

UC Outside Activity Tracking System (UC OATS)

Project Information

The UC Outside Activity Tracking System (UC OATS) is a multi-campus collaboration formed to facilitate the reporting and tracking of Outside Professional Activities (OPA) and identify potential cases of Conflict of Commitment (COC). UC OATS is an interactive, web-based application that enables faculty to comply with the University of California, Conflict of Commitment policies outlined in the Academic Personnel Manual (APM).

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Project Team:

UC OATS has three teams and a multi-tiered governance structure to ensure a balanced UC-oriented approach to the design, implementation, and enhancement of the application.

Governance Board	Working Group	Technical Partner
<p>University of California, Berkeley (UCB) Fiona Doyle, Ph.D., Vice Provost, Graduate Studies Heather Archer, Assistant Vice Provost, Academic Personnel</p> <p>University of California, Davis (UCD) Binnie Singh, Assistant Vice Provost, Academic Affairs Brent Siefert, J.D., Assistant Dean, Academic Personnel – School of Medicine</p> <p>University of California, Irvine (UCI) Marianne Beckett, Assistant Vice Chancellor, Academic Personnel Max Garrick, Assistant Director, IT</p> <p>University of California, Los Angeles (UCLA) Michael S. Levine, Ph.D., Vice Chancellor, Academic Personnel (<i>Governance Board Chair</i>) Erika Chau, Executive Director, Academic Personnel Office George Morris, Associate Dean of Computing, DGSOM and Deputy Chief Information Officer, DGIT, UCLA</p> <p>University of California, Merced (UCM)</p>	<p>University of California, Berkeley (UCB) Stacey Shulman, Director, Academic Personnel Nicole Lesser, Business Systems Analysts, Academic Personnel</p> <p>University of California, Davis (UCD) Kim Poole, Manager, Academic Affairs</p> <p>University of California, Irvine (UCI) Jami Holland, Assistant Director, Academic Affairs Ilona Pak, Principal Academic Personnel Analyst Shelia Morris, Executive Director of Academic Affairs and Faculty Compensation</p> <p>University of California, Los Angeles (UCLA) Bill Holloway, Senior Director, Enterprise Applications, DGIT (<i>Working Group Co-Chair</i>) Mary Tam, Academic Personnel Office</p> <p>University of California, Riverside (UCR) Sara Umali, Director of Academic Personnel Data and Technology Danessa Murdock, Academic</p>	<p>Digital Technology (DGIT), David Geffen School of Medicine (DGSOM) at UCLA George Morris, Associate Dean of Computing, DGSOM and Deputy Chief Information Officer, DGIT</p> <p>Sherly Mosessian, PhD, Chief Administrative Officer and Director of Research Enablement, DGIT</p> <p>Bill Holloway, Senior Director, Enterprise Applications, DGIT</p> <p>Robert Dennis, PhD, Director, Software Development, DGIT</p> <p>Christy Forte, Program Manager, DGIT</p> <p>Khy Huang, Technical Lead, Developer, DGIT</p> <p>Angelique Juarez, Senior Training Specialist, DGIT</p> <p>Jodie Huang, Business Analyst, DGIT</p> <p>Gene Lacson, UI Designer, DGIT</p> <p>Sung Hong, Developer, DGIT</p>

<p>Teenie Matlock, Vice Provost for the Faculty, Professor of Cognitive Science and Founding Faculty Rich Shintaku, PhD. Senior Advisor and Chief of Staff, Office of Executive Vice Chancellor and Provost</p> <p>University of California, Riverside (UCR) David Gracey, Interim Associate Vice Chancellor and Chief Information Officer Sara Umali, Director of Academic Personnel Data and Technology Katina Napper, Assistant Vice Provost for Academic Personnel</p> <p>University of California, San Diego (UCSD) Cindy Palmer, Assistance Vice Chancellor, Academic Personnel Services Evelyn Hidalgo, Associate Dean, Academic & Staff Administration</p> <p>University of California, San Francisco (UCSF) Neal Cohen, M.D., M.P.H., M.S., Vice Dean, School of Medicine Cynthia Leathers, Chief of Staff/Assistant Vice Provost, Strategic Initiatives</p> <p>University of California, Santa Barbara (UCSB) Cindy Doherty, Director, Academic Personnel Andy Satomi, Director, Academic Affairs Information Technology</p> <p>University of California, Santa Cruz (UCSC) Grace McClintock, Interim Associate Vice Chancellor, Academic Personnel</p> <p>University of California, Office of the President (UCOP) Susan Carlson, Vice Provost Pamela Peterson, Executive Director and Deputy to the Vice Provost</p>	<p>Personnel Data and Technology Analyst</p> <p>University of California, San Diego (UCSD) Monica Gudea, Director of Faculty Compensation, Health Sciences</p> <p>University of California San Francisco (UCSF) Renee Lee, Academic Business Processes Coordinator</p> <p>University of California, Santa Barbara (UCSB) June Betancourt, Associate Director, Academic Personnel (<i>Working Group Co-Chair</i>)</p> <p>University of California, Santa Cruz (UCSC) Jenny Brown, Academic Advancement Analyst, Academic Personnel Office</p>	<p>Veronica Maria De La Cruz, Developer, DGIT</p> <p>Josue Cardona, Developer, DGIT</p>
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Background

