Code Match
Connecting Academia and Open Source to the IETF
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Johns Hopkins University
Agenda

- Brief overview of the IETF
- CodeMatch overview
- Benefits
- Current status
- Contributors
- Questions & Answers
The IETF in one slide

- Internet Engineering Task Force
  - Formed in 1986
- Organized activity of the Internet Society
- Developer/Maintainer of “Internet” standards
  - Request For Comments (“RFCs”)
- Focus:
  - Above the wire
  - Below the application
- Voluntary, open standards
  - Nothing mandated
CodeMatch Goals

- Make useful connections between the IETF and outside code development efforts
- Improve collaboration and coordination between these communities
- Identify new opportunities between these communities
CodeMatch Approach

- CodeMatch website that acts as a marketplace to make connections
- Primary focus on connections between
  - IETF standards efforts
  - Open-source development community
  - Academic professors, students, researchers, etc.
  - Industry development teams
- Provide a mechanism to demonstrate linkages between communities
CodeMatch Approach

- Extend the IETF’s datatracker tool
  - Track implementations of drafts/RFCs
  - Allow work group to advertise drafts that need implementation

- Provide linkages between the datatracker and existing tools (e.g., GitHub)
  - Utilize existing tools
  - Create linkages rather than replacement tools
Benefits to academic community

- Gain experience creating open source code
  - Code that lives on beyond a class project
- Potential to make significant technical contribution to standards
- Interact with industry and other researchers
- Help make the Internet better
- Network within the networking industry
  - Potential job opportunities
Benefits to open-source community

- Leverage for new projects that need multiple, interoperable implementations
- Feedback on use cases, requirements, architecture, etc. that may impact a project
- Interaction with other developers
  - Broader community interaction
  - Interoperability events
- Wider review that identifies design flaws, bugs, etc. in the project
Benefits to the IETF

- We believe in rough consensus and running code
  - Running code demonstrates feasibility
- A broader community leads to wider reviews from different perspectives
- Demonstration of synergy between standards efforts and outside development efforts
- Promotes IETF work in new areas/communities
Current status

- Currently developing requirements for datatracker enhancements
- Developing mockups of datatracker extensions
- Targeting availability of the CodeMatch website prior to IETF 95
  - Being held in Buenos Aires!
- Tools enhancements being done by members of the target communities!
Visitors’ view
IETF CodeMatch

Here comes the short description of IETF CodeMatch, informing its goals, results so far, etc. Here comes the short description of IETF CodeMatch, informing its goals, results so far, etc. Here comes the short description of IETF CodeMatch, informing its goals, results so far, etc.

CodeMatches
Who's implementing what?

Code Offers
Which coding opportunities are offered by the IETF?

Coders Hall-of-Fame
The stars of IETF CodeMatch!
**CodeMatches**

Order by: Codename | Coder | Protocol | Area | Working Group

**Codename by Coder**

A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out.


**SmartProbes by Peter Jedi**

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**MyOrchestrator by OpenNFV Team**

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Code Offers

Order by: Protocol | Area | Release date | Popularity | Working Group

➤ NETCONF - NETwork CONFiguration

— Distributed detection of SLA violations - July 26, 2014
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CodeMatches: SmartProbes | ManP2P

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➤ SNMP - Simple Network Management Protocol

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CodeMatches: SmartProbes | ManP2P
Distributed detections of SLA violations

Protocol: NETCONF
Area: IRTF
Working Group: NMRG - Network Management Research Group

Description
A paragraph describing the implementation that needs to be carried out. A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out. A paragraph describing the implementation that's being carried out.

Resources
Mailing list: dist_sla_detection@ietf.org - https://www.ietf.org/mailman/listinfo/dist_sla_detection
Twitter: #dist_sla_detection
Facebook: http://www.facebook.com/desf_sla_detection

CodeMatches
- SmartProbes
- ManP2P

Social (Facebook, Twitter, etc.) container
To request an offer, you must first log in to IETF CodeMatch.

User: 
Password: 
Log in  Cancel

Forgot password  Sign up
Coders’ view
Code Offers

Order by: Protocol | Area | Release date | Popularity | Working Group

NETCONF - NETwork CONFiguration

- **Distributed detection of SLA violations** - July 26, 2014
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MyCodeMatches

Order by: Codename | Protocol | Area | Working Group

**Codename** by **Coder**

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**SmartProbes** by **Peter Jedi**

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SmartProbes

By: Peter Jedi
Shepherd: John Paul
Code Offer: Distributed detection of SLA violations
Protocol: NETCONF
Area: IRTF

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Resources
GitHub: https://github.com/ufrgs-hymon/meican
Wiki: http://wiki-redes.inf.ufrgs.br/SmartProbes
Google Drive: http://drive.google.com/SmartProbes
Mailing list: smartprobes@ietf.org - https://www.ietf.org/mailman/listinfo/smartprobes
Twitter: @smartprobes, #smartprobes
Facebook: http://www.facebook.com/smartprobes

Social (Facebook, Twitter, etc.) container
Shepherds’ view
CodeMatches I'm shepherding

Order by: Codename | Protocol | Area | Working Group

 Codename by Coder
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 SmartProbes by Peter Jedi
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Working groups’ view
My Code Offers

Order by: Code Offer name I Protocol I Area I Working Group

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[Add Code Offer]
Contributors

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- Lisandro Zambenedetti
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- Matthias Waehlisch
- Internet Society
Questions?