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 enabled 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
- Shilom Balass, Carnegie Mellon 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 Kinner, 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 priorities 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 sjeanes@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.

NET+ AWS Quarterly Town Hall - Transform Genomic and Biological Data Into insights with AWS Omics is now available

Sean O'Brien (internet2.edu) posted on Feb 15, 2023

Lee Pang, Principal Solutions Architect, Health AI at AWS presented at our quarterly NET+ AWS Town Hall on AWS Omics. NET+ AWS Town Halls are typically a subscriber benefit, but periodically we open the Town Halls up to share interesting topics.

Amazon Omics helps healthcare and life science organizations and their software partners store, query, and analyze genomic, transcriptomic, and other omics data and then generate insights from that data to improve health and advance scientific discoveries.

In this session, you can learn how Amazon Omics provides scalable workflows and integrated tools for preparing and analyzing omics data and automatically provisions and scales the underlying infrastructure so that you can spend more time on research and innovation. Amazon Omics supports large-scale analysis and collaborative research.

This session is for research decision-makers, researchers, and RCD team members who want to learn how Amazon Omics can accelerate research, support large-scale analysis, and generate insights to improve health and advance scientific discoveries.

The slides and recording are available below.

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**Slides:**

Transform Genomic and Biological Data Into insights with AWS Omics

**Recording:**

Transform Genomic and Biological Data Into insights with AWS Omics
Bring your game to GameDay at Community Exchange and the Cloud Forum

If you’re up for an engrossing, wild ride that’s crazy fun, then you’re ready for AWS GameDay.

Internet2 NET+, together with AWS, DLT, and Cloud Academy, are bringing AWS GameDay to the 2023 Community Exchange and Cloud Forum in Atlanta, GA.

What is AWS GameDay?

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.

Highlights:

<table>
<thead>
<tr>
<th>First Place</th>
<th>Second Place</th>
<th>Third Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Squad</td>
<td>Keystone Cloud Crushers</td>
<td>Active Cumulus</td>
</tr>
<tr>
<td>GameDay Details:</td>
<td></td>
<td></td>
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<tr>
<td>------------------------------------------------------------------------------------------------</td>
<td></td>
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</tr>
<tr>
<td><strong>When</strong></td>
<td>Friday, May 12, 2023, 8 a.m. – 3 p.m.</td>
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<tr>
<td><strong>Where</strong></td>
<td>The Westin Peachtree Plaza</td>
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<tr>
<td><strong>Cost</strong></td>
<td>Free of charge, thanks to our sponsors TD Synnex Public Sector/DLT and Cloud Academy</td>
<td></td>
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<tr>
<td><strong>The Game</strong></td>
<td>We are running the Infinidash Ride-Hailing GameDay:</td>
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<tr>
<td></td>
<td>The Infinidash Ride-Hailing GameDay requires participants to make technical and (light) business decisions to win. This means while teams need technical skills to complete, fix and improve Infinidash’s infrastructure, some business acumen will come in handy to decide on how to set up and assign their unicorn fleet.</td>
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<tr>
<td></td>
<td>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.</td>
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</tr>
<tr>
<td><strong>The Players</strong></td>
<td>Bring your whole team, or a partial team, or come prepared to join a team at the event. Registration information is below.</td>
<td></td>
</tr>
</tbody>
</table>
What's Included

- Breakfast and lunch, as well as beverages and snacks throughout the day, 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 GameDay 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
(all included in the Cloud Academy learning path)

- Amazon Fraud Detector
- Amazon DynamoDB
- AWS IoT Core
- AWS Step Functions
- AWS Lambda
- AWS AppConfig
- AWS CodePipeline
- Amazon Route 53
- Amazon EC2
- Amazon Elastic Load Balancer
- Familiarity with the AWS Well-Architected Framework advised

GameDay Registration & Preparation:

Step 1
Register

Register for GameDay through the Community Exchange Registration or the Cloud Forum Registration.

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.

Step 2
Complete Team Roster

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.

You will receive an email invitation from Cloud Academy to set up an account to access GameDay preparation materials.

Cloud Academy orientation sessions will take place on Thursday, April 6 at 2pm EDT. This will be recorded for those who cannot attend during the times provided.

Step 3
Access Prep Work

Questions or Concerns:

Please contact Bob Flynn, Internet2 Program Manager, Cloud Infrastructure & Platform Services, at bflynn@internet2.edu.

GameDay Sponsors:
The special sauce of all NET+ programs is at its tastiest (and most nutritious) when we gather as a community to share our work and our challenges and work through them together. This has been particularly piquant in the NET+ AWS program of late. In this newsletter, I share several excellent events and a couple of quick news items.

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:** 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
- **Description:** 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
- **Place/Registration:** https://internet2.zoom.us/webinar/register/WN__YP4BH8ToKuW9ArcaAPsQ
- **Time:** Wednesday, October 19 at 11am PDT/2pm EDT

### 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/part-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.
- **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 Manager (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**

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:
### When
Monday, December 5, 2022, 8 a.m. – 3 p.m.

### Where
Sheraton Denver Downtown Hotel

### Cost
- Until 10/21: $35 per person General Admission ($10 students)
- After 10/21: $50 per person General Admission ($20 students)

### The Game
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

### Game Day Registration & Preparation:

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
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<tbody>
<tr>
<td>Register</td>
<td>Complete Team Roster</td>
<td>Access Prep Work</td>
</tr>
</tbody>
</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.

**Questions or Concerns:**

Please contact Bob Flynn, Internet2 Program Manager, Cloud Infrastructure & Platform Services, at bflynn@internet2.edu.

**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.