October 2011

PeopleSoft Enterprise Campus Solutions 9.0

Additional Features October 2011
Pre-Release Notes
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Due to the nature of the product architecture, it may not be possible to safely include all features described in this document without risking significant destabilization of the code.
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Executive Summary

This document provides an overview of the new features planned to be delivered in Oracle’s PeopleSoft Campus Solutions (CS) 9.0 Additional Features October 2011. It is a preview intended to help you understand the new features, to assess their applicability to your institution, and to help you plan your IT projects and investments.

Two major features previewed in this document are:

- **Planned Student Financials Third Party Contract Enhancements** that are intended to serve our expanding global user base.

- **Enrollment Web Services (EWS), Phase 2** which continues our Service Oriented Architecture approach that allows us to deliver flexible and reusable service operations that you can leverage in various applications of your own design.

Technology managers and staff will be particularly interested in the planned web services section that are targeted for delivery since they represent potentially new ways to deploy information supporting transactions to students.

With every Additional Feature bundle, our goal is to help your organization leverage technology to its fullest and increase the efficiency and effectiveness of your operations. Additional resources are planned to help your organization determine the impacts of implementing these new capabilities. We encourage you to visit My Oracle Support frequently to keep apprised of resources as they become available. These planned resources are outlined throughout this document and represent our commitment to keep you informed and prepared to take full advantage of the features that are available through our Continuous Delivery Model. While every attempt is made to accurately describe our intentions, the delivered additional features may not have every feature or capability mentioned in this document, and a specific feature may become part of a different application or have a different product name than those cited in this document.
Path to a Service Oriented Architecture

As we modernize and evolve Campus Solutions, our focus continues to be on a service oriented approach for the architecture and design of our products. Our commitment to this effort started when we introduced a Web Services Framework for CS 9.0 that includes an extensible framework using PeopleCode application classes and Integration Broker to make building integrations simpler. In Feature Pack 1 (May, 2009) we introduced the Constituent Web Service that supports the integration of constituent data between Campus Solutions and other systems in a higher education IT topology. In Feature Pack 3 (July, 2010) we introduced Admission Applications Web Services (AAWS) that support the provisioning of an applicant through the process of saving and submitting an application, ensuring the application data is captured from an online “form” and processed through delivered staging tables. In Additional Features January 2011, we introduced Student Financials web services that support the initiation and completion of Admissions Application Fee payment utilizing the hosted payment framework. For Additional Features July 2011, we turned our attention to providing web services that support business processes related to enrollment and delivered an initial set of Enrollment Web Services that support browsing your course catalog, searching your class schedule, and providing the detailed display of enrolled classes to a student. In Additional Features October 2011, we plan to deliver two additional web service operations which are expected to support enrollment transactions. We plan to continue to construct and deliver additional services with our Continuous Delivery model. It is our intention for customers to utilize these delivered web services as they construct custom user interfaces they wish to deploy to their student, applicant and faculty communities.

Because the use of web services is relatively new within the Campus Solutions product, Oracle plans to support the implementation of service-enabled features with new documentation. Traditional PeopleBooks will continue to support implementation of PeopleTools-based features. However, Oracle also has created a series of “Web Services Guides” that will help customers understand how to implement delivered new technology. These already include:

- PeopleSoft Campus Solutions Constituent Web Services Developer’s Guide (May, 2009)
- PeopleSoft Campus Solutions Affiliations Developer’s Guide (May, 2009)
- PeopleSoft Campus Solutions Admissions Applications Users’ Guide (July, 2010, Updated July 2011)
- Enrollment Web Services User Guide (July 2011)
- Enrollment Web Services Developer’s Guide (July 2011)

Updates to the Enrollment Web Services User and Developer’s Guides as well as Admission Applications Web Services User and Developer’s Guides are planned for Additional Features.
October 2011. Customers should visit My Oracle Support PeopleSoft Enterprise Campus Solutions 9.0 Documentation Home Page (Doc ID 751540.1) for access to current PeopleBooks, delivered User and Developer guides, and for updated EWS and AAWS User and Developer’s Guides when Additional Features October 2011 is made available. In addition to PeopleBooks and these new guides, customers should be familiar with how to use PeopleTools integration technologies, including Integration Broker.

