Standards Tracker

- Follow up from the presentation at IETF 118
  - Internet Standards Observatory
  - Standards Tracker for ITU
- Today
  - Recap
  - IETF Tracker
  - Feedback from Prague
The Internet Standards Observatory (ISTO)

- Funded by ISOC Foundation and RIPE Community Fund

- The goal of the Internet Standards Observatory is to prevent Internet fragmentation.

- Identify standards proposals that could potentially challenge interoperability and significantly transform addressing, naming, networking and routing on the Internet.
Why Tracking Internet Standards?

- SDOs are an opportunity to make the Internet better!
  - Discuss Internet standards in the right fora
  - Encourage thorough discussions about how we want the Internet to evolve
  - Lower barriers to engagement
The Standards Tracker
What is the Standards Tracker

● Tool to automate the identification of standards proposals by topics of interest
  ○ Input standards proposals into DAP
  ○ Scan for specific sets of words
  ○ Scoring to enable prioritization: 1. engage, 2. monitor and 3. track

● Focus on standards under development: ITU-T, IETF, and ETSI (up-next)
Internet Standards Observatory Tracker Projects

Review the tables, below. Click to explore each tracker.

**ITU-T**
Tracking voluntary standards development at the ITU Telecommunication Standardisation Sector.

**IETF**
Tracking internet standards development by the Internet Engineering Task Force.
<table>
<thead>
<tr>
<th>Priority</th>
<th>Item</th>
<th>About</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage</td>
<td>Proposal to initiate a new work item on &quot;Fixed, mobile and satellite conver...</td>
<td>high bandwidth, intelligent vehicle</td>
</tr>
<tr>
<td>Engage</td>
<td>Proposal for initiating a new work item on &quot;Requirements and functional ...</td>
<td>low latency</td>
</tr>
<tr>
<td>Engage</td>
<td>Proposal to initiate a new work item on &quot;Fixed, mobile and satellite conver...</td>
<td>intelligent vehicle, remote healthcare</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal for initiating a new work item on requirements and functional fr...</td>
<td>user plane</td>
</tr>
<tr>
<td>Monitor</td>
<td>ITU-T Y. ICN-SEAN: Proposal for modification of clause 2, 7, 8 and 10</td>
<td>control plane, user plane</td>
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<td>user plane</td>
</tr>
<tr>
<td>Monitor</td>
<td>ITU-T Y. ICN-IP: Proposal for modification of clause 9</td>
<td>user plane, low latency</td>
</tr>
<tr>
<td>Monitor</td>
<td>ITU-T Y. ICN-UP: Proposal for Modification of clause 7</td>
<td>data plane, low latency, user plane</td>
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<tr>
<td>Monitor</td>
<td>Proposal for improving the whole document of ITU-T Y. MEC-INS and su...</td>
<td>data plane, network convergence</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal to initiate a new work item on framework of computing and net...</td>
<td>multi access edge computing</td>
</tr>
<tr>
<td>Monitor</td>
<td>Propose to modify clause 3, 4, 5, 6, 7 description of draft recommendation</td>
<td>control plane, data plane</td>
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</table>
### ITU-T Tracker

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<tr>
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<tbody>
<tr>
<td>Monitor</td>
<td>Proposal to initiate a new work item on “Fixed, mobile and satellite convergence”</td>
<td>data plane, remote healthcare</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal for new work item: Requirements and functional architecture of...</td>
<td>blockchain, control plane</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal to initiate a new work item on “Information sharing framework of computing and networking coordination based on identifier resolution”</td>
<td>qos assurance, low latency, network convergence</td>
</tr>
<tr>
<td>Proposed for standardisation</td>
<td>Proposal to initiate a new work item on “Information sharing framework of computing and networking coordination based on identifier resolution”</td>
<td>qos assurance, low latency, network convergence</td>
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<tr>
<td>Proposed use cases</td>
<td>Proposal to initiate a new work item on “Information sharing framework of computing and networking coordination based on identifier resolution”</td>
<td>qos assurance, low latency, network convergence</td>
</tr>
<tr>
<td>New work item</td>
<td>Proposal for initiating a new work item on Information-centric networking...</td>
<td>control plane, data plane, user plane</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal to create a new work item “Network 2030 – Architecture Frame...</td>
<td>low latency</td>
</tr>
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</table>

**SG13**
- Future networks

**SG16**
- Multimedia & digital technologies

**SG17**
- Security

### Priority Levels
- Monitor (3)

### New Work Item
- Monitor (5)

### Proponents
- China Unicom, Ministry of Industry and Information Technology (MIIT) (China), Beijing University of Posts and Telecommunications (China)

