

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

Section 1.01 EXECUTIVE SUMMARY

The purpose of this project is to perform an Assessment, from a Technical and Functional perspective, of the PeopleSoft 8.8 HCM Application currently in Production at the County of Solano. This document will focus on the Technical Assessment as performed by ACS Senior Technical Consultant Gregg Hunter.

The Technical Assessment will be focused on the following tasks as stated in the Statement of Work provided by the County of Solano. *(A) Perform an assessment of all existing customizations to minimize and/or eliminate them and identify opportunities for business process improvement, and (B) Assess the compatibility of the current technical infrastructure (hardware, software, Data Base, network) with Version 9.0.*

Section 1.02 INTRODUCTION

For the purpose of this document, a customization will refer to the modification of any existing PeopleSoft delivered object, or the addition of any new object not delivered by PeopleSoft but present in either the database catalog or the PeopleSoft file server directory, referred to as PS_HOME. Customizations produced online will be termed Online Customizations while changes to files within the directory structure – such as SQRs – will be termed External Customizations.

The term Infrastructure will refer to the hardware and software currently supporting the PeopleSoft Production and Development applications. This shall include current production and development servers, AIX operating system, Oracle RDBMS, disk storage, and other 3rd party software such as Crystal Reports.

Environment will refer to the configuration of the Oracle database instance, PS_HOME naming conventions, PeopleSoft Application Server configuration, PeopleSoft Web Server configuration, and the Process Scheduler.

To this end, the Technical Assessment is composed of three (3) distinct phases which shall culminate into a complete document detailing the findings.

Section 1.03 PHASE 1 - Customization Assessment

The Customization Assessment consists of several tasks, beginning with the Comparison of a Vanilla Demo 8.8 HCM database with a clone of the current Production 8.8 HCM database. Reports will be produced from this comparison listing any and all object changes performed to the Production HCM database since delivered from PeopleSoft. System Tables will also be populated with the results, providing not only the basis for the reports but also the source for additional SQL queries which will provide much of the information used in this Phase of the Assessment.

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

The Compare process is delivered by PeopleSoft and is the basis for any Application Upgrade performed. This process is the only definitive method of detailing exact changes to the installed application as it utilizes not only version numbers, but also operator identification to ensure reliable results. Delivered PeopleSoft objects are stamped by a 'PeopleSoft Only' id, making it possible for the process to easily determine any object touched even minutely by an operator other than PeopleSoft.

Compare Reports are another of the results of the Compare process. These reports record changes at the highest level of detail and could be hundreds of pages. These will require extensive analysis prior to any Upgrade to determine if retrofit is required.

Following the Comparison process, Online Customizations such as Records, Pages, Menus, PeopleCode, etc. will be organized into an Excel spreadsheet which will show various relationships between the customized objects. The bulk of Phase 1 will be encompassed by this task due to the amount of research required to analyze and document these relationships. In addition to Online Customizations, this spreadsheet will contain entries for objects which have been deleted or changed in delivered version 9.0, and which have also been modified in version 8.8 by the County.

The existing PS_HOME directory will be compared to a delivered, Vanilla directory to determine any SQRs, Crystal Reports, or COBOL programs which may have been modified. These External Customizations will be listed in an Excel spreadsheet. The spreadsheet will also contain a list of version 9.0 objects which have changed since version 8.8 but were modified by the County. These objects will also require additional analysis prior to any Upgrade to determine if retrofit is required.

Many customizations performed on the County's system are actually new objects, whether Online or External. As such, most of these customizations are distinguishable by their unique naming convention: the prefix 'COS'. It is beyond the scope of this Technical Assessment to determine the business case behind the development of each of these customizations, or to determine whether these customizations would still be required for the continued functionality of the system after an Upgrade to version 9.0.

Additionally, there have been several changes to delivered objects in both categories which must also be assessed. These customizations are the area of greatest concern, as PeopleSoft has changed many delivered objects with the HCM 9.0 release to provide additional functionality within the Application. As customized reporting may depend on specific record structure, any changes in HCM 9.0 made by PeopleSoft related to an HCM 8.8 delivered object may have an impact on other processes necessary to the business processes at the County. Again, it is beyond the scope of this Technical Assessment to determine the business case behind each of these customizations or to determine whether these customizations would still be required for the continued functionality of the system after an Upgrade to version 9.0.

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

Section 1.04 PHASE 2 - Infrastructure Assessment

The infrastructure Assessment will include the analysis and documentation of the existing hardware and software infrastructure with regard to the current PeopleSoft applications, both Production and Development. The documentation will list the status of existing hardware as well as any suggestions for modification or improvement to the infrastructure which could result in increased productivity during an HCM 8.8 to 9.0 Upgrade.

The existing infrastructure will be documented and analyzed for certification of usage with version 9.0 with any discrepancies clearly detailed. Any recommendations will also be documented and explained, where applicable.

Section 1.05 PHASE 3 - Environment Assessment

An Environment Assessment will be performed to determine any issues with the existing Production or Development environments which could impact the HCM 8.8 to 9.0 Upgrade Project. Specifically, details will be gathered about the Database Server, Database configuration, File Server, File organization, naming standards, as well as Web Server, Application Server and Process Scheduler configurations. Also included will be the analysis of existing Change Control, testing, and migration methods.

