Welcome to the NET+ Amazon Web Services (AWS) wiki.

Many Internet2 member and non-member institutions take advantage of this service offering. If your institution is one of them then this wiki will provide details on how to make the most of your participation of the programming and interact with peers across Internet2 member institutions.

This program is open to all higher education, affiliate and federal affiliate members as well as non-member higher education institutions. If you are looking details on how to join the program, please visit the Sign Up Tab of the NET+ AWS webpage.

You can also find out more about the Internet2 Cloud Connect offering for AWS Direct Connect.

Service Documentation and Resources

Accessibility:

- Voluntary Product Accessibility Template® (VPAT)

Identity:

- NET+ AWS Portal Identity Guidance - For end user self service AWS account requests
- InCommon-enabled Group to role mapping for AWS Accounts

Information Security:

- Cloud Controls Matrix - please email cloud@dlt.com
- Higher Education Cloud Vendor Assessment Tool (HECVAT) - pending

Contract and Pricing:

- NET+ AWS Enterprise Customer Agreement - please email cloud@dlt.com
- NET+ Infrastructure and Platform Services (IPS) Program Participation Agreement and Schedule - pre-req for subscribing to NET+ AWS

FAQs and Instructions:

- NET+ AWS Frequently Asked Questions
- NET+ AWS NIH STRIDES Initiative Frequently Asked Questions
- Requesting an NIH STRIDES account through DLT

Community Resources

Participate in our Community Conversation (Subscribers Only):

Institutions participating in the NET+ AWS program may take advantage of our email discussion list to receive curated program updates and participate in other activities and events.

We host a series of regular events for program subscribers. For 2022 they include:

- Bi-weekly NET+ AWS Technology Share calls where campus cloud enablement professionals, cloud engineers and developers, meet to discuss their challenges, share lessons learned and collaborate to find the best answers for their institutions’ AWS deployment. AWS solutions architects and DLT support engineers regularly attend and participate.
- Quarterly NET+ AWS Subscriber Calls (Feb, May, Aug, Nov) are home to strategic and directional conversations. The intended audience is cloud and infrastructure leadership, but anyone working on your AWS team is welcome to attend. Twice annually we invite AWS EDU leadership to join us and encourage campus infrastructure and IT leadership to join.
- Quarterly NET+ AWS Tech Jams (Mar, Jun, Sep, Dec) bring together a couple of subscriber schools working on a specific issue with related technical experts from AWS to talk through the challenge and related choices. The rest of us watch and learn, tossing in our own questions as well. Example topics are building compliant environments, enforcing policies for FinOps best practices, etc. The December Jam is devoted to a rapid-fire recap of the announcements coming out of the annual AWS re:Invent conference that are most relevant to the NET+ subscriber community.
- Quarterly NET+ AWS Town Halls welcome experts from AWS to present targeted topics to the community. Past Town Halls covered Ransomware, AWS Academy and Research Support Tools. We encourage subscribers to suggest topics we can work with AWS to bring to us.

Please contact netplus@internet2.edu to be added to any of these conversations.

Join the AWS Community Forum (Open to all community members):

NET+ AWS Service Advisory Board (SAB)

Membership

- Rick Rhoades, Penn State University, Chair
- Cornelia Bailey, University of Chicago
- Shilomo Balass, Carnegie Mellon University
- James Bennett, Indiana University
- Asbed Bedrossian, Member Emeritus
- Damian Doyle, University of Maryland Baltimore County
- Jeff Gumpf, Case Western Reserve University
- Jay Hartley, Massachusetts Institute of Technology
- Jim Jokl, University of Virginia
- Scott Kirner, University of Notre Dame
- David Lacey, J. Paul Getty Trust
- Gerard Shockley, Boston University
- Jim Thomas, Indiana University

To Contact the Service Advisory Board

Email: aws-campus-advisory@internet2.edu

NET+ AWS Advisory Board Goals

- 2020 Goals

Questions?

