

internet2.edu



# NET+ Webinar Series

NET+ AWS, NET+ GCP, NET+ Kion and the  
Cloud Infrastructure Community Program (CICP)

*This session will be recorded*

Thanks for  
joining!  
We will begin at  
2:03PM ET



I2 Cloud  
NET+

# Housekeeping

- Note that participant microphones and video are turned off by default
- Please share your questions using the Zoom Chat or Q&A sections at the bottom of your screen. Questions will be answered at the end of the presentations.
  - You can also email [netplus@internet2.edu](mailto:netplus@internet2.edu) for institution-specific questions
- Today's session will be recorded and made available on the Internet2 [Youtube channel](#) and the [Discover the Power of NET+ Services](#) blog post
  - Recording will also be sent out to Program mailing lists!

# What we'll cover

1. Company + Service Overview
2. Program Benefits + Eligibility
3. Events + Activities
4. Q&A



Google Cloud



In the  
audience



Google Cloud



**Jan Day**

Higher Education Alliance and Community Manager

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Education Strategy Lead

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# Nice to meet you!



**Nidhi Yadav**

NET+ Associate Program Manager  
Cloud Infrastructure, Platform and  
Security Services  
Internet2 • [nyadav@internet2.edu](mailto:nyadav@internet2.edu)

## About me:

- Joined the Internet2 NET+ team in August 2023
- Prior to that completed graduate studies from UIUC and gained IT sector experience
- Based in Champaign, IL
- Passionate about applying my skills to projects that deliver real value to users

# NET+ Kion

# What is Kion?

A comprehensive platform to support your institution's research efforts, enhance the student experience, and secure your institution's overall **multi cloud infrastructure**—across AWS, Azure, GCP and OCI.

## CloudOps Challenges in Higher Education:

- Cloud account sprawl
- Overprivileged cloud access
- Uncontrolled cloud spend
- Ineffective existing tools
- Time management issues for CloudOps teams



# The Kion Advantage



- **Visibility**
  - Centralized view of security and financials across all cloud resources.
- **Automation**
  - Automates tasks and processes, enforcing guardrails and remediating drift.
- **Guidance**
  - Provides tailored recommendations to enhance CloudOps practices.
- **Guardrails**
  - Sets controls defining account permissions and roles.

# NET+ Kion Program Overview

The NET+ Kion program provides the research and higher education community with access to Kion's robust product offerings for multi-cloud environments:

- **Automation & Orchestration**
- **FinOps**
- **Continuous Compliance**



Kion seamlessly [integrates](#) with leading platforms and using APIs.

# NET+ Kion Service Benefits & Eligibility



## Program Benefits

- 20-50% off AWS Marketplace rates, depending on annual consumption
- Price increase capped at 5% annually
- FERPA, HIPAA compliant
- HECVAT and VPAT available upon request
- NET+ Service Evaluation completed ([documentation available](#))
- Community engagement with NET+ Kion Early Adopters group

<b># of subscribers</b>	15
<b>Eligibility</b>	A higher education member of Internet2, an affiliate member of Internet2, a non-profit institution of higher education in the United States, a K-12 educational institution, library, museum, any other not-for-profit organization in the United States that in Internet2's reasonable judgment has or facilitates a research or educational mission.
<b>Date agreement signed</b>	2022

# NET+ Kion Early Adopters



UMBC



ILLINOIS  
TECH  
ILLINOIS TECH



UC Irvine

## Links & Resources

### General

- [Self-guided Kion Tour](#)
- [Tutorial videos on using Kion](#)
- [Kion Support Pages](#)

**Blog, Case Studies and other [resources](#)**

## NET+ Resources

- [NET+ Kion wiki](#)
- NET+ Kion [web page](#)

### Contract and Pricing:

Email

[netplus@internet2.edu](mailto:netplus@internet2.edu) to request documentation

## Community Engagement

- Monthly Early Adopter calls
- Other inquiries:
  - Internet2: [netplus@internet2.edu](mailto:netplus@internet2.edu)

