on the template of the PROMIS Guide.

The P2 Project Delivery Team would also like to thank all of the many subject matter experts who have contributed content to the Preparing for P2 Guide and the information and guidance papers currently under development.

Conventions Used In This Guide

-  This icon represents a "note" - a point of information about the topic being addressed. The reader will find important tips about future plans or relevant additional information.
- URL hotlinks - throughout the document, URL hotlinks have been added to certain key words. As long as the user is on the USACE network while reading the Guide, he or she will be able to immediately access additional information about the underlined key word by clicking on the URL.

Future P2 Subject Information and Guidance Papers To Be Released

Specific, final details and instructions for certain P2-related subjects were not available at the time of initial publication of this Preparing for P2 Guide. Additional P2 subject information and guidance papers will be developed and provided to USACE as soon as they are available, and before P2 deployment begins. The information and guidance papers will become appendices to this Guide and will be made available through the PMBP Portal, as well as communicated to senior leadership and the P2 deployment points of contact.

The P2 subject information and guidance papers are being developed as the P2 Project Delivery Team makes final decisions on key subject matter areas as outlined below:

- **Appendix II: Information Management Requirements for P2 Deployment and Support Including Description of P2 Help Desk Process and How P2 Is Put Together**
- **Appendix III: P2 System Hands-On Training Requirements and Strategy**
- **Appendix IV: CEMRS Replacement of FORCON/CERAMMS Information Paper**
- **Appendix V: Corporate Management Information (formerly PPDS) Information Paper**
- **Appendix VI: General Investigations (GI) Database Transition Information Paper**
- **Appendix VII: CAPCES Information Paper**
- **Appendix VIII: RMS-P2 System Interface Information Paper**
- **Appendix IX: PROMIS to P2 Data Conversion - Part 1**
- **Appendix X: CEFMS-P2 Referential Data Interfaces Information Paper - Part 1**
- **P2 Project Delivery Team Recommendations for Transition Plan from Legacy USACE Automated Information Systems to P2**
- **P2 Help Desk Process**
- **Detailed Guidelines for CEFMS Data Clean Up and Conversion**

The CEFMS Data Conversion subject guidance paper will include specific information regarding Purchase Request and Commitments and data cleanup for CEFMS inactive employees and inactive organizations.

- **Future Business Process for CEFMS PR&C Creation and All Other Interface Processes**
- **P2 Deployment Schedule and Requirements for Preparation**
- **P2 Technical Architecture**
- **PMBP Portal Functionality as a Collaborative Workspace for the Project Delivery Team (PDT)**

Source for Additional Information

If additional information is needed please contact the P2 PM located at the Huntsville Center (HNC). The P2 PM for this effort is Mr. Terry Patton (256-895-1844). The Business Process/P2 Project Delivery Team (PDT) provides functional support for P2 development.

Preparing for P2

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What P2 Will Do For You

P2 is the tool (AIS) that enables USACE to implement its business processes and to change to its desired Project Management Business Process (PMBP) culture. USACE is committed to accomplishing work through project-focused teams, using proven project management practices.

P2 is a suite of commercial-off-the-shelf (COTS) software applications configured to support project execution in the Military, Civil Works, Environmental, Research & Development and Interagency and International Services (IIS) mission areas in Phase I of its deployment.

The ultimate goal is to manage all project and program work through P2. Phase II of the PMBP Manual and P2 initiatives will include incorporating and managing all remaining work as a project in P2, and creating additional interfaces between USACE legacy systems and P2 in accordance with evolving business processes.

The ultimate goal is to manage all project and program work through P2. Phase II of the PMBP Manual and P2 initiatives will include increasing the user friendliness of P2 and creating additional interfaces between USACE legacy systems and P2 in accordance with evolving business processes.

Previous software systems such as PROMIS, were deployed without standard business processes. P2 is different in that it is the enabling tool for the new USACE business processes. The P2 system functionality is being configured in a way that keeps the focus on delivering the best tools to the Project Delivery Team (PDT), including Virtual Teams, to support project planning and execution while also supporting programmatic processes, Regional Business Centers and corporate data needs at all levels of the organization as a by-product.

The key benefits of the P2 system include the following:

- Establishment of a single Project/Program Management Database
- Single-point of data entry
- Support to Project Delivery Teams, including those that are virtual teams across USACE
- Establishment of consistent tools and processes
- Support for pro-active program/project management
- Increased efficiency and coordination
- Increased control of project execution at the local level
- Provision of management information as a by-product of PDT activities
- Increased visibility of resources

- Increased interaction/communication with customer as a member of the PDT
- Higher Quality Projects / On time / Within Budget
- Shared management of projects by all project delivery team members using consistent business processes

The suite of P2 modules includes: PMBP Portal, Oracle Discoverer, Oracle Financial Analyzer (OFA), Oracle Tutor, Oracle Projects (OP), Project Partners OP3 interface, Primavera Project Planner for the Enterprise (P3e), and Primavera Primavision.

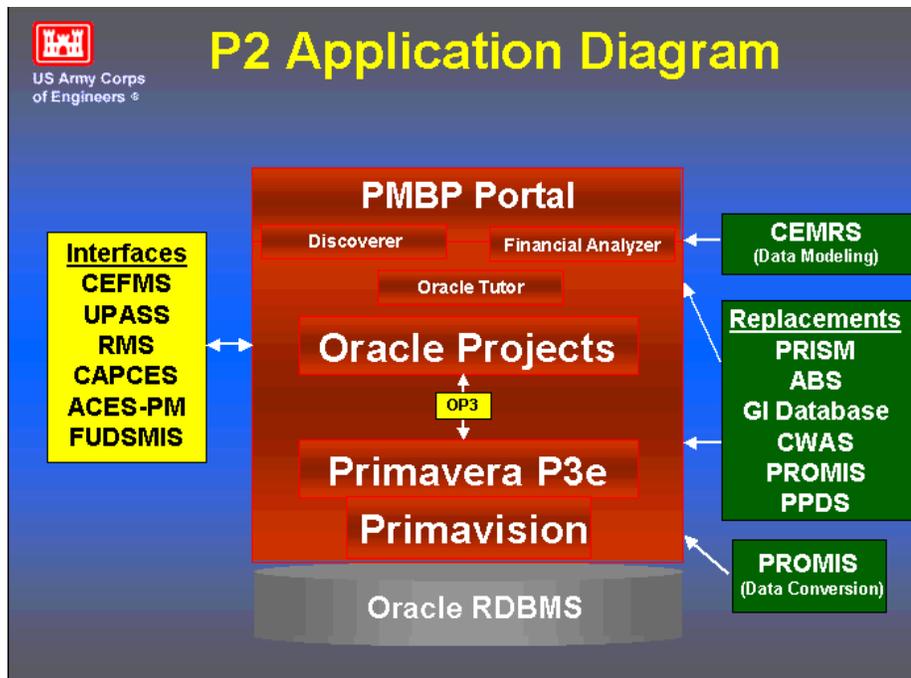


Figure 1. P2 Application Diagram

- **PMBP Portal:** a web-based knowledge management portal that provides the latest information about the PMBP initiatives, including P2. The PMBP Portal is available at <https://pmbp.usace.army.mil>.

As P2 is deployed to each location, users will access the P2 system through the PMBP Portal using their U-PASS account information.

- **Primavera Project Planner for the Enterprise (P3e):** the project management tool that provides the PDT with project scheduling capabilities and extensive resource management options in a single COTS package, configured to support the USACE PMBP, replacing all network analysis software currently deployed in USACE.
- **Primavera Primavision:** the web-based project and program management tool that provides internet access for project delivery team (PDT) members to view and update existing projects as well as access for management to evaluate project and program workloads

- **OP3 Interface (Project Partners LLC):** a commercially available interface between Oracle Projects and Primavera P3e. The interface allows information to flow in a synchronized fashion passing key data back and forth between the two applications.
- **Oracle Financial Analyzer (OFA):** the program management tool to be used primarily by budget/program analysts and program managers at District/MSD/HQ level for interactive views (with drill down and roll up capability) and more complex modeling and analyses of financial data. OFA is also configured to support the USACE PMBP, and will incorporate current programmatic and budgeting functionality of such legacy systems as PRISM and ABS and replace the functionality of providing Work Allowances and re-programming of CW funds currently found in the Civil Work Allowance System (CWAS). OFA functionality will also replace many standard reports and enable the user to create customized views of the data to address specific needs. CEMRS, the Corps' next generation manpower requirements tool is under development. It will use OFA analysis and modeling functions to equitably distribute Full Time Equivalent (FTE) authorizations to the field.
- **Oracle Discoverer:** the COTS tool to be used for ad-hoc queries and reports from the database.
- **Oracle Projects (OP):** the web-based COTS tool that will become the central repository for all USACE project information, configured to support the USACE PMBP, and serving as the control point for all P2 system interfaces with USACE legacy automated information systems.
- **Oracle Tutor:** an automated business process documentation tool used to prepare the text and process flow charts for the web-based PMBP Manual. It is not an execution component of P2. Tutor documents provide the linkage between the USACE business processes and the P2 application. The PMBP Manual is easily accessible on the PMBP Portal.

Programs and Project Management Tools (planning & executing)

P2 consists of a suite of automated COTS project and program management, analysis and reporting tools, configured to support the USACE PMBP, to be used by the project delivery team (PDT) and the vertical teams in planning, executing, and reporting project and program information. P2 also allows people outside of the immediate PDT to review project information.

The tools available within the P2 Suite allow USACE employees to:

- Single point of entry
- Initiating new projects
- Grouping and sorting projects to make displays of the information convenient and meaningful
- Developing and maintaining project activities (schedule, cost, resources, dependencies, etc.)
- Analyzing data for workload analysis and resource leveling
- Creating the Project Management Plan (PMP) components electronically
- Creating and maintaining project and budget versions and "What If Scenarios"
- Tracking project and program execution
- Facilitating and restricting the creation of purchase requests and commitments (PR&Cs) in CEFMS
- Defining and monitoring budgets
- Managing FTE requirements/authorizations
- Using the on-line PMBP Manual to obtain on-line help about Business Processes and P2

Single Point of Entry

The web-based PMBP Portal provides USACE employees with a single point of entry for access to the modules of P2 and CEFMS for managing their work. The PMBP Portal's single sign-on functionality allows users to automatically access the web-based modules of P2 such as Oracle Projects (OP), Oracle Financial Analyzer (OFA), Oracle Discoverer and Primavera Primavision, by utilizing their respective U-PASS ID and password. The modules of P2 have also been configured to share data through internal interfaces, so that users do not have to enter redundant data in multiple systems. For example, project level data entered in OP will be sent to P3e through the OP3 interface. Activity data entered in P3e will be interfaced with CEFMS through the OP3 interface.

The Portal will also serve as the user's "home base" for their daily work, providing them information on their own projects as well as easy access to additional information from other sources throughout USACE.



USACE employees will continue to enter their user names and passwords separately in order to access applications that are not web-based nor single sign-on compliant. Examples include, but are not limited to: P3e, CEFMS, and RMS.

Initiating new projects

After USACE accepts work, the Local Configuration Manager (LCM) initiates the project in P2 by completing the Project Quick Entry Setup in the Oracle Projects (OP) module of P2. The LCM enters project information to define the project including project name, organization, project manager, etc.

The LCM should be someone familiar with the unique characteristics of projects and programs to consistently enter project level attribute data. The LCM could be the PM or a PDT member, probably a budget analyst or program analyst. This position is not to be confused with the P2 Corporate System Administrator who would be responsible for things like access security, global data, etc.

The PM provides the project information to the LCM. (A form will be available for this purpose). The LCM will enter the information into P2 and will communicate with the project manager for data verification and approval. Oracle workflow will be used to automate communication between the project delivery team members.

This takes the effort of basic project-level data entry away from the PM so that he/she can stay focused on:

- Building a relationship with the customer as a project delivery team member by increasing communication
- Working as a member of the PDT for successful delivery of the project

- Better communications for better project planning, continuous improvement, and execution
- Managing the project using best business practices

Once a project has been initiated in the Oracle Projects (OP) module of P2, and the project status has been changed to "approved," the OP3 interface automatically creates project and task work items in CEFMS, which is then available to receive the funds on the project.

The OP3 interface also sends this approved project level data to P3e where it will be available to complete project initiation and planning.



Please note that the workflow process for the creation of work items is currently being finalized. More information on the use of workflow will be made available before P2 is deployed.

The LCM opens the new project in P3e (created through the OP3 interface) and then uses the **Project Architect** feature of P3e to "jump start" the creation of activities and schedules for their project by selecting the appropriate base methodology (also known as the project plan template) based on the type of work accepted. A base methodology is a set of activities and associated information that serves as a framework for a project plan or part of a project plan. Base methodologies include recommended activities, work breakdown structure (WBS), and organizational breakdown structure (OBS) definitions, and may also include predecessor and successor relationships between activities, activity role and resource assignments, expenses, work products and documents, activity codes, and resource estimate data. A project plan uses one base methodology.

By using USACE specific base methodologies, the LCM will be able to create custom project plans by selecting, combining, and tailoring methodologies, rather than creating project plans from scratch, thus increasing efficiency for initiating, planning and executing projects. The LCM can also copy an existing project if it contains the work breakdown structure and activity data that meets their business requirements.

The Military (including Host Nation), Civil Works, Environmental, Research and Development and International and Interagency Services mission areas utilize plug-in methodologies to address additional mission specific requirements. A plug-in methodology provides additional level of activity detail and can be plugged in, or linked, to a base methodology as needed. In Civil Works, plug-in methodologies allow the project to "grow" over time through its phases of Reconnaissance, Feasibility, Preconstruction Engineering and Design (PED), etc. A project plan can combine zero, one, or more plug-in methodologies with a base methodology.

For additional details on the mission specific descriptions of base methodologies and plug-ins, refer to the mission specific reference documents in the PMBP Manual: [Military](#) (including [Host Nation](#)), [Civil Works](#), [Environmental](#), [Research and Development](#) and [International and Interagency Services \(IIS\)](#).



Please note that the mission specific reference documents are currently being revised to reflect the final P2 configuration, therefore, the information currently shown in the documents is subject to revision.

Grouping, sorting, and filtering projects to make displays of the information convenient and meaningful

Users can organize the projects in the Enterprise Project Structure (EPS) in P3e into groups according to specific categories, such as Primary Congressional District and project manager, using project classification codes. The Project Manager/User can use project classification codes to group, sort and filter their projects, and arrange them hierarchically for easier and more convenient views of their projects. These customized layouts can be saved so that the data is displayed the way the user wants to see it each time they open the P3e application.

The Project Codes dictionary is global to the entire USACE organization. The Project Delivery Team can use project codes to group projects, and to rearrange or consolidate large amounts of information.

Developing and Maintaining Project Activities

P2 defines an activity as the lowest level of a project's work breakdown structure (WBS) and, as such, are the smallest subdivision of a project that communicates how work will be accomplished. The primary resource assigned to the activity is the element of the organization that will perform the work, and is typically responsible for tracking and recording the progress of the assigned activity in P3e. The project manager is typically responsible for managing and tracking the progress of the overall project.

The Project Delivery Team can enter activity predecessor and successor relationships, start and end dates, resources, constraints, and other schedule related items for each activity.

Activity Types

Activity types control how the P3e module of P2 calculates an activity's duration and dates. P3e defines five activity types: task dependent, resource dependent, level of effort, start milestone, and finish milestone. Each activity must be assigned an activity type.

Activity Codes

In the P3e module of the P2, PDT members can define specific information related to each activity using **activity codes**, which have been tailored according to specific USACE business requirements. Activity codes enable PDT members to efficiently, group, sort, filter and report on activities. Types of activity codes include work category code and contracting type.

The PDT members can also classify (or code) an activity to support alternate or horizontal programmatic roll-ups. The type of classification data assigned differs depending upon the project type.



Phase I of P2 focuses on five mission areas: [Military](#) (including [Host Nation](#)), [Civil Works](#), [Environmental](#), [Research and Development](#) and [International and Interagency Services \(IIS\)](#). For additional information about the program specifics for Phase I mission areas, click on the mission area listed above to see the on-line PMBP Manual reference documents.

Using Milestones

In P3e, there are two types of milestone activities: finish milestone activities and start milestone activities. Because these milestone activities do not have a duration, they are defined as “zero-duration” activities. They are indicators of starting or completing events and plot as a diamonds in the P3e Gantt chart, which is a graphical depiction of a project’s activities and schedule.

Activities may also have milestone *activity codes* so that users can find and group activities easily and report on activities according to milestone (along with the other activity codes).

Resourcing Activities and Estimating Costs

P2 gives us the capability to resource our activities from one, corporate Resource “pool” and build our activity and project cost estimates from within one application - the P3e module of P2.

When P2 is deployed, the project manager, in conjunction with the resource providers, will be able to resource activities initially at the lowest organizational level and will also be able to assign available resources from other USACE organizations. This is an important new benefit of P2 - the ability to seamlessly access any organization in USACE to assemble the virtual team to accomplish the project. (Before deployment of P2 is complete across USACE, the intent is to provide the capability to resource activities at the individual level where appropriate).

Fully burdened labor rates per time period (with all overhead factors applied) come from the CEFMS interface to develop the estimated cost of performing the activity based on the estimated duration of the work

After work has been performed the CEFMS interface will return actual costs to P2 at the activity level, for easy comparison to estimated or “budgeted” costs.

Analyzing data for workload analysis and resource leveling

Resource Providers, Project Managers and Project Delivery team members will be able to identify time periods when resources are overloaded during execution, such as from previous slips in schedules, and where other options like contracts/overtime may need to be considered.

During Workload Analysis and Resource Leveling, Resource Providers can readily see all activities resourced to their organization and attributes of those activities such as description, schedule, status, estimated cost and actual cost-to-date. Resource Providers can also readily view resource commitments for all resources under their control.

Results of this analysis will provide feedback to the PDT during PMP development to make different method of accomplishment decisions up-front. Analysis of this information also provides input to Regional Business Center decisions to balance workload across organizations.

There are several methods to view resources across projects in P2. One method is thru the Resource Tab in Primavision.

Primavision is a web-based tool with many of the same capabilities of P3e that provides quick and easy access for PDT members to perform many of their required activities, with the added flexibility of being web-based. This is another important new capability and benefit that will allow the PDT to access their project data and perform many project management activities from remote locations such as from off-site meetings or even from the field during construction.

Creating the Project Management Plan (PMP) components electronically

PMP development is comprised of a number of individual processes designed to support the PDT in planning for success and setting up the necessary data to execute the plan. This Project Planning Phase may seem more time consuming than in the past, but it supports the PMBP objective of spending the right amount of time planning the project up-front to maximize the chances for success and minimize problems during execution

P3e functionality called "Work Products and Docs" will allow the PDT to attach project related plans, scope, change management plan and risk management plan directly to the project. The PDT will also be able to store project related documentation, such as the plan components of the PMP, within the discussion forum section of the electronic Project Management Plan (e-PMP, formerly known as the "project data sheet"). This will optimize communications between all PDT members. The e-PMP will be accessible via the web-based PMBP Portal. The PDT will include hyperlink references to the Portal discussion forum within P3e for ease of reference by all PDT members.

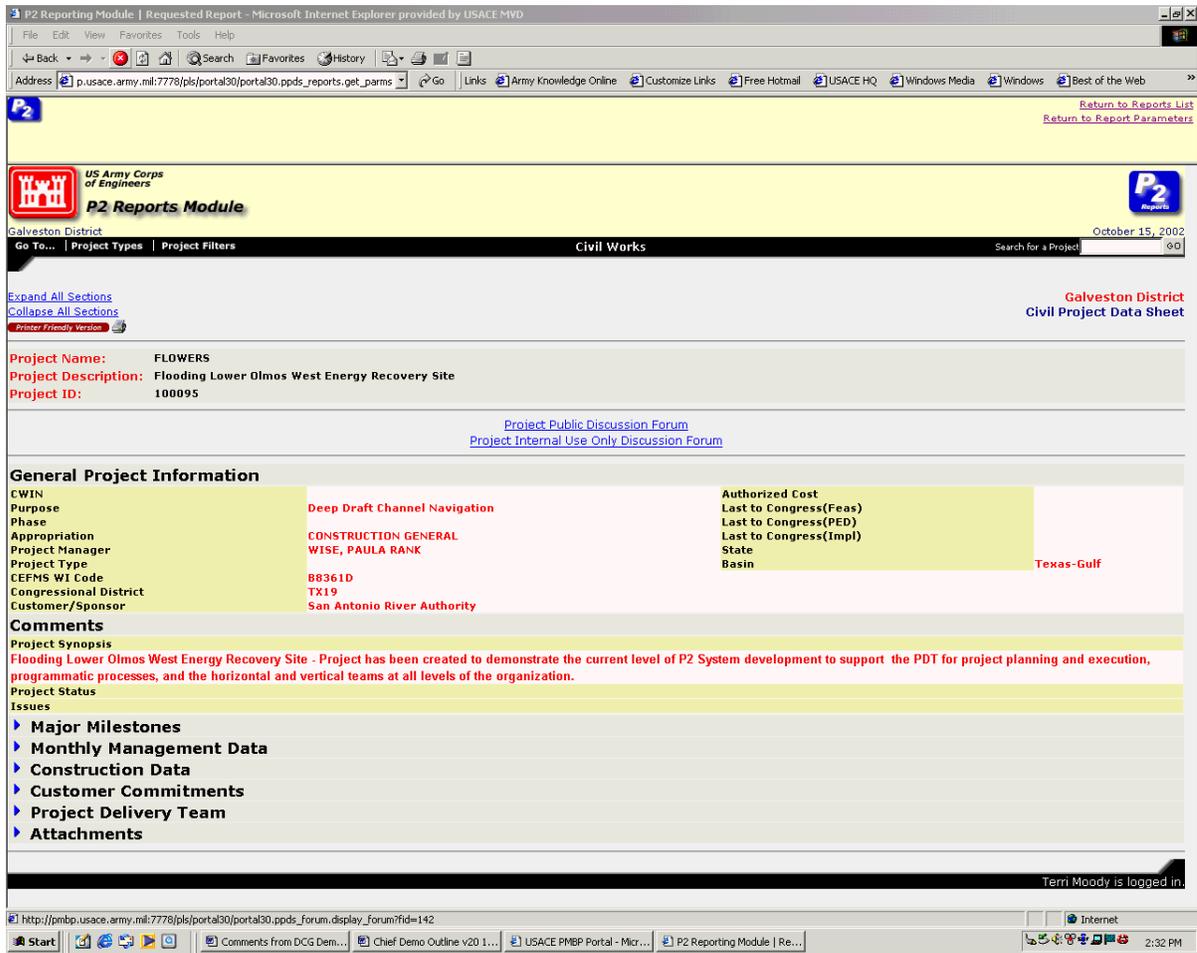


Figure 2. PMBP Portal e-PMP

The e-PMP will allow the PDT to electronically access all components of the project management plan for quick review and approval during PMP Development and for quick and easy reference during Project Execution and Control. The e-PMP will contain the information outlined in the [PMP/PgMP Content](#) reference document in the PMBP Manual including the minimum requirements for the PMP.

Creating and maintaining project and budget versions and "What If Scenarios"

P2 provides the capability to create and maintain different versions of a project to reflect different project conditions or assumptions in all mission areas. For example, in Civil Works, different budget versions of a project can be created and saved in the Oracle Projects (OP) module to define the project under different conditions such as full "Capability," Constrained" (by OMB budget ceilings), or as submitted in the "President's Budget" version.

This versioning functionality can be used to create "What- If" Scenarios and used by the PDT, including budget and program analysts, to manipulate or redefine existing projects to model the impacts of what "might occur," such as:

- A change in funding level, such as constrained funds during a Continuing Resolution Act, (CRA) period, possible re-programming of funds, or a congressional add
- A change in product or project delivery time (such as new schedule constraints or completion requirements)
- A change in scope requirements
- Or to assess impacts and make necessary adjustments in Civil Works as Congressional Priorities change

Both the P3e and Oracle Projects (OP) modules of P2 have functionality which can be used as change management / risk management tools.

"What if" scenarios can be performed within P3e by the PDT to address issues during project execution and also performed during the same time period by the vertical team on budget versions of the same project data for programmatic purposes in accordance with program specific processes.

At the project level, P3e functionality also supports backward calculating schedules to identify critical paths resulting from real or potential constrained project end dates. This facilitates **Risk Management** by identifying risks to project success early enough to document in Project Management Plan Development, and highlight later for focused management attention during execution.

At the program level, "what if" scenarios facilitate analysis and impacts of budget constraints or receipt of additional funds. This budget data will also be imported to Oracle Financial Analyzer for further analysis.

This versioning functionality also facilitates analyses scenarios/drills being performed at MSCs and HQ rather than at the field level to reduce need for data calls or other requests for information and increase communication and coordination between each level of the USACE organization.

Tracking project and program execution

The PDT is responsible for updating and statusing or "progressing" the activities they are responsible for in P2, which will allow measuring performance against the project baseline, which defines expectations, quality requirements, responsiveness to change, and coordination of their respective products and services with other PDT members.

PDT members will have various methods for tracking the progress of their activities within P2. Primavision, the web-based project management tool, will allow PDT members who are responsible for progressing or statusing their activities to do so through the web. PDT members who have daily responsibilities for monitoring and progressing activities may want to use the P3e module of P2 for more complex project management functions.

Resource providers will also be able to use Primavision to evaluate workload and resource leveling requirements.

In addition to establishing the basic project schedule, it's important to consider establishing **Thresholds** based on Project Management Plan development decisions to closely monitor a project with high visibility or finish constraints.

By adding and analyzing thresholds the project delivery team can focus management's attention to those activities/projects requiring action rather than viewing all data on a standard report and manually searching for "problems". This gives the PDT members increased efficiency and time savings by having the system automatically monitor activity and project execution and generate **Issues**, thus helping identify problems before they occur and in enough time to implement corrective action. This analysis can also help make PDT meetings and PRB meetings more focused and efficient by concentrating on projects and activities by exception.

Resource providers can also use thresholds for cost (% variance) to uncover issues pertaining to resources. This Facilitates forward-looking, pro-active view of projects and programs rather than backward looking, traditional reactive "metrics."

P2 also facilitates convenient comparison of baseline versions of a project schedule, such as one against which performance objectives will be measured, to the "current" or working version of the project schedule. P3e provides for Gantt chart views, or graphical depictions of the project schedule, to be plotted side-by-side for multiple versions of the same project for easy comparison of activity and project status.

Facilitating and restricting the creation of purchase requests and commitments (PR&Cs) in CEFMS

After the Resource Estimate is developed for each activity, the information on the activities (dates, organizations and costs) is interfaced to CEFMS to constrain and validate the data choices to complete initiation of Purchase Requests and Commitments (PR&Cs) in CEFMS. This assures that the right amount of funds is available to the right organization at the right time, and assures that the project delivery team is executing the plan that they have developed.

This is a significant benefit over prior systems because it assures that we "Plan the Work" and then "Work the Plan," and not only assures data integrity between the project management and financial accounting systems, but it eliminates the need to re-enter redundant data in another system or database before allocating funds for the accomplishment of the work.

In accordance with the PMBP, for projects and programs that are to be managed in P2, the only way Purchase Request & Commitments can be created is through the CEFMS interface.



The PR&C interface is under the final stages of development. Therefore, detailed information about PR&Cs is subject to change. Approval and certification of the PR&Cs will remain a CEFMS function.

Defining and monitoring project and program budgets

PDT members will create budgets for their projects beginning at the activity level in the P3e module of P2. Budget versions of projects will also be interfaced with and stored in the OP

module of P2. The roll up features within P2 will allow the PDT members to view budget information in multiple ways providing easy access for analysis and reporting.

Resource providers and managers throughout USACE will be able to use P2 reporting features to prepare consolidated reports of budgetary information across projects, such as displaying the roll up of budget data by mission area.

For the Civil Works and Environmental mission areas, these project budgets will serve as the basis for program/project budget submittals. The Oracle Financial Analyzer (OFA) and Oracle Projects (OP) modules of P2 will replace the functionality within the current Civil Works Project Resource Information System for Management (PRISM) and the Operations and Maintenance Automated Budget System (ABS).

Budget versions in OP will be used to drive Civil Works funds requests from the field to HQUSACE for approval and release of funds. This is a replacement of, and reversal of the current Civil Works Work Allowance System (CWAS) functionality for issuing Work Allowances, but consistent with the concept that the business processes and applications support the project and the PDT.



