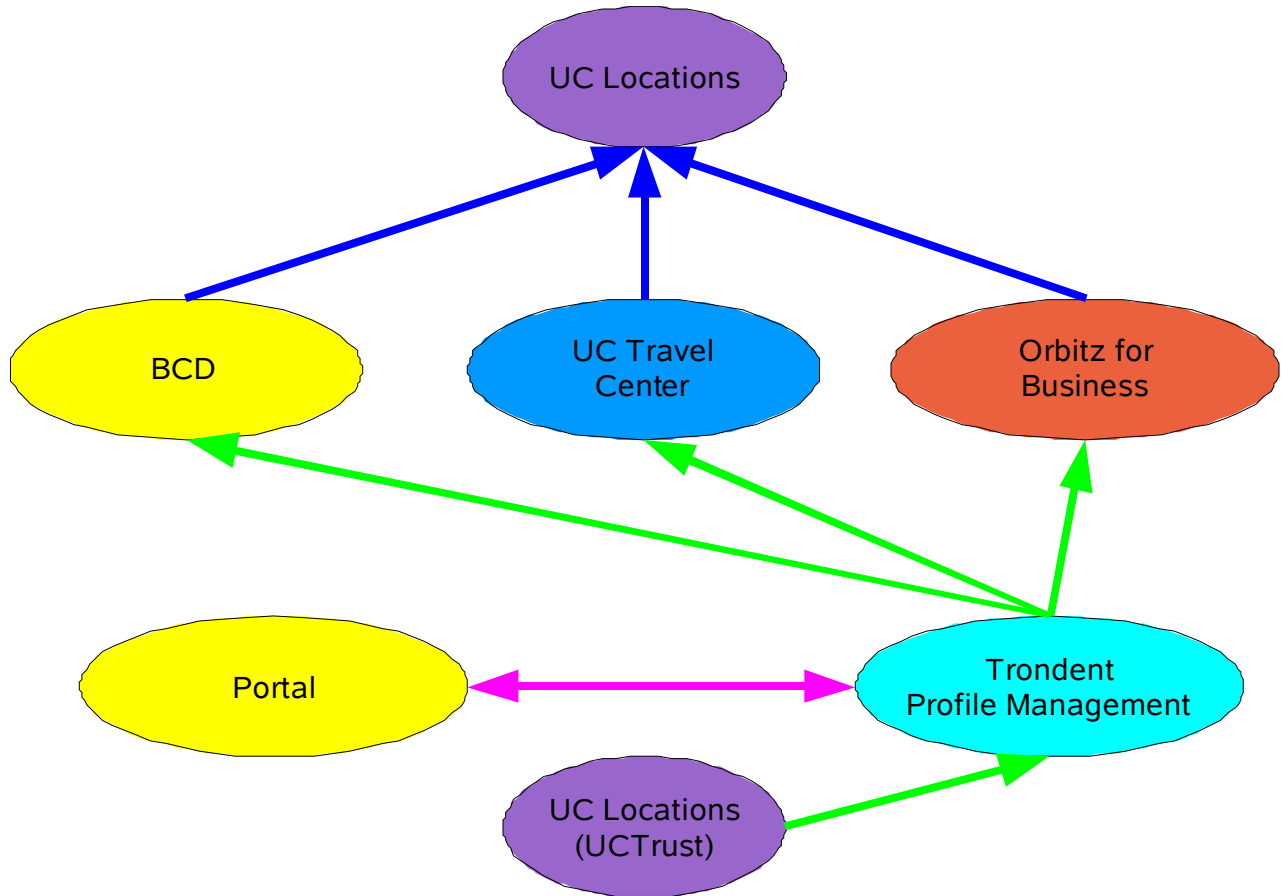


System Design Issues for Connexus

(5/1/2008)

The Connexus program provides attractive, UC-negotiated rates and terms for a variety of travel-related services, such as airlines, hotels, and car rentals to the UC community. The document provides a high-level overview of the supporting IT systems that are being implemented to facilitate access to those services. While Connexus will, undoubtedly, impact the campuses' existing business processes related to travel, a goal is to keep that impact minimal.

The following diagram illustrates the interrelations among Connexus's various subsystems.



Interfaces	
	SSO and Profile
	SSO Only
	Reports and Data

Responsibilities			
	BCD		UC Locations
	UCLA		Trondent
	Orbitz		

The following sections discuss the specifics of *User Provisioning*, *Single Sign-On*, and *Agency Processing* within this structure.

User Provisioning

Before a traveler can use Connexus, a profile must be created for that traveler. A common file format will be used by all UC locations to send information about its travelers to the Profile Management System at Trondent for redistribution to the other subsystems of the Connexus system. Much of the information in a traveler's profile may be modified by the traveler, as well as travel arrangers and agents on behalf of the traveler. The information sent includes name, electronic mail address, and other information required by Connexus and UC's travel offices. That information also includes an identifier, UCTrust's eduPersonPrincipleName (ePPN), that is unique throughout the entire UC system.

