

PeopleSoft CRM 9.2: PeopleSoft Services Foundation

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Preface

Understanding the PeopleSoft Online Help and PeopleBooks

The PeopleSoft Online Help is a website that enables you to view all help content for PeopleSoft applications and PeopleTools. The help provides standard navigation and full-text searching, as well as context-sensitive online help for PeopleSoft users.

Hosted PeopleSoft Online Help

You can access the hosted PeopleSoft Online Help on the <u>Oracle Help Center</u>. The hosted PeopleSoft Online Help is updated on a regular schedule, ensuring that you have access to the most current documentation. This reduces the need to view separate documentation posts for application maintenance on My Oracle Support. The hosted PeopleSoft Online Help is available in English only.

To configure the context-sensitive help for your PeopleSoft applications to use the Oracle Help Center, see <u>Configuring Context-Sensitive Help Using the Hosted Online Help Website</u>.

Locally Installed Help

If you're setting up an on-premise PeopleSoft environment, and your organization has firewall restrictions that prevent you from using the hosted PeopleSoft Online Help, you can install the online help locally. See <u>Configuring Context-Sensitive Help Using a Locally Installed Online Help Website</u>.

Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format on the <u>Oracle Help Center</u>. The content in the PeopleBook PDFs is the same as the content in the PeopleSoft Online Help, but it has a different structure and it does not include the interactive navigation features that are available in the online help.

Common Help Documentation

Common help documentation contains information that applies to multiple applications. The two main types of common help are:

- Application Fundamentals
- Using PeopleSoft Applications

Most product families provide a set of application fundamentals help topics that discuss essential information about the setup and design of your system. This information applies to many or all applications in the PeopleSoft product family. Whether you are implementing a single application, some combination of applications within the product family, or the entire product family, you should be familiar with the contents of the appropriate application fundamentals help. They provide the starting points for fundamental implementation tasks.

In addition, the *PeopleTools: Applications User's Guide* introduces you to the various elements of the PeopleSoft Pure Internet Architecture. It also explains how to use the navigational hierarchy, components, and pages to perform basic functions as you navigate through the system. While your application or implementation may differ, the topics in this user's guide provide general information about using PeopleSoft applications.

Field and Control Definitions

PeopleSoft documentation includes definitions for most fields and controls that appear on application pages. These definitions describe how to use a field or control, where populated values come from, the effects of selecting certain values, and so on. If a field or control is not defined, then it either requires no additional explanation or is documented in a common elements section earlier in the documentation. For example, the Date field rarely requires additional explanation and may not be defined in the documentation for some pages.

Typographical Conventions

The following table describes the typographical conventions that are used in the online help.

Typographical Convention	Description
Key+Key	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For Alt+W , hold down the Alt key while you press the W key.
(ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe ().
[] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.
⇒	This continuation character has been inserted at the end of a line of code that has been wrapped at the page margin. The code should be viewed or entered as a single, continuous line of code without the continuation character.

ISO Country and Currency Codes

PeopleSoft Online Help topics use International Organization for Standardization (ISO) country and currency codes to identify country-specific information and monetary amounts.

ISO country codes may appear as country identifiers, and ISO currency codes may appear as currency identifiers in your PeopleSoft documentation. Reference to an ISO country code in your documentation does not imply that your application includes every ISO country code. The following example is a country-specific heading: "(FRA) Hiring an Employee."

The PeopleSoft Currency Code table (CURRENCY_CD_TBL) contains sample currency code data. The Currency Code table is based on ISO Standard 4217, "Codes for the representation of currencies," and also relies on ISO country codes in the Country table (COUNTRY_TBL). The navigation to the pages where you maintain currency code and country information depends on which PeopleSoft applications you are using. To access the pages for maintaining the Currency Code and Country tables, consult the online help for your applications for more information.

Region and Industry Identifiers

Information that applies only to a specific region or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in the PeopleSoft Online Help:

- Asia Pacific
- Europe
- · Latin America
- North America

Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in the PeopleSoft Online Help:

- USF (U.S. Federal)
- E&G (Education and Government)

Translations and Embedded Help

PeopleSoft 9.2 software applications include translated embedded help. With the 9.2 release, PeopleSoft aligns with the other Oracle applications by focusing our translation efforts on embedded help. We are not planning to translate our traditional online help and PeopleBooks documentation. Instead we offer very direct translated help at crucial spots within our application through our embedded help widgets. Additionally, we have a one-to-one mapping of application and help translations, meaning that the software and embedded help translation footprint is identical—something we were never able to accomplish in the past.

Using and Managing the PeopleSoft Online Help

Select About This Help in the left navigation panel on any page in the PeopleSoft Online Help to see information on the following topics:

- Using the PeopleSoft Online Help.
- Managing hosted Online Help.
- Managing locally installed PeopleSoft Online Help.

PeopleSoft CRM Related Links

Oracle Help Center

PeopleSoft Online Help Home

PeopleSoft Information Portal

My Oracle Support

PeopleSoft Training from Oracle University

PeopleSoft Video Feature Overviews on YouTube

PeopleSoft Business Process Maps (Microsoft Visio format)

PeopleSoft Spotlight Series

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Send your suggestions to <u>psoft-infodev us@oracle.com</u>.

Please include the applications update image or PeopleTools release that you're using.

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in	LinkedIn

Chapter 1

Getting Started with PeopleSoft CRM Services Foundation

PeopleSoft Services Foundation Overview

This book discusses the common foundation objects that are shared among PeopleSoft Integrated FieldService, the call center applications (PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education), and industry solutions that leverage the functionality of these core applications. These objects are used in service orders and cases to provide solution management, integration with the Transaction Billing Processor, and geographical information lookup capabilities.

Solution management and integration with Transaction Billing Processor are available to PeopleSoft Integrated FieldService and most call center applications.

PeopleSoft Services Foundation Business Processes

This topic discusses the business processes associated with solution, time management, and integration with the Transaction Billing Processor. We discuss these business processes in the business process topics in this product documentation.

Solution Management Business Process

Solution management enables users to establish a set of predefined solutions that can be used by call center agents and field service technicians to resolve customer problems.

Time Management Business Process

Time management enables users to log time for the work performed on cases. Field service technicians and managers use a different page that is embedded in the service order component

Transaction Billing Processor Integration Business Process

Transaction Billing Processor integration provides the ability to bill and book revenue through PeopleSoft Contracts for recurring and on-demand services and agreements. The fees sent to the Transaction Billing Processor include agreement fees, service order fees (including service, material, time, and expense fees), and case fees.

PeopleSoft Services Foundation Implementation

PeopleSoft Setup Manager enables you to review a list of setup tasks for your organization for the products that you are implementing. The setup tasks include the components that you must set up, listed in the order in which you must enter data into the component tables, and links to the corresponding product documentation.

PeopleSoft Integrated FieldService and call center applications provide component interfaces to help you load data from your existing system into PeopleSoft tables. Use the Excel to Component Interface utility with the component interfaces to populate the tables.

Each product's topics contain specific implementation and component interface information for that product. This product documentation includes information about solution management, time management, and contracts and billing integration.

See *PeopleTools: Component Interfaces* product documentation.

Other Sources of Information

In the planning phase of the implementation, take advantage of all PeopleSoft sources of information, including the installation guides, table-loading sequences, data models, and business process maps. A complete list of these resources appears in the preface of the Application Fundamentals product documentation with information about where to find the most current version of each.

Related Links

PeopleSoft Call Center Applications

Chapter 2

Setting Up Solution Management

Understanding Solution Management Setup

Solutions are resolutions to problems. They exist independently from the cases, service orders, defects, and email responses to which they can be applied.

This topic discusses:

- Solution relationship types.
- Solution libraries.
- Solution search templates.
- Solution history.
- Solution content owners.

Solution Relationship Types

Solutions can be related to other solutions. You can relate solutions manually or automatically. When you relate solutions, you must qualify the relationship using a solution relationship type. Predefined types are *Similar* and *Duplicate*.

Solution relationship types, unlike case relationship types, are never hierarchical. The system uses the same relationship label for both solutions. (That is, if solution A is similar to solution B, then solution B is similar to solution A.)

Solution Libraries

Solution libraries enable you to group solutions into functional areas within a setID. For example, you can create solution libraries for each of your product lines. This level of categorization improves search effectiveness in PeopleSoft call center applications. Solution for cases enables users to choose libraries to include in the search domain.

If desired, solutions may also be associated with multiple libraries. As long as a user has access to at least one of the libraries for a particular solution, the solution will be visible to that user.

Access to solution libraries from transactions can be limited by security settings defined for each library. An administrator can restrict library access to users and cases that meet certain criteria. These criteria vary by transaction, and can include user role, agent location, employee location, and customer region.

Note: The following paragraphs describe ways in which access to solutions is not limited by the security settings defined for their corresponding library.

Branch scripts that end with a solution are exempt from any further check to see if users have access to that library. All users will be able to view these solutions.

Recommended actions that suggest solutions are also exempt from any checks for solution library access. Recommended actions can be set based on a quick code, AAF case update action, or AAF suggested action. In all these cases when a suggested action is a solution, there will be no additional security applied.

Solution security applies only to the solution search process: search results will include only solutions in the libraries to which users have access. This security does not apply to the attempted solutions grid in both the agent facing case and the self-service case. If a user has access to a case, he or she may see any solutions that were applied to the case (including those applied by any other user).

FAQ Libraries

Selecting the **Enable Solution Library as FAQ or Troubleshooting Guide in Self Service** check box for a particular solution library makes that library available to internal agents using Frequently Asked Questions as well as external customers using the Frequently Asked Questions self-service page. For individual solutions within that library to be accessible for self service users, the solution's **External FAQ** check box must be selected for the corresponding library. Similarly, individual solutions within a library are accessible to internal agents if the solution's **Internal FAQ** check box has been selected for the corresponding library.

Note: Self Service FAQ functionality is applicable to Customer Self Service and Employee Self Service for PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education customers. PeopleSoft Integrated FieldService does not utilize FAQ functionality.

Related Links

"Understanding PeopleSoft Call Center's Self-Service Application Configuration" (PeopleSoft Call Center Applications)

Solution Search

Solutions can be searched independent of any component (on the Keyword Solution Search page) or in relation to CRM components in which issues or problems are tracked, for example, cases, service orders, defects, fixes, and inbound emails. From these CRM components, users can search for other relevant objects in addition to solutions that can help resolve their issues. For example, agents can perform keyword search (from cases) covering solutions, troubleshooting guides, similar cases, fixes and defects. Field technicians who perform keyword search from service orders can get search results in solutions and service orders.

To make solutions (and other CRM components) searchable, PeopleSoft CRM delivers the necessary setup and schedule definitions that are used by PeopleSoft Search to enable solution search.

Related Links

"Understanding PeopleSoft Search Framework Implementation for CRM" (Automation and Configuration Tools)

"Understanding PeopleSoft Search Framework Definitions for CRM" (Automation and Configuration Tools)

Solution History

Solutions History is a system-delivered action type. Solutions History logs information into the History Page of the Solution component. This is a solution-specific action and cannot be used for other applications. You can determine which policy caused the history item to be logged since the policy name appears in the history grid. The details can contain terms, which are resolved at runtime. This action is usually invoked after a solution is saved.

The system uses Active Analytics Framework (AAF) to create solution history items. Terms are managed in the AAF data library. They point to disparate pieces of data residing in places like data warehouses, external databases, or operational environments. They are metadata that provide information about the physical data and can be resolved into actual data to be used in PeopleSoft CRM. When users send template-based letters or email, the system merges both static text and resolved data into the template to produce the final correspondence.

Related Links

"Understanding AAF" (Automation and Configuration Tools)

Solution Content Owners

To help maintain solution content more easily and effectively, the CRM system provides the ability to assign ownership of solutions to groups, which are called *content owners*. Each content owner consists of members who are subject matter experts in their designated area and are responsible for creating and maintaining solution content. Group members can receive notifications (if AAF is set up to support the capability) when solutions are assigned to their group, so they can review content and make them available for use in a timely manner.

Suppose that you want to manage solutions created for employee benefits. You can achieve this goal by defining a solution content owner called, for example, *Benefits Solutions*. In this content owner definition, you add group members, who are responsible for creating benefit-related solutions in the knowledge base and reviewing them as needed. These solutions will have *Benefits Solutions* as the content owner. This setup provides flexibility in solution management in terms of resource assignment, because you can quickly update the list of people working on each content owner group as they come on board or leave for other areas.

The CRM system delivers an AAF term for solution content owner, which can be used to build policies that carry out AAF actions supported in CRM. For example, you might want to send workflow notifications to content owner group members and other interested parties when a solution is newly assigned to or has been reassigned to a content owner, so that the solution can be reviewed or put to use quickly. The system also delivers query roles for solution content owners (*Solution Owner Content Email* and *Solution Owner Content Worklist*). A query role is used (when configuring a workflow action as part of building an AAF policy) by AAF to identify the role of people who receive workflow notifications as a result of the execution of the policy.

Related Links

"Workflow Configuration Page" (Automation and Configuration Tools)

Setting Up Solution Management Prompt Tables

To setup solution libraries, use the Solution Library Setup (RC_SOLN_LIB_SETUP) and Solution Relationship Table (RC_SOLN_RLT_TBL) components.

Note: The Solution History Setup component is no longer in use.

Pages Used to Set Up Solution Management Prompt Tables

Page Name	Definition Name	Usage
Solution Library	RC_SOLN_LIB_SETUP	Create solution libraries.
Security Filter Settings	RC_SOLN_LIB_SECUR	Define solution library security.
Solution Relationship Type	RC_SOLN_REL_TYPE	Define how solutions can be related.
Default Solution Template	RC_SOLN_TEMPLATE	Define a default solution template for a SetID.
Content Owner	RC_SOLN_CONTENT	Define content owner groups and associated members for solutions.
Review Status page	RC_REVIEW_STATUS	Used to setup review status for the solution feedback provided by employees or agents.
Feedback Type page	RC_REVIEW_TYPE	Used to configure feedback types.
Configure Solution Approval page	RC_SOLN_AWE_CNFG	Used to configure solution approvals.

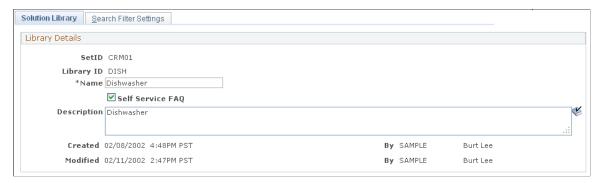
Solution Library Page

Use the Solution Library page (RC_SOLN_LIB_SETUP) to define solution library security.

Navigation:

Set Up CRM > Product Related > Solution > Solution Library > Solution Library

This example illustrates the fields and controls on the Solution Library page.



Field or Control	Description
Name	Enter a library name. If this library is associated with the library FAQ, then the name you enter is exposed to self-service users in the Customer Care - Frequently Asked Questions page.
Self Service FAQ	If the check box is selected, this solution library will be available to external customers using the Frequently Asked Questions page or the Troubleshooting Guide.

Related Links

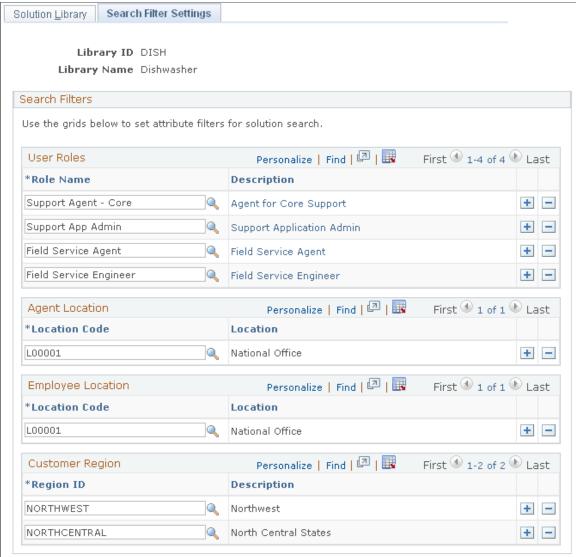
"Understanding PeopleSoft Call Center's Self-Service Application Configuration" (PeopleSoft Call Center Applications)

Security Filter Settings Page

Use the Security Filter Settings page (RC_SOLN_LIB_SECUR) to define solution library security. Navigation:

Set Up CRM > Product Related > Solution > Solution Library > Security Filter Settings

This example illustrates the fields and controls on the Security Filter Settings page.



Specify the combination of user role, agent location, employee location, and customer region that are required in order to have access to the solution library. If one or more categories are specified, all categories must be met to gain access to the solution library. A category with no conditions listed implies no restriction is imposed based on that category.

Note: The **Agent Location**, **Employee Location**, and **Customer Region** grids are only visible on this page if a relevant PeopleSoft product has been licensed. For example, the **Employee Location** grid is only visible if the HelpDesk, Self-Service HelpDesk, HR HelpDesk, Service Center for Higher Education, or Self-Service Service Center for Higher Education product has been installed.

Note: Users can choose not to associate a solution to a solution library by leaving the library field blank on the solution definition. Security is not applied to solutions with no library.

User Roles

Field or Control	Description
Role Name	Enter a PeopleSoft security role name to restrict access to this solution library to users with the specified role. An empty row indicates no role limitation is attached to this solution library.

Agent Location

Field or Control	Description
Location Code	Enter a location code to restrict access to this solution library to agents associated with the specified location. An empty row indicates no agent location limitation is attached to this solution library.
	An agent's location is specified on the job tab of the worker component. If the agent has more than one job, then all jobs will be considered. A match on location for one job is sufficient to satisfy the agent location condition.

Employee Location

Field or Control	Description
Location Code	Enter a location code to restrict access to this solution library to employees associated with the specified location. An empty row indicates no employee location limitation is attached to this solution library.
	An employee's location is specified on the job tab of the worker component. If the employee has more than one job, then all jobs will be considered. A match on location for one job is sufficient to satisfy the employee location condition.

Customer Region

Field or Control	Description
Region ID	Enter a region ID to restrict access to this solution library to cases whose customers are associated with the specified region. The customer region is retrieved from the customer site address. If no region is specified for the customer site address, or there is no site associated with the case, the contact address region is used. If no contact address region is available, the customer address region is used. If there is no region available for the customer address, no region will be considered for the transaction
	Note that address definitions may be created without an associated region: if you wish to implement solution security based on customer region, make sure the relevant customer addresses are associated with a region. An empty row indicates no customer region limitation is attached to this solution library.

Related Links

"Understanding PeopleSoft Call Center's Self-Service Application Configuration" (PeopleSoft Call Center Applications)

Solution Relationship Type Page

Use the Solution Relationship Type page (RC_SOLN_REL_TYPE) to define how solutions can be related.

Navigation:

Set Up CRM > Product Related > Solution > Solution Relationship Type > Solution Relationship Type

This example illustrates the fields and controls on the Solution Relationship Type page.



Field or Control	Description	
Solution Relationship Type	Enter a unique identifier for the relationship type.	
Relationship Name and Relationship Description	Enter a short and long description of the relationship. The short description appears on the pages where you establish and review solution relationships.	

Default Solution Template Page

Use the Default Solution Template page (RC_SOLN_TEMPLATE) to define a default solution template for a SetID.

Navigation:

Set Up CRM > Product Related > Solution > Default Solution Template > Default Solution Template

This example illustrates the fields and controls on the Default Solution Template page.



Field or Control	Description	
SetID	The SetID for which the default solution template will apply.	
Template	Select the default template to be applied to solutions associated with this SetID.	

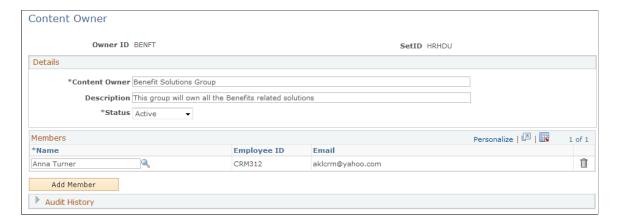
Content Owner Page

Use the Content Owner page (RC_SOLN_CONTENT) to define content owner groups and associated members for solutions.

Navigation:

Set Up CRM > Product Related > Solution > Content Owner > Content Owner

This example illustrates the fields and controls on the Content Owner page.



Details

Field or Control	Description
Content Owner	(Required) Enter the name of the content owner group. The system uses this field value for display when a content owner group is selected on the Solution page. The maximum field length is 50 characters.
Description	Enter the long description (maximum field length is 80 characters) for the content owner group.
Status	Select the current status of the content owner group: <i>Active</i> (default) or <i>Inactive</i> . When you deactivate a content owner group, the system checks if it is associated with any active solutions. If yes, the system displays an error message and denies the status change request. If no, the system changes the status accordingly.

Members

This section displays all members (with their employee IDs and email addresses) that are associated with the content owner group. Only active workers in the system are available for selection.

Field or Control	Description
Add Member	Click to add a new row in the Members section to associate another member to the group.

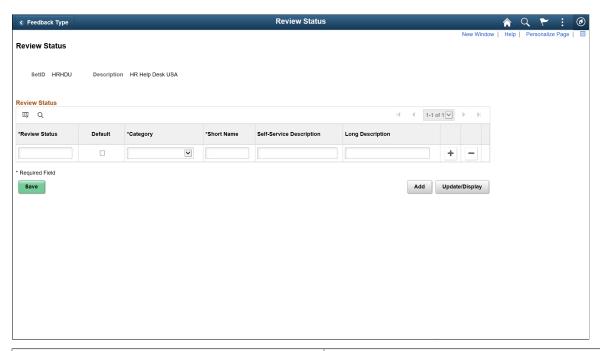
Review Status Page

Use the Review Status page (RC_REVIEW_STATUS) to o setup review status for the solution feedback provided by employees or agents.

Navigation:

Setup CRM > Product Related > Solutions > Review Status

This example illustrates the fields and controls on the Review Status page.



Field or Control	Description
Review Status	Enter the review status for the feedback.
Default	The default value of "Review Status" field in Solution Feedback. The default status is displayed when an employee or a user provide a solution feedback, even though Review Status is not visible at that time.
Category	Category of review status. Content Owner would not able to update the solution feedback once the Review Status is updated to any of the "Feedback is Closed Category".
Short Name	Short name for the review status.
Self-Service Description	This field is not applicable for 'Review Status'.
Long Description	Meaningful description for the review status.

Feedback Type Page

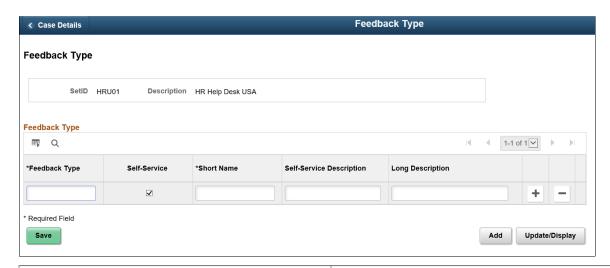
Use the Feedback Type page (RC_REVIEW_TYPE) to setup the solution feedback types.

Feedback Type can be configured based on Set ID. The Feedback type values can be distinguished for self services users and agents.

Navigation:

Setup CRM > Product Related > Solutions > Feedback Type

This example illustrates the fields and controls on the Feedback Type page.



Field or Control	Description
Feedback Type	Enter the feedback type values as per requirements. These values are available for an employee or agent while proving a feed back for the solution.
Self Service	Select this check-box so that the feedback types will be visible for employees and agents. If Self Service check-box is not selected, then feedback types are available only for agents.
Short Name	Enter a short description for feedback type. When you are providing a feedback, the value that is entered for short description appears on the Solution Feedback modal window.
Self Service Description	Enter a self service description for the feedback type. If you select the Self Service check box, then you need to provide Self Service Description.
Long Description	Enter the long description for feedback type.