- Internet2 NET+ Service Management netplus@internet2.edu
- DLT Customer Team cloud@dlt.com
- DLT Ops Team
- Internet2 Program Manager: Bob Flynn bflynn@internet2.edu

Send Feedback or Submit a Feature Request:

The NET+ AWS program is managed by an Internet2 program manager with the support of the NET+ AWS Service Advisory Board.

The NET+ AWS Service Advisory Board reviews and prioritizes community feature requests on a periodic basis. Feature requests may be submitted to netplus@internet2.edu.
Users of AWS are encouraged to join the AWS Community Channel in the Educause Cloud Computing Community Group Slack. See the Higher Ed Cloud Community page for instructions to join.

Collaborate on the Cloud Wiki:

Speaking of community, did you know about the Cloud Wiki? This was created specifically for YOU, members of the higher education community, to collaborate with each other. Log in to see a Cloud Job descriptions page and contribute your knowledge!

Contribute Code:

Looking to share your latest Terraform config? Add it to the Cloud Wiki Helpful GitHub Repos list or email sjjeanes@internet2.edu to request access and create a repo in the Community Cloud Config GitHub organization.

Key Program Updates

Subscribers may review our mailing list archives for monthly program and AWS updates.

Events

There are so many hot conversations coming up, I had to write them all down for you. The first one is TO MORROW and you won’t want to miss it.

September

NET+ AWS Tech Jam

- **Topic:** Show Me the Money - Two sides of the billing coin
  - **Nick Adair from Baylor College of Medicine** has brought this challenge to the TJ Table: “I would like to use AWS Control Tower to manage research accounts in a master-payer structure. Each subscription (account) will have a bill generated, including the master-payer account. The billing detail will include service totals for chargeback purposes.”
  - **Kevin Murakoshy, AWS SA extraordinaire,** responded that he’d see that challenge and raise it one, “Come help us design a billing tool! In this tech jam, we’re going to gather requirements for a tool that will help us build bills for recharge. Beyond simply allocating the bill, we’re also going to look at ways to move charges for certain services into the payer (i.e. networking/security), and more!”
- **Time:** Wednesday, September 21 at 11am PDT/2pm EDT

October

NET+ AWS Tech Share

- **Topic:** Update and Demo of StreamOne Ion (SIE), the CloudCheckr replacement from DLT
- **Description:** DLT is phasing out CloudCheckr as the tool for you and your account holders to track their AWS costs. Gotthard Szabo, Director of Cloud FinOps at DLT will join us to describe the transition for NET+ AWS customers, give a demo of SIE and update us on the timeline.
- **Audience:** Anyone involved in the operational management of AWS at subscribing NET+ institutions.
- **Speaker:** Gotthard Szabo, Director of Cloud FinOps, DLT
- **Time:** Wednesday, October 5 at 8am PDT/11am EDT

NET+ AWS Town Hall

- **Topic:** Key Considerations for Supporting Academic Researchers
Researchers are increasingly leveraging computational technologies as a key approach within their research. More and more disciplines are leveraging data, simulation, and advanced analytics to perform their research. Researchers have increasingly complex requirements and expectations as they join institutions and funding agencies are requiring new and more complex data retention approaches. At the institutional level, developing a strategy on how to support the wide range of requirements in a supportable, cost-effective, and secure way has become a critical strategic initiative. This session will discuss a perspective on how to support researchers, impacts from the funding agencies, and AWS technology solutions.

**Audience:** This session is for higher education information technologists, VPs of Research, and principal investigators interested in using cloud to accelerate and scale their scholarship.

**Speaker:** Rick Friedman – Head, US EDU Research Strategy and Business Development team

**Time:** Wednesday, October 19 at 11am PDT/2pm EDT

**Place/Registration:** [https://internet2.zoom.us/webinar/register/WN__YP4BH8IToKuW9ArcaAPsQ](https://internet2.zoom.us/webinar/register/WN__YP4BH8IToKuW9ArcaAPsQ)