The P2 Management Team will publish additional information about creating and maintaining budgets, Work Allowances and re-programming of funds before deployment of P2.

Determining project and program manpower requirements

Resource estimates for hired labor entered into P3e at the activity level will be the primary source for manpower requirement information previously entered into FORCON AND CERAMMS. This information will be extracted into Oracle Financial Analyzer (OFA) for analysis and modeling capability.

All levels of USACE management will be able to use P2 reporting capabilities to view Full Time Equivalent (FTE) requirements information by organization, project or mission areas.

The modeling capability of OFA will be used by HQUSACE to equitably distribute limited FTE authorizations received from Office of Management and Budget (OMB) and Department of the Army (DA) to all level of the Corps. The modeling results in OFA will be posted on the P2 Portal for easy access.

Using the on-line PMBP Manual to obtain on-line help about Business Processes and P2

The USACE Project Management Business Process (PMBP) Manual was developed as a web-based on-line tool to enable the U.S. Army Corps of Engineers to function as a project-focused organization, delivering projects on-time, within budget and meeting both the customers' expectations and serving the public interests.

The PMBP Manual is designed to apply to all work. With the corporate business processes defined, P2 will enable project teams to plan and execute work in a consistent manner. Program/project managers, PDT members and resource providers will have enhanced ability to plan work,

manage resources, determine shortfalls and take corrective action before a crisis develops. The PMBP Manual and P2 will be flexible, allowing work of any size and nature to be managed consistently across the organization.

The PMBP Manual was developed using Oracle Tutor to facilitate integration of the business processes with P2. This on-line software allows for continuous update and improvement and provides both written processes as well as a flowchart supplement designed to reach all users. Oracle Tutor also provides for specific role identification, using the Tutor term "actor," to allow users to recognize their responsibilities. As a web-based, on-line tool, the PMBP Manual offers immediate access to policy documents, reference documents, and easy navigation through all reference material from the Project Initiation phase through Project Planning, Project Execution and Control to closeout.



For additional information about the organization and functionality of the PMBP Manual, refer to the [Preface of the PMBP Manual](#).

P2 Reporting Tools - What You Can Get Out of P2

P2 has a wide variety of “Reports” and “Management and Analysis” tools available to suit the needs of any user in the horizontal and vertical project delivery teams (including the customer and sponsor).

One of the biggest limitations with previous systems has been the availability of “Reports” which have been the traditional vehicle for extracting the data from the system – and for most users, the real payoff for the up-front data entry and maintenance.

“Reports” and “Management and Analysis” tools are provided and function as a by-product of the PDT’s development, planning and execution of the project within P2 – with NO additional input required. The P3e module of P2 alone contains over 100 standard reports.

However, the USACE corporate focus, enabled by P2, is on “Management tools” to support analysis and built-in flexibility, rather than reliance on “hardwired” reports. Traditional “reports” can be replaced by displaying different views of the data in the various P2 modules – and printing a hard copy “report” if needed.

“Reports” or “Management Tools” can range from simple “flat” views of the data to more complex multi-dimensional analyses of data attributes. For example, the group/sort/filter functionality in the P3e module of P2 allows users to view data in ways that previously would have required running one or more standard reports.

The PMBP Portal contains a P2 Reporting module that provides flexibility and transparency allowing users to run reports on various types of project and program data that is automatically extracted from the appropriate module(s) of P2. The Portal pulls information from the correct data source based on the parameters entered by the user.

The key to a successfully designed P2 reporting module lies in the idea of providing the right information for the right resources at the right time. To accomplish this goal, information in the

P2 Reporting module will be arranged by category for ease of use. USACE employees will be able to select from templates and pick lists to run reports depending on the type of information they require. P2 will also provide the availability to run scheduled reports in overnight batch processes for increased timesavings.

Certain USACE employees may have access to specialized P2 reporting tools based on their roles and responsibilities on the PDT. For example, PDT members looking for specific detailed information about their project might run a report directly from the P3e module of P2. However, a Regional Business Center management team member might run a report from PMBP Portal in order to obtain consolidated programmatic information about a specific mission area or about all projects within a specific district.



The P2 Reports Team is finalizing the development of P2 Reports for both generic needs as well as specific mission area needs as this document is being prepared. Thus, more detail will be provided about P2 reporting capabilities as soon as it becomes available. The P2 Reports Team will also provide additional information about customer access to project-specific information via the PMBP Portal.

General categories for reports are outlined below:

- Project level reports - examples of some project level detailed reports (only a few examples are included, but P2 provides excellent flexibility for the PDT)
 - e-PMPs (electronic Project Management Plans)
 - Actual Cost for a project
 - Total Project Cost Summary
- Management level reports - examples of reports for resource providers and other management team members:
 - Workload Leveling and Resource Analysis report
 - Drill down capability by geography to query MSC/Center/District project and program information
 - Milestone Report (for all projects in a district or MSC)
 - Command Management Review (CMR) Reports
 - Visibility of project and program information via the PMBP Portal to enhance current PPDS functionality
- Civil Works Budget Information

The Oracle Financial Analyzer (OFA) and Oracle Projects modules of P2 will replace the current Civil Works budget system known as Project Resource Information System for Management (PRISM) and the Operations and Maintenance Automated Budget System (ABS). OFA is a multi-dimensional reporting tool that enables complex what-if modeling analysis and reporting. Budget information entered in the other modules of P2 will be extracted into OFA for analysis purposes. The program/budget analysts will be the primary users of OFA to produce such reports as the “2101” schedule of obligations and expenditures, Justification of Estimate (JOE) Budget Sheets, Fact Sheets, etc.

- Manpower Analysis

The P2 Reports Team is working with the Manpower team at HQUSACE to develop metrics and leverage the modeling capabilities of OFA to meet the business requirements of manpower in accordance with the Corps of Engineers Manpower Requirements System (CEMRS).

The program/management (budget) analysts will be the primary users of OFA.



Additional information will be provided as soon as it is available.

- Generating Ad-hoc Reports

The P2 Reports Team is working closely with each Phase I mission area to capture as many reporting requirements as possible allowing for the creation of standardized reports across USACE. The team recognizes that some ad-hoc reporting may still need to be completed at the MSC/Center/District level.

The Oracle Discoverer module of P2 will allow for ad-hoc queries and reports to be generated as long as the data is contained in the P2 and/or CEFMS database (although, some data in CEFMS protected by the Privacy Act will not be accessible). The use of Discoverer will be reserved for a well-trained cadre of individuals who require ad-hoc query and report functionality to complete their jobs.



The P2 Reports Team is working to continue identifying the business requirements for the use of the Oracle Discoverer module of P2. As queries and reports are completed and approved, additional information will be included in future revisions of this Guide.

P2 Information Security and User Maintenance

The P2 application design ensures common data names and definitions between P2 and various other USACE automated information systems. The P2 security framework provides a structure for users to access information that is required for the completion of their specific job without overwhelming the user with unnecessary information.



Additional information about centralized maintenance of referential data (pick lists, etc) will be included when it is finalized.

The interfaces between P2 and legacy USACE automated information systems and the OP3 interface between Oracle Projects (OP) and P3e provide a secure framework for data to be entered into *one* system one time and then interfaced to the right source to limit the possibility of errors or duplication of work effort.

USACE single sign on user IDs and passwords are administered in the USACE UPASS system. In order to utilize the user IDs and passwords from UPASS, the P2 development team built an

interface between UPASS and P2. Similar interfaces exist with other USACE systems today. The interface eliminates the manual creation and maintenance of separate user IDs and passwords in all P2 applications.

P2 Interfaces with USACE Information Systems

Corps of Engineers Financial Management System (CEFMS) Interfaces

CEFMS consists of 61 separate Oracle database instances. P2 will centralize project financial information in two Oracle database instances, one for Oracle Projects (OP) module and one for the P3e module of P2.

P2 interfaces with CEFMS will create the project work item, task work items and many of the other data fields required for the creation of Purchase Requests and Commitments (PR&C).

CEFMS PR&C Interface With P2:

The PR&C interface is a bi-directional interface between Oracle Projects and multiple instances of CEFMS required to:

- Provide the information needed to validate the PR&C in CEFMS using the project and task work item structure and budget from P2.
- Centralize P2 PR&C information from multiple CEFMS database instances by returning certified PR&C information to P2 including PR&C Number, PR&C Line Number and Certified Amount.
- Reduce the effort needed to create PR&Cs and increase the quality of data in both CEFMS and P2.

CEFMS Work Items Interface With P2:

The Work Items interface with CEFMS is required to:

- Create and maintain project and task work items in CEFMS from information entered in P2.
- Standardize the work item structure in CEFMS for use in creating Purchase Request and Commitments using P2 information.
- Provide a link between P2 projects and CEFMS Project Work Items by returning the CEFMS project work item numbers to Oracle Projects.
- Provide a link between P2 tasks and CEFMS Task Work Items by storing the unique Oracle task id in CEFMS and relating it to the task work item number in CEFMS. Linking the Oracle Tasks to CEFMS task work items in P2 facilitates the interfacing of project expenditures, PR&Cs and obligations to P2.
- Significantly reduce manual entry and maintenance of work items in CEFMS

- Reduce the entry time and increase the quality of data in both CEFMS and P2.

A work item in CEFMS is similar to the Work Breakdown Structure (WBS) in P2. The WBS in P2 is a hierarchical structure of tasks related to a project. CEFMS work items are hierarchical and represent projects and tasks. Budgets are assigned to resources on projects and tasks in P2. Similarly funding is assigned to work items in CEFMS.

The CEFMS Work Item Interface in conjunction with the CEFMS PR&C Interface will allow USACE to budget work in P2 and control the execution in CEFMS through the standardized use of work items and PR&Cs.

The CEFMS Work Item Interface will analyze the project and task structure and approved budgets in P2 and create the appropriate corresponding work item structure in CEFMS for each activity in P2. All work items created by the interface will be designated as P2 work items in CEFMS

Change in USACE Financial Management Business Process

The USACE PMBP Manual contains a new Work Management - Financial Management business process. The new business process represents a cultural shift for USACE in connection with the generation of work items and purchase requests and commitments.



It is important to note that the P2 Team, in keeping with the latest functional and technical design of the P2/CEFMS interfaces, is currently revising the Work Management - Financial Management business process. The updated version will be included in the PMBP Manual as soon as the information is finalized.

Resident Management System (RMS) Interface

RMS for Windows is a quality management and contract administration system designed by Resident Engineers to help their staff control/manage construction contracts.

The goal of the two-way interface between P2 and RMS is to capture construction contract information at its source, prevent duplicate data entry and share information during the construction phase of projects with all Project Delivery Team members. All of the contract data necessary for P2 during the construction phase of the project is stored in RMS and will be interfaced to P2.

RMS data stored in multiple databases will be consolidated into a single database for the interface and to facilitate reporting contract status information across the Corps thru P2.

CAPCES and ACES-PM

Directive information from the program office at HQ for Army projects is currently entered manually into PROMIS. The DIRNET module of CAPCES will be modified to receive project information from ACES-PM as well as CAPCES. Program managers at HQ will continue to enter directive information into DIRNET for Army projects. In addition, program managers at

MSCs will enter directive information for Air Force projects into DIRNET. Information from DIRNET will be used to create and update projects in P2. A copy of each directive will be stored on the Discussion Database in the Portal and linked to the project for ready access by the PDT.

Automatic interface of directive information from CAPCES (Army) and ACES-PM (Air Force) offers the opportunity to eliminate the manual entry of directives into the Oracle Projects module of P2. Milestone information from P2 that is currently entered manually to CAPCES and ACES-PM would be passed back to these systems by the interfaces. In addition, construction contract modification information will be passed back to ACES-PM.

FUDSMIS

Interface of Program budget information from Formerly Used Defense Sites Management Information System (FUDSMIS) will preserve access to this information for future use.

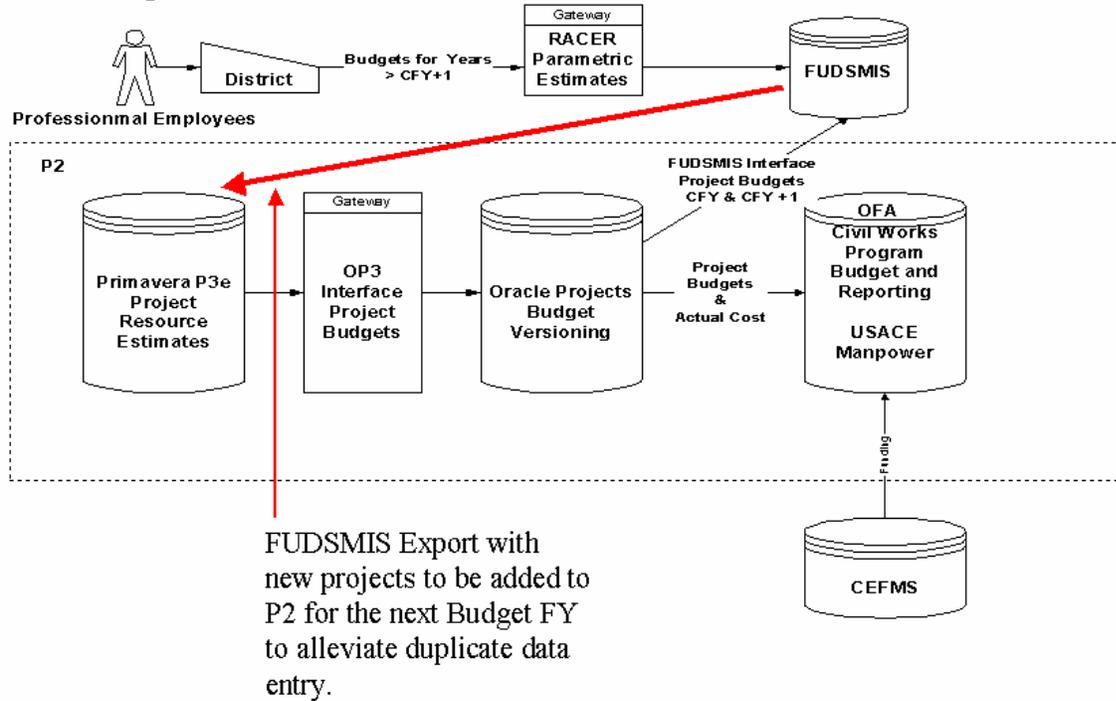
P2 and FUDSMIS will share data. FUDSMIS data will be used to create the FUDS projects in P2. Initially, this creation will include projects through on-going or starting prior to FY2005. Then, on an annual basis, any project included in the FUDSMIS work plan for the budget fiscal year will be added to P2. It should be noted that a FUDS P2 project equates to a phase FUDSMIS.

For initial data conversion (FUDSMIS to P2 as well as PROMIS to P2) it is important that all FUDS projects in PROMIS whose data will be converted have the PEAR code added in the External Reference data field on the Project Registration screen in the PROMIS System Administrator module. This will eliminate the creation of duplicate FUDS projects in P2.

After conversion, the P2 data will be used to populate the annual work plan information for all P2 FUDS projects that have execution scheduled in the current and budget fiscal years.

The diagram below shows the P2 - FUDSMIS interface.

FUDSMIS Interface
Data Flow Diagram



UPASS

The P2/UPASS interface is for maintaining user accounts within the P2 applications with synchronized usernames and computer-generated passwords that conform to Army Regulation (AR) 25-1 (supercedes AR 380-19). All user maintenance for the P2 application will be performed with the USACE UPASS application including P2 user creation, user deletion, and user password changes.

UPASS will maintain user accounts for the following P2 modules: PMBP Portal, Oracle Applications (including Oracle Projects, Oracle Financial Analyzer, and Oracle Discoverer), and P3e (Primavision maintenance may be added at a later date).

USACE Automated Information Systems Being Replaced by P2

Project Management Information System (PROMIS)

PROMIS is the current automated project management information system within the Corps. It interfaces with CEFMS, RMS (one-way interface), and 3 commercial Network Analysis System (NAS) packages.

P2 replaces PROMIS as the corporate program and project management system for USACE.

Project and Resource Information System For Management (PRISM)

PRISM currently provides budgeting and reporting of Civil Works Program resources and funding sources. It is used for development and defense of the annual Civil Works program and budget request to OMB and Congress, and to monitor program execution.

For the Civil Works mission area, the project budget versions in OP will serve as the basis for program/project budget submittals. The Oracle Financial Analyzer (OFA) and Oracle Projects modules of P2 will replace the functionality of PRISM. PRISM will support the development of the FY05 Civil Works program and budget beginning in the 3rd Qtr of FY03. PRISM will continue to provide program and budget data, and remain the database of record for the development, defense and monitoring of the Civil Works program and budget until all MSCs have deployed P2. At that time, PRISM will be no longer be used.

For additional information about the current PRISM system, refer to the [PRISM website](#).

Automated Budget System (ABS)

The Automated Budget System (ABS) is the automated information system (AIS) currently used to support the O&M program development and budget process. This includes the O&M, General, General Regulatory, Flood Control and Coastal Emergencies (FCCE), Mississippi Rivers and Tributaries (MR&T), and Bonneville Power, appropriations. ABS stores the full set of operating USACE projects, facilitates the creation of work packages and the ranking of these work packages, and includes a set of tools to analyze and report the impacts of different budget scenarios. P2 will replace ABS functionality and support the development of the O&M program and budget.

Current projects in ABS will become projects in P2. Work packages in ABS will be represented as one or more activities within P2. These activities will be ranked as work packages were ranked in ABS. Dependent activities must be given the same rank so that all activities required to accomplish a given piece of work are evaluated together. Resources, such as labor and contracts, will be assigned to each activity. Operations managers will use the P3e and Primavision modules of P2 to plan work and identify resources for all activities. P2 provides an interface with CEFMS in order to obtain actual costs. The Oracle Financial Analyzer (OFA) module of P2 will provide the analytical capabilities now provided by ABS.

ABS will support the development of the FY 2005 O&M program beginning early in 2003. As P2 is deployed, ABS data will be transferred to P2. ABS will continue to provide O&M budget data until the completion of the P2 deployment. Upon completion, ABS will no longer be used to support O&M program development.

Civil Work Allowance System (CWAS)

CWAS assists in developing and issuing work allowances, revocations, and reprogramming actions for the Civil Works appropriations of General Investigations (GI), Construction, General (CG), Operations and Maintenance, General (O&M), General Regulatory, Flood Control and Coastal Emergencies (FCCE), Mississippi River and Tributaries (MR&T), and Formerly Used Sited Remedial Action Program (FUSRAP). Historical work allowance records are maintained for each study, project, and program.

With the deployment of P2, budget versions in the Oracle Projects (OP) module of P2, and OFA functionality will be used to drive Civil Works funds requests from the field to HQ for approval and release of funds. This is a replacement of, and reversal of the current CW Work Allowance System (CWAS) functionality, but is consistent with the concept that the processes/applications support the project and the PDT.



Civil Works Program-specific Reference Documents are currently being revised to reflect the integration of current CWAS functionality in P2. Additional information will be provided as soon as it is available.

General Investigation Database

The General Investigations (GI) Database is a management information system which tracks individual Civil Works reconnaissance and feasibility study reports Schedules. The GI database contains status, cost, schedule and end result data for each report, and provides a means of tracking the relationship between a parent reconnaissance study and resulting multiple feasibility studies. It is currently used to produce input for Project Review Board (PRB) and Command Management Review (CMR) charts, management analysis, and responses to requests for information from the Office of the Asst. Secretary of the Army (OASA (CW)), the Administration, Congress and others. The database includes all active studies regardless of funding source (about 500), and all completed studies since 1989 (about 900). It also includes a program to generate the PRB/CMR back- up data.

P2 will replace the active file of the GI Database, and will include the capability to periodically roll out completed studies for inclusion in a completed file.

Study managers will use the P3e and Primavision modules of P2 to plan work and identify resources for all GI reports. P2 provides an interface with CEFMS in order to obtain actual costs. The Oracle Financial Analyzer (OFA) module of P2 will provide the management analysis and information retrieval capabilities now provided by the GI Database.

The data elements included in P2 will provide the same information on reports as the GI Database. Once all feasibility and reconnaissance studies and the individual reports they produce

are loaded into P2, the P2 PRB/CMR report generator will be able to produce data that matches the corresponding GI Database report, and P2 will replace the GI Database.

Corps of Engineers Manpower Requirements System (CEMRS)

CEMRS will be the single workload-based manpower requirements determination and analysis system for the Corps. CEMRS replaces both FORCON and CERAMMS, the current legacy systems for manpower requirements. Additionally, it will include RDT&E, RE and OMA, which are not included in any automated manpower requirements system.

CEMRS will use Oracle Financial Analyzer (OFA) analysis and modeling functions to equitably distribute Full Time Equivalent (FTE) authorizations to the field.

Your Hardware and Software Needs

Hardware and Software Needs

This section explains the hardware and software requirements for P2 in order to achieve successful deployment at all USACE Activities. Initial requirements have been provided to the MSCs and Districts through the P2 Deployment PgMP developed by the BP/P2 Deployment sub-team in April 02.

The minimum desktop requirements needed to operate P2 (including all Oracle and Primavera modules) are identified below:

Minimum System Requirements

- 200 MHZ + CPU
- Windows 95/98/NT 4.0/2000 (covers all modules of P2)
- Color Palette of 16k or 32k¹
- Monitor Resolution of 1024 x 768²
- 20 + MB of disk space
- 128MB RAM + (256 MB or higher recommended)
- Microsoft Internet Explorer 5.0
- TCP/IP network protocol
- Paging file should be set to 'Permanent' and Paging file should be big enough 40-50 MB
- J-initiator installed (1.1.8.7) note: A one-time installation when Oracle Projects is executed for the 1st time.



Memo dated 8 Nov 2000, signed by USACE CIO, Mr. Wil Berrios directed that all desktop operating systems would be Windows 2000 by 1 October 2002.

<http://www.usace.army.mil/ci/impolicy/w2k.html>

¹ To validate the color palette, right click on the Windows desktop and choose Properties. Click the settings tab and look at the Colors pick list. Now most adapters will only go up to "True Color," otherwise known as 32k.

² To validate the monitor resolution, follow the same instructions as the color palette. The tab is to the right of the Colors tab. Based upon the 1024x768 screen size, users may see a reduction of choices for the colors. Many low-end display adapters may not even have a choice of "True Color," and only will have "high color" (16k) as the highest option.

P2 Roles and Responsibilities

This section outlines the roles and responsibilities of the primary P2 users and focuses specifically on how they will use P2 to manage their work. Access to specific data within a project version is controlled by the role to which the user is assigned in the system.

Specific roles outlined in this section include *P2 Corporate System Administrator*, *P2 Database Administrator (DBA)*, and *Project Delivery Team (PDT) member*, that includes, but is not limited to, the *local configuration manager*, *project manager*, *program/budget analyst* and *resource provider*. For additional detail about the roles and responsibilities of these and other users, refer to the [Roles and Responsibilities](#) reference document in the on-line PMBP Manual.



Oracle Tutor uses the term "actor" throughout the PMBP Manual. An actor refers to either a specific USACE job title or a generic role associated with a given business process.

P2 Corporate System Administrator

The P2 development team is working with the Corps of Engineers Enterprise Information Services (CEEIS) to finalize the long-term operations and maintenance strategy for P2. The current plan is to establish a centrally located P2 Corporate System Administrator role that would be responsible for maintaining the centralized data dictionaries (lists of values/referential data) for the P2 application suite (specifically Portal, Oracle Projects, P3e, Primavision, OFA, and Discoverer).

The P2 Corporate System Administrator would ensure that all data dictionaries (i.e. "global data") and other data sets are synchronized, and would update any pick lists or menu items that need to be modified, after a request for an update has gone through the appropriate configuration management business process.

The P2 Corporate System Administrator would also be responsible for making sure the PMBP Portal security framework is up to date for Portal accounts.

Types of information to be maintained centrally in data dictionaries (known as "global data" in P3e) instead of locally maintained, include:

- Enterprise project structure (EPS)
- Roles (i.e. PM)
- Activity Codes
- Project Codes
- Project templates (project architect)
- Deletion of project records
- Admin categories and preferences

P2 Database Administrator (DBA)

The P2 development team is also working with the CEEIS to establish a centrally located P2 Database Administrator (DBA). The P2 DBA is NOT the same role as the "P2 Corporate System Administrator" outlined above. The P2 DBA would be the technical resource that makes sure all the databases are functioning, that all the interfaces with CEFMS and other USACE legacy automated information systems are working, and that connectivity is functioning, as it should between all the processing centers.

The P2 DBA would be part of the team at the processing centers where the centralized database resides.

Project Delivery Team (PDT) Member

The Project Delivery Team (PDT) is a multi-functional team who works in unison from project initiation through project closeout and is responsible and accountable for ensuring that projects are completed using the PMBP, and in accordance with the PMP. This involves PDT members accurately scoping, scheduling, and estimating their portions of the project as well as developing other relevant portions of the PMP/PgMP using P2. The customer is a member of the Project Delivery Team.

PDT members are responsible for ensuring activity information is entered in sufficient detail to describe the work so that the team can effectively execute the project and facilitate workload analysis and resource leveling.

PDT members are responsible for updating and progressing the activities in P3e (or Primavision) for which they are responsible, thereby allowing performance to be measured against the baseline plan in the PMP. Meeting customer expectations, addressing quality requirements, responsiveness to change, and coordination of their respective products and services is the responsibility of the PM and each PDT member.

Outlined below are a few specific roles of selected PDT members to show how the "actor" works with the P2 system to perform their work:

Local Configuration Manager (LCM)

The Local Configuration Manager (LCM) should be someone familiar enough with the unique characteristics of projects and programs to consistently enter project level attribute data. The LCM could be the PM, a PDT member, or a budget analyst or program analyst. This LCM is not to be confused with the P2 Corporate System Administrator who would be responsible for things like global access security, global data, etc.

The LCM will initiate new projects in the Oracle Projects (OP) module of P2, and complete additional project initiation steps in P3e before "turning over" the project to the PM and PDT. The directive or authorization to initiate the project can be received by the organization either electronically or in hardcopy. The Project Manager (PM) provides the specific project

information to the LCM using a form to indicate all relevant information. The LCM will enter the project level information into P2 and will communicate with the PM for data verification and approval.

The LCM will capture the assignment of the Project Manager for the new project. The LCM can change the PM assignment for a project, when necessary, as directed by local business procedures.

The Local Configuration Manager role should be assigned to an employee with a thorough understanding of the USACE Project Management Business Process (PMBP).

The LCM will work closely with the PMBP Manager in their location in connection with configuration management issues such as change requests for referential data (i.e. pick lists) since P2 is a centralized database.

Project Manager (PM)

The project manager is responsible for all project resources, information and commitments, and leads and facilitates the PDT towards effective project planning, execution, control and closeout. The PM is responsible for ensuring the right project team is established in P2, and for verifying that the project has been created correctly in P2. They also ensure that PDT members are rewarded and recognized for their contributions and achievements.

The project manager also serves as the customer's primary "door" to the Corps. He or she must seamlessly integrate USACE efforts to deliver the best possible solutions for the customer by coordinating all matters relating to the project, and ensuring that the customer's requirements are conveyed and understood. Increased access to project related information in P2 will help facilitate this communications process.

The PM facilitates and collaborates with the PDT to develop the project management plan (PMP) contents, including the initial schedule and resourcing of the project primarily within the Primavision or P3e modules of P2. The PM is responsible for representing the PDT in obtaining approval of the PMP in accordance with local standard operating procedures (SOP) and for tracking the approval of the PMP in P2.

The PM ensures that the PDT members update and maintain schedule progress, resource and cost data consistent with the PMP baseline or the currently approved version. The PM can also create project versions.

The PM is also responsible for overall project change control (as addressed in the Change Management Plan and local business procedures), quality control, strategic communications, risk management plans, and other components of the PMP. The PM also documents lessons learned for the project in accordance with the [Lessons Learned](#) process in the PMBP Manual.

Program/Budget Analyst

The Program Analyst (PA)/Budget Analyst (BA) is responsible for creating and maintaining appropriate budget versions in P2 and preparing/updating programmatic and budgetary information from projects scheduled and resourced in P2

The PA/BA will primarily use the Oracle Financial Analyzer (OFA) and Oracle Projects (OP) modules of P2, which replace current PRISM and ABS functionality.