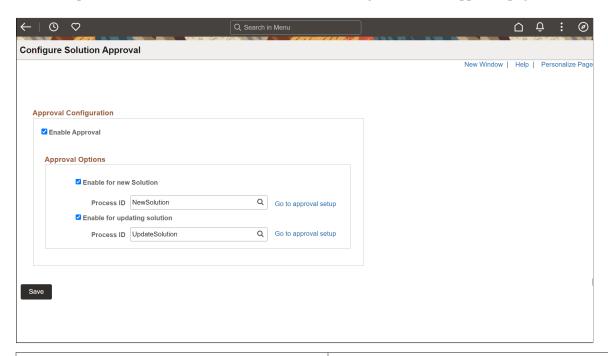
Configure Solution Approval Page

Use the Configure Solution Approval page (RC_SOLN_AWE_CNFG) to enable approvals for new and update solution requests. You can enable solution approvals as per your requirements. Solution approvals are not enabled by default, however, you can enable them as needed.

Navigation:

Setup CRM > Product Related > Solution > Configure Solution Approval

This example illustrates the fields and controls on the Configure Solution Approval page.



Field or Control	Description	
Enable Approval	Select this checkbox to enable the approval process.	
Enable for new Solution	Select this checkbox to enable the approval process for New Solutions.	
Process ID	Select the required value in the Process ID field. Click the Go to Approval Setup link to view the approval setup. For details on approval setup, see "Setting Up the Transaction Registry" (Approval Framework).	
Enable for updating solution	Select this checkbox to enable the approval process for updating solutions.	
Process ID	Select the required value in the Process ID field. Click the Go to Approval Setup link to view the approval setup. For details on approval setup, see "Setting Up the Transaction Registry" (Approval Framework).	

PeopleSoft CRM provides two approval processes - NewSolution and UpdateSolution. These can be used for approving new solutions and updating existing ones. You can also create your own processes based on your needs.

Before enabling approvals for solutions, you must set up the following user roles:

Roles	Description
Content Owner – Requestor	Users with this role can create or update solutions, if solution approval is enabled.
Knowledge Manager - Approver	Users with this role can approve/Deny/push back solution, if approval for solutions is enabled.
Solution Administrator	Users with this role can expire or supersede solution, if approval is enabled.

If approval configuration is enabled and you already have active solutions, existing active solutions will be populated in the RC_SOLN_NEW_APR record. As a result, all updates to existing solutions will be routed through the Update solution approval process.

Setting Up Solution History Tracking

Use AAF to define which events are captured in a solution's history.

Related Links

"Configuring Actions in Policies" (Automation and Configuration Tools)

"Case History Configuration Page" (Automation and Configuration Tools)

Chapter 3

Managing Solutions

Understanding Solutions

Solutions are resolutions to problems. A well-established set of predefined solutions for common problems helps resolve customer problems quickly and efficiently.

This topic discusses:

- Solution creation.
- Solution activation, deactivation and replacement.
- Solution use in PeopleSoft CRM applications.
- Solution usage counts and linkages.

Solution Creation

Solutions can be created manually or by merging solutions. You can create solutions:

• When a user creates a new text resolution for a case.

Within PeopleSoft call center applications and PeopleSoft Integrated FieldService users can use solutions to explain how problems were resolved for cases and service orders. When this occurs, the system uses the text to create a new solution of type *Adhoc*. Using PeopleSoft Email Response Management System (ERMS) users can also attach solutions to emails in a way that's similar to the method users would use to attach solutions to cases and service orders. In quality management, users can search and associate solutions to defects.

• When a self-service user closes a call center case using a predefined reason.

If you do not associate solutions with the case closure reasons that you create, then the first time a self-service user closes a case using one of the predefined reasons, the system uses the reason description to create a new solution of type of *Canned*. The system associates this solution with the reason.

The only way to edit a solution is through the Solution component.

Related Links

"Associating Solutions with Reasons for Closing Cases" (PeopleSoft Call Center Applications)

Solution Activation, Deactivation and Replacement

A solution is considered activated, ready for use when it is included in the search index and becomes searchable by applications that use solutions. Whether or not a solution can be added to the index and

Managing Solutions Chapter 3

when it occurs depend on two factors at the time the Search Schedule Index process is run: solution status and start date. Basically, the Search Schedule Index process adds solutions that meet ALL of these conditions to the search index:

- Status equal to Active.
- Start date earlier than or equal to the current date, or blank.
- End date later than the current date or blank.

Over time, even a well-managed solution set can end up with similar or duplicate solutions. The system lets you deactivate any outdated or unused solution by giving it an expiration date. You can also choose to change the solution status to "Expired", in which case the system automatically defaults the current date as the solution's end date. When the Search Schedule Index process runs, it looks for solutions that either have a past or current end date, or a non-Active status in the search index. Then, it removes them from the search index. This ensures that the expired solutions are no longer available for search in applications.

The ability to give a solution an end date is important in call center applications. In reality, cases can be associated with solutions that are invalid or soon to be invalid, and deleting or modifying these solutions can compromise data integrity. The idea of adding an end date to solutions makes it possible for users to access expired solutions from their associated cases, but they are no longer searchable as they are removed from the search index.

Sometimes, rather than expiring solutions entirely, you may want to replace (or supersede) them with others sometime in the future. This is common in call centers where you would create a solution describing the temporary workaround for a problem before a permanent fix becomes available. Later on when the permanent fix is ready, you can retire the temporary solution by giving an end date on its solution definition, and specify the new solution that is replacing or superseding it. Superseded solutions are not searchable by users at runtime; they are removed from the search index when the Search Schedule Index process is run.

Similarly, when you merge solutions, you select a primary solution that supersedes one or more similar solutions. As a result of the merge process, the status of superseded solutions is changed to "Superseded", and the primary solution is cross-referenced in the definition of the superseded solutions.

This table lists the different combinations of solution status, start date, end date, and superseded by solution and their corresponding Search Schedule Index process results (Assumption: the Search Schedule Index process is run today):

Solution Status	Start Date	End Date	Superseded By	Search Schedule Index Process Result
Draft, Submitted for Review, or In Review	Current date	-	-	Solution not added to index
Active	Current or past date	-	-	Solution added to index
Active	Future date	-	-	Solution will be added to index on or after future date when process is run

Chapter 3 Managing Solutions

Solution Status	Start Date	End Date	Superseded By	Search Schedule Index Process Result
Changed to Draft, Submitted for Review, or In Review	Any date	-	-	Solution removed from index
Changed to Expired or Superseded	Any date	-	-	Solution removed from index
Active	-	Current or past date	-	Solution removed from index. Solution status is set to "Expired"
Active	-	Future date	-	Solution will be removed from index on or after future date when process is run. Solution status is set to "Expired"
Expire	-	Current or past date	-	Solution removed from index
Expire	-	Future date	-	Not applicable. If status is changed to "Expired" automatically (Search Schedule Index process), the end date is never a future date. If status change is manual, the system defaults current date as end date and does not allow you to enter a future end date.
Changed to Draft, Submitted for Review, or In Review	-	Any date	-	Solution removed from index
Active	-	Current or past date	Any solution	Solution removed from index. Solution status is set to "Superseded"
Active	-	Future date	Any solution	Solution will be removed from index on or after future date when process is run. Solution status is set to "Superseded"
Superseded	-	Current or past date	Any solution	Solution removed from index

Managing Solutions Chapter 3

Solution Status	Start Date	End Date	Superseded By	Search Schedule Index Process Result
Superseded	-	Future date	Any solution	Not applicable. If status is changed to "Superseded" automatically (Search Schedule Index process), the end date is never a future date. If status change is manual, the system does not allow you to enter a future end date.
Changed from "Superseded" to any other status	-	Any date	-	Note: The Supersede By field becomes unavailable for edit when status is changed from "Superseded" to something else. From "Superseded" to "Active": Solution added to index based on start date. If start date is a past or current date or left blank, solution is added to index as soon as process is run; if start date is a future date, solution will be added on or after the future date. From "Superseded" to any other non-Active status: Solution is not available in index and it will not be after status change.

Note: If a solution has an end date and it's not superseded by another solution, the end date is considered the solution's expiration date. If the solution has both an end date and a solution that supersedes it, the end date is served as the superseded date.

Solution Use in PeopleSoft CRM Applications

Solutions can apply to problems tracked through service orders, call center cases, defects and resolutions, and email. Field service technicians and call center agents use solutions differently.

Using Solutions in PeopleSoft Integrated FieldService

PeopleSoft Integrated FieldService users may view existing solutions from service orders and add new ones as they resolve problems. PeopleSoft Integrated FieldService tracks which solutions are used for specific service orders. Field service technicians can both view solutions and enter new ones.

Using Solutions in PeopleSoft Call Center Applications

PeopleSoft Support, PeopleSoft HelpDesk, PeopleSoft HelpDesk for Human Resources, and Service Center for Higher Education users can relate solutions to cases.

PeopleSoft call center applications track not only the final solution to a case, but also failed solutions and other solutions considered. By tracking solution usage, you capture valuable information about your solution set.

Chapter 3 Managing Solutions

Call center applications track solution usage by associating solutions to cases and using the solution **Status** field to indicate whether the solution solved the case. The interface is different in the agent-facing case page and the self-service case page, but the underlying data structures are the same for all users.

Using Solutions in Quality Management

Quality management enable you to track both the final solution (the one that resolved the caller's problem) and other solutions that were considered. By tracking all solution usage, you capture valuable information about the effectiveness of your solution set.

Using Solutions in ERMS

In PeopleSoft ERMS, agents can search for solutions to help resolve customer issues on the email workspace. Additionally, the system uses solutions that are added to the proposed list as the criterion to search for templates that can apply to the email response.

Using Solutions

Both field service technicians and call center users (agents and self-service users) can search for solutions using the Solutions page. Solutions for cases, service orders, and email provides search functionality, including the ability to associate a solution with the case, service order or email from which the search originated.

When you use Solutions page to search for solutions, search results are ranked by relevance. Relevance scores range from 1 to 100, with 100 representing the highest relevance.

A solution's relevance score is calculated based on how well the search criteria match the solution. The search definition for solutions determines which fields are searched to determine if there is a match

Call center agents have additional ways of finding solutions for a case. They can or access the Solutions page and:

- Search the solutions on the Frequently Used Solutions page by product, by error code, or by category, type, and detail.
- Search for solutions on the FAQ (frequently asked questions) page.

Related Links

"Understanding the My Service Order Component" (PeopleSoft Integrated FieldService) Understanding Solutions

- "Understanding the Configurable Case" (PeopleSoft Call Center Applications)
- "Understanding PeopleSoft Search Framework Implementation for CRM" (Automation and Configuration Tools)
- "Understanding PeopleSoft Search Framework Definitions for CRM" (Automation and Configuration Tools)

Solution Usage Counts and Linkages

Because PeopleSoft call center and field service applications enable you to track the application of a solution to cases and service orders, the system can track resolution-related metrics for each solution.

This table describes the resolution metrics that are tracked:

Managing Solutions Chapter 3

Number	Description
Usage count	Contains three counts, including:
	Viewed : The number of times users clicked to open and view the solution from cases and service orders.
	Solved : The number of times the solution solved cases and service orders successfully.
	Failed : The number of times the solution has been marked as a failed resolution in cases and service orders.
Standard usage count	Contains three counts, including:
	Viewed : The number of times users clicked to open and view the solution that is not associated with any transaction.
	Solved : The number of times the solution solved issues successfully (users click the Yes button on the Solution Summary page in self-service application).
	Failed : The number of times the solution does not solve issues (users click the No button on the Solution Summary page in self-service application).
Usage count by product	Indicates how many times the solution resolved cases or service orders for the products that are associated with the solution (these products are listed on the Related Actions page in the Solution component).
	This number is used to determine which solutions appear on the Frequently Used Solutions page.
Usage count by error	Works like usage count by product, but is based on the error message recorded for a case rather than on the product recorded for a case. This usage count pertains to the Frequently Used Solutions page and is used the same way that it is used for products.
Usage count by category/type/detail	Works like usage count by product, but is based on the category, type, and details recorded for a case rather than on the product recorded for a case. This usage count pertains to the Frequently Used Solutions page and is used the same way that it is used for category, type, and details.

The system normally maintains the solved count and the (overall) usage count by increasing and decreasing the values as you work with solutions. But you can reset the counts based using either a specified date range or all dates. To do this, run the Update Solution Usage Counts process. This process is also the only mechanism for updating the usage count by product, error, or category/type/detail.

Creating Solutions

To define solutions, use the Solution (RC_SOLUTION) component. This component also allows you to define solutions and send them for approval. For details on defining approval enabled solutions, see Creating Approval Enabled Solutions.

Chapter 3 Managing Solutions

This topic discusses how to:

- Define solutions.
- Track notes and attachments.
- Identify solution libraries.
- Manage relationships with cases, products, errors, and other solutions.
- Manage relationships with service orders, products and other solutions.
- Relate solutions.
- View solution history.
- View Solution Feedback provided by Employees and Agents

Pages Used to Create Solutions

Page Name	Definition Name	Usage
Solution - Solution	RC_SOLN_DETAILS	Create and deactivate solutions.
Solution - Notes	RC_SOLN_NOTES	Add notes or attachments.
Solution - Libraries	RC_SOLN_LIBRARY	Identify libraries to which the solution belongs. When users search for solutions using Solution Advisor, they can choose which libraries to search.
Solution - Related Actions	RC_SOLN_SIMILAR	Review the solutions, cases, products, and errors, and category/type/detail, service orders, and business projects that are related to this solution, and create relationships with other solutions and products.
Relationship Type	RC_SOLREL_TYPE_SEC	Identify a related solution and the relationship type. This page is used for the both the case and service order related actions.
Solution - History	RC_SOLN_HISTORY	Review a history of important events in the life of the solution.
Solution Summary	RC_SOLN_SUMMARY	View solution summary information for the current solution.

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Page Name	Definition Name	Usage
Solution - Feedback	RC_SOLN_FEEDBACK	View solution feedback provided by Employees and Agents.

Solution - Solution Page

Use the Solution - Solution page (RC_SOLN_DETAILS) to create and deactivate solutions. This section applies solely if approval is not configured for the solution. If approval is enabled for solution, see Creating Approval Enabled Solutions.

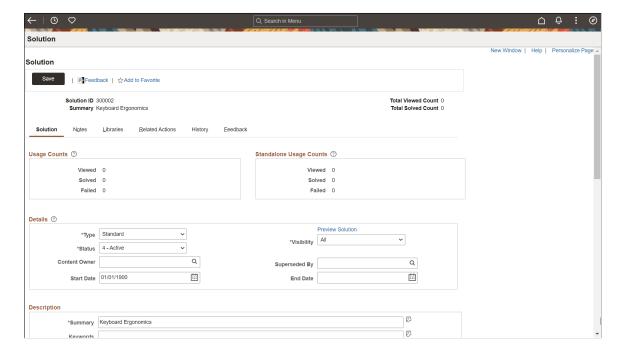
Navigation:

Solutions > **Search Solutions**

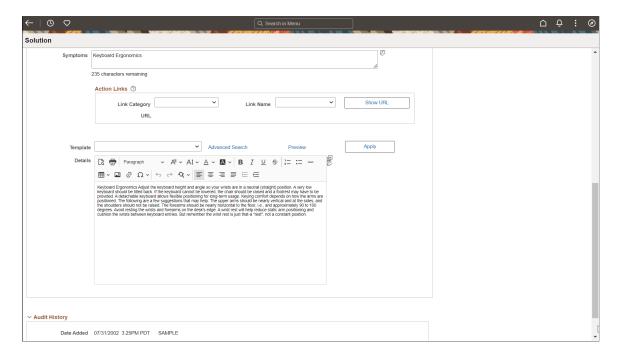
Alternatively, click the Manager Solutions tile on the HR Service Manager homepage.

Note: When solutions appear in the Search Results section on the Solution search page initially, they are displayed on the list by solution ID in ascending order. If you click the **Solution ID** column name to sort solutions in the list, the system reorders them (in ascending or descending order) by solution ID one character at a time. Suppose that there are three solutions in the search result grid and their IDs are 30, 31 and 301054 respectively. If you click the column name to sort them by solution ID in ascending order, they appear in this order: 30, 301054 and 31.

This example illustrates the fields and controls on the Solution - Solution page (1 of 2).



This example illustrates the fields and controls on the Solution - Solution page (2 of 2).



Note: If you change the solution's type, you must rerun the build search index process for solutions to update the solution set. This provides users with accurate search results when trying to locate solutions to problems.

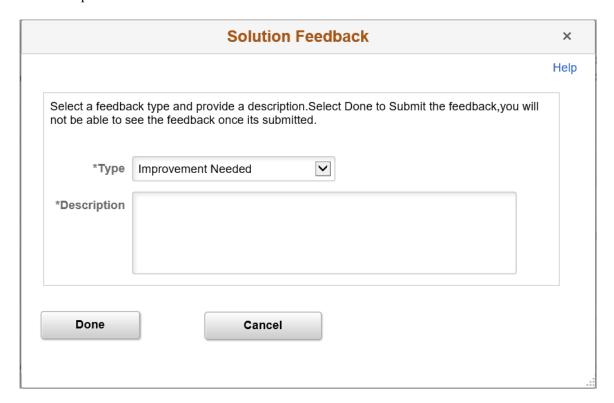
Field or Control	Description	
Feedback	Used to enter feedback while viewing a solution. For details see Agent Feedback on Solutions.	
Add to Favorite/Remove from favorite	Click the star icon to mark/unmark the solution as your personal favorite.	
Total Viewed Count	Displays the sum of the viewed usage count and viewed standard usage count.	
Total Solved Count	Displays the sum of the viewed solved count and viewed standard solved count.	

Feedback on Solutions

Users with appropriate access can provide feedback for a solution. To provide the feedback, perform the following:

1. Click the Feedback link on the Solution — Solution page. This displays the Solution Feedback modal window.

This example illustrates the fields and controls on the Solution Feedback modal window.



- 2. Select the required feedback type. The values displayed in the drop-down list are based on the feedback types configured in the Feedback Type page. For details, see <u>Feedback Type Page</u>
- 3. Enter a meaningful description.
- 4. Click Done.

Note: 'Type' and 'Description' are mandatory fields.

Usage Counts

This section displays the usage counts of the solution when it is used in relation to cases or service orders. The numbers are updated by running the Update Usage Counts process.

Field or Control	Description
Viewed, Solved, and Failed	 Viewed) The number of times users clicked to open and view this solution from cases and service orders. (Solved) The number of times this solution has successfully solved cases and service orders. A solution is considered successful when the user clicks the Solve button. (Failed) The number of times this solution has been marked as a failed resolution in cases and service orders. A solution is considered failed when the same value is selected as the resolution status.

Standalone Usage Counts

This section displays the usage counts of the solution when it is used in the standalone mode, not related to any CRM transactions. The numbers are updated by running the Update Usage Counts process.

Field or Control	Description	
Viewed, Solved, and Failed	Displays:	
	(Viewed) The number of times users clicked to open and view this solution.	
	(Solved) The number of times this solution solved issues successfully (users click the Yes button on the Solution Summary page in self-service application).	
	(Failed) The number of times this solution does not solve issues (users click the No button on the Solution Summary page in self-service application).	

Details

Field or Control	Description
Туре	Normally, select either Standard or Workaround.
	Solutions created when agents enter an independent text resolution are given the type <i>Adhoc</i> . You can convert these to standard solutions by changing the type.
	Solutions created when a agent or technician uses external content to resolve a case or service order are given a solution of type of <i>Link</i> . You can't manually create a solution of type of <i>Link</i> .
	Solutions created when self-service users choose predefined case closure reasons are given the type of <i>Canned</i> .
Preview Solution	Click to see a preview of the solution in a new browser window.
Status	Select from:
	Draft: When a new adhoc solution is added to a case, the system creates a solution behind the scenes with a solution type of Adhoc and a solution status of Draft. Adhoc solutions, however, are not accessible through Solution Advisor.
	Submitted for Review: When an agent clicks the Submit button on the Resolution Details page, the system changes the solution status from <i>Draft</i> to <i>Submitted for Review</i> .
	<i>In Review:</i> Managers use this status to indicate that the adhoc solution is being reviewed for approval or denial.
	Active: The solution is approved and available to agents.
	Denied: The solution is denied for general use by agents.
	Expired: The solution is no longer valid as of the expired or superseded date.
	Superseded: The solution is no longer valid because another solution has replaced it.
	Rework: The solution is marked for update and further review.

Field or Control	Description
Visibility	Select <i>All</i> if self-service users are allowed to view this solution. Select <i>Internal</i> to prevent self-service users from using this solution.
	Note: Users cannot search for internal solutions through PeopleSoft Self Service applications. If an internal solution is added to an agent facing case, however, it can be viewed from self service once it's added to the case.
Content Owner	Enter the content owner group that the solution belongs to. Only active content owners with same setID as the solutions are available for selection.
	When the status of an expired or superseded solution is changed to <i>Active</i> , the system checks if the associated content owner (if available) is active.
	If the content owner is inactive, an error message is displayed and the status of the solution cannot be updated; if it is active, the solution status can be updated.
Path Detail	The system displays this field when the type is File or Link. It includes a URL to the website or file where a solution resides.
Superseded By	When the solution status is <i>Superseded</i> , identify the replacement solution in this field.
	Selecting a replacement solution automatically sets the status to <i>Superseded</i> . Selecting a status other than <i>Superseded</i> clears the Superseded By field.
	When you merge solutions using the Merge Similar Solutions page, the system sets the status to Superseded and identifies the replacement solution automatically.

Field or Control	Description	
Start Date	Enter the start date when the solution (in active status) becomes available for searching through the PeopleSoft Search Framework. When the Search Schedule Index process is executed, it looks for solutions with start dates that are equal to the current system date and adds them to the search index. Solutions must be added to the search index in order for them to be searchable in cases, service orders, defects and email messages (ERMS). By default, the system uses the current date as the solution start date. You can create future-dated solutions by specifying a future start date.	
End Date	Enter the end date on which the solution is no longer searchable for use by the PeopleSoft Search Framework. The Search Schedule Index process removes solutions with end dates that are equal to or earlier than the current system date from the search index	

Description

Field or Control	Description	
Summary	Enter a short description of the solution.	
Keywords	Enter search keywords or a phrase for the solution.	
Symptoms	Enter a description of the problem that the solution addresses.	
Template	Select a template package to be used for this solution.	
Apply Template	Click this button to apply the template package specified in the Template field to the solution. More than one template package can be applied to a solution: each time a template package is selected and applied, it will appear at the top of the solution Details area.	
Details	Enter the full explanation of how to solve the problem.	

Related Links

Understanding Solution Management Setup

Solution - Notes Page

Use the Solution - Notes page (RC_SOLN_NOTES) to add notes or attachments.

Navigation:

Solutions > **Search Solutions** > **Notes**

The Solution - Notes page uses the standard PeopleSoft CRM interface for working with notes and attachments

Attachments are visible on solution summary pages based upon the value of the **Attachment Visibility** field for the note with which it is associated. If the value of the field is *Internal*, the attachments are only visible on agent-facing pages: if the value is *All*, the attachments are also visible in self-service pages.

Regardless of the value of the **Attachment Visibility** field, solution notes themselves are never visible in self-service pages.

You would normally want attachments to have a visibility of *All* if they are files that a caller uses when applying the solution: for example, DLL files or BAT files that fix software problems.

Related Links

"Understanding Notes and Attachments" (Application Fundamentals)

Solution - Libraries Page

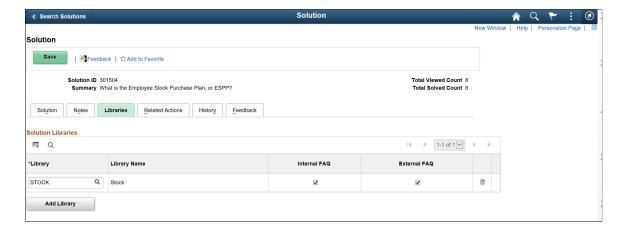
Use the Solution - Libraries page (RC_SOLN_LIBRARY) to identify libraries to which the solution belongs.