**November**

**NET+ AWS Tech Share**

- **Topic:** Account provisioning practices of UW-Madison
- **Description:** Regular attendees of the bi-weekly Tech Share calls have already learned a thing or two from Wisconsin’s Kelly Rivera. On a recent call she described in detail their part-automated/par-manual process of provisioning accounts in their AWS Org. The elegance of their maneuvering through the various policy, configuration, technical, and maybe even spiritual obstacles was so profound that on the spot her peers demanded some show and tell. Kelly herself admits that she’s never satisfied until it’s perfect, but it sounded mighty good to all on the call. Thankfully she gave in to the group’s pleadings and will share her team’s hard-won wisdom. You won’t want to miss this!
- **Audience:** Anyone involved in the operational management of AWS at subscribing NET+ institutions.
- **Speaker:** Kelly Rivera, Lead Cloud Engineer, UW-Madison
- **Time:** Wednesday, November 2 at 8am PDT/11am EDT

**NET+ AWS Subscriber Call (Leadership Edition)**

- **Topic:** The Role of Cloud in Institutional Resilience
- **Description:** The last two years have demonstrated the unique role hyper-scale, on-demand computing in keeping the institution operational when faced with unexpected circumstances. A recent EDUCAUSE QuickPoll on institutional resilience prompted the question of the part cloud computing should, and shouldn’t, play in your organization’s resilience planning. Invite your leadership to join leaders from our community to discuss how, where and when we should be thinking about these powerful tools.
- **Audience:** Strategic IT thinkers and decision makers – CIOs, AVPs and Directors of Infrastructure, Cloud Enablement Managers
- **Panel:**
  - Damian Doyle, Deputy CIO, UMBC
  - Rick Rhoades, Chair, NET+ AWS SAB and Manager, Cloud Services, PSU
  - Kari Robertson, Executive Director of Infrastructure Services at UCOP
  - Jennifer Sparrow, Senior Manager, Higher Ed Business Development, AWS
- **Time:** Wednesday, November 16 at 11am PST/2pm EST

**December**

**AWS Game Day at Internet2 TechEx**

- **Topic:** AWS Game Day
- **Description:** AWS Game Day is an exciting, risk-free, hands-on way to explore and improve your AWS skills. Teams of 3-4 band together to run a company selling mythical animals through the ups and downs of that notoriously turbulent market.
- **Audience:** Anyone from seasoned cloud pros to those with minimal experience. Special prices for student teams. Tell your faculty!
- **Details:** Full event details including the ridiculously low price (thank you sponsors!), the special pre-event training opportunities, prizes, etc. can be found on the [event page](https://internet2.zoom.us/webinar/register/WN__YP4BH8IToKuW9ArcaAPsQ).
- **Time:** Monday, December 5, 9am-3pm MST
- **Place:** On-site, in-person, IRL @ the Internet2 Technology Exchange in Denver

**News Shorts**

**NIH STRIDES Initiative**
Earlier this year we announced that the NIH STRIDES Initiative for AWS was now available through the NET+ AWS Program. Full documentation on how to request STRIDES accounts or enable existing accounts for STRIDES is now available on the NET+ AWS program wiki. Visit that or jump straight to the links themselves!

- NET+ AWS NIH STRIDES Initiative Frequently Asked Questions
- Requesting an NIH STRIDES account through DLT

If you have any questions, frequent or unique, please contact Bob Flynn (bflynn@internet2.edu)

HECVAT

AWS has recently finished a new HECVAT Full updated to the 3.03 version. It is available to customers who are under NDA. Contact your AWS Account Manger (AM) to request access. If schools don’t know who their AM is, they can use the “contact us” link on the AWS webpage to find out.

AWS is also working on a HECVAT 3 Lite that will be available without NDA. That document is still going through legal as they massage language on a couple of questions.

It is hoped both will be posted to the HECVAT Community Broker Index soon.

AWS Game Day @ TechEx 2022

Bob Flynn posted on Aug 13, 2022

If you’re up for an engrossing, wild ride that’s crazy fun, then you’re ready for AWS Game Day @ TechEx 2022.

Internet2 NET+, together with AWS, DLT, and Cloud Academy, are bringing AWS Game Day to the 2022 Technology Exchange in Denver, CO.

What is AWS Game Day?