Resource Provider

The role of "resource provider" is defined as what the Corps has traditionally called functional supervisors - i.e., they are the providers of the human resources that populate the project delivery teams. Their roles include providing the resource, working with project managers to place the right person on the project delivery team and Independent Technical Review Teams (ITRT), the training, development and mentoring of their people, and ensuring they have the right people with the right skills for current and future work. When the needed skill sets are not readily available "in-house," they also assess other alternatives such as contracting and seeking labor resources from other USACE organizations.

It is important to note the difference between the "role" of the resource provider and specific USACE job titles. The resource provider is the person or group of people with control of specific resources. Therefore, resource providers can be first line supervisors, middle managers, Branch or Section Chiefs, etc. The methods each resource provider uses to accomplish work will vary depending on the organizational structure of a given MSC/Center/District.

The resource provider is responsible for reviewing the scope, schedule and resource estimate agreed to by their respective PDT member, ensuring the commitment of their respective PDT member to complete their activities on the project within the agreed to budget and schedule, and reviewing the quality of the work of their respective PDT member.

The resource provider will be aided by the web-based Primavision module of P2 to access key resource availability data needed for completion of [workload analysis and resource leveling](#) and to analyze scope, methods of accomplishment, budget and distribution for activities identified by project delivery teams.

P2 will allow resource providers to effectively and efficiently plan and negotiate work for their staff with the project manager and other USACE management.

Refer to the [PMBP Manual - Roles and Responsibilities](#) for a complete explanation of the responsibilities of the resource provider.

Training You Need to Use P2

NOTE

For the most current information about the training you need to use P2, please refer to Appendix III of this document - "P2 System Hands-on Training Options" (updated 5/29/03).

Training Prerequisites for P2 Deployment

- PMBP Curriculum Courses 1-5

The PMBP Curriculum PDT assumes that before P2 is deployed, the respective users in the organization should have completed the PMBP Curriculum courses 1 through 5.

PMBP Curriculum Courses 1-5 address such questions as “Why PMBP?” and “what PMBP means to me and my organization.” They review the doctrine contained in ER 5-1-11, making connections to the Strategic Vision, and the “how” of PMBP - the Business Processes and P2. They describe what is expected of team members in a PDT, the role of quality in project delivery, and team member roles and responsibilities at all levels of the organization. They discuss both horizontal and vertical teams operating in the matrix organization and review our primary missions, the role of the customer, and the meaning of public service. They are designed to set the cultural context, describing the way we each need to do business to be successful in a PMBP team environment. The courses focus on the team as the center of learning and source of innovation for solving our customers’ needs. They prepare the way for learning the business processes and the enabling tool.

- PMBP Curriculum Course 6 - "Working in the PDT"

PMBP Course 6 reinforces key messages in courses 1-5 by discussing the benefits of the business processes and the role of the enabling tools. The business processes are presented as the way to imbed the PMBP culture into our daily business, and P2 as the enabling tool for the business processes. Course 6 teaches the key business processes and includes self-study and small group discussion elements of the curriculum. It calls upon those in the organization that are mentors and coaches of the PMBP at all levels and team members who understand the business processes and the P2 system to work together as an integrated whole for success of the PMBP.

Course 6 addresses the questions such as "why PMBP?" and "what does PMBP mean to me and my organization?" Course 6 includes screen shots demonstrating high-level functionality of P2 in support of the PMBP Manual. These screen shots provide employees with a "primer" for P2, forming a basis before the user attends hands-on training designed according to the functional roles on a generic project delivery team.

Upon completion of Course 6, USACE employees will participate in additional small group discussions (SGD) to discuss the practical application of the PMBP Manual and P2 within their own organizations.

To find out more about the PMBP Curriculum Team Initiative, refer to the [PMBP Curriculum website](#).

- Project Management Scheduling Concepts

The P2 Training Sub-team assumes that local PDT members have experience using project management scheduling software and are familiar with basic project management concepts and practices. If PDT members do not possess these skills, formal training for these individuals should be obtained at least three weeks prior to P2 deployment.

P2 Training Approach

P2 System Hands-on training materials are being developed using Oracle Tutor. These training materials are in addition to the current "Desk Manual" that is available through the USACE Project Management Business Process Manual. Oracle Tutor works in an automated fashion to leverage the PMBP Manual Navigation documents (including screenshots) that are currently under development. The courseware also includes additional detailed instructor notes and student notes.

P2 System Hands-On Training Courses

The P2 Training Sub-team is developing role-based training courses to provide training options for the various audiences who will use P2 to manage their work. The training courses will focus on four distinct groups: Local Configuration Manager, Project Delivery Team (PDT), Management and Analysis, and Executive/Management Information. The courses are outlined below:

- **P2 Local Configuration Manager Course:**
 - The target audience for this course is P2 Local configuration managers (LCMs). P2 LCMs will be responsible for initiation of projects in P2, as well as key local configuration management roles within P2, which will include coordination with the P2 Corporate System Administrator(s) on global issues.
- **Project Delivery Team Course:**
 - Project Managers
 - **Most PDT members will use Primavision**, while the power users will use P3e to plan, execute, and control their projects.
 - The Resource Providers will use the Resources tab in Primavision to assign resources to the individual activities based on either role requests or direct assignment of resources to an activity. The Resource Provider will also be able to manage their resources; identifying which resources are over allocated, which are under-allocated and to which projects, WBSs and activities the resources have been assigned.
 - The PDT members will, by far, be the largest group of end-users to be trained.
- **Management and Analysis Course (formerly known as Program/Budget Analyst Course):**

- The target audience for this course is:
 - Working level staff people who are going to be using the tool for programming and budgeting, financial management and resource analysis. Audience also includes program analysts and budget analysts currently performing work where they interact with CEFMS for the management of work items and purchase request and commitments (PR&Cs).
 - Program Analysts, who work with PRISM and ABS, as well as other budgeting processes, should attend this class and will also be provided with supplemental lessons that will focus on Civil Works specific information.
- Course materials will include in depth instruction on the use of Oracle Financial Analyzer, along with basic training on the budget module of Oracle Projects.
- Some components of Oracle Discoverer may be taught as well.
- **Executives:**
 - The target audience includes:
 - HQUSACE Executives include: GOs, SES, Vice Presidents, Directorate Chiefs, and Division Chiefs (when supported by Branch Chiefs)
 - MSC and Center Executives include: GOs, SES, Division Chiefs and Branch Chiefs (when supported by Section Chiefs).
 - District and other FOA Executives include: DE, Division Chiefs, and Branch Chiefs (when supported by Section Chiefs)
 - This course is intended to provide a high level overview of P2 functionality and will focus on the use of the PMBP Portal as the "one door to the Corps" for management level information.
 - Topics will most likely include basic navigation of the PMBP Portal, running reports from the PMBP Portal and Primavision to review management information such as project health, etc.

After the specialized training is completed, USACE employees will have additional small group discussions with the other members of their PDTs in order to gain further understanding about the roles and responsibilities of the other PDT members.



Management at the local organization level will be responsible for determining which employees need to attend which training courses. Additional training requirements and plans are identified in Appendix III of this Guide - "P2 System Hands-On Training Options." Specialized guidance will also be provided for P2 Local Configuration Managers and Information Management Office Help Desk Support prior to P2 deployment.

P2 System Fast Track Training Options

The P2 Development Team is currently evaluating options for P2 end users who may already have extensive knowledge of the P3e module of P2 and key project management concepts.

Options such as web-based training and CD-ROM computer-based training are currently being evaluated for cost and time considerations.



More details about the "fast track" training options will be provided as soon as they become available.

Instructor Team Makeup for P2 System Hands On Training Courses

The instructor teams for the P2 System Hands On Training courses will be made up of a mix of subject matter experts. The intent is to have at least one P2 certified trainer (most likely to be a Primavera Preferred Service Provider) and one USACE business process subject matter expert from the local organization (when possible).

Process for Local Organizations to Schedule P2 System Hands-On Training

P2 System Hands-On training will be available during the P2 deployment phase through a USACE corporate contract. The PMBP initiative has contracted with Primavera and Oracle to develop P2 System Hands-on training materials that will instruct people on how to operate P2 (e.g. Oracle projects, P3e, Primavision, Oracle Financial Analyzer, etc.) However, each local organization will be required to provide funds to pay for the instruction at an onsite location determined by the FOA. Once the training materials are completed, a pricing schedule will be published.

The management of each local organization will provide a funding request to the P2 Project Manager at Huntsville Center via a MIPR. The P2 Project Manager will then provide the funding to Primavera Systems to secure the appropriate trainers. Each local management team will be responsible for working with Primavera to schedule their P2 System Hands-on training classes. The local management will also be responsible for coordinating training logistics as needed.

How P2 Will Be Deployed To You

Advance Planning to be Completed By Local Organization Before P2 is Deployed

Form a PMBP Deployment and Implementation Team

The P2 team provided a draft Program Management Plan for MSC Deployment of P2 in April 2002. The draft PgMP outlined recommendations for the establishment of Program/Project Delivery Teams at the MSC/Center/District level to help facilitate the deployment and implementation of P2. Each MSC is responsible for adding their specific information to the template PgMP to tailor it for requirements.



The details of the roles and responsibilities of these team members are still under discussion, but the information below summarizes the current recommendations. The PMBP Program Manager recommends the establishment of PMBP Deployment and Implementation teams at all levels. This Guide focuses on the deployment and implementation requirements of **P2** only. Therefore, the roles and responsibilities for the PMBP Curriculum deployment and implementation are not included in this Guide. The PMBP Program Manager will address them in the overall PMBP Program Management Plan under development.

PgDT for Each MSC

- **Program Manager for Implementation:** Point of Contact (POC) for overall PMBP implementation (Curriculum, PMBP Manual, P2) within the region
- **Representatives from each PDT:** Liaison representative to communicate between the PgDT and the HQ/MSD/District/Center PDT
- **Information Management POC:** POC for regional IT requirements to support deployment.
- **Resource Management POC:** POC for regional CEFMS requirements to support deployment

PDT for each HQ/MSD/District/Center

- **Project Manager for Implementation:** POC for HQ/MSD/District/Center for PMBP implementation (Curriculum, PMBP Manual, P2)
- **Business Process Review & Implementation team:** A group of individuals that will provide ongoing review and implementation of USACE business processes as well as HQ/MSD/District/Center
- **Information Management POC:** POC for HQ/MSD/District/Center IT requirements to support deployment
- **Resource Management POC:** POC for HQ/MSD/District/Center CEFMS requirements to support deployment

Local P2 Deployment and Implementation Roles:

- **Information Management POC:** Responsible for coordinating IT requirements for the deployment, implementation and ongoing support of P2 (a checklist will be provided by the USACE P2 PM).
- **Local Configuration Manager:** Completes project initiation based on information provided by the project manager.
- **Coordinator:** Provides oversight of the HQ/MSD/District/Center P2 system deployment and on-going implementation
- **Local Help Desk:** A group of individuals that will be the first response to facilitate the process for obtaining answers to issues concerning the PMBP Manual and P2 whether it can be answered by those individuals or by the USACE help desk.

Identify and train Local Configuration Managers (LCM - formerly known as Local System Administrator)

The Roles and Responsibilities section outlines the skill set necessary for the LCM to possess. The senior leadership at the local level should identify the LCM based on the identified skill set.

Local Configuration Managers will play a large role in the data conversion process for migrating PROMIS data to P2. Therefore, the P2 Training Sub-team plans to provide materials for training in advance of the P2 System PDT Course for the identified LCMs(s) before deploying P2 to the specified Activity.

The USACE P2 PDT, in collaboration with the PMBP Curriculum PDT, is determining the method of training for the LCMs. As more information becomes available, it will be communicated to senior leadership for planning purposes.

Identify P2 "Power Users"

P2 Power Users are individuals that have the experience and skill set to become P2 subject matter experts (SME). These individuals should possess the ability to learn the intricacies of P2 quickly.

These individuals should be advocates of PMBP and be frequent users of P2 so they can assist other in managing work. Assistance may include help with updating and maintaining schedules, monitoring work, providing programmatic updates, running wide ranges of reports, managing resources, etc.

As P2 SMEs, the power users will be able to provide on-the-job training (OJT) for those who are moderate to occasional users of P2. Power users should have a strong grasp of their local standard operating procedures (SOPs) and will be able to serve as advocates of PMBP. They should be positive people who serve as change agents willing to share knowledge and help their colleagues with the practical application of P2.

After the initial deployment of P2, power users could be used to provide sustainment training at the local organization level. Specific tasks for the power users and expectations for the management of their workload will be determined by local senior leadership. Requirements will vary based on the structure of the given organization.



Information about potential training of power users is subject to change as the PMBP Curriculum and BP/P2 PDTs make final decisions about training for PMBP and P2.

Install and test any necessary hardware or reconfigure existing hardware to meet P2 requirements.



Please note that a P2 System Information Management Information Paper is under development outlining the steps that will be required for installation and testing of hardware to meet P2 requirements. This information will be distributed to the USACE Information Management Community via e-mail distribution to the Deputies and Chiefs of IM and via the PMBP Portal.

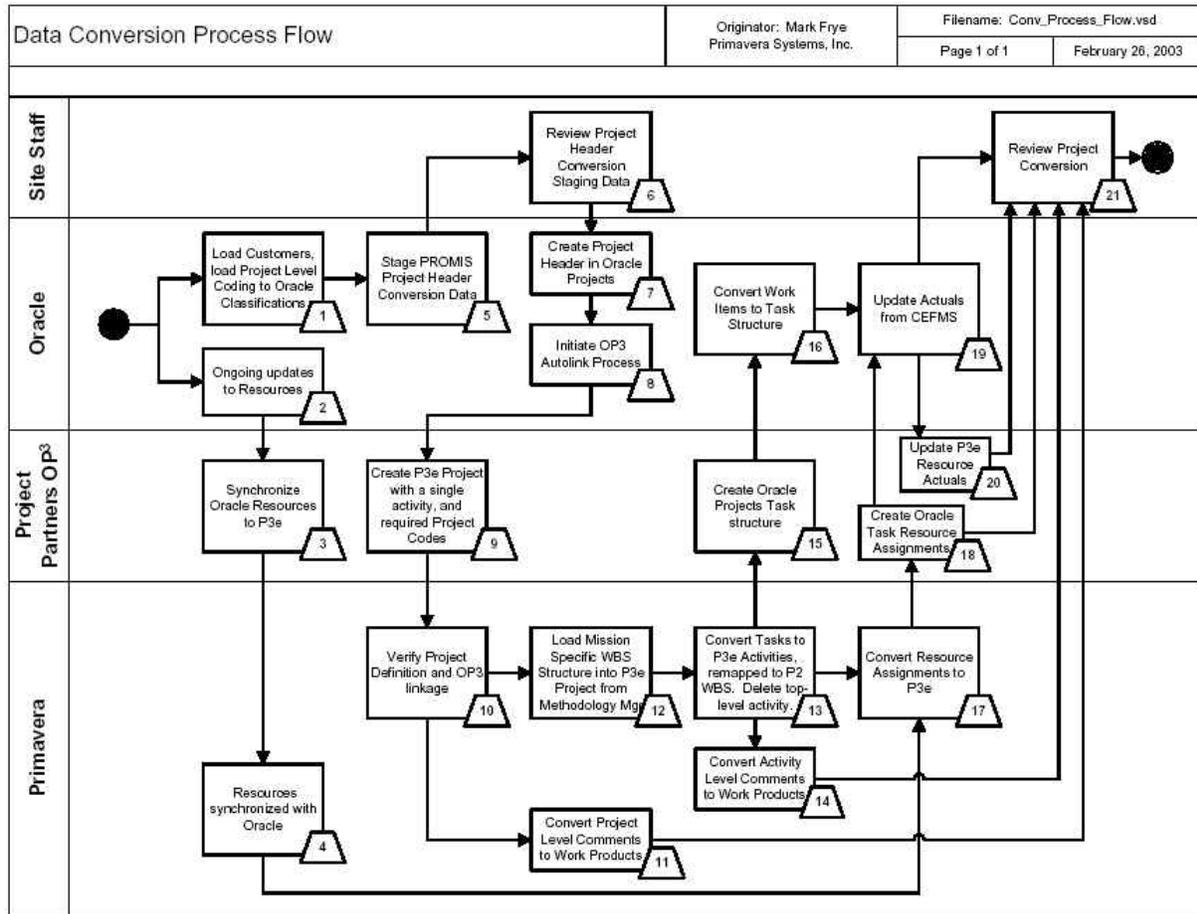
PROMIS Data Conversion and Clean Up

The P2 PDT is currently developing the best practice strategy needed to successfully convert USACE project information from the current automated information system - PROMIS.

The BP/P2 PDT is collaborating with the PROMIS subject matter experts to develop the PROMIS data conversion strategy outlined below:

- Only Current Official Version projects with an HQ upward reportable flag will be converted
- Only certain active comment types reviewed by the BP/P2 team will be converted
- Customer data will be converted and be mapped to a Corps-wide list
- Project Manager and Proxy will be converted
- Milestone codes will convert to a P3e milestone activity type and an appropriate global activity code
- Schedule dates, relationships (predecessor/ successor), and resource estimates will be converted
- Identified project and task level data will be converted
- Work items linked on PROMIS will be identified on the task in OP
- Converted data that can be derived from schedule or resource information will be available in P2

PROMIS Data Conversion Process Flow



The process flow above and the description below represent the intended strategy for PROMIS Data Conversion. However the information is subject to slight modifications based on finalization by the PROMIS Data Conversion team. As the information is modified, this document will be updated to reflect the changes.

ID 1: Load Customers, load Project Level Coding to Oracle Classifications

Site-specific updates to P2 validation dictionaries are performed prior to site data conversion.

ID 2: Ongoing updates to Resources

A number of P2 system interfaces will, in the background, ensure that P2 reflects current CEFMS definitions. These interfaces are:

- Organization Interface: Transfers CEFMS Organization definitions.
- Burden Cost Rates Interface: Transfers CEFMS Burden Cost Rate definitions
- Employee Interface: Transfers CEFMS Employee definitions
- Employee Cost Rates Interface: Transfers CEFMS Employee Cost Rates definitions

ID 3: Synchronize Oracle Resources to P3e

Within the P2 System, Oracle controls organization and employee resource definitions. These are synchronized with P3e using the OP3 “Transfer Resources to Primavera” concurrent process.

ID 4: Resources synchronized with Oracle

Organization and employee resource definitions are updated in P3e.

ID 5: Stage PROMIS Project Header Conversion Data

Existing current version, upward reportable PROMIS projects are established in Staging Tables for Project creation in Oracle Projects. These project conversion records contain project level coding and a single top-level task to temporarily represent project scope. These projects will be created with a status of "Pending OP3 Autolink".

ID 6: Review Project Header Conversion Staging Data

The Oracle Project Creation Staging Tables are reviewed for accuracy and completeness prior to conversion.

ID 7: Create Project Header in Oracle Projects

Oracle Project Creation Staging Tables are processed, creating the PROMIS projects in Oracle Projects with a single top-level task.

ID 8: Initiate OP3 Autolink Process

The OP3 “Autolink” concurrent process is initiated which will cause projects in Oracle Projects with a status of "Pending OP3 Autolink" to be created in P3e.

ID 9: Create P3e Project with a single activity, and required Project Codes

The PROMIS projects in Oracle Projects with a status of "Pending OP3 Autolink" are created in P3e.

ID 10: Verify Project Definition and OP3 linkage

Data conversion processing verifies that required project attributes are established and that a linkage between Oracle Projects and P3e is active.

ID 11: Convert Project Level Comments to Work Products

PROMIS project level comments are converted to P3e Work Products. PROMIS comment types relate to P3e Work Product Categories. Project level comments are assigned to the Project's root Work Breakdown Structure (WBS) node.

ID 12: Load Mission Specific WBS Structure into Project from Methodology Mgr

Based on the type of PROMIS project, e.g., Military and Civil, the applicable WBS is loaded into the newly converted projects using structures defined in Methodology Manager. The single top-level task received from Oracle Projects via OP3 is retained in the project's root WBS node.

ID 13: Convert Tasks to P3e Activities, remapped to P2 WBS. Delete top-level activity

Data conversion processing converts PROMIS tasks and milestone information into applicable P3e activities and associated Activity Codes. Based on PROMIS WBS coding, these activities are converted to the project's P2 mission specific WBS structure. The single top-level task that originated in Oracle Projects is deleted as soon as any PROMIS tasks are converted.

ID 14: Convert Activity Level Comments to Work Products

PROMIS task level comments are converted to P3e Work Products. PROMIS comment types relate to P3e Work Product Categories. Task comments are assigned to the converted P3e Activity.

ID 15: Create Oracle Projects Task structure

Within the P2 System, P3e controls activity (task) definitions. These are synchronized with Oracle Projects using the OP3 "Update Project" concurrent process.

ID 16: Convert Work Items to Task Structure

Work Item definitions within CEFMS are linked to P2 Activities maintained in the Oracle Projects Task Structure.

ID 17: Convert Resource Assignments to P3e

Data conversion processing converts PROMIS task resource assignment to the associated P3e activity. Unit and cost values converted are the resource budget, actual-to-date, estimate-to-complete, and the estimate-at-completion.

ID 18: Create Oracle Task Resource Assignments

Within the P2 System, P3e controls the assignment of resources to activities and their associated budget values. These are synchronized with Oracle Projects using the OP3 “Update Budget” concurrent process.

ID 19: Update Actuals from CEFMS

Actual Cost and Unit values are updated from CEFMS to Oracle Projects activity resource assignments.

ID 20: Update P3e Resource Actuals

Within the P2 System, Oracle controls the actual values associated to activity resource assignments. These are synchronized with P3e using the OP3 “Update Actuals” concurrent process.

ID 21: Review Project Conversion

Deployment site-personnel review project information with P2.

CEFMS Data Cleanup

CEFMS Purchase Request and Commitments

USACE's Project Management Business Process (PMBP) requires the validation of information entered when a Purchase Request & Commitment is completed or modified in CEFMS. The validation will enable execution of the project according to the project plan and budget in P2.

The CEFMS PR&C interface will run from Oracle Projects (OP) to establish and maintain the base information for validation of PR&Cs in CEFMS. PR&Cs will still be completed in CEFMS but limits will be placed on the data available for selection in the CEFMS PR&C forms based on the P2 validation information passed to CEFMS by the interface.

Approval and certification of the PR&C will be accomplished in CEFMS using current methods. CEFMS will return certified PR&C information for access within P2 via queries and reports.



The Purchase Requests and Commitments (PR&C) Interface New Direction functional design document contains the detailed information regarding the CEFMS - P2 PR&C interface. The P2 Development Team will document additional information regarding data cleanup as needed to assist with the deployment of P2 and the new CEFMS interfaces.

CEFMS Project Work Items

If a project has been entered into PROMIS, then the current strategy is to convert the work items into P2 during the PROMIS data conversion process. Once the work items are converted, the P2 Deployment Team will give a list of P2 work items to the CEFMS Development team and they will go in and change the work items to P2 work items as necessary.



The Oracle Projects to CEFMS Work Item Interface functional design document contains the detailed information regarding the Work Items interface. Additional guidance about the clean up process for CEFMS work items is currently under development and will be made available as an appendix to the Preparing for P2 Guide before P2 deployment begins. The information and guidance papers will be made available through the PMBP Portal and communicated to proper audiences involved with P2 deployment. The information contained in this Guide has not been finalized and is provided to explain the requirements and possible strategies being considered.

USACE P2 Deployment Schedule and Team Strategy

The structure of the P2 Deployment Team and number of possible teams delivering P2 to USACE will depend on several factors unique to each location. The initial strategy outlined below is based on information available as of the date of producing this document. There will be a period of time during year-end closeout where P2 will not be deployed or implemented.

Team Members: Qualified members of the P2 team will travel to each location before the "go-live" date for the specific location. The Deployment team will consist of at least one contract software subject matter expert as well as USACE P2 team members. The local P2 point of contact will work with the USACE P2 Deployment Team along with other members of the local PMBP Implementation Team.

Readiness Verification: The USACE P2 Deployment Team will verify that the organization is prepared for the deployment of P2 before the process begins. The Team will provide the organization with a pre-deployment checklist to complete.

PROMIS Data Conversion: See information outlined above for details. The USACE P2 Deployment team will assist with data conversion during the two-week time frame before an organization goes into production with P2.

Loading P2: The USACE P2 Deployment team will work with the local IM organization to install any necessary software on the end users' desktops. (At the time of writing this document, P3e is client-based and will need to be installed directly on the machine of the end user or on the local server for usage). The installation of application software will be completed no later than the Friday immediately prior to the "cutover" to P2.

Schedule for P2 Deployment

Each MSC/Center and its subordinate Districts/Labs have named POCs for P2 Deployment, and have provided information to the P2 team to allow us to evaluate their readiness for deployment against predefined criteria. The P2 Deployment Manager analyzed the site deployment data and prepared a draft order of deployment to brief to the Chief of Engineers. Sites were ranked by the following criteria:

- Number of P2 end users
- Training Capacity
- Data Conversion Requirements
- Responsiveness to site data call

The draft schedule of P2 deployment dates briefed to the Chief was as follows:

Site	Date
SWF (IOC)	August 2003
SWG (IOC)	August 2003
SWD - HQ (IOC)	August 2003
SWT	13 Oct - 7 Nov 2003
SWL	13 Oct - 7 Nov 2003
POD	13 Oct - 7 Nov 2003
SPD	5 Jan - 30 Jan 2004
NWD	5 Jan - 30 Jan 2004
HNC	5 Jan - 30 Jan 2004
MVD	2 Feb - 27 Feb 2004
NAD	2 Feb - 27 Feb 2004
Marine Design Center	2 Feb - 27 Feb 2004
LRD	1 Mar - 26 Mar 2004
ERDC	1 Mar - 26 Mar 2004
SAD	5 Apr - 30 Apr 2004
HECSA	5 Apr - 30 Apr 2004
TAC	5 Apr - 30 Apr 2004
IWR	5 Apr - 30 Apr 2004

The PMBP Program Management Team (PMT) is submitting the draft P2 deployment schedule to the MSCs for review and comment. After comments are received and coordinated between the P2 Development Team and the PMT, then the P2 project manager will brief the Chief on the updated deployment schedule. The official P2 deployment and implementation plan decision will be communicated to USACE leadership via a Guide-on call with MSC Commanders.

How You Will Get Help

This section outlines how you will be able to obtain help with the P2 system when you need it.



The PMBP Initiative Program Manager is developing a collaborative Help Desk approach for all PMBP initiatives. Different concepts are under discussion and pending finalization. Therefore, information contained in the Guide is for discussion purposes only and does not represent the final decision.

On-line Help with the PMBP Manual

The on-line PMBP Manual allows for specific role identification to allow users to recognize their responsibilities. As a web-based on-line tool, the PMBP Manual offers immediate access to policy documents, reference documents, and an ease of navigation through the execution of a program or project from work acceptance through planning and execution to closeout.

The on-line PMBP Manual contains Navigation documents that allow the user to relate actions outlined in the business processes directly to P2 usage, including screenshots of entry pages aiding in navigation of P2.

Local P2 Help Desk

Local senior leadership is responsible for establishing a local P2 Help Desk that will serve as the first response to facilitate the process for obtaining answers to issues concerning the PMBP Manual and P2. The details of the roles and responsibilities of the local help desk are still being finalized. It is possible that the help desk would be for all PMBP Initiatives instead of only P2. However for the purposes of this Guide, we will focus on P2.

The Local P2 Help Desk will use a call management system to forward open tickets (requests for information or assistance) that they cannot handle to the Centralized P2 Help Desk. Parameters will be defined to explain the escalation process for handling issues. The P2 Huntsville Management Team is currently developing the P2 Configuration Management Plan, which will contain more detailed information about the functioning of the Local P2 Help Desk.

Centralized USACE P2 Help Desk

The P2 PDT is responsible for establishing a centralized USACE P2 Help Desk. The Help Desk is part of the P2 Configuration Management process. Contractors with P2 expertise and USACE employees with PMBP Manual subject matter expertise will staff the USACE P2 Help Desk. Calls will be escalated from the local level up to the Centralized Help Desk based on the business processes to be defined in the P2 Configuration Management Plan under development.



