IETF CodeMatch

March 2015

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Lisandro Granville

CodeMatch Overview

- ## What is CodeMatch?
  - Marketplace which brings together students, researchers, professors, open source development communities, vendors with proprietary implementations, and consumers of code bases

- ## Objectives
  - Link existing implementations to standards
  - Showcase opportunities to develop running code for IETF protocols
  - Provide clear benefits to each user type from increased collaboration

- ## Grace Hopper Celebration
  - Initial idea came from discussions with students and professors to help provide options for them to engage in the IETF, working with ISOC at GHC
  - Scope and objectives expanded with help from the diversity design team members and numerous contributors

For more information: **https://codematch.ietf.org/**

CodeMatch Goals

- Open collaboration platform for running code of IETF protocols
- Connect drafts/RFCs in a measurable way to running code
  - Open source and proprietary
- Coordinating activities related to code and IETF work
  - Note, we are not GitHub, we link to open source and proprietary
- Increased collaboration with under represented communities
  - Engage with Universities, get students interested in the IETF
  - Engage and collaborate with open source communities
  - Engage under-represented regions: ISOC, Latin America for IETF 95
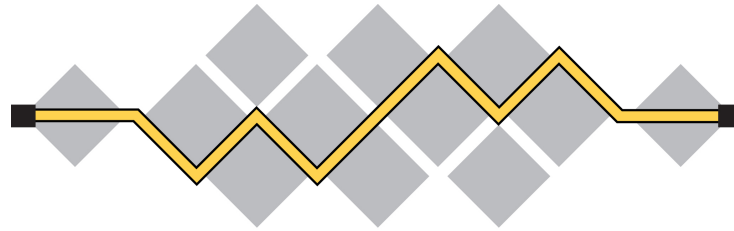- Low barrier entry point to the IETF

Benefits for Participants

- Speed-up implementations of IETF protocols
- Increase visibilty of implementations
- Coordination of plugtests
- Matches between universities & industry to sponsor capstone projects
- Opportunity to improve resume: students, job transitions
- Demonstrate multiple interoperable implementations of drafts/RFCs

CodeMatch Roadmap

- Idea Origination & Planning (Oct. 2013)
- Mockups v1 (Jul. 2014)
- Data Model v1 (Nov. 2014)
- Prototype v1 (Dec. 2014)
- User Interface Testing
  - Card sort & IETF 92 UX testing (Sunday)
  - Adjust prototype from feedback (April 2015)
- Development (Starting Soon!)

CodeMatch Development

- **Phase 1** - Basic functionality to create CodeMatches, enable CodeRequests and Mentor assignments, match published drafts to existing code bases (Yokohama)

- **Phase 2** - Improved Functionality such as organizing 'Plug Fests', notifying developers of confirmed errata, dashboards for management and statistics, advertise IRTF and ISOC incentives for coders (Buenos Aires)

- **Phase 3** - Advanced Features such as reputation scoring for code bases, ability for coders to request help to create drafts from feature developed, etc. (Seoul)

Feature list by phase: https://drive.google.com/folderview?id=0B-dir4eV4Ih1V2tQSDdNRndrdGc&usp=sharing

Mockups

http://codematch.ietf.org

IETF CodeMatch

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

CodeMatches
Who's implementing what?

CodeRequests
Which coding oppportunities are offered by the IETF?

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

http://codematch.ietf.org/codematches

CodeMatches

Order by: **Project** | Coder | CodeRequest | 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.
CodeRequest: CodeRequest   Protocol: Protocol   Area: Area   Working Group: Working Group

SmartProbes by Peter Louis

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CodeRequest: Distributed dection of SLA violations   Protocol: TWAMP   Area: IRTF   Working Group: NMRG

PersonalOrchestrator by MyNFV Team

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CodeRequest: Orchestrator Initiative   Protocol: ForCES protocol   Area: OPS   Working Group: ForCES

Codename by Coder

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http://codematch.ietf.org/coderequests

CodeRequests

Order by: CodeRequest I Protocol I Area I Release date I Popularity I Working Group

❯ TWAMP - Two-Way Active Measurement Protocol

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

A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation.
CodeMatches: SmartProbes I ManP2P

✓ Associate my project

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

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❯ SNMP - Simple Network Management Protocol

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CodeRequests ❯ Distributed detection of SLA violations

❯ Distributed detections of SLA violations

✓ Associate my project

Protocol: TWAMP
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.

