



Internet2 Engineering Update

Lincoln

Guy Almes <almes@internet2.edu>

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Internet2 IPv6

A IPv6 Working Group

Dale Finkelson, Univ Nebraska, chair

A Build the Internet2 IPv6 infrastructure

A Educate campus network engineers to support IPv6

A Explore the Motivation for IPv6 within the Internet2 community



IPv6 Infrastructure

A vBNS IPv6 with IPv6 / ATM

A Abilene IPv6 with IPv6 / IPv4

Four 'backbone' nodes: Cisco 7200

" Atlanta, Pittsburgh, Denver, and Indianapolis

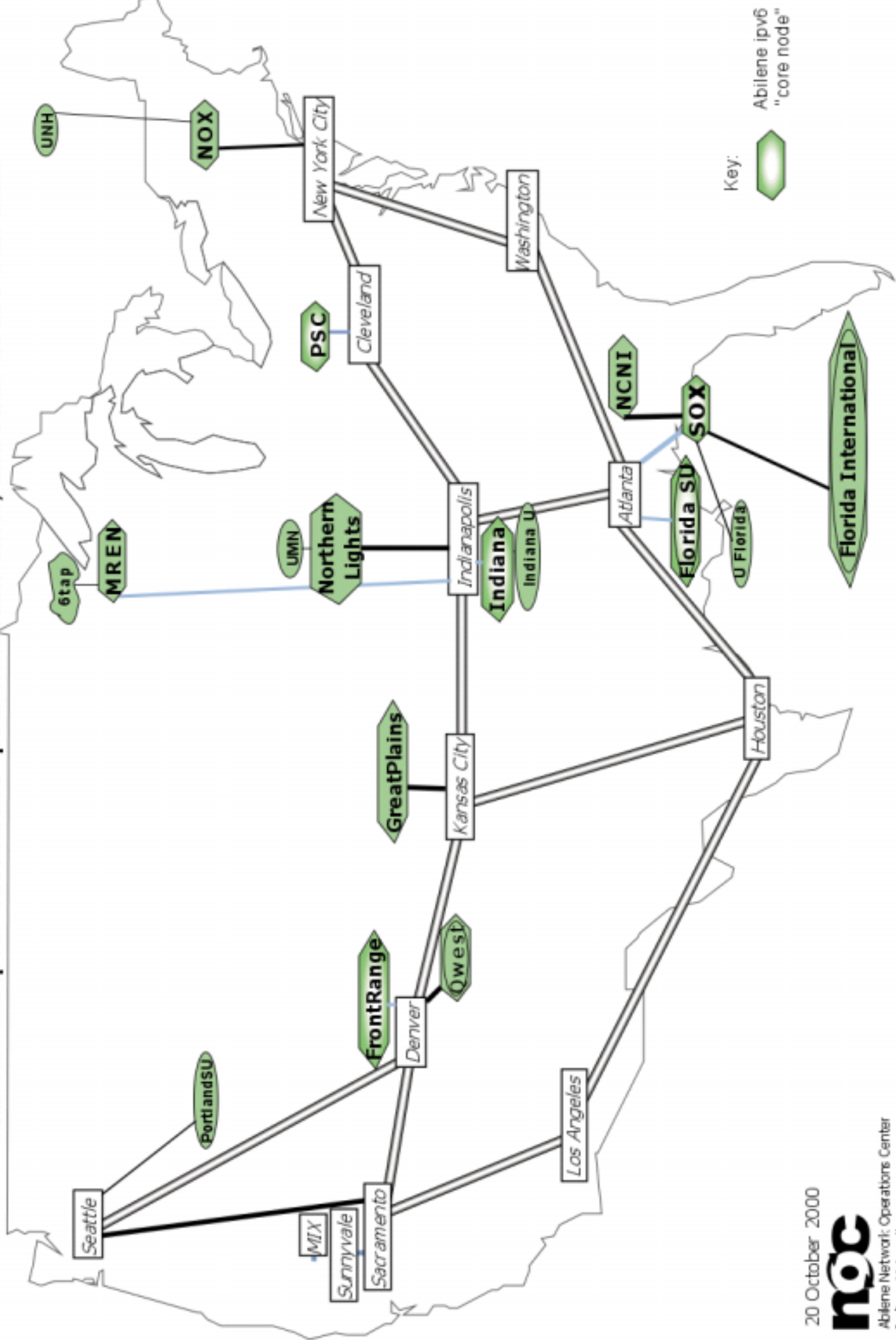
Managed by the Abilene NOC

A IPv6 address allocation and engineering coordination

The Abilene Network

IPv6 deployment

Four Abilene ipv6 "core nodes" peer with each other, and other nodes with them





Education / Training Goals

A IPv6-only hands-on workshop

starting from scratch, build an IPv6 network, including routers, hosts, DNS tools and various transition tools, ending up with a functional IPv6 network fully interconnected to the global Internet.

A Other dissemination ideas

gigaPoP-level IPv6 workshops

materials on the web



Explore IPv6 Motivation

A Why should our users, campus decision-makers, and community generally care about IPv6?

IPv6 preserves the classic end-to-end transparency of the Internet architecture

improved support for mobility

key for IPsec

key for the scalability of the Internet

A The answers must be pragmatic.