



## Cloud Connect for the Internet2 Community

Internet2 is pleased to introduce Cloud Connect, allowing the Internet2 community to leverage its regional and national infrastructure to directly access leading Cloud services. Currently, Internet2 offers access to Microsoft Azure Express Route, Amazon's AWS Direct Connect and Google Cloud Platform Dedicated Interconnect.

### Community Requests

Internet2 has received requests from campuses and regional networks for direct connectivity across the backbone to cloud providers including Azure Express Route and AWS Direct Connect, using the methods by which each of these cloud providers allow dedicated connections via a layer 2 or layer 3 solution to their cloud environments.<sup>1</sup>

### Cloud Initiative Stages

For the first stage of this service, Microsoft Azure Express Route, Amazon AWS Direct Connect and Google Cloud Platform Dedicated Interconnect will become available via Internet2 and regional networks through multiple 10G connections to these providers distributed across the country. This stage of the service will become available as part of Internet2's existing Layer 2/Layer 3 service and will be offered at no additional fee (all Internet2 connectors already have Layer 2/3 Service). The next stage of the Service will research community requirements for multi-cloud movement of data into, out of and across multiple major cloud providers and will design a roadmap for more automated and complex use cases. Community input on that service roadmap is critical and welcome.<sup>2</sup>

#### Microsoft Express Route

Currently, Internet2 has 10G connections in Ashburn and Chicago. Additional ports in Dallas and a west coast location will follow as demand from members and connectors dictates. Members interested in the service will need to execute their own Express Route subscription with Microsoft. Members will be able to obtain 1G vlans to connect through Internet2's 10G ExpressRoute port.

#### Amazon Web Services Cloud

Internet2 currently has solutions in Ashburn and Chicago to allow access to AWS Direct Connect with either a layer 2 or layer 3 solution. Members will need to work directly with Amazon to subscribe to the AWS Direct Service or can leverage an existing campus Net+ agreement. Plans will be in place to allow rapid expansion to additional cities as demand dictates.

#### Google Cloud Platform

Currently, Internet2 has a 10G connection in Ashburn to support the Google Cloud Platform Dedicated Interconnect Service. Members will be able to obtain 1G vlans to connect through Internet2's 10G Dedicated Interconnect port. Members interested in the service will need to execute their own Cloud Platform subscription with Google.

Microsoft Azure



Google Cloud Platform

For more information about this service, please send an email to: [cloudconnect\\_request@internet2.edu](mailto:cloudconnect_request@internet2.edu)

<sup>1</sup>. Internet2 will place no restrictions on who can utilize the service through regional networks (i.e. this will be available to Community Anchor Program (CAP) and sponsored participants), any restrictions would be applied by the cloud provider.

<sup>2</sup> Internet2 plans to offer these direct connections of the Internet2 backbone as part of its existing services and fee structures. Based on community input, our goal is to enable members to leverage the investment they have already made in the backbone infrastructure. As a roadmap for additional service capabilities is developed and the associated investment for that level of service becomes clear, a community discussion about the business model for that future service may be necessary.