Rersources

Mentor: John Paul
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/dest_sla_detection

CodeMatches

· SmartProbes
· ManP2P

Social (Facebook, Twitter, etc.) container

http://codematch.ietf.org/login

🔍 CodeRequests

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

❯ TWAMP - Two-Way Active Measurement Protocol

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To associate a project, you must first log in to IETF CodeMatch.

User: _____

Password: _____

[Log in]   [Cancel]

Forgot password | **Sign up**

[✓ Associate my project]

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http://codematch.ietf.org/codematches

MyCodeMatches

Peter Louis

MyCodeMatches

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http://codematch.ietf.org/codematches

MyCodeMatches

3 Peter Louis

MyCodeMatches > SmartProbes

SmartProbes
By: Peter Louis
Mentor: John Paul
CodeRequest: Distributed detection of SLA violations
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Rersources

GitHub: https://github.com/ufrgs-hyman/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

http://codematch.ietf.org/mentoring

MyCodeMatches | CodeRequests I'm mentoring

John Paul

CodeRequests I'm mentoring

Order by: CodeRequest | Protocol | Area | Working Group

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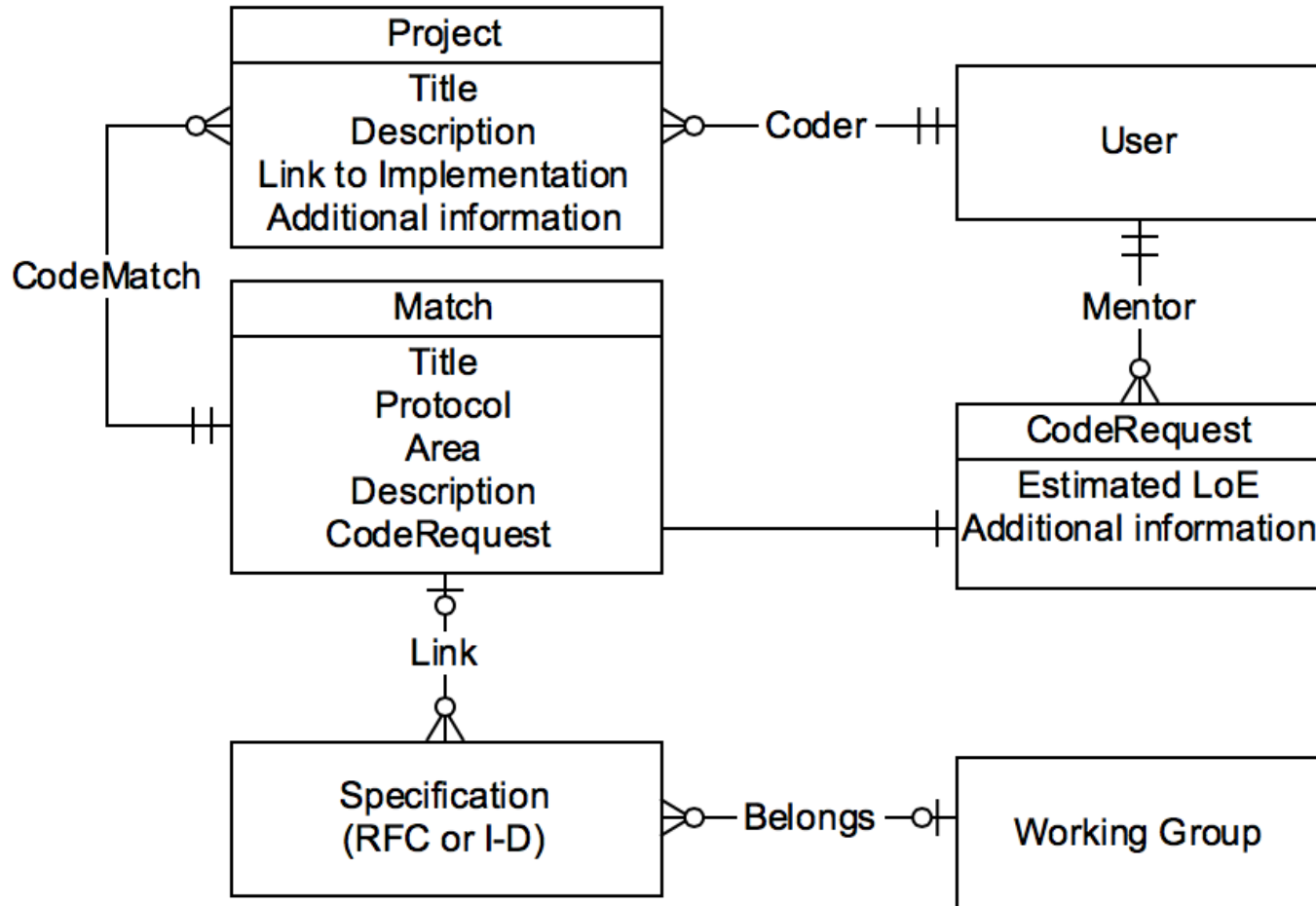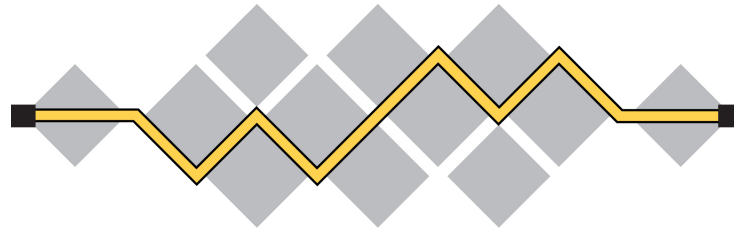A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation. A paragraph describing the offered implementation.
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Data Model