When users search for solutions using Solution Advisor, they can choose which libraries to search.

Navigation:

Solutions > Search Solutions > Libraries

This example illustrates the fields and controls on the Solution - Libraries page.



Libraries are only applicable to call center applications.

Field or Control	Description	
Library	Select a library to which you wish to associate this solution	
Internal FAQ	Select this check box to make this solution available to agents searching Frequently Asked Questions on cases.	
External FAQ	Select this check box to make this solution available to external customers using the self-service Frequently Asked Questions page.	

Related Links

"Understanding PeopleSoft Call Center's Self-Service Application Configuration" (PeopleSoft Call Center Applications)

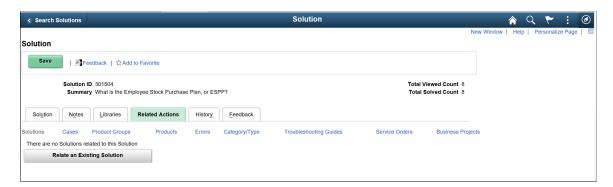
Solution - Related Actions Page

Use the Solution - Related Actions page (RC_SOLN_SIMILAR) to review the solutions, cases, products, and errors, and category/type/detail, service orders, and business projects that are related to this solution, and create relationships with other solutions and products.

Navigation:

Solutions > **Search Solutions** > **Related Actions**

This example illustrates the fields and controls on the Solution - Related Actions page.



Click the links below the tab to see different types of related actions in the grid.

Solutions

This grid lists all solutions that are related to the current solution. You can relate solutions manually or create solution relationships by running the Related Solution process.

Click the **Relate an Existing Solution** button to access the Relate Existing Solutions page. Use this page to establish a relationship between the currently displayed solution and an existing solution.

[&]quot;Understanding Self-Service Transactions" (PeopleSoft Call Center Applications)

This information appears for each related solution:

- The relationship type.
- The solution ID and summary.

Click the solution ID to view the solution summary.

- The link source: MAN (manually created) or SYS (system-created).
- The date and time the relationship was created.

Note: You cannot relate an existing solution to an adhoc solution.

Issues

Case relationships, or issues, are relevant only for call center applications. When you resolve a case, the system adds the newly resolved case to the solution's list of related cases.

This grid lists all cases to which the solution has been applied, regardless of whether the solution solved the case. The system maintains the list of related cases in real-time.

This information appears for each related case:

• The case ID and summary.

Click the case ID to transfer to the case.

• A resolution status that indicates whether the solution resolved the case.

Products

This grid lists all products for cases that the solution successfully resolved. You can relate products manually or use the Update Solution Usage Counts process to create additional relationships automatically.

This information appears for each related product:

- The product ID and description.
- A solved count that indicates the number of cases with this product that the solution resolved.
- The link source: MAN (manually created) or SYS (system-created).
- The date and time the relationship was created.

Errors

Errors are relevant only to call center applications. This grid lists all errors for cases that the solution successfully resolved. You cannot add rows of data manually; you must use the Update Solution Usage Counts process to create additional relationships.

This information appears for each related error:

The error ID and error message.

- A solved count that indicates the number of cases with this error that the solution resolved.
- The link source: MAN (manually created) or SYS (system-created).

Currently, you cannot create manual relationships.

Category/Type

Categories, specialty types, and details are relevant only for call center applications. This grid lists all categories, types, and details for cases that the solution successfully resolved. You can change the specialty types and details listed for the category by selecting new values from the drop-down list boxes for the two fields.

This information appears for each related category/type/detail:

- The category, specialty type, and detail.
- A solved count that indicates the number of cases with this category/type/detail combination that the solution resolved
- The link source: MAN (manually created) or SYS (system-created).

Currently, you cannot create manual relationships.

Service Orders

Service order relationships are relevant only for PeopleSoft Integrated FieldService applications. When you complete a service order, the system adds the service order to the solution's list of related service orders.

Business Projects

You can set up an AAF policy to launch a business project after a solution is saved for a case or service order. The business project is typically used to send notifications to solution managers or send worklist entries to specific employees. This grid lists all business projects associated with the solution.

This information appears for each business project that is related to the solution:

• The business project summary and status.

To access the Business Project Status page, click the **View Details\Transfer** icon for the Related Business Project.

• The date the business project was created and the person who created it

Related Links

Relating Solutions Automatically
Updating Solution Usage Counts and Linkages
Understanding Case, Service Order, and Defect Resolution

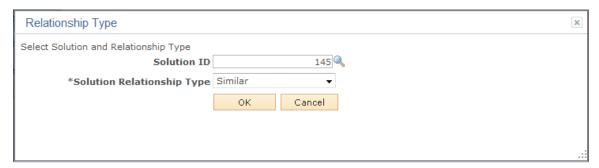
Relate Existing Solution Page

Use the Relationship Type page (RC_SOLREL_TYPE_SEC) to identify a related solution and the relationship type.

Navigation:

Click the **Relate an Existing Solution** button on the Solution - Related Actions page.

This example illustrates the fields and controls on the Relate Existing Solution page.



Field or Control	Description	
Solution ID	Select the solution to relate to the current solution.	
Solution Relationship Type	Select from the values established on the Solution Relationshi Type page.	
ок	Click this button to establish the relationship and return to the Solution - Related Actions page.	

Related Links

Solution Relationship Type Page

Solution - History Page

Use the Solution - History page (RC_SOLN_HISTORY) to review a history of important events in the life of the solution.

Navigation:

Solutions > **Search Solutions** > **History**

This example illustrates the fields and controls on the Solution - History page.



Field or Control	Description
Policy Name	Displays the name of the policy that caused the history item to be logged. This information is usually recorded after the solution is saved.
	Note: The components present in Active Analytics Framework (AAF) are used to build policies. The information that appears on this page is triggered after the solution is saved.
Action Taken	Displays the name of the event. The description of the action comes from the description of the policy established in AAF.
Changed By	The person who made the change that triggered the event.

Related Links

"Configuring Actions in Policies" (Automation and Configuration Tools)

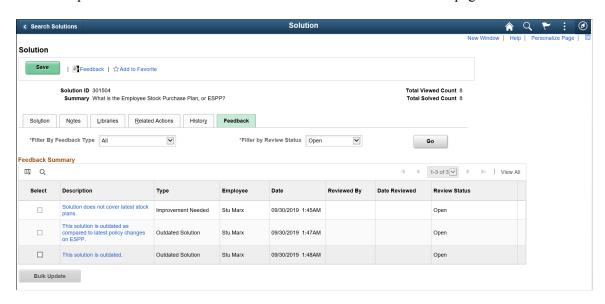
Solution - Feedback Page

Use the Solution - Feedback page to review all the comments provided by Agents and Employees.

Navigation:

Solutions > **Search Solutions** > **Feedback**

This example illustrates the fields and controls on the Solution - Feedback page.



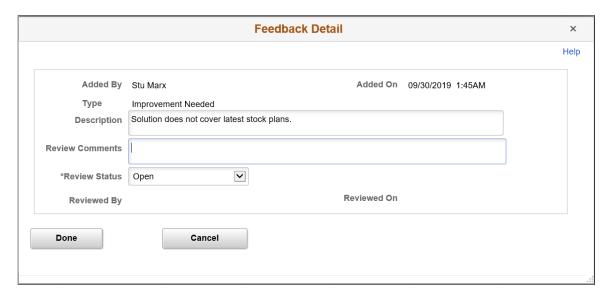
Note: The Feedback tab is displayed only for users tagged with permission list 'CRRC1122' (content owners). Feedback can be further filtered by Feedback Type and Review Status. Feedback Type will hold the value "All" by default. Review Status default value can be configured from Review Status set up (Default check box).

Field or Control	Description	
Description	Description of the feedback.	
Туре	Type of feedback.	
Employee	Employee or agent who provided the feedback.	
Date	Date on which the feedback was provided.	
Reviewed By	Content owner who reviewed the feedback provided by agents or employees.	
Date Reviewed	Date on which the feedback was reviewed.	
Review Status	Status of review.	

To review a feedback, perform the following:

1. Select a particular feedback from the Feedback Summary block. This displays the Feedback Detail modal window as shown:

This example illustrates the fields and controls on the Feedback Detail modal window.



- 2. Enter the review comments.
- 3. Select an appropriate review status. The values displayed in the drop-down list are based on the configurations on the Review Status page. For details, see <u>Review Status Page</u>

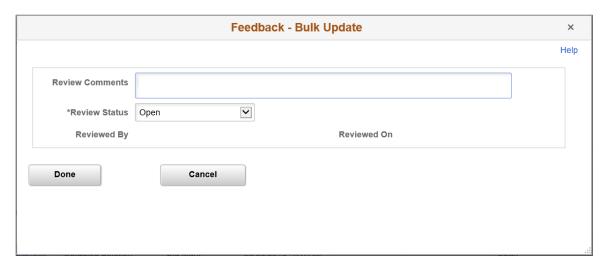
Note: Users cannot edit a feedback further if any of the review status is with in "Feedback is closed" category.

Click Done.

Users can also bulk update solution feedbacks. To bulk update the feedbacks, perform the following:

- 1. Select the check-box corresponding to the feedbacks which you want to edit.
- 2. Click the Bulk Update button. This displays the Feedback Bulk Update modal window as shown:

 This example illustrates the fields and controls on the Feedback Bulk Update modal window.



3. Provide the review comments and select a review status.

4. Click Done.

Creating Approval Enabled Solutions

To define approval enabled solutions, use the Solution (RC_SOLUTION) component. It is possible for content authors to create or update solutions, and can submit it for approval.

For details on enabling approvals for solutions, see Configure Solution Approval Page.

Pages Used to Create Approval Enabled Solutions

Page Name	Definition Name	Usage
Solution - Add Solution	RC_SOLN_DET_EDIT	To create approval enabled solutions and submit them for approval.
Solution - Solution	RC_SOLN_DETAILS	To manage and deactivate solutions.

Solution Page

Use the Solution page (RC_SOLN_DET_EDIT) to create approval enabled solutions and submit them for approval.

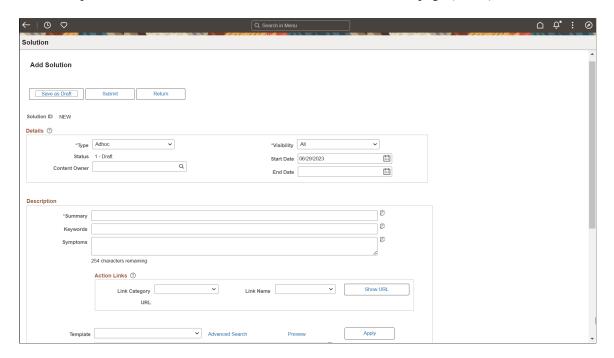
Navigation:

Solutions > Search Solutions > Add Solution

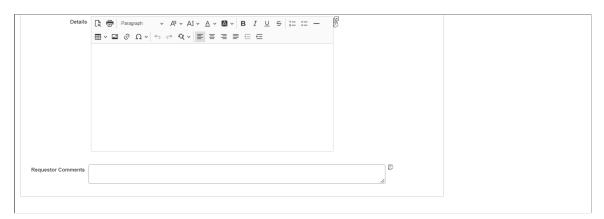
Alternatively, click the Manager Solutions tile on the HR Service Manager homepage. Click the Add Solution button to access the Add Solution page.

Note: Add Solution button is displayed only if user has "Content Owner – Requestor" role.

This example illustrates the fields and controls on the Add Solution page (1 of 2).



This example illustrates the fields and controls on the Add Solution page (2 of 2).



Field or Control	Description
Save as Draft	Click to save the solution definition and set the solution status to Draft.
Submit	Click to submit the draft solution for approval. If the solution request is submitted for approval all the fields in the Solution page become readonly.
Return	Click to go back to the Add Solution page or Solution Details page (in case of updating solutions).

Details

Field or Control	Description
Туре	Normally, select either Standard or Workaround.
	Solutions created when agents enter an independent text resolution are given the type <i>Adhoc</i> . You can convert these to standard solutions by changing the type.
	Solutions created when a agent or technician uses external content to resolve a case or service order are given a solution of type of <i>Link</i> . You can't manually create a solution of type of <i>Link</i> .
	Solutions created when self-service users choose predefined case closure reasons are given the type of <i>Canned</i> .
Visibility	Select <i>All</i> if self-service users are allowed to view this solution. Select <i>Internal</i> to prevent self-service users from using this solution.
	Note: Users cannot search for internal solutions through PeopleSoft Self Service applications. If an internal solution is added to an agent facing case, however, it can be viewed from self service once it's added to the case.
Status	Displays the current status of the solution.
	Available values are:
	Draft
	Submitted for Review
	In Review
	Active
	Denied
	Expired
	Superseded
	Rework

Field or Control	Description
Start Date	Enter the start date when the solution (in active status) becomes available for searching through the PeopleSoft Search Framework. When the Search Schedule Index process is executed, it looks for solutions with start dates that are equal to the current system date and adds them to the search index. Solutions must be added to the search index in order for them to be searchable in cases, service orders, defects and email messages (ERMS). By default, the system uses the current date as the solution start date. You can create future-dated solutions by specifying a future start date.
Content Owner	Enter the content owner group that the solution belongs to. Only active content owners with same setID as the solutions are available for selection. When the status of an expired or superseded solution is changed to <i>Active</i> , the system checks if the associated content owner (if available) is active. If the content owner is inactive, an error message is displayed and the status of the solution cannot be updated; if it is active, the solution status can be updated.
End Date	Enter the end date on which the solution is no longer searchable for use by the PeopleSoft Search Framework. The Search Schedule Index process removes solutions with end dates that are equal to or earlier than the current system date from the search index

Description

Field or Control	Description
Summary	Enter a short description of the solution.
Keywords	Enter search keywords or a phrase for the solution.
Symptoms	Enter a description of the problem that the solution addresses.
Template	Select a template package to be used for this solution.

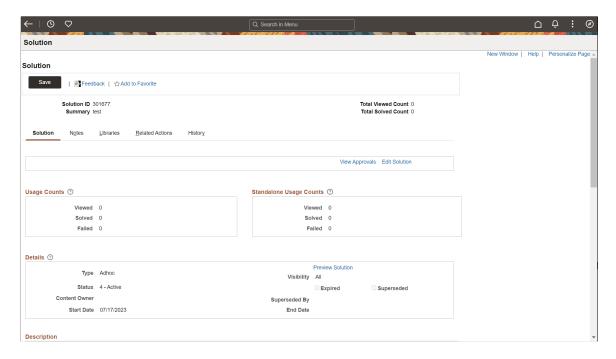
Field or Control	Description
Apply	Click this button to apply the template package specified in the Template field to the solution. More than one template package can be applied to a solution: each time a template package is selected and applied, it will appear at the top of the solution Details area.
Details	Enter the full explanation of how to solve the problem.
Requestor Comments	Enter the content author's comments. If no value is entered in this field, a warning message "Requestor comments are not entered. Do you want to continue?" is displayed

Viewing or Updating Approval Enabled Solution Requests

To view or update solution request, perform the following:

- 1. Access the Search Solutions page.
- 2. Search for the required solution by providing the required search criteria. This displays the Solution page listing solutions with different statuses.
- 3. Click the Solution ID to access the solution details as shown:

This example illustrates the Solution - Solution page for users with Content Owner - Requestor role.



4. Click the View Approvals link. This displays the Show Approval Status modal where you can view the approval status.

- 5. Click the Edit Solution link. This displays the Solution page in Edit mode.
- 6. Modify the required details and submit for approval.

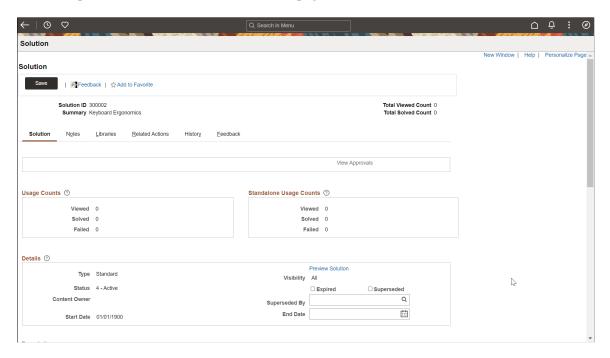
Note: The Edit Solution link is displayed only for users with Content Owner – Requestor role.

For details on rest of the tabs available in the Solution page, see <u>Creating Solutions</u>

Deactivating Solutions

Use the Solution - Solution page to deactivate solutions. Solutions can only be deactivated by users with the solution administrator role.

This example illustrates the Solution - Solution page for users with Solution Administrator role.



If the solution is no longer valid, select the Expired checkbox.

If another solution has replaced the existing solution, select the Superseded checkbox and provide the Superseded By solution ID.

Note: There is no approval process for expiring and superseding solutions.

Related Links

Understanding Solution Management Setup

Approving Solutions Using Fluid Approvals

This topic describes how to approve solutions using fluid approvals.

Page Used to Approve Solutions Using Fluid Approvals

Page Name	Definition Name	Usage
Approvals tile	EOAWMA_USER_FL	To access the Pending Approvals page.
Pending Approvals page	EOAWMA_MAIN_FL	To view different solutions submitted by content owners.

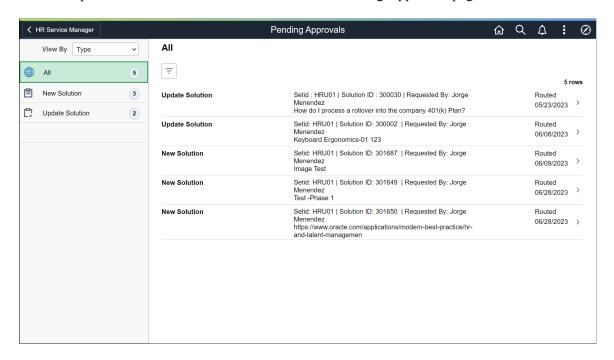
Pending Approvals Page

Use the Pending Approvals (EOAWMA_MAIN_FL) to view different solutions submitted by content owners. On the Pending Approvals page, you can view all pending approvals for new solutions as well as update solutions.

Navigation:

- On the HR Service Manager home page, click the **Approvals** tile to access the Pending Approvals page.
- Click the push notification (or the link from an email notification) of a solution, if notifications are enabled in the setup.

This example illustrates the fields and controls on the Pending Approvals page.



When you click New Solution or Update Solution in the left panel, the page will display pending approvals sorted by the date on which the approval request was received, with the oldest pending approval displaying first.

Field or Control	Description
View By	Select how you want the page to display approval requests. You can group pending approvals by these view options: • Type (default view when you access the Approvals tile) Groups approval requests by approval process. For example, you can display all solution types in one list, or Approval Process such as "New Solution" or "Update Solution". • Date Routed Provides a weekly grouping of pending approvals based on the date the approval was sent. Category tabs may include: • From Groups pending approvals by the last sender. The last sender could be either the requestor of the solution or the last approver in the approval chain. If the last approver step in the approval chain has multiple approvers, the name of the last person who approved the request is displayed. • Requestor Shows a list of requestors who request solution approval.
	2-12 11 2 1 1-15t 51 1-4 assessed solution approvai

Pending Approvals - New Solution/Update Solution

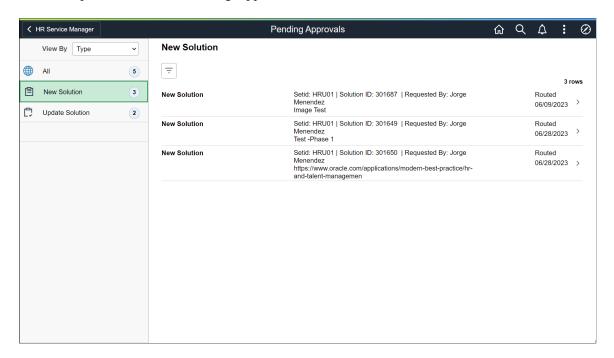
Use the Pending Approvals - New Solution to approve, deny or pushback the new solution.

The field and controls on the Pending Approvals - Update Solution is similar to Pending Approvals - New Solution.

Navigation:

Click the New Solution on Pending Approvals.

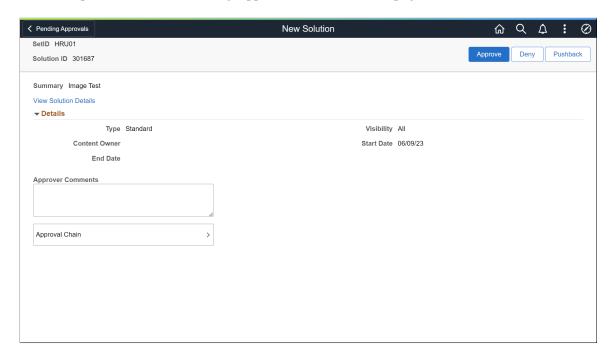
This example illustrates the Pending Approvals - New Solution.



To approve a new solution or update solution as a knowledge manager, perform the following:

- 1. Login as user with "Knowledge Manager-Approver" role.
- 2. Access the Pending Approvals page.
- 3. Select the New Solution or Update Solution.
- 4. Click the solution you want to approve.

This example illustrates the Pending Approvals - New Solution page.



5. To view the solution details, click the View Solution Details link. This opens the Solution Details in new tab.

6. Provide your comments in the Approver Comments field and click Submit. This displays the Approve modal window.

This example illustrates the Approve modal window.



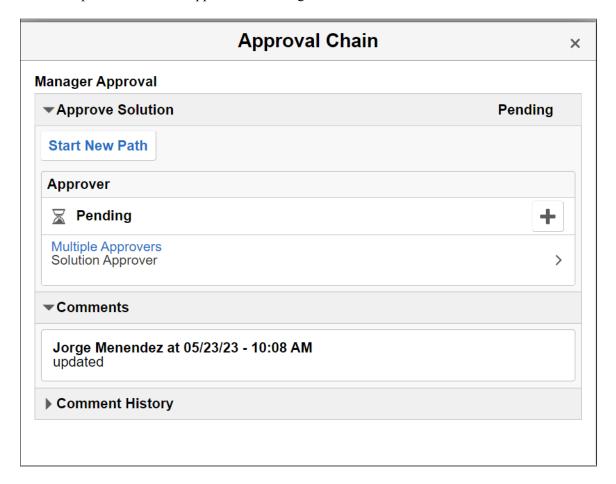
Note: Knowledge Managers can also deny or pushback the solution. If the solution is denied, further update is not possible. In case of Pushback, content owner can rework and submit the solution again.

7. Enter your comments and click Submit.

Approval Chain

Use the Approval Chain Details page (EOAWMA_APPC_SCF) to view the information about approvers associated with the request and approval status.

This example illustrates the Approval Chain Page.



Relating Solutions Automatically

This topic discusses how to create solution relationships automatically.

Page Used to Relate Solutions Automatically

Page Name	Definition Name	Navigation	Usage
Update Related Solutions	RC_REL_SOL_RUN	Solutions > Update Related Solutions > Update Related Solutions	Run the Related Solutions (RC_RELA_SOL) process, which loops through every solution in the system. For each iteration of the search, the system creates relationships of type <i>Similar</i> between the base solution and similar solutions.

Update Related Solutions Page

Use the Update Related Solutions page (RC_REL_SOL_RUN) to run the Related Solutions (RC_RELA_SOL) process, which loops through every solution in the system.

For each iteration of the search, the system creates relationships of type Similar between the base solution and similar solutions.

Navigation:

Solutions > Update Related Solutions > Update Related Solutions

This example illustrates the fields and controls on the Update Related Solutions page.



