



# OCI GRAILS CASE STUDY: MAJOR PUBLIC UNIVERSITY

## RELEVANT BACKGROUND

Our client is a U.S.-based public research University. With over 80,000 users accessing its internal database on a daily basis, our client identified Grails as a modern web framework that would seamlessly manage their complex requirements in the short term, and also accommodate changes and enhancements for the long term.

## CHALLENGES

The University's technology departments were decentralized, which created a unique problem for their core technology team. Each department had different demands but utilizing a decentralized system introduced major security and interoperability concerns.

The University's internal database supported 80,000 daily users, including students, staff, faculty, and contractors. The database is also accessible to 500,000 alumni.

The system must be highly responsive and always performant. System failure would affect tens of thousands of users and create major chaos, especially during peak-use times, like school admission season.

## PROJECT GOALS

Modernize the University's database to accommodate future growth	Create a flexible business solution for RESTful interfaces and UI using Open Source technologies	Reduce the accumulation of technical and process debt	Develop tools to be used by multiple departments, independent of the Open Source platform in use	Ensure continuity of existing efforts (e.g., data synchronization) and system security
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## OCI'S CONTRIBUTION

Our Grails team implemented an informal training program that helped the University's technical staff get up to speed on the Framework before full implementation.

OCI also contributed to the following key aspects of this project:

- Replacing legacy scripts to synchronize student and faculty data
- Integration of proprietary and Open Source databases and applications with one another
- Microservice-oriented architecture with several Grails applications running and interacting
- Multiple data sources with master data (Oracle Databases)
- Inter-application notifications with ActiveMQ and REST
- Front-end Grails applications for administration and user interface

Our client selected the Grails Framework because of its extensive library of plugins and its ability to reduce the complexity of building web applications and backend systems on the Java platform.

## CLIENT TESTIMONIAL



*"I'll take all the [OCI Engineer] I can get. I have a great deal of respect for [him], and I know that he won't put his name on something that isn't up to his standards."*

## ABOUT GRAILS

- Accelerates web application development
- Supports exponential scaling
- Maximizes "convention over configuration"
- Deploys well within existing, complex environments
- Provides necessary flexibility to develop plug-ins, and to quickly address and resolve issues

## OCI ADVANTAGES

- 25+ years' experience with Open Source product development and building high-performance, real-time, mission critical systems
- Grails co-founders lead the OCI Grails team, along with subject matter experts from around the globe
- Customizable library of training materials, delivered by practicing software engineers and subject matter experts
- Experts in Open Source Solutions: partnering with clients to determine where and when Open Source can add value and reduce technical debt

**We write some of the world's most powerful software solutions, are deeply committed to Open Source, and have trained over 50,000 developers. We proudly sponsor the Grails framework and stand ready to help you enhance your Grails journey.**

**Please contact us today to discuss your next Grails project.**