# Nice to meet you!

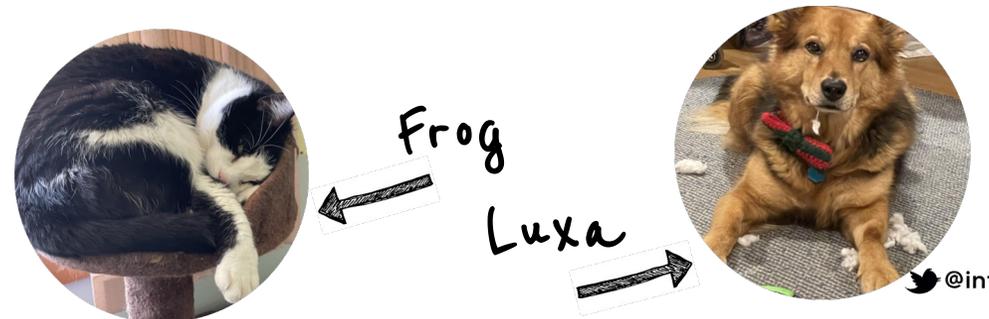


**Bob Flynn**

NET+ Program Manager  
Cloud Infrastructure & Platform  
Services  
Internet2 • [bflynn@internet2.edu](mailto:bflynn@internet2.edu)

## About me:

- Joined the Internet2 NET+ team at the start of 2021
- Prior to that I spent 24+ years in IT at Indiana University
- Based in Bloomington, IN
- Passionate about helping advance the exploration and adoption of hyperscale technologies around the R&E community



NET+ 

# Amazon Web Services



Modernize & Secure Institution	Turn Data into wisdom	Enrich Student Experience	Empower Research
<p>Migrations and Modernizations <b>PeopleSoft, Ellucian, Moodle</b></p>	<p>Data Solutions for Education <b>Data Insights, Predictive Analytics</b></p>	<p>Virtual campus assistant <b>Mobile, dynamic and personalized content delivery</b></p>	<p>Trusted research environment <b>Self-service research solution</b></p>
<p>Virtual Proctoring Solutions <b>AI services to enable remote testing at scale</b></p>	<p>Campus Data Warehousing <b>Scalable, cost-effective data analytics</b></p>	<p>Accelerate Enrollment &amp; Financial Aid <b>Digital One-Stop powered by Amazon Connect</b></p>	<p>Data Access and Storage for Research <b>Intelligent data management</b></p>
<p>Sustainability <b>Carbon footprint framework</b></p>	<p>Data in Digital <b>AWS Data-Driven Everything</b></p>	<p>Virtualized Application Management <b>Customized virtual desktops with applications</b></p>	<p>RONIN Research Solution <b>Self-service access to cloud resources for Researches</b></p>

**The NET+ AWS service offers two contract choices to access AWS's extensive set of tools and services. They give you options for support, billing data access, training, organizational control, BAAs, access to NIH STRIDES, and consulting all while providing discounts, billing flexibility, and full access to the Cloud Infrastructure Community Program and its benefits.**

# NET+ AWS Service Benefits and Eligibility



## Program Benefits

- **A competitively-bid customer agreement created through the input of member organizations**
- Minimum 4.5% discount on AWS services
- 12% discount for NIH-funded research and biomedical workloads through the NIH STRIDES Initiative
- **Flexible options for a Business Associate Agreement for HIPAA workloads**
- **The ability to enable support on an account-by-account basis**

- A **Data Egress Fee Waiver** that refunds egress charges up to 15% of an account's monthly spend for eligible accounts
- The option of a **single institutional bill or direct billing to account holders**, with a variety of payment options including credits
- A **community service advisory board** to drive continued benefits for all subscribers

# of subscribers	77
Eligibility	U.S. Higher Education institutions; or Internet2 Higher Education Members, Affiliates, or Federal Affiliates
Date agreements signed	TD SYNEX (DLT) – 2015 Four Points Technology – 2024