The P2 PDT is currently discussing the business requirements for handling 24/7 support for international USACE locations. Before full CONUS deployment, this issue will be formally addressed. The P2 Help Desk may use a combination of automation information collection through the PMBP Portal and live call back within a specified number of hours, or the Help Desk may have a resource to handle this requirement. More details will be provided as they are finalized.



The P2 Help Desk team is currently making the final determination on which automated tool will be used to maintain help desk tickets. Magic and CA Unicenter software tools are currently being evaluated.

How P2 Will Be Updated and Maintained

This section explains the P2 Configuration Management process and the roles and responsibilities of the PMBP Manual and P2 Configuration Management Board.



The P2 Management Team is currently developing the Configuration Management Plan at Huntsville Center. As soon as the plan is completed, relevant information will be incorporated in this chapter of the Guide.

Topics that will potentially be covered in the Configuration Management Plan include:

- Configuration Control Procedures
- Baseline Changes
- Document Changes
- Software Changes
- Hardware Changes
- Automated Configuration Management Tool
- Cost and Schedule Accounting
- Configuration Compliance

Appendix I - Acronyms and Glossary

For quick reference to both acronyms used in the PMBP Manual, as well as a common definition of terms, as they relate to business processes and P2, refer to the [Acronyms and Glossary](#) reference document in the PMBP Manual.

To reference questions already addressed by the P2 PDT, please refer to the PMBP FAQ tab located on the [PMBP Portal](#).

Appendix II - Information Management

Introduction

This document will provide an introduction to PMBP and the P2 system as well as an overview of the impact of the PMBP P2 initiative on the Information Management Office (IMO). This document is designed to provide the IMO with the information they need to prepare their personnel for effective support upon P2 deployment including desktop support, network support, security, and interaction with the centralized P2 Help Desk. This document is not intended to be a comprehensive training document for all users and support personnel. More information will be provided based on individual roles as the P2 system approaches deployment.

This document requires the reader to have a firm understanding of computer systems and networking architecture.

For more detailed information on P2, refer to the “Preparing for P2 Guide”, located on the PMBP Portal.

<https://pmbp.usace.army.mil>.

PMBP Background

The Project Management Business Process (PMBP) was established to transition the US Army Corps of Engineers (USACE) to a more project-focused teamwork based organization that operates with a corporate behavior. PMBP consists of five initiatives outlined below.

Quality Management/ER 5-1-11 Initiative: This initiative develops doctrine, policy and guidance for the USACE Business Process; maintains integration with other PMBP initiative teams to assure consistency and maintains awareness of private and public sector trends in business process.

Business Process Initiative: This initiative develops, implements and sustains a set of modern, standardized project management business processes based on the USACE, industry, and public sector best business practices in project management. The BP Project Delivery Team collected the best practices, assessed and evaluated them, developed a set of high-level processes and some procedures that are applicable to all work within the organization, and established a common business framework in order that a corporate consistency can be achieved across all organizational boundaries.

P2 Initiative: This initiative develops an automated information system that follows the PMBP model to provide automation services for project management and program development. Assesses the automation requirements for Corps business processes and configures a corporate AIS using Commercial Off-the-Shelf (COTS) software; provides a capability to scope, develop and track critical path networks; assigns resource estimates; compares estimated cost to actual costs; performs earned value analysis; maintains historical project records; serves as the corporate system providing decision support capabilities that leverage state-of-the-art technology. P2 will support project and programmatic information across organizational boundaries and at all levels of the organization.

Curriculum/Cultural Initiative: The team for this initiative is developing an innovative and state-of-the-art curriculum methodology consistent with a cultural change that supports the PMBP and learning organization philosophy, doctrine, and process. The curriculum will support the transformation of USACE into a corporate-behavior learning organization.

Construction S&A Initiative: This PMBP initiative team will conduct a study and develops recommendations to enhance efficiency, effectiveness, and customer satisfaction of the construction management phases and costs of USACE projects and PMBP. Details of this Initiative are shown in the Project Management Plan for Construction S&A.

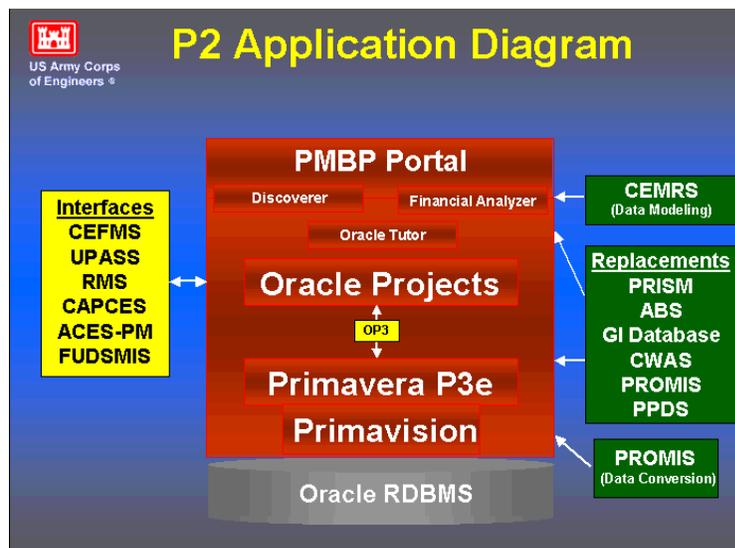
Overview of P2 System

The P2 system is an integrated suite of industry-leading commercial off the shelf (COTS) software that uses proven project management best practices. It is the enabling tool being implemented across the USACE enterprise based on the PMBP model.

The majority of the P2 modules will be web-based and will be centrally maintained by the Central Processing Center (CPC) in Vicksburg, MS. The web-based technology approach offers unprecedented capabilities for support of worldwide-integrated applications. Web-driven technology is highly scalable, flexible, available, supports world-wide networking, lowers long-term infrastructure costs, and provides the means to centralize applications on a world-wide basis. Centralized applications allow the construction of a single repository for data, which removes a significant barrier to integrated information. This in turn enables the common functions needed to support global business goals.

This centralized approach will benefit the Information Management Office in many ways. Since the majority of processing and maintenance will be done at the CPC, most users will only need a network connection and web browser to use the P2 system.

The suite of P2 modules includes: PMBP Portal, Oracle Discoverer, Oracle Financial Analyzer (OFA), Oracle Tutor, Oracle Projects, Project Partners OP3 interface, Primavera P3e, and Primavera Primavision.



PMBP Portal: Web-based knowledge management portal that provides the latest information about the PMBP initiatives, including P2. This will be the central location that most P2 modules will be accessed through. The PMBP Portal is available at <https://pmbp.usace.army.mil>.

As P2 is deployed to each location, users will access the P2 system through the PMBP Portal using their U-PASS account information.

Primavera P3e: Project management tool that provides the PDT with project scheduling capabilities and extensive resource management options in a single COTS package, configured to support the USACE PMBP, replacing all network analysis software currently deployed at USACE. This application will be used primarily by the project manager and local P2 administrator.

Primavera Primavision: Web-based project and program management tool that provides internet access for project delivery team (PDT) members to view and update existing projects as well as access for management to evaluate project and program workloads. This application allows most of the features of Primavera P3e to be accessed using only a web browser. The majority of PDT members will use Primavision.

OP3 Interface (Project Partners LLC): COTS interface between Oracle Projects and Primavera P3e. The interface allows information to flow in a synchronized fashion passing key data back and forth between the two applications.

Oracle Financial Analyzer (OFA): Program management tool to be used primarily by budget/program analysts and program managers at all levels for interactive views (with drill down and roll up capability) and more complex modeling and analyses of financial data. OFA is also configured to support the USACE PMBP, and will incorporate current programmatic and budgeting functionality of such legacy systems as PRISM and ABS and replace the functionality of providing Work Allowances and re-programming of CW funds currently found in the Civil Work Allowance System (CWAS). OFA functionality will also replace many standard reports and enable the user to create customized views of the data to address specific needs. The Corps' next generation manpower requirements tool is also under development. It will use OFA analysis and modeling functions to equitably distribute Full Time Equivalent (FTE) authorizations to the field.

Oracle Discoverer: Web-based tool to be used for ad-hoc queries and reports from reporting databases made available within the P2 system.

Oracle Projects: Web-based COTS application that will become the central repository for all USACE project information, configured to support the USACE PMBP, and serving as the control point for all P2 system interfaces with USACE legacy automated information systems.

Oracle Tutor: Automated business process documentation tool used to prepare the text and process flow charts for the web-based PMBP Manual, also available for local users in creation of local Business Processes. It is not an execution component of P2. Tutor documents provide the linkage between the USACE business processes and the P2 application. The PMBP Manual is easily accessible on the PMBP Portal.

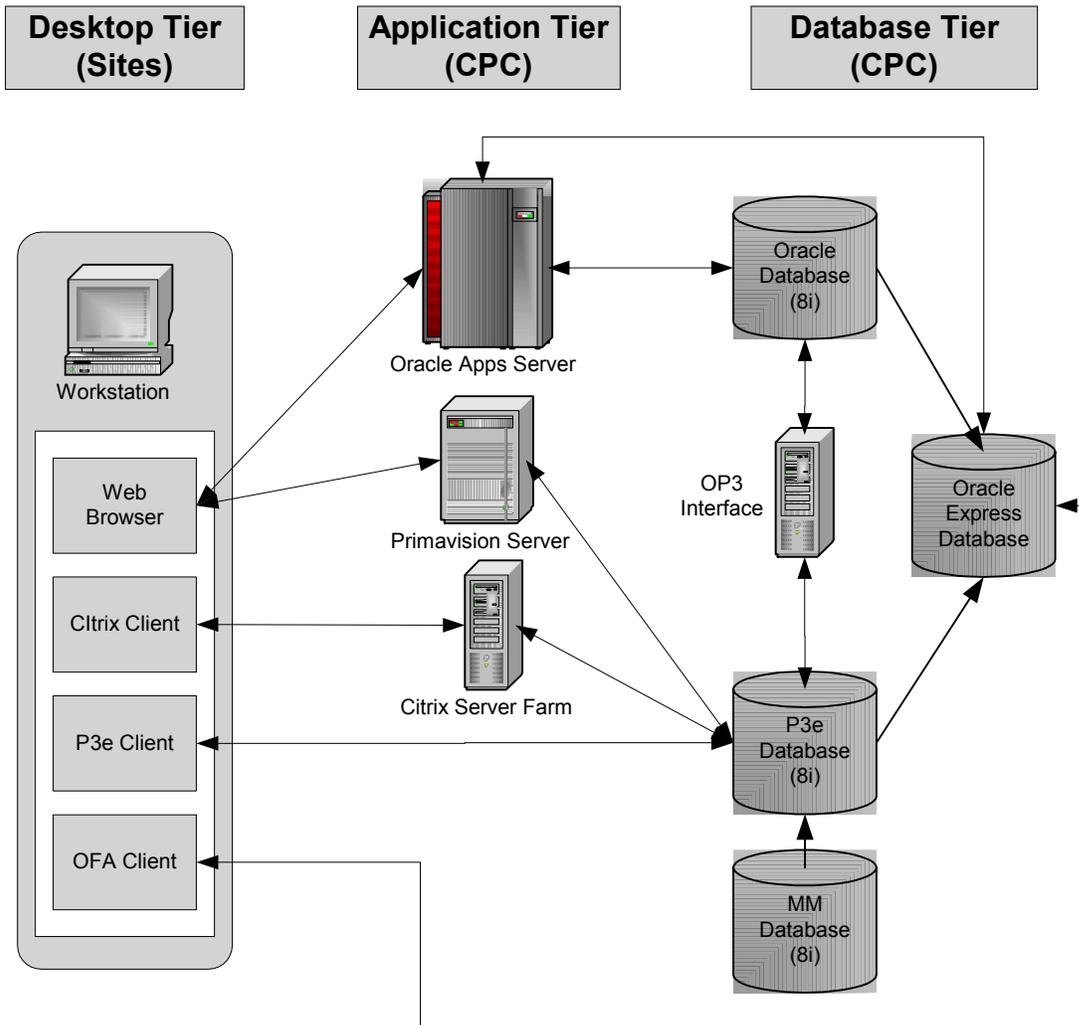
P2 System Architecture

The figure below depicts a high-level diagram of the P2 system. The P2 system was built using a web-based Internet Computing Architecture. With Internet Computing Architecture, only the presentation layer of the applications is on the desktop tier in the form of a plug-in to a standard Internet browser (as shown in the Desktop Tier below).

Users of Primavera P3e will access the system using either the P3e client or through the Citrix client. Citrix is a third-party software module that enables client-server software to be accessed remotely by computers with low-

bandwidth connections. The Citrix server handles the heavy processing and network bandwidth required by P3e client and distributes the application through Citrix's thin-client architecture. This is a form of Internet computing architecture, but uses Citrix web client software to access the applications server instead of the web-browser. The decision of whether P3e will be deployed using P3e client or Citrix client has not been made. Details will be added when finalized.

The Oracle Financial Analyzer (OFA) client will be used primarily by a select group of OFA developers and power-users. Standard users will access the web-enabled version of OFA.



By using this centralized Internet Computing Architecture, the need for local support staff to install and maintain applications software on desktop workstations is greatly reduced. Users that access the web versions of the applications or use Citrix client will also reduce traffic over the network.

P2 Help Desk

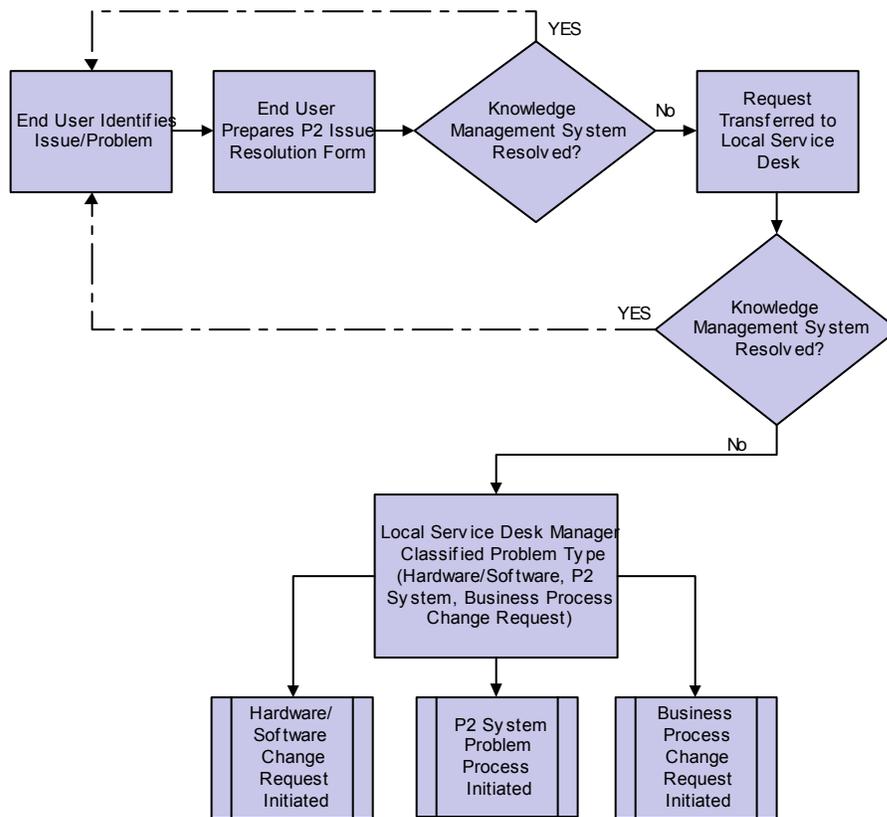
A centralized P2 Help Desk will be established to assist users with issues directly related to P2. Local Service Desks consisting of support staff trained in P2 will be established at the sites, while one Central Service Desk will be established at a location to be determined. The P2 Help Desk is currently in the planning phase. More

information will be provided when the plans are finalized. The following planned roles are still under development and are subject to change.

Local Service Desk

The Local Service Desk will be staffed with either a local P2 deployment manager or a former P2 implementation team member. The P2 Project Delivery team is currently selecting a knowledge management help desk support application. This application will allow the users to identify and resolve the issues themselves. If the user is unable to resolve the issue, the Local Service Desk will be called in to attempt to resolve the issue. If the Local Service Desk staff is unable to resolve the issue, the problem will be identified and escalated to the Central Service Desk.

The flowchart below shows the process that the user and Local Service Desk staff will perform to resolve user issues.



Central Service Desk

A Central Service Desk will be established at a central location to be determined. The Central Service Desk will be staffed initially with two full-time resources that are dedicated to the receipt and investigation of P2 related issues escalated to them by the Local Service Desks. The staff will be trained in the P2 system and will be familiar enough to answer low-level questions. Questions that cannot be answered immediately will be entered into an automated tool for routing and distribution to the appropriate technicians for investigation and resolution.

Impact on the Information Management Office

As the primary supporters of the end-user network and desktop systems for USACE, the Information Management Office will need to know what to expect to effectively support the P2 system users. Although the users and Local Service Desk will handle all P2 related problems, IM support personnel must be aware of how the P2 applications affect the users' workstations and USACE network. The P2 Configuration Management team is currently formulating a plan to cross-train a group of IM personnel for P2 support.

Detailed information about the activities during P2 deployment and how IM support personnel will be involved will be available in the P2 Deployment Plan when it is finalized.

The following sections are organized based on the areas of focus of the IM support staff.

Desktop Support

Minimum System Requirements

- 200 + MHz CPU
- Windows 95/98/NT 4.0/2000 (covers all modules of P2)
- Color Palette of 16k or 32k
- Monitor Resolution of 1024 x 768
- 20 + MB of disk space
- 128MB RAM + (256 MB or higher recommended)
- Microsoft Internet Explorer 5.0 or higher (recommended) OR Netscape Navigator 4.5x to 4.7x (Newer versions of Netscape will not work with Oracle Applications)
- TCP/IP network protocol
- Paging file should be set to 'Permanent' and paging file should be big enough 40-50 MB

Setting up a User for P2

The first step in setting up a user is to assign the appropriate privileges through UPASS. For more information, see the *UPASS* section of this document.

Although the P2 system is an integrated suite of applications/modules, each application is separate and may have different requirements. Many of the P2 applications are web-based and require java plug-ins. The plug-ins will be installed automatically the first time the application is accessed.

The user must have Administrator rights to the machine when installing plug-ins (the first time the application is accessed). The user will not need Administrator rights to run the applications after the initial installation of the plug-ins. Also, the web browser's security settings *ActiveX controls and plug-ins* must be set to *Enable* or *Prompt*. If the controls are set to *Disable*, the web applications will not work.

Module	Web Browser	Client Software	Browser Plug-In
PMBP Portal	Yes	No	No

P3e	No	Yes	No
Primavision	Yes	No	Yes
OP3	No	No	No
OFA Web	Yes	No	Yes
OFA Client	No	Yes	No
Discoverer	Yes	No	Yes
Oracle Projects	Yes	No	Yes
Oracle Tutor	Yes	No	No

PMBP Portal: The user must have a web browser, working Internet connection and must be on the USACE network.

Primavera P3e: There are two ways for P3e client to be installed. Users can either install the P3e client or Citrix client. Details on how your local offices will access the client software are still being discussed, and will be added when finalized.

Primavera Primavision: The user must have a web browser and working Internet connection. Java 2 runtime environment must be installed. This will be installed automatically the first time Primavision is run.

Oracle Financial Analyzer (OFA): There are two ways for OFA to be accessed. The vast majority of users will access OFA through the PMBP Portal via their web browser. A file will be automatically installed the first time you run OFA via the web. A select few developers and power-users will use the OFA client.

Oracle Discoverer: The user must have a web browser and working Internet connection. A file will be automatically installed the first time you run Discoverer.

Oracle Projects: The J-initiator plug-in must be installed. This is one-time installation when Oracle Projects is executed for the first time. A certificate file for Oracle Applications should be present and executed. This is done automatically by the J-initiator plug-in.

Printing

P2 modules print using standard desktop windows printer drivers. Standard local or network printers should be used to print from the majority of P2 applications.

Users accessing Primavera P3e using Citrix client will have special printer setup requirements. Details will be added when the plans have been finalized.

Unlike previously implemented USACE applications such as CEFMS, no scheduled batch reporting requirements have been identified and no custom printing programs have been developed at this time.

Network Support

The scope of the P2 System implementation does not include plans to upgrade the USACE network infrastructure. The P2 system will be used through the existing USACE network.

Bandwidth Requirements – Oracle Applications

Each application session will require between 3Kbps and 4Kbps. Based on this, it was recommended in the P2 Conceptual Technical Architecture plan that USACE assess the ability of existing network to handle required capacity based on the following:

	Per user	Concurrent Users	Licensed Users
Forms Bandwidth	3.5Kbps	3,000	5,000
HTML Bandwidth	2.5Kbps	3,000	5,000
Total	6.0Kbps	3,000	5,000

Bandwidth Requirements – Primavera Applications

Primavera recommends the total bandwidth between the database server and Citrix farm should be 1Gbps and bandwidth between the clients and Citrix farm can vary with higher performance with higher bandwidth [1.5Mbps is good, 56Kbps is marginal]. Bandwidth between individual P3e clients and the database server should be at least 10Mbps.

UPASS

UPASS will maintain user accounts for the following P2 modules: PMBP Portal, Oracle Applications (including Oracle Projects, Oracle Financial Analyzer, and Oracle Discoverer), and Primavera P3e (Primavision maintenance may be added at a later date).

Single Sign On (SSO) technology will allow users to access the web-based applications using their UPASS standard login and passwords. In order to use the client applications (P3e and OFA) the user will have to reenter their UPASS username and password after the modules are launched from the PMBP Portal.

Appendix – Detailed Desktop Configuration Helpful Hints

This appendix will provide the detailed setup and configuration requirements for each application including identified configuration helpful hints. All identified helpful hints will be added to this appendix as they are identified. The helpful hints from this section will be transferred to the P2 Help Desk knowledge base once it is implemented.

General:

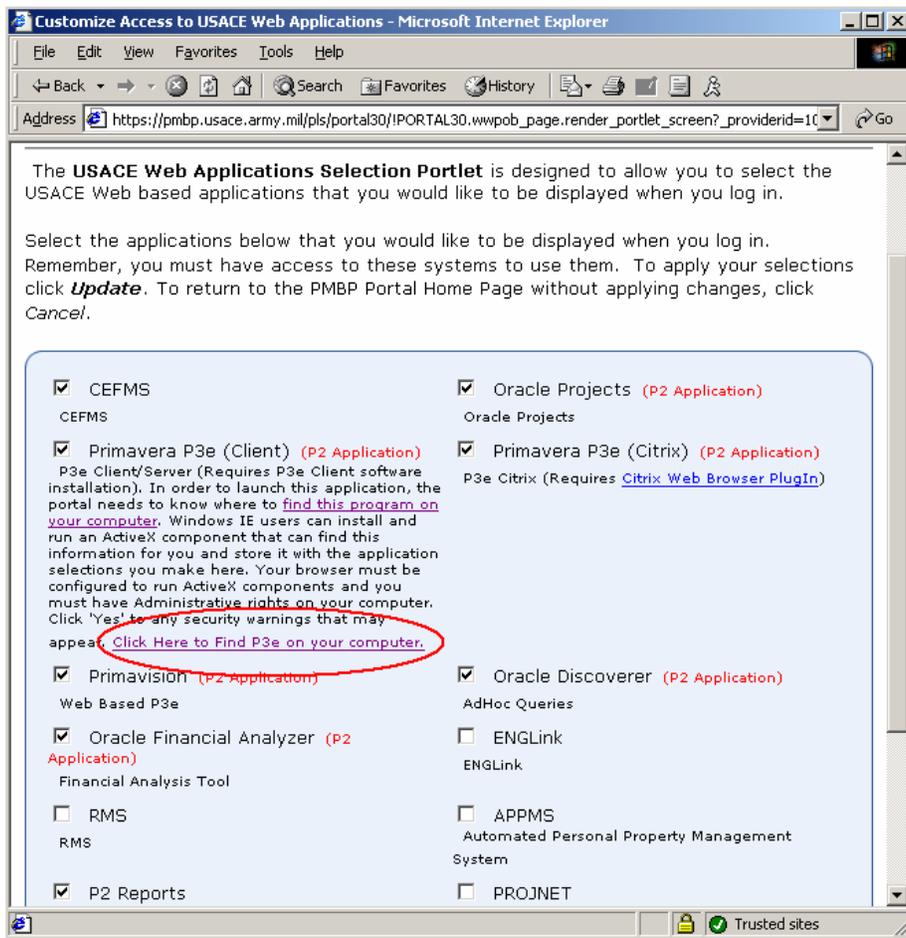
- **Installing Web Browser Plug-ins:** Users must have Windows *Administrator* privileges when installing the web browser plug-ins (the first time the web applications are run).
- **Certificate Warning:** A Security Alert may appear when accessing the PMBP Portal. To get rid of this alert, navigate to the Frequently Asked Questions portlet. There will be a link to instructions on how to get rid of this alert.



- **Active X Controls:** The web browser's security settings *ActiveX controls and plug-ins* must be set to *Enable* or *Prompt*. If the controls are set to *Disable*, you will not be able to login to the authenticated page of the PMBP Portal and the P2 web applications will not work. A simple way to do this is to set your Internet security settings to *Medium* or lower.

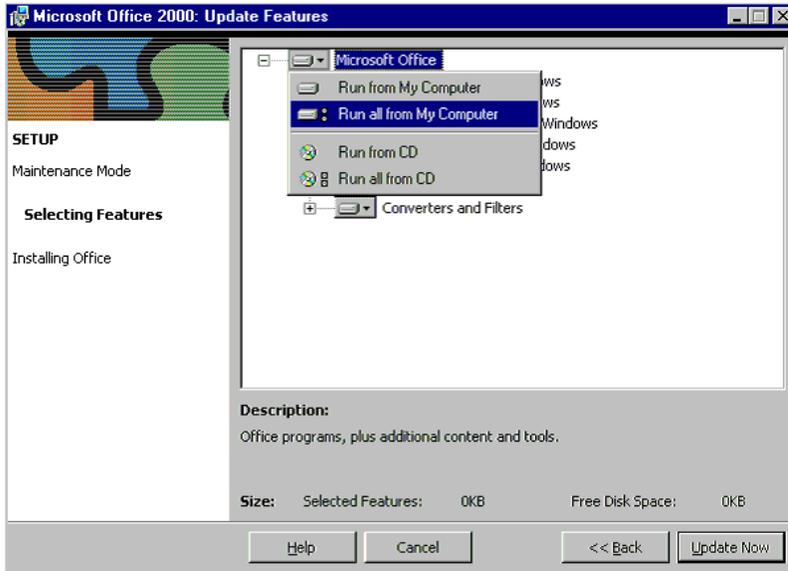
Primavera P3e:

- **Accessing P3e Client in the PMBP Portal:** When accessing this application from the PMBP Portal, the portal needs to know where to find this program on your computer. Windows IE users can install and run an ActiveX component that can find this information for you and store it with your application selections. Click 'Yes' to any security warnings that may appear. This is one-time installation procedure and must be executed by someone with Administrator rights to the machine.



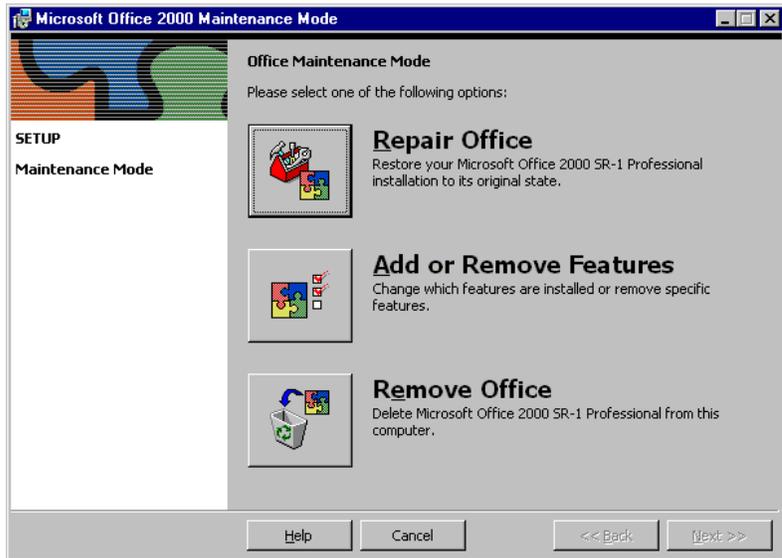
- **Microsoft Office:** An issue has been identified when selecting an option on the Home or Projects windows, Windows launches and tries to install Microsoft Office. To avoid this problem, do a complete install of Microsoft Office 2000, or disable HTML source editing.