Campus Solutions Enrollment Web Services (EWS) Phase 2

One of the primary objectives in utilizing SOA is to provide Campus Solutions customers with the ability to use a tool of choice to build and deploy “front end” user interfaces with appropriate institution specific attributes. This provides the institution with the ability to manage the design, look, and feel of the self service experience as well as offer certain activities and transactions to a broader set of devices. Focusing our efforts on providing web services and expanded data elements allows us to concentrate on defining fundamental application business technology and functionality that can be deployed to various devices regardless of the design of a user interface (UI). Because the planned Enrollment Web Services comply with World Wide Web Consortium standards, they can be utilized by various end user devices (such as a browser or a smart phone), enterprise applications or any other third-party software that can interface through standards-based design. EWS can be used by:

- Oracle presentation technologies such as Portal, Application Developer Framework, and PeopleSoft components and pages
- Oracle middleware such as Enterprise Service Bus and BPEL
- Oracle applications such as PeopleSoft, Enterprise One, and Oracle E-Business Suite
- Third-party presentation technologies
- Third-party middleware and applications

Shopping Cart Web Service Operations and Enrollment Request Web Service Operations

Institutions have different needs, requirements and preferences for interacting with their students during the enrollment process. It is essential that the interaction with the student offers information rich transactions with simplicity and convenience. The user interface through which a student interacts with the institution can vary widely from conventional web browser based methods to a range of current generation handheld devices (smart phone, tablets, etc). In order to facilitate this flexibility a suite of web services is planned to support the Self Service Enrollment process regardless of the user interface technology deployed at an institution. All these services have been designed based on the existing functionality for Student Self Service. These services do not address the functionality for other roles like an Administrator, Faculty,
Adviser, etc. Additional services that support transactions performed by these other roles are planned for a future release.

**Shopping Cart Web Service**

The existing student enrollment Shopping Cart self service functionality is planned to be exposed through a web service (SCC_SHOPPING_CART) which will have the following service operations:

- Add a class or classes to the enrollment shopping cart (SCC_SC_ADDITEM)
- Clear classes from the enrollment shopping cart (SCC_SC_CLEARCART)
- Retrieve and view the classes in the enrollment shopping cart (SCC_SC_GETCART)
- Retrieve a particular class section from the enrollment shopping cart (SCC_SC_GETITEM)
- Checkout (Enroll) a class or classes from the enrollment shopping cart (SCC_SC_CHECKOUT)
- Remove a class from the enrollment shopping cart (SCC_SC_REMOVEITEM)
- Save multiple classes to the enrollment shopping cart (SCC_SC_SAVECART)
- Perform Pre Enrollment validation (SCC_SC_VALIDATE)

The Shopping Cart Service being applied to Enrollment actually utilizes a Shopping Cart Framework which is also targeted for delivery in Additional Features October 2011. It is anticipated that this framework will provide a generic service with the service operations described above which can be adopted and applied to any Campus Solution module requiring specific shopping cart features. The Shopping Cart Framework supports functionality commonly found in shopping cart business processes and can be extended by any feature needing a “cart”. Advantages of a framework approach are:

- The effort in building a module specific shopping cart is greatly reduced and maintenance is improved.
- This design allows an adopting feature to own and manage its “own” shopping cart data and custom business logic.

We plan to deliver the Shopping Cart Framework as a Campus Community shared component. For information, refer to Campus Community PeopleBooks by visiting My Oracle Support PeopleSoft Enterprise Campus Solutions 9.0 Documentation Home Page (Doc ID 751540.1) when Additional Features October 2011 are available.

**Enrollment Request Web Service**

In order to allow students to manage enrollment, the Enrollment Request service (SSR_ENROLLMENT) is targeted to include the following operations:
• Add a class (SSR_ADD_ENROLLMENT)
• Drop a class (SSR_DROP_ENROLLMENT)
• Swap an existing enrolled class for a different class (SSR_SWAP_ENROLLMENT)
• Edit existing enrollments (SSR_EDIT_ENROLLMENT)
• Validate a potential class enrollment prior to checkout in the shopping cart. (SSR_ENR_VALIDATE)

Update to the Get Classes Service

Introduced in Additional Features July 2011, the SSR_GET_CLASSES web service supports the ability to search for classes and to view the class search results. A new service option under the Get Classes service is planned for Additional Features October 2011. The Student Enrollment Options service operation represents the enrollment options for the selected class (for examples, if variable credit can be specified or if there is a related class section) in the enrollment request action by a student. A user interface would need to invoke this operation first to obtain Enrollment Request Defaults. It would then pass the response values as a request for invoking subsequent operations such as the shopping cart or the enrollment service.