Further information about the campus profile feeds is provided in the "Connexus Profile Feeds" section below.

Single Sign-On Via UCTrust

Once a traveler's profile has been created, he or she can make use of Connexus by browsing to the UCTrust-enabled entry point provided by Trondent. If the traveler has not already logged in at their campus, they will be prompted to login by their campus at this time. This entry point will obtain the traveler's ePPN from the traveler's campus's identity management system to match with the unique identifier in the traveler's profile, and invoke the Portal. The UCTrust Assurance attribute will be sent along with ePPN so that Trondent can verify that the requirements for UCTrust Basic assurance have been met for the traveler.

As the traveler navigates to the other subsystems of Connexus (BCD, UC Travel Center, and Orbitz for Business, and the Profile Management System), the Portal will utilize Trondent-provided services in a manner transparent to the traveler to implement SSO throughout Connexus.

Sign-On for Campuses That Are Not Yet UCTrust Certified

Trondent will provide a Connexus-specific login page for campuses that are not yet UCTrust certified. When this is done, care should be taken to ensure a smooth transition to UCTrust in the future. If possible, those campuses should populate the UCTrustID profile field with the ePPNs that will, eventually, be assigned to the travelers. When this is not possible, however, it will be necessary for those campuses to send a custom field containing a unique identifier to act as a match key when ePPNs are incorporated into the profiles.

Agency Processing

The agencies (BCD, UC Travel Center, and Orbitz for Business) will work with each of the campuses to meet local business requirements for approval, ticketing, reservations, reporting, reimbursement, audit, *etc.*

There are also relationships among the agencies, the University, and the University's financial institutions to allow the agencies to bill the University for services. These are not within the scope of the Connexus project, so are not shown in the diagram above.

Connexus Profile Feeds

The following fields are required for all profile records:

- **UCTrust ID**—The UTrust/InCommon eduPersonPrincipleName (ePPN). The Maximum length is 255 characters.
- **First Name**—This is a Trondent/agency required field. The Maximum length is 50 characters.
- **Middle Initial**—Middle initial will be part of the profile feed, as it is used by the agencies to disambiguate people with similar names. Campuses that cannot provide middle initial, however, will leave this field blank. The Maximum length is 50 characters.
- **Last Name**—This is a Trondent/agency required field. The Maximum length is 50 characters.
- **Email**—This is a Trondent/agency required field. The Maximum length is 100 characters.

In addition, campuses may define additional custom fields for their local communities. For example, UCSD and UCR have defined a “Traveler ID” field that can be provided to campus back-end systems by the agencies. There are some considerations for defining custom fields:

- Any fields provided by a campus (any campus) may not be overridden by travelers. For example, campuses probably do not want to send the “Seat Preference” field, leaving that preference to each traveler.
- Custom fields that are intended to modify the business rules for agency processing, either while the user is interacting with the agency or when information is provided to campus back-end systems, will need to be negotiated with the agencies. It may not be possible for all agencies to implement all desired business rules.
- The ability to modify business rules may also be affected by other campuses' desired business rules. Compromise may be required to meet everyone's needs.

For general information, the following table shows the standard profile fields that are synchronized by Trondent to the Connexus agencies' Global Distribution Systems (GDS). The number in parentheses represents maximum allowable values those particular items. Any fields listed here that are not provided in campus profile feeds are entered by individual travelers through a Trondent-provided web application.

1. Prefix	27. Emergency Contact Relationship
2. First Name	28. Travel Arranger s (2)
3. Middle Initial	29. Use Corporate Credit Card
4. Last Name	30. Card Vendor
5. Suffix	31. Credit Card Number
6. Business Title	32. Expiration Date
7. Supervisor Email Address	33. Card Member Name
8. Email	34. Use Corporate Credit Card
9. Alternate Email Address	35. Card Vendor
10. Office Phone	36. Credit Card Number
11. Fax Phone	37. Expiration Date
12. Mobile Phone	38. Card Member Name
13. Home Phone	39. Seat Preference
14. Delivery Address	40. Seat Remarks
15. Floor/Suite	41. Seat Remarks
16. City	42. Air Remarks
17. State	43. Meal Type
18. Zip Code	44. Meal Remarks
19. Company Country Code	45. Frequent Flyer Carrier (12)
20. Home Address	46. Frequent Flyer Membership (12)
21. City	47. Bed Type
22. State	48. Remarks
23. Zip Code	49. Hotel Name (12)
24. Emergency Contact Name	50. Hotel Membership (12)
25. Emergency Contact Country	51. Remarks
26. Emergency Contact Phone	52. Car Vendor (12)

- 53. Car Membership (12)
- 54. Passport Country of Issuance (2)
- 55. Passport Number (2)
- 56. Date of Expiration (2)

- 57. Place of Issuance (2)
- 58. Visa Country of Issuance (4)
- 59. Visa Number (4)
- 60. Date of Expiration (4)

The format of the profile feeds, as well as the process for transmitting them to Trondent, is provided in the Trondent-authored document, *Profile Data Feed Process - University of California*.