University of California
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University of California, Riverside - iViews Administrative Transaction Processing Portal

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Introduction

The future of UCR’s administrative environment is the iViews (Visual Interface to Enterprise Workplace Systems) Administrative Transaction Processing Portal: *thanks to the tireless efforts of UCR’s functional and technical staffs, the future is now.*

The portal authenticates against UCR’s Enterprise (LDAP) Directory and provides single sign-on (SSO) access to an entire suite of UCR e-commerce applications via the open source CAS system (Central Authentication Services). The portal is integrated with UCR's Enterprise Access Control System (EACS) allowing 200+ campus System Access Administrators (SAAs) to directly (from their desktop, without paper) authorize access to portal-enabled systems.
The iViews portal, EACS, and single sign-on functionality have enabled UCR to accomplish many of the goals and objectives of the New Business Architecture, creating:

- A collaborative environment where staff have ready access to the tools necessary to do their job efficiently and effectively
- A workplace that allows University staff to maintain high levels of job satisfaction while providing the highest levels of customer service
- An environment where technology solutions minimize time spent processing mundane, routine transactions

The iViews portal provides campus administrative staff with the “core” campus tools that enable the university to fulfill its tri-fold mission of instruction, research, and public service.

The portal is the fulfillment of a vision established several years ago for a New Business Architecture at UCR – please visit [http://www.cnc.ucr.edu/nba/](http://www.cnc.ucr.edu/nba/) for a discussion of this vision and how the various components outlined above (single sign on, EACS, and the web) come together to facilitate UCR administrative transaction processing.

### Project Highlights

- iViews currently provides **single sign-on** access to almost 20 web-based enterprise applications, including UCR’s PeopleSoft financial system and the campus web purchasing system, eBuy. Lawrence Berkeley National Lab has adopted this authentication system after initial efforts proved efficacious at UCR.

- iViews uses **content management** to allow real-time posting, updating and archiving of important announcements and news.

- iViews includes a **comprehensive repository of online tutorials**, including Flash-based video training. iViews provides video tutorials which guide users through a tour of iViews and provides users with online assistance for the nearly 20 single sign-on enabled applications.

- iViews provides campus users with **personalized productivity tools** such as MyLinks, which allows users to create and compile their own personalized list of frequently used web sites.

iViews was deployed in April 2005 and **PeopleSoft and eBuy were integrated into the portal** in December of 2005. Since the financial and purchasing system were integrated into the portal, acceptance of the new web environment by the campus has been impressive (for example, UCR has created nearly 30,000 online, web and portal based POs).
Project Description

The iViews portal project involves three very important areas of functionality as follows:

1. The iViews portal uses open source CAS (Central Authentication Service) to allow users to "sign on" once and access systems without re-entering their usernames and passwords each time a web application is opened. There are now almost 20 applications available via iViews (including eProcurement, Webmail, data marts, etc.).

2. Once authorization has been granted via EACS, applications become available within iViews as soon as users supply their usernames and passwords. UCR NetID, an enterprise-wide user id, is the required username. Please note that EACS is a multi-faceted authorization system; for example, SAAs visit this single web system to grant access to campus data marts, to allow utilization of the campus purchasing system and assign purchasing authority (e.g. $10,000 for computers, $1,000 for miscellaneous purchases), and to assign routing where and where required (e.g. for the campus travel system).

Importantly, ALL PeopleSoft applications receive authorization via EACS. Via this single web interface, SAAs may assign granular portal access to a myriad of PeopleSoft web based functionality (and NOT be forced to recreate these authorizations within the native PeopleSoft system).

3. The iViews portal contains links to campus news, important business announcements, and information on new and soon-to-be released administrative tools and electronic systems.

Customer Satisfaction/Testimonials

"The Enterprise Access Control System (EACS) and iViews have greatly enhanced our control environment... As the campus Controller, I appreciate the reinforcement of accountability provided by the EACS system as department System Access Administrators, who are most knowledgeable about the skill sets of their transactors, can control access to various systems quickly and efficiently... As a campus user, I enjoy the single sign-on to systems, reducing the volume of ids and passwords. The transparency of information is wonderful, I can simply review what users have access to the various systems and quickly modify access as necessary. Frequently used web sites are readily available through one location."

Bobbi McCracken, Asst. Vice Chancellor-Financial Services & Controller
Accounting Department

“My administration staff loves the ability to sign on once and access all financial and service applications. It has increased our efficiency and empowered the users to become more independent... The application is easy to use and it provides the information necessary to..."
easily evaluate and monitor users access...an outstanding, innovative contribution that supports the mission of providing the best possible administrative applications for campus departments to effectively conduct business.”

-Cherie A. Cooksey, Financial & Administrative Officer
Botany & Plant Sciences

“As the administrative manager of a large academic department, I have seen enormous advancements with the implementation of iViews, which has saved everyone valuable time and eliminated the frustration of having to remember multiple passwords. Having iViews provides a convenient entry point for all of our enterprise workplace systems. Our faculty and graduate students rely heavily on travel reporting and the online calendaring, which they also access through iViews... The Computing department staff have provided outstanding customer support throughout the rollout process of iViews and EACS, actively soliciting feedback from users and making requested changes quickly, often with additional enhancements the user hadn’t even thought of... It would be a dark day indeed if we had to go backwards in time and lose iViews and EACS.”

-Millie Garrison, Financial & Administrative Officer
Entomology

“As an administrator for my department, iViews ability to work with the campus access control system helps me tremendously. I can grant department employees access to any application controlled by iViews in one action, saving me time. Also, the iViews screen has easy access to reference tools, campus information and training sites that I use on a frequent basis.”