In 2014, the two Academic Personnel Manual (APM) policies that govern faculty's Outside Professional Activities, APM 025 (revised) and APM 671 (new), were issued. Outside professional activities that

interfere with a faculty member's primary professional obligations to the University represent a conflict of commitment (COC). APM 025 and APM 671 provide guidance for the identification and management of outside professional activities in order to avoid conflicts of commitment, while assuring that faculty may engage in a wide array of outside activities without unnecessary limitations. It should be noted that faculty who serve as academic deans (APM 240) or full-time faculty administrators (APM 246) have additional restrictions on outside professional activities beyond the requirements of APM 025/671.

The Academic Personnel Directors (APDs) began discussing the need for a COC tracking system in fall 2015. Internal audits conducted on multiple campuses suggested that there was room for improvement in compliance with APM 025/671, including education, tracking, and retention of records. Historically, COC policies were managed using paper forms or simple online systems. However, there was little consistency amongst campuses in the interpretation and implementation of these policies. Faculty struggled with understanding the COC policies and their obligations to the University regarding COC.

The Vice Provosts of Academic Affairs (VPAAAs) were polled in winter 2016 about exploring a multi-campus COC system. The VPAAAs were supportive of this endeavor, and the proposal from UCLA Digital Technology (DGIT) was accepted. The proposal suggested leveraging an application developed for the David Geffen School of Medicine (DGSOM) at UCLA to support faculty in reporting and tracking outside professional activities governed by APM 671 and use it as the basis for a new UC-wide system to facilitate adherence to all COC APM policies.

The Solution

Application Features

The design of the UC OATS application is focused around helping faculty understand their reporting obligations to the University and leveraging automation as much as possible to provide faculty with the right forms to complete at the right time.

UC OATS is a web-based application and generally supports the following:

- Submission, review, and approval of prior approval forms for faculty participation in outside professional activities (OPA)
- Submission, review, and acceptance of faculty annual reports certifying compliance with COC policies
- Reporting and tracking of faculty effort spent on outside professional activities
- Reporting and tracking of Health Sciences Compensation Plan (HSCP) participants' earnings received from outside professional activities
- Tracking of HSCP participants' payments to the health sciences compensation plan (according to policy when appropriate)
- Accessing and reporting for approvers/leaders at all levels (Department, School, Campus) on various compliance issues in real-time, e.g., status report on compliance with annual certification reports, faculty exceeding time and/or earnings thresholds, involvement of students in OPA, etc.
- Archiving of approvals and disclosures, allowing for historical (and multi-year) searches for approvals/disclosures
- Providing faculty with an embedded educational component to facilitate understanding of the policies, their role and responsibilities, and accurate reporting

Technical Architecture

The software systems developed for UC OATS follow a standard set of development conventions and procedures with an emphasis on agility, data security, scalability, and leveraging of shared-systems across all UC campuses. The UC OATS web application is built using open source software hosted in a

cloud environment that defines progressively stricter security restrictions within a traditional three-tier architecture. The relational database where data are stored is isolated and protected from all traffic except the web application. The web application is isolated from public traffic and only accepts traffic from a reverse proxy server. The reverse proxy server is in turn protected by a web application firewall.

