Who’s who in the IETF Zoo?

Geoff Huston
Executive Director,
Internet Architecture Board
The IETF is...

- The Internet Engineering Task Force is a standards body that supports the development of open standards in support of the Internet.

- The IETF is not like other industry-based standards bodies...

  - The IETF is an open collaborative effort undertaken by a number of groups and individuals, each undertaking particular roles within the overall IETF framework.

  - The IETF uses individual contributions and a process of the development of rough consensus to achieve interoperable relevant technical specifications of Internet technologies.
Players in the IETF

Internet Society
IETF
IAB
ICANN
ISI
IESG
CNRI
IRTF
Areas
RIRs
Research Groups
Working Groups
Individuals
Research & Academia
Industry
Industry
Roles and Relationships

Internet Society

IETF

IAB

IESG

ICANN

ISI

IANA

RFC Editor

IRTF

RIRs

Research Groups

Working Groups

Individuals

Research & Academia

Industry

CNRI Secretariat Services

Areas
Roles and Relationships

Internet Society
ISOC holds the copyright on IETF documents, point of process appeal
ISOC funds the RFC Editor
ISOC charters the IAB

IETF
IAB
IAB confirms IESG members
IAB charters the RFC Editor
IAB charters the IRTF

IESG
IESG Secretariat
IESG is composed of IETF Area Directors

RFC Editor
ISI
IAB charters the IETF IANA

Research Groups
Research & Academia

Working Groups
Individuals

Areas
Areas are structured into Working Groups

ICANN
ICANN charters the IAB

RIRs
Liaison activity between RIRs and IETF

IANA
ISOC holds the copyright on IETF documents, point of process appeal

IRTF
IAB charters the IRTF

Industry

ISOC
ISOC funds the RFC Editor
ISOC charters the IAB

IAB charters the IETF IANA

CNRI
Secretariat
Services
Confused?

- But of course!

- The IETF is not a single organization, it’s a collective illusion!
The IETF

- Is an unincorporated activity that operates under the auspices of the Internet Society
- The IETF has
  - a Chair (Harald Alvestrand)
  - a Secretariat (undertaken by CNRI)
  - an operational managerial group (the IESG)
  - an architectural and external relationship group (the IAB)
  - A codified set of principles (‘tao’) and a set of operational procedures
- The IETF does not have
  - members
  - a budget
  - incorporation documents
  - bylaws
The IETF

- Produces Internet Standards Documents (RFCs) that are intended to assist in making the Internet work.
- Is organized into ‘Areas’
  - managed by ‘Area Directors’
  - that contain ‘Working Groups’
    - who work under the terms of a defined charter to produce documents (RFCs) that describe interoperable Internet technologies
      - using an open process of peer review and rough consensus
- The objective of the IETF is an efficient process that produces high quality descriptions of standard technologies that are relevant, useful and support interoperable implementations that make the Internet work.
IETF Areas

- Applications
  - Selected applications and application support infrastructure
- Transport
  - End-to-end transport services
- Internet
  - IP level services
- Routing
  - Routing protocols and services
- Security
  - Yes, security!
- Operations and Management
  - Operational services and Network Management tools
- General
  - The operation of the IETF itself
The Internet Engineering Steering Group

- Is the group of 13 Area Directors
- Manages the operation of the Internet Standards Process
- Recommends the publication of IETF RFC documents
- Approves Working Group formation and Working Group charters
- Oversees the general operations of the IETF Internet Standards Process
The Internet Architecture Board

- Is a group of 12 IETF participants
- Provides architectural comment to the IETF community
- Manages external relationships to the IETF
- Oversees the operation of the RFC Editor
- Provides advice to the IESG on Working Group formation and rechartering

- The IAB attempts to provide an overall perspective of “making the Internet work” in relation to IETF activities
The Internet Society

- Is a membership society intended to support the development of the Internet
- Has a Board of Trustees, corporate members, individual members, chapters and a secretariat
- Is funded through corporate sponsorship and through the operation of subsidiary activity of the .org registry
- Supports the IETF mission through
  - Funding contributions to the IETF
  - Funding the RFC publication process
  - Providing liability coverage to IETF participants
  - Entering into contracts for the IETF
What ‘defines’ the IETF?

- **Openness**
  - Open membership and a culture of inclusion
  - Open operation of the standards development process

- **Quality**
  - Consistent objective to create high quality outcomes

- **Competency**
  - The capability of core competencies of knowledge as to _why_ the Internet technology is defined in the way it is and where the intricate inter-dependencies are lurking

- **Tribal Culture**
  - An enthusiasm to continue to explore refinements and extensions to the Internet technology base
My IETF role:

- Executive Director of the IAB
  - Provide organizational support to the IAB
  - As a member of the IAB I work on IAB architectural issues, including:
    - QoS architectures
    - Inter-domain routing
    - IPv6 architecture
    - Identities and Locators
    - Operations
    - DNS
    - …..
Questions?
CNRI

- Operates the IETF Secretariat
  - Publication of Internet Drafts
  - Operation of IETF meetings
  - Publication of meeting proceedings
  - Provision of support to Working Groups
  - Support of the IESG activities
  - Supports IETF services (web site, mailing lists, draft tracker, etc)

- The IETF Secretariat operation is funded through IETF meeting attendance fees
ISI

- Operates the RFC Editor function
  - Publishes RFC documents that are the outcome of the Internet Standards Process
  - Publishes (some) RFC documents that have been submitted directly to the RFC Editor
- Is funded by ISOC
- Operates with some independent discretion in terms of editorial policies for non-IETF document publication
  - Not all RFCs are IETF Standards!
ICANN

- Operates the Internet Assigned Numbers Authority (IANA)
- IANA maintains a collection of IETF protocol parameter registries
  - IP addresses, bootp option code points....
- Supports the consistent and unique use of protocol parameter code points within the Internet
- Supports the registration of code points in IETF protocol registries
- The IANA function is funded by ICANN
The RIRs

- Distribute Internet Number Resources to IP Service Providers
  - Number resources are IP addresses and AS numbers
  - Distributes resources according to defined IETF standards
  - Provides resources on the basis of demonstrated need