Frequently Asked Questions about Sponsored Participation in Abilene
(Individual Institutions and Sponsored Educational Groups)

GENERAL QUESTIONS ON ABILENE PARTICIPATION

What is an Abilene Participant?

Any organization that subscribes to or uses Abilene services through a gigaPoP, through direct connection, or through any other route is considered an Abilene Participant. Abilene exists to advance Internet2's goal of facilitating and enabling the development of advanced network applications, services, and content that enable routine collaboration on instructional, clinical, and/or research projects, services, and content among participants. Abilene provides high-performance networking for data traffic among participating gigaPoPs and Regular Members, as well as other organizations whose connectivity benefits higher education in the United States.

Participants in Abilene fall into two categories: Primary and Sponsored. Within the Sponsored Participation category there are two classes, Sponsored Individual Institutions, and Sponsored Educational Group.

PRIMARY

Regular University members, and Affiliate and Corporate members with Collaboration Site Status. Primary institutions are typically colleges and universities, but may also be other types of research organizations with the capability of committing and deploying the substantial resources necessary to implement Internet2 capabilities.

A complete list of Internet2 members can be found at:
http://www.internet2.edu/html/members.html

SPONSORED

*Sponsored Individual Institutions (or simply Sponsored)*

Individual educational institutions (including not-for-profit and for-profit K-20, technical, and trade schools), museums, art galleries, libraries, hospitals, as well as other non-educational, not-for-profit or for-profit organizations that require routine collaboration on instructional, clinical, and/or research projects, services, and content with Primary participants or with other Sponsored Participants. Such organizations typically are either not eligible or not able to become Internet2 members.
Sponsored Educational Group

Networked aggregates of educational institutions (including non-profit and for-profit K – 20, technical, and trade schools) which may also include museums, art galleries, libraries, or hospitals that require routine collaboration on instructional, clinical, and/or research projects, services, and content with Primary participants or with other Sponsored participants.

How do Internet2 members become Abilene Participants?

Internet2 members can become Abilene Primary Participants by completing a participation agreement, a separate process from becoming a Member. Primary Participants agree to pay a participation fee as imposed by Internet2 and to adhere to the Abilene Conditions of Use. See http://www.ucaid.edu/abilene/html/cou.html

How does Participation differ from Membership?

"Membership" refers to the formal relationship eligible organizations have with Internet2. Internet2 has three categories of membership: Regular University, Affiliate, and Corporate. "Participation" applies specifically to Internet2 backbone networks, such as Abilene. Organizations must first be Members to qualify as Primary Participants. Regular University Members can connect their main campus locations to Abilene as Primary Participants. Affiliate Members and Corporate Members must also have Collaboration Site Status to become Primary Participants in Abilene. Collaboration Site Status is a specific membership category that applies to locations where advanced networking technology development, advanced network-based applications development, and/or research and education that makes use of advanced networking technologies and applications takes place. Research or education-orientated labs at non-profit and corporate organizations are examples of collaboration sites.

Membership carries certain benefits, such as attendance at member meetings and workshops, and participation in working groups and discussion lists. Regular University Members can vote for members of the Internet2 Board of Trustees and Internet2 Advisory Councils. All Members pay annual dues.

For more information on membership, see http://www.internet2.edu/ucaid/html/membership.html
QUESTIONS ABOUT SPONSORED INDIVIDUAL INSTITUTION PARTICIPATION

How can an organization become a Sponsored Participant?

An Internet2 Regular Member that is also an Abilene Primary Participant must sponsor organizations with potential to become Sponsored Participants. The Regular Member submits an application to Internet2 that describes the planned or existing collaboration on advanced applications or networking with the potential Sponsored Participant. The Regular Member also submits a letter agreeing to the conditions of sponsorship. The application is reviewed by Internet2 senior staff. Upon acceptance of the application, the sponsor is notified and the necessary network routing is enabled to allow the Sponsored Participant to use Abilene. A description of the process and application materials can be found at [http://www.ucaid.edu/abilene/html/secondary-application.html](http://www.ucaid.edu/abilene/html/secondary-application.html)

Who can sponsor individual institutions for Abilene connectivity?

Only Internet2 Regular Members that are also Abilene Primary Participants can sponsor individual institutions for connection to Abilene. Affiliate and Corporate Members, even with Collaboration Site Status, cannot be sponsors.

What are the responsibilities of the sponsor?

