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*E2Epi Performance Evaluation System
(E2E piPES)*

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Remember the Problem?

Hey, this is not working right!

Others are getting in ok

Not our problem

Applications Developer

Applications Developer

LAN Administrator

LAN Administrator

Talk to the other guys

System Administrator

System Administrator

Everything is AOK

Campus Networking

Campus Networking

The computer is working OK

No other complaints

Looks fine

Gigapop

Gigapop

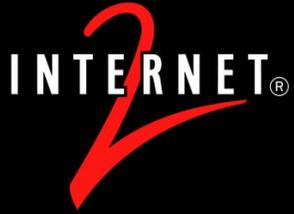
All the lights are green

How do you solve a problem along a path?

Backbone

We don't see anything wrong

The network is lightly loaded

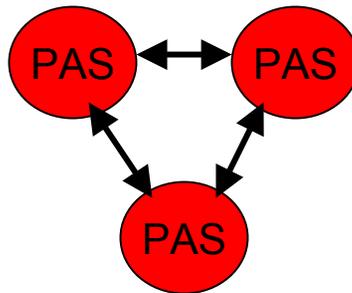


E2E piPES

Goal: To allow end-users and network operators to determine performance capabilities, locate problems, and contact the right person to get a problem resolved.

The New Abilene will have measurement devices as part of its structure

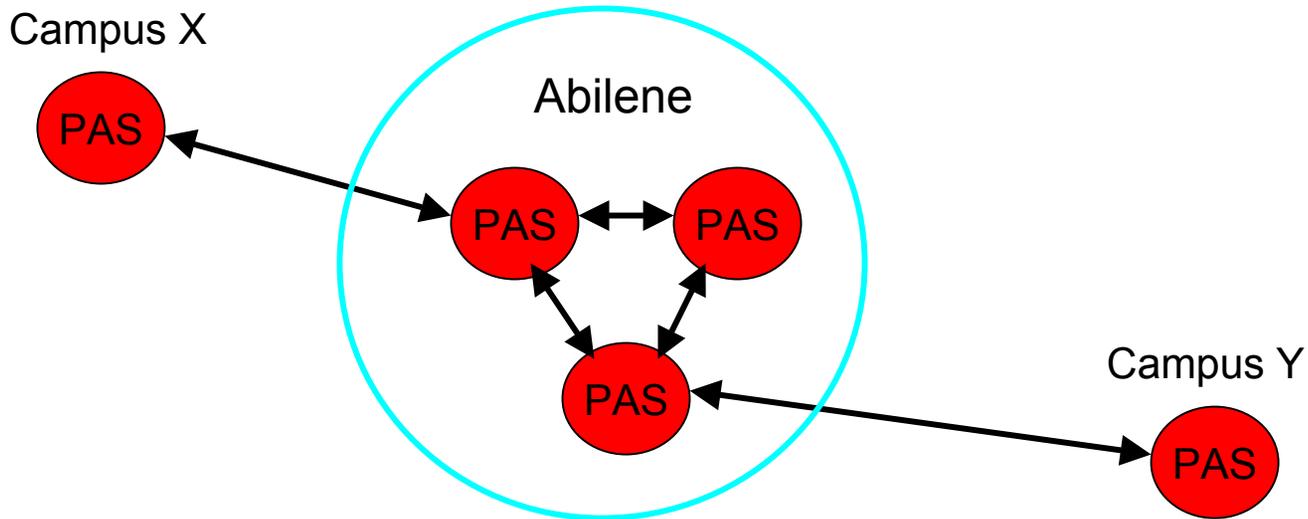
Abilene



PAS = Performance Analysis Station (at each Abilene Node)