The RC_RELA_SOL application engine process runs PeopleSoft search against the summary of all solutions (specified by in the **Effective Dates** field) that are included in the process. For each matching solution that returns, this similar solution is linked to the base solution as related solution.

Adhoc solutions are excluded from this process.

Field or Control	Description
Score	Enter a score. When the system searches for similar solutions, solutions with a relevance score at or above the level that you specify here are considered a match.
Rows to return	Enter the maximum number of solutions returned by the search process, and therefore the maximum number of solutions that will be related to the base solution.
Effective Dates	Select <i>All</i> to include all solutions in the process. Select <i>From</i> and <i>Through Dates</i> to enter from and through dates to limit search results to solutions created during the specified date range.

See PeopleTools: Applications User's Guide and PeopleTools: Process Scheduler product documentation.

Updating Solution Usage Counts and Linkages

Update usage counts using the Update Solution Usage Counts process.

Page Used to Update Solution Usage Counts and Linkages

Page Name	Definition Name	Navigation	Usage
Update Solution Usage Counts	RC_SOLN_RUN_CNTL	Solutions > Update Solution Usage Counts > Update Solution Usage Counts	Run the RC_SOLN_USAG Application Engine process, which updates the solved count, usage count, and usage count by product for all solutions in the database.

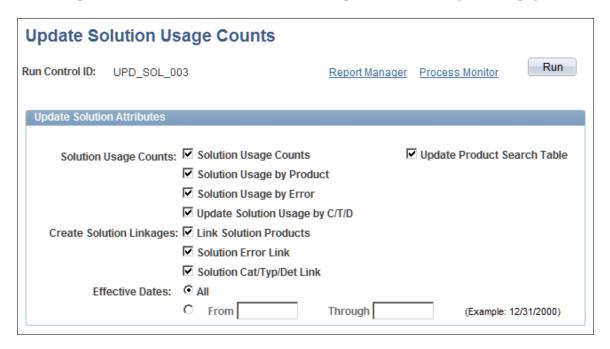
Update Solution Usage Counts Page

Use the Update Solution Usage Counts page (RC_SOLN_RUN_CNTL) to run the RC_SOLN_USAG Application Engine process, which updates the solved count, usage count, and usage count by product for all solutions in the database.

Navigation:

Solutions > Update Solution Usage Counts > Update Solution Usage Counts

This example illustrates the fields and controls on the Update Solution Usage Counts page.



Running this process updates the usage counts as well as solution linkages for the items that you select. It also updates the solution status to *Expired* for solutions that have had an expiration date in the past.

This process is available to users with the *Solution Manager* role.

Solution Usage Counts

Note: When you select to update linkages between solutions and their related products, list of errors, and category, type and detail in the Create Solution Linkages section, the process updates the corresponding usage counts as well. Therefore, it is not necessary to select, for example, the option to update solution usage by product here, if you select the option to update solution linkages by product in the Create Solution Linkages section.

Field or Control	Description
Solution Usage Counts	Select to update usage counts and the solved counts.
Solution Usage by Product	Select to update solution counts by product. The process does not affect existing product relationships where the link source is MAN.
Solution Usage by Error	Select to update solution counts by error message. The process does not affect existing error relationships where the link source is MAN.
Update Solution Usage by C/T/D (update solution usage count by category/type/detail)	Select to update solution counts by category, specialty type, and detail.

Create Solution Linkages

Note: Selecting any of the solution linkage options in this section automatically updates both the linkages and the usage counts of the selected related object.

Field or Control	Description
Link Solution Products	Select to update the related products list for all solutions. The system creates relationships between cases and the products in the cases that the solution solved. It also creates relationships between service orders and the products in the service orders that the solution solved.
Solution Error Link	Select to update the related errors list for all solutions. The system creates relationships between cases and the errors in the cases that the solution solved.

Field or Control	Description
Solution Cat/Typ/Det Link (solution category/type/detail link)	Select to update the related categories, types, and details lists for all solutions. The system creates relationships between cases and the category/type/details combination in the cases that the solution solved. Category/type/details counts are based on unique combinations of all three fields.

Effected Dates

These fields affect solution usage counts, not solution linkages.

Field or Control	Description
All	Select to count every use of the solution.
From and Through	Select to count solution usage during a particular date range. If you select this option, specify the date range.

See PeopleTools: Applications User's Guide and PeopleTools: Process Scheduler product documentation.

Merging Similar Solutions

This topic discusses how to:

- Search for similar solutions.
- Select solutions to merge.
- Perform the merge.
- Search for solutions.

Pages Used to Merge Similar Solutions

Page Name	Definition Name	Navigation	Usage
Merge Similar Solutions	RC_FIND_SIMLR_SOLN	Solutions > Merge Similar Solutions > Merge Similar Solutions	

Page Name	Definition Name	Navigation	Usage
Merge Similar Solutions - Search Results	RC_FIND_SSOLN_RSLT	Click the Search Similar Solutions button on the Merge Similar Solutions page.	Review search results and select solutions to merge.
Merge Similar Solutions - Select Primary Solution	RC_FND_SELECTMASTR	Click the Merge Solutions button on the Merge Similar Solutions - Search Results page.	Select a solution to use as the primary solution and complete the merge.
Keyword Solution Search	RB_SOLUTION_SEARCH	Solutions > Keyword Solution Search > Keyword Solution Search Click the Advanced Search link,, and then click the More Search Options link.	Search for solutions based on the content of an existing solution.

Merge Similar Solutions Page

Use the Merge Similar Solutions page (RC_FIND_SIMLR_SOLN) to search for solutions similar to a solution that you identify.

Navigation:

Solutions > Merge Similar Solutions > Merge Similar Solutions

This example illustrates the fields and controls on the Merge Similar Solutions page.



Field or Control	Description
SetID	Select the setID of the solutions to be merged.
Solution ID	Select the solution that you want to use to search for similar solutions.

Field or Control	Description
Include Solution Description	Select to search for similar solutions based on the description of the solution that you've identified. The system searches all the fields in the search index.
Include Symptoms	Select to search for similar solutions based on the symptoms that you entered in the Solution Summary page for the solution that you've identified. The system searches all the fields in the search index.
Search Similar Solutions	Click to initiate the search for similar solutions. Results appear on the Merge Similar Solutions - Search Results page.

Merge Similar Solutions - Search Results Page

Use the Merge Similar Solutions - Search Results page (RC_FIND_SSOLN_RSLT) to review search results and select solutions to merge.

Navigation:

Click the **Search Similar Solutions** button on the Merge Similar Solutions page.

This example illustrates the fields and controls on the Merge Similar Solutions - Search Results page.



Field or Control	Description
Select	Select to identify the solutions to merge. Use the Select All and Clear All links as data entry shortcuts.
Score	Displays the relevance score calculated by PeopleSoft Search, which indicates how closely the solution matches the solution that you started with.
Merge Solutions	After you've selected the solutions to be merged, click to continue the merging process. The selected solutions appear on the Merge Similar Solutions - Select Primary Solution page, where you can select one solution as the primary solution and complete the merge.
Return to Search	Click to return to the Merge Similar Solutions page.

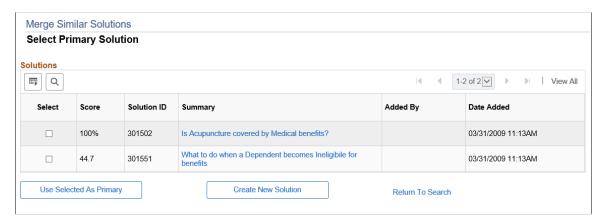
Merge Similar Solutions - Select Primary Solution Page

Use the Merge Similar Solutions - Select Primary Solution page (RC_FND_SELECTMASTR) to select a solution to use as the primary solution and complete the merge.

Navigation:

Click the **Merge Solutions** button on the Merge Similar Solutions - Search Results page.

This example illustrates the fields and controls on the Merge Similar Solutions - Select Primary Solution page.



The column headings on this page are identical to those on the Merge Similar Solutions - Search Results page.

Select one of the solutions listed before you click one of these page elements:

Field or Control	Description
Use Selected as Primary	Click to merge the solutions using the selected solution as the primary solution. Attachments and products associated with the expired solutions are added to the primary solution.
Create New Solution	Click to clone the selected solution and merge the solutions using the newly created solution as the primary solution. Attachments and products associated with the expired solutions are added to the new primary solution.
Return to Search	Click to return to the Merge Similar Solutions page without merging solutions.

When you merge solutions, all solutions other than the new primary solution (either the selected solution or its clone) expire as of the date that you perform the merge. Each expired solution identifies the new primary as the superseding solution, including the selected solution, if you cloned it to create the new primary.

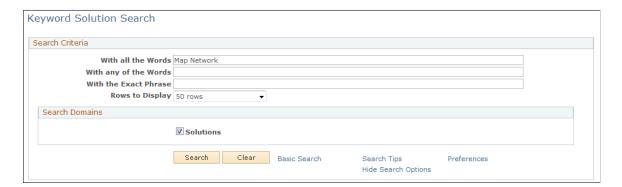
Keyword Solution Search Page

Use the Keyword Solution Search page (RB_SOLUTION_SEARCH) to search for solutions based on the content of an existing solution.

Navigation:

Solutions > Keyword Solution Search > Keyword Solutions Search Click the Advanced Search link, and then click the More Search Options link.

This example illustrates the fields and controls on the Keyword Solution Search page (1 of 2).



Search Criteria

Use the fields in this group box to enter information about the solution for which you are searching.

Note: For information on the way that the system uses the various fields in this section for solution searching, click the **Search Tips** link. To display the page to match your personal preference, click the **Preferences** link.

Field or Control	Description
Rows to Display	Select the number of rows that you want the system to display after you click Search .
More Search Options	Click this link to display a list of check boxes that you can select to search by date and time added, last maintained by, solution description, added by, setID, solution ID, last modified, solution status, and solution summary.

Search Domains

Select the fields that you want the system to use to search for solutions. Before you click **Search**, however, you must enter the criteria by which you want the system search for the solution in the **Search Criteria** section at the top of the page.

For example, if you know the ID of the solution for which you were searching, you could enter it in one of the fields in the **Search Criteria** section and then select the **Solution ID** check box and click **Search** to locate the solution.

Or, if you know the date that the solution was last modified, you could enter the date in one of the **Search Criteria** fields, select the **Last Modified** check box and then click **Search** to find the solution.

Search Results

Field or Control	Description
Description	Click the link under the summary field to view more details for the entry.

Chapter 4

Using Solutions

Understanding Case, Service Order, and Defect Resolution

PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, Service Center for Higher Education, Quality Management and Integrated FieldService applications enable you to track both the final solution (the one that resolved the caller's problem) and other solutions that were considered. By tracking all solution usage, you capture valuable information about the effectiveness of the solution set.

This topic discusses:

- Resolved cases, service orders, and defects.
- Allowing multiple resolutions to resolve a case, service order, or defect.
- Attempted solutions.

Note: PeopleSoft's email response management system (ERMS) and many of its self-service applications also use solutions.

Resolved Cases, Service Orders and Defects

Solutions describe the ways you might be able to resolve the caller's problem. A solution can succeed or fail. When a solution resolves a case, service order, or defect, it is considered a resolution. Resolutions exist in the context of a case, service order, defect, or email only.

A resolved case is a case that's associated with a successful solution. A resolved case is not necessarily a closed case; the case status is independent of the solution status. You can use the Case Defaults page to set up a default status for resolved cases. If a default status exists, the system changes the status when you resolve the case.

Note: If no default exists, an agent must update the status manually. You can, however, close a case without a successful solution. You can do this if you have a solvable action that is related on the case; so a successful resolution isn't the only way to close a case.

On a service order the field service technician can record repair actions they have attempted and identify the actions that were successful. The system feeds the successful actions data to the solution database, so that a technician's repair actions become available to other technicians. The result of these solutions when added to the solution database is that new, more efficient and effective solutions become available to the entire work force.

In PeopleSoft Quality Management, a technician can select a fix ID or search for and add a solution to indicate what they have done to resolve the customer's problem.

Using Solutions Chapter 4

Related Links

"Understanding Call Center Business Units" (PeopleSoft Call Center Applications)

Allowing Multiple Resolutions to Resolve a Case, Service Order, or Defect

You can use more than one solution to resolve a case, service order, or defect. If you use multiple solutions, more than one can have the solution status of successful.

To allow more than one successful resolution, you must configure it on the Business Unit setup pages for PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education. For PeopleSoft Integrated FieldService and Quality Management you do not need to configure the system to allow multiple resolutions.

Because you set up the system to close the case automatically when a solution is successful, PeopleSoft has made these modifications to this process:

• The automatic closing of the case on the solution status field is a save event.

This enables the user to change the status on more than one resolution before the case, service order, or defect is closed.

• The status field is editable even when the case is closed if the status is *In Consideration* or *Failed*, so the agent, technician, or manager can identify other solutions as successful.

The system makes any resolution with the status of *Successful* read only.

Note: This is only applicable when cases are configured to allow multiple resolutions; otherwise, the system makes all the statuses read only after the case is closed.

Attempted Solutions

This topic discusses:

- Attempted solution grids.
- Methods for finding solutions.
- Resolution statuses.
- Resolution process.
- Managing attempted solutions.

Attempted Solution Grids

The Case page includes two grids, the **Solutions** grid and the **Attempted Solutions** grid. The **Solutions** grid is used to search for solutions and the **Attempted Solutions** grid includes solutions considered for the case.

[&]quot;Understanding FieldService Business Units" (PeopleSoft Integrated FieldService)

This example illustrates the fields and controls on the Solutions Considered for this Case grid.



The Solutions page of the Quality Management component includes the Attempted Solutions grid that lists the solutions, solution IDs, date modified and status of all solutions that may resolve the defect or implement the enhancement.

Methods for Finding Solutions

There are four ways to find and attempt potential solutions in the **Solutions** grid on the Solutions page for cases.

For service orders there are three ways to find and attempt potential solutions using the **Solutions** grid on the Solutions page.

For quality management there are two ways to find and attempt potential solutions using the Attempted Solutions grid on the Solutions page.

Note: When searching for solutions, expired solutions do not show up in search result.

This table describes the methods that are used to find and attempt solutions:

Page	Tab	Description
Solution	Search Used for cases, service orders, and quality management.	Enter text to search for solutions that might relate to the case and then click the Search button. In the search results, click the Select check box for the solutions that are most likely to resolve the problem and then click the Attempt or Solve button. Alternatively, from the search results you can click the desired solution's Description link to open the Resolution Details page for that solution, and then click the Attempt or Solve toolbar button on that page. The system adds the selected solutions into the Attempted Solutions grid. You can choose to use the basic, advanced, or more search options modes when searching for solutions.

Page	Tab	Description
Solution	FAQ Used for cases only.	Select the library of frequently asked questions that are most likely to resolve the problem associated with the case. The system displays a list of active solutions with a start date equal to or earlier than the current date and an end date later than the current date. Select a solution and then click the Attempt or Solve button. The system adds the selected solutions to the Attempted Solutions grid.
Solution	Frequently Used Solution Used for cases only.	Select the type of solutions that are most likely to resolve the problem associated with the case. The system displays a list of active solutions with a start date equal to or earlier than the current date and an end date later than the current date. Select a solution and then click the Attempt or Solve button. The system adds the selected solutions to the Attempted Solutions grid.
Solution	Enter New Solution Used for both cases and service orders.	Enter text that describes the solution that you used to resolve the problem. Click the Attempt or Solve button. The system adds the selected solutions into the Attempted Solutions grid.

Resolution Statuses

Each solution attempt is associated with one of these statuses:

• In Consideration.

You have not suggested this solution. The solution is in the list and is available when you're ready to try it.

• Waiting on Customer.

You have suggested this solution, but you don't know whether the solution worked.

• Failed Resolution.

The caller or technician attempted the solution, but the solution did not solve the problem.

Successful Resolution.

The solution solved the problem.

Note: Successful statuses can be applied to multiple solutions based on the way the business unit is set up.

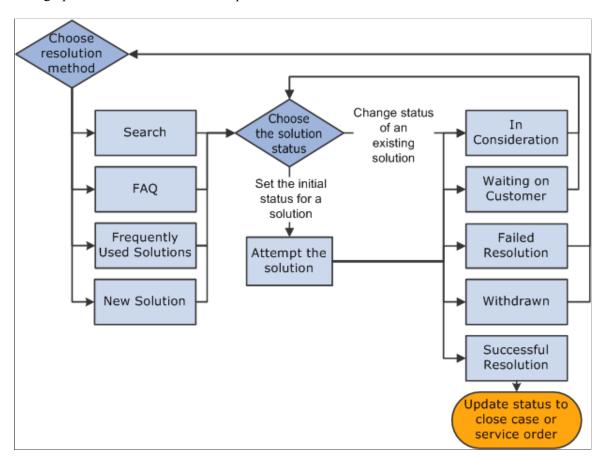
• Withdrawn.

The solution should not have been associated with the case, service order, or defect and is to be disregarded in all solution-related metrics. Selecting *Withdrawn* does not remove the solution entirely. It informs the system that it shouldn't have been there in the first place. *Withdrawn* solutions are ignored in solution usage statistics and are not visible through self-service.

Resolution Process

This graphic illustrates the resolution process for cases. For PeopleSoft Integrated FieldService and Quality Management successful resolutions do not change the status of the service order or the defect.

This graphic illustrates the resolution process for cases



There are other methods of attempting a solution from a page other than the Case or Service Order page. You can launch a troubleshooting guide (a type of script) directly from the solution search grid or the Related Actions page. Or, if the case is a child of another case, you can set up Active Analytics Framework (AAF) to cascade the successful resolution from the parent to the child. This is not applicable to service orders, however.

Note: You can use the Case Update Action in AAF to automatically resolve a case.

Managing Attempted Solutions

Once you've added solutions to the **Attempted Solutions** grid for the case, service order, or defect, you can initiate one or more of these actions:

- Update the solution status.
- View the solution details.

The **Solutions** grids show summary information about each solution. Click the summary text to display the Resolution Details page. On the Resolution Details page, you can see the full text of the solution, and you can add notes or attachments to the solution.

• Email the solution.

Often the most efficient way to communicate a solution to a caller, manager, or technician is to send an email with the solution text. If necessary, you can add attachments to the email. When sending an outbound notification for a solution, any attachments associated to the solution's notes will be made available to send as an attachment to the email,

• Solve the case by selecting one or more solutions; then click the **Solve** button. This changes the status to *Successful Resolution*. Or, you can change status on the attempted solution grid directly.

Note: Solve is not available for Service Orders and Quality Management.

- View the text of the solution by selecting one ore more solution and then click the **View** button.
- Click the **Add a New Note** button to the right of the solution description to add notes to the solution.

Note: PeopleSoft Quality users can view solution details only. They cannot update solution statuses. They also cannot add resolution notes or attachments from the Resolution Details page.

Related Links

"Managing Related Actions" (PeopleSoft Call Center Applications)

Understanding Solution Management Setup

Understanding Solutions

"Configuring Actions in Policies" (Automation and Configuration Tools)

Finding and Attempting Solutions

This topic provides an overview of solutions and discusses how to:

- Search for solutions.
- Use FAQs to search for solutions.
- Use frequently used solutions.
- Enter new solutions.
- Email solutions.

- Review details of attempted solutions.
- Add resolution notes and attachments.

Pages Used to Find and Attempt Solutions

Page Name	Definition Name	Navigation	Usage
Case - Solution	RC_CASE_SOLN	 Support > Add Case > Solution Support > Search Cases > Solution HelpDesk > Add Case > Solution HelpDesk > Search Cases > Solution 	Find and attempt solutions to resolve cases.
Service Order - Solutions	RF_SO_SOLN	 FieldService > Add Service Order > Solutions FieldService > Search Service Orders > Solutions 	Find and attempt solutions to resolve service orders.
Quality Management - Solutions	RQ_DEFECT_SOL_LNK2	 Quality Management > Add Defect > Solutions Quality Management > Search Defects > Solutions 	Link attempted solutions to defects.
Outbound Notification	RB_EM_OB_NOTIFY	Select a solution from the Attempted Solutions grid and then click the Email button.	Email solution information to customers or contacts.
Resolution Details	RC_CASE_SOL_SUM	Click a solution summary link on the Case - Solution page.	Review details of attempted solutions.
Resolution Details	RF_SO_SOL_SUM	Click a solution summary link on the Service Order - Solutions page.	Review details of attempted solutions.
Resolution Details	RQ_DFCT_SOL_SUM	Click a solution summary link on the Quality Management - Solutions page.	Review details of attempted solutions.

Page Name	Definition Name	Navigation	Usage
Case - Resolution Notes	RC_CASE_RSLN_NOTE	Click the Add Resolution Note button on the Resolution Details page of a case.	Add notes and attachments that are associated with a resolution.
Service Order - Resolution Notes	RF_SO_RSLN_NOTE	Click the Add Resolution Note button on the Resolution Details page of a service order.	Add notes and attachments that are associated with a resolution.

Understanding Solutions

This topic discusses:

- Solution library security.
- · Solution advisor searches.
- FAQs.
- Frequently used solutions.
- New solution creation.
- Adhoc solutions.
- Customer notification.
- How external content works.

Solution Library Security

When selecting solutions for a transaction, only solutions from authorized solution libraries (or solutions that are not associated with any library) will be available. Solution library security is defined on the Solution Library Security page.

The solution library security requirements vary by transaction, as shown in the following table.

Transaction	Solution Library Security Factors Considered
Support Case	User Role, Agent Location, and Customer Region
Self-Service Support Case	User Role and Customer Region.
HelpDesk and HR HelpDesk Case	User Role, Agent Location, and Employee Location
Self-Service HelpDesk and HR HelpDesk Case	User Role and Employee Location.

Transaction	Solution Library Security Factors Considered
Service Order	User Role and Customer Region
Inbound Email	User Role, Agent Location, and Customer Region
Defect	User Role
Service Center for Higher Education Case	User Role, Employee Location, Agent Location, and Customer Region
Self-Service Case for Service Center for Higher Education	User Role, Employee Location, and Customer Region

Solution Searches

The Solution page has three search modes: basic, advanced, and more search options:

Basic Search

This is a PeopleSoft search that looks at all objects in the search index. The system ranks the search results by percentage according to how close the match is. It contains these characteristics:

- Basic search is the default when the user selects the tab, unless the user has changed his preferences.
- The problem summary text is populated in the Search Text field by default and can be
 updated. Click the Search button to launch a search against all search domains selected for
 the corresponding search page definition. Domains can include solutions, cases, fixes, defects,
 troubleshooting guides, and web contents.

Note: Click the **Search** button to launch a search against all the domains that are defined in the user's preferences. There is additional logic that the system uses to display the search text on the Case page. The system first tries to pull information from the quick code, then from the previous search (the saved search), and then the problem summary.

- When the system performs a search, the text is stored as a keyword so that the next time the user opens the page, the previously used search text is automatically entered.
- The system displays a message listing common or stop words that were not included in the search (examples are *the*, *a*, *and*, *or* and so on) above the search results, if they were set as a configuration option at the component level during implementation.

Advanced Search

Includes a series of text boxes used to perform a natural language internet-type search as configured in the search page definition. Advance search gives you the ability to perform these types of searches:

• With all the Words: Works like a logical AND. All of the words must be in the text for which you are searching

• With any of the Words: Works like a logical OR. If any of the words in the search text appear, the system returns results.

- With the Exact Phrase: The exact phrase must appear in the text for which you are searching.
- **Restrict by Product:** Enables you to restrict solutions by product. Although **Restrict by Product** appears in the list of solution fields in the advanced search, it is different from the other fields in the list because a solution can be related to many products, and therefore product is not a single searchable field in the Solution table.
- Use Word Variations: Select one of the options to expand the search using different spellings of words or synonyms.
 - See "Configuring Options for Runtime Search Pages" (Automation and Configuration Tools).
- **Rows to Display:** Controls the number of rows in the search results grid.