# NET+ AWS Program Activities & Resources



## Tech Shares

**Bi-weekly open calls to discuss any topic or challenge. Some of our hottest topics are:**

- Security & Compliance
- Account Management
- Cost Controls
- Identity Management
- Research Support
- Control Tower
- Networking
- Storage
- AI/ML
- Migration
- Governance
- Training/Hiring
- Enterprise Integration

## Town Halls

**Quarterly webinars on topics surfaced through the Tech Share. Recent topics include:**

- Multi-account governance in AWS
- Amplify GenAI - an Enterprise Open Source Generative AI Platform
- Research and Engineering Studio and HPC on AWS
- Introduction to Amazon Security Lake

## Strat Calls

**Quarterly calls often focusing on a single topic and what role cloud may play in it. For example:**

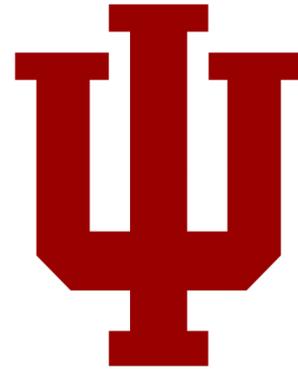
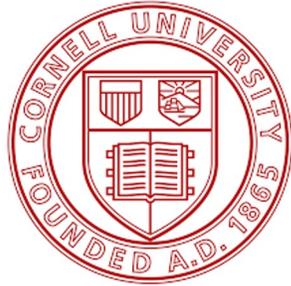
- Unlocking AWS Private Marketplace
- Lessons and observations from a greenfield implementation using the AWS Landing Zone Accelerator
- Maximizing your AWS Relationship: Don't leave money on the table
- How Athletic Departments can use the Cloud to gain an advantage

## Tech Jams

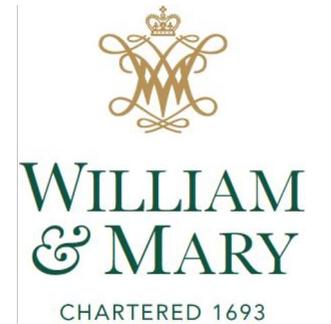
**Deeper technical explorations of challenges faced by multiple institutions that result in a learning opportunity for everyone. Popular recent Tech Jams include:**

- Figuring out Reserved Instances and Savings Plans
- All Along the Control Tower
- CMMC on AWS
- AWSome Authenticating AWS with SSO systems and more!
- Configuring Compliance

# NET+ AWS Service Advisory Board



UMBC  
[ 19 ]



NET+ GCP 

# Google Cloud (GCP)

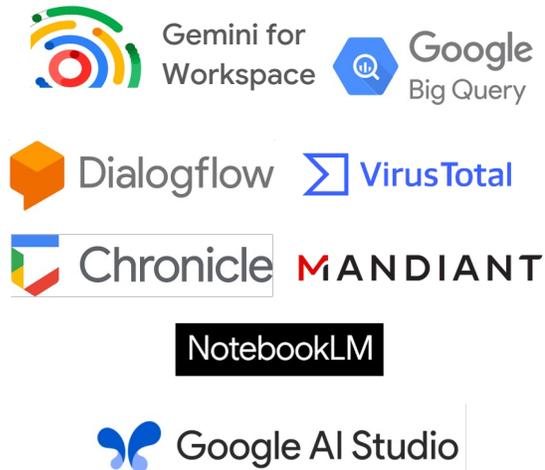


## AI for Education - Privacy Focus

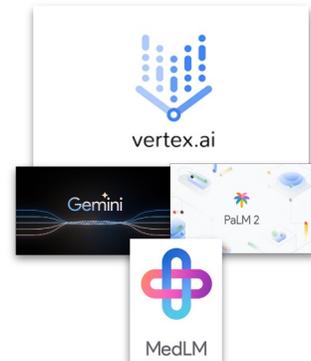


Enterprise Enhancement

Generative AI Platform



Agent Builder  
Model Garden  
End to End MLOPs



Google's Enterprise AI tools do not use customer data to train models without permission

## Google Cloud - Research Focus



Data growth

**Implication:**  
Exponential growth in data available across research disciplines related to research Inputs and Outputs for Genomics and Climate Science