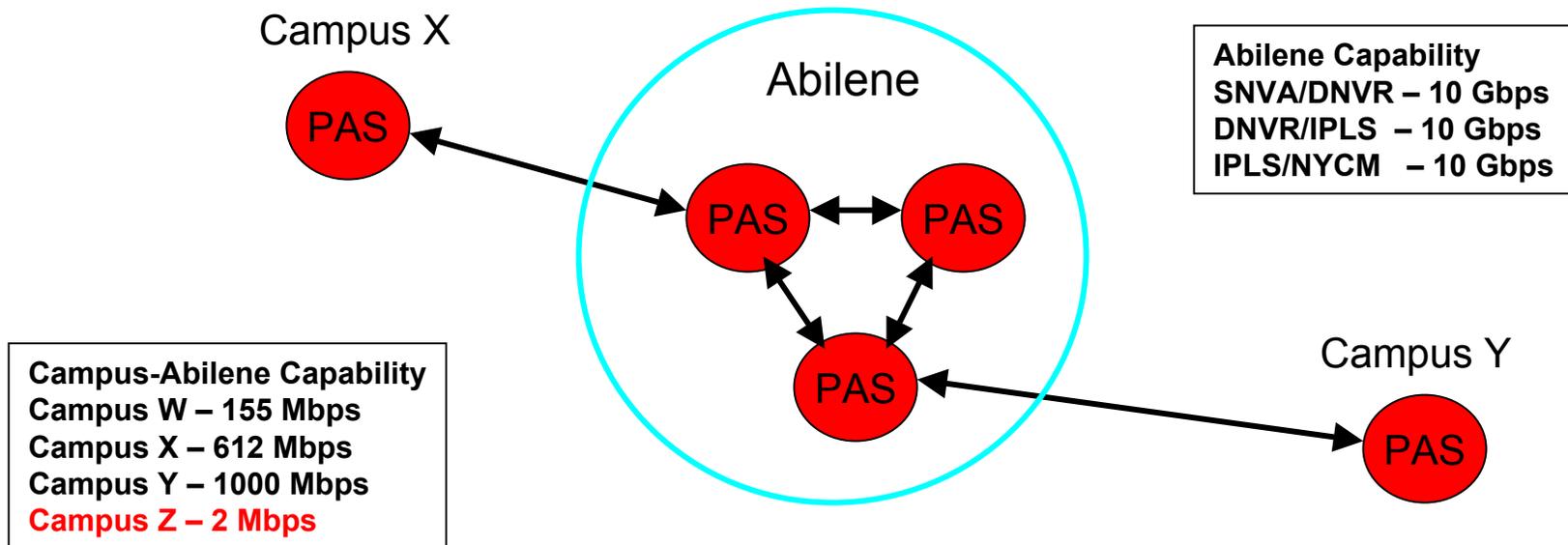
The Measurement System

Extend the System to Campuses

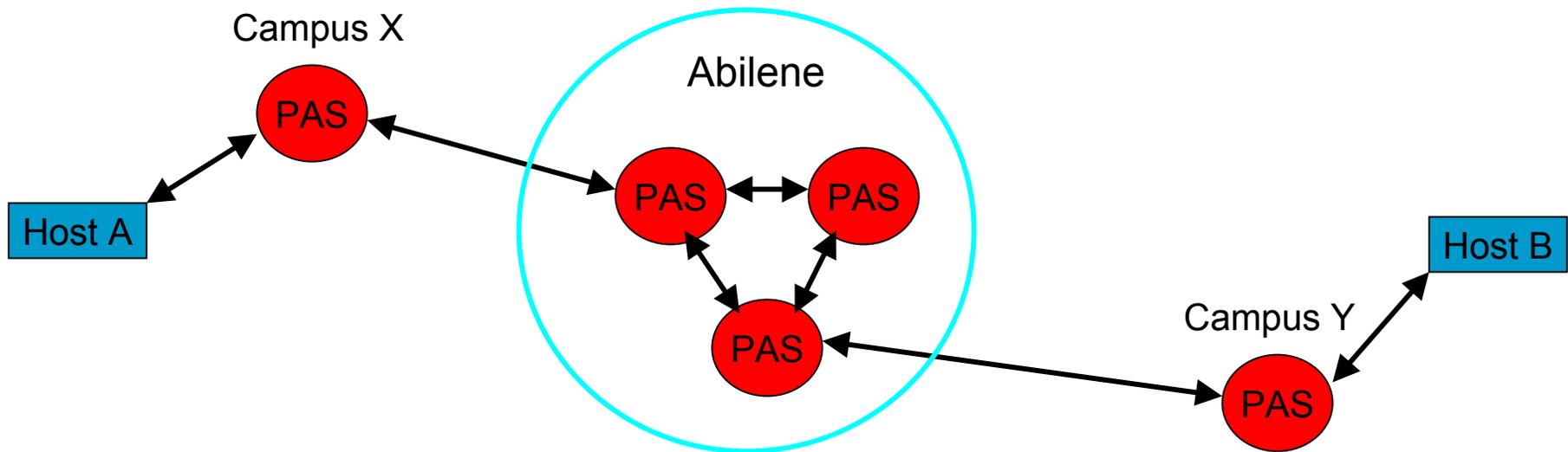


PAS at each **Campus Border**

Perform regular tests to provide web based Performance Reports across Abilene and for Campus-Abilene paths