A “collaborative learning exercise that tests skills in implementing AWS solutions to solve real-world problems in a gamified, risk-free environment.”

How do you play?

- Recruit your own team (preferred) or show up and join one onsite.
- Compete against the game and against other teams for glory and prizes.
- Walk away with sharper AWS skills and a story to tell.

Game Day Details:

<table>
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<tr>
<th>When</th>
<th>Monday, December 5, 2022, 8 a.m. – 3 p.m.</th>
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<tr>
<td>Where</td>
<td>Sheraton Denver Downtown Hotel</td>
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</table>
| Cost       | Until 10/21 – $35 per person General Admission ($10 students)  
After 10/21 – $50 per person General Admission ($20 students) |
| Theme      | Teams of 3-4 will run an imaginary company that rents mythical creatures. Your task will be to manage the company’s infrastructure as the market reacts to your exciting new business. |
**The Players**

Bring your whole team, a partial team, or come prepared to join a team at the event. Registration information is below.

**Note:** Each member of your team must register separately.

**What's Included**

- Breakfast will be served in the morning giving you time to settle in and get to know the competition. Beverages and snacks will be provided throughout the day, and lunch will be served close at hand so that you can keep an eye on your virtual company at all times.
- AWS Solutions Architects will be onsite to facilitate the game and cheer you on.
- A month of access to the Cloud Academy training library with a learning path specifically crafted to help participants shore up skills you'll be using to run your company's AWS infrastructure on the day of the event.
  
  In the month prior to the Game Day event, we will hold kick-off sessions to walk you through the materials. The event will be recorded for those who are unable to attend live.
- AWS swag and prizes

**Skills Used**

EC2, VPC, AutoScaling, ELB/ALB, CloudFront, Elasticache, S3, CloudWatch, ECS/Fargate

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### Game Day Registration & Preparation:

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<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
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<tr>
<td><strong>Register</strong></td>
<td><strong>Complete Team Roster</strong></td>
<td><strong>Access Prep Work</strong></td>
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</table>
| Register for Game Day through the Tech Ex Registration.  
**Note:** You do not need to register for Tech Ex if you are only attending Game Day.  
To register as a student, contact meetingregistration@internet2.edu.  
All registrants will receive two email messages from the Internet2 registration system.  
1. The first will be a receipt for your event registration.  
2. The second will be a request to confirm your registration via our identity and access management system.  
Please read and follow the instructions in both emails. | Once we have confirmed your registration, we will send you to a form where you can enter your team roster.  
You will indicate whether you have a full or partial team or if you will be looking to pick up with a team on-site.  
**Note:** Each team member must register separately, but one team member can enter the team information. | You will receive an email invitation from Cloud Academy to set up an account to access Game Day preparation materials.  
Cloud Academy orientation sessions will be offered in early November. They will be recorded for those who cannot attend during the times provided. |

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**Questions or Concerns:**
Please contact Bob Flynn, Internet2 Program Manager, Cloud Infrastructure & Platform Services, at bflyn@gmail.com.

Game Day Sponsors:

Internet2 and the higher education cloud community are grateful to our sponsors AWS, DLT, and Cloud Academy for their generous support of this event.

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**AWS Feature Request Project (guest post)**

Bob Flynn posted on Jul 14, 2022

Good Morning,

I am writing on behalf of the Internet2 AWS Service Advisory Board (SAB). The AWS Higher Education Team has requested our assistance with collecting requests for enhancements or changes to AWS and its services, with the hope of improving the platform for the research and education community. To facilitate this, we developed a form to collect the requests, the associated use cases, and their overall impact on your ability to use AWS.

These requests could be challenges in managing AWS at the enterprise level, a little tweak to a service that would help you end some work-around or a major challenge to a researcher’s ability to use the platform.

We are asking everyone in the research and education community to contribute to this effort, regardless of whether your organization is using AWS for enterprise work, research, teaching, and learning, or something else. It doesn't matter if you are on Internet2’s NET+ contract, on a direct contract with AWS, or have access through some other program.