I E T F®

GUI Prototype

IETF CodeMatch

Accelerating the implementation of new protocols

7000 Requests

3000 Coders

5000 Matches

Dashboard

Dashboard

Home / Dashboard

Coding Requests

Codename by **Coder**

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SmartProbes by **Peter Jedi**

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MyOrchestrator by **OpenNFV Team**

A paragraph describing the

Sidebar

- Dashboard
- CodeMatches
- CodeRequests
- Coders Hall-of-Fame

IETF CodeMatch

My CodeMatches

CodeRequests I'm mentoring

Search

Admin

IETF CodeM

Accelerating the implementation c

SmartProbes

Codename

View All

7000 Requests

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A paragraph describing the

Menu

❯ NETCONF - NETwork CONFiguration

— Distributed detection os SLA violations

July 26, 2014

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✔ Associate my project

✕ CodeMatches 2

✕ **CodeMatches**

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ManP2P   Premium

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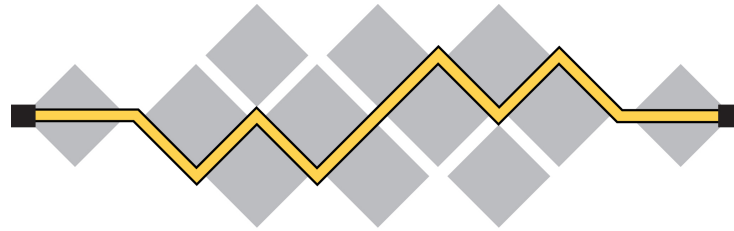
CodeMatch Contributors

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- William Atwood
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- Pete Resnick
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- Robert Sparks
- Brian Trammell
- Matthias Waehlisch
- Dave Waltermire
- Lixia Zhang

Asks

- WGs & Individuals: Think about drafts that might be a good target for CodeMatch
  - Mentor required for CodeRequests
  - Estimated development time needed
- If you are interested to join the team developing the site, subscribe to mailing list:
  - CodeMatch-develop@ietf.org
- Assistance from Apps are requested to help select appropriate icons
- Timeline is fluid and depends on volunteers, please consider contributing

Asks (cont.)

Thank you!

CodeMatch Development Team
https://codematch.ietf.org/