There are general enrollment edits and specific enrollment edits performed by Enrollment Web Services. The general edits include: the student is active in the term, eligible to enroll, active in a program and plan, not withdrawn for the term, has the self service enrollment permission list, and (if appointments are used) has a valid appointment. There are also edits specific to an enrollment action. For example, the edits for the Add enrollment action include determining if the class number is valid for the term, are there career rules to be invoked, is an open entry open exit class allowed, is there an existing enrollment, and has the last date to enroll passed.

Scope of Data: Entities and the Entity Registry

An entity is an object that provides access (view, create, update) to data in a record and is implemented through an application class. By design, an entity is the primary point of access to the underlying records which avoids potential inconsistencies of having the same logic in multiple places. This helps in making relevant code reusable and maintenance easier.

In July, 2010, we introduced an innovative structure called the Entity Registry in which data is defined and organized. The Entity Registry stores entity records, application classes, properties and entity relationships. It stores the information relevant to building XML and has utilities for generating schemas and generating base code which can then be modified. The Entity Registry is a comprehensive source that defines the XSD (XML Schema Definition) for Campus Solutions core tables and the data they contain. The entities for core data records within the Enrollment and Course areas are delivered within the Entity Registry component. (Navigation: Set Up 3. ACR > System Administration > Entity > Entity Registry). As we continue to deliver web services we will
also continue to deliver entities which reflect the data and logic that they recognize and transform. However, an important property of the Entity Registry is its ability to extend and support custom records and data elements. Entity data is considered system data and is necessary for the correct functioning of EWS as it stores all the details of the entities being delivered as part of EWS.

There are four new entities planned for delivery in Additional Features October 2011. They are:

<table>
<thead>
<tr>
<th>ENTITY</th>
<th>DB_RECORD</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Shopping Cart</td>
<td>SCC_SHOPCRT_WRK</td>
<td>Course Shopping Cart is the parent entity that represents the underlying fields of the record SCC_SHOPCRT_WRK. This entity is used to identify the functional area (Student Records, Student Financials, etc.) that is specific to the “cart” in which the request is being made. In the case of the enrollment shopping cart, we deliver an element SCC_SHOP_CART_TYPE which will be set by the UI to ‘COURSE’ in the request xml.</td>
</tr>
<tr>
<td>Course Shopping Cart Item</td>
<td>SSR_REGFORM</td>
<td>This is a child entity of Course Shopping Cart and represents the actual course shopping cart item table (SSR_REGFORM) into which the shopping cart items are saved.</td>
</tr>
<tr>
<td>Enrollment Request Header</td>
<td>ENRL_REQ_HEADER</td>
<td>This entity represents the ENRL_REQ_HEADER which has the unique enrollment request ID for every enrollment request in addition to fields like enrollment request source, enrollment request status, etc.</td>
</tr>
<tr>
<td>Enrollment Request Detail</td>
<td>ENRL_REQ_DETAIL</td>
<td>This is a child entity of the Enrollment Request Detail that holds the actual enrollment request (Add/Drop/Edit/Swap) data.</td>
</tr>
</tbody>
</table>

For detailed information about Entities and the Entity Registry, refer to the Campus Community Fundamentals PeopleBook chapter called “Setting Up Entity Registry” delivered as part of the CS 9.0 Bundle #22 Functional Documentation (July 2011) Doc ID 1342836.1 (included inside the CS_Bundle_22_Campus_Community_9_0.pdf) at the My Oracle Support PeopleSoft Enterprise Campus Solutions 9.0 Documentation Home Page (Doc ID 751540.1).

List of Values Service

Self-service user interfaces constructed using tools external to your PeopleSoft Campus Solutions database will typically contain data fields that have predefined or “prompt” values used to control and streamline data entry for a user. If you want to display these values that are setup inside your PeopleSoft Campus Solutions database, whether it is for a prompt field or a field that contains translate values, you can take advantage of the List of Values Web Service (SCC_GET_LOV introduced in Feature Pack 3, July 2010) to do so. This delivered web service recognizes and provides the values that are used to populate drop-down list boxes on a user interface and for validating selections. (Navigation: Set Up SACR > System Administration > Utilities > List of Values)
For more information about List of Values, refer to the Campus Community Fundamentals PeopleBook chapter called “Setting Up List of Values” delivered as part of the CS 9.0 Bundle #22 Functional Documentation (July 2011) Doc ID 1342836.1 (included inside the CS_Bundle_#22_Campus_Community_9.0.pdf) at the My Oracle Support PeopleSoft Enterprise Campus Solutions 9.0 Documentation Home Page (Doc ID 751540.1).