FAQs

The **FAQ** tab displays a predefined list of solutions that the agent can choose from to resolve the case. If the **FAQ** check box is selected during implementation on the solution setup page, then the solution qualifies as an FAQ.

The **Library** field contains a list of libraries with associated solutions that have been identified as FAQ.

The results grid displays a list of the solutions that have been set up for the library selected. FAQs are sorted by the date and time that they were last modified on the solution so that the user sees the most up-to-date solutions first.

Note: FAQs can be searched from the Case component (agent-facing) as well as from the Customer or Employee Self-Service application (Customer Service Center, HR Service Center, Campus Service Center, and IT Service Center).

See Also

"Understanding PeopleSoft Search Framework Implementation for CRM" (Automation and Configuration Tools)

"Understanding PeopleSoft Search Framework Definitions for CRM" (Automation and Configuration Tools)

Frequently Used Solutions

The **Frequently Used Solution** tab lists frequently used solutions by type: either *All, Category/Type/Detail, Error*, or *Product*.

Solutions are sorted based on their solved counts. For example, the solution that solved the most cases for the product on the current case would be first, and so on. This tab must be turned on when you are configuring the system during implementation.

Prior to using Frequently Used Solutions, you must first run the Update Solution Usage Counts process (RC SOLN USAG) and then update the Solution search index by running the incremental index for

the CR_CO_SOLUTION search definition. The relationships between solutions and products are not included in the Solution search index until the index is updated or rebuilt.

The **Frequently Used Solution** tab lists the solved count for each solution. Note that if solution counts have been updated for multiple types (such as Category/Type/Detail and Product.), the solved count displayed on this tab when viewing **Type** = All will be a summation of the solved counts for each of the other individual types.

Note: This feature is only used in PeopleSoft call center applications (PeopleSoft HelpDesk, Support and HelpDesk for Human Resources, and verticals).

See Also

Understanding Solutions

New Solution Creation

If a user is unable to locate an existing solution, they can use the **New Solution** tab to enter a new solution (which will be created with a type of *Adhoc*). When the user enters a new solution and clicks the **Attempt** button, the system inserts the solution into the **Attempted Solutions** grid with the status of *In Consideration*. If they click the **Solve** button, the system inserts the solution in the grid with the status of *Successful*.

Note: The **Attempt** and **Solve** button are visible and applicable on all sections and tabs on the Solutions page, not just new solutions. This feature is not used in PeopleSoft Quality Management.

Adhoc Solutions

When a new *Adhoc* solution is first created, the solution status is set to *Draft* on the Solutions Details page.

Changing the solution status from *Draft* to *Submitted for Review* indicates that the Solution is ready for manager review. PeopleSoft, however, does not deliver an AAF policy to take action or send notification when the solution status changes. You must configure an AAF policy to send a notification or create a business project to start the solution approval process if this type of notification is desired.

See "Understanding the Use of Active Analytics Framework in CRM" (Automation and Configuration Tools).

Customer Notification

When a solution is in the status of *Waiting on Customer* you may want to send a notification to the customer. For example, an agent suggests two solutions on a an open case. One solution has the status of *In Consideration* and the other solution has the status of *Waiting on Customer*. When the agent saves the case, you could set up an AAF policy that sends a notification to the case contact with the solution details for the solution that is in the *Waiting on Customer* status.

To set up such a policy, use these parameters:

Parameter	Value
Term Name	Case Resolution Status
Trigger Point	After a Support Case is Saved
Condition	Case Solution Status is equal to Waiting on Customer
Actions	Notify case contact via email

Note: You can use AAF policies to send multiple notifications to the case contact when the case has more than one solution with the status of *Waiting on Customer*.

External Content Searching

PeopleSoft Search supports external content searching. You can build search definitions with the *Web* or *File* source type, and indicate the locations of the internet, intranet, or file system that you want to expose to the Search Framework crawling process to build the search index. At runtime, matching external links are displayed in the search results.

When external content solutions appear in the search results grid, the description includes a link that opens the external content in a new window. If the external content is a file, it opens in the appropriate application. The user can turn external search on or off by selecting or clearing the external content domain on the Advanced Search - More Search Options page.

When a user selects multiple items from the search grid, it transfers the user to the Solution Detail page. If external content is selected, it displays as a link with a description. Users can navigate into the solution to see the details or click **Attempt** or **Solve** to solve the case, service order, or defect.

Common Elements Used in Finding and Attempting Solutions

Field or Control	Description
Select	Select the check box next to the solution that you want to either attempt, use as a solution, or view and then click the appropriate button that corresponds to the action that you want to take.
Attempt	Click this button to attempt the solution that you selected. The system adds the solution to the Attempted Solutions grid for the service order, case, or defect with the status of <i>In Consideration</i> .
Solve	Click this button to use the solution that you selected to resolve the issue. The system adds the solution to the Attempted Solutions grid for the service order, case or defect with the status of <i>Successful Resolution</i> .

Field or Control	Description
View	Click this button to view the solution that you selected. The system displays the Resolution Details page.
Search	Click to search for solutions that match the search criteria or text that you entered.

Case - Solution Page, Service Order - Solution Page or Quality Management - Solutions Page

Use the Case - Solution page (RC_CASE_SOLN), Service Order - Solutions page (RF_SO_SOLN), or Quality Management - Solutions page (RQ_DEFECT_SOL_LNK2) to find and attempt solutions to resolve cases and service orders, or link attempted solutions to defects.

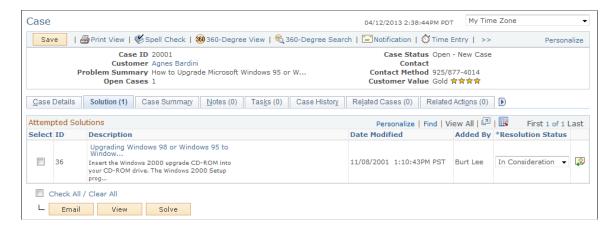
Navigation:

- Support > Add Case > Solution
- Support > Search Cases > Solution
- HelpDesk > Add Case > Solution
- HelpDesk > Search Cases > Solution
- FieldService > Add Service Order > Solutions
- FieldService > Search Service Orders > Solutions
- Quality Management > Add Defect > Solutions
- Quality Management > Search Defects > Solutions

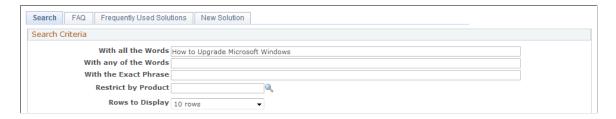
The example in this topic shows the Case - Solution page in Advanced Search mode with More Search Options enabled. Click the Advanced Search link on the Search tab, and then click the More Search Options link.

Note: The Service Order - Solutions page (RF_SO_SOLN) and Quality Management - Solutions page (RQ_DEFECT_SOL_LNK2) look and functional the same as the page described in this topic.

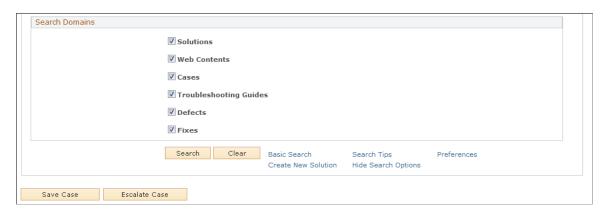
This example illustrates the fields and controls on the Case - Solution page (1 of 3).



This example illustrates the fields and controls on the Case - Solution page (2 of 3).



This example illustrates the fields and controls on the Case - Solution page (3 of 3).



Attempted Solutions

This section displays the number of solutions that have been attempted.

Select the solution that you want to either attempt or that you have used to resolve the problem. To move the solution to the **Attempted Solutions** grid, either click the **Attempt** or **Solve** button. The system assigns it an appropriate status.

To email the solution to a customer, employee or agent, select the solution in the **Attempted Solutions** grid and click the **Email** button. The system displays the Outbound Notification page and the selected solution is prepopulated in the message area. Any attachments belonging to the solution's notes will be made available on the Outbound Notification page, where you may choose to add the attachment to the email by selecting the associated **Include** check box.

To view a solution, select it and then click the **View** button. The system displays the Resolution Details page. You can also click the solution description link to open the solution detail. From there you can attempt, solve, and add notes to the solution.

Click the Add a New Note button to access the Resolution Notes page. The button changes slightly based on whether note exists for the resolution or not. If there are no notes attached to the resolution, the system displays the Add a New Note button. If there are already attached to the resolution, the system displays the View Note button. The Add a New Note button only shows up in the Attempted Solutions grid, not in the search results grid.

Search Criteria

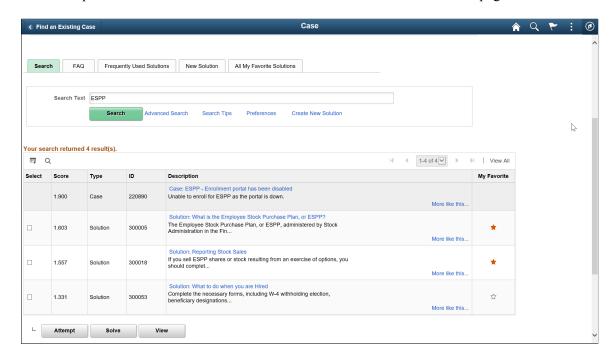
The **Search Criteria** section is shown in the advanced search mode with the **More Search Options** link selected. In addition to the Advanced Search mode, you can access the Basic Search by clicking the **Basic Search** link. Information on using these search options is detailed in the **Understanding Solutions** topic.

To narrow a search and improve performance, you can choose which of the available solution libraries to include in the search. Select the corresponding check box for each desired library to include it in the search. Conversely, deselect a library check box to exclude that library from the search. You can click the **Preferences** link to define and store which of your available libraries should be selected by default each time a case is opened.

Solution: Search Tab

Use the Search tab on the Solution page to search for different solutions and you can mark it as your personal favorite.

This example illustrates the fields and controls on the Case - Solution: Search page.

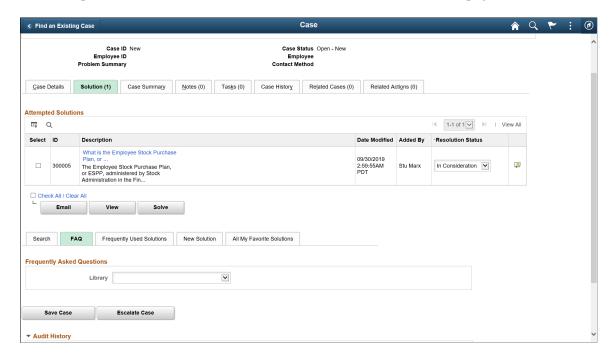


Click the My Favorite toggle button to mark the solution as favorite. You can view these favorite solutions in the Solutions: All My Favorite Solutions page.

Solution: FAQ Tab

Use the FAQs tab on the Solution page to view questions that are frequently asked about the issue.

This example illustrates the fields and controls on the Case - Solution: FAQ page.

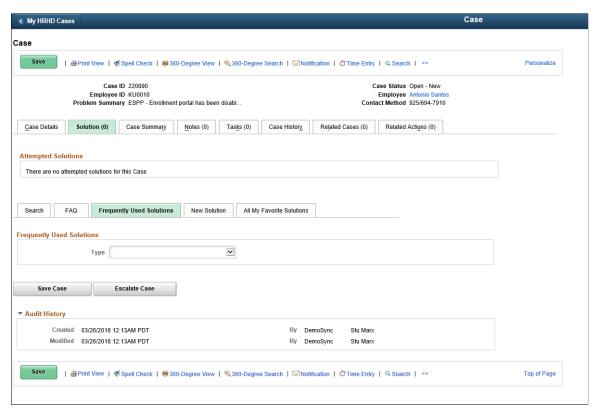


Field or Control	Description
Library	Select the library that you want to use to search for solutions. Once you find a solution, select it and use the Attempt , Solve , or View buttons to indicate the action that you want to take. To open the Resolution Details page, click the Summary link

Solution: Frequently Used Solutions Tab

Use the Frequently Used Solutions tab on the Solutions page to see solutions that have frequently resolved the issue.

This example illustrates the fields and controls on the Case - Solution: Frequently Used Solutions page.

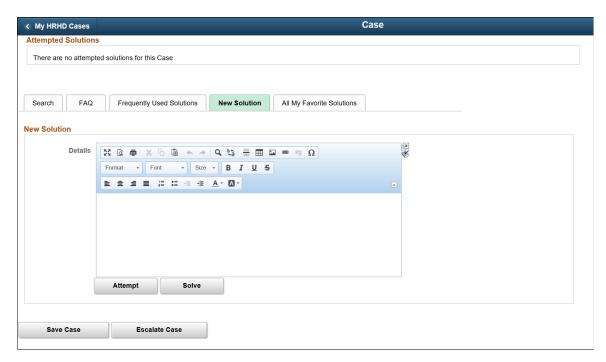


Field or Control	Description
Туре	Select the type of solution that you want the system to use for the search. Once you find a solution, select it and then click the Attempt , Solve , or View button to indicate the action that you want to take. To open the Resolution Details page, click the Summary link.

Solution: New Solution Tab

Use the New Solution tab on the Solution page to add a solution for the issue.

This example illustrates the fields and controls on the Case - Solutions: New Solution page.



Note: Users can only search on active solutions. Solutions that are categorized as either canned or adhoc do not appear in searches on the Frequently Used Solutions page for both agents and self-service users.

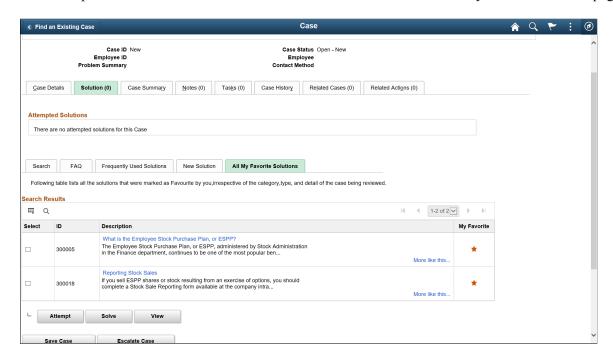
Enter text describing the solution that you are either attempting or have used to resolve the problem. Click either the **Attempt** or the **Solve** button to send the solution to the **Attempted Solutions** grid, where it is assigned a status of either *In Consideration* or *Successful Resolution*.

Solution: All My Favorite Solutions Tab

Use the All My Favorite Solutions tab to view and manage all favorite solutions of agents, irrespective of a case relevance. You can attempt or solve these solutions to the case.

Note: This tab is displayed only when the 'Favorite Solution for Agents' checkbox is selected in the Call Center Definition page. For details, see "Defining Call Center Business Units" (PeopleSoft Call Center Applications)

This example illustrates the fields and controls on the Case - Solutions: All My Favorite Solution page.



All solutions marked as favorite by agents or employees are displayed under the Search Results block.

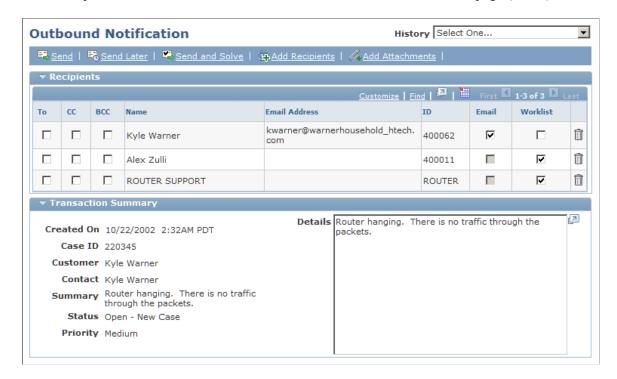
Outbound Notification Page

Use the Outbound Notification page (RB_EM_OB_NOTIFY) to email solution information to customers or contacts.

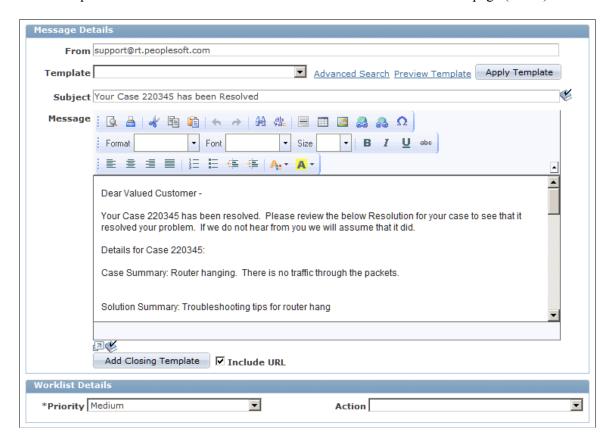
Navigation:

Select a solution from the **Attempted Solutions** grid of the Solution page, and then click the **Email** button.

This example illustrates the fields and controls on the Outbound Notification page (1 of 2).



This example illustrates the fields and controls on the Outbound Notification page (2 of 2).



Any attachments from the solution's notes will be automatically added to the **Solution Attachments** grid on the Outbound Notification page. Select the **Include** check box for any such attachments that you want to be sent with the email.

See "Sending Manual Notifications From CRM Transactions" (Automation and Configuration Tools).

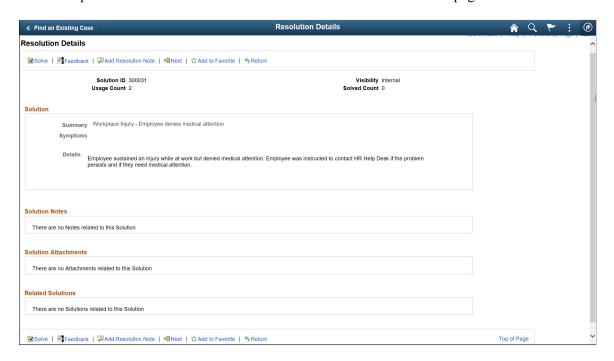
Resolution Details Page

Use the Resolution Details page (RC CASE SOL SUM) to review details of attempted solutions.

Navigation:

Click a solution summary link on the Case - Solution page, Service Order - Solutions page, or Quality Management - Solutions page.

This example illustrates the fields and controls on the Resolutions Details page.



Use the Resolutions Details page to view the details of a solution, add solution notes and attachments, add resolution notes, and submit adhoc solutions for management approval.

Toolbar Area

Field or Control	Description
Attempt and Solve buttons	If the solution has not been attempted, an Attempt button and a Solve button (Solve for Case only) appear. Choose the desired action to attempt or solve the transaction using this solution. (Once the solution has been attempted or solved, these buttons no longer appear.)
Feedback	Used to enter feedback while viewing a solution.

Field or Control	Description		
Add Resolution Note	Click to add a resolution note that is specific to this solution attempt.		
Add to Favorite/Remove from favorite	Click the star icon to mark/unmark a solution as your personal favorite.		
Solve button	If the solution is an <i>Adhoc</i> solution in <i>Draft</i> status, the Submit button appears. Once the <i>Adhoc</i> solution has been submitted, this button no longer displays on the toolbar.		
Usage Count	Indicates the number of times the solution was used to help resolve cases.		
Solved Count	Indicates the number of times the solution was used to successfully solve cases.		

Solution

Field or Control	Description		
Summary	The Solution summary is a link to the full solution definition.		
Symptoms	Displays the symptoms as listed on the solution definition.		
Details	Displays the details as listed on the solution definition.		

Solution Notes

To add a new solution note, click the **Summary** link in the Solution region of the page. The Solution page opens in a new window. Click the **Notes** tab to add a note to the solution.

Solution Attachments

To add a new solution note, click the **Summary**link in the Solution region of the page. The Solution page opens in a new window. Click the **Notes** tab to add a note to the solution. Click the **Add Note** button. When you are finished adding your note, click the **Add an Attachment** link at the bottom of the **Add a Note** section.

Related Solutions

To add a new related solution, click the **Summary** link in the Solution region of the page. The Solution page opens in a new window. Click the **Related Actions** tab. Then click the **Relate an Existing Solution** button to relate a similar solution.

Note: You cannot relate an existing solution to an independent text or adhoc solution.

Resolution Notes

This group box appears with data only if the solution is associated with resolution notes.

Field or Control	Description
Summary	Click the note's summary link to display note details on the Resolution Notes page.

To add a new resolution note, click the **Add Resolution Note** button in the toolbar. The system displays the Resolution Notes page.

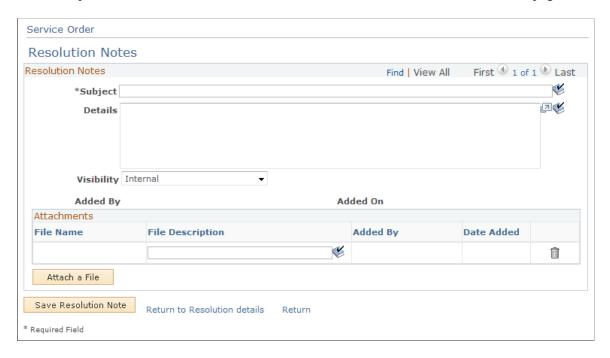
Case - Resolution Notes Page

Use the Case - Resolution Notes page (RC_CASE_RSLN_NOTE) or Service Order - Resolution Notes page (RF_SO_RSLN_NOTE) to add notes and attachments that are associated with a resolution.

Navigation:

Click the Add Resolution Note button on the Solutions Detail page (in attempted solutions mode).

This example illustrates the fields and controls on the Service Order - Resolution Notes page.



Resolution notes created on this page are intermingled with notes on the Notes pages in PeopleSoft Integrated FieldService, PeopleSoft Support, PeopleSoft HelpDesk, and PeopleSoft HelpDesk for Human Resources.

PeopleSoft CRM provides a similar interface for working with notes and attachments across all the components that use this functionality. You can access resolution notes from the **Attempted Solutions** grid and the Notes page.

Related Links

"Understanding Notes and Attachments" (Application Fundamentals)

Chapter 5

Setting Up an Integration to the Transaction Billing Processor

Understanding PeopleSoft CRM Integration with the Transaction Billing Processor

This topic discusses:

- Billing and contracts functionality.
- Agreements and entitlements.
- PeopleSoft CRM transactions.
- Cost category definitions.
- Pricing and invoicing.
- Reason codes.
- Tax calculations.
- Workforce synchronization.
- Item definition price types.
- Service order reports.
- Accounting rules.
- Financial profiles of customers.
- Delivered enterprise integration points (EIPs).
- Fields populated in the Transaction Billing Processor.
- Contracts interface tables.
- Transactional billing plans.

See Also

PeopleSoft FSCM: Contracts, "Setting Up the PeopleSoft Transaction Billing Processor"

Billing and Contracts Functionality

PeopleSoft Integrated FieldService, PeopleSoft Order Capture, and PeopleSoft CRM call center applications can integrate with the Transaction Billing Processor or any third-party billing applications to:

- Send agreement, service order, and case fees to the Transaction Billing Processor.
- Send order capture service and product agreement information to the Transaction Billing Processor.
- Generate invoices for services, cases and agreement fees.
- Manage and book revenue to the appropriate general ledger accounts for recurring and one-time purchases of services and products.

Users can take advantage of the feature-rich billing functionality that is available through PeopleSoft Contracts, such as revenue recognition, billing cycle, and schedule details.

This PeopleSoft application also provides the ability to apply the appropriate surcharges and taxation to billable amounts and process the information using user-defined invoice formats.

Note: PeopleSoft CRM FieldService and Call Center do not calculate surcharges and taxes. These transactions are computed in the Transaction Billing Processor.

See Also

PeopleSoft FSCM: Billing, "Structuring Bills"

Agreements and Entitlements

Agreement information resides in PeopleSoft CRM. The system sends it to the Transaction Billing Processor for integration with PeopleSoft Billing and General Ledger. If you integrate PeopleSoft CRM with the Transaction Billing Processor, PeopleSoft CRM sends all agreement-based and on-demand transactions through to the Transaction Billing Processor.