Key architectural elements:

- UC OATS leverages the UC Shibboleth in-common federation for user account creation and authentication – ensuring user accounts adhere to campus-specific password and authentication requirements and improving user experience by leveraging pre-existing user accounts and credentials.
- UC OATS is hosted in the UCLA DGSOM Amazon Web Services (AWS) HIPAA-compliant environment:
 - This cloud-based infrastructure leverages cost-effective, on-demand scaling to allow the UC OATS application to increase and decrease storage and computing power as needed which improves performance of the application.
 - Data are transmitted between systems on a real-time basis via a secure sockets layer (SSL) connection using SHA-256 bit with RSA Encryption over TLS 1.2 and all data at rest are encrypted. A signed business associate agreement (BAA) between UCLA and AWS further provides confidence in the security provided by hosting the application in the DGSOM AWS environment.
- With the upcoming completion of the UC PATH implementation at all ten campuses, UC OATS will leverage data elements available from UC PATH and local campus systems to ensure faculty accounts are automatically updating with the most recently salary data and appointment status required for UC OATS workflows.

Timeline

The UC OATS consortium kicked off in September 2017 with seven initial adopting campuses: UC Berkeley, UC Davis, UC Irvine, UC Los Angeles, UC San Francisco, UC Santa Barbara, and UC Santa Cruz. Since then, the remaining three campuses, UC San Diego, UC Riverside, and UC Merced, have joined the consortium.

The project is approved for a four-year engagement:

- Year 1: Build the UC OATS application
- Year 2: Deploy UC OATS to participating campuses
- Year 3: Maintain and Enhance UC OATS
- Year 4: Maintain and Enhance UC OATS

The first year (September 2017 – August 2018) focused on building the new UC OATS application. The original version of OATS developed at UCLA served as the template for the UC OATS Working Group to identify new features, remove UCLA-specific functionality, and build support for additional APM COC policies. The Working Group worked in conjunction with the Technical Partner to perform testing of the application along the way and ultimately all participating campuses approved a minimal viable iteration of the UC OATS application that was determined sufficient to begin deployment to the campuses. The first year of UC OATS completed on budget.

The second year (September 2018 – August 2019) continued development efforts to refine the application and began the deployment of UC OATS across the participating campuses. During this year, the consortium grew from seven campuses to nine with UC San Diego joining January 2019 and UC Riverside joining in July 2019. UC OATS was successfully launched at UC Davis, UC Santa Cruz, UC San Francisco, UC Los Angeles, and UC Santa Barbara. Each deployment included onsite training

from the UCLA Technical Partner and took about 16 weeks to complete. The second year of UC OATS completed on budget.

Currently, UC OATS is in the third year (September 2019 – August 2020). The UC OATS Governance Board approved a budget-neutral enhancement effort for the third year of the program to add additional functionality to the application. UC Merced joined the consortium in June 2020 to expand UC OATS to serve all ten UC campuses. The application was successfully deployed at UC San Diego, UC Irvine, and UC Riverside. Deployment activities are currently in progress with UC Berkeley (expected to complete by the end of the project year) and UC Merced is currently onboarding with an expected deployment date sometime during the fourth project year. This year, most campuses also went through the first cycle of annual certifications using UC OATS where faculty log into the system and certify a system generated annual report of all of their outside professional activities or certify that they have not engaged in any OPA for the previous year. For the seven campuses that completed the annual reports using UC OATS this year, over 10,000 faculty members submitted reports. The third year of UC OATS is projected to complete on budget.

As the consortium prepares to enter the fourth year, the UC OATS Governance Board has again approved a budget-neutral enhancement effort for the application. The Technical Partner will begin working with the Working Group to identify and prioritize the newest features to be added to UC OATS.

In implementation order:

Campus	Status	Go-Live Date
UC Davis	Complete	November 2018
UC Santa Cruz	Complete	January 2019
UC San Francisco	Complete	April 2019
UC Los Angeles	Complete	July 2019
UC Santa Barbara	Complete	July 2019
UC San Diego	Complete	September 2019
UC Irvine	Complete	November 2019
UC Riverside	Complete	May 2020
UC Berkeley	In Progress	Summer 2020
UC Merced	Not Started	Fall 2020

Additional References

For more information on the UC OATS program, please visit our website at <https://info.ucoats.org/pages/>

UC OATS was featured on the UC IT Blog in February 2019 <https://cio.ucop.edu/7-uc-campuses-to-use-conflict-of-commitment-system/>