## **Ops in the Mirror**

- Ops Charter
- · What have we done?
- · What should we do?
- Discussion

### **IVOA Operations Interest Group Charter**

#### **Goal of the IVOA Operations Interest Group**

Coordinate and publicize activities of individuals, institutions and groups interested in facilitating robust operations of distributed astronomy applications, particularly those based upon implementations of IVOA protocols.

#### **Specific responsibilities**

- 1.Publicize existing forums and encourage new ones for monitoring services, notifications, discussions and questions regarding "real-time" operations of VO / distributed services.
- 2.Promote discussion within the IVOA on standards and practices that would increase the reliability of VO implementations.
- 3.Develop nominal implementation strategies for VO services as guides to best practice in the operational use of VO protocols.
- 4.Periodically provide reports to the IVOA executive and WGs summarizing availability, quality and usage statistics for distributed services and VO protocols.
- 5. During the IVOA standards review process, assess the validation capabilities that are now required as part of new standards.

# What has OIG accomplished?

- Coordination and Publication of Service Validation Efforts
  - Understanding differences between validators (documented on Ops home page)
  - Gradual improvement in results of service testing.
  - Discovery of key issues in implementation of standards
- Monitoring of service uptime also shows gradual improvement in reliability

## What has OIG accomplished? (Cont'd)

- Information on Validation capabilities has been centralized, collated and made available to service developers and broadly publicized
  - OIG checks that validators are available for new and updated standards
- Forums for discussion of operational issues
- Centers have presented many distinctive views of how they implement and combine VO standards to enable science research by their users.

### What can we do better?

- Limited presence between InterOps
  - Mailing list, telecons? Specific goals? (e.g., like early comparison of validators)
  - Standardized location to publicize service issues?
    - NAVO Monitor supports this, but probably not enough
- Earlier feedback on operational issues in standards
  - E.g., should Ops play larger role in reviewing IVOA A&A efforts?
- More advocacy on recommended approaches?
  - E.g., should we be pushing libraries or Docker images?
  - System engineering practices in VO?
- ????
- Charter updates????