PeopleSoft CRM sends transactions to the Transaction Billing Processor when a user changes the status to *Active*. The timing for billing is decided by PeopleSoft Contracts and Billing based on the options set on the Recurring Bill Schedule page.

In preparation for the integration to the Transaction Billing Processor, PeopleSoft CRM includes statuses and start and end dates on the agreement lines. To control the states that an agreement can move through during the agreement life cycle, PeopleSoft includes change control logic on the agreement status. PeopleSoft CRM uses the same status values that are used in the Transaction Billing Processor. The *Pending Activation* and *Action Required* statuses are, however, unique to PeopleSoft CRM.

Note: The integration to the Transaction Billing Processor only works with PeopleSoft CRM release 8.9 and above and PeopleSoft Financials and Supply Chain Management release 8.81 and above.

Agreement Statuses

Here are the PeopleSoft Integrated FieldService and PeopleSoft Support agreement statuses:

Term	Definition
Pending	Use this status when you create an agreement but you have not completed entering information into the agreement. This status enables you to save an agreement without initiating validation checking.
Pending Activation	An agreement is in the <i>Pending Activation</i> status when its data entry is complete and manager approval is obtained. Changing the status to the <i>Pending Activation</i> status triggers the message that is sent to the Transaction Billing Processor. From this status, the system attempts to create a contract. If no errors occur, the contract is created in the <i>Active</i> status.
	The agreement remains in <i>Pending Activation</i> status until the associated contract's billing and revenue plans are set to <i>Ready</i> status.
	When the contract line is ready for billing and revenue, the Transaction Billing Processor sends a message to PeopleSoft CRM and the system moves the agreement from <i>Pending Activation</i> to <i>Active</i> status automatically so that PeopleSoft CRM can send transactions to the Transaction Billing Processor for processing. When the Contract and the Contract line is created, it is automatically created with a Billing and Revenue plan status of <i>Ready</i> and hence the message is sent to CRM without any user intervention.

Term	Definition		
Action Required	An agreement is in a status of <i>Action Required</i> when a failure occurs on the contract activation in the Transaction Billing Processor. If the error occurs in the Transaction Billing Processor, it sends an error message to PeopleSoft CRM indicating that the agreement will remain in a status of <i>Action Required</i> . It remains in this status until the status changes to <i>Pending Activation</i> after you add the correct information to the agreement.		
	If the billing or revenue plan could not be set to <i>Ready</i> status, the Transaction Billing Processor sends an error message to PeopleSoft CRM indicating what information is missing or incorrect so that the appropriate areas can be corrected and another attempt can be made to put the billing plan or revenue plan in <i>Ready</i> status. In this case the system create a new contract.		
	Once the billing and revenue plan are in <i>Ready</i> status, then the system sets the agreement and contract automatically to <i>Active</i> status.		
	If any information on the agreement was missing or incorrect, or if a server was down at the time of transmission, the agreement remains in <i>Action Required</i> status.		
Active	If no errors exist for the agreement in the <i>Pending Activation</i> status, then the agreement is set to <i>Active</i> status. This occurs automatically after a contract is created and set to the <i>Active</i> status and a billing and revenue plan are created in the <i>Ready</i> status. The contract can now accept transactions from the agreement in PeopleSoft CRM.		

Term	Definition	
Closed	A contract can be set to the <i>Closed</i> status when the agreement and agreement lines associated with the contract are in <i>Closed</i> status and all transactions associated with the agreement have been sent to billing and revenue.	
	When the Bill Plan or Revenue Plan is attempted to be completed or canceled, the system checks that the agreement and agreement lines associated with the contract are closed and that no service orders or cases are pending. If agreement lines are not closed or pending service orders and cases exist, the system displays an error message.	
	Note: You cannot initiate the closure of a contract from the CRM side.	
	The agreement becomes read-only when the status is set to <i>Closed</i> for the agreement.	
	Note: A contract can no longer accept transactions from PeopleSoft CRM once it has been closed. The <i>Pending Activation</i> and <i>Action Required</i> statuses are available only when you select Contracts Integration on the Installation page for PeopleSoft Integrated FieldService.	

Related Links

"Understanding Agreements and Warranties" (Application Fundamentals)

PeopleSoft CRM Transactions

These are all the transactions PeopleSoft CRM sends to the Transaction Billing Processor:

- Agreement Fee (including renewal and uplift/discount).
- On Demand (including case fee, uplift/discount, service order fee, and service order fee uplift discount).
- Agreement Based (including case fee, uplift/discount, service order fee, and service order uplift/discount).
- Service Order (including labor fee, labor fee uplift/discount, material fee, material fee uplift/discount, expenses, expenses uplift/discount).

Note: The transactions with uplifts and discounts are sent to the customer on the same invoice as the fee. They appear as separate bill lines; therefore, they are considered separate transactions.

Cost Category Definitions

To retrieve the correct rate for a worker's time, you must define cost category types using the Cost Category Definition page within the Service Level component. Cost category types are set based on the service level, which defines the service provider's hours of operation.

The Service level setup page is used to configure a customer's hours of operation. For example, a service provider might define their hours of operation to be:

· Straight hours.

Monday through Friday 8:00 a.m. to 5 p.m.

Overtime hours.

Monday through Thursday 5:00 p.m. to 8:00 a.m.

Weekends.

Friday 5:00 p.m. to Monday 8:00 a.m.

Once you tie cost categories to the days and hours of operation, then the system can apply the correct rate to the provider group or provider group member. The Cost Category Definition page enables you to define the cost category for the service level hours of operation defined on the service level page. You can override begin and end times, select different cost categories, and enter multiple values for a given day.

In addition, you must define cost categories for workers to account for the cost of labor time to your company. You set up these cost categories using the Provider Group and Provider Group Member definition pages in the Workforce component.

When technicians enter their hours in the time log based on that day and time, the system retrieves the correct rate from the member cost categories.

Related Links

"Defining Service Levels" (Application Fundamentals)

"Establishing Cost Categories for Workers" (Application Fundamentals)

Pricing and Invoicing

To price cases for a call center agent's time or to implement pricing based on a flat fee per case, which is based on the price defined on the agreement, PeopleSoft CRM uses pricing logic that automatically calculates the number of hours upon saving a case.

You can also price and invoice prepaid services by time or the number of service orders or cases initiated through PeopleSoft Integrated FieldService and Support.

Additionally, the PeopleSoft system has incorporated pricing features within the Service Order component to enable pricing for the billable elements of a service (material, time, and expense fees) and to synchronize the service price of the materials from PeopleSoft Supply Chain Management (PeopleSoft SCM) with the information that resides on the service order.

You can also apply a service fee to cases and services orders.

The system retrieves the correct price from the Item Definition page in PeopleSoft CRM when the technician records material used at the customer site on the service order. The sum of the material used is calculated and summed up with the total cost of labor, expense charges, and service fees.

The system displays the material price, labor, expense, service charges, and total values separately. However, when sending information to PeopleSoft Contracts for billing, the system sends the individual transaction values so that they can be displayed separately on the invoice.

The service manager or contracts administrator can increase or decrease the sum of labor, material, and expense charges and recalculate fees to generate new service order totals. Surcharges and taxation are not, however, included in this total. These fees are calculated by billing and included on the invoice to the customer. You don't, however, need an agreement to bill a flat fee for a case.

The integration begins with the Transaction Billing Processor when a user sets the status to *Pending Activation* for an agreement or service. The system creates a corresponding contract and contract line in PeopleSoft Contracts through the Transaction Billing Processor. Transactions such as service orders, service agreements, and case details are sent from PeopleSoft CRM to the Transaction Billing Processor and stored in the Contracts Interface tables. The Transaction Billing Processor uses PeopleSoft Contracts rate-based functionality and bills charges on an as-incurred basis. The transaction information is then forwarded to PeopleSoft Billing as bill lines for invoice generation. The Transaction Billing Processor manages the appropriate timing of sending these transactions to PeopleSoft Billing.

Related Links

"Establishing Pricing Records" (Application Fundamentals)

"Managing Service Orders" (PeopleSoft Integrated FieldService)

Reason Codes

PeopleSoft CRM uses reason codes on the Agreement and Billing pages for service orders and cases to provide an informational reason as to why an adjustment was made to the fees.

The prompt values for the Reason field are from the Reason Code table (RB_REASON_CD). To facilitate the integration with the Transaction Billing Processor, the PeopleSoft application uses reason codes to further describe billing adjustments. When you set up reason codes, you also need to specify the correct reason type to make the reasons available within the transactions.

For service order billing, you can specify reason codes for adjustments of service fees, material, time, expenses, and additional adjustments for the total cost of the service order. For agreement billing, you can specify reason codes for adjustments of service fees, product fees, service and product fees, and additional adjustments to the agreement fee total. For cases, you can specify reason codes for case fees and time-based fees.

All reason code types enable the end user to choose predefined reason codes from the Reason Code table (PS_RB_REASON_CD). If the reason codes in the database are not adequate for the user to make a billing adjustment, end users can click the **Other** link and enter their own reason in the **Detail** field.

Related Links

"Setting Up Reason Codes" (PeopleSoft Call Center Applications)

Tax Calculations

For PeopleSoft CRM transactions that require value-added tax (VAT), the system sends the ship from location along with the address associated with the customer or the location where the product was shipped to the Transaction Billing Processor.

If VAT is set up for the services or products, the system determines whether VAT is required and performs the tax calculations to include on the invoice.

The system applies taxes during billing invoice finalization for VAT) and sales and use taxes (SUT). Rarely are both applied at the same time; however, the PeopleSoft application provides the flexibility to handle both taxes for those countries where both taxes apply.

Note: PeopleSoft Order Capture uses third-party tax calculation routines for Sales and Use tax as well as VAT tax calculations and does not use Simple Tax. Also, any taxes calculated by PeopleSoft Order Capture are recalculated in PeopleSoft Billing.

See "Defining Tax Installation Options" (PeopleSoft Order Capture Applications).

A service provider can use two methods of determining sales and use taxes that can be applied to a case, service order, and agreement fee transactions:

• Simple Tax (PeopleSoft tax)

If the customer is tax exempt, users can link to the Tax Parameters page from the Billing page on the service order, case, or agreement and then select the **Tax Exempt** check box. Customers should inform the service provider if they are exempt from taxes and provide their tax certificate number. If a user selects the **Tax Exempt** check box, they must also enter the tax certificate number.

Since the exemption certificates are synced, the exemption certificate is prompted from the customer exemption table. However, it does not have to exist in the customer exemption table. PeopleSoft CRM does not perform a validation. If a user creates new addresses for a company, consumer, or site, the user can select a tax code from the prompt. When the company, consumer, or site is selected for an agreement fee, service order fee, or case fee transaction, the newly created address and tax code are be sent to the Transaction Billing Processor with the transaction.

• Third-Party Tax (Vertex or Taxware).

See Setting Up Sales and Use Tax for Third-Party Tax Vendors.

When the Transaction Billing Processor sends the transaction to PeopleSoft Billing for invoicing, final taxes are calculated at the time of invoice finalization using either of these methods. For PeopleSoft Billing to calculate the taxes for service order transaction (including service fees, labor, materials, and expenses) or case transactions (case fee or labor fee), specific tax fields must be populated and sent along with the transaction.

The fields that need to be populated are dependent on the tax methodology used, either PeopleSoft Tax or Third-Party Tax. PeopleSoft Billing handles the information for PeopleSoft CRM services.

For transactions that are sent from PeopleSoft Integrated FieldService or PeopleSoft Support, most of the values are provided by default from within PeopleSoft CRM transactions and passed on to the Transaction Billing Processor.

Note: PeopleSoft Billing derives some tax calculation information from the contract line in PeopleSoft Contracts Also, you can override most fields on the billing plan. PeopleSoft CRM also uses order acceptance location, order origin location, and storage location for third-party tax calculations.

If billable transactions for PeopleSoft Integrated FieldService and PeopleSoft Support require VAT, use the links on these PeopleSoft CRM setup pages to access the VAT Treatment page in PeopleSoft SCM:

- Service Types
- Cost Category
- Case Type
- Item
- Item Group

To add SUT information, access the Tax Parameters page in PeopleSoft CRM from the billing pages within the agreement, service order, or case. You can also access the Tax Parameters Definitions page in PeopleSoft CRM by selecting **Set Up CRM** > **Common Definitions** > **Tax Parameter Definitions**.

See Also

PeopleSoft FSCM: Order to Cash Common Information, "Maintaining General Customer Information," Setting Up Tax-Exempt Certificate Information

PeopleSoft FSCM: Order to Cash Common Information, "Maintaining General Customer Information," Adding General Customer Information, Entering Customer VAT Information

PeopleSoft FSCM: Application Fundamentals, "Defining Financials and Supply Chain Management Common Definitions," Defining Sales and Use Tax Authorities and Codes

PeopleSoft FSCM: Global Options and Reports, "Working with VAT"

Workforce Synchronization

To apply revenue to the correct general ledger accounts for the time an agent or field service technician spends on a case or service order, the Workforce EIP (WORKFORCE_SYNC) and the Business Unit HR Sync EIP (BUS_UNIT_HR_SYNC) from PeopleSoft Human Capital Management retrieves the human resources (HR) business unit and the general ledger business unit for every worker.

The system stores the general ledger business unit information within the person data structure. The Business Unit HR Sync EIP (BUS_UNIT_HR_SYNC) from PeopleSoft HCM maps the HR business unit information to the general ledger business unit.

This links the general ledger business unit to the call center agent or field service technician. To accomplish this, PeopleSoft created two fields in the Worker component for the general ledger business unit.

Related Links

"Understanding Provider Groups and Group Members" (Application Fundamentals)

Item Definition Price Types

The Item Definition page contains two pricing fields: Service Price and Service Exchange Amount. The service price is what the field technician charges the customer for using an item, regardless of whether it is an install or repair. The service exchange amount is what the customer is credited when a part is removed. This charge is deducted from the service price.

For example, a company has a service price of 10.00 USD for a new PC chip. The service exchange amount is set to 4.00 USD. When the field technician removes the part (item) from the installed product and replaces it with a new item, then the new chip costs 6.00 USD. In this case, the service exchange amount (4.00 USD) is subtracted from the service price (10.00 USD).

These fields map to the PeopleSoft Supply Chain Management pricing fields (created specifically for pricing items in PeopleSoft Integrated FieldService). When the item price is synchronized with the item primary, the system checks the appropriate fields for item definitions. The price and currency code are exposed on the Item Definition page when an integration with PeopleSoft SCM exists but they are not available for update. Therefore, the currency and price cannot be modified on the Item Definition page.

However, if the items are not synchronized with PeopleSoft SCM, the administrator may enter price information on the Item Definition page. To stay in sync with the Item Definition page in PeopleSoft SCM, the same fields and labels are used in PeopleSoft CRM.

The system displays these fields on the Item Definition page in PeopleSoft CRM:

Currency Code

This field prompts on the Currency Code table (CURRENCY_CODE_TABLE). The administrator can select the currency code for each item because items can have different currency codes. This field is not required.

Service Price

Enter an amount for the item. This field is not required.

Service Exchange Amount

Enter an amount for the item if it is being exchanged for a newer or working item. This field is not required.

Note: These prices are only used within the service order when calculating the pricing for materials.

Related Links

"Understanding Item Definition in PeopleSoft CRM" (PeopleSoft Product and Item Management)

Service Order Reports

PeopleSoft Integrated FieldService provides two reports that are used to detail the services that have to be performed for a service order and provide expense details to customers.

Here are descriptions of the reports:

• Service Order Estimate Report.

Once a technician enters time, material, and expense information in a service order, the contract administrator, service manager, or technician may generate a report to provide to the customer for services performed. This report is an estimate of the amount that is planned for the job. It includes all activities with the planned start and stop dates and times, the status of each activity, the charge for performing the service, and any materials that are going to be used. There is a comments section that the technician can use to report actual material and labor if it is different than what was specified on the report. This report does not include taxes and surcharges and it is not a bill. To launch the report from the Service Order page, the user clicks the **Estimate Report** button on the toolbar.

Service Order Detail Report.

This report is used by technicians to list all of the work needed to fulfill the requirements of the service order. To launch the report from the Service Order or My Service Order page, the user clicks the **Detail Report** button on the toolbar.

Related Links

"Understanding PeopleSoft Integrated FieldService Interactive Reports" (PeopleSoft Integrated FieldService)

Accounting Rules

To define the various attributes of an agreement, service order, or case that should be sent to specific revenue accounts, set up accounting rules in the Transaction Billing Processor during implementation.

The integration to the Transaction Billing Processor enables users to manage and book their revenue by posting revenue accounting entries to their general ledger for agreement fees and services rendered, which are entered on service orders and cases.

For accounting purposes, these fields must be populated in the Contracts Interface table by PeopleSoft CRM:

Term	Definition
Transaction Source	Indicates the origin of the transaction. For example, if the value is <i>CRM</i> , it tells the system that the transaction is from PeopleSoft CRM.
From GL Unit (from general ledger unit)	The source general ledger business unit (GLBU). Enter the source PeopleSoft General Ledger business unit. With the exception of employee-related transactions (service orders), this value should always be the same as the value in the GL Business Unit field.
GLBU (general ledger business unit)	The PeopleSoft General Ledger business unit defines where the accounting entry is booked. The system populates this field from various sources based on the type of transactions: Agreement Fee Transactions, Service Order Transactions, or Support Case Transactions.

Term	Definition
Transaction Type and Transaction Subtype	These fields, which reside in the Transaction Billing Processor, are system-defined codes that identify whether the transaction is an agreement, service order, or support case. This field is critical for Transaction Billing Processor to know the type of accounting. Accounting rules setup is different depending on this field.
Accounting Date	This field is populated with the transaction date if no date is sent from PeopleSoft CRM.
Department	This field is optional. Use a wild card with this value in the accounting rules to use the department sent from PeopleSoft CRM in the revenue accounting entry.

See:

- "Setting Up the PeopleSoft Transaction Billing Processor" and "Working with PeopleSoft Project Costing, "PeopleSoft FSCM: Contracts product documentation.
- "Setting Up Accounting for Projects" in *PeopleSoft FSCM: Project Costing* product documentation.

Financial Profiles of Customers

The 360-Degree View integration to PeopleSoft Accounts Receivable provides the ability to display financial profiles of the customer for agreement-based service fees and service order and case transactions.

Customer profile information that is applicable to the services integration to the Transaction Billing Processor includes: statement number, statement date, statement currency, statement total, bill to customer, outstanding balance, and past due balance.

For invoice data, PeopleSoft CRM sends a request application message to PeopleSoft Billing. PeopleSoft Billing sends a response application message to PeopleSoft CRM with the information that appears under the 360-Degree View tree. In addition, once invoices and payments appear on the 360-Degree View tree for a customer, you can click an invoice or payment to access PeopleSoft Billing, where you can view more details on the invoice.

Related Links

"Setting Up the 360-Degree View Tree" (Application Fundamentals)

Delivered EIPs

This table lists the EIPs that PeopleSoft CRM delivers to facilitate the integration of PeopleSoft CRM applications to PeopleSoft Financial Management Services (PeopleSoft FMS), PeopleSoft Enterprise Service Automation (PeopleSoft ESA), PeopleSoft Supply Chain Management (PeopleSoft SCM), and PeopleSoft Human Capital Management (PeopleSoft HCM).

Note: The database code for PeopleSoft Financials and Supply Chain Management is FSCM.

Queue Name	Description	Message and Service Operation Name	Directions of Integration	Technology
FO_SYNC	Sends tax code definitions from PeopleSoft FSCM to CRM.	TAX_HEADER_TBL_ FULLSYNC	FSCM —> CRM	Application Message
HR_SETUP	Maps PeopleSoft HCM business units to general ledger business units.	BUS_UNIT_HR_ SYNC BUS_UNIT_HR_ FULLSYNC	HCM —> CRM	Application Message
CONTRACT	Synchronizes request and response messages from PeopleSoft CRM and Contracts for pending activities about agreements, transactions, invoicing, and contracts.	CONTRACT_ REQUEST CONTRACT_ RESPONSE CONTRACT_TXN PENDING_ACTIVITY	CRM -> ESA CRM < ESA CRM -> ESA CRM -> ESA	Application Message
SERVICE	Synchronizes messages from PeopleSoft CRM to Contracts for accounting definitions, VAT, and VAT drivers.	SERVICE_SYNC SERVICE_ FULLSYNC SERVICE_TYPE_ SYNC SERVICE_TYPE_ FULLSYNC	CRM —> ESA	Application Message
COST_CATEGORY	Synchronizes cost categories (called labor type in PeopleSoft FSCM) from PeopleSoft CRM to Contracts for accounting definitions and VAT drivers.	COST_CATEGORY_ SYNC COST_CATEGORY_ FULLSYNC	CRM —> ESA	Application Message
CASE	Synchronizes case types and accounting definition information from PeopleSoft CRM to Contracts.	CASE_TYPE_SYNC CASE_TYPE_ FULLSYNC SOURCE_SYNC SOURCE_FULLSYNC	CRM> ESA	Application Message

Queue Name	Description	Message and Service Operation Name	Directions of Integration	Technology
ENTERPRISE_SETUP	Synchronizes schedule information from PeopleSoft Financials to CRM for agreement information and revenue recognition.	SCHEDULE_SYNC SCHEDULE_ FULLSYNC	FMS —> CRM	Application Message
BI_SETUP	Synchronizes bill types and bill sources from PeopleSoft SCM to CRM for contract transactions.	BILL_TYPE_SYNC BILL_TYPE_ FULLSYNC BILL_SOURCE_ SYNC BILL_SOURCE_ FULLSYNC	SCM -> CRM	Application Message
VAT_TRANSFER	Generates request and response messages from PeopleSoft CRM to global VAT to generate VAT defaults.	VAT_TRANSFER_ REQ VAT_TRANSFER_ RSP	SCM <> CRM	Application Message
PAY_TERMS	Synchronizes messages from PeopleSoft FSCM to CRM for payment terms.	PAY_TERMS_SYNC PAY_TERMS_ FULLSYNC	SCM —> CRM	Application Message
AGREEMENT	Generic message that synchronizes agreement information with third-party vendors.	AGREEMENT_SYNC	FieldService —> External	Application Message
SERVICE_ORDER	Generic message that synchronizes service order billing information with third- party vendors.	SERVICE_ORDER_ BILLING_SYNC	FieldService —> External	Application Message

Fields Populated in the Transaction Billing Processor

This topic discusses:

- Contract header
- Contract line
- Billing plan

- Revenue plan
- Tax parameters

Note: PeopleSoft CRM sends fields to the Transaction Billing Processor to create the contract, contract line, and revenue and billing plans. Many of these fields can be changed manually on the contract. If you want to change a field after contract activation has taken place, you must create an amendment using the Transaction Billing Processor amendment functionality.

Contract Header

These fields must be populated in the contract header. These values are sent from the PeopleSoft CRM agreement. These fields can be overridden on the contract header once they are populated from the CRM agreement:

- Bill To Contact
- Bill To Customer
- · Bill To Address
- Purchase Order ID

Note: This field is not required and it is populated from the Billing Plan at a Contract Line.

- Payment Terms
- Sold To Customer

These fields cannot be overridden on the contract header:

- Sold To Customer
- CA Business Unit
- Currency Code

This table lists additional fields that are required on the contract header and the source from which the system retrieves the value for the field:

PeopleSoft Contracts Field Name	Source
Bill Type	PeopleSoft Contracts Business Unit.
Note: This field is sent from PeopleSoft CRM.	_ _
Legal Entity	PeopleSoft Contracts Business Unit.
Contract Signed Date	The system populates this field with the current date. PeopleSoft CRM must send this date to override the default contract signed date.

