

LIGO & Interfederation: Status & Questions

Scott Koranda for LIGO

LIGO and University of Wisconsin-Milwaukee

October 26, 2014

LIGO-XXXXXXXXX-v1





Gravitational Wave Astronomy & Interfederation: Status & Questions

Scott Koranda for LIGO

LIGO and University of Wisconsin-Milwaukee


October 26, 2014
LIGO-XXXXXXXXX-v1





Why We Care (and You Should Too!)


LSC
VIRGO

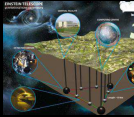
Comprehensive Multimessenger Studies


LIGO Livingston


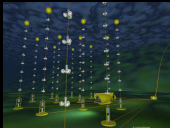
LCGT


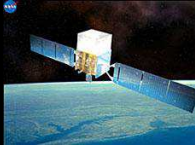
GEO


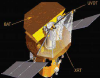
LIGO Hanford



ET



Virgo



Antares


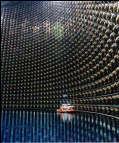
Fermi


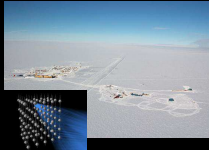
Swift



LVD



QUEST



TAROT


Super-K


IceCube


Arecibo


Green Bank


LOFAR


Multimessenger Astronomy

Connecting different kinds of observations of the same astrophysical event or system.

Requirement 0: Streamline collaboration between the gravitational wave astronomy community and other astronomy communities.

Hard deadline: All infrastructure in production by **July 2015** when Advanced LIGO detectors begin science observing.

Collaboration management for GW Astronomy community

- ▶ Registry for on(off)boarding (COmanage and Shibboleth SP)
- ▶ Attribute Authority (AA) (SAML and LDAP interfaces)
- ▶ Wiki (Foswiki and Shibboleth SP)
- ▶ List manager (Sympa and Shibboleth SP)
- ▶ **NEW** GW Candidate Event Database (GraceDB)
- ▶ All SPs registered in InCommon
- ▶ All SPs tagged by InCommon as InCommon R&S SPs

gw-astronomy.org and International Interfederation

Collaboration management for GW Astronomy community

- ▶ 3 SPs pushed into eduGAIN
(hat tip to our Swedish friends for push)
(hat tip to Tom Scavo and team)
- ▶ 3 SPs tagged by InCommon as REFEDs R&S SPs
- ▶ GraceDB SP coming soon...
- ▶ SPs **consume** InCommon + eduGAIN metadata aggregate
(hat tip to Tom Scavo and team)

gw-astronomy.org and IdP of Last Resort

Collaboration management for GW Astronomy community

- ▶ LIGO Guest IdP (desire to decommission!)
- ▶ Google via Cirrus Identity
(hat tip to Dedra and team)
- ▶ Looking hard at UnitedID.org
- ▶ Contributing to InCommon IdPofLR working group

We are ready!
(we think)

We have begun!

166 onboarded astronomers as of today

What could go wrong?

ATTRIBUTE RELEASE

SPs filter eduGAIN metadata on InCommon & REFEDs R&S

- ▶ Include IdPs that will release needed attribute (ePPN)
- ▶ Exclude IdPs that do not consume SP metadata
- ▶ Excludes important campuses
Berkeley, Duke, Harvard, PSU, Texas at Austin
- ▶ Only includes Swiss and Swedish IdPs
(hat tip to Swiss and Swedes)

Many of current 166 users obtained LIGO Guest credential

We track email addresses for those credentials

@iasfbo.inaf.it

@cfa.harvard.edu

@physics.uoc.gr

@ljmu.ac.uk

@leicester.ac.uk

@aao.gov.au

@sron.nl

@warwick.ac.uk

@ioa.s.u-tokyo.ac.jp

@oa-roma.inaf.it

@astro.uni-tuebingen.de

@cea.fr

@anu.edu.au

@hiroshima-u.ac.jp

@lambrate.inaf.it

@xao.ac.cn

Questions for REFEDs Community

What can we do to help more IdPs adopt REFEDs R&S?

I have to contact each of our IdP admins and ask that they allow a set attributes for a range service providers who have asserted to a range of registrars (in a range of jurisdictions) that they are strictly in the business of R&S. I will have to explain that R&S is defined in one of two forms, but can be taken to mean the service somehow enhances the scholarly activities of one of their users. I consider this to be a hard sell. It also places me very close to being considered a joint data controller by our DP authorities since I am providing the technical means and being party to a personal data policy decision.

-Anonymous federation operator

Attributes are for contract vendors.

-Anonymous IdP operator

Questions for REFEDs Community

Should we play Don Quixote or Lloyd Blankfein?

We could target individual “important” campuses and directly contact users and send them to IdP operator. This does not scale but we could target some.

Questions for REFEDs Community

How should InCommon AND REFEDs R&S change to make IdPs feel better?

Some reluctant IdPs have communicated that the InCommon R&S program is opaque:

- ▶ No public record of the SP vetting process.
- ▶ No audit trail.
- ▶ No expiration or re-audit.

LIGO supports and is willing to go through pain of hardening R&S vetting if it leads to more IdPs adopting R&S?

Thank You

Thank You to this community for all help.

(Editorial comment: It will be a shame if this fantastic science opportunity relies on Google instead of higher ed federated identity.)