Submit as many requests as you like but, please complete a separate form for each request. The request form can be found at:
Request Form: https://forms.gle/SpW11KexDw3Drf5p9

We also encourage you to indicate your support for existing requests by reviewing our request tracker located at:

Request Tracker: https://tinyurl.com/HED-AWS-FeatureRequests

This will help the SAB gauge their impact and prioritize these requests for AWS. Working with AWS Education CTO Leo Zhadanovsky, the SAB will pass all requests on to the AWS product teams, with those having the greatest support getting the greatest attention.

We will submit your requests to AWS on a quarterly basis, so we will reach out to the community in advance to ask for new requests as well as your support for existing requests. We will work with AWS to update the status of submitted requests on a regular basis.

I am excited about this initiative and hope you will join me in making it a success.

Rick Rhoades  
Manager, Cloud Services  
Penn State University  
Chair, Internet2 NET+ AWS Service Advisory Board

- aws

Sustainability and AWS: Insights for Higher Education - A NET+ AWS Town Hall

Bob Flynn posted on Apr 04, 2022

The value of the NET+ programs goes far beyond the peer-vetted contract terms. Subscribers might come for the contract, but they stay for the community. Subscribing to a NET+ program is a powerful workforce multiplier and an extended higher-ed-focused knowledge base. Technology conversations with peers, technical deep dives on community-driven topics, service advisory boards, and conversations with education leadership at the service providers are all core to the NET+ experience. In the NET+ AWS program, we hold bi-weekly Technology Share calls, quarterly "Tech Jams," strategy-centered Subscriber Calls, and thematic Town Hall events. Topics covered at past Town Halls include Ransomware, AWS Educate & Academy, and Service Workbench & RONIN for researchers.

This month, in honor of Earth Day, we turn our attention to the environment. We welcome Hahnara Hyun, Partner Solution Architect, Amazon Web Services to present a session called Sustainability and AWS: Insights for Higher Education. In general, NET+ program events are only open to subscribers, but due to the importance of this work and this message, we are opening this session to the entire research and education community.

- **Title:** Sustainability and AWS: Insights for Higher Education
- **Session Description:** Digital Transformation can drive improved student outcomes, speed time to science, and increase agility within higher education institutions. Higher education leadership, responding to student and faculty demands, look to incorporate sustainability goals and practices into the university experience. In this session, we’ll talk about sustainability transformation, how we’ve been approaching it at Amazon and AWS, and actions higher education customers can take to incorporate sustainability into their digital transformation efforts.
- **Date:** Wednesday, April 20
- **Time:** 11am PDT/2pm EDT
- **Speaker Bio:** Hahnara Hyun is a Partner Solution Architect for Amazon Web Services. Hahnara has a background in software engineering. She began her journey in tech at Fullerton College and received her Computer Science B.S. from the University of California, Irvine where she was an undergraduate machine learning researcher. She found her passion in enablement, sustainability, and cloud architecture. As a result, in her day-to-day role, she develops AWS GameDays to enable partners and customers to build on AWS. Hahnara is also a public speaker for AWS and ran sustainability enablement sessions at re:Invent 2021. In her free time, Hahnara plays volleyball though she’s not very good yet and loves to cook, losing most of her free time making multiple trips to the grocery store grabbing forgotten items.

**Postscript**

The event has taken place. If you were unable to or would like to have the slides to follow the links Hahnara shared, you can find the recording, slides, and other assets in this folder.

- aws
The new year is underway and already there is a lot going on. I'm going to order this edition's content based on how soon the deadline is approaching and how urgent it is for your attention.

Three Alarm

AWS Training Cohort

The NET+ AWS training cohort is ready to go. This combined synchronous/asynchronous program will prepare participants for the AWS Solutions Architect Associate certification. Participants will be guided through Pluralsight training and testing materials by higher education cloud veteran Sharif Nijim, Assistant Teaching Professor, IT, Analytics and Operations at the University of Notre Dame.

The cohort is limited to 15 participants and is being advertised to NET+ AWS subscribers a few days in advance of opening it up to the entire community, so do not delay. Details are available on the registration form. You can register yourself or you can nominate members of your team. If you have additional questions, please contact netplus@internet2.edu.