**Planned Third Party Contract (TPC) Enhancements**

One of the top enhancement requests from the customers using Student Financials is in the area of Third Party Contracts (TPC) setup/maintenance and related Corporate Billing. Use of this functionality continues to expand, with different models of usage found in different countries. The variety and number of third party “sponsors” continues to grow too, from government agencies to private entities.

In the October 2011 bundle, Campus Solutions is planning to deliver new functionality to “roll” third party contracts in mass and “roll” specific students to the new third party contracts. In addition, CS plans to provide increased flexibility for Corporate billing through the use of additional user defined fields at the contract level and the student assignment level.

**Rollover Third Party Contracts**

The planned functionality to roll third party contracts in mass and the option to roll specific students to the new contracts is a three step process:

First, identify the contracts that should be copied and select the option to Assign Students to Contract:
Second, run the planned process (SSF_TPROLOVR, Rollover Third Party Contracts) to copy the selected contracts and if Assign Students to Contract has been selected, the staging table (SSF_TP_CONT_SEL) will be populated with the specified students.

Finally, the initial student assignments can be viewed and updated in the Review Results by Contract page by retrieving rows from the staging table (SSF_TP_CONT_SEL). Run the existing Assign and ReCalc (SFPTPDRV, Third Party Batch Assignment, SFPTPPRC, Third Party Recalculation) process to move data from the staging table and to post the students to the Third Party Contract.

**Additional Third Party Contract User Defined Fields:**

In order to setup, support, and manage the Third Party Contract functionality, five new user defined fields are planned at the Third Party Contract level and five new user defined fields are planned at the Assign Students to Third Party level. The Corporate Bills, Print Invoice (SSF_PRNT_INV, Print Invoices – XML Publisher) program is targeted to be enhanced to extract the new user defined fields into the XML extract. The tags SSF_INDXL_TMP and SSF_INXCR_TMP in the XML have been modified. This anticipated change is only for corporate invoices; student invoices remain unchanged.
The planned functionality will be added to the creation of a Third Party Contract to allow the administrator to enter specific information regarding this contract:

The planned functionality at the student level will be provided through a link on the Student Assignment page that will allow the administrator to enter specific information per student:

Clicking on the Additional Details link, is expected to provide a secondary page to enter any additional information required by the Sponsor for this specific student.
Beyond Additional Features, October 2011: Planned additions to Third Party Contracts

As noted in the *PeopleSoft Campus Solutions 9.0 Statement of Direction 2011, May 2011* we are planning for several additions to TPC in coming bundles.

In order to continue streamlining the Contract Setup and Maintenance, we are planning to provide the following flexibility:

- To allow for changes in “eligible charges”, a new component in TPC setup that will allow for exclusions of tree nodes.

In order to provide the mandatory information based on sponsor requirements, we are planning to provide additional flexibility in producing the invoice or an electronic file:

- Enhancements to the XML Corporate Billing file to include the student’s academic information.
- Provide the flexibility to override the template defined on the invoice layout
- Ability to inquire on global invoices to allow display of paid invoices to enable users to see which payments were applied to invoices.

In responding to the institution’s business requirements in Applying Corporate Payments, we are planning on the following capabilities:

- Enhance Group Post process to retrieve outstanding External Org ID charges by various criteria
• Enhance posting to allow student’s due dates/billing dates to be moved to the corporate account.

In responding to the institution’s business needs in viewing corporate transactions, we are planning on providing the ability to:

• Inquire/search against the corporate account transactions using various criteria.
• Display Contract Number and Contract Emplid for a payment

Conclusion

The introduction of the additional phase of Enrollment Web Services targeted for Additional Features October 2011 illustrates Oracle’s commitment to advancing an innovative architectural model for Campus Solutions that is enabled by extending services-based integration. Planned initial enhancements to Third Party Contracts will allow us to provide broader functionality in subsequent bundles and illustrate our ongoing efforts to serve a world-wide customer base. We can do this by employing a Continuous Delivery Model which provides the ability to take advantage of new and important technology and innovative design on ongoing and sustained basis. The PeopleSoft Campus Solutions 9.0 Additional Features October 2011 is intended to meet customer needs, extend value, and provide leadership for the global education community. We encourage all business areas to evaluate the content of this Additional Features bundle for applicability to their business processes.