High Performance Computing

**Implication:**  
High performance computing is becoming a mainstay of research in scientific simulations and AI/ML based inference making)



Cross institutional collaborations

**Implication:**  
Research is no longer conducted individually and collaboration is more essential than ever



# NET+ GCP Service Overview



**The NET+ GCP service offers the unique opportunity to adopt a single contract negotiated by community organizations through several resellers to give institutions the flexibility to leverage the skills and expertise of multiple partners at once, should you wish.**

# GCP Terms of Service Flow



## Provider

*Provides the technology*

## Distributor

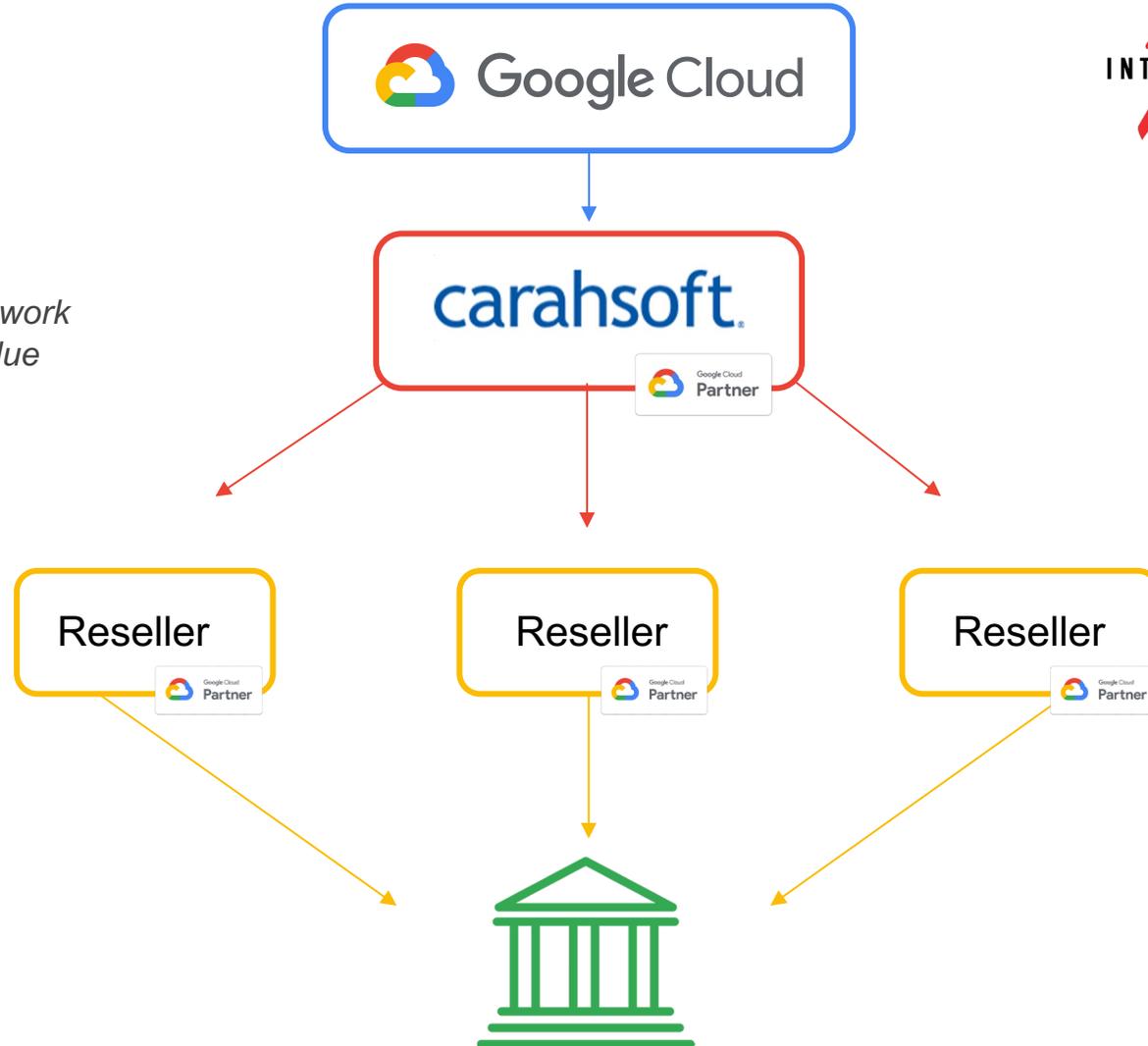
*Enables flexibility for campuses to work with multiple resellers; provides value added services like billing reports*