-Janet Mauren, Management Services Officer
Philosophy Department
Technical Overview

System guidance and oversight

Systems, tools, and information are made accessible via the iViews portal based upon input, guidance, and direction from UCR’s Financial Systems Steering Committee (FSSC) to the campus central technology organization, Computing and Communications (C&C). Importantly, the technology supporting UCR’s iViews portal can be utilized by vendor-supplied applications and by non-C&C developed systems. This allows iViews to support a robust mix of applications and services meeting a diverse array of campus e-processing needs. From a technical perspective, if an application can utilize CAS for authentication, it has the potential of being placed on the portal. For additional information on CAS, please visit http://casdemo.ucr.edu/.

Importantly, CAS utilizes UCR’s identity management systems to authenticate users (via LDAP). For more information on UCR’s identity management solutions, please visit the following URL: http://www.cnc.ucr.edu/iviews/enterprise_dir/

The campus Central Authentication Service (CAS) provides single sign-on access to iViews and the systems to which it currently enables access. The freely available Central Authentication Service was originally developed by Yale University and has since become a JA-SIG project.

User Authorization and Single Sign-on (SSO)

Authorization is provided by the campus Enterprise Access Control System, an Oracle-based system that holds information about users and the permissions they have been granted. Permissions are granted by campus Systems Access Administrators (SAAs) via a web interface. For more information on EACS, please visit the following URLs: http://www.cnc.ucr.edu/iviews/enterprise_acc_control/

Authorization granularity varies by application; moreover, in many cases, EACS also provides applications an as needed routing engine. In some cases, authorization may be “read only” access (e.g. authorization to use the campus data warehouse). In other cases, the authorization may be extremely granular (e.g. for the campus Purchasing system, access may be granted or not granted (with varying dollar amounts) to 100s of campus purchasing agreements governing terms and conditions with a myriad of vendors).

Please note that vendors or non-C&C applications may use EACS for authorization by connecting to the Oracle-based system using industry standard tools such as the ODBC protocol.

Implementation Timeline

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<tr>
<th>Milestones</th>
<th>Time to complete</th>
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Complete work to enable CAS single sign-on for all Authorized Applications 18 months
Design and development of the portal interface 6 months
Addition of personalized My Links capability 1 month

The iViews portal was launched in April 2005.

Importance and Relevance to Other Institutions

The Central Authentication Service (CAS) which iViews and all authorized applications use to provide single sign-on capability, is an open source program. UCR has shared this single sign-on technology with Lawrence Livermore National Laboratory. For more information about UCR’s implementation of CAS, see http://casdemo.ucr.edu/.

In addition, the use of CAS single sign-on for authentication (and the associated campus identity management system) and EACS for authorization enables UCR to easily comply and work with federated identity management methodologies such as UC Trust and Shibboleth.

Systems currently available via the iViews Portal

<table>
<thead>
<tr>
<th>Acronym or Nickname</th>
<th>Description</th>
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<tbody>
<tr>
<td>Webmail</td>
<td>Campus e-mail System</td>
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<tr>
<td>eCalendar</td>
<td>Campus Calendaring System</td>
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<tr>
<td>eTravel</td>
<td>Travel Planning Expense Reporting Systems</td>
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<tr>
<td>PAMIS</td>
<td>Proposal &amp; Award Management Information System</td>
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<tr>
<td>UCRFStotals</td>
<td>Campus Financial and Budgetary Data Warehouse</td>
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<td>SuperD.O.P.E.</td>
<td>Campus Payroll Expense Data Warehouse</td>
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<tr>
<td>Mail Services</td>
<td>Mail Services Work Order and Reporting System</td>
</tr>
<tr>
<td>Communications</td>
<td>Communication Services Work Order &amp; Reporting System</td>
</tr>
<tr>
<td>EACS</td>
<td>Enterprise Access Control System</td>
</tr>
<tr>
<td>Physical Plant</td>
<td>Physical Plant Work Order and Reporting Systems</td>
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<tr>
<td>Printing &amp; Reprographics</td>
<td>Printing and Reprographics Work Order &amp; Reporting</td>
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<tr>
<td>Web Recharge</td>
<td>Campus Web Recharge System</td>
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<tr>
<td>eBuy</td>
<td>Campus web-based catalog and general purchasing system</td>
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<tr>
<td>FMS</td>
<td>Facilities Management System</td>
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<tr>
<td>My Links</td>
<td>Utility for Managing and Customizing Portal Quick Links</td>
</tr>
<tr>
<td>PeopleSoft</td>
<td>Campus Financial System</td>
</tr>
<tr>
<td>Hazardous Materials Shipping</td>
<td>Hazardous Materials Shipping Request and Reporting System</td>
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</tbody>
</table>
iViews main page (user not logged in)
CAS authentication for single sign-on access to iViews
iViews main page showing user logged in
iViews showing single sign-on enabled Travel application in foreground
iViews showing Highlights section in foreground
EACS grants access to eBuy for iViews user
The future of iViews
Vision for the future of iViews

Upcoming Authorized Applications

A new web version of UCRFS has recently been deployed and a new web Purchasing system (eBuy) is also now available from within the portal. Applications that will be added to the portal in the near future include:

- CIRS – Course Information Reporting System
- HR Academic Personnel
- Cost Center and Project Code Request System
- Fleet Services Reservation System

Upcoming Personalization Features

In addition to these applications, the portal is being enhanced to include more personalization features such as:

My News: Allows users to create their own news section. The portal makes use of RSS to provide this service to users.

My Channels: Allows users to create additional areas in the portal interface, which include information that helps them work more productively and efficiently.

Site URL
http://iviews.ucr.edu

Submitted by

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