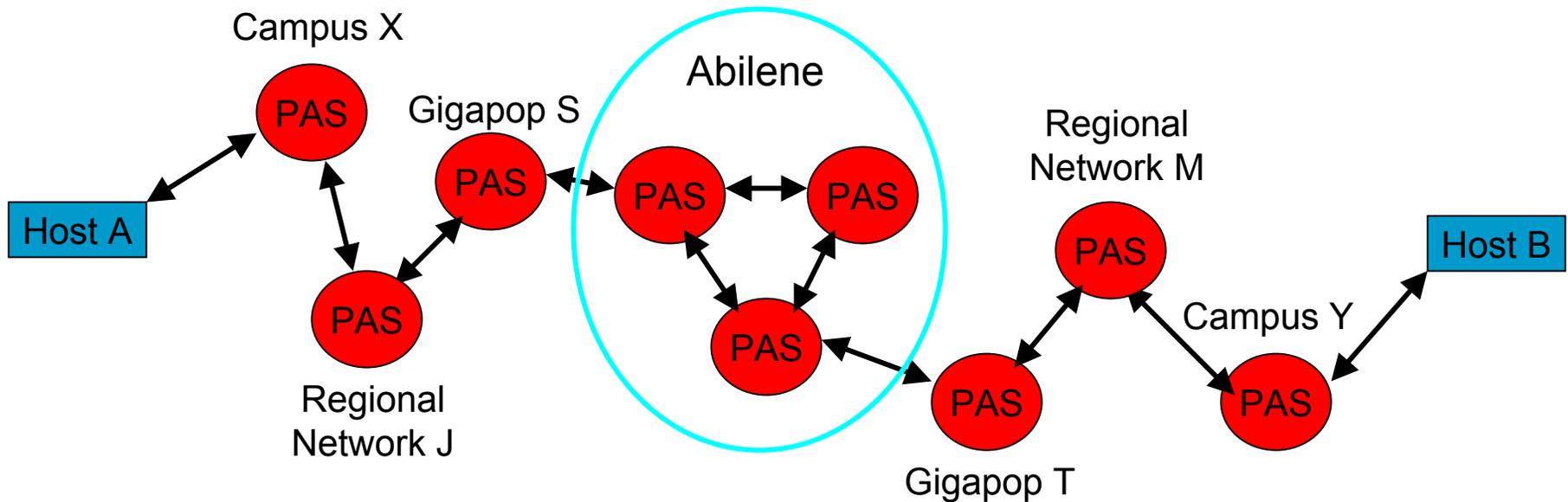
Provide a Testing Tool for the End-Users Computer to test across campus and beyond



The tool reports performance of the path to a specified destination by using active tests (like to the campus border) or using stored test results from regularly scheduled tests

Adding Path Information

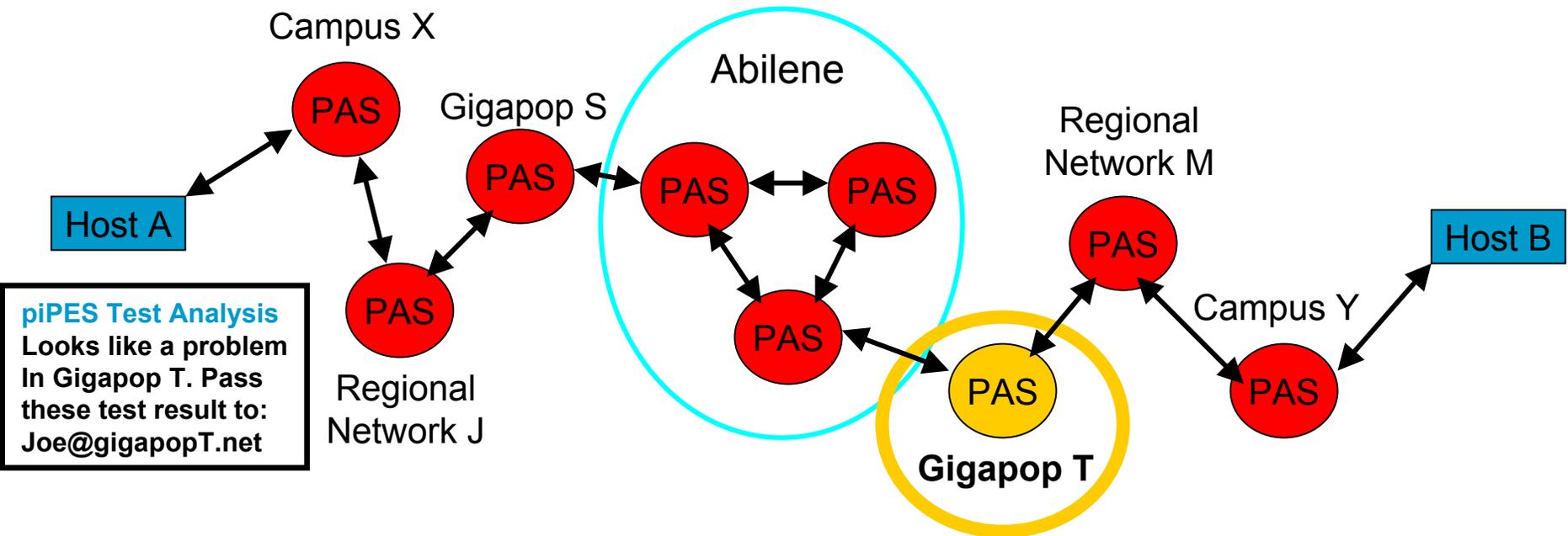
Add PAS along paths to provide additional detail