## Resellers

*Manages billing and usage; provide technical guidance & architectures*

## University

*Consumes the technology*



## Context:

Favorable EDU terms were pre-negotiated between 4 universities (Service Evaluation group) & Google, and then flowed down

The NET+ terms flow down through Carahsoft via each reseller.

The terms are signed between the customer and the reseller, through the Reseller Service Order.

# NET+ GCP Service Benefits and Eligibility



## Program Benefits

- Community-negotiated **contract includes enhanced legal provisions**, including **separate liability for student use**
- Minimum 5% discount on GCP services, regardless of spend
- **Up to 30% discount** for NIH-funded research and biomedical workloads through the **NIH STRIDES Initiative**
- **Business Associate Agreement (BAA)** for HIPAA workloads

- A **Data Egress Fee Waiver** that refunds egress charges up to 15% of an account's monthly spend for eligible accounts
- **Choose from multiple resellers** or bring your own authorized software reseller. This allows members to **issue competitive RFPs** within the program.
- A **community service advisory board** to drive continued benefits for all subscribers

# of subscribers	75
Eligibility	Internet2 Higher Education Members, or other research and education institutions mutually agreed upon by Google and Internet2.
NET+ agreement signed	2019

# NET+ GCP Program Activities & Resources



## Tech Shares

Monthly open calls to discuss any topic or challenge. Some of our hottest topics are:

- Project Management
- Billing & Cost
- Security Controls
- AI/ML
- Research Support
- Identity & Access
- BigQuery
- Support Models
- Compliance
- Storage
- Automation
- Training
- Networking

## Town Halls

Quarterly webinars on topics surfaced through the Tech Share. Recent topics include:

- R&E Highlights from Google NEXT
- Google Gemini AI: Charting Your Higher Ed Course with the Perfect Model
- HPC on GCP
- The Cloud Team's Role in Supporting Teaching & Learning on Google Cloud

## Strat Calls

Quarterly calls often focusing on a single topic and what role cloud may play in it. For example:

- Partnering with the Google Rapid Innovation Team
- Grant AI, GenAI-Powered Grant Discovery & Analysis
- Best practices for running Google Cloud
- Preparing your GCP Org to Support RAD Lab for Research

## Tech Jams

Deeper technical explorations of challenges faced by multiple institutions that result in a learning opportunity for everyone. Popular recent Tech Jams include:

- AuthN/AuthZ Challenges with Looker + BQ Optimization
- Strategies for aggregating network traffic flow logs for all your GCP projects
- Answers About Google's AI Tools
- Managing Abandoned Projects in GCP

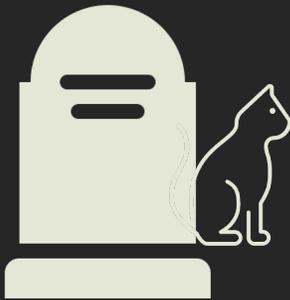
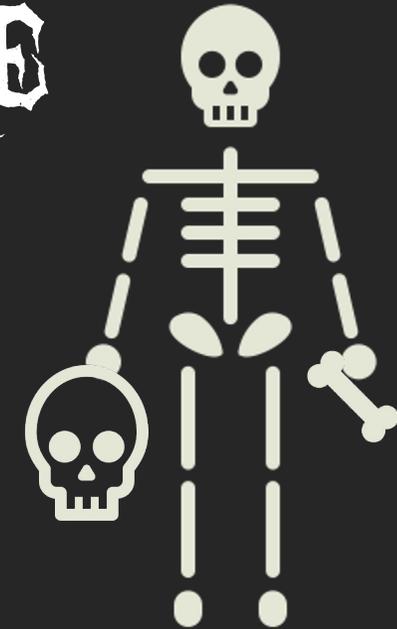
# NET+ GCP Service Advisory Board



