

# NET+ AWS

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

Many [Internet2 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 Internet2 [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](mailto:cloud@dlt.com)
- Higher Education Cloud Vendor Assessment Tool (HECVAT) - pending

### Contract and Pricing:

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

## Community Resources

### Participate in our Online Community (Subscribers Only):

Institutions participating in the NET+ AWS program may take advantage of our email discussion list and Slack channel to receive curated program updates and participate in other activities and events. Please contact [netplus@internet2.edu](mailto:netplus@internet2.edu) to be added.

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

Users of AWS are encouraged to join the AWS Community Channel in the Educause Cloud Community Group Slack. See [the Higher Ed Cloud Community Conversation and Additional Resources page on the Cloud Wiki](#) 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](mailto:sjeanes@internet2.edu) to request access and create a repo in the [Community Cloud Config GitHub organization](#).

### Questions on Billing, AWS Orgs, or CloudCheckr:

Find answers to frequently asked question in these [Knowledge Base articles](#).

- AWS Organizations
  - [Organizations - Customer On-boarding and Management](#)
  - [DLT Secure Handling Of AWS Accounts And Organizations](#)
  - [How To Create A New Account Using Organizations](#)
  - [How To Transfer An Account To Your Organization](#)

## NET+ AWS Service Advisory Board (SAB) Membership

- Gerard Shockley, Boston University, Chair
- Cornelia Bailey, University of Chicago
- James Bennett, Indiana University
- Asbed Bedrossian, Member Emeritus
- Damian Doyle, University of Maryland Baltimore County
- Jeff Gumpf, Case Western Reserve University
- Jim Jokl, University of Virginia
- Scott Kirner, University of Notre Dame
- David Lacey, J. Paul Getty Trust
- Chris Manly, Cornell University
- Rick Rhoades, Penn State University
- Jeff Schneider, College of the Ozarks

## To Contact the Service Advisory Board

- Email: [aws-campus-advisory@internet2.edu](mailto:aws-campus-advisory@internet2.edu)

## NET+ AWS Advisory Board Goals

- [2020 Goals](#)

## Questions?

- Internet2 NET+ Service Management [netplus@internet2.edu](mailto:netplus@internet2.edu)
- DLT Customer Team [cloud@dlt.com](mailto:cloud@dlt.com)
- DLT Ops Team
- Internet2 Program Manager: Oren Sreebny [osreebny@internet2.edu](mailto:osreebny@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](mailto:netplus@internet2.edu).

- New Accounts created through Organizations *do not* include Support by default. To change this to DLT Business Support, follow the instructions in [How To - Change AWS Support Option](#)
- AWS Control Tower
  - [AWS Control Tower Adoption Strategies](#)
- [DLT Process For AWS Customer Credits](#)
  - To prevent DLT from getting 1000 credit memos for the Data Egress Fee Waiver (DEFW) payer, the discount is built into the utilization invoice. For Universities that have their own Payers, AWS is billing utilization at MSRP and then giving us credit memos for DEFW which is shown on the face of the invoice submitted to the customer. Does not appear on backup file. Does appear in CloudCheckr.
  - <http://www.dlt.com/sites/default/files/contract-attachments/DLT%20Solutions%20Internet2%20NET.pdf>
- [How To Initiate Support Request With DLT Operations Center](#)
- [CloudCheckr](#)
  - [CloudCheckr Basic+ Webinar](#)
  - [CloudCheckr Accounts Requests](#)
  - [How To - Create CloudCheckr IAM Policy For Cross-Account Access](#)
  - [Tag Resources for Cost Allocation with a DLT AWS Account](#)
  - [FAQs](#)

## Key Program Updates

Subscribers may review our [mailing list archives](#) for monthly program and AWS updates.



[Fall 2020 Service Updates](#)

Tara Gyenis posted on Dec 18, 2020

### LabArchives releases Jupyter Notebooks integration

NET+ LabArchives reached **20 subscribers** earlier this year. The Electronic Lab Notebook (ELN) is being used successfully enterprise wide by tens of thousands of faculty and researchers in the Internet2 community. In the coming months, the NET+ LabArchives Service Advisory Board members will evaluate for inclusion in the NET+ program two other LabArchives products: LabArchives Scheduler, which has ~70,000 users worldwide, and LabArchives Inventory. Recently, LabArchives integrated with Jupyter Notebooks. The [new integration with Jupyter Notebooks](#) empowers users to capture data science, scientific computing, and machine learning workflows within LabArchives ELN for Research.

### NET+ GCP offers the easiest path to use of the NIH STRIDES program

The National Institutes of Health STRIDES program offers deep discounts on cloud usage for NIH-funded research work. Enrolling an institution to take advantage of STRIDES with NET+ GCP only requires filling out an additional order form with your chosen NET+ GCP reseller. For more information on using NET+ GCP with STRIDES check out our [blog post](#) or email [netplus@internet2.edu](mailto:netplus@internet2.edu).