PeopleSoft Contracts Field Name	Source
Contract Type	PeopleSoft Contracts Business Unit.
Exchange Rate Type	PeopleSoft Contracts Business Unit.

Contract Line

These fields that must be populated in the contract line. These values are sent from the PeopleSoft CRM agreement or on-demand service order/case. The list contains fields that can be overridden on the contract line once they are populated from the CRM agreement.

These fields can be overridden on the contract line:

- Line Description
- Ship From Location (source = PeopleSoft Contracts business unit)
- Start Date
- End Date

Note: Except for Line Description, these fields are not sent from PeopleSoft CRM.

The **Currency Code** field cannot be overridden on the contract line. The source for the currency code is the contract header.

Billing Plan

These fields that must be populated in the billing plan. These values are sent from the PeopleSoft CRM agreement or on-demand service order/case. The list contains fields that can be overridden on the billing plan once they are populated from the CRM agreement.

These fields can be overridden on the contract line:

- Bill To Contact
- Bill To Customer
- Bill To Address

These fields appear on the Billing Plan General page. The system populates the fields on this page upon contract creation. This table shows the source from which each field is populated, if the value can be changed in the billing plan in the Transaction Billing Processor, and if the field can be overridden by transactions sent from PeopleSoft CRM:

Billing Plan Field	PeopleSoft Contracts Source	Changeable?	Can Be Overwritten by CRM on Transaction?
Billing Notes	Manual process	Yes	Yes
Note: You can create a note in the Transaction Billing Processor and attach that note to a billing plan. It can be sent to PeopleSoft Billing as part of the generated invoice.			
Contract Number	Contract header	No	No
Billing Plan Number	Billing plan	No	No
Billing Method	Contract line	No	No
Currency Code	Contract header	No	No
Bill Plan Description	Contract header	Yes	No

Other fields on the Billing Plan General page, such as the **Billing Inquiry**, **Billing Specialist**, **Billing Authority**, **Cycle ID**, **Bill By ID**, and **Invoice Form** can be added to the billing plan manually or left blank.

Revenue Plan

A contract line is linked to a revenue plan to recognize revenue. The required revenue plan fields populate automatically during contract creation and cannot be overwritten from the transaction data that is sent from PeopleSoft CRM. The revenue plan fields are managed entirely from the contract.

These fields are required for the Revenue Plan page. The table shows the source from which each field is populated. These fields cannot be overridden by transactions sent from PeopleSoft CRM:

Revenue Plan Field	PeopleSoft Contracts Source
Contract Number	Contract header
Sold To Customer	Contract header
Business Unit	Contract header
Revenue Method	Contract Line

Revenue Plan Field	PeopleSoft Contracts Source
Currency Code	Contract header
Revenue Plan Description	Contract header
Hold (flag)	Revenue Plan
Events	Contract header

Note: If a credit hold exists on a customer in PeopleSoft CRM, you must put the revenue plan for the contract on hold by selecting the **Hold** check box on the Revenue Plan page to prevent transactions from processing. If you select the **Hold** check box, then you must release the hold manually when you are ready to recognize revenue for the customer.

While every created contract line has a revenue plan, recurring fees do not use the revenue plan for revenue recognition. Revenue plans build a deferred revenue schedule associated with the billing transactions. In addition, on-demand transactions do not need a revenue plan to recognize revenue. PeopleSoft Billing manages revenue for on-demand transactions. PeopleSoft Billing also manages the revenue method for all on-demand and recurring transactions.

To ensure that your customers are billed properly, you should also validate the billing plan and revenue plan details in PeopleSoft Contracts.

Tax Parameters

PeopleSoft CRM sends tax parameter information for agreements to the Transaction Billing Processor. The Transaction Billing Processor stores the CRM tax information in the Contract Interface tables (INTFC_CA) and passes this information on to PeopleSoft Billing for processing. The Billing Plan General - Tax Parameters tab is not available for CRM contracts.

These tax fields are passed from PeopleSoft CRM to the contract interface tables:

- Ship From Location
- Tax Code
- Tax Group
- Transaction Type
- Transaction Sub Type
- Exemption Certificate
- Physical Nature
- Order acceptance location.
- Order origin location.

• Storage location.

PeopleSoft CRM sends fields to the Transaction Billing Processor to create the contract, contract line, and revenue and billing plans. Many of these fields can be changed manually on the contract. In addition, the Transaction Billing Processor receives sales and use and VAT tax parameters if they are sent by PeopleSoft CRM.

Transaction Billing Processor interface tables (INTFC_CA, INTFC_CA2, INTFC_CA_HDR, and INTFC_CA_NOTE) are duplicates of the Billing interface tables. However, the first two keys on the billing table, INTFC_ID and INFC_LINE_NUM, have been changed to the single key CA_TXN_ID on the Transaction Billing Processor tables.

See Also

PeopleSoft FSCM: Contracts, "Processing PeopleSoft Contracts Billing"

PeopleSoft FSCM: Billing, "Entering Bills Online"

Contracts Interface Tables

The Contracts interface tables store the transactions from PeopleSoft CRM. The first two keys on the billing table, INTFC_ID and INFC_LINE_NUM, have been changed to the single key CA_TXN_ID on the Transaction Billing Processor tables.

PeopleSoft Integrated FieldService and Support

PeopleSoft CRM sends service order transaction information, case transaction information, and service agreement fees to be billed or accounted for to the Transaction Billing Processor interface tables.

PeopleSoft Order Capture

PeopleSoft Order Capture sends these fields to the Transaction Billing Processor for every transaction:

- · Sold to Customer.
- · Sold To Contact.
- Sold To Address.
- Contract Business Unit.

The Transaction Billing Processor sends these fields to PeopleSoft Order Capture as a response:

- Contract Number
- Contract Line Number
- PeopleSoft Contracts Business Unit
- Error Status
- Error Message

Transactional Billing Plans

The system creates a billing plan with an *As-incurred* billing method for the service transactions sent from PeopleSoft CRM to PeopleSoft Contracts. Pricing occurs in PeopleSoft CRM for all services on the agreement, such as service order transactions, service agreement fees, and cases. Contract lines within an agreement-related contract are linked to the billing plan. Although these billing plans contain rules defined by default upon contract creation, you can manually override the system defaults.

This table presents source and override information for the fields on the billing plan:

Field	CA Source	Override on Billing Plan?	Override from CRM Transaction?
Billing Notes	Manual Process	Yes	Yes
Contract #	Contract Header	No	No
Billing Plan #	Billing Plan	No	No
Billing Method	Contract Line	No	No
Currency Code	Contract Header	No	No
Bill Plan Description	Contract Header	Yes	No

You can link only CRM lines to a billing plan created from CRM transactions. You cannot mix lines with different transaction sources on the billing plan. For example, you cannot link a CRM contract line with a Project Costing contract line.

PeopleSoft Integrated FieldService, PeopleSoft Support, and PeopleSoft Order Capture send credit card information to the Transaction Billing Processor. The Transaction Billing Processor does not validate the credit card numbers.

Common Elements Used in Setting Up an Integration to the Transaction Billing Processor

Field or Control	Description
Agreement	A PeopleSoft CRM agreement is a list of obligations to which a service provider has agreed or committed to the customer. The agreement lines listed on the agreement include services and products covered by the agreement, information about who or what customer locations can request service, and the level of service that is provided, which includes restore time, response time, prime period of maintenance, and service coverage (time, material, and expense).

Field or Control	Description
Agreement Pricing	Agreement pricing records define the fee paid for a specific service or support offering. The agreement price is defined when the agreement is issued to the customer. PeopleSoft CRM also enables you to initiate recurring charges for which a customer might pay a monthly or quarterly fee.
Agreement Service Pricing	Agreement service pricing records define what the customer pays when the work associated with the service or support offering on the agreement is performed. This record includes the price paid per transaction covered by the agreement line.
Billing Plan	When the system creates a contract, it also generates a billing plan that is linked to a contract line. The billing plan determines how a transaction should be billed. It contains customer billing information, billing method (for example, asincurred), and status of the billing plan.
Contract Amendment	A contract amendment is any change made to an active contract for which you are altering the fundamental obligations and entitlements of the contract.
Deferred Revenue	Deferred revenue helps to create and send invoices for products or services that are to be delivered in the future or over a range of time. You may use deferred revenue to generate accounting entries that defer revenue recognition based on a revenue recognition date and proration method that you select.
General Ledger	General ledger is where all of the journal entries are posted. Journal Generator populates the general ledger with accounting entries (for example, accounts receivable and revenue entries).
Location	Select the location of the store where the order is to be purchased. This field is used for tax vendor exceptions and reporting.
Order Acceptance Location	Select the location where the order is to be accepted. The system uses this field to determine tax jurisdiction.
Order Origin Location	Select the location where the order originated. The system uses this field to determine tax jurisdiction.
Rate Based Contract Line	A rate based contract line is a transaction-based offering (or an ad hoc offering) that the Transaction Billing Processor picks up and sends to PeopleSoft Billing.

Field or Control	Description
Revenue Plan	When the system creates a contract, a revenue plan is also created and associated with a contract line. You can create revenue plans either automatically or manually. The contract line, however, must be linked to the revenue recognition plan to recognize revenue.
Revenue Recognition	Revenue recognition occurs when the system sends revenue information to the general ledger and it is counted in the revenue projection for the accounting period.
Store Location	Enter the address of the store location.
	Note: If you are using a third-party tax vendor, the entry in this field should match the store location code in Vertex or Taxware.

Setting Up Integrations to the Transaction Billing Processor

To define agreement options, time types, and tax parameters, use the Agreement Options (RF_AGR_OPTIONS), Time Type (RF_TIME_TYPE), and Tax Parameters (RF_TAX_PARAM) components.

This topic discusses how to:

- Establish billing and pricing options.
- Map agreement setIDs with contracts and general ledger business units.
- Set up time types for PeopleSoft Integrated FieldService.
- Set up billing options for PeopleSoft Integrated FieldService.
- Set up billing options for PeopleSoft Call Center.
- Set up billing options for PeopleSoft Order Capture.
- Define tax parameters.

Note: You must activate the messages, queue statuses, service operations, and routings (from the EIP chart discussed previously) to use the integration to the Transaction Billing Processor.

Pages Used to Set Up Integrations to the Transaction Billing Processor

Page Name	Definition Name	Navigation	Usage
Billing and Pricing Options	RB_INTEGRATION	Set Up CRM > Install > Installation Options > Billing and Pricing Options	Turn on integration to the Transaction Billing Processor for PeopleSoft Integrated FieldService, Call Center, and Order Capture. Enable pricing for service order and cases.
Agreement Options	RF_AGR_OPTIONS	Set Up CRM > Common Definitions > Agreement Options > Agreement Options	Map the agreement setIDs with the business units for both the Transaction Billing Processor and PeopleSoft General Ledger.
Time Types	RF_TIME_TYPE	Set Up CRM > Product Related > FieldService > Time Type > Time Types	Establish the defaults for the types of time that are billable for the business units being set up under the selected setID.
Billing Options	RF_BU_BILL_OPTIONS	Set Up CRM > Business Unit Related > FieldService Definition > Billing Options	Set up billing options for PeopleSoft Integrated FieldService.
Business Unit Billing Details	BUS_UNIT_RC_BI_SEC	Set Up CRM > Business Unit Related > Call Center Definition > Options Select Bill for Cases and then click the Details link. (Note that you must have Billing enabled or this link will not appear.)	Set up billing options for PeopleSoft call center applications.
Order Capture Definition - Internal	BUS_UNIT_RO1	Set Up CRM > Business Unit Related > Order Capture Definition > Internal	Set up billing options for PeopleSoft Order Capture.
Tax Parameter Definitions	RF_TAX_PARAM	Set Up CRM > Common Definitions > Tax Parameter Definition > Tax Parameter Definition	Set up sales and use taxes for service, material, labor, expenses, and cases for third- party tax vendors.

Related Links

Delivered EIPs

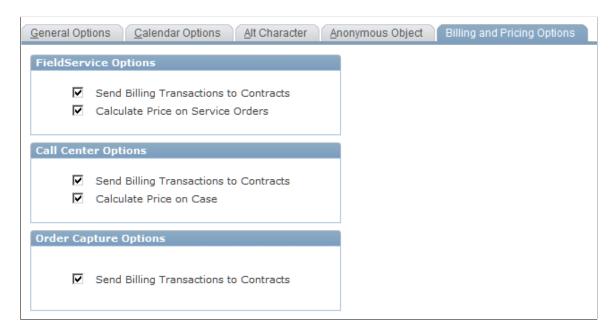
Billing and Pricing Options Page

Use the Billing and Pricing Options page (RB_INTEGRATION) to turn on integration to the Transaction Billing Processor for PeopleSoft Integrated FieldService, Call Center, and Order Capture Enable pricing for service order and cases..

Navigation:

Set Up CRM > Install > Installation Options > Billing and Pricing Options

This example illustrates the fields and controls on the Billing and Pricing Options page.



Note: No installation options exist for third-party integration since no method of determining what validation checking is required on the system to receive agreement, service order, or case data exists.

Field or Control	Description
Send Billing Transactions to Contracts	Select this check box to send agreement fee billing date, service order billing data, case fees, and order information to the Transaction Billing Processor for billing and accounting. The system sends agreement fees, case fees, or service order fees to the Transaction Billing Processor when the case or service order is closed. For PeopleSoft Order Capture, the system sends the information to the Transaction Billing Processor when you submit the order. These options are not available without customizing the application.
Calculate Price on Service Orders	Select this check box if you want the system to price on- demand and agreement-based service orders.
Calculate Price on Case	Select this check box if you want the system to price agreement- and on-demand cases.

Agreement Options Page

Use the Agreement Options page (RF_AGR_OPTIONS) to map the agreement setIDs with the business units for both the Transaction Billing Processor and PeopleSoft General Ledger.

Navigation:

Set Up CRM > Common Definitions > Agreement Options > Agreement Options

This example illustrates the fields and controls on the Agreement Options page.



Agreement Options Tab

Use the fields within this tab to map the agreement setIDs to the business units for both the Transaction Billing Processor and PeopleSoft General Ledger.

This mapping links the agreement to the corresponding contract. The system uses the existing business unit EIP to obtain all contracts and general ledger business units from the PeopleSoft FSCM database.

Field or Control	Description
SetID	Enter the setID that you want to use with the agreements that you create for integration to the Transaction Billing Processor.
Contracts Business Unit	Enter the business unit that you want to use to create contracts in the Transaction Billing Processor. The Transaction Billing Processor business unit must be tied to the agreement to facilitate the proper creation of a contract and to enable the appropriate default values to be selected when the contract is created.
GL Business Unit (general ledger business unit)	Enter the general ledger business unit that you want associated with the setID. The GL Business Unit field is required for contracts integration with PeopleSoft Global to send revenue to the appropriate general ledger account.

Field or Control	Description
Location Code	The location code prompts from the Location table (LOCATION_TBL) in PeopleSoft CRM and returns a location code. The system sends the country and state information to the Transaction Billing Processor with the agreement transaction. This information is needed to calculate VAT tax rates. The location table in PeopleSoft CRM is synced with the location table in the PeopleSoft FSCM database (two-way).
Schedule	Select the schedule by which you want to report revenue recognition.

Note: When the system creates the agreement, it uses the setID, the contracts business unit, and the general ledger business unit from the Agreement Options page.

Billing Options Tab

Use the fields within this tab to map the agreement setID to the bill type and the bill source.

For example, if the CRM01 setID identifies the bill type and bill source as a SERVICE, then the system sends the information to the Transaction Billing Processor to override the **Bill Source** and **Bill Type** fields on the Transaction Billing Processor billing plan.

Field or Control	Description
Bill Type	Select the bill type that you want associated with the setID. The bill type prompts on all bill type identifier codes that are synced from PeopleSoft Billing to PeopleSoft CRM. The bill type code is a user-defined value in PeopleSoft Billing.
Bill Source	Select the bill source that you want associated with the setID. The bill source prompts on all bill source identifier codes that are synced from PeopleSoft Billing to PeopleSoft CRM. The bill source code is a user-defined value in PeopleSoft Billing.

Note: You can use both the **Bill Type** and **Bill Source** fields to define bill by identifiers in PeopleSoft Billing. If CRM overrides the **Bill Type** and **Bill Source** fields on the Transaction Billing Processor billing plan with values defined in the CRM Billing Options page, then depending on the Bill By Identifier hierarchy in Billing, these values may be used to control the way that the invoices can be grouped.

On the Billing Options page, the **Bill Type** and **Bill Source** fields are optional. If they are not set in PeopleSoft CRM, the billing plan in the Transaction Billing Processor sets these fields based on the contracts business unit. PeopleSoft Billing still determines the bill by identifiers that are used based on its bill by identifier hierarchy.

Tax Options Tab

Use the fields within this tab to indicate where the order originated, where it will be accepted, and where the store is located. This information is used for tax purposes.

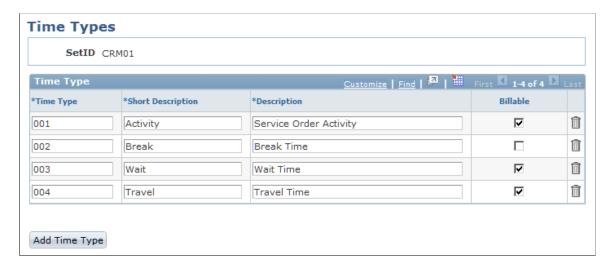
Time Types Page

Use the Time Types page (RF_TIME_TYPE) to establish the defaults for the types of time that are billable for the business units being set up under the selected setID.

Navigation:

Set Up CRM > Product Related > FieldService > Time Type > Time Types

This example illustrates the fields and controls on the Time Types page.



Use this page to establish time types and indicate to the system which time types are billable. The system uses this information on the Billing Options page when you are setting up business units. If you enter one or more time types for a given setID, all PeopleSoft Integrated FieldService business units that use that setID as a default inherit the time types for the setID, including the billable flag.

For example, if you select the *Billable* check box for the *Break* time type, the system selects it as billable in the **Time Type** grid on the Billing Options page for the PeopleSoft Integrated FieldService business unit.

Field or Control	Description
Time Type	Enter a number by which you want to order the time type that you are entering. The numbers that you enter determine the order in which the time types appear on the Billing Options page.
Short Description and Description	Enter the short and long description of the time type.
Billable	Select if you want to set the default to billable for the time type.

Note: If the installation option is not set to *Calculate Price on Service Orders*, then the system hides the Business Unit - Billing Option page, which contains the billable fields that you are entering on this page.

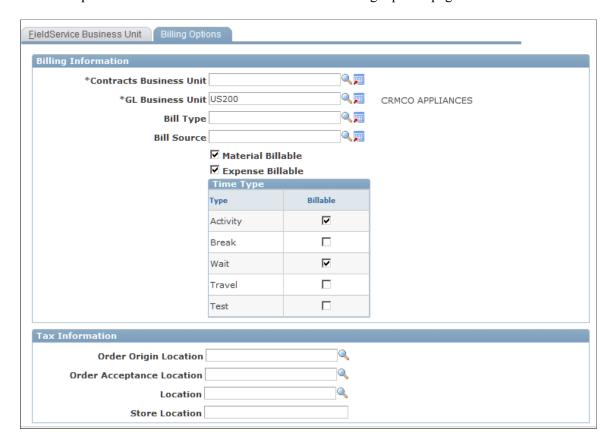
Billing Options Page

Use the Billing Options page (RF_BU_BILL_OPTIONS) to set up billing options for PeopleSoft Integrated FieldService.

Navigation:

Set Up CRM > Business Unit Related > FieldService Definition > Billing Options

This example illustrates the fields and controls on the Billing Options page.



Billing Information

Use the fields within this group box to enter the information that is needed for PeopleSoft Integrated FieldService to integrate with the Transaction Billing Processor. To apply revenue to the correct general ledger account for service order fees, link the business units for PeopleSoft Integrated FieldService, Contracts, and General Ledger. This information is included in the contract transaction message that the system sends to the Transaction Billing Processor when the service order closes.

Note: You can link only one general ledger business unit to a service order. You cannot override the **GL Business Unit** field from the service order. The system does not display this field on the Service Order page in PeopleSoft Integrated FieldService.

Field or Control	Description
Contracts Business Unit	Enter the contracts business unit that you want to use for billing.
GL Business Unit	Enter the general ledger business unit that you want to use for billing.
	The prompt values for this field include all business units for all product lines. Populating this field enables mapping between the general ledger business unit and the field service business unit.
	The Service Order page does not display the general ledger business unit or contracts business unit. When a service order closes, the system sends the general ledger business unit, contracts business unit, and contract ID to the Transaction Billing Processor with other transaction information.
Bill Type	Select the bill type that you want associated with the business unit.
	The prompt values for the Bill Type field include all bill type identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM.
Bill Source	Enter the bill source that you want to associate with the business unit.
	The prompt values for the Bill Source field include all bill source identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM.
	Note: The system sends the Bill Type and Bill Source fields with every service order transaction if one or both are set on the FieldService Business Unit - Billing Options page.

Field or Control	Description	
Material Billable and Expense Billable	Select the check boxes that you want to use for billing purposes on service orders for the business unit that you are defining.	
	If you select the Send Billing Transaction to Contracts and Calculate Price on Service Orders check boxes on the Installation Options page, then the system automatically selects the Material Billable and Expense Billable check boxes.	
	The system administrator, however, can override these values by clearing the check boxes.	
Time Type and Billable	Select the Billable check box to make the time type a billable item on the service order for the business unit.	
	Default time types are based on the setup of the time types. If you enter one or more time types for a given setID, all PeopleSoft Integrated FieldService business units that use that setID as the default setID inherit the time types of the setID, including the billable option. You can, however, override time types for a business unit.	
	For example, if the time type for Break is not set to billable on the Time Types page, then the system does not display it in the Time Type section on this page.	

Tax Information

Use the fields on this tab to indicate where the order originated, where it will be accepted, and where the store is located. This information is used for tax purposes. The **Order Origin Location**, **Order Acceptance Location**, and **Location** fields prompt from the Location table (LOCATION_TBL), which is sent to PeopleSoft CRM through an EIP from PeopleSoft HCM and PeopleSoft FSCM.

Note: PeopleSoft Billing uses the fields in the **Tax Information** group box for integration to Vertex and Taxware, which are third-party tax vendors. Please refer to the setup for sales and use tax for third-party tax vendors for details on the function and behavior of each third-party tax field. These third-party tax fields are always blank when you first create a PeopleSoft Integrated FieldService business unit.

Related Links

"Defining FieldService Business Units" (PeopleSoft Integrated FieldService)
Setting Up Sales and Use Tax for Third-Party Tax Vendors

Business Unit Billing Details Page

Use the Business Unit Billing Details page (BUS_UNIT_RC_BI_SEC) to set up billing options for PeopleSoft call center applications.

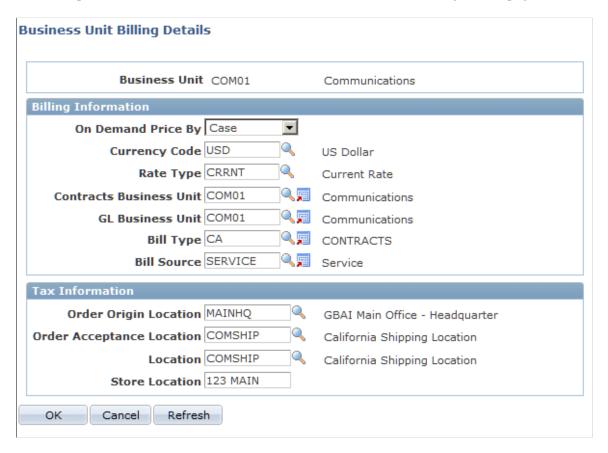
Navigation:

Set Up CRM > **Business Unit Related** > **Call Center Definition** > **Options**

Select **Bill for Cases** and then click the **Details** link.