**Could this be the October Surprise we  
hear so much about?**



# CLOUD INFRASTRUCTURE COMMUNITY PROGRAM



# What is the R&E IT Community's Superpower?



# Collaboration



*“By working together with other members of the community we can achieve results faster with less trial and error.”*

- ***Shlomo Balass**, Director of Cloud Engineering, Carnegie Mellon University*



# The Cloud Infrastructure Community Program...

Is a place for  
dedicated  
conversations  
around the  
cloud  
platforms



Google Cloud

Focuses the  
ideas of the  
community



# The Cloud Infrastructure Community Program...

Is a place to  
learn and  
grow together



## Strength Through Community

*“The University of Chicago has been a NET+ participant for many years, first with AWS and then GCP. How does one run a higher ed cloud enablement team (and stay sane) without being a part of this group?”*

- **Cornelia Bailey**, Director of Information Assurance, University of Chicago



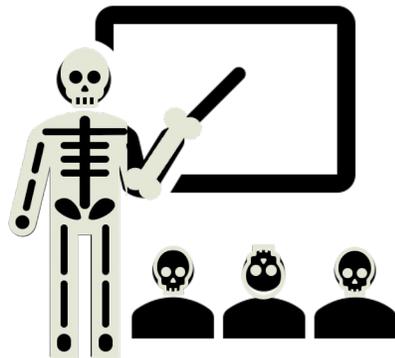
# The Cloud Infrastructure Community Program...

Is a place to  
learn and  
grow together



- peer discussions
- working groups
- expert presentations
- training cohorts
- data benchmarking

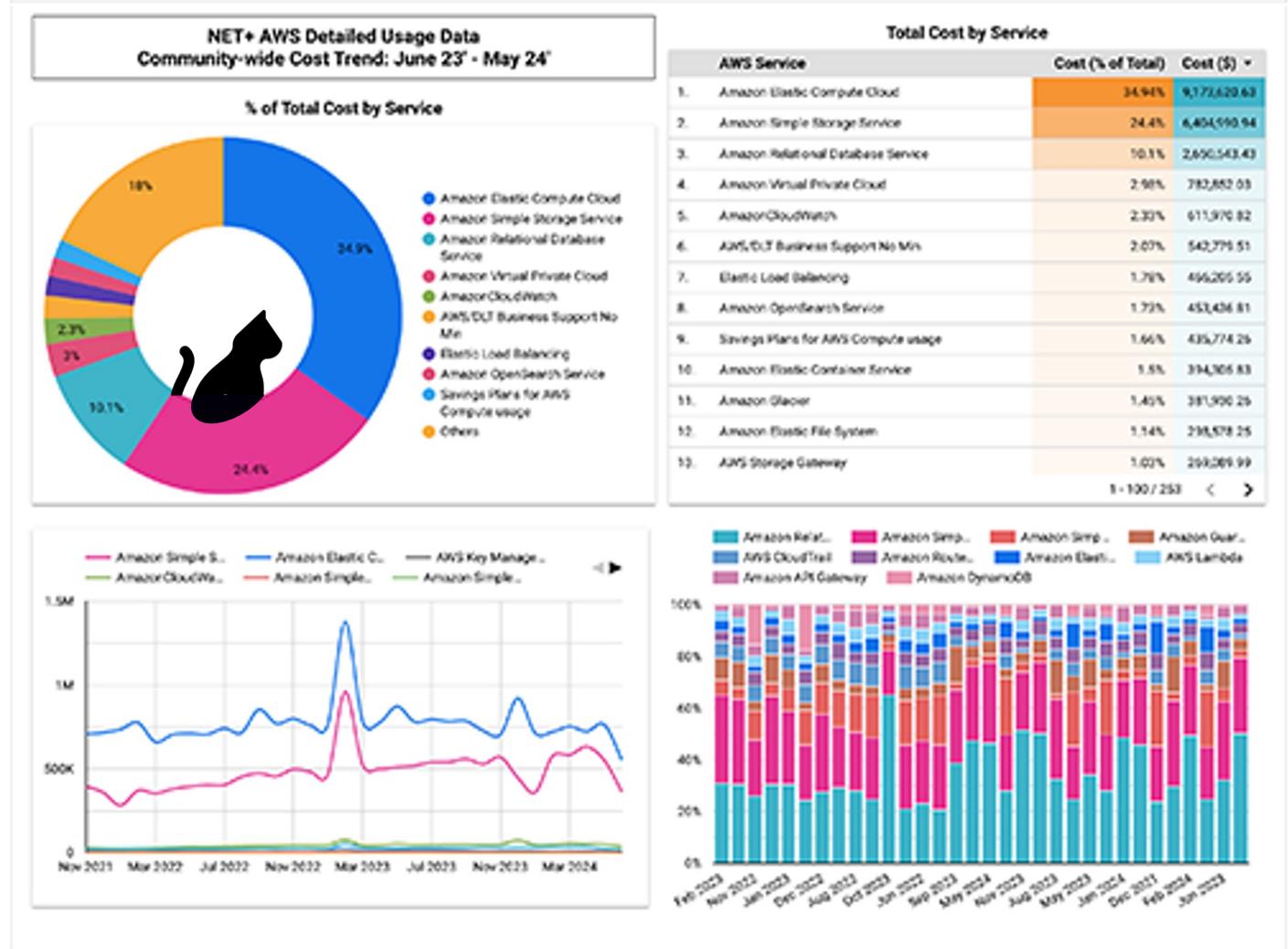
Gives you  
ready access  
to the CLASS  
program