Section 1.06 FINDINGS PHASE 1 – Customization Assessment

The Customization Assessment details the Online Object Customizations and the External Object Customizations as explained in detail earlier in this document.

(a) Online Object Customizations

A total of **8640** Online Object Customizations have been discovered. These objects have been identified as either new objects developed by the County, or County developed changes to delivered objects. These customizations have been listed below, by object type. The details of these customizations are attached on a separate Excel Spreadsheet titled [CoS Online Customizations](#).

A full and complete analysis could not be performed since the currently installed HCM Demo version 8.8 and HCM Demo version 9 databases did not include all current PeopleSoft Patches as exist in the Production 8.8 database. It is beyond the timeline of this project to update these Demo databases to current patch level.

Records - 125 Customized delivered or new records.

Indexes - 4 Customized delivered or new indexes.

Fields - 163 Customized delivered or new fields.

Translates - 466 Customized delivered or new translate values.

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

Pages - 159 Customized delivered or new Pages.

Menus - 6 Customized delivered or new Menus.

Components - 141 Customized delivered or new Components.

RPC - 104 Customized delivered or new Record PeopleCode.

Queries - 7290 Customized delivered or new Queries (including multiples of the same name due to oprid).

Colors - 9 Customized delivered or new Colors.

Activities - 22 Customized delivered or new Activities.

Process Definitions - 107 Customized delivered or new Process Definitions.

Process Server - 1 Customized delivered or new Process Server.

Process Jobs - 4 Customized delivered or new Process Jobs.

Process Recurrences - 10 Customized delivered or new Process Recurrences.

File Layouts - 29 Customized delivered or new File Layouts.

(b) External Object Customizations

A total of **505** External Object Customizations have been discovered. These objects have been identified as either new objects developed by the County, or County developed changes to delivered objects. These customizations have been listed below, by object type. Details of these customizations are provided in an Excel spreadsheet titled [CoS External Customizations](#).

A full and complete analysis was not performed since neither file system existed in a Vanilla state for HCM 8.8 or HCM 9.0, complete with patches, but missing any customizations. It is beyond the timeline of this project to create these file systems.

Custom SQRs - Production 8.8 includes 323 Custom SQRs/SQCs.

Customized Delivered 8.8 SQRs -Production 8.8 includes 5 Customized Delivered SQRs.

New SQRs in 9.0 - HCM 9.0 contains 113 new SQRs.

Changed SQRs in 9.0 - HCM 9.0 contains 1155 SQRs that have been changed since 8.8.

Custom Crystal Reports - Production 8.8 includes 166 Custom Crystal Reports.

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

Customized Delivered Crystal Reports - Production 8.8 includes 11 Customized Delivered Crystal Reports.

New Crystal Reports in 9.0 - HCM 9.0 contains 10 new Crystal Reports.

Deleted Crystal Reports in 9.0 - Since 8.8 there have been 24 Crystal Reports deleted in 9.0.

Changed Crystal Reports in 9.0 - In HRMS 9.0, 32 Crystal Reports have been changed since 8.8.

(c) Affected 9.0 objects

Analysis was performed to document the total number of objects that differ from current Production to current Demo version 9.0. The results are available as an attachment to this document and titled [Affected 9.0 objects](#).

To produce this summary, the PeopleSoft Upgrade Compare process was completed utilizing a delivered Demo 9.0 database and a clone of the current County 8.8 Production database. The resulting data is stored in several tables and was extracted via SQL to produce this summary.

The table data is organized by several status flags. These flags denote whether an object is present in the Source (9.0) database and its relationship to that same object in the Target (8.8) database. The Compare process inserts a row in the table(s) where the following criteria are met:

1. An object exists in the Source database but not in the Target
2. An object exists in the Target but not in the Source.
3. An object exists in both but has been changed in one or the other.

If an object meets criteria 3, the status of that object is also detailed with a notation of whether the object was changed by a PeopleSoft system operator or a normal operator id. This information is used to determine whether that object is a customized object or merely a new or patched object from PeopleSoft.

The following list details any object that meets the preceding criteria, with the exception of being present in both databases and being the same in both. Not all online comparable objects are listed below; rather, listed are objects of primary concern in any upgrade as these require detailed analysis performed by Technical and Functional staff. Other objects should also be analyzed, but the following may be considered the most important.

Records

33,762 Record objects in conflict.

Indexes

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

488 Indexes in conflict.

Fields

23,579 Fields in conflict.

Field Formats

4 Field Formats in conflict.

Translate Values

17,823 Translate Values in conflict.

Pages

12,121 Pages in conflict.

Menus

298 Menus in conflict.

Components

5392 Components in conflict.

RPC

29,653 Record PeopleCode in conflict.

MPC

1 Menu PeopleCode in conflict.

Query

9142 Query objects in conflict.

Tree Structure

13 Tree Structures in conflict.

File Layout

225 File Layouts in conflict.

The objects listed should not be considered a final count as prior to beginning an Upgrade many patches may be applied to the Source or Target databases producing additional conflicts. As such, this Compare

County of Solano Pre-Upgrade Technical Assessment Phase 1 - Customizations

process will be run again during the Upgrade to produce a comprehensive set of documentation detailing any and all conflicts between the Source and Target databases.