Kion Infoshare

Over the past year we have been hearing from schools in the higher education cloud community that they are looking for some help sorting through the plethora of 3rd-party tools swirling around the cloud infrastructure space. The top needs expressed were:

1. account automation and maintenance
2. security monitoring and remediation
3. cost tracking management and savings

One product specifically suggested and already being piloted by a few schools is Kion (formerly known as cloudtamer.io). We asked Kion to show the community around their tools and answer your questions.

- **What**: Demo of Kion.io's cloud enablement tools with a focus on higher education enterprise cloud use
- **When**: Tuesday January 11 at 11am PST/2pm EST
- **Where**: Register for zoom link
- **Will it be recorded?** Yes. It will be posted on the Higher Ed Cloud Community page

Two Alarm

Program Satisfaction Survey

One of the vital roles of the NET+ team is to bring the community together, making and sharing opportunities to learn from each other and from the cloud vendors. NET+ Program Development Manager Tara Gyenis has put together a brief survey to get your take on how well we are doing with community engagement. We also want your feedback on vendor (AWS) and reseller (DLT) performance. The survey is designed to get input from everyone from the cloud team to procurement to management. We ask that you share it with others at your institution.

Speaking of engagement...

One of our most powerful engagement tools are our meetings. Yeah, yeah, I know, meetings… But no, seriously. When we bring you, the members of the community together, magic happens. The sharing of challenges, successes, approaches, obstacles, plans, etc. sparks some of the best conversations and most productive networking and collaboration.

By popular demand, we are going to put a little more structure and variety in our NET+ AWS engagement calendar. Here’s what we have planned. Calendar invitations to come out soon.
NET+ AWS Technology (formerly Tech & Tactics) – This will focus on the technology. It has largely been doing that anyway, but without a clear mandate, many managers and cloud leads felt obliged to attend. This is going to be geek speak. (bi-weekly)

NET+ AWS Subscribers – This meeting will be for more strategic discussion. The target audience will be those cloud managers, infrastructure directors, etc. who have not found the technical discussions to be the best use of their time. Twice over the course of the year we’ll ask you to invite your leadership and we’ll invite the heads of higher education strategy from AWS to attend. (quarterly)

NET+ AWS Tech Jams – Co-hosted by Internet2’s Bob Flynn & AWS’s Kevin Murakoshi, these calls are technical deep dives on topics schools are working on but just need to talk through with an AWS technical expert. We’ll bring together the schools and the experts and all watch over their shoulders as they work it out. (quarterly)

NET+ AWS Town Halls – Bring the community together to learn from AWS (or other presenter /panel) about a big picture topic/approach/strategy/trend. Attendees come away from the session with greater understanding on the topic and how they might take advantage of this knowledge within their institution, where to go to learn more, etc. Examples from 2021 include Tools to enable research (e.g., RONIN, Service Workbench), Ransomware, and AWS Academy. (quarterly)

We will be sending calendar invitations to all of these to the NET+ contacts we have. Please accept the invitations for the meetings that interest you and decline the rest. And please do forward them on to others in your organization for whom they may be appropriate.

Make a difference in your community. Join the NET+ AWS SAB

While NET+ Cloud IPS Manager Bob Flynn provides the staff time to address program mechanics and keep things running, it is the NET+ AWS Service Advisory Board (SAB) that provides the leadership and guidance to move the program forward. We are seeking new voices, new schools and new perspectives on the SAB. Make 2022 the year you get more involved in this community. Help make a difference to schools all across the country. Submit your name to be on the NET+ AWS SAB by emailing netplus@internet2.edu.

ICYMI – re:Invent re:Cap

On December 15 legendary AWS Solutions Architect and friend of higher education, Kevin Murakoshi gave a high-speed and high-information presentation on all the most important announcements coming out of AWS re:Invent 2021. It was fun and full of great resources. Find the recording and list of all of the links referenced here.

Credits

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Requests?

Do you have ideas or requests for a future newsletter or engagement event? Email bflynn@internet2.edu
• aws