### NET+ AWS campuses implement AWS Organizations and Control Tower

AWS Organizations and Control Tower are AWS features that help institutions to manage and govern their multi-account AWS environments. The NET+ AWS Organizations and Control Tower working groups have helped map out strategies for campuses to successfully implement Control Tower in their AWS environments, and Internet2 [published a post](#) by Peter Traub outlining the implementation of Control Tower at the University of Virginia. If you are interested in participating in these working groups, please email [netplus@internet2.edu](mailto:netplus@internet2.edu)

- [aws](#)
- [gcp](#)



[Useful AWS Tidbits](#)

Oren Sreebny posted on Oct 08, 2020

Here are some recent items that community members have shared for using AWS in their higher ed environments:

Shelley Rossell from the University of Chicago shares [this useful document](#) on Managing Guard Duty accounts with AWS Organizations. You can use this to name a GuardDuty master account for the organization and other accounts in the organization can be viewed and added as GuardDuty member accounts.

Shelley also shares [a document from Amazon](#) on how to use AWS SSO for easy authentication to the AWS CLI, which means that individual CLI users don't have to separately manage keys for access.

Aaron Hunnewell from the University of Virginia notes that he found [this recent post](#) on How to Manage AWS SSO Account Assignments in CloudFormation to be useful.

And Nathan Dors from the University of Washington has pointed us to [this very useful example](#) of how the UW is allowing AWS users to link Grouper groups to AWS roles.

- [aws](#)



Video and slides from [Introduction to AWS for Researchers session on July 21](#)

Oren Sreebny posted on Jul 22, 2020

Thanks to all who led the training, and special thanks to Danyell Wilt and the entire AWS team for providing great content and support for answering all the questions.

The video of the session is available at:

<https://internet2.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=0ef71592-8360-4cad-b92e-ac01013b6a2c>

Here are Danyell's slides:



And here are Sara Jeanes' slides:



The Q&A from the session is here:



07212020 Q&A Report.pdf

- [aws](#)



#### [AWS Control Tower Deployment Strategies](#)

Sara Jeanes ([internet2.edu](#)) posted on May 19, 2020

Peter Traub, Sr Cloud Infrastructure Engineer at University of Virginia has put together a great guide to adopting AWS Control Tower. His guide is now hosted on the NET+ AWS service page - [AWS Control Tower Adoption Strategies](#).

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#### [AWS Announces Control Tower for Existing AWS Organizations](#)

Sara Jeanes ([internet2.edu](#)) posted on Apr 23, 2020

Since last Spring, subscribers to NET+ AWS have had access to [AWS Organizations](#), which provides a management framework for AWS accounts, and permits administrations to apply [service control policies](#) to various [Organizational Units](#) (OUs) within their Organization.

Late last Summer, AWS announce [Control Tower](#), a feature native way to deploy accounts and enforce [Guardrails](#) in an AWS patterned way. This functionality was limited to deployment in a completely separate Organization, but in coordinating with a small team of schools, DLT and Internet2 devised a way to deploy Control Tower. These canary schools reported back that while Control Tower can be run, but most should hold off until Control Tower could be run natively in existing AWS Organizations. Today is that day.

Last night, AWS announce that Control Tower can now be run in existing AWS Organizations! While the participating schools are testing the functionality, it does appear Control Tower can be deployed within the OU of an existing Organization. The AWS team posted a blog post with additional details here: <https://aws.amazon.com/blogs/field-notes/enroll-existing-aws-accounts-into-aws-control-tower/>. If you are a NET+ AWS schools who has deployed an AWS Organization, you should be able to test out the functionality today. We would highly encourage you attend the bi-weekly AWS Orgs and Control Tower call to trade notes with your colleagues and share the pitfalls. We have also on more than one occasion found a bug that collided with common higher ed deployment patterns that needed to be reported back to AWS Engineering.

If you would like to attend the call, or request an AWS Organization for your university, please reach out!

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[NET+ AWS Agreement updated to include Partner Statements of Work; BAA updates](#)

Sara Jeanes ([internet2.edu](#)) posted on Mar 30, 2020

The NET+ AWS Advisory Board, DLT, and Internet2 have worked over the last few months to update the subscriber Enterprise Customer Agreement (ECA). The ECA was last updated in 2017 to include a Business Associates Agreement (BAA) in the program.

With this now available update, subscribers can now access professional services from any participating Partner in the [AWS Partner Network](#). To minimize the hurdles of engaging a Partner, these services can be accessed directly via Statements of Work delivered by DLT under this Agreement. Additionally, the BAA now includes a direct link to all HIPAA eligible services and no longer restricts HIPAA workloads to dedicated instances. To make use of these new features, subscribers will need to execute a new ECA. Please email [cloud@dlt.com](mailto:cloud@dlt.com) to get that process started.

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[New AWS Community Calls - Biweekly 'Tech and Tactics' and AWS Orgs and Control Towers calls](#)

Sara Jeanes ([internet2.edu](#)) posted on Mar 19, 2020

We welcome you to join us on biweekly community calls. Our Wednesday morning call focuses on the Technology and tactics of running AWS as scale. Our Thursday call deep dives on the technical particulars of Organizations and Control Tower.

Reach out to [sjeanes@internet2.edu](mailto:sjeanes@internet2.edu) to be added to the invites.

The following topics are planned for the Wednesday Technology and Tactics call:

- 3/25 - A review of IPv6 on AWS
- 4/8 - A facilitate a conversation on AWS Educate

Hope you can join us!

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