### About
- qos assurance, low latency, network convergence
- computing and network convergence

### Proposed for standardisation
- CNC

### Proposed use cases
- fnsc

### New work item
- new
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<td>control plane, data plane</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal to consent Y.IMT2020-CNC-req</td>
<td>qos assurance, qos monitoring</td>
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<tr>
<td>Monitor</td>
<td>Y. bDDN-NP-ReqArch: Propose to update all clause description and to su...</td>
<td>control plane, low latency</td>
</tr>
<tr>
<td>Monitor</td>
<td>Proposal to initiate a new work item on &quot;Fixed, mobile and satellite conve...</td>
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|          | Engage: Requirements for Scaling Deterministic Networks             | identification and packet treatment ...
|          | Engage: Use Cases and Problem Statement for Routing on Service Addresses | quality of service service instance ...
|          | Monitor: Computing-Aware Traffic Steering (CATS) Problem Statement, Use Case... | service instance quality of service ...
|          | Monitor: Routing Framework for LEO Mega-constellation Based on Region Division | end to end control plane ...
|          | Monitor: Computing and Network Information Awareness (CNI) system architecture... | service instance service id ...
|          | Monitor: Problem statements and requirements of L2 CATS              | networking and computing ...
|          | Monitor: Challenges and Opportunities in Management for Green Networking | steer traffic data plane end to end ...
|          | Monitor: Deterministic Networking (DetNet) Controller Plane - VPFC Planning Info... | resources reservation calculation ...
|          | Monitor: On Network Path Validation                                 | service function chaining ...
|          | Monitor: On Network Path Validation                                 | service function chaining ...
|          | Monitor: Traffic Engineering Extensions for Enhanced DetNet          | steer traffic latency jitter ...
|          | Monitor: Problem Statement and Requirements of end-to-end CATS       | computing resource ...
|          | Monitor: Computing Information Description in Computing-Aware Traffic Steering | computing and networking ...
|          | Monitor: Using Deterministic Networks for Industrial Operations and Control | compute capabilities control plane ...

**14 Contributions**

- **All (618)**
- **Engage (2)**
- **Monitor (12)**
- **Track (25)**

**Where the standard is being discussed**

- Area
- Where on the agenda
- Group acronym
- Type

**What the standard is about**

- About
- Proposed for standardisation
- Proposed use case
- Standard status

**About**

- IANA action state
- IANA review state
- IESG state
- Intended standard level
- Workgroup family

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**DNS Research Federation**
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IETF Tracker

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<td></td>
<td>A profile for Signed Prefix Lists for Use in the Resource Public Key Infras...</td>
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<td></td>
<td>RPKI Validation Re-considered</td>
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<td>RPKI Manifest Number Handling</td>
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<td></td>
<td>Selective Synchronization for RPKI to Router Protocol</td>
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The Backend of the Standards Tracker
Dictionaries

- Data Explorer
  - Operations
    - Dictionaries
      - word
      - blockchain
      - control plane
      - Data plane
      - Digital Object Architecture
      - distributed ledger platform
      - distributed ledger system
      - distributed ledger technologies
      - distributed ledger technology
      - forwarding plane
      - guaranteed delivery
      - heterogeneous networks
      - hierarchical IP address allocation
      - high bandwidth
      - high throughput
      - identity service provider
      - intelligent vehicle
      - low latency
      - Metaverse
      - multi-access edge computing
      - negligible latency
      - network convergence
      - network status information
### Data Explorer

<table>
<thead>
<tr>
<th>Config</th>
<th>Standardisation Word Weighting</th>
<th>Max Standardisation Words</th>
<th>Max Standardisation Frequency</th>
<th>About Word Weighting</th>
<th>About Max Words</th>
<th>Max About Words Frequency</th>
<th>Use Case Weighting</th>
<th>Has Use Case Weighting</th>
<th>Max Use Case</th>
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<tbody>
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<td>5</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>5</td>
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The Standards Tracker - Feedback from Prague

- Questions on methodology
  - Meaning of track, monitor and engage + color-coding
  - Access to dictionaries
  - Option to broaden the search
  - Importance of understanding status + whether engagement adds value

- What we did
  - New section explaining methodology
  - Dictionaries are open + visible through filtering
  - Enabled search box
  - Status of proposal
The Standards Tracker - Next Steps

● Technical-side
  ○ Improve search box
  ○ Test AI-powered semantic analysis
  ○ IETF hackathon

● Content-side
  ○ Expand topic coverage: focus on emerging technologies (metaverse, quantum, network trust, other)
  ○ Expand SGs (ITU)
  ○ ETSI
Without a LEG to Stand On

23rd February 2024

By Mark McFadden

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23rd February 2024

What's up at the ITU?
8th February 2024

Web3 Disruption and the Domain Name System - now published in the Journal of Cyber Policy as part of the DNSRF Special Issue
17th January 2024

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28th June 2023

Research, Technical Standards
Resources - ISTO Knowledge Center (Research)

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- "Understanding Internet Standardisation Processes through Longitudinal Data-driven Analysis." Ignacio Castro - Queen Mary University of London.
- “Corporate influence in Standards Bodies.” Nick Merrill - University of California, Berkeley