Reed College integrated **Etrieve by Softdocs**™ with their campus portal to extend secure, anytime document access to the entire Reed community.

"In close communication with our developers, the Softdocs Development team fast-tracked the creation of APIs needed to seamlessly present certain Etrieve documents through our web portal."

SHAYONA ROBERTS
SENIOR DATA/APPLICATIONS ANALYST

KEY PLAYERS
▶ Kerri Creager, Director, Administrative Computing Services
▶ Shayona Roberts, Senior Data/Applications Analyst
▶ Shannon Henderson, Senior Programmer Analyst-Web
▶ Marianne Colgrove, Director of Web Support Services & Deputy Chief Information Officer

CHALLENGES
▶ Leveraging a document management platform with an end-of-life date, a new solution was needed
▶ New solution needed to integrate with ERP and institution's web portal
▶ Also interested in implementing electronic forms and workflow

SOLUTIONS
▶ Ellucian Banner 9
▶ Integrated Reed Information System (IRIS)
▶ Etrieve by Softdocs
  ▪ Etrieve Content™
  ▪ Etrieve Forms™
  ▪ Etrieve Flow™

REED COLLEGE
PORTLAND, OREGON

Reed College is a 4-year, independent liberal arts and sciences college located in southeast Portland, Oregon. Providing over 40 majors and programs to students seeking a bachelor of arts degree, Reed also offers a graduate program for students interested in obtaining a master of arts degree in liberal studies. Student FTE is around 1,500.

Having previously migrated from Singularity to NolijWeb, Reed College recognized the opportunity for digital evolution after receiving *yet another* acquisition notice and end-of-life date concerning their ECM solution.

Perhaps best represented by its 10:1 student-to-faculty ratio, Reed College is an institution fully committed to serving engaged learners. From the conference-style classes it provides, to the very systems within its technology stack, this commitment requires Reed's continued emphasis on digital evolution as a way to meet the changing needs of the modern student.

For years, Reed had supported key applications and systems of record by utilizing enterprise content management (ECM). These solutions had made it possible for faculty to more efficiently serve students, and extended the Reed community's ability to access certain documents online.

In 2018, facing the NolijWeb software's end of life, the institution conducted an exhaustive search for a solution and vendor that would prove to be a long-term, strategic fit for the departments already leveraging ECM and those still reliant on paper-heavy processes.

"After vetting the available ECM platforms on the market, we chose to move ahead with Softdocs as our ECM partner for the future," said Shayona Roberts, Senior Data/Applications Analyst at Reed College. "We knew we needed a modern, web-based solution—something that would play nicely with the Macs we use on campus, was intuitive and would be easy for our users to navigate. Etrieve checked every box."

"In addition to building upon the successes we've experienced leveraging document management, Etrieve puts us in position to begin implementing electronic forms and automated workflows. We're excited for the impact this functionality will have on our ability to serve the Reed community."

Digital Evolution

Reed's implementation of the Etrieve platform began within departments already familiar with the benefits of document management. Roberts and her team, supported by Softdocs' implementation consultants, spearheaded the institution's initial migration efforts within the Registrar and Financial Aid offices. The top priority was the migration of all documents stored within the institution's current ECM solution.

"Digitizing paper forms and paper-heavy processes takes time. We've found that the most crucial step is to completely understand each department's processes and what exactly they are trying to accomplish at every stage," said Roberts. "Obtaining this understanding allows us to diagram each configuration piece, define key fields and receive signoff on all decisions—before setting anything up within Etrieve."

These efforts continued, department by department, as Roberts met with leaders and end users to discuss the amount and types of documents they needed to migrate. From initial Discovery to Final Conversion, Roberts and her team were able to bring additional departments online every 4–6 weeks, including Admissions, Special Programs, Academic Support Services, International Student Services, Dean of Students, Human Resources, Finance and Payroll.

"As word got around about the successful implementations of Etrieve Content, we were approached by other departments that were interested in replacing filing cabinets and hard copy files with Etrieve's online content repository," Roberts said. Many departments were interested in Etrieve for digitizing certifications and other stored hard copy files. For other areas around campus, the interest in ECM was centered around the possibilities provided by electronic forms, prepopulating data and automated workflows.

"Instead of recreating what existed within NolijWeb or how things work through paper forms, we are helping our departments define what they want us to build for them. By pulling in data from databases, we're able to prepopulate key fields and construct complex workflows that route information exactly where it needs to go."

Integrating Etrieve

To integrate Etrieve with Ellucian Banner, Reed's ERP, a link server was set up between the Etrieve database and the Oracle database, where the Banner tables live. SQL stored procedures leverage the link server to pull data out of Banner, manipulate it and pass the data through Etrieve's Imports functionality designed to pull that data in. Each day the institution downloads and automatically indexes College Board documents for Financial Aid, leveraging a perl script in conjunction with Imports within Etrieve and stored procedures on the SQL server.

Recognizing the role that ECM plays in support of key campus systems, Reed College not only wanted to develop robust integrations between Etrieve and Ellucian Banner, but also with the Integrated Reed Information System (IRIS). A password-protected portal through which students, faculty, staff and alumni can access needed information through multiple apps, IRIS is integral to the student experience at Reed. Wishing to provide effective integration and use of single sign-on between Etrieve and IRIS, Reed realized that additional APIs would be needed. This strategy would allow them to display documents, living in Etrieve, and provide access to required e-forms through the portal.

"We worked with the Softdocs Development Team to build specific APIs which allowed our Registrar's Office to go live with Etrieve," said Kerri Creager, Director of Administrative Computing Services. "We now use these APIs to display Etrieve documents through IRIS, as well as forms that are pushed into Etrieve as documents—once a user logs in and submits them."

Currently these forms include an Academic Advising Questionnaire and a Health Insurance Waiver Form.

"While we could have set up our students and faculty as users in Etrieve, we didn't want to introduce a new system—and the need for another password—to our community," said Creager. "Instead, we coordinated with Softdocs on the creation of APIs needed to present Etrieve documents through our central web portal."

Realizing the flexibility and communication benefits of the requested APIs, Softdocs asked Reed to serve as a Customer Development Partner. Roberts and others met with Softdocs developers every few weeks to help advise on the functionality of Etrieve's newest RESTful API. The Softdocs Development Team, following an agile methodology, presented developed features to Reed for testing, following each sprint. Reed and Softdocs would then discuss, before Softdocs' developers entered another sprint to make additional, incremental changes. This approach not only sped up the development of the needed functionality, but also ensured the APIs were exactly what was needed by the institution.

Continued Transformation

With Etrieve firmly positioned across campus, the focus for the future lies with expanding the institution's utilization of electronic forms and workflows. In addition to working with multiple departments to determine needed forms, Roberts and her team are converting all current fillable PDFs into e-forms. Recreating these fillable PDFs within Etrieve allows faculty to automatically route completed forms through workflows and integrate with Banner, eliminating the inefficiency in emailing PDFs for review/approval and walking copies around campus.

Accentuated by recent disruption, Creager also hopes to begin to shift more items from on premise to the cloud, including Etrieve. "These days you must be able to effectively operate with a lean team. We need to spend our time cross training on applications and assisting our end users, and not worrying about applying updates or software maintenance. We know that going to the Cloud will allow us to do that."

Expansion of Etrieve Content, Etrieve Forms and Etrieve Flow across campus, shifts to integration through APIs, and forward-thinking deployment initiatives are just some of the ways that Reed is using digital and operational evolution to fuel its commitment to providing a superior student and staff experience.