To do a complete install, choose *Microsoft Office* branch, and select *Run all from My Computer*.

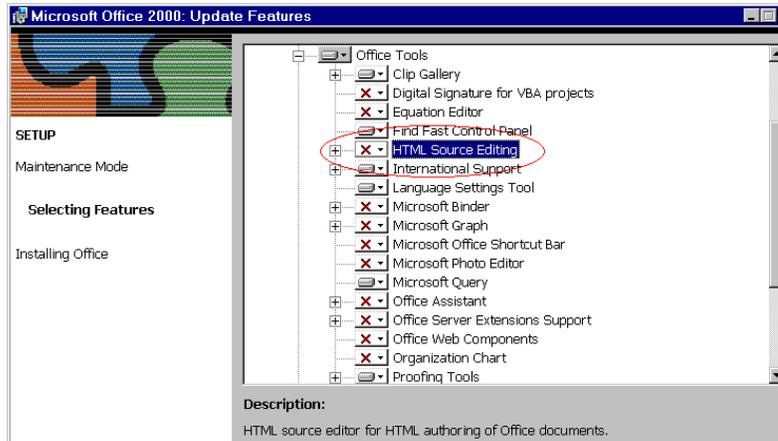


OR

To disable HTML source editing, go to *Control Panel* and choose *Add/Remove Programs*. Select Microsoft Office 2000 SR-1 and choose *Add/Remove*. At screen below, choose *Add or Remove Features*.



Expand Office Tools and click on *HTML Source editing* and choose *Not Available*.



Oracle Projects:

- There may be a conflict with CEFMS J-initiator on some Windows 2000 PCs. Some PCs will not activate the CEFMS J-initiator after the P2 J-initiator is installed. If users have an incompatibility conflict with J-initiator and the ability to run CEFMS, they should obtain the registry patch available from the CEFMS team. The POC for the patch is Bill Mordecai who can be reached at 256-864-1803. The CEFMS team is currently planning to upgrade to a compatible version of J-initiator by the time the P2 system is deployed.

Appendix III - P2 System Hands-on Training Options

Introduction

This document will provide an overview of the P2 system hands-on training options that will be provided to USACE during the deployment and implementation of the P2 system.

The primary audience for this document is the local P2 Deployment points of contact and other employees responsible for the development of local P2 training strategies. We encourage you to use this paper to help you develop your training strategies for your local organizations. This paper will assist you in determining who needs to be trained and when.

This information paper offers guidance about topics including:

- Overview of the courses that will be offered
- Target audience for each course
- The process for securing trainers through a single corporate contract
- The estimated costs affiliated with the P2 system hands-on training options

For more detailed information on P2, refer to the “Preparing for P2 Guide,” located on the [PMBP Portal](#).

Background: The PMBP Curriculum and P2

PMBP curriculum training is made up three key parts:

- Curriculum on CDs
- Small Group Discussions
- Formal Training

The various P2 system hands-on training options build on the key messages provided in the PMBP Curriculum discussing the benefits of the business processes and the role of the enabling tools.

PMBP Course 6, "Working in the PDT," represents the first two parts of the PMBP training process for P2. It teaches the key business processes and includes self-study and small group discussion elements of the curriculum. It calls upon those in the organization that are mentors and coaches of the PMBP at all levels and PDT members who understand the business processes and the P2 system to work together as an integrated whole for success of the PMBP.

Course 6 includes screen shots demonstrating high-level functionality of P2 in support of the PMBP Manual. These screen shots provide employees with a "primer" for P2, forming a basis before the user attends hands-on training designed according to the functional roles on a generic PDT.

Upon completion of Course 6, USACE employees will participate in small group discussions (SGD) to discuss the practical application of the PMBP Manual and P2 within their own organizations. It is strongly recommended that USACE employees complete PMBP Curriculum Course 6, and associated Small Group Discussions, before attending P2 system training.

The P2 system hands-on training courses provide the formal training portion of Course 6 of the PMBP curriculum. The P2 system hands-on training options presented allow users to attend the right courses to help them learn specifically what they need to know about the P2 system and how it serves as the enabling tool for PMBP.

Training Activities To Be Done Before P2 Is Deployed

It is the local organization's responsibility to choose appropriate training options for their employees, to coordinate training schedules, to fund this training, and to provide resources such as training facilities and other logistical support. Sites should ensure user training is accomplished as near to their P2 system cutover date as possible.

- Identify local USACE PMBP Subject Matter Experts (including those who possess mission-specific expertise) to support the training efforts
 - NOTE: The criteria for identifying SMEs is outlined in the "Instructor Team Makeup" section of the document.
- Plan the local P2 training strategy and identify which P2 system hands-on courses the local employees need to attend
- The P2 Training Team is developing a training assessment tool, which will be available via the PMBP Portal to help local management determine which courses the students need to take to become familiar with the P2 system based on their roles in the organization and the PMBP.
- Plan the preliminary budget for the courses using the information provided in this document as a starting point, but following the specific Consolidated Command Guidance for official information.
- Issue a government order Purchase Request and Commitment (PR&C) at least 60 days in advance for the Hands-on course instructors to the P2 Training Manager (Terry L. Patton)
- Coordinate training facility logistics
 - The current strategy is to ensure that logistics are managed as early as possible before each course begins
 - **USACE Network Connectivity:** The training facilities must provide some type of high-speed network connectivity allowing for connection to the USACE network (Connection to the USACE network is required to access the P2 Training database). The specific requirements for the network connections must be defined in collaboration with CEEIS technical requirements.
 - **Hands-On Requirement:** Ensure adequate number of computers is available to support number of attendees. Each student is required to have his or her own computer.
 - **Off Site Training Options:** Some local organizations may need to research options for offsite training if no onsite facilities are available. Network access issues from remote sites will have to be addressed.
 - **P2 Software Installation:** Install necessary software required to support the P2 system and test connectivity to the USACE network.

- **Hardware and Software Requirements:** Refer to the "Preparing for P2 Guide" located on the [PMBP Portal](#).
- **Access to the Training Facility:** The local P2 Deployment points of contact need to ensure access to the training facility for the P2 Certified instructors

Determining Who Should Be Trained

USACE is moving into a new cultural paradigm with the implementation of PMBP and P2. In order to successfully embrace this culture change, it is important to assess where your organization is in its understanding of the PMBP business processes and of network analysis systems (NAS) in general, and to determine what type of additional training you may need to prepare for P2 before it arrives.

PMBP Curriculum Courses 1-6 are a prerequisite for taking the hands-on training. It is important that people coming to the P2 hands-on training to understand the cultural context for why we are implementing PMBP as well as have a basic understanding of the business processes and the benefits of using P2.

Where to Focus Your Training Dollars

The P2 Training Team is aware of the fact that it may not be feasible for local organizations to train everyone in the organization on P2 at the same time because of various constraints including time and budget. Therefore, we encourage you to go through the analysis necessary to determine the key employees who need to be trained immediately, and which employees can wait to be trained until after P2 is deployed to the organization.

Please refer to the section of this document titled "Case Study: How To Use the P2 Hands-On Training Options Information to Develop Your P2 Training Strategy" to see an example of how one district used this information paper to develop their P2 training strategy.

If your local organization is under severe constraints for the number of employees who are able to attend P2 hands-on training before deployment, then we recommend these minimum requirements for your consideration:

- P2 Local Configuration Management Course - at least three employees responsible for this function need to be trained (depending on the size of your local organization)
- P2 Project Delivery Team (PDT) Course - at least the project managers and critical PDT members who will be responsible for keeping each project plan updated in P2
- P2 Executive Course - at least a sub-section of the executive management at your local organization so they have an understanding of the work their employees are completing using P2

P2 Training Assessment Tool

The P2 Training Team is developing a P2 Training Assessment tool, which can be used to help perform the analysis about which employees need to be the first ones to be trained on P2. The tool will contain a matrix outlining the various functions within the Project Management Business Processes with a cross reference to the modules of P2 where the functions are performed.

The local P2 Deployment points of contact should work with the employees in their organizations to leverage the P2 Training Assessment tool as part of the development of the P2 training strategy. The tool will be available via

the PMBP Portal. The local P2 Deployment points of contact will be notified as soon as the Training Assessment tool is available.

Corporate Contract for Supplemental Primavera Training

Although the USACE-specific P2 hands-on training courses are mandatory for end users, the USACE corporate training contract with Primavera also provides USACE corporate rates and a contracting mechanism for attending generic Primavera training courses, which can *supplement* the mandatory P2 hands-on training courses.

- NOTE: The Primavera generic courses are *not* intended to replace the USACE-specific P2 hands on training courses. They are intended to provide critical path method and project management concepts training. This information is critical for budgetary planning purposes for developing your local training strategy.

Roles and Responsibilities

P2 System Hands-On Training Teams

The training teams for the P2 system hands-on training courses will be made up of a blend of P2 certified instructors and USACE PMBP subject matter experts (SMEs). The intent is to have at least one P2 certified trainer (a Primavera Solution Provider (PSP) and one USACE PMBP SME from the local organization (the SME may come from another organization if someone is not available at the local level). All P2 certified instructors and USACE PMBP SMEs are required to attend the P2 Instructor Certification Boot Camp.

Criteria For Selecting USACE PMBP Subject Matter Experts

USACE PMBP subject matter experts (SMEs) should have an excellent understanding of the PMBP Manual, how the business processes are being implemented in the local organization, and good working knowledge of one or more mission-specific areas. The SMEs will be responsible for supporting the P2 certified instructor in the classroom, however they will not become officially certified as P2 certified instructors. Although it is encouraged that SMEs be in house employees, in some cases a contractor may be used.

The number of USACE PMBP SMEs required for each local site depends on the number of employees who will be trained on the P2 system and which courses they plan to attend. For example, if the local site plans to have two Project Delivery Team courses running simultaneously then they will need two USACE PMBP SMEs.

The local site's management team is responsible for selecting the PMBP SMEs. Once the subject matter experts are identified, they will be required to attend the first week of the P2 Instructor Certification Boot Camp to gain familiarity with the P2 system, the training materials and techniques to be used, and some proficiency in assisting with training (note that multiple boot camps will be held depending on the course in question - see below for details on boot camps).

P2 Instructor Certification Boot Camps

The purpose of the P2 Instructor Certification Boot Camps is to provide the method for the Primavera Solutions Providers (P2 certified instructors) and USACE PMBP SMEs to become familiar with the P2 system and the hands-on training materials. The Boot Camp described in this document is specifically geared to cover the Project Delivery Team course, however additional Boot Camps are under discussion to cover the other P2 system hands-on

courses as well (Additional information about the other P2 system hands-on training Boot Camps will be provided as soon as plans are finalized).

The PDT P2 Instructor Boot Camps will be structured in a two-week time frame. During the first week, the instructors and SMEs will go through the entire Project Delivery Team course, as though they were PDT students. During the second week, the instructors will review and discuss the instructor notes, workshops and classroom exercises in the training materials. The Boot Camp facilitator will quiz the students to ensure their level of knowledge meets the requirements for certification. The quizzes will touch on all aspects of the P2 system that are addressed in the P2 system hands-on courses as well as the key learning points from the PMBP Curriculum Course 6.

The Primavera Solutions Provider instructors (candidates for P2 certification) are responsible for covering their costs for travel and labor to participate in the P2 Hands-on Boot Camps; however there will not be a charge to attend the camp. The USACE local management of each site is responsible for covering the costs for travel and labor for USACE PMBP SMEs for their own location.

The PDT P2 Instructor Certification Boot Camps will be held at various locations prior to the deployment of P2 at the local sites. The goal is to hold the Boot Camps at the MSC level when possible.

Upon successful completion of the PDT P2 Instructor Certification Boot Camp, the Primavera Solutions Providers will receive "P2 Certification" from Primavera Systems, Inc.

MSC/Center P2 Deployment Points of Contact

The MSC/Center P2 Deployment Points of Contact (POCs) are responsible for the following activities:

- Working together with the training coordinator on their Deployment PDT to develop a regional training strategy for economies of scale and efficiencies for coordinating training through their MSC
- Working with MSC level management to provide resources and facilities and fund training for their regional employees.
- Identifying USACE PMBP subject matter experts for the MSC/Center training courses
- Development of training schedules for MSC/Center training courses

District/Local P2 Deployment Points of Contact

The District P2 Deployment Points of Contact (POCs) are responsible for the following activities:

- Working together with the MSC P2 Deployment POCs to develop a regional training strategy and implementing that strategy at the District/Local level
- Working with District/local level management to provide resources and facilities and fund training for their district/local employees
- Identifying USACE PMBP subject matter experts for the District/Local training courses
- Development of training schedules for District/Local training courses

HQUSACE P2 Deployment Point of Contact

The HQUSACE P2 Deployment Point of Contact is responsible for the following activities:

- Developing and implementing the HQUSACE P2 training strategy
- Working with HQUSACE management to provide resources and facilities and fund training for HQUSACE employees
- Identifying USACE PMBP subject matter experts for the HQUSACE training courses
- Development of training schedules for HQUSACE training courses

Process for Development and Delivery of P2 System Hands-On Training Materials

P2 system Hands-on training courses are being developed using Oracle Tutor. Oracle Tutor works in an automated fashion to leverage the PMBP Manual Navigation documents (including screenshots) that are currently under development. The training materials are designed for instructor-led training and will include both Instructor and Student Guides.

The Instructor and Student Guides are made up of Power Point slides, Word documents, PMBP Manual Navigation documents, workshops and class exercises.

Training materials will be delivered to the local sites in the form of hard copy training manuals for the initial courses. If the local site desires the electronic version for on-site printing, then an Adobe PDF file will be provided.

Overview and Description of P2 System Hands-On Training Courses

P2 system hands-on training is a pre-deployment activity, often called “just in time training,” which is conducted on-site at USACE offices or at a location determined by the local management. P2 certified training teams (as described above) will be used to conduct P2 system hands-on classroom training.

It is recommended that courses should start no sooner than three weeks before P2 deployment at each site (depending on availability of training facilities). The courses are designed to provide P2 system training to individuals based on their role in the PMBP.

There will be at least four courses available for procurement using the CEHNC P2 Corporate Training Contract, namely:

- A one-day P2 Local Configuration Manager (LCM) course (formerly known as System Administrators)
- A four and a half day Project Delivery Team (PDT) course
- A one-day Executive course
- A three-day Program/Budget Analyst course.

Each course can have up to twenty-four students, but is limited to the capacity of the facilities provided by the local management. The local management schedules and pays for the P2 hands-on training courses, which are available from the P2 contract held by CEHNC. The estimated training costs outlined below **do not** include travel costs for the instructors or estimated labor costs for attendees.

The P2 Training Team is currently evaluating options for P2 end users who may already have extensive knowledge of the Primavera Project Manager (formerly known as P3e) module of P2 and key project management concepts. Self-paced learning options such as web-based training are currently being evaluated for cost and time considerations. More information will be provided about web-based training as soon as decisions are finalized.

P2 System - Executive Course

– *Prerequisites:*

- Students must complete PMBP Curriculum Courses 1 through 6 in order to understand and achieve maximum benefits from this training course.
- *Target Audience:*
 - HQUSACE Executives include: GOs, SES, Vice Presidents, Directorate Chiefs, and Division Chiefs (when supported by Branch Chiefs)
 - MSC and Center Executives include: GOs, SES, Division Chiefs and Branch Chiefs (when supported by Section Chiefs).
 - District and other FOA Executives include: DE, Division Chiefs, and Branch Chiefs (when supported by Section Chiefs)
 - This course will also be made available for employees who need to understand the basic concepts of P2, but who do not plan to attend one of the other courses.
- *Cost Estimate:* \$2,000 per session
 - This cost does include the training materials.
 - The cost does not include the travel costs for the P2 Certified instructor or any labor and travel costs for the USACE subject matter experts.
- *Class Size:* Maximum of 24 students
- *Course Duration:* 1 Day
- *Summary of the Objectives of the Executive Course:*
 - Intended to provide a high level overview of P2 functionality
 - Managers will learn about the following topics:
 - Navigation of the PMBP Portal focusing on the use of PMBP Portal as the "one door to the Corps" for management level information
 - How to run reports and view project data from the PMBP Portal and Primavision modules of P2 to obtain management information such as project health, etc.
 - Basic concepts for workload analysis and resource leveling capabilities

P2 System - P2 Local Configuration Manager Course

- *Prerequisites:*
 - Students must complete PMBP Curriculum Courses 1 through 6 in order to understand and achieve maximum benefits from this training course.
- *Target Audience:* P2 Local configuration managers (LCMs). P2 LCMs will be responsible for initiation of projects in P2, as well as key local configuration management roles within P2, which will include coordination with the P2 Corporate P2 System Administrator(s) on global issues.
- *Cost Estimate:* \$2,000.00 per course for the labor hours of the P2 Certified Instructor.
 - This cost does include the training materials.
 - The cost does not include the travel costs for the P2 Certified instructor or any labor and travel costs for the USACE subject matter experts.
- *Class Size:* Maximum of 24 students

- *Course Duration:* 1 Day (course may be held locally or also at a regional level depending on the number of P2 LCMs identified for each site)
- *Summary of the Objectives of the P2 Local Configuration Manager Course:*
 - Overview of navigation through all modules of P2
 - Learn how to initiate projects in P2 including details about managing customer information and USACE corporate information
 - Learn about configuration management responsibilities for establishing, maintaining and monitoring the Corps standards for the P2 system in connection with P2 Configuration Management practices.
 - NOTE: The role of the P2 Local Configuration Manager is not to be confused with the P2 Corporate System Administrator who will be responsible for the global maintenance of the P2 system.

P2 System - Project Delivery Team Course

- *Prerequisites:*
 - Students must complete PMBP Curriculum Courses 1 through 6 in order to understand and achieve maximum benefits from this training course.
- *Target Audience:* all members of the Project Delivery Team, including anyone who supports the delivery of products and services
- *Cost Estimate:* \$9,000.00 per course for the labor hours of the P2 Certified Instructor.
 - This cost does include the training materials.
 - The cost does not include the travel costs for the P2 Certified instructor or any labor and travel costs for the USACE subject matter experts.
- *Class Size:* Maximum of 24 students
- *Course Duration:* 4 ½ days
- *Summary of the Objectives of the PDT Course:*
 - Learn to navigate through and operate all modules of P2
 - Learn how the USACE Project Management Business processes are enabled by the P2 system in order to:
 - Provide a single source of entry for all project information
 - Increase efficiency and coordination when planning and executing projects
 - Update project status
 - Add notes to activities
 - Build a PgMP/PMP and maintain it
 - Perform project/program closeout
 - Increase visibility of resources to aid in workload analysis and resource leveling
 - Use the PMBP Portal as a collaborative workspace for projects
 - Analyze key management information using P2 reporting and analysis tools
 - NOTE: The PDT members will, by far, be the largest group of end-users to be trained.

P2 System - Management and Analysis Course

- *Prerequisites:*

- Students must complete PMBP Curriculum Courses 1 through 6 in order to understand and achieve maximum benefits from this training course.
- *Target Audience:* working level staff people who are going to be using the tool for programming and budgeting, financial management and resource analysis. Audience also includes program analysts and budget analysts currently performing work where they interact with CEFMS for the management of work items and purchase request and commitments (PR&Cs).
 - Program Analysts, who work with PRISM and ABS, as well as other budgeting processes, should attend this class and will also be provided with supplemental lessons that will focus on Civil Works specific information.
- *Cost Estimate:* \$5,300.00 per session
- This cost does not include the costs associated with the supplemental Civil Works lessons.
- This cost does include the training materials.
- The cost does not include the travel costs for the P2 Certified instructor or any labor and travel costs for the USACE subject matter experts.
- *Class Size:* Maximum of 24 students
- *Course Duration:* 3 days (plus the supplemental lessons for Civil Works specific program and budget analysts)
- *Summary of the Objectives of the Management and Analysis Course:*
 - Course materials will include in-depth instruction on the use of the Oracle Financial Analyzer (OFA) module of P2.
 - Basic training on the budget module of Oracle Projects.
 - Basic USACE-specific ad-hoc functionality of Oracle Discoverer
 - Attendees will learn how to accomplish the following functions in P2:
 - Programmatic rollups and reporting
 - Receipt of funds
 - CEFMS interface
 - Civil Works Program/Budget Analysts will learn about the following topics:
 - Budget versions - how they are created, how the reporting work will be done
 - PRISM functionality (legacy system being replaced by the P2 system)
 - ABS functionality (legacy system being replaced by the P2 system)
 - GI Database functionality (legacy system being replaced by the P2 system)
 - CWAS functionality (legacy system being replaced by the P2 system) - initial receipt of funds and reprogramming of funds
 - Workflow - budget workflow and project workflow

P2 System – Web-Based PDT Course

- *Prerequisites:*
 - Students must complete PMBP Curriculum Courses 1 through 6 in order to understand and achieve maximum benefits from this training course.
- *Target Audience:* Users who are well versed with working with project scheduling tools, new employees who begin work after P2 is deployed, and employees who require refresher training. One

of the primary benefits of a web-based course is the option for self-paced learning and sustainment training after initial P2 system training and deployment is completed.

- *Cost Estimate:* Negotiations are in process. Additional details will be provided as soon as they are available.
- *Summary of the Objectives of the Web-based PDT Course:*
 - The content of the PDT web-based training is based on the training materials used in the classroom PDT course.
 - NOTE: More information will be provided about the web-based PDT course as soon as it becomes available.

How to Obtain and Schedule P2 System Hands-On Training

P2 system hands-on training will be available through a USACE corporate contract with Primavera Systems, Inc. Each local organization will be required to provide funds to pay for course materials, labor and travel costs for P2 certified instructors and USACE PMBP subject matter experts. The local organization will also be responsible for providing local USACE PMBP subject matter experts to assist the P2 certified trainers, as well as necessary IM and logistical support.

The P2 Training manager at the Huntsville Center should receive funds via a government order 60 days prior to the first scheduled training class. The P2 Training Manager will then issue a task order to Primavera Systems to secure the requested instructors. It is Primavera Systems' responsibility to provide the requested number of P2 certified trainers to meet the needs of the local site through the corporate contract.

After the P2 system hands-on training has been scheduled, the local organization will need to coordinate logistics concerning training facilities and equipment with the P2 Training Manager. The local organization will be responsible for all costs associated with the training facility and equipment. The time frame for coordinating the training logistics will depend on the number of users selected for hands-on training and the availability of training facilities, etc.

Case Study: How To Use the P2 Hands-On Training Options Information to Develop Your P2 Training Strategy

In our quest to be a learning organization, we want to help local organizations to develop your P2 training strategies by sharing one scenario with you that was developed by a local district to meet their training needs.

- **NOTE: This is not a mandate, but instead, a suggestion to provide options for your consideration.**

This outline has been slightly revised to make it more generic. Please feel free to use this outline as a starting point for developing your own local P2 system training strategies.

PDT Course

- All District Project and Program Managers
- Select other PDT members: within each technical section, select 2-3 technical people that have a basic understanding of business processes, practice them, play a leadership role in PDTs (by virtue of their strengths) and are respected as coaches and mentors of other PDT members.
- Resource providers

Management and Analysis Course

- Budget and program analysts (also participate in the PDT course)
- Other key employees who play a role currently in the creation of PR&Cs and other CEFMS work

P2 Local Configuration Manager Course

- 2-3 people in the district selected for strengths appropriate to the role and ability to effectively work with others

Executive course

- Commander, Deputy Commander, Division and Separate Office Chiefs

P2 Web-based training

- Available to all for self-training and reference as needed
- For refresher after taking the above courses
- For training of team members already savvy in project management network analysis tools

Summary of Breakout of Students Per Course:

In a district of about 800 people:

- PDT training: 200 (depending on how many PDT members are trained before deployment)
- Executive training: 20
- Management and Analysis training: 20-30
- P2 LCM course: 3
- Web-based: Available to all 800

Frequently Asked Questions: P2 System Hands-On Training

If you have questions regarding P2 system hands-on training options, please submit them via the PMBP Portal FAQ tab. Click [here](#) to access the PMBP Portal, and then click on the FAQ tab to enter your question.

- NOTE: Please take a moment to search the P2 FAQ database to see if someone has already addressed the question you have before you enter a new question.

Appendix IV - CEMRS Replacement of FORCON/CERAMMS Information Paper

Introduction

This document will provide information for USACE sites to understand the planned replacement of the Force Configuration Management System (FORCON) and the Corps of Engineers Resource and Military Manpower System (CERAMMS) with a single automated information system (AIS) for manpower requirements determination titled Corps of Engineers Manpower Requirements System (CEMRS). The paper starts with a brief overview of CEMRS and explains the major business needs and features of the tool. The next section describes the new user procedures. The appendix provides descriptions of the data elements to be derived from P2, the Corps' Project Management Business Process (PMBP) enabling tool.

For more detailed information on CEMRS, refer to the CEMRS Functional Detail Design Document. For more information on P2, refer to the Preparing for P2 Guide, located on the PMBP Portal. <https://pmbp.usace.army.mil>.

Overview of CEMRS

CEMRS will be the Corps' single workload-based manpower requirements determination and analysis system. It will replace both FORCON and CERAMMS, the current legacy systems for manpower requirements. In addition to the data currently handled in these legacy systems, CEMRS will also include RDT&E, RE and OMA, which are not included in any automated manpower requirements system.

CEMRS will use Oracle Financial Analyzer (OFA), a multidimensional database software designed for analytical purposes, in coordination with Oracle Projects (OP) and Primavera Project ManagerTM/Primavision (PMTM). Project Managers and project delivery teams (PDT) will use PMTM to schedule and resource all the activities needed for their projects. OP is the central repository for project data and handles interfaces to other Corps systems (such as CEFMS). Project activity schedules and resource estimate status will be maintained in PMTM by the PDT in accordance with local business practices.

Purpose

The primary goal of CEMRS is to replace the functionality currently provided by FORCON and CERAMMS for all types of data referred to above. CEMRS will provide analysis, reporting, and modeling capabilities geared towards identification of manpower requirements as well as the equitable distribution of manpower authorizations to the field. It will be used by all levels of the Corps to successfully determine and defend the Corps manpower requirements to OMB and DA. The primary application output will be a series of reports designed to disseminate these properly determined requirements.

CEMRS will use "data loaders" in Oracle Express to import manpower requirements information, both dollars and hours, from Oracle Projects (OP) and Primavera. The exact timing for this to occur is undecided. On the civil works side, a beneficial time would be when the project managers and PDT members update their current expenditure plans after the appropriations bill is passed by Congress and signed by the President. For military projects a better time may be immediately before the POM submission is due to DA.

Manpower information in OP and Primavera is maintained at the 7-digit organization level but will be aggregated in CEMRS to a set of Functional Organization codes (Administration, Planning, Engineering, Real Estate, Operations, and Programs and Project Management). Expenditure type information from OP will also be aggregated to a level that is more useful for manpower purposes (Hired Labor, Other in-house, Contracts, and Work by Others). Labor estimates from OP will come fully burdened and reflect the number of hours to be directly charged to projects. The number of direct FTE or workyears will be calculated through use of a formula in CEMRS. Fully burdened labor cost estimates will be “unburdened” in CEMRS to identify the number of indirect labor dollars charged to the projects through the use of Departmental and General Administrative overhead rates. The number of indirect labor hours will be calculated using of a formula derived from CEFMS historical financial data.

Once these data input summarization and calculation needs have been met, the data will need to be compared and separated by conceptual views of “How Funded”/“How Worked” and “Where Managed”/“Where Worked”. These comparisons will be easily facilitated via the drill and pivot and reporting capabilities of the OFA application. CEMRS will differentiate between Civil Works and Military projects. The primary differences between the two will be the Projects themselves and the Appropriation hierarchy they are reported and maintained with.

Districts/MSCs/Centers will be required to validate their manpower requirements. This will be accomplished through use of a variety of reports provided for that purpose. OFA provides worksheets that allow data to be entered and changed within OFA itself, directly to CEMRS data. This will be especially helpful during the validation process when it doesn’t make sense to require project managers or PDT members to adjust a very detailed project plan during this iterative review process.