The Internet2 Regular Member and Abilene Primary Participant assumes responsibilities identical to those it has for its own campus. Sponsors are principally responsible for:

- Ensuring that the potential institution is appropriate for sponsorship, as described in the Abilene COU. If the Sponsored Participant ceases to be so, the sponsor agrees to inform Internet2 in writing and arrange to have it disconnected from Abilene.
- Annual submission of a written summary of the contribution to the Internet2 project made by each Sponsored Participant, as a means of demonstrating to other members the appropriateness of the continued sponsorship.
- Ensuring that the Sponsored Participant abides by the Abilene Network Terms of Participation including the Abilene Conditions of Use.
- Ensuring that the Sponsored Participant has an appropriate connection to Abilene through an institution having a Connector Agreement with Abilene.
- Providing up to date information about the Sponsored Participant's means of connection to Abilene, including the name of its Connector.
What is the relationship of Sponsored Participants to Internet2?

Sponsored participants have no relationship to, and are not members of, Internet2. They cannot participate directly in any working groups or initiatives, and cannot attend member meetings. Their relationship is to their sponsor.

Are there any requirements of the Sponsored Participant?

Potential sponsored individual institution participants are expected to be engaged in activities that require routine collaboration on instructional, clinical, and/or research projects, services, and content with Primary participants or with other Sponsored Participants.

What organizations cannot become Sponsored Participants?

Institutions classified as Carnegie Doctoral/Research-Extensive must become Internet2 members and Abilene Primary Participants in order to connect to Abilene.

Can Internet2 members become Sponsored Participants?

Internet2 University and corporate members must become Primary Participants to connect to Abilene. Currently, Affiliate members can connect to Abilene as either Primary or Sponsored Participants. Sponsored participation can be a reasonable option for those Affiliate members who have planned or existing collaborations with a single Internet2 member, or otherwise expect to make fairly limited use of Abilene. Affiliate members who have collaborative relationships with multiple Internet2 members should consider Primary Participation as the most effective way of supporting their activities.

What does it cost to become a Sponsored Participant?

Sponsored Participants may pay fees to the Connector and/or to the Member, as these fees apply to the specific conditions of connection. Sponsored Participants pay no dues or fees directly to Internet2.

If a Sponsored Participant wants to connect to Abilene, will Internet2 find a sponsor?

In general, Internet2 does not take on the role of finding specific sponsors for potential Sponsored Participants. Internet2 members are listed on the public website, and potential Sponsored Participants are welcome to investigate with a local University the possibility of connecting. (NOTE: Internet2 will assist potential sponsored participants applying for an award under the NSF High Performance Network Connections (HPNC) for Science and Engineering Research program. See http://www.internet2.edu/html/hpnc.html.)
How is a Sponsored Individual Institution Participant different than a Sponsored Educational Group Participant?

Sponsored Participants are individual research and education organizations that are engaged in collaboration with an Internet2 member or other sponsored participants on instructional, research, clinical or content-related projects. The impetus for sponsorship is the existence or planned existence of a collaborative project designed to develop or use advanced applications or further the deployment and use of advanced networking capabilities. Sponsored Educational Group Participants are aggregations of educational organizations brought together in a state-wide or other wide-area network within a state. Examples of these aggregations are state-wide K-12 networks, community college networks, and similar collectives of educational organizations. These networks are engaged in applications development and other projects designed to enhance their use of advanced networking infrastructure and services.
QUESTIONS ABOUT SPONSORED EDUCATIONAL GROUP PARTICIPATION

What is a Sponsored Educational Group Participant (SEGP)?

A SEGP is an aggregate of educational and education-related organizations (museums, libraries, etc.) inter-connected by one or more networks within a state that is approved for participation in Abilene. To become a SEGP, the group of organizations must be sponsored by an Internet2 university member that is an Abilene primary participant. The SEGP and the university must be located in the same state, and must attach to Abilene through to the same connector.

What does becoming a SEGP provide?

SEGP status allows members of the aggregation to send and receive traffic over the Abilene network.

What is the relationship of SEGPs to Internet2?

SEGPs have no relationship to, and are not members of, Internet2. They cannot participate directly in any working groups or initiatives, and cannot attend member meetings. Their relationship is to their sponsor.

What difference will the connection to Abilene provide to the average school?

The connection to the backbone network does not alone guarantee any improvement in network performance over existing Internet connections. In addition to the backbone, local and regional networks at both ends of the network connection being used must be high-performance for users to experience improved performance.

Who can sponsor a Sponsored Educational Group Participant?

Internet2 Regular (University) members can sponsor networked aggregations of educational organizations as Sponsored Educational Group Participants in Abilene. The sponsor must be in the same state as the networked aggregate. Requests for exceptions to the same-state requirement should be referred to the Internet2 Director of Member Activities.

