FROM CC-NIE/IIE/DNI TO BUILDING A COHESIVE PLATFORM FOR COLLABORATION OVER ADVANCED CYBERINFRASTRUCTURE

MULTIPLE SPEAKERS

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From CC-NIE/IIE/DNI to Building a Cohesive Platform for Collaboration over Advanced Cyberinfrastructure

Agenda

• CC-NIE Project Overview
• CC-IIE Project Overview
• CC-XYZ Proposal Gotchas/Hints/Tips For NetEng Folks
• Importance of Researcher Collaboration
• Q&A

• Next Speaker…
CC-NIE: High Performance Research Network (HiPerNet)

• NSF CC-NIE: 1246019
  – Establish Science DMZ
  – Provide Data Transfer Nodes
  – Provide Test Point(s)
    • PerfSonar

• Dedicated SciDMZ Network
  – Brocade MLXe Core, Brocade ICX Distribution
UChicago Science DMZ
Current Connections

Future/Planned Speeds in parenthesis.
CC-IIE: A Performant and Reliable Science DMZ for National and International Collaboration

- NSF CC-IIE: 1440785
- Add redundancy to Science DMZ
  - Current SciDMZ is single homed, one border router, one fiber path (DWDM)
    - Provide Second DWDM System with additional 100G Wave(s)
    - Provide Second SciDMZ Router
- Second DWDM System and 100G Wave(s)
  - Utilize Second Fiber path to downtown Chicago
  - Add 100G capacity (and hopefully third 100G for experimentation)
- Second SciDMZ Router
  - Vendor TBD (Pending RFP)
  - Connect to existing SciDMZ Devices
CC-XYZ Gotchas/Hints/Tips For NetEng Folks

• University Grants Department
  – Let them do the NSF work, they’re better at it than you
• Engage Researchers who have done this before, Early
  – They are better at catchy titles and verbiage the NSF is looking for
  – You’ll also need them for Use Cases
• Your University might have PI/Co-PI Rules
  – Find this out early, there might be paperwork
• Tell a Story, Get Use Cases
  – The NSF isn’t looking to just fund your network upgrade, they want a problem and a solution (Listen to Anita)
• Be Specific but Allow for Flexibility
  – Prices will fall, make sure you can spend the surplus on enhancements
Importance of Research Collaboration in the Proposal Process

• They are your Partners
  – Their story will make or break your proposal

• Develop Proposal Objectives Jointly
  – No Solutions in search of a Problem
  – Researcher Use-Cases need to line up
  – Miscommunication will cause problems during implementation

• They will Sing your Praises
  – Researchers carry weight on campus

• Collaboration goes Both Ways
  – When they apply for grants, they’ll consult you
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