IRNC NOC

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IRNC NOC: One Point Of Contact for IRNC Operations

The International Research Network Connections Network Operations Center (IRNC NOC) serves as a **cooperative point of contact and communications** for IRNC network management, providing **consolidated network monitoring, reporting, and operational visibility for the IRNC program**. The IRNC NOC facilitates a single set of operational expectations for all IRNC funded infrastructure programs; this enables greater availability of IRNC infrastructure and improves results in troubleshooting multi-domain network issues. A central data repository created by the IRNC NOC provides critical operational information; monitoring data and performance metrics in support of NSF funded science and research.

End to End Performance Engagement Team

The IRNC NOC end-to-end Performance Engagement Team (E2E PET) provides centrally guided and well-coordinated **end-to-end performance incident management**. The E2E PET coordinates activities with the IRNC Exchange Point and Backbone programs as well as international partners, enabling efficient and timely troubleshooting of end to end performance issues spanning the continents. The IRNC NOC **works together** with these programs to create a common framework for handling end-to-end performance problems.

What we will do

Create the IRNC NOC:

- Dedicated GlobalNOC instance for IRNC NOC: ticket system, documentation system, monitoring system, and telephone lines. (1-855-IRNC NOC) NOC web presence (http://irncnoc.globalnoc.iu.edu/) e-mail, reporting, etc.

- Provide IRNC infrastructure projects with a service desk that is available 24x7x365 to serve as a single point of contact to report and detect problems related to IRNC infrastructure projects, provide support for coordination and communications among the participants.

- Develop processes and documentation needed including notification, escalation and reporting processes and problems reporting.

- Create database of operational contact data and ops status including planned outages

- Develop and implement technical integration with IRNC: AMI projects for NOC monitoring/alerting

- Integrate RouteViews data into NOC monitoring systems to alert on metrics such as key route changes

What we have done

- **Hired**:
  - **Chris Robb; Performance Engagement Team Manager:** network engineering, systems engineering, and software engineering resources.
  - **Jared Brown;** *Performance Engagement Team Case Manager*: Specialized Support Technician, General Support Technicians

What we will do

- **End-to-end Performance Team Support Model:**
  - Case Manager and project team will reach out to IRNC projects to identify our resources and provide visibility into the engagement model.
  - Work with network operators on strategy for working with their networks/users
    - Solution definitions, resolution reports, and design recommendations.
  - Provide end-to-end performance engagement services for scientists working with international collaborators.
  - Measure success of the effort via researcher satisfaction and effect technical change through recommendations.
  - Plan/implement perfSONAR enhancements for inter-domain performance troubleshooting

What we will do:

- Create an **IRNC NOC advisory council**
  - Ron Johnson working with the community to recruit members
  - Define role and scope of the council
  - Provide clear communications path