Internet Standards Development

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Overview

• What is ISOC?
  – ISOC’s activities and mission

• IETF structure and operations
  – Administrative Structure
  – Technical Structure

• Standards Development Process
  – Work Flow

• How to participate
Internet Society – Who we are

• Founded 1991 by Internet Pioneers
• International, not-for-profit, membership org.
  – 80+ organisation members
  – 21,000+ individual members
  – 75+ chapters, 10+ chapters forming
• Organisation members fund activities in
  – Standards
  – Education
  – Policy
Global Membership

- North America: 32%
- Western Europe: 24%
- South America: 4%
- Pacific: 4%
- Africa: 8%
- Asia: 17%
- Caribbean: 0.3%
- CEE & Russia: 5%
- Latin America: 2%
- Middle East: 4%

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ISOC Chapters

• Voluntary local/regional entities embracing ISOC Mission and Goals

• Serve interests of local community
  – organise activities/events/education locally
  – provide services in local language
  – amplify ISOC efforts locally/regionally

• Provide local perspective back to ISOC
  – important component in ISOC Strategic Operating Plan
ISOC's Mission

"To assure the open development, evolution and use of the Internet for the benefit of all people throughout the world."

Building an active global community of knowledgeable members & chapters
ISOC’s Activities

• Education
  – Transfer of technical knowledge
    • in technologically emerging countries
    • workshops, publications, conferences

• Policy
  – Education of policy & decision makers
  – Actively involved in WSIS
  – Defending the 'Internet Model'

• PIR: Registry for .org

• Support for Internet Standards (IETF)
Internet Standards

• ISOC is the organisational home of the IETF
• Funding for Internet Standards come from
  – IETF meeting fees
  – ISOC
The mission of the IETF is to produce high quality, relevant technical and engineering documents that influence the way people design, use, and manage the Internet in such a way as to make the Internet work better. These documents include protocol standards, best current practices, and informational documents of various kinds.
The IETF - http://www.ietf.org

- Internet Engineering Task Force
- Formed 1986 - 20th anniversary Jan. 2006
- Produces Internet Standards
- Standards Process open to all
  
  "rough consensus and running code"

- Standards Documents open and free of charge
IETF Operations

• No “members”
• No voting
  – “rough consensus and running code”
• 3 meetings/year
  • 1200 participants, many more on mailing lists
• Individuals not companies or governments
  – operators, designers, vendors, researchers
IETF Organisation

- Work done in **130+** Working Groups (WGs)
- WGs split into **8** areas
- Each area lead by 1 - 2 Area Directors (ADs)
- ADs form the IESG
IETF Areas

• Applications
• General
• Internet
• Operations and Management
• Real-Time Applications and Infrastructure
• Routing
• Security
• Transport
IETF Standards Process

- Specification published as Internet Draft (IDs)
- Discussed in a working group - creates revised IDs
- ID sent to IESG after WG consensus
- IESG issues IETF “Last-Call” (2 weeks)
  - anyone can comment
  - IESG considers comments and its own review
    - may approve publication as standards track RFC
    - may point out issues to WG & return ID

- same process for non-WG proposals (but 4-week Last Call)

http://www.ietf.org/rfc/rfc2026.txt
Role of Working Groups

• Develop ideas
• Review proposals
• Jury
• Find consensus about Proposals
• Produce specifications
• Recommend specifications to IETF community
Acceptance Criteria

• Competence: Technically sound
• Constituency: Users and providers
• Coherence: Clear and concisely written
• Consensus: Clear (can be rough)
IETF Workflow

Initial idea

Informal discussions

Internet Architecture Board

Internet Engineering Steering Group

Approved Birds of a Feather meeting

Chartered Working Group

WG Consensus on drafts

Approved drafts

Work
Authorization
Discussion

RFC

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IETF Mailing lists

• Announcements about
  – IETF Meetings
  – actions of IESG, RFC editor, NomCom etc.

  ietf-announce-request@ietf.org

• Internet-Drafts announcements only

  i-d-announce-request@ietf.org

• IETF Discussion list

  ietf-request@ietf.org
Other Resources

- http://ietfjournal.isoc.org

- http://www.ietf.org

- http://www.rfc-editor.org

- http://www.iana.org