(Note that you must have Billing enabled or this link will not appear.)

This example illustrates the fields and controls on the Business Unit Billing Details page.



Billing Information

Use the fields within this group box to enter the information that is needed for the integration to the Transaction Billing Processor.

Field or Control	Description
On Demand Price By	Select either <i>Hour</i> or <i>Case</i> .
	This field provides the flexibility to price case transactions by hour or by case. For example, if you have a New York business unit and a California business unit, the New York unit could price a case by flat fee while the California unit could price the case by the total number of hours that an agent spends working on a case. This field is blank when you enter the page for the first time.

Field or Control	Description
Currency Code	Enter the currency that you want to use for billing purposes for the business unit that you are defining.
Rate Type	Select the exchange rate type that is used to calculate monetary transaction amounts in alternate currencies.
Contracts Business Unit	Enter the contracts business unit that you want to use for billing.
GL Business Unit	Enter the general ledger business unit that you want to use for billing.
	The prompt values for this field include all business units for all product lines. Populating this field enables mapping between the general ledger business unit and the call center business unit.
	The Case page does not display the general ledger business unit. It does display the contracts business unit, which appears by default from the agreement. When a case closes, the system sends the general ledger business unit, contracts business unit, and contract ID to the Transaction Billing Processor with other transaction information.
Bill Type	Select the bill type that you want associated with the business unit.
	The prompt values for this field include all bill type identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill type code is a user-defined value in PeopleSoft Billing. Sample data includes SVC (Service), CASE, and CRM _ORDER
Bill Source	Enter the bill source that you want associated with the business unit.
	The Bill Source field prompts on all bill source identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill source code is a user-defined value in PeopleSoft Billing. Sample data includes <i>SERVICE</i> , <i>OES</i> (Order Entry System), and <i>GSO</i> (General Service Orders).
	Note: The system sends the Bill Type and Bill Source fields with every transaction if one or both are set up on the Business Unit Billing Details page.

See "Defining Call Center Business Units" (PeopleSoft Call Center Applications).

Tax Information

Use the fields on this tab to indicate where the order originated, where it will be accepted, and where the store is located. This information is used for tax purposes. The **Order Origin Location**, **Order Acceptance Location**, and **Location** fields prompt from the Location table (LOCATION_TBL), which is sent to PeopleSoft CRM through an EIP from PeopleSoft HCM.

Note: The fields in the **Tax Information** group box are used by PeopleSoft Billing for integration to Vertex and Taxware, which are third-party tax vendors. Please refer to the setup for sales and use tax for third-party tax vendors for details on the function and behavior of each third-party tax field. These third-party tax fields are always blank when you first create a business unit for a PeopleSoft call center application.

See Setting Up Sales and Use Tax for Third-Party Tax Vendors.

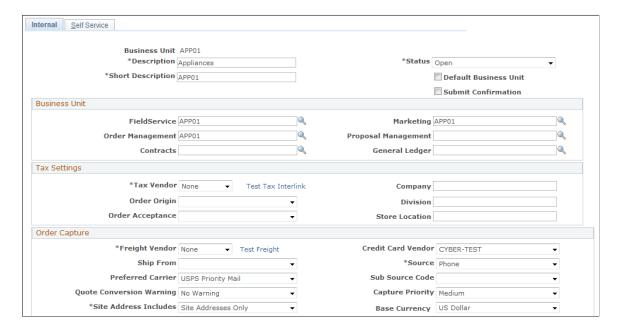
Order Capture Definition - Internal Page

Use the Order Capture Definition - Internal page (BUS_UNIT_RO1) to set up billing options for PeopleSoft Order Capture.

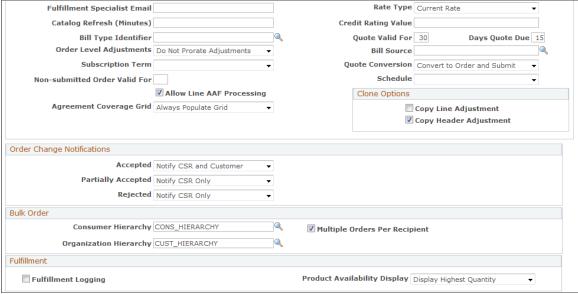
Navigation:

Set Up CRM > Business Unit Related > Order Capture Definition > Internal

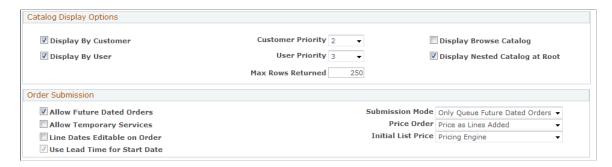
This example illustrates the fields and controls on the Order Capture Definition - Internal page (1 of 3).



This example illustrates the fields and controls on the Order Capture Definition - Internal page (2 of 3).



This example illustrates the fields and controls on the Order Capture Definition - Internal page (3 of 3).



To set up billing options for PeopleSoft Order Capture, you must establish values for the Contracts, General Ledger, Bill Type, Bill Source, and Default Service Duration fields.

Field or Control	Description
Contracts	Enter the contracts business unit that you want to use for billing.
General Ledger	Enter the general ledger business unit that you want to use for billing. The prompt values for this field include all business units for all product lines. Populating this field enables mapping between the general ledger business unit and the order capture business unit.

Field or Control	Description	
Bill Type Identifier	Select the bill type that you want associated with the business unit. The prompt values for this field include all bill type identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill type code is a user-defined value in PeopleSoft Billing. Sample data includes SVC (Service), CASE, and CRM _ORDER.	
Bill Source	Enter the bill source that you want associated with the busines unit. The Bill Source field prompts on all bill source identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill source code is a user-defined value in PeopleSoft Billing. Sample data includes <i>SERVICE</i> , <i>OES</i> (Order Entry System), and <i>GSO</i> (General Service Orders). Note: The system sends the Bill Type and Bill Source fields with every transaction if one or both are set up on the Busines Unit Billing Details page.	

For more information on setting up billing options, refer to "Defining Order Capture Business Units" (PeopleSoft Order Capture Applications) in the Order Capture Fundamentals product documentation:

Tax Parameter Definitions Page

Use the Tax Parameter Definitions page (RF_TAX_PARAM) to set up sales and use taxes for service, material, labor, expenses, and cases for third-party tax vendors.

Navigation:

Set Up CRM > Common Definitions > Tax Parameter Definition > Tax Parameter Definition

Working with On-Demand Billing

This topic provides an overview of on-demand billing and discusses how to set up on-demand billing transactions.

Pages Used to Set Up On-Demand Transactions

Page Name	Definition Name	Navigation	Usage
Installation Options - Installed Products	INSTALLATION_FS	Set Up Financials/Supply Chain > Install > Installation Options Click the Products link in the General Options group box.	Select the Contracts Transaction Billing check box to indicate that this product is installed on the system.
Contracts Definition - BU Definition	BUS_UNIT_TBL_CA	Set Up Financials/Supply Chain > Business Unit Related > Contracts > Contracts Definition > BU Definition	Create a new PeopleSoft Contracts business unit definition or manage an existing business unit.
Contracts Definition - BU Options	BUS_UNIT_OPT_CA	Set Up Financials/Supply Chain > Business Unit Related > Contracts > Contracts Definition > BU Options	Select a bill plan template ID to use to override the fields on the billing plan (optional). If you select a template on this page, when the billing plan is created the billing plan detail template overrides the corresponding fields on the billing plan.
Contract Status	CA_STATUS_PNL	Set Up Financials/Supply Chain > Product Related > Contracts > General Options > Contract Status	Define contract statuses and map them to processing statuses. The system uses the contract status to control all processing that can occur against a contract.
CRM Accounting Rules	CA_ACCT_CRM	Customer Contracts > Create and Amend > CRM Acct Distribution	Define the accounting rules to apply to PeopleSoft CRM transactions. Set up the accounting rules for ondemand transactions to ensure that the system enables only one <i>REV</i> row per transaction.

Understanding On-Demand Billing

This topic discusses:

- Overview
- Setup
- Contract creation and processing
- Integration points

Error handling

Note: On-demand billing is specific to PeopleSoft CRM FieldService and CRM Support.

Overview

On-demand billing provides back office processing for one-time fee transactions for service orders and cases. These transactions are not linked to agreements. The fees are usually one-time fees that are billed to the customer. Through an integration with the Transaction Billing Processor, you can bill and book revenue for on-demand service fees for cases and service orders.

Note: PeopleSoft CRM enables the system to bill on-demand transactions through the Transaction Billing Processor. The same messages and interface tables are used. Revenue recognition for on-demand transactions is managed by PeopleSoft Billing through the Contracts Billing Interface (CA_BI_INTFC) process.

Here is an overview of the on-demand functionality:

- Through PeopleSoft Contracts, on-demand cases and service orders are processed through the Transaction Billing Processor and General Ledger for billing and revenue.
- PeopleSoft CRM identifies a transaction as on demand when passing the transaction from PeopleSoft CRM to the Transaction Billing Processor.
- Closure of a service order or case in PeopleSoft CRM triggers the sending of transaction information from PeopleSoft CRM to the Transaction Billing Processor.
 - PeopleSoft CRM determines whether a new contract is created or if an existing contract is used based on the sold to customer. PeopleSoft CRM requests one on-demand contract per sold to customer and PeopleSoft Contracts business unit mapping.
- The Transaction Billing Processor launches the revenue and billing processes immediately after the on-demand transaction loads into the contract staging table (INTERFACE_CA) without any manual intervention.
- If a failure occurs during the creation of the contract or during processing of the on-demand transaction, the system does not create the contract or process the transaction.

The system sends an error message to PeopleSoft CRM with the failure reason. In this case, you must resubmit the transaction.

Note: The Transaction Billing Processor allows no visibility to on-demand contract lines in any components, processes, or reports. Deferred revenue is not applicable for on-demand transactions.

Setup

To implement on-demand transaction processing, you must set up:

- PeopleSoft Contracts business units.
- Contract statuses.
- Accounting definitions.

- Accounting rules.
- Billing plan detail template (optional).

Before creating on-demand contracts, set up the contract business unit and contract status. Additionally, you must set up the accounting rules for on-demand transactions to ensure that the system allows only one *REV* row per transaction. You must also select the **Transaction Billing** check box on the Installed Products page.

You have the option to create a billing plan detail template to populate or override the fields on the billing plan. Select the billing plan detail template on the Contract Definition - BU Options page. If you select a template on this page, the billing plan detail template populates or overrides the corresponding fields on the billing plan when the billing plan is created.

Contract Creation and Processing

PeopleSoft Integrated FieldService and Support send one-time fee transactions to the Transaction Billing Processor to use the contracts functionality to bill and book revenue. The Transaction Billing Processor initiates billing processing and completes both revenue and billing processing for on-demand transactions.

The system completes these steps to create and process on-demand transactions through the Transaction Billing Processor:

- 1. If the service order or case is not covered by an agreement, the system sends the transaction to the Transaction Billing Processor as an on-demand transaction when a PeopleSoft CRM Support case or FieldService service order is closed.
- 2. The first time PeopleSoft CRM creates an on-demand service order or case, the system searches for the sold to customer or PeopleSoft Integrated FieldService or Support business unit to map to the PeopleSoft Contracts business unit and contract number.
 - If the search does not find a mapping, PeopleSoft CRM sends a contract request message (CONTRACT_REQUEST) to the Transaction Billing Processor to create a new on-demand contract. PeopleSoft CRM sends a contract request message only when the system needs to create a new contract. The request message from PeopleSoft CRM specifies the transaction type (service order or case).
- 3. The Transaction Billing Processor creates an on-demand contract and sends a contract response message (CONTRACT_RESPONSE) to PeopleSoft CRM providing the contract business unit, contract number, contract line number, error status, and error message.
 - The system creates the contract and contract lines, including an *As-incurred* billing plan, using the CA_HDR_CI component interface. On success, the Transaction Billing Processor responds to PeopleSoft CRM with the new contract number.
- 4. On receipt of the contract response message, PeopleSoft CRM sends the transaction to the Transaction Billing Processor through a transaction message (CONTRACT_TXN) with all necessary data for the invoicing and booking revenue.
 - In the transaction message, the contract number identifies a particular contract. Each transaction is unique and is marked by its own transaction ID (CA_TXN_ID). For all future transactions for the same sold to customer, only the transaction (through the transaction message) is sent to the Transaction Billing Processor.

5. the Transaction Billing Processor retrieves the transaction data and loads the on-demand transaction from PeopleSoft CRM into the contract staging tables (INTFC_CA).

Loading the contract staging tables triggers both the revenue process to apply the revenue to the appropriate account and billing process to generate the invoice to run. The transaction populates the contract interface tables, initiates the Billing Interface process (CA_BI_INTFC), and prepares the transaction for billing processing. Revenue recognition is handled by PeopleSoft Billing.

If errors occur during processing, the system sends a reply message to PeopleSoft CRM containing the contract business unit, contract number, contract line number, CRM identifier, and status indicating that the process failed.

If the transaction posts successfully to both PeopleSoft General Ledger and PeopleSoft Billing, the system sends a reply message to PeopleSoft CRM containing the contract business unit, contract number, contract line number, CRM identifier, and status indicating that the process succeeded. The response message is CONTRACT_RESPONSE for both request and transaction messages, and it contains the appropriate success and failure codes and descriptions.

- 6. The CRM transaction changes the billing status from *submitted* to *completed*. This action marks the end of the PeopleSoft CRM processing. Contracts that are created for on-demand transactions are not visible in the front end on the Transaction billing Processor.
- 7. PeopleSoft Billing runs the Billing Interface and Finalization processes.

Integration Points

These are the four major steps in the integration process between PeopleSoft CRM and PeopleSoft Contracts for on-demand contracts:

- 1. Create a billing plan.
- 2. Create a contract.
- 3. Populate the Contracts interface tables.
- 4. Process billing.

Creating a billing plan, creating a contract, and populating the interface table are the same steps that occur with agreement-based processing. These steps use the contract request (CONTRACT_REQUEST and CONTRACT_RESPONSE) and transaction (CONTRACT_TXN) messages. The last step, process billing, differs from agreement-based transactions since billing for on-demand contracts takes place immediately through PeopleSoft Billing.

With agreement-based billing, you have control over the billing plan in PeopleSoft Contracts, and you can make changes to the contract before it goes to PeopleSoft Billing for processing. The on-demand process uses the same integration points as agreement-based transactions.

Error Handling

Errors can occur during the contract and billing plan creation process, when the system loads the staging table, or when the system runs the revenue and billing processes. The Transaction Billing Processor initiates billing processing and sends the transactions to PeopleSoft Billing. PeopleSoft Billing completes both the revenue and billing processing for on-demand transactions.

Here is how the system handles errors:

• If a failure occurs during contract creation, the system creates the contract in a *cancelled* status and a response is sent back to PeopleSoft CRM with a message stating the nature of the error.

Once you correct the error manually, you must resubmit the transaction.

• If a contract was successfully created and is ready for billing, but the transaction fails to populate the contract interface tables, the transaction is not created, and the response message sends an error message back to PeopleSoft CRM stating the cause of the error.

Once you correct the problem manually, you must resubmit the transaction. PeopleSoft CRM resubmits only the Contract Transaction message since the contract has already been created.

• If errors are triggered during the revenue or billing processes, each process sends a response message back to PeopleSoft CRM with the failure and message.

Once you correct the problem manually, you must resubmit the transaction. PeopleSoft CRM resubmits only the Contract Transaction message since the contract has already been created.

Setting Up On-Demand Transactions

This topic lists the pages used to set up on demand transactions in PeopleSoft Financials and Supply Chain Management.

Installation Options - Installed Products Page

Use the Installation Options - Installed Products page (INSTALLATION_FS) to select the Contracts Transaction Billing check box to indicate that this product is installed on the system.

Navigation:

Set Up Financials/Supply Chain > Install > Installation Options

Click the **Products** link in the **General Options** group box.

See Also

PeopleSoft FSCM: Application Fundamentals, "Setting Installation Options for PeopleSoft Applications"

Contracts Definition - BU Definition Page

Use the Contracts Definition - BU Definition page (BUS_UNIT_TBL_CA) to create a new PeopleSoft Contracts business unit definition or manage an existing business unit.

Navigation:

Set Up Financials/Supply Chain > Business Unit Related > Contracts > Contracts Definition > BU Definition

For detailed instructions, refer to *PeopleSoft FSCM: Contracts*, "Defining PeopleSoft Contracts Business Units".

Contracts Definition - BU Options Page

Use the Contracts Definition - BU Options page (BUS_UNIT_OPT_CA) to select a bill plan template ID to use to override the fields on the billing plan (optional).

If you select a template on this page, when the billing plan is created the billing plan detail template overrides the corresponding fields on the billing plan.

Navigation:

Set Up Financials/Supply Chain > Business Unit Related > Contracts > Contracts Definition > BU Options

For detailed instructions, refer to *PeopleSoft FSCM: Contracts*, "Defining PeopleSoft Contracts Business Units".

Contract Status Page

Use the Contract Status page (CA_STATUS_PNL) to define contract statuses and map them to processing statuses.

The system uses the contract status to control all processing that can occur against a contract.

Navigation:

Set Up Financials/Supply Chain > Product Related > Contracts > General Options > Contract Status

For detailed instructions, refer to *PeopleSoft FSCM: Contracts*, "Defining PeopleSoft Contracts Business Units".

CRM Accounting Rules Page

Use the CRM Accounting Rules page (CA_ACCT_CRM) to define the accounting rules to apply to PeopleSoft CRM transactions.

Set up the accounting rules for on-demand transactions to ensure that the system enables only one REV row per transaction.

Navigation:

Customer Contracts > Create and Amend > CRM Acct Distribution

For detailed instructions, refer to *PeopleSoft FSCM: Contracts*, "Setting Up the PeopleSoft Transaction Billing Processor".

Setting Up Sales and Use Tax for Third-Party Tax Vendors

This topic provides an overview of the tax setup for third-party tax vendors, lists the common elements used in this topic, and discusses how to set up sales and use tax for third-party tax vendors.

To enter sales and use tax, use the Tax Parameters (RF_TAX_PARAM) component. To load data into the tables for this component, you can also use the RF_TAX_PARAM component interface.

Page Used to Set Up Sales and Use Tax for Third-Party Tax Vendors

Page Name	Definition Name	Navigation	Usage
Tax Parameter Definitions	RF_TAX_PARAM	Set Up CRM > Common Definitions > Tax Parameter Definition > Tax Parameter Definition	Set up sales and use taxes for service, material, labor, expenses, and cases for third- party tax vendors.

Understanding Tax Setup for Third-Party Tax Vendors

Use the Tax Parameter Definitions page to integrate with third-party tax vendors, such as Taxware or Vertex. The system passes the values in the fields that appear on the page to the Transaction Billing Processor with every PeopleSoft CRM transaction and uses the values during invoice finalization when the taxes are calculated.

You can calculate Sales and Use Tax in one of two ways in PeopleSoft Billing, either the third-party tax calculations or the PeopleSoft internal tax calculation. Basically, the tax code and the address overrides are used for calculating taxes through the PeopleSoft internal system.

The data required for the internal tax calculation is sent through the integration with the Transaction Billing Processor. If the Billing business unit on the SCM side is configured for the PeopleSoft internal tax calculation, it calculates the taxes. It is basically the tax code.

You can define fields for each type of transaction (agreement fees, service order fees, and case fees) independent of each other. Use the fields listed in the next section only if you have a third-party integration with either Taxware or Vertex.

See *PeopleTools: Integration Broker Testing Utilities and Tools* and *PeopleTools: Integration Broker Service Operations Monitor* product documentation.

Common Elements Used in Setting Up Sales and Use Tax for Third-Party Tax Vendors

Field or Control	Description	
Product Tax Group	Identify special tax-related charge information associated windividual transaction lines. For example, a laptop computer for the hearing impaired might receive a better rate than a laptop computer that doesn't have a feature for the hearing impaired.	
	The values for this field come from the Product Group table. You may, however, enter free-form values. This is not a required field, so you may leave it blank.	
	See PeopleSoft Product and Item Management.	
	Note: These values should match the values defined by either Taxware or Vertex. As the administrator, you must enter the values accurately because no interface exists to verify that the tax group is a valid Taxware product code or Vertex product group.	
Transaction Type	Determines how a vendor can calculate taxes. For example, the State of Illinois charges a six percent sales tax for purchases. This field includes these translate values: <i>Rental, Sales,</i> and <i>Service.</i> It is not a required field and may be left blank.	
Transactions Sub Type	Use for reporting purposes with the Vertex product only. This field is tied to the Transaction Type field and has predefined translate values that include <i>Expense</i> , <i>Freight</i> , <i>Misc</i> , <i>None</i> , <i>Property</i> , <i>Rental</i> , and <i>Service</i> . It is not required and may be left blank.	

Tax Parameter Definitions Page

Use the Tax Parameter Definitions page (RF_TAX_PARAM) to set up sales and use taxes for service, material, labor, expenses, and cases for third-party tax vendors.

Navigation:

Set Up CRM > Common Definitions > Tax Parameter Definition > Tax Parameter Definition

Tax Parameter Definitions SetID CRM01 Service Material Labor Expense *Service **Product Tax Group** Transaction Type Transaction Sub Type Type APP0000006 Repair A/C A/C Service Service APP0000001 PM for A/C A/C Service Expense Add Service Sales and Use Tax Material Sales and Use Tax Item Group AIR CONDITIONER 10009 A/C Service None Add Material Sales and Use Tax Labor Sales and Use Tax Customize | Find | Vie *Cost Category **Product Tax Group** Transaction Type Transaction Sub Type Travel A/C Service None

This example illustrates the fields and controls on the Tax Parameter Definitions page (1 of 2).

This example illustrates the fields and controls on the Tax Parameter Definitions page (2 of 2).



Service Sales and Use Tax

Add Labor Sales and Use Tax

Select the service type and service ID for which you want to enter tax information. To add additional rows of information, click the **Add Service Sales and Use Tax** button.

Material Sales and Use Tax

Select the item group and item ID for which you want to enter tax information. To add additional rows of information, click the **Add Material Sales and Use Tax** button.

Labor Sales and Use Tax

Select the cost category for which you want to enter tax information. To add additional rows of information, click the **Add Labor Sales and Use Tax** button.

Expense Sales and Use Tax

Select the expense type for which you want to enter tax information. To add additional rows of information, click the **Add Expense Sales and Use Tax** button.

Support Sales and Use Tax

Select the product and case type for which you want to enter tax information. To add additional rows of information, click the **Add Support Sales and Use Tax** button.

Chapter 6

PeopleSoft CRM Solution Management Reports

PeopleSoft CRM Solution Management Reports: A to Z

The table in this topic lists PeopleSoft CRM solution management reports, sorted by report ID. These reports are shared by PeopleSoft Support, PeopleSoft HelpDesk, and PeopleSoft Integrated FieldService.

For more information about running the reports, refer to:

- The corresponding topic in this product information.
- PeopleTools: Process Scheduler
- PeopleTools: BI Publisher for PeopleSoft.
- PeopleTools: SQR Language Reference for PeopleSoft

For samples of the reports, see the <u>Report Samples</u> that are published with this online documentation.

Report ID and Report Name	Description	Navigation	Run Control Page
RCC2012 Solution Usage	This report lists solutions that were used in cases created during the specified date range. For each solution, the report shows the solution usage count, solved count, and success rate.	Solutions > Reports > Solutions Usage > Solutions Usage	RUN_RCC2012
RCC2014 Top Ten Solutions By Product	For each included product, this report lists the ten solutions that most often resolved cases that were created during the specified date range. For each solution, the report shows the number of cases solved for that product.	Solutions > Reports > Top Ten Solutions By Product > Top Ten Solutions By Product	RUN_RCC2014