- Annual vouchers to cover registration
- Discounts for any participant from your institution
- Courses ranging from basic cloud skills to advanced cloud and AI topics

# The Cloud Infrastructure Community Program...

Provides insights into your institution as well as the community



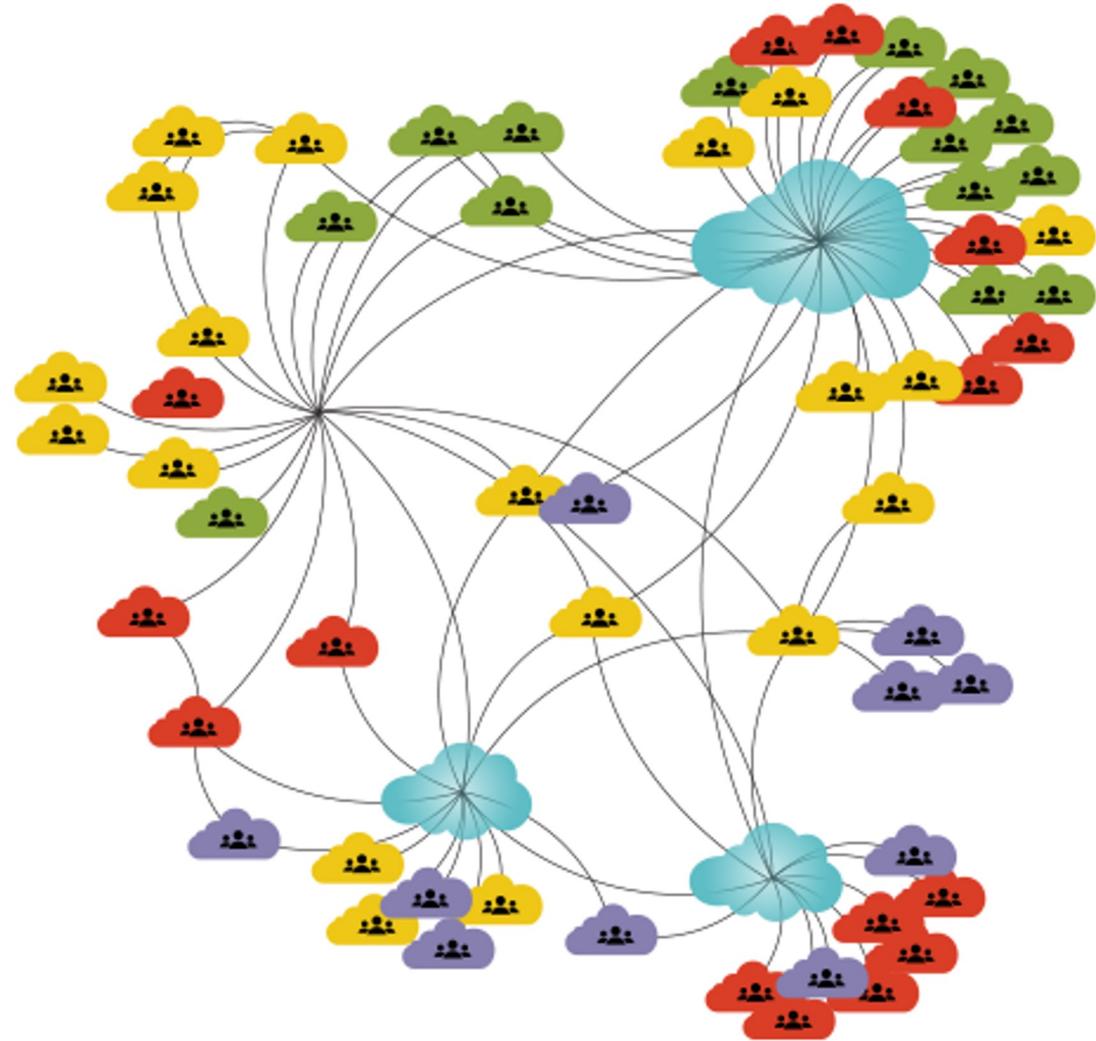
Helps you  
and your  
institution



- **Accelerate** cloud adoption
- **Master** cloud technology
- **Influence** cloud providers
- **Expand** your knowledge network

# The Cloud Infrastructure Community Program...

Is a  
cloudforce  
multiplier



# The Cloud Infrastructure Community Program...



Is open to all,  
regardless of  
how of  
*whether* you  
contract cloud

## Eligibility

U.S. Higher Education institutions; or  
Internet2 Higher Education Members,  
Affiliates, or Federal Affiliates

## Some Current Subscribers



# JOIN US!

For details visit: <https://internet2.edu/CICP>