Can more than one Regular (University) Member of Internet2 in the same state sponsor a Sponsored Educational Group Participant?

Yes. These types of collaborations are encouraged.
What is the process for adding a Sponsored Educational Group Participant to Abilene?

An Internet2 Regular member that is also an Abilene Primary Participant, or a group of Internet2 Regular members and Primary Participants, can submit an application to sponsor a networked aggregate of educational organizations, such as a state K-20 network. The sponsor(s) submits an application to Internet2 that describes the network's applications, projects, and other activities involving Internet2, and documents its commitment towards implementing advanced networking capabilities. The Regular Member also submits a letter agreeing to the conditions of sponsorship. The application is reviewed by Internet2 senior staff. Upon acceptance of the application, the sponsor is notified and the necessary network routing is enabled to allow the Sponsored Participant to use Abilene. A description of the process and application materials can be found at http://www.ucaid.edu/abilene/html/sponsored-application.html

What are the costs associated with Sponsored Educational Group Participation and who pays them?

Internet2 will charge the Connector for the Sponsored Educational Group Participant an annual fee of $30,000 per connector per state, plus a variable fee of $2,000 times the current number of Congressional representatives for that state. Sponsored Educational Group Participants may pay fees to the Connector and/or to the sponsoring Internet2 member, where these fees apply to the specific conditions of connection. No fees are assessed directly of the Sponsored Educational Group Participant itself by Internet2. This fee structure will be assessed on an annual basis. Any questions about how this fee applies in specific situations should be referred to the Internet2 Director of Backbone Network Infrastructure.

Can the Connectors apply E-rate to this fee?

This fee is not eligible for any discounting under the K-12 Schools and Libraries program of the Universal Services Fund.

Can an Abilene Connector support more than one Sponsored Educational Group Participant?

Yes. In states with multiple state education networks (e.g., distinct K-12, CC, and 4-year college networks), one or more sponsors can work with the same Abilene Connector to aggregate these networks’ traffic.

What are the responsibilities of the sponsor?

Sponsors are principally responsible for:
Ensuring that the potential Sponsored Educational Group Participant is appropriate for sponsorship, as described in the Abilene COU. If the Sponsored Educational Group Participant ceases to be so, the sponsor agrees to inform Internet2 in writing and arrange to have it disconnected from Abilene.

Identifying an Abilene connector that will provide the proposed network’s connectivity to Abilene

Describing one or more advanced application for which either the sponsored network or schools therein will utilize Abilene

Reporting periodically on the proposed participant's activities that make use of advanced network services and its commitment to deploying advanced networking capabilities

Identifying any Carnegie Doctoral/Research-Extensive (D/R-E) institutions within the sponsored network that are not eligible to participate in Abilene without first becoming an Internet2 member

What are the increased technical requirements for Abilene connectors supporting one or more Sponsored Educational Group Participants?

A Connector supporting the Sponsored Educational Group Participant(s) must:

- maintain a 7x24 Network Operations Center (NOC) that is accessible to the Abilene NOC
- register its routing information and that of the Participant(s) in the Internet2 Routing Registry (I2db) or equivalent provide UCAID a quarterly report on the relative utilization of the Abilene connection by the Sponsored Education Group Participant(s)
- assure compliance with the Abilene CoU by the Participant(s)
- inform the Participant(s) that Abilene does not provide transit to the commodity Internet
- use a distinct origin Autonomous System Number (ASN) so as to distinguish its routing information for that of other Participants using the same connection
- not use Abilene to transit any intra-state traffic within its own network (in cases where the Sponsored Education Group Participant is multiply homed to Abilene)
- take steps to avoid causing Abilene to establish any additional ATM permanent virtual circuits or BGP peerings to the Connector.

Are there any requirements of the Sponsored Educational Group Participant?

Potential Sponsored Educational Group Participants are expected to be engaged in activities that make use of advanced network services and be able to document a commitment to deploying advanced networking capabilities.
What organizations cannot be covered by Sponsored Educational Group Participation?

Institutions classified as Carnegie Doctoral/Research-Extensive that are part of these networked aggregates must become Internet2 members and Abilene Primary Participants in order to connect to Abilene. Internet2 Regular members that are part of these networked aggregates are expected to remain Internet2 members and Abilene Primary Participants.

How is a Sponsored Educational Group Participant different than a Sponsored Individual Institution Participant?