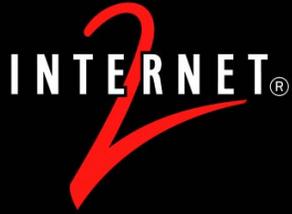
Regular tests are performed between adjacent PAS and stored in a Data Repository. This information is used by the End-User tool to reduce the number or active tests needed.

Who You Gonna Call?

E2E piPES will provide contact information when a segment in the path appears to have a problem



The test results obtained by the End-User will be passed on to the contact person



Who is doing the work?

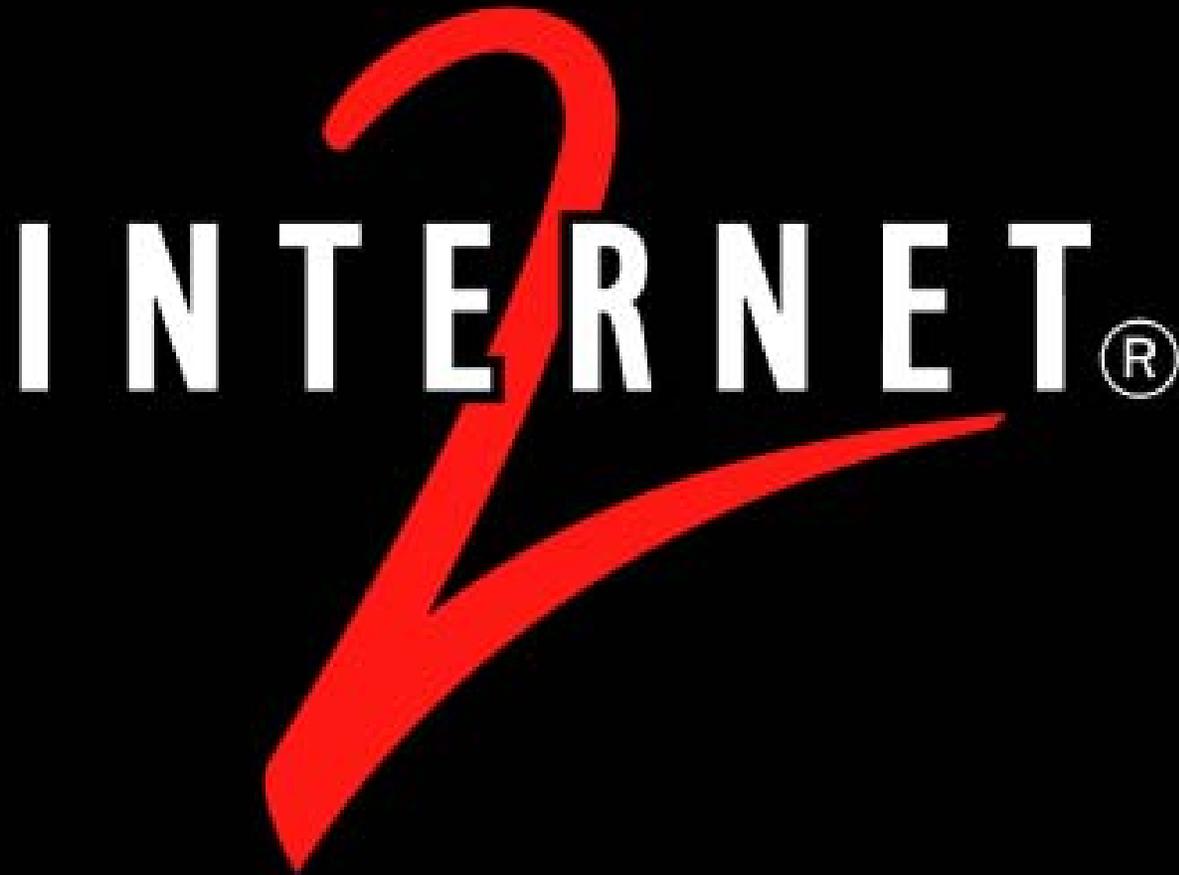
E2Epi will build on many of the measurement and data tools already developed by our community.

Several organizations have joined in this projects to provide parts of the architecture.

*A white paper on the architecture will be available shortly. **<http://E2Epi.internet2.edu>***

If you would like to join in the project or want to discuss details, contact:

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www.internet2.edu