# Questions?



## Jan Day

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Community Manager  
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## Get in touch:



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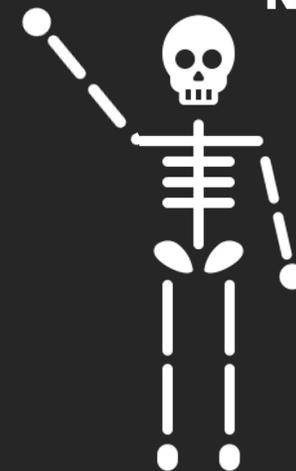
NET+ Team  
[netplus@internet2.edu](mailto:netplus@internet2.edu)

# Up Next:

*Discovering the Power of NET+ Services* – Thursdays at 2pm ET

- ~~Sept. 19: Overview of NET+ Services~~
- ~~Sept. 26: What's New in the NET+ Portfolio?~~
- ~~Oct. 3: NET+ Google Workspace, DryvIQ, Miro~~
- ~~Oct. 10: NET+ ServiceNow, Docusign, Splunk~~
- ~~Oct. 17: NET+ Canvas, Panopto, LabArchives~~
- **Oct. 31: NET+ AWS, GCP, CICP, Kion** – slides & recording to follow soon!
- Nov. 7: NET+ Zoom, Lumen SIP, Clearspan
- Nov. 14: NET+ Duo, LastPass, Crashplan, Palo Alto
- Dec. 5: NET+ Procurement

Thank you!



Get in touch:

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