Sponsored Educational Group Participants are aggregates of organizations brought together in a state-wide or other wide-area network within a state. The network serves as a means of connecting these organizations to each other as well as to external networks where the cost of connection can be shared by all. Examples of these aggregates are state-wide K-12 networks, community college networks, and similar collectives of educational organizations. These networks are engaged in applications development and other projects designed to enhance their use of advanced networking infrastructure and services. Sponsored Participants are individual research and education organizations that are engaged in collaboration with an Internet2 member or other sponsored participants on instructional, research, clinical or content-related projects.
Letter of Sponsorship of a Sponsored Participant

University Corporation for Advanced Internet Development
3025 Boardwalk, Suite 100
Ann Arbor, MI 48108

Attn: H. Martinson

Re: Abilene Sponsored Education Group Participation

Dear Dr. Corbató;

As one or more Primary Participant(s) in the Abilene network, we, __________________ (name of Sponsor(s)) wish to extend our Participation Agreement to include the sponsorship of certain networks in the same state as ours as a Sponsored Education Group Participant in Abilene. We understand that we are responsible for ensuring that these institutions are appropriate for sponsorship as a Sponsored Education Group Participant, as described in the Abilene CoU, and if they cease to be so, we will inform you in writing and arrange to have them disconnected from Abilene. We also agree to submit to UCAID periodic reports from this Sponsored Education Group Participant about their applications, projects, and other activities involving Internet2, and their progress towards implementing advanced network capabilities.

We agree to ensure that our Sponsored Education Group Participant abides by the Abilene Network Terms of Participation including the Abilene Conditions of Use, which is part of our Participation Agreement. We have the right to terminate their Abilene Participation at any time, and we agree to inform UCAID and the Connector below of any such change. All current and former Internet2 members and any other Carnegie Doctoral/Research -Extensive institutions that may be part of these networks are not eligible to participate in Abilene without maintaining Internet2 membership and paying the annual Abilene participation fee.

We are responsible for ensuring that the Sponsored Education Group Participant has an appropriate connection to Abilene through an institution maintaining a Connection Agreement with Abilene. We agree to provide you with and to keep updated information about their means of connection to Abilene, including the name of their Connector. The Connector also agrees that on their behalf that (a) a “Technical Contact” shall be responsible for the resolution of operational problems involving their use of the network and (b) for all other matters a designated "Executive Contact" shall be responsible.

When you, UCAID, countersign this Sponsorship Agreement, it will become an extension to our Abilene Participation Agreement and the Connector's Connection Agreement. The Sponsored Education Group Participant exhibit attached to this letter will become an addition to our respective agreements and covered by them and any future changes to it.
We understand that fees are due and payable to UCAID by the Connector for Sponsored Education Group Participation, and these fees are outlined in the Connection Agreement. Upon acceptance of the Sponsored Education Group Participant, the Connector assumes fiscal and operational responsibility for the Participant to both UCAID and the Abilene NOC.

The resulting updated Abilene Sponsored Education Group Participation Agreement, including its attachments, constitutes the entire understanding between you, UCAID and us with respect to our use of Abilene and supersedes any prior understandings and agreements, written or oral, between you and us regarding this subject matter. No representation or other statement, written or oral, will be binding on you or us unless it is set forth in this Agreement, the Terms of Participation, the Terms of Connection or the Appendix thereto.

Sincerely,

MEMBER

[signature] Date:_______________

By:_______________

[print name]

Its:_______________

[print title]

MEMBER (in the event of a second sponsoring institution)

[signature] Date:_______________

By:_______________

[print name]

Its:_______________

[print title]
CONNECTOR

________________________    Date:____________________
[signature]

By:_____________________
[print name]

Its:_____________________    Sponsorship Date:___________
[print title]          [to agree with official Connection Date
                     of Connector]

ACCEPTED BY UCAID:

[signature]    Date:____________________

By:_____________________
[print name]

Its:___________________
[print title]
EXHIBIT A
Sponsored Education Group Participant covered by the Primary Participant's Agreement and Connector's Connection Agreement
(For each sponsored education group please provide the following.)

1. **Identity of Sponsored Education Group Participant;**
   Please give enough information to identify the network aggregate, its composition (e.g. a K-12, 2-year and/or 4-year college network), and its geographic extent.

   Please note: A separate application for sponsoring individual institutions (e.g., a baccalaureate college or K-12 school district) as Sponsored Participants is available. If in doubt, contact abilene@internet2.edu

2. **Purpose of Sponsorship**
   Please report briefly on the proposed network's commitment to deploying advanced networking capabilities.

   In addition, please describe at least one advanced application or advanced service for which either the sponsored network or one or more institutions therein will utilize Abilene.

   This information should be the basis for the periodic update. This update can be made via a Web page, and a URL for this purpose can be submitted here.

3. **Name of Connector that has agreed to connect this Sponsored education group participant to Abilene**