An additional goal is to provide estimated FTE utilization information on a monthly basis for the duration of a project lifecycle. This will be derived from spread curves within Project Manager™, which will indicate the number of direct labor hours for each month.

User Procedures

Project Data Creation

In order to derive manpower data from Oracle projects and Primavera Project Manager™, project managers and PDT members must enter project information following step identified in the PMBP Project Delivery Process web site: http://www.hnd.usace.army.mil/p2/USACE_BP_FC1%20v3-24-03.pdf

Processes to be completed that are especially critical for manpower determination are:

1) Initiate a Project in Oracle Projects (PROC1030).

During this step project level information will be identified using Oracle Projects. Included are:

- Project Number and Name
- Project Work Item (connects project to CEFMS)
- Project type (Civil, Military, Environmental, or SFO)

Funds type (Dept Symbol, Approp, CCS for CW and Dept Symbol, Approp, MDEP, and AMSCO for Military) . For civil works Dept Sym/Approp/CCS will be entered as a WBS or Activity code in PM. This is because these values change over the life of a CW project, and because some WBS elements or activities may be funded by different funds types than the overall project at any point in time.

- Primary Business Program (Navigation, Power, Flood Control, Emergency Mgmt, etc.) - Civil projects only.
- Responsible District/Organization (for civil and military projects) and UIC (for military projects)

2) Activity/Schedule Development (PROC2030).

During this process project activity and schedule level information will be identified in Primavera Project Manager™. Schedule information will be used by CEMRS to provide estimated monthly FTE utilization data for the duration of a project lifecycle.

3) Resource Estimate Development (PROC2040).

During this process resource estimate will be created in Primavera Project Manager. Resource estimates will be used for budgeting and manpower requirement determinations. Each labor resource estimate will include the number of labor hours to be directly charged to the project. The estimate will be “fully burdened” which means it will include an amount for base labor, government contributions, leave recovery, and departmental and general administrative overhead. Other resource estimates will include:

- Travel, training, and other in-house type estimated costs.
- Construction placement and AE/Service type contract estimated costs.
- Estimates for work to be performed by other Corps entities and other agencies.

4) Workload Analysis and Resource Development (PROC1020) and Project Delivery Acquisition Strategy (PROC2050)

During these processes critical negotiations will take place between project managers, resource providers (section chiefs), and district leadership to determine best solutions for meeting project resource requirements. Decisions will be made with regard to the use of in-house resources, resources from another district within the Region, resources from another Corps Region, or resources external to the Corps (i.e. architectural and engineering firms). Resource estimates will be adjusted accordingly during this effort.

Preparing Project Data for Manpower Validation

At specific times of the year, yet to be determined, the most current manpower data being managed in Oracle Projects and Primavera Project Manager will be processed by HQUSACE – Manpower and Force Management Division into CEMRS, using Oracle Express and OLAP technology. The data undergo the following changes:

- Organization data will be summarized into CEMRS primary and secondary organization codes. Each 7-digit org code in Primavera Project Manager will be assigned a CEMRS primary organization code (A=Administration; K=Planning; L=Engineering; N=Real Estate; Q=Construction; R=Operations and Maintenance; Z=Programs and Project Management). CEMRS secondary organization codes will be assigned to all resources with and R (Operation and Maintenance) primary code. The secondary organization codes for operations and maintenance will be determined by the Primary purpose code (or line of business code) assigned to the project during the Initiating a Project in P2 PROC1030. The purpose for a secondary code for O&M work is to further define work that makes up for more than 50% of the Corps’ Civil Works mission.

- Expenditure types assigned to resource estimates in Primavera Project Manager™ will be summarized into the most meaningful breakout for manpower purposes. Those will include Hired Labor, Other-in-house, AE/service and construction placement contracts, and work by other Corps and Agencies.
- Fully burdened resource estimates from Oracle Projects will be “unburdened” for the purpose of determining the amount of labor and related labor hours being indirectly charged to a project.
- Formulas will be applied to direct and indirect labor hours for the purpose of determining full time equivalencies (FTE). It is anticipated that different formulas will be used for military and civil projects to accommodate a difference in average salary calculations.

Manpower Data Validation

Once data is in the appropriate format the manpower communities at all levels of the Corps will begin the manpower validation process. This will include:

- HQUSACE – Manpower and Force Management Division provides guidance for manpower validation via email to all MSCs.
- Major Subordinate Command (MSC) Manpower Office prepares region-specific guidance for accomplishment of HQUSACE manpower validation requirements for use by districts and centers under its command.
- Manpower officers at each site perform initial analysis of CEMRS data to ensure conformance to guidance. Reports similar to those currently in FORCON will be available in CEMRS for the purpose of analyzing manpower requirements. If data modification is required, CEMRS will provide project worksheets for that purpose. All changes to manpower requirements data will occur in CEMRS during the validation process.
- There will be two levels of validation for Corps Districts. First will be District level validation to ensure requirements meet district manpower goals and objectives. This is the responsibility of the District Program and Budget Advisory Committee (PBAC). Second is at the MSC or Regional level to ensure regional manpower goals and objectives are met. This is the responsibility of the Resource Management Board (RMB).
- The Manpower and Force Management Division at HQUSACE (CERM-M) will review all validated requirements for conformance to guidance as well. In most cases, requirements will exceed authorizations. Manpower modeling may be required to differentiate and optimize authorizations so that the Corps will execute its programs.

HQUSACE Modeling

Manpower modeling is the process used to group like projects together, generate a set of averages for the like projects, and apply the averages back to the projects in an effort to treat them equally when distributing authorizations. Manpower modeling will be completely automated in CEMRS. The process requires the following steps:

- CEMRS will group projects by project type, method of accomplishment, and organizational breakouts.

- A series of modeling codes are assigned for each grouping of projects.
- A set of averages is calculated for each grouping based on the first two years of data in the database, which represent the most accurate of the six years of data received.
- The averages are applied back to the projects in each group for the budget year, creating a new set of manpower data for equitable distribution of available manpower authorizations.

The CEMRS manpower modeling tool is not restricted for use against budget year data. It is anticipated that the need will occur to model outyear data as well. It is also anticipated manpower modeling will be made available for use by all levels of the Corps during later stages of development.

Manpower Allocation Process

When all requirements data has been validated, is in conformance to guidance, and meets Corps objectives, manpower initial allocations will be made by CERM-M via the Consolidated Command Guidance (CCG). Data will be made available for viewing in CEMRS and a timeframe for rebuttal by the field will be established. When the rebuttal process is completed final allocations will be made and reports posted to the PMBP Portal.

Defense of Manpower Requirements to OMB and DA

Manpower requirements data in CEMRS will be the basis for defense of manpower requirements by HQUSACE to OMB and DA. Reports will be made available in CEMRS for that purpose. For military projects CEMRS data will be used for the POM submission as well.

FORCON/CERAMMS Transition to CEMRS

FORCON/CERAMMS will remain the manpower requirements database of record for the MSC until the MSC has fully deployed P2 and had sufficient time to input and validate their project data. HQUSACE will use manpower information from only one system for each MSC and not try to combine data from two separate systems. The actual retirement date of the FORCON/CERAMMS systems remains to be determined at an appropriate date, pending the final USACE P2 deployment schedule.

CEMRS Appendix

This appendix provides a listing and descriptions of the CEMRS data elements to be derived from Oracle Projects.

Oracle Projects to CEMRS

Data Field	Description
Project No.	6-Digit Unique Project ID generated from Oracle Projects via OP3
Project Name	The Name of the Project
Project Type	Military, Civil, Env, SFO
Managing District/UIC Code	For Civil Projects will consist of 2-digit EROC Code; For Military Projects will consist of 2-digit EROC Code + Military UIC Code

Data Field	Description
Appropriation, Dept Symbol and CCS/AMSCO/MDEP	For Civil projects will consist of a combination of Dept Symbol/Approp/CCS codes; For Military Projects will consist of Dept Symbol/Approp/MDEP/AMSCO
Reimbursable Army Command Code	1 st two digits of the Resource Operating Code (ROC) of the reimbursing command, <u>if reimbursed by Army</u>
Reimbursable Source Appropriation Code	4-digit code assigned to all military funded projects.
Program Year	Year the project is appropriated by Congress (CAPCES)
Program Amount	The amount appropriated by Congress (CAPCES)
Funding Source	Identification of source of funds for the given year (i.e. Carry-In; Budget/Work Allowance; Non-Corps; Carry Out)
Funding Amount	Dollars associated with each funding source
Resource Code	Labor resource code is the 7-digit org code (and corresponding Military UIC for military projects) of the performing activity. Other-than-labor resource codes consist of expenditure type codes (travel, training, construction placement, work by others, etc.) These codes will be summarized for use by CEMRS.
Primary Business Program	Code assigned to each civil works project. To be used by CEMRS for secondary breakout of Operations and Maintenance organizational workload.
Task/Activity Organization	7-digit organization code assigned to a given activity. This code will be used to identify organization responsible for other-than-labor expenditure types.
Resource Amount	Dollars associated with each resource code.
Start Date	Date assigned to the beginning of an activity for the purpose of providing monthly breakouts of manpower requirements
Finish Date	Date assigned to the end of an activity for the purpose of providing monthly breakouts of manpower requirements.
G&A Rate	Rate applied to a labor resource estimate for calculating fully funded labor cost estimates.
Dept O/H Rate	Rate applied to a labor resource estimate for calculating fully funded labor cost estimates.

Appendix V - Corporate Management Information (formerly PPDS) Information Paper

Introduction

This document will provide information for USACE sites on how the Corps will transition from the Corps current Programs and Projects Delivery System (PPDS) to the Corps new Corporate Management Information (CMI) in the P2 system. For more information on P2, refer to the “Preparing for P2 Guide”, located on the PMBP Portal. <https://pmbp.usace.army.mil>.

Name Change from PPDS to CMI

Per recommendation of the P2 development team the PMBP Program Management Team (PMT) concurred with renaming the Programs and Projects Delivery System (PPDS) to the Corporate Management Information (CMI).

The change in name was necessitated because CMI will provide much greater reporting capability and it will be more user friendly. In many respects CMI will appear similar to PPDS but the overall concept and functionality is significantly different. For example CMI will offer these additional capabilities:

- **Electronic Project Management Plan (e-PMP):** CMI will contain an area to attach final version electronic copies of the supporting planning documents as required by the Program/Project Planning Phase of the Project Management Business Process as well as other components available within the P2 System.
- **Internal Use Discussion Forum:** This section will be used by the Project Delivery Team to exchange ideas about the supporting planning documents in order to finalize them for posting in the appropriate section of the e-PMP.
- **Enhanced Corporate Management Review (CMR):** Because P2 has much greater capability with various report development tools, future plans for CMR are underway to provide an even more robust CMR data.
- **P2 Reports Module:** CMI will be contained in a reporting module called P2 Reports. A P2 Reports tab will be located on the PMBP Portal and will be the central repository of custom developed reports. It will also provide access to the Oracle Financial Analyzer (OFA), and the Discoverer modules of P2.

Overview of Corporate Management Information (formerly PPDS)

The Corporate Management Information (CMI) module of P2 will be the reporting delivery website for reporting USACE programs and projects information, when P2 is deployed. CMI will allow anyone inside the Corps Intranet firewall with a web browser and appropriate permissions to view data regarding the progress of work performed by any Division/District/Center of the US Army Corps of Engineers for its varied customer base. It will provide current and detailed information and associated documents regarding projects at all Divisions within the Corps of Engineers. Additionally, CMI will contain links to the individual homepages of Districts and Divisions websites.

Transition from PPDS to CMI

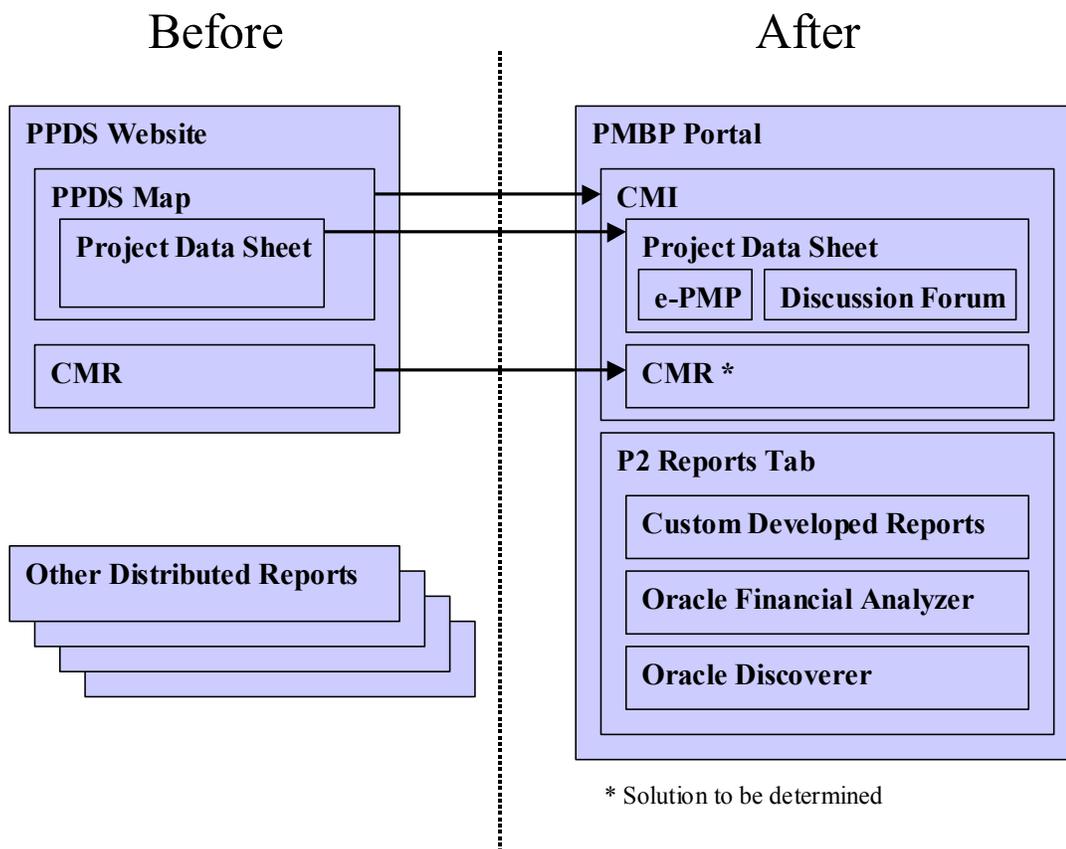
As P2 is deployed and PROMIS is retired, PPDS must transition its data sources accordingly from PROMIS to P2, and become CMI. During the transition phase, P2 project data from deployed districts will be imported.

There are several advantages to bringing PPDS functionality into P2, as described below:

- Using P2 as the sole-source database (interfaced with CEFMS, RMS, etc.) will ensure consistent enterprise-wide project data from a single instance.
- The PMBP Portal team will maintain CMI. Since the Portal is the central location via which the P2 System, including reports, will be accessed, having the PMBP Portal team maintain CMI will ensure that the Portal is updated and maintained in a manner that is consistent with P2.

CMI Module Replacements

The following graphic depicts the reorganization of the former PPDS and its components to CMI:



CMI: When P2 is deployed, CMI will contain an updated graphical depiction of USACE division boundaries for both Civil Works and Military and drill down capabilities. This map will be similar to what is in PPDS today. Some minor graphical and functional enhancements will be made in CMI, but the overall “look and feel” of the tool will remain very similar. The new CMI site uses drop-down menus for more streamlined access to the links

compared to using frames. These enhancements also allow the pages to load faster, are easier to update and maintain, and include improved search capabilities.

- **Project Data Sheet:** The Project Data Sheet will essentially remain unchanged. It will still be the primary source of project data and will contain the following components.
 - **Electronic Project Management Plan (e-PMP):** The e-PMP will be an enhancement to the ‘Detailed PROMIS/CEFMS Information’ link on the previous Project Data Sheet. It will contain an area to attach final version electronic copies of the supporting planning documents as required by the Program/Project Planning Phase of the Project Management Business Process as well as other components available within the P2 System.
 - **Internal Use Discussion Forum:** The Discussion Forum will be used by the Project Delivery Team to exchange ideas about the supporting planning documents in order to finalize them for posting in the appropriate section of the e-PMP.
- **Corporate Management Review (CMR):** CMR info will continue to be displayed on the CMR website. During P2 deployment the CMR website will incorporate both P2 and PROMIS data. Because P2 has much greater capability with various report development tools, future plans for CMR are underway to provide an even more robust CMR. More details on CMR will be published once plans are finalized.

P2 Reports Module: P2 will contain a reporting module called P2 Reports. A P2 Reports tab will be located on the PMBP Portal and will be the central repository of custom developed reports. It will also provide access to the Oracle Financial Analyzer (OFA), and the Discoverer modules of P2.

- **Custom Reports:** The P2 Reports tab will have links to custom developed reports. The P2 Reports Team is developing these reports using Oracle Reports 9i to meet specific USACE reporting requirements. Some examples of the P2 custom reports are; Acquisition Strategy Plan, Line Item Review, Milestones, Design Cost Management, and Project Close-out.
- **Oracle Financial Analyzer (OFA):** OFA is the program management analysis tool to be used primarily by budget/program analysts and program managers at District/MSD/HQ level for interactive views (with drill down and roll up capability) and more complex modeling and analyses of financial data. OFA is also configured to support the USACE PMBP, and will incorporate current programmatic and budgeting functionality of such legacy systems as PRISM and ABS and replace the functionality of providing Work Allowances and re-programming of CW funds currently found in the Civil Work Allowance System (CWAS). OFA functionality will also replace many standard reports and enable the user to create customized views of the data to address specific needs. CEMRS, the Corps’ next generation manpower requirements tool is under development. It will use OFA analysis and modeling functions to equitably distribute Full Time Equivalent (FTE) authorizations to the field.
- **Oracle Discoverer:** Oracle Discoverer is a web-based tool to be used for ad-hoc queries and reports from the P2 database. The business area views of Discoverer are organized by mission area and provide commonly used data elements for selection.

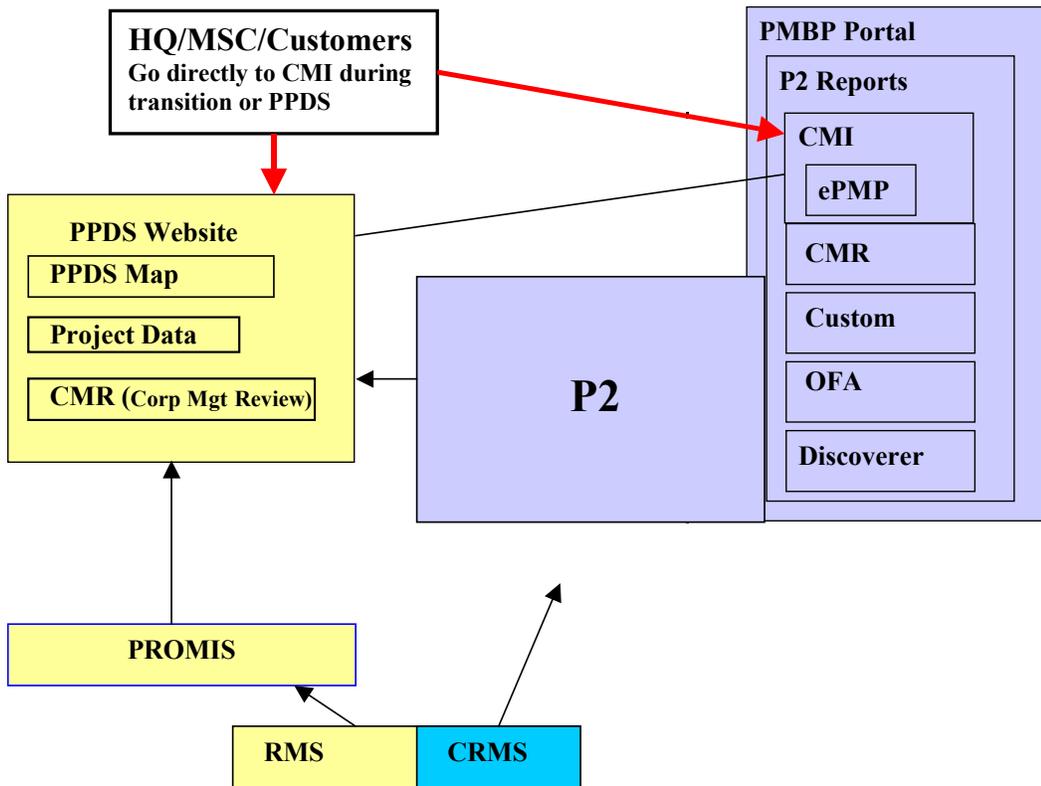
PPDS to CMI Transition Strategy

The CMI transition strategy will be a two-step process, as described below:

1. Each District/MS/Center/HQ will be migrated from PROMIS to P2 according to the deployment schedule. Transition consists of copying PROMIS data and converting it for use in the various functional modules within P2. Once the transition is complete, the data will be available for reporting and updating within P2.
2. Upon successful conversion, reporting for a converted District/MS/Center/HQ will then be directed to P2. P2 will be the source for data entry, editing, and reporting. During transition, selected data from P2 required for consolidation and continuous reporting to HQ, MSs and customers will be extracted from P2 and imported to PPDS. The original PROMIS-based PPDS will continue to be active for the sites remaining to be deployed.
 - Rollup of data to HQ, MSs and customers will be accomplished in the original PPDS, which will contain P2 data and PROMIS data until the last district is deployed to P2. Special SQL routines will be used to extract and combine data together from PROMIS (PPDS) and P2 (CMI) in order to seamlessly continue roll-up reporting.
 - Access to Corporate project data in PPDS during transition can be obtained from the Portal through the CMI/PPDS link or by going directly to the PPDS website.

Access for customers outside of the Corps of Engineers, such as military customers, local interests for Civil Works and other federal agencies will use CMI, which will continue to be available for a given site once P2 has been deployed at that site. The transition of PPDS to CMI for a given district will be transparent to the typical user and they will notice very little difference.

PPDS to P2 TRANSITION



During the PPDS transition to P2, selected data from P2 deployed districts will be extracted from P2 and imported to PPDS and combined with PROMIS data from non-deployed districts so that consolidated Corps-wide reports can be executed for HQ, customers, or an MSC that is in transition. Other MSCs can run PPDS reports that are not yet developed in CMI. Deployed districts should go to CMI for their detailed data. HQ/MSC/Customers could go directly to CMI during the transition or to PPDS.

Appendix VI - General Investigation (GI) Database Transition Information Paper

Introduction

This document will provide information for USACE sites to understand the planned transition of the General Investigations (GI) Database to the P2 System. The paper starts with a brief overview of the GI Database and explains the purpose of the transition. The next section of the paper describes the functional components of the GI Database and their planned replacements. The final section describes the transition strategy.

For more information on P2, refer to the “Preparing for P2 Guide”, located on the PMBP Portal.

<https://pmbp.usace.army.mil>.

Overview of the GI Database

The General Investigations (GI) Database is a management information system which tracks individual Civil Works reconnaissance and feasibility study reports. The GI database contains status, cost, schedule, and end result data for each report. When more than one feasibility study is generated from a single reconnaissance report, the GI Database provides a means of tracking the relationship between the parent reconnaissance study and its resulting multiple feasibility studies.

The GI Database is currently used to produce input for Program Review Board (PRB) and Command Management Review (CMR) charts, management analysis, and responses to requests for information from the Office of the Asst. Secretary of the Army (OASA (CW)), the Administration, Congress and others. The database includes all active studies regardless of funding source (about 500), and all completed studies since 1989 (about 900).

Purpose

The primary purpose of the transition from the GI Database to P2 is consistent with the overall goals of the Project Management Business Process and the P2 System. The GI Database will be replaced by the P2 System to enable a corporate standard business process run on a single enterprise Automated Information System.

The GI Database was created as an independent system for the sole purpose of meeting specific upward reporting requirements for the Civil Works General Investigations program. It was created because no other Corps system, including PRISM and PROMIS, contained the required information. GI Database studies are also entered into PROMIS as projects. With the replacement of PROMIS with the P2 System, all the data required for upward reporting will be available in the P2 System, thus the GI Database system will no longer be needed.

GI Database Functional Replacements

Study managers will use the Project ManagerTM and Primavision modules of P2 to plan work and identify resources for all GI studies. P2 provides an interface with CEFMS in order to obtain actual costs. P2 will replace the active file of the GI Database, and will include the capability to periodically roll out completed studies for inclusion in a completed file.

The primary function of the GI Database is to provide information to the following sources:

Program Review Board (PRB): The monthly PRB briefing, which is conducted at HQ Directorate of Civil Works, includes one or more charts, which display a summary of the status of reconnaissance and feasibility studies. The GI Database produces reports that are used to generate these charts. The PRB requires general data for all reconnaissance and feasibility studies that are intended to lead to projects. P2 custom reports will produce output that matches the corresponding GI Database reports.

Corporate Management Review (CMR): The PRB charts to be used for CMR are selected by the Director of Civil Works. CMR charts are intended for the corporate level executives and the Chief of Engineers.

The Office of the Assistant Secretary of the Army (OASA(CW)), the Office of Management and Budget, and Congress: Reporting for higher echelons is currently done on an ad-hoc basis. These queries are usually basic data such as the number of studies completed in a given year, median costs or times to complete over a period of time. These reports and queries can be easily run from the P2 reports module using Discoverer. An extract will also be provided to allow P2 data to be exported into Excel or MS Access from which additional analysis and reporting can be accomplished. This extract will also be used to periodically roll out completed studies into an historical file.

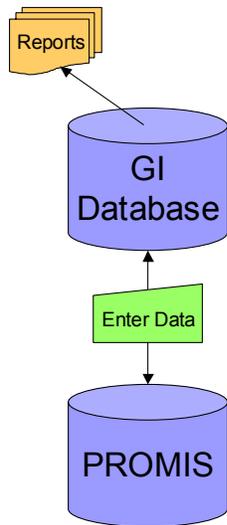
Management Analysis: In addition to the P2 Custom reports, Discoverer, and export to Excel/MS Access mentioned above, the Oracle Financial Analyzer (OFA) module of P2 will provide management analysis and information retrieval capabilities. There are currently no OFA cubes specifically planned for the GI Database replacement, but the PRISM-Replacement and P2-General OFA cubes will provide additional analysis capabilities for reconnaissance and feasibility data.

GI Database Transition Strategy

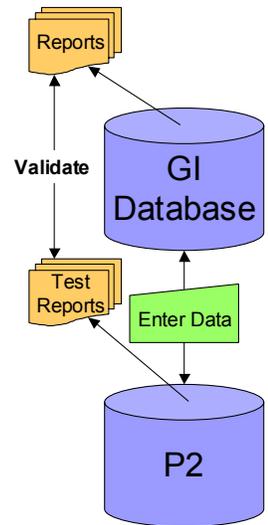
Current plans call for deploying and then implementing P2 by Major Subordinate Command (MSC). The PMBP Program Management Team (PMT) has made the decision to have the GI Database remain as the database of record for USACE until all MSCs have fully deployed P2 and had sufficient time to input and validate their data. The GI Database legacy system will then be deactivated globally, and USACE will transition to P2 corporately.

Although this will require dual-entry of data the two systems (GI Database and P2) during the full P2 deployment period, there will be no significant additional effort than is currently required to maintain data in PROMIS and the GI Database. The figure below depicts the process before, during, and after P2 deployment.

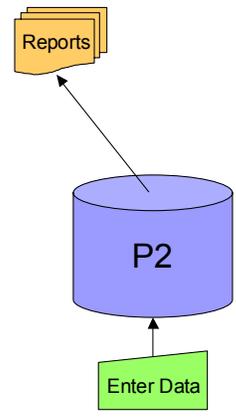
Pre-Deployment
(Non-deployed Site)



Deployment
(Deployed Site)



Post-Deployment
(All Sites Deployed)



There are no cost savings to deactivating the GI Database concurrent with each MSC deployment, because the GI Database systems will still need to be maintained until the last MSC has fully deployed and implemented P2 under any option. Also, by running the P2 and GI Database systems in parallel, the information from P2 can be validated against GI Database to minimize the risk of errors and omissions and maximize the degree of confidence that P2 will produce accurate information once the GI Database is deactivated.

