Commercial Cloud Landscape at UCSD and UC Negotiated Agreement Comparisons

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30,000 Foot Overview

UC currently has negotiated agreements with these commercial cloud providers:

- Amazon Web Services (AWS)
- Google Cloud Platform (GCP)
- Microsoft Azure

*Negotiations with Oracle are in progress, nothing official at this time

Beam integration - licensed by the university and provided at no cost to account holders, this product offers cost monitoring and risk/vulnerability dashboards for at-a-glance spend and security tracking.

Indirect Costs Exemption: Cloud computing services provided by the above vendors (plus SDSC) are exempt from the application of indirect costs (IDC) when used for extramurally funded research.

Main Campus cloud computing environments are not configured for use with data that fall into moderate-to-high protection level classifications. Health Sciences does provide environments for its constituents that meet higher protection and regulation compliance requirements.

Amazon Web Services (AWS)



Volume Reseller	Strategic Blue
Negotiated Discounts	13% through to researcher (15% + 1.25% from SB = 16.25% - 3.25% goes to Cloud Sustainability fund)
Data Egress "Waiver"	Up to 15% of total monthly spend
Beam	Cost Governance Security Central
SSO	Yes - <u>https://awsconsole.ucsd.edu</u> (uses AD security groups to facilitate authentication)
Root Ownership	Held by ITS OIA and CloudOps teams

*AWS has highest adoption rate on our campus. Agreement has been in place the longest of these.

Google Cloud Platform (GCP)



Volume Reseller	Strategic Blue
Negotiated Discounts	*None currently, user pay full published rates
Data Egress "Waiver"	*None currently, user pay full published rates
Beam	Cost Governance
SSO	Yes - <u>https://cloud.google.com</u> (using @ucsd.edu identity)
Root Ownership	Root credentials do not exist, project ownership is tied to the individual's Google account

*Technically, we should be benefitting from UC negotiated discounts, however, because we are tied to Strategic Blue, GCP is not cooperating in extending full benefits (to volume resellers).

Microsoft Azure



Volume Reseller	SHI
Negotiated Discounts	11% through to researcher (with no deductions for the Cloud Sustainability fund)
Data Egress "Waiver"	Up to 15% of total Azure monthly consumption (totaled across all UCs)
Beam	Cost Governance Security Central
SSO	Yes https://portal.azure.com (using @ucsd.edu identity)
Root Ownership	Root credentials do not exist, subscription ownership is tied to individual's O365 account

*Azure Virtual Desktop is the only service that allows the use of Windows 10/11 multi-session (1:many).

How to Get an Account

To request an account with any of the commercial cloud service providers, use the *Research Cloud Request Form* link on this page: <u>https://blink.ucsd.edu/technology/cloud/index.html</u>

Information you'll need handy when completing the form:

- Decide on your choice of service provider
- Fiscal name and email address
- Chart of Accounts (CoA) Project and Task numbers

Lead time on account creation is usually 2-3 business days

Or, contact us at <u>Research-IT@ucsd.edu</u> and we will gladly point you to the resources

Common Questions

- Is it possible to split cloud expenses across 2 or more Chart of Accounts strings?
- Can I set up budget alerts to be notified when my account is approaching a spend limit?
- Why does the university license Beam for cost and risk monitoring?
- How can I manage my research group's user access to add or remove permissions?



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Contact us: Research-IT@ucsd.edu