"I think R'Mail is an excellent idea. Google has been making a lot of innovations in cloud computing and other web based services. Why host a local e-mail server at UCR when Google can do it? Good work CNC."

–Senior UCR Student

Overview

There is no denying that the past few years have been tough for the University of California. The economy and ensuing state budget crisis has meant fewer and fewer dollars to support important campus services like e-mail. However, e-mail has been, and will continue to be, a pivotal part of ensuring student success, offering an interesting challenge to UCR. A new approach was in order; outsourcing student mail to Google with favorable terms for UCR was the goal. In addition to the predictable improvements to the student experience, making the transition to R'Mail for students has made it possible to enhance e-mail service to staff and faculty as well, by decreasing costs ($50,000 in annual support alone) and freeing up valuable system resources.

Better, more economical, more efficient, and more robust e-mail services for all is the result.

With over 7GB of e-mail storage, server-side virus scanning of all e-mail messages, web-based access, and POP/IMAP access, UCR student e-mail accounts provide students with a high level of flexibility and security.
Highlights

- **Instant access to R'Mail** – New students are given a UCR Net ID and e-mail address after submitting their Statement of Intent to Register.

- **Campus Identity** – The new e-mail provides the same UCR identity it always has with an @ucr.edu address.

- **Users** – A total of 44,151 users were migrated from Webmail to R'Mail. Currently, there are 49,473 students using R'Mail today.

- **Contract Terms** – UC successfully negotiated for no advertising, UCR branding, no data mining, student accounts for life, and provisions for responding to eDiscovery and other legal and student judicial requests.

- **Impact on Student Success** – With enhanced collaboration tools such as Google Docs and Calendar, UCR is able to offer a broader and richer array of services for students.

- **Access** – Versatile access is available on the web, through a student's favorite desktop client using IMAP or POP, and even on their smartphone device.

- **Continuity** – R'Mail accounts have no expiration date; they last a lifetime. This enables UCR to stay in contact with alumni, allowing seamless continuity. Previous graduates are also able to obtain R'Mail accounts.

- **Storage** – R'Mail's storage space continues to grow, and is currently over 7GB per account.

- **Future Potential** – Integration between Blackboard and R'Mail will be made possible with the use of Bboogle Collaboration Tool.

- **Budget Savings** – C&C was able to take 2 legacy mailstores off Mirapoint annual support contracts at a cost savings of more than $50,000. Within two years, Mirapoint annual support costs should be zero.

- **Liberating campus resources** – Not only was the transition economical for the campus but it has also freed up IT support staff to work on other projects.
Going Beyond E-mail

R'Mail is being used for more than just e-mail. As of today, more than 20,000 documents have been created using Google Docs.

R'Mail offers a variety of web-based Google applications:

- **Calendar** – Students can organize their schedules online for easy access, and share events with friends. Calendars can even be shared with faculty and staff using Exchange.
- **Documents** – Store files online for easy access, and share documents, presentations and spreadsheets.
- **Sites** – Create websites and secure group wikis.
- **Groups** – Students are able to communicate and collaborate with fellow classmates, organizations, and friends for projects, planning, and more.

Project Details: Technology & Implementation

**Authentication and Account Provisioning**

Integrating R'Mail into the University’s identity management and single sign on (SSO) systems was a key requirement of this project. Student accounts are also auto-provisioned.

Google supports SSO through the SAML 2.0 protocol, so UCR’s Central Authentication Server (CAS) system was modified to support this. Importantly, usernames within R'Mail and the campus identity management systems needed to match. Google’s directory sync tool was used to ensure that students were properly provisioned on R'Mail, and that attributes matched appropriately.

**Migration Process**

The process of moving legacy e-mail from the campus Webmail system into Google took about six months. Two of the six months involved writing migration code.

The actual migration code was written in Java and utilized the well-publicized Google Apps API provided by Google. Additionally, a migration database was put into production to keep track of students that had been migrated already so that content on the R’Web student portal could be updated to reflect the new e-mail location.

**Filtering**

R'Mail offers automatic spam filtering. All incoming e-mail passes through UCR’s graylisting and real-time block list filters. Messages that are not blocked as spam by UCR's antispam filters will then go through Google's spam tagging filters.
**Timeline**

<table>
<thead>
<tr>
<th>Period</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Fall 2009</td>
<td>R'Mail initial pilot to approximately 100 students</td>
</tr>
<tr>
<td>Winter 2010</td>
<td>Pilot expanded to approximately 1,300 students</td>
</tr>
<tr>
<td>May 2010</td>
<td>C&amp;C conducted a survey of student feedback from the pilot</td>
</tr>
<tr>
<td>May 17th, 2010</td>
<td>Presentation of R'Mail features &amp; functionality, pilot overview, and discussion to deploy to entire student body</td>
</tr>
<tr>
<td>May 21st, 2010</td>
<td>R'Mail web support site update</td>
</tr>
<tr>
<td>May 24th, 2010</td>
<td>Scotmail announcement of deployment sent to campus students, staff, and faculty</td>
</tr>
<tr>
<td>June 2nd, 2010</td>
<td>Continued announcements of deployment</td>
</tr>
<tr>
<td>June 15th, 2010</td>
<td>Migration process begins for enrolled students</td>
</tr>
<tr>
<td>June 25th, 2010</td>
<td>Complete migration of SIRed students to R'Mail</td>
</tr>
<tr>
<td>July 15th, 2010</td>
<td>Complete migration of enrolled students to R'Mail</td>
</tr>
</tbody>
</table>

**Feedback**

“R'Mail is so much easier to navigate and is more high tech than Webmail. Here, I can save my contacts instead of trying to spend hours attempting to find an old e-mail. Please keep R'Mail! I can’t go back to Webmail.”

— Freshman UCR Student on 5/11/2010

“I am absolutely thrilled about receiving 7.5 GB of space. There is no more need for me to be concerned about running out of space and not receiving a message due to quota issues. I know now that every message sent to me will be received. All of my e-mail now goes to my R'Mail, and I love every feature of it. From iPhone Contact, Calendar, and Mail push synchronization to a fully integrated Outlook features, R'Mail is amazing, Google is amazing, and you have a very happy client.”

— Junior UCR Student on 5/11/2010

“I think R’Mail is an excellent idea. Google has been making a lot of innovations in cloud computing and other web based services. Why host a local e-mail server at UCR when Google can do it? Good work CNC.”

— Senior UCR Student on 5/11/2010

“Using the Google interface for e-mail is the move UCR needs to make. R’Mail has modernized my online experience with UCR. Webmail is outdated and difficult to use. Most students already have Gmail accounts and using R’Mail will not be a difficult transition for them.”

— Senior UCR Student on 5/11/2010

“R’Mail is really easy-to-use and since most incoming students are familiar with Google it makes it easy for people to get used to it. Getting access to Google’s full line of products (Voice, Chat, Video, Books, Scholar, etc.) can make it easier for everyone to communicate and be actively linked to all your classes.”

— Sophomore UCR Student on 5/19/2010
On the Web
- Application site: http://rmail.ucr.edu
- Support site: http://cnc.ucr.edu/rmail

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