Appendix VII - CAPCES Information Paper

Introduction

This document will provide information for USACE sites to understand the planned interaction between the P2 system and Construction Appropriations Programming Control and Execution System (CAPCES). The paper starts with a brief overview of CAPCES and explains the major business needs and features of the interface. The next section describes the new user procedures. The appendix provides descriptions of the data elements transferred during the interface process.

For more detailed information on the CAPCES Interface, refer to the “MD.050 CAPCES Functional Design Document”. For more information on P2, refer to the “Preparing for P2 Guide,” located on the PMBP Portal. <https://pmbp.usace.army.mil>.

Overview of CAPCES

The CAPCES application is an Army system designed to manage the Army military construction (MILCON) budget and programming process. CAPCES is part of the Programming, Administration and Execution (PAX) system, which is the source of MILCON programming and budget justification information for the Department of the Army. PAX also contains the DD Form 1391 Processor System which is the system used to create, review, correct and submit the DD Form 1391 to Headquarters, Department of the Army (HQDA). A DD Form 1391 is the basis for justifying Military Construction Army (MCA), Army Family Housing Construction (AFHC) and other Army projects for Congressional authorization and appropriation actions.

DIRNET is a module of CAPCES that is used by HQUSACE Program Managers to authorize Corps FOAs to proceed with specific phases of design and award construction. DIRNET collects selected updated data from the CAPCES database and, combined with written direction from HQ PgMs, forms the basis of the directive.

Purpose

The primary purpose of the CAPCES interface is to automate and streamline the flow of up-to-date Directive information between CAPCES and P2.

The P2/CAPCES interface will be developed to satisfy the following business needs:

- USACE-wide integration of current and future Army military construction project data into a single source
- Provide means for directive record to electronically flow into the P2 system
- Reduce effort needed to initiate projects in P2
- Ensure that Army released MILCON projects are entered and maintained in P2
- Provide milestone information previously entered manually into CAPCES through an automated means
- Provide consistent data, i.e. description, location, program amount, program year, authorized phase, scope, 1391 number, etc., through the use of an automated interface

Major Features

The major features of the CAPCES interface include the following:

- A project will be initiated in P2 for each initial directive created in DIRNET. A class code will be added to the Class Category “Army Project Number / 1391 Form Number” with the Project Description from CAPCES as the class code description. Other class categories such as Program Year will be assigned to the project by the interface.
- As directives after the initial directive are issued, the interface will update the class codes and other data elements as required in Oracle Projects.

User Procedures

The CAPCES (DIRNET) to P2 interface runs automatically in background twice daily. For new projects, the interface creates a project with directive data after which the Local Configuration Manager (LCM) must open the project and complete the project setup. For existing projects, the interface updates the project record with new directive data. Two reports reside on the PMBP Portal, one for displaying new projects created by the interface, which need to be completed by the LCM, the other for projects, which have received new directives within the previous two weeks.

The P2 to CAPCES interface runs automatically in background daily.

CAPCES Interface and P2 Deployment

Current plans call for deploying and then implementing P2 by Major Subordinate Command (MSC). As P2 is deployed to a site, the CAPCES interface will be activated upon go-live cutover. CAPCES users will have to follow the new business processes outlined in the User Procedures section at that time.

Appendix

This appendix provides a listing and descriptions of the data elements of the CAPCES interface.

CAPCES (DIRNET) to P2

Data Field	Description
Directive Number	Each project directive has a sequential number beginning with 1. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Directive Date	The directive issue date. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Job Series	The job series number is a unique number that identifies the directive in the DIRNET system and will not be interfaced. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
From Office	The office that issues the directive. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
To Office	The MSC responsible for executing the project. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Information Copies	A list of organizations that receive a copy of the directive. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Design Agent	The district office responsible for executing the design.
Construction Agent	The district office responsible for executing the construction. This field is used to designate the Area of Responsibility, EPS and the office responsible for financial execution of the project. The LCM can change these prior to the execution of the initial CEFMS interface that creates the Project Work Item.
IMA Region	Installation Management Area Region
MACOM	Major Command
Project Description	The official project description from the DD 1391 (CAPCES)
Project Name	A derived name designed to make the Oracle Project Name unique. The name will consist of a prefix based on the Type Funds code (CAP for Army MILCON, ACE for Air Force MILCON, and OTH for other funds types), 1391 Processor Number, and the first 19 characters of the Project Description to form the Project Name.
Scope	A numeric code describing the scope of the project (CAPCES).
Unit of Measure	Examples include Lot, Square Meter ETC (CAPCES).
Category	Alphanumeric code that categorizes the project (CAPCES).
Type Funds	A code that identifies the type of funds. (CAPCES codes are not the same as DIRNET codes and are converted to DIRNET codes upon entry to DIRNET).
Station Code	The code that identifies the installation where the project is to be built (CAPCES).
1391 Processor Number	The DD 1391 form number (CAPCES).
Authorized Year	The year in which Congress authorizes the project (CAPCES).
Program Year	The year the project is appropriated by Congress (CAPCES).
Authorized Design Phase	Code indicating the authorized stage of project design. Code 9 is construction all others are design (CAPCES).
Directed Amount	The amount directed by the USACE Program Manager as a limit on total construction cost for the project.
Previous Funds	Funds on the Directive prior to the current Directive. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.

Data Field	Description
Funds This Directive	Funds associated with the Current Directive. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Total Funds	Sum of all funds for all Directives. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
References	Free form text. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Description of Authorization	Free form text. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Special Instructions	Free form text. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Signature Block	List of program managers with branch, division and directorate. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
USACE MSC Certified Cost/DD1391 Block 8 Cost	The DD1391 Block 8 Cost is displayed on the directive if the cost has not been certified by USACE. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
CECW-EI Estimated Cost/CECW-EI ENG3086 Cost	The Estimated Cost is displayed on the directive if the cost has not been approved by CECW-EI. This will be captured in a PDF file that will be attached to the project in Primavera-Project Manager™.
Congress Appropriated Amount / Congress Appropriation Request	The Congress Appropriated Amount is displayed on the directive if the appropriation bill is signed. Otherwise, the Congress Appropriation Request is displayed if the budget was sent to Congress.

P2 to CAPCES

Data Field	Description
Project Number	System generated project number (segment1) in Oracle Projects.
DD 1391 Processor Number	Unique Identifier for a Directive record from DIRNET and CAPCES. This will be the link between CAPCES and Primavera Project Manager so that changes can be made to existing activities.
Funds Type Code	'Military Funds Type' class code for a project in Oracle Projects.
Project Name	Project name in Oracle Projects. Those originally from CAPCES will consist of a prefix representing the Military Funds Type Code (CAP for Army MILCON, ACE for Air Force MILCON, and OTH for other funds types), followed by the 1391 Processor Number, followed by the first 19 characters of the Project Description.
Design Agent	3 digit code taken from p2pa_agent_codes_tbl cross-reference table. Code used corresponds to the value in the Project record's Design Agent class code.
Forecast Award Date	Forecast Award Date value from Primavera Project Manager™. Note: The "Lock-in" date will come from a baseline designated with the type "Lock-in".
Project Manager	Project Manager from Oracle Project record.
Design Percent Complete	Design Percent Complete value from Primavera Project Manager.
Construction Percent Complete	Phys_complete_pct field from task record in Primavera Project Manager. Value originally comes from Primavera Project Manager, but will be populated by the RMS interface once construction is underway.
CWE	Sum of resource estimates for all activities under 60000 (Construction) WBS
Design Start Date Scheduled	Scheduled date for activity containing milestone activity code for milestone ML060
Design Start Date Actual	Actual date for activity containing milestone activity code for milestone ML060

Data Field	Description
PD/Concept Complete Date Scheduled	Scheduled date for activity containing milestone activity code for milestone ML090
PD/Concept Complete Date Actual	Actual date for activity containing milestone activity code for milestone ML090
Design Completion Date (RTA) Scheduled	Scheduled date for activity containing milestone activity code for milestone ML180
Design Completion Date (RTA) Actual	Actual date for activity containing milestone activity code for milestone ML180
Construction Advertise Date Scheduled	Scheduled date for activity containing milestone activity code for milestone ML230
Construction Advertise Date Actual	Actual date for activity containing milestone activity code for milestone ML230
Bid Open Date Scheduled	Scheduled date for activity containing milestone activity code for milestone ML240
Bid Open Date Actual	Actual date for activity containing milestone activity code for milestone ML240
Construction Award Date Scheduled	Scheduled date for activity containing milestone activity code for milestone CC800
Construction Award Date Actual	Actual date for activity containing milestone activity code for milestone CC800
Beneficial Occupancy Date Scheduled	Scheduled date for activity containing milestone activity code for milestone CC850
Beneficial Occupancy Date Actual	Actual date for activity containing milestone activity code for milestone CC850
Construction Completion Date Scheduled	Scheduled date for activity containing milestone activity code for milestone CC820
Construction Completion Date Actual	Actual date for activity containing milestone activity code for milestone CC820
Fiscal Completion Date Scheduled	Scheduled date for activity containing milestone activity code for milestone ML330
Fiscal Completion Date Actual	Actual date for activity containing milestone activity code for milestone ML330
Estimated Basis Contract Date Scheduled	Scheduled date for activity containing milestone activity code for milestone ML245
Estimated Basis Contract Date Actual	Actual date for activity containing milestone activity code for milestone ML245
Contract Required Completion Date Scheduled	Scheduled date for activity containing milestone activity code for milestone CC830
Contract Required Completion Date Actual	Actual date for activity containing milestone activity code for milestone CC830
Construction Agent	3 digit FOA code taken from p2pa_agent_codes_tbl cross-reference table. FOA used corresponds to the value in the Project record's Construction Agent class code.
Contracting Type	Activity code for the 'Contracting Type' activity in Primavera Project Manager.
Delay Code	Activity code for the 'Construction Contract Delay' activity in Primavera Project Manager.
BOD Original Date	BOD Original Date from Project record in CRMS.
Last Update Date	Last Update Date from a project record in Oracle Projects.

Data Field	Description
Installation Name	'ARLOC' class code for a project in Oracle Projects.
Tier Code	'Tier Code' class code for a project in Oracle Projects.
Congressional Add	'Congressional Add' class code for a project in Oracle Projects.

Appendix VIII - RMS-P2 System Interface Information Paper

Introduction

This document will provide information for USACE sites to understand the planned interaction between the P2 system and Resident Management System (RMS). The paper starts with a brief overview of RMS and explains the major business needs and features of the interface. The next section describes the new user procedures. The appendix provides descriptions of the data elements transferred during the interface process.

For more detailed information on the RMS Interface, refer to the “MD.050 RMS Interface Functional Design Document”. For more information on P2, refer to the “Preparing for P2 Guide”, located on the PMBP Portal. <https://pmbp.usace.army.mil>.

Overview of RMS

The Resident Management System (RMS) is the USACE construction quality management and contract administration system designed primarily to aid field construction engineers and their staffs with management of construction contracts (and in the near future, dredging contracts). RMS provides considerable contract/project-related information to senior management, project managers, Corps customers and others. RMS also serves as a multi-purpose automation tool for the daily administrative tasks of field construction offices. It also enables contractors and field offices to communicate electronically, thus greatly reducing the amount of time and paperwork involved with progress payments, schedule changes/reviews, submittal reviews and various types of correspondence.

Other major features of RMS include: pre-award construction planning, preparation of contract modifications with related documentation, correspondence preparation with tracking and indexing, scheduling of construction with review and updating, submittal register preparation and import/export, performance measurement and safety program oversight.

The primary goal of the two-way interface between P2 and RMS is to capture construction contract information at its source, to prevent duplicate data entry, and to share this information during the construction phase of projects with all Project Delivery Team members.

The interface has two major purposes: During the project design and procurement phases, it provides construction personnel with project information necessary to plan and prepare for future contracts. During the construction phase starting with award of a contract, all the contract and related data necessary for P2 will be stored in RMS, and will be transmitted to P2.

RMS data is stored in multiple databases. Required items for P2 will be consolidated into a single database for the interface. This will facilitate reporting contract status information and issues across the Corps thru P2

The Current Working Estimate (CWE) information presently in RMS may or may not represent the CWE on a project (it actually relates to a contract). As a result, the CWE will come from P2 for a project.

Purpose

The primary purpose of the RMS-P2 Interface is to allow resident engineers to continue using RMS for its end-user focused functionality while integrating RMS information into P2's data repository for centralized management information and potential action.

The RMS-P2 Interface will be developed to satisfy the following business needs:

- USACE wide integration of current and future construction contract data into a single source
- Maintain current status on future contracts in P2 schedule
- Maintain current status on active construction contracts through RMS
- Maintain projected monthly construction placement on active and future construction contracts through RMS
- Standard construction contract milestones and WBS elements will reside in P2 methodologies with the capability of adding additional contracts throughout the life of a project
- Capability to launch RMS from the P2 Applications Link on the PMBP Portal
- Increased availability of construction contract and summary data via a consolidated RMS (CRMS) database with web-published reports residing on the PMBP Portal

Major Features

The major features of the RMS Interface include the following:

- Build a “construction contract” methodology in P2 to support RMS construction contract data. This methodology will reside in the Military, Civil, and Environmental methodologies that include construction. There will also be a separate “construction contract only” plug-in methodology that can be used separately in the case where multiple contracts exist on a project or within a phase/stage of a project.
- A strategic feature of the interface built by the RMS development team is the Consolidated RMS (CRMS) database. It will be modeled to support future reporting and data warehousing requirements. The CRMS will consolidate information from all district RMS databases into a single database that will enable strategic reports to be published to the PMBP Portal and be the source of RMS data interface with P2.
- After the contract data is present in P2, the interface will PULL the construction contract-related activity data for each contract in a project from P2 to the resident office RMS databases. RMS users will update this data, and a batch service will transfer the data up to the CRMS database. Once the data is present in CRMS, a batch service will PUSH the construction activity schedule data into P2. The primary objective of the interface between P2 and RMS is to capture information at its source to prevent duplicate data entry and share project information with all PDT members.

User Procedures

In order to interface construction contract data into RMS from P2, the user must enter project information through the following steps:

1. Initiate a Project in P2
2. Ensure a construction contract structure is included in Primavera Project Manager™ for each construction contract associated with a project.
3. Assign construction contract to a construction field office. (Task Organization)
4. Assign Resources to activities in Primavera Project Manager™. For construction contracts, the methodologies include one activity for the construction contract and one or more activities for other non-contract efforts. The estimate for the construction contract should include any contingency authorized for use by the field office.
5. The Work Item associated with the construction contract should be a funded Work Item.
6. The activity structure associated with a construction contract from the methodology in Primavera Project Manager™ must not be modified. It is designed to seamlessly link to RMS.
 - One exception to this is where there are both asset and non-asset funds on a project being used to fund the contract. Another is where there are multiple attributes related to funding that must be tracked (such as business program) in P2 on contract. In these cases, parallel activities with a funded work item must be added to link the asset/non-asset funds or multiple attribute codes to the project and hence to the contract.
7. Add a construction contract to RMS for the selected construction office. Link the construction activity from P2 to construction contract in RMS.

RMS Interface and P2 Deployment

Current plans call for deploying and then implementing P2 by Major Subordinate Command (MSC). As P2 is deployed to a site, the RMS interface will be activated upon go-live cutover. RMS users will have to follow the new business processes outlined in the User Procedures section at that time. For more information on deployment, refer to the “Deployment Guide Executive Summary”.

Appendix

This appendix provides a listing and descriptions of the data elements of the two RMS interfaces.

P2 to RMS

Data Field	Description
<Internal System>	Unique ID
Project No.	6-Digit Unique Project ID generated from Oracle Projects via OP3
Project Name	The Name of the Project
Activity ID	A Short Unique Activity ID within the project.
Activity Name	The Name of the Activity.
Resource Code	The RMS interface will pull the CONSTSVCS resource that is assigned to each Construction Contract activity.
Planned Start	(Note: For the Contract activity ONLY). The date the activity is scheduled to begin. This date is computed by the project scheduler but can be updated manually by the project manager. This date is not changed by the project scheduler after the activity has been started.
Planned Finish	(Note: For the Contract activity ONLY). The date the activity is scheduled to finish. This date is computed by the project scheduler but can be updated manually by the project manager. This date is not changed by the project scheduler after the activity has been started.
Contract Amount	The total of the Construction Contract Amounts for CONSTSVCS. In Project Manager TM , the planned cost for the resource assignment on the activity.
Task Work Item	The "Task Work Item" is the work item associated with the activity. For the RMS interface, the work item associated with the funding of the contract is passed from P2 to RMS.
Task Organization	The "Task Organization" is an activity code designating the organization to which the contract is assigned.
Contract Scope of Work	The Documents table contains all project-related documents.
Contract Issues/Remarks	The Documents table contains all project-related documents.
Status Code	Contract Status Code
Delay Code	Contract Delay Code
Design By Code	The Design By Authority
Contracting Type Code	The Type of Contract.
Contract Award	Contract award date - Milestone CC800
Construction NTP Acknowledged	NTP acknowledged date - Milestone CC810
Construction Completion	Projected completion date - Milestone CC820
Contract Required Completion	Contractually required completion date - Milestone CC830
Physical Completion	No remaining known defects - Milestone CC840
Beneficial Occupancy Date	Beneficial Occupancy Date - Milestone CC850
AE Evaluation Date	Date AE contractor evaluation complete - Milestone CC860
Contractor Evaluation Date	Date construction contractor evaluation complete - Milestone CC870
Fiscal Completion	Date contract financially closed out - Milestone CC880
Transfer Document Date	Date facility is transferred to customer's property list - CC890

RMS to P2

Data Field	Description
<Internal System>	Unique ID
Project No.	6-Digit Unique Project ID generated from Oracle Projects via OP3
Project Name	The Name of the Project
Activity ID	A Short Unique Activity ID within the project.
Activity Name	The Name of the Activity.
Resource Code	Resource Code
Start Date	The Current Start Date of the Construction Contract Activities ONLY. (Note: Set to the Planned Start Date until the Activity is Started, then Set to the Actual Start Date).
End Date	The Current Finish Date of the Construction Contract ONLY. (Note: Set to the Activity Planned Finish Date while the Activity Is not Started, the Remaining Finish Date while the Activity is in Progress, and the Actual Finish Date once the Activity is Completed).
Contract Amount	The total of the Construction Contract Amounts for CONSTSVCS.
Task Work Item	The use of this field is still being decided.
Project Organization	The name of the Project Organization.
Task Organization	The decision has not been made if this will be an activity code or a cost account.
Scope of Work Document	Contract Scope of Work link on the PMBP Portal
Status Code	Contract Status Code (if changed)
Delay Code	Contract Delay Code (if changed)
Issues/Remarks	Contractual Issues/Remarks
Contract Award	Contract award date - Milestone CC800
Construction NTP Acknowledged	NTP acknowledged date - Milestone CC810
Construction Completion	Projected completion date - Milestone CC820
Contract Required Completion	Contractually required completion date - Milestone CC830
Physical Completion	No remaining known defects - Milestone CC840
Beneficial Occupancy Date	Beneficial Occupancy Date - Milestone CC850
AE Evaluation Date	Date AE contractor evaluation complete - Milestone CC860
Contractor Evaluation Date	Date construction contractor evaluation complete - Milestone CC870
Fiscal Completion	Date contract financially closed out - Milestone CC880
Transfer Document Date	Date facility is transferred to customer's property list - CC890

Note: At contract award, the RMS to P2 interface will rename the WBS associated with the contract from “Contract” to contract number plus delivery order number plus the contract short title.

Appendix IX - PROMIS to P2 Data Conversion Part 1: Overview and Data Information Introduction

This document describes the conversion plan for the data elements contained in the PROMIS databases that will be converted to P2. It is a supplement to the “Preparing for P2 Guide,” located on the PMBP Portal at <https://pmbp.usace.army.mil/>.

The purpose of this paper is to provide information necessary to assist USACE districts and centers with their preparations to convert their PROMIS ‘Current Official’ and ‘Upward Reportable’ project data into P2. The automated loading of PROMIS data will not be mandatory. Each district/center will need to decide whether to have its PROMIS data programmatically converted to P2. If so, they will need to develop plans to cleanup and prepare that data for the conversion. Districts not currently using PROMIS will need to decide how best to prepare their data for loading manually into P2. This paper provides information about the design of the PROMIS-to-P2 data conversion. It is intended to help all of the districts and centers develop informed strategies for the P2 data load and cleanup. If minimal ‘clean-up’ is required, such as schedule updates and resource/WBS maintenance, this path should be chosen as it will save many man-hours of manual effort to rebuild the projects in P2 and allow you to devote the necessary time and effort to input of those district projects that are not currently in PROMIS. On the other hand, if your PROMIS data is incomplete, out of date, structured incorrectly in PROMIS, etc. and a major clean-up effort is required, consideration should be given to dispensing with the conversion effort or convert only those projects considered in good shape. Bear in mind, only a limited amount of time will be allowed to input all existing and new work in P2.

All project data in PROMIS will reside in the MEGA PROMIS database once the designated data is converted to P2.

The paper is the first of a two-part series of information papers on the PROMIS-to-P2 data conversion. The subsequent paper will provide detailed information on the full data conversion process and recommendations for data cleanup.

The paper is organized in the following way. First, it describes the different categories of data that will be converted from PROMIS. Second, it describes the various strategies and techniques for converting the PROMIS data. It then describes for each category of PROMIS data how the conversions will work. It includes an appendix showing field-by-field details of the PROMIS data that will be converted.

PROMIS Data Groupings in the Conversion Process

During the data conversion process, the PROMIS data will come into P2 in four different phases.

First, the “referential” data will be loaded. Examples of referential data are: CEFMS employees, organizations, cost rates, etc. When you use PROMIS today, there are many fields on the PROMIS dialog boxes that are populated through “drop-down lists,” which show the valid values from which you make your selection. In other cases, all the valid PROMIS values display on the body of the dialog box itself, and you click the associated button or box to designate your selection. The choices that display on each of these pick-lists or button/box identifiers must have been pre-loaded into the system. All of those sets of pick list values and button/box codes are stored in PROMIS as “referential data.” These PROMIS referential data

elements have been mapped to the P2 system and scrubbed to make sure they are current and consistent. The P2 team will have pre-loaded the appropriate referential data elements into the corporate P2 system before it is deployed to your site.

Second, your project header data, which is the data loaded in the Project Identification and Subproject dialog boxes in PROMIS, will be loaded. The project header data include all information that relates to the entire project.

Third, your project “task” data from the Current Official version will be loaded from PROMIS. It includes such information as the descriptions, durations, dependencies, and dates for each task on the project. You may be maintaining the task data today in your Network Analysis System (NAS). PROMIS includes interfaces to multiple NAS systems and stores the task data generated within those systems in PROMIS itself as well as internal usage of the dates entries ‘milestone’ option.

Finally, your resource data will be loaded from PROMIS. The resource data identify the organizations that will be responsible for the work on the task.

The Different Methods for Converting PROMIS Data

Two primary methods will be used to convert the various data elements in PROMIS. While the distinctions between the methods may seem a bit technical, understanding the differences will be important to you because they will have different implications for data cleanup in PROMIS. An overview of each method is presented here. A subsequent paper will provide specific recommendations for cleaning up your PROMIS data.

Direct Method

The first is the *direct* method. Data converted by this method will be read from the PROMIS database and loaded straight into P2. What you see in PROMIS is exactly what you will see in P2 for data converted by this method. For example, the text in your PROMIS comments will be brought over – word-for-word – into P2. In a number of cases, data values will be read from PROMIS – but validated against a list of “valid values” before they are loaded into P2. Most of these valid values have come directly from the *standard* drop-down list or button/box values in PROMIS. If your local site has added values to their FOA list, those local values will not be loaded into P2. For data elements validated against “lists of values,” what you see in PROMIS is exactly what you will see in P2 – as long as the PROMIS value is a valid standard value in P2. For example, one of the PROMIS Project Identification fields for Civil Works projects is the “Authorization: Public Law Number.” P2 pre-defines the list of valid values for the “Authorization: Public Law Number.” If a PROMIS project contains a value for “Authorization: Public Law Number” that is not on the list of valid values in P2, you will need to correct the data value before it can be loaded into P2.

Indirect Method

The second method is the *indirect* method. This method describes situations where the PROMIS data element will be used for loading data – through either crosswalks or program logic. An example of *cross-walked* data is the work breakdown structure. Activities for PROMIS projects are organized around standard work breakdown structures. The Corps’ WBSs have been reworked and updated to make them most appropriate for use in P2. The mission area team leads have led the effort to standardize the WBSs and to provide a crosswalk that links the PROMIS structures to the new P2 structures. The crosswalk allows

PROMIS activities to be organized into the P2 hierarchies. Another form of the *indirect* method includes situations where a PROMIS data element is not converted into an equivalent field in P2, but is used in the logic that governs various aspects of the data conversion process. For example, the PROMIS field “Reportable to HQ/MSD” is used as one of the criteria for the conversion program to identify the PROMIS projects that should be brought over to P2. Therefore, all projects that a district wants converted to P2 not currently marked as “Reportable to HQ/MSD” **must be** so ‘marked’.

PROMIS Referential Data: Customers and Lists of Values

The PROMIS referential data cover two major types of data – customer information and the drop-down values used throughout PROMIS such as employees, organizations, congressional districts, etc. (The dropdown equivalent in P2 is called “List of Values” or LOV.)

Customers

The customer data will be converted using a crosswalk technique. PROMIS data from all 51 instances have been scrubbed into one master spreadsheet. The mission area team leads on the P2 project are leading the effort to eliminate duplicates and standardize the naming conventions. The resultant spreadsheet will be used as the source file for loading customers into P2. The PROMIS customer-identifier together with your FOA code will also be loaded into P2 so that projects can be correctly associated with the “scrubbed” customer data.

Lists of Values

The P2 Team will manually load virtually all of the Lists of Values (LOVs) as part of configuring the system before the site-by-site data conversion actually begins. Much of this coding will be entered into P2 as part of the mission-specific information formats for projects in P2. For example, the list of valid “construction class codes” will be pre-loaded for use in defining military projects.

PROMIS Project Header Data

The project header information will be loaded primarily using the direct method.

The data conversion program will first search for projects in PROMIS that are flagged as “upward reportable” and have a “current” version. All projects in the PROMIS database that the district wants converted **not** currently marked as ‘Upward Reportable’ must be so marked. These are the only PROMIS projects that will be automatically converted to P2.

In general, fields that are validated during data conversion are the ones in PROMIS where you currently select from a pick-list or from other pre-loaded values in PROMIS. The previous section described the loading of Lists of Values into P2. Those lists will be used to validate the codes on individual projects. To continue the earlier example, the construction class code on a specific military project must match one of the valid values before the project header can be loaded. Likewise, the customer identifier in PROMIS must match the PROMIS identifier on the new master customer list in P2.

Once the project header data is in place, the project-level comments in PROMIS for those projects will be converted. During this process, the comment types will be cross-walked to document categories in P2, and the text of the comments will be directly loaded.

PROMIS Project Task Data

The PROMIS project task data will be automatically loaded into P2 in three stages.

First, the PROMIS work breakdown structure will be cross-walked. New standardized mission-specific work breakdown structures are being developed for P2. The appropriate new WBS will be identified for each PROMIS project and loaded into P2 for that project. If the program does not find a crosswalk for the PROMIS WBS, one will have to be identified for the project before the task data can be loaded.

Second, each PROMIS task for a converted project will be slotted into the appropriate location within its P2 WBS. The conversion programs will do this by first determining a task hierarchy (a combined WBS in Project Manager™ and an upper level task structure in Oracle Projects). The PROMIS “parent-task” will then be reviewed through WBS inference and by project level activity codes.

Similar to the WBS, milestone codes will be cross-walked to the P2 mission-specific milestone codes. Milestone code linkages in PROMIS will have an activity created in P2 including the description and dates. A new activity milestone will be created with the appropriate date and with a cross-walked code identified.

Once the project tasks are in place, all task-level comments that exist in PROMIS for those tasks will be converted. The PROMIS comment types will be cross-walked to document categories in P2, and the text of the comments will be directly loaded.

PROMIS Project Planning Estimates

The planning estimates in PROMIS – including such data as the resource codes, organizations, and amounts – will be the last group of PROMIS data to be loaded into P2 during the data conversion.

Appendix A: The PROMIS-to-P2 Mapping Table

The pages that follow show a table that identifies the PROMIS data elements that will be converted to the P2 applications. All data elements not identified as being converted are either being derived from other data elements (e.g., total project cost), are critical data elements in connection with CEFMS and need to be defined by those new standards (e.g., WCC for PR&C creation) or were not maintained in the PROMIS database to be used appropriately in P2 (e.g. Budgetary header data for Civil Works). The table is organized in the following way:

The first two columns in the table identify the PROMIS data. The first column, “**PROMIS Table**”, shows the *table* name in PROMIS. The second column, “**PROMIS Column**”, shows the *column* name in PROMIS. For readers unfamiliar with the table/column structure, it is the technical definition of how the data are stored in the PROMIS database.

The next two columns show the PROMIS dialog box identifier and the field names that users see in PROMIS today.

The fifth column in the table, “**Converts to P2**”, shows the method for converting the PROMIS data element to P2. Three codes are used to indicate the method.

Code	Interpretation
DIRECT	The data element will be converted by the direct method
INDIRECT	The data element will be used indirectly for loading data – through either crosswalks or program logic.
OPEN	The designs for a few conversion elements are currently being re-evaluated. Mappings for these elements will be provided in the future.

The column “**Notes**” shows design notes and comments. The column “**Row ID**” simply shows a unique identifier for the row.

This mapping table is taken from the current working document for the conversion design. You will see that some cells in the spreadsheet contain design notes reflecting the fact that there are still a few open issues in the design. Once the entire conversion design is finalized, updates will be made to this document and posted to the PMBP Portal.

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
PROMIS Project related Tables						
assignment	subproject_no	Team Assignment - ID#034	not displayed	INDIRECT		1
assignment	emp_id_no	Team Assignment - ID#034	Employee	DIRECT	Roles converted are "Project Manager" (only one) and "Proxy" (Zero or more)	2
assignment	proj_wi_code	Team Assignment - ID#034	not displayed	DIRECT		3
assignment	role_code	Team Assignment - ID#034	Role	DIRECT	Only Role codes: "P" = "Project Manager", "X" = "Proxy" are converted	4
						5
civil_authority	subproject_no	Civil Construction Authorization - ID#024	not displayed	INDIRECT		6
civil_authority	proj_wi_code	Civil Construction Authorization - ID#024	not displayed	DIRECT		7
civil_authority	legislative_cap_percnt	Civil Construction Authorization - ID#024	Authorization: Legislative Cap	DIRECT	(Civil Project Type only)	8
civil_authority	auth_name	Civil Construction Authorization - ID#024	Authorization: Authority Name	DIRECT	(Civil Project Type only). Existing data in PROMIS is being scrubbed to create a new list of values. May not be able to map all old values to new values.	9
civil_authority	auth_public_law_no	Civil Construction Authorization - ID#024	Authorization: Public Law No	DIRECT		10
civil_authority	exp_authority_amt	Civil Construction Authorization - ID#024	Maximum Project Cost	DIRECT		11
						12
civil_classification	proj_wi_code	Civil Classification - ID#039	not displayed	DIRECT		13
civil_classification	task_no	Civil Classification - ID#039	not displayed	INDIRECT		14
civil_classification	work_cat_code	Civil Classification - ID#039	Feature, Subfeature, Feature Account	OPEN		15
						16
civil_project	proj_wi_code	Civil Project Detail - ID#018	not displayed	DIRECT		17
civil_project	subproject_no	Civil Project Detail - ID#018	not displayed	INDIRECT		18
civil_project	fea_cost_share_pcmt	Civil Project Detail - ID#018	Cost Sharing: Federal Feasibility	DIRECT	1 code per project per phase for each of these fields	19
civil_project	impn_cost_share_pcmt	Civil Project Detail - ID#018	Cost Sharing: Federal Implementation	DIRECT		20
civil_project	ped_cost_share_type	Civil Project Detail - ID#018	Preconstruction Engineering and Design Deferred to Construction During PED	DIRECT		21
civil_project	fea_to_congress_bud_yr	Civil Project Detail - ID#018	Last To Congress: Feasibility: Budget Year	DIRECT		22
civil_project	ped_to_congress_bud_yr	Civil Project Detail - ID#018	Last To Congress: PED: Budget Year	DIRECT		23
						24

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
civil_project	imp_to_congress_bud_yr	Civil Project Detail - ID#018	Last To Congress: Implementation: Budget Year	DIRECT		25
civil_project	ped_cost_share_pcnt	Civil Project Detail - ID#018	Cost Sharing: Federal PED	DIRECT		26
civil_project	seperable_element_ind	Subproject Identification - ID#086	Separable Element	INDIRECT		27
						28
erdc_classification	proj_wi_code	R&D Classification - ID#200	not displayed	DIRECT		29
erdc_classification	task_no	R&D Classification - ID#200	not displayed	INDIRECT		30
						31
erdc_project	proj_wi_code	Project Identification - ID#033	Identifier	DIRECT		32
erdc_project	subproject_no	Project Identification - ID#033	not displayed	INDIRECT		33
erdc_project	pbs_type_code	Project Identification - ID#033	not displayed	DIRECT	R and D Project Type only	34
						35
htrw	proj_wi_code		not displayed	DIRECT		36
htrw	subproject_no		not displayed	INDIRECT		37
htrw	primary_type_code	HTRW Program and Category - ID#022	Primary	DIRECT	Environmental Project Type Only	38
htrw	secondary_type_code	HTRW Program and Category - ID#022	Secondary	DIRECT		39
htrw	epa_region_code	HTRW Location - ID#016	Federal Region Code	DIRECT	Environmental Project Type Only	40
htrw	lead_assignment_code	HTRW Classification - ID#023	Lead Assignment	DIRECT		41
htrw	phase_code	HTRW Classification - ID#023	Work Phase/Assignment Type	DIRECT	Only one per project. (Environmental Project Type only)	42
htrw	sf_npl_status	HTRW Classification - ID#023	NPL Status	DIRECT	Environmental Project Type Only	43
htrw	reg_code	HTRW Classification - ID#023	Regulatory Driver	DIRECT	Only one per project. (Environmental Project Type only)	44
htrw	hrs_score	HTRW Classification - ID#023	HRS Score	DIRECT	Environmental Project Type Only	45
htrw	approp_symbol	HTRW Classification - ID#023	Appropriation	DIRECT	(1 code only). (All Project Types")	46
htrw	approp_dept_code	HTRW Classification - ID#023	Department Code	DIRECT	Project Appropriation is the Approp Dept plus a space plus the Approp Symbol . Note: Cost sharing will be determined by the activities being funded by fed or non-fed per the CEFMS rule of work and has to be proportional by available funds – not expenditures. This is tru for all project types.	47
htrw	pillar_code	HTRW Program and Category - ID#022	Pillar	DIRECT	Environmental Project Type only	48
htrw	dserts_no	HTRW Program and Category - ID#022	DSERTS No	DIRECT		49
						50
milestone_version	proj_wi_code		not displayed	DIRECT		51

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
milestone_version	task_no		not displayed	INDIRECT		52
milestone_version	project_type		not displayed	DIRECT	("Civil", "Environmental", "Military" or "R and D")	53
milestone_version	milestone_code	Milestone List - ID#037	Milestone	INDIRECT	The mission area P2 Team Leads are providing a mapping of new P2 milestone codes to the PROMIS codes	54
						55
military_classification	proj_wi_code		not displayed	OPEN	Under review by HQ	56
military_classification	task_no		not displayed	INDIRECT	Under review by HQ	57
military_classification	work_cat_code	Military Classification - ID#043	Category, Subcategory, Cat Account	OPEN	Under review by HQ	58
						59
military_project	proj_wi_code		not displayed	DIRECT		60
military_project	subproject_no		not displayed	INDIRECT		61
military_project	design_method_facility_cl_code	Military Project Status - ID#021	Design meth - facility	DIRECT	Military Project Type only	62
military_project	construction_agent	Military Project Status - ID#021	Construction Agent	DIRECT	Military Project Type only	63
military_project	design_agent	Military Project Status - ID#021	Design Agent	DIRECT		64
military_project	design_by_code	Military Project Status - ID#021	Design By	DIRECT		65
military_project	construct_class_code	Military Project Status - ID#021	Type Construction	DIRECT		66
military_project	design_method_code	Military Project Status - ID#021	Design meth - drawings	DIRECT		67
military_project	instl_code	Military Project Location - ID#015	Installation Code	DIRECT		68
military_project	project_status_code	Military Project Status - ID#021	Status Code	DIRECT		69
military_project	delay_code	Military Project Status - ID#021	Delay Code	DIRECT	Military project types only	70
military_project	authorized_year	Military Project Detail - ID#020	Authorized Yr	DIRECT		71
military_project	form_1391_no	Military Project Detail - ID#020	1391 Processor #	DIRECT	Military project types only	72
military_project	congr_appror_prog_amt	Military Project Detail - ID#020	Congressionally Appropriated Program Amount	DIRECT		73
military_project	tier_code	Military Project Detail - ID#020	Tier	DIRECT	Military and Environmental Project Types Only	74
military_project	using_service_code	Military Project Detail - ID#020	Using Service Code	DIRECT	Military Project Type only	75
						76
nas_activity_schedule	proj_wi_code			DIRECT		77
nas_activity_schedule	task_no			INDIRECT		78
nas_activity_schedule	nas_id			DIRECT		79
nas_activity_schedule	act_start_date			DIRECT		80
nas_activity_schedule	act_finish_date			DIRECT		81

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
nas_activity_schedule	act_percent_complete			DIRECT		82
nas_activity_schedule	constrained_type			INDIRECT		83
nas_activity_schedule	constrained_date			DIRECT		84
nas_activity_schedule	aux_nas_id			INDIRECT		85
nas_activity_schedule	remdur			DIRECT		86
nas_activity_schedule	p3_act_type			INDIRECT		87
						88
						89
network_link	proj_wi_code			DIRECT		90
network_link	task_no			INDIRECT		91
network_link	predecessor		Depends upon the NAS Package selected by the user -- Not displayed in the PROMIS client software	DIRECT		92
network_link	net_link_type			DIRECT		93
network_link	net_link_lag			DIRECT	Will convert all lag to hours where 8-hours equals 1-day.	94
						95
nv_comments	comment_no	Comments - ID#006	not displayed	DIRECT		96
nv_comments	comment_type_code	Comments - ID#006	Selection Tree	INDIRECT	Used for mapping to Document Category (e.g. a PROMIS value of G (= General) will map to a "General" Document Category	97
nv_comments	xref_code	Comments - ID#006	not displayed	INDIRECT		98
nv_comments	proj_wi_code	Comments - ID#006	not displayed	DIRECT		99
nv_comments	comment_date	Comments - ID#006	Date Created	DIRECT		100
nv_comments	xref_type_code	Comments - ID#006	not displayed	INDIRECT		101
nv_comments	subject	Comments - ID#006	Subject	DIRECT		102
nv_comments	comment_text	Comments - ID#006	Narrative	DIRECT		103
						104
planning_estimate	task_no	Resource Estimate - ID#061	Task Name	INDIRECT		105
planning_estimate	proj_wi_code	Resource Estimate - ID#061	not displayed	DIRECT		106
planning_estimate	uom_code	Resource Estimate - ID#061	Units	DIRECT		107
planning_estimate	resource_code	Resource Estimate - ID#061	Resource Type	DIRECT		108
planning_estimate	org_code	Resource Estimate - ID#061	Organization	INDIRECT		109
planning_estimate	lbr_emp_id_no	Resource Estimate - ID#061	Employee	DIRECT		110
planning_estimate	quantity	Resource Estimate - ID#061	Qty	DIRECT		111

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
						112
planning_estimate_amounts	task_no	Resource Estimate - ID#061	Task Name	INDIRECT		113
planning_estimate_amounts	proj_wi_code	Resource Estimate - ID#061	not displayed	DIRECT		114
planning_estimate_amounts	total_amount	Resource Estimate - ID#061	Total	DIRECT		115
						116
proj_sponsors	proj_wi_code		not displayed	DIRECT		117
proj_sponsors	subproject_no		displayed	INDIRECT		118
proj_sponsors	customer_id	Depends on Project Type Civil Customer Information - ID#009 Military Customer Information - ID#009 HTRW Customer - ID#011 R&D Customer Information - ID#202	Civil, Military, HTRW: Customer Name ERDC: Org/Loc	DIRECT		119
proj_sponsors	local_sponsor_indicator		Civil Only: Local Sponsor	DIRECT		120
						121
project	proj_wi_code	Project Identification - ID#033	Identifier	DIRECT		122
project	funding_type_code	Project Identification - ID#033	Funds Type	DIRECT		123
project	project_type	Project Identification - ID#033	Type	DIRECT		124
project	project_name	Project Identification - ID#033	Name	DIRECT		125
project	rept_to_hq_msc	Project Identification - ID#033	Reportable to HQ/MSc	INDIRECT	Not converted, but used to determine which PROMIS projects will be converted.	126
project	hq_id	Project Identification - ID#033	CWIN/HQ ID	DIRECT		127
project	parent_proj_wi_code	PROMIS System Administrator Project Registration - ID#005	Parent Proj	INDIRECT	Used during data conversion of PROMIS nested projects	128
project	civil_project_type_code	Project Identification - ID#033	Subtype	DIRECT		129
project	sfo_flag	PROMIS System Administrator Project Registration - ID#005	Support for Others (SFO)	DIRECT		130
project	private_ind_flag	Project Identification - ID#033	Private	DIRECT		131
project	congressional_add	PROMIS System Administrator Project Registration - ID#005	Congressional Add	DIRECT	Yes or "No" only. 1 code only	132
						133
project_version	proj_wi_code	Project Identification - ID#033	Identifier	DIRECT		134
project_version	early_start	Project Identification - ID#033	not displayed	INDIRECT	Used in combination with actual_start or proj_start_date	135

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
project_version	actual_start	Project Identification - ID#033	not displayed	INDIRECT	Used in combination with early_start or proj_start_date	136
project_version	proj_start_date	Project Identification - ID#033	not displayed	INDIRECT	Used in combination with early_start or actual_start	137
						138
resource_distribution	proj_wi_code	Resource Distribution - ID#064	not displayed	INDIRECT	Not converted to P2 resource distribution curves but recorded for future reference.	139
resource_distribution	task_no	Resource Distribution - ID#064	Task Name	INDIRECT		140
resource_distribution	pe_num	Resource Distribution - ID#064	RE No	INDIRECT		141
resource_distribution	rd_month	Resource Distribution - ID#064	column headers	INDIRECT		142
resource_distribution	rd_yr	Resource Distribution - ID#064	Distribution Values by Month for FY	INDIRECT		143
resource_distribution	rd_acctng_phase	Resource Distribution - ID#064	row headers	INDIRECT		144
resource_distribution	rd_total_amt	Resource Distribution - ID#064	row values	INDIRECT		145
resource_distribution	rd_cont_amt	Resource Distribution - ID#064	not displayed	INDIRECT		146
resource_distribution	rd_update_date	Resource Distribution - ID#064	not displayed	INDIRECT		147
						148
v_comments	proj_wi_code	Comments - ID#006	not displayed	DIRECT		149
v_comments	xref_code	Comments - ID#006	not displayed	DIRECT		150
v_comments	comment_type_code	Comments - ID#006	Selection Tree	INDIRECT	Used for mapping to Document Category (e.g. a PROMIS value of G (= General) will map to a "General" Document Category)	151
v_comments	comment_no	Comments - ID#006	not displayed	DIRECT		152
v_comments	comment_date	Comments - ID#006	Date Created	DIRECT		153
v_comments	xref_type_code	Comments - ID#006	not displayed	DIRECT		154
v_comments	subject	Comments - ID#006	Subject	DIRECT		155
v_comments	comment_text	Comments - ID#006	Narrative	DIRECT		156
						157
wi_basin	proj_wi_code	Civil Project Location - ID#014	not displayed	DIRECT		158
wi_basin	basin_code	Civil Project Location - ID#014	Basin	INDIRECT	(Not currently standardized across PROMIS Instances). 1 code only. If more than 1 code Project Classification "Secondary Basin Code" multiple codes. (Civil Project Type only)	159
wi_basin	subproject_no	Civil Project Location - ID#014	not displayed	INDIRECT		160
						161
work_directive	proj_wi_code	Military Work Directive - ID#025	not displayed	DIRECT		162
work_directive	auth_phase_code	Military Work Directive - ID#025	Authorized Phase	DIRECT	Military Project Types	163

PROMIS Table	PROMIS column	Dialog Box ID	Field Name	Conversion Method	Notes	Row ID
						164
work_item_codes	wi_code	Task Identification - ID#038	Work Item	OPEN		165
work_item_codes	proj_wi_code	Task Identification - ID#038	not displayed	DIRECT		166
work_item_codes	task_no	Task Identification - ID#038	Task: Number	INDIRECT		167
						168
work_task	proj_wi_code	Task Identification - ID#038	not displayed	DIRECT		169
work_task	task_no	Task Identification - ID#038	Task: Number	INDIRECT		170
work_task	work_cat_elem_code	Task Identification - ID#038	Template Item	OPEN	Under review by HQ	171
work_task	cust_primary_task	Task Identification - ID#038	Civil & ERDC only: Customer Primary Task	DIRECT		172
						173
work_version	proj_wi_code	Task Identification - ID#038	not displayed	DIRECT		174
work_version	task_no	Task Identification - ID#038	Task: Number	INDIRECT		175
work_version	task_name	Task Identification - ID#038	Task: Name	DIRECT	Full name in P3e, only first 20 characters of name in Oracle Projects	176
work_version	ae_lost_design_costs	Lost Design - ID#047	AE Lost Design	DIRECT		177
work_version	parent_task	Task Identification - ID#038	not displayed	INDIRECT		178
work_version	de_lost_design_costs	Lost Design - ID#047	DE Lost Design	DIRECT		179
work_version	wbs_position	Task Identification - ID#038	not displayed	INDIRECT		180
work_version	early_start	Resource Distribution - ID#064	Early Start Date	DIRECT		181
work_version	early_finish	Resource Distribution - ID#064	Early Finish Date	DIRECT		182
work_version	actual_start	Task Identification - ID#038	not displayed	DIRECT		183
work_version	actual_finish	Task Identification - ID#038	not displayed	DIRECT		184
work_version	late_start	Task Identification - ID#038	not displayed	DIRECT		185
work_version	late_finish	Task Identification - ID#038	not displayed	DIRECT		186
work_version	wbs_level	Task Identification - ID#038	not displayed	INDIRECT		187
						188

Appendix X: CEFMS-P2 Referential Data Interfaces Information Paper - Part 1

Introduction

There will be interfaces between the P2 system and the Corps of Engineers Financial Management System (CEFMS) to synchronize two types of data – referential data and project-specific data. The referential data in the two systems will be synchronized through one group of the interfaces. The referential data include organizations, employees, and their respective burden and cost rates that will be shared across all projects in P2. The project-specific data will be kept in synch through the second group of the interfaces. The project-specific data include project and task work items, purchase request and commitments (PR&C), obligations, expenditures, and funding.

This paper addresses the interfaces that will synchronize the *referential* data. The interfaces that will synchronize the *project-specific* data will be described in a separate information paper. The interface designs for work items and PR&Cs are described in the paper *Work Management – Financial Management – REF8014G* reference document as part of the PMBP manual, which is already posted on the PMBP Portal. <https://pmbp.usace.army.mil>.

The paper starts with a brief overview of the referential data interfaces. It then provides a description of each interface in the set – including the business needs, major features, and functional design of each interface. The appendix provides descriptions of the data elements transferred during the interface processes.

For more information on P2, refer to the “Preparing for P2 Guide,” located on the PMBP Portal. <https://pmbp.usace.army.mil>.

Overview of the Interface Flows

All four of the CEFMS-to-P2 referential data interfaces are “one-way” interfaces. All of these referential data elements will be entered and maintained by users in CEFMS only; manual maintenance of these data elements in P2 will not be allowed. The purpose of the interfaces is to initialize P2 with the referential data from CEFMS and to automate updates to P2 when the data are changed or new data are added in CEFMS. The CEFMS referential data interfaces flow in a particular sequence. This paper presents the interfaces in the same sequence they will run in P2.

Organization Interface

Oracle Projects and Primavera Project Manager, components of P2, make extensive use of organization and organization structure information.

- Oracle Projects uses a hierarchy to store the parent-child relationships between organizations. The hierarchy is used for reporting in Oracle Projects.
- Employees and projects are assigned to organizations.

- Organizations can be assigned as resources on resource lists in Oracle Projects.
- The resource list information from Oracle Projects is interfaced to Primavera Project Manager™ (via the Resource List Maintenance Extension in the OP3 interface).

The basic business need of the CEFMS-P2 Organization Interface is to update the organization information in P2 and to eliminate manual entry of data into P2 for organizations maintained in CEFMS.

Major Features

This interface will connect to either all CEFMS databases or a specified CEFMS database. It will extract current active organization information from the CEFMS database. Once extracted, the data will be compared to the organization data in Oracle Projects, and the interface will add to or change the data in Oracle Projects as required.

Business Rules

Each CEFMS database is identified by an FOA code associated with the HQ, division, district or center. The USACE processing centers have standardized the CEFMS database names by using the FOA code as the first two characters of the database name. Only organizations that are part of the FOA database being interfaced will be selected in the interface process. In some cases “foreign organizations” from other districts or centers exist in the database. For example the Mobile FOA code is K5. The majority of the organizations in the Mobile CEFMS database begin with K5. There are organizations that begin with the Fort Worth FOA code M2. These foreign organizations are used when employees are borrowed from another district or center and need to be setup in the database for access to CEFMS. There are also organizations that belong to the Mobile District that do not begin with K5 but are part of the Mobile organization structure. These organizations are used for interns working in the Mobile District. To select only the organizations within a district or center, a two-step rule will be used. First, the organizations beginning with the FOA code associated with the given instance will be selected. For example, all organizations in the Mobile CEFMS instance beginning with K5 would be selected in this step. Next, all organizations that do not begin with the FOA code will be analyzed. The analysis will look at the parent organization code for these organizations. If the parent organization begins with the FOA code associated with the database instance, the organization will be added to the selection list. If the parent organization is blank or does not begin with the FOA code for the database instance, it will be ignored in the selection process. This rule assures that organizations are selected from their home database only.

Organization Codes in CEFMS remain the same throughout the life of the organization in CEFMS. An organization that requires changes to the name or code must be inactivated in CEFMS and a new organization created to replace the inactive one. A subsequent run of the interface will correct the appropriate data in P2.

Assignment of Parent Organizations in Oracle Projects

After all organizations from the source CEFMS database(s) are defined in Oracle Projects, the interface program runs a routine to determine the CEFMS parent organization for each and to build the organization hierarchy in Oracle Projects.

When the Organization Interface Program Will Be Run

The organization interface will be run locally as part of the P2 deployment activities for each Corps district or center. After that initialization, it will be run globally as a part of regularly scheduled production processing for P2 across USACE. The frequency of running the interface will be biweekly.

Burden Cost Rate Interface

The interface of organization burden rates from CEFMS to P2 will provide burden cost information for use in calculating burdened average organization labor cost rates for project budgeting purposes. The average cost rates will later be interfaced from Oracle Projects to Primavera Project ManagerTM.

Basic Business Need

P2 provides for project budgeting to be performed by resourcing each activity at the lowest organization level. The organizations are defined as resources in both Oracle Projects and Primavera Project Manager. In Oracle Projects, an average organizational cost rate will be calculated using the employees' salary rate plus the organization's burden multiplier. The resulting cost rate will be passed from Oracle Projects to Primavera Project Manager. The formula used is:

$$\frac{\text{(sum of employees' salaries in organization)}}{\text{(number of employees with salary greater than \$0)}} * (1 + \text{burden multiplier}).$$

The Burden Cost Rate Interface addresses the *burden multiplier element* in the formula. A burden multiplier for each organization must be maintained in *Burden Schedules* in Oracle Projects in order to be available for this calculation. Only one version of the Burden Schedule will be maintained; each running of the interface will replace the existing P2 Burden Schedule in its entirety.

Major Features

The Burden Cost Rate Interface will, in a serial manner, connect to all CEFMS databases and retrieve the CEFMS burden rate information by organization. The data will be stored as burden multipliers in Oracle Projects.

Business Rules for the P2-CEFMS Organization Burden Rate Interface

- USACE uses two burden structures: Civil Works and Military. Only one rate will be used as the Oracle Projects Burden Rate Multiplier; the higher rate between the Civil and Military rates will be selected for any given time period.
- Budgeting of labor costs is done at the lowest organizational level.
- The labor cost rate used when creating a budget in Primavera Project ManagerTM includes salaries (effective rates) and all burden costs.
- The labor cost rate used when creating a budget in Primavera Project Manager is an average rate of all employees in an organization.

- Only the rates that are currently active at the time the interface is run will be used. The effective date of the schedule version will be the date that the interface is run.

When the Burden Cost Rate Interface Program Will Be Run

The Burden Cost Rate Interface will be run locally as part of the P2 deployment activities for each Corps district or center. After that initialization, it will be run globally as a part of regularly scheduled production processing for P2 across USACE. The frequency of running the interface will be semiannually, after the initial setting of the rates for the year and again at the mid-year adjustment. Additional runs can be made as deemed desirable.

Employee Interface

Employee information includes information about the employee, government contractor (designated by FOA), and his or her assignment. It includes the employee's name, employee number, organization, e-mail, and employee start dates. The CEFMS Employee Interface will programmatically update employee information in P2 from CEFMS.

Basic Business Needs

Employee information is used in P2 for the following functions:

- UPASS
- Security
- Key member role assignment in Oracle Projects. (Key member roles include Project Manager or PM Proxy or CEFMS Alternate Responsible Employee.)
- Workflow notifications

Major Features

The Employee Interface will connect to either all CEFMS databases or a specified CEFMS database and extract current active employee information for each employee in the database. Once all the data are extracted, they will be compared to the data contained in the Oracle applications. The employee data will be updated in Oracle Applications for any changes or additions.

Business Rules

All sites should ensure that the employee information in CEFMS screen 10.131 (Employee Travel Information Screen) is accurate and the email address is populated.

When the Employee Interface Program Will Be Run

The Employee Interface will be run locally as part of the P2 deployment activities for each Corps district or center. After that initialization, it will be run globally as a part of regularly scheduled production processing for P2 across USACE. The frequency of running the interface will be biweekly.

Employee Cost Rate Interface

Employee Cost Rate Interface will load employees' Regular Hourly Rate from CEFMS and convert them into employee cost rate information in Oracle Projects.

Basic Business Needs

The CEFMS employee cost rates will be used only to compute an average organizational cost rate that in turn will be utilized in the project budgeting process.

Major Features

The Employee Interface will connect to either all CEFMS databases in sequence or a specific CEFMS database and extract current Regular Hourly Rate information for each employee in the database. Once all the data are extracted, they will be compared to the data contained in Oracle Projects. The Oracle data will be updated for any changes or additions.

Business Rules

During the initial deployment of P2, an employee can have only one active cost rate. Oracle Projects maintains a date-controlled chain of cost rates for each employee to provide full visibility to cost rate history. This functionality will be utilized in the employee cost rate interface. When a cost rate changes, the existing cost rate entry will be "end-dated" and a new entry will be created.

When the Employee Cost Rate Interface Program Will Be Run

The employee cost rate interface will be run locally as part of the P2 deployment activities. After that initialization, it will be run globally as a part of regularly scheduled production processing for P2 across USACE. The frequency of running the interface will be biweekly.

Appendix: Data Elements Interfaced from CEFMS to P2

Organizations Interface

Organization Data Elements

- Organization Code
- Organization name
- Parent Organization Code
- Active/Inactive Indicator

FOA Data Elements

- FOA Code
- FOA Name

Burden Cost Rate Interface

The Burden Cost Rate Interface passes only one data element for each organization. That element is the Multiplier. It is calculated as the sum of the

FOA Overhead Rate

Manual Recovery Rate
Manual Recovery Rate (Other)
Government Contribution Rate
Add-On Rate for Military or Civil (whichever is higher)

All elements are stored for use in P2.

Employee Interface:

Employee Last Name
Employee First Name
Employee Middle Name
Employee Start Date – The date the employee was hired.
End Dates – The date the employee leaves.
Employee Number
Employee E-mail address
Employee Organization

Employee Cost Rate Interface:

Employee ID
Compensation Rule
Cost Rate
Effective Start Date
Effective End Date