

IETF 112 [Virtual] ALTO Working Group

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- Online Agenda and Slides: <https://datatracker.ietf.org/meeting/112/session/alto>
- Data tracker: <http://datatracker.ietf.org/wg/alto/>
- Tools: <http://tools.ietf.org/wg/alto>
- Notes: <https://codimd.ietf.org/notes-ietf-112-alto>

Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<https://www.ietf.org/contact/ombudsteam/>) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:





- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- <https://www.ietf.org/privacy-policy/> (Privacy Policy)

Also see: <http://www.ietf.org/about/note-well.html>:

Administrative

The session is recorded

- **Meetecho**

- Using meetecho queue control
 - Enter the queue by pressing the raise hand  leave with 
 - Speak using , stop with 
- Chat/Jabber available for use
- Bluesheets

- **Note taking**

- <https://codimd.ietf.org/notes-ietf-112-alto>
- Please help with minute taking (only discussion needs to be captured)

- Online Agenda and Slides at:

- <https://datatracker.ietf.org/meeting/112/session/alto>

- Session Participant Guide: <https://www.ietf.org/how/meetings/technology/meetecho-guide-participant/>

- Data tracker: <http://datatracker.ietf.org/wg/alto/>

- Jabber: <xmpp:alto@jabber.ietf.org?join>

- Tools: <http://tools.ietf.org/wg/alto>



Agenda

- **Introduction**

 - Chairs (5 minutes)

 - Session Intro & WG Status

- **WG Documents Status Update:**

 - ALTO Extension: Path Vector Open Issue Discussion (8 minutes) Kai Gao

 - ALTO Performance Cost Metrics Open Issue Discussion (5 minutes) Richard YANG

- **Chartered items:**

 - ALTO OAM Support (20 min)**

 - <https://tools.ietf.org/html/draft-zhang-alto-oam-yang-00>

 - Discussion Leader: Jensen Zhang/Dhruv Dhody

 - ALTO over HTTP2 (15 min)**

 - <https://tools.ietf.org/html/draft-yang-alto-http2-transport-01>

 - Discussion Leader: Richard YANG/Roland Scott

Agenda (Cont.)

- **Deployment experience Update:**
 - G2 and ALTO integration (20minutes)**
 - <https://tools.ietf.org/html/rfc7971>
 - Discussion Leader: **Kai Gao**
 - ALTO Implementation Update: Flow Director (15minutes)**
 - <https://tools.ietf.org/html/rfc7971>
 - Discussion Leader: **Danny Alex Lachos Perez**
- **Non-Chartered items:**
 - Considering ALTO as IETF Network Exposure Function (10 minutes)**
 - <https://datatracker.ietf.org/doc/html/draft-contreras-alto-ietf-nef-00>
 - Discussion Leader: **Luis M. Contreras**
 - Compute aware network Use Case (10 mins)**
 - <https://datatracker.ietf.org/doc/html/draft-liu-alto-can-usecase-00>
 - Discussion Leader: **Peng Liu**
 - Bandwidth Estimation on OpenNetLab (10minutes)**
 - Discussion Leader: **Zhixiong Niu**
- **Writeup (2 minutes) Chairs**

Working Remote

- **Utilize the mailing list!**

- Working Group consensus is determined on the mailing list
- Mailing list is to be used for WG decision making and discussions
 - Resolving open issues
 - Reviewing changes to WG documents
 - Introducing new drafts
 - Potential new Working Group topics

- **On-line meetings**

- on-line interims can be scheduled as needed
 - Periodically, or as needed to cover a specific topic
 - WG members can make requests to chairs
- Likely to continue for some time in place of physical meetings

- **Informal (working) meetings**

- WG WebEx is available
- WG members can make requests to chairs/secretary
- These meetings will be announced on the WG list

ALTO WG Charter

- o Develop operational support tools for ALTO. Based on experience from deployments, the advice in RFC 7971, and the latest opinions and techniques from the Operations and Management Area, the working group will develop tools to configure, operate, and manage the ALTO protocol and networks that use ALTO. This may include **YANG models and Operations, Administration, and Maintenance (OAM) mechanisms**, in consultation with the OPS area and the IPPM WG. **The working group may also update RFC 7971** in the light of new experience and protocol features that were added to ALTO after that RFC was published.
- o Support for modern **transport protocols**. ALTO only uses the capabilities of HTTP version 1. While ALTO can operate successfully over any version of HTTP, it would benefit from leveraging HTTP/2 and HTTP/3 capabilities such as push. The WG will produce an ALTO extension that leverages these capabilities if they can be shown to improve performance.
- o The WG will place special emphasis on the normal group activities of collecting deployment experience, **exploring use cases, and protocol maintenance**. The working group will not develop protocol extensions for new use cases until it has been re-chartered specifically for that purpose. A report on wide-scale deployment of ALTO and documented demand for new use cases will be critical to the decision to recharter or close the Working Group.

Milestones

Date	⇄ Milestone
Aug 2022	ALTO OAM Document/YANG Model
Aug 2022	Wiki or internet-draft on ALTO deployments and challenges
Mar 2022	RFC for ALTO using HTTP/2 and /3 mechanisms

Work items Classification

Work item	Classification	Relevant Documents
OAM mechanisms to support ALTO (Develop operational support tools for ALTO)	Chartered Item	https://datatracker.ietf.org/doc/html/draft-zhang-alto-oam-yang-00
Analysis on ALTO over HTTP/2 and HTTP/3	Chartered Item	https://datatracker.ietf.org/doc/html/draft-yang-alto-http2-transport-01
ALTO Deployment Update with new experience and protocol features (Develop operational support tools for ALTO)	Chartered Item that require evaluation	https://datatracker.ietf.org/doc/html/rfc7971
Use cases with have strong support and a realistic chance of implementation and deployment	Non-Chartered Items Can be Input to ALTO deployment Update	Considering ALTO as IETF Network Exposure Function draft-contreras-alto-ietf-nef-00 New Use Cases: Compute aware network Use Case draft-liu-alto-can-usecase-00 draft-contreras-alto-service-edge-03 Network Topology Exposure Use Case draft-hzx-alto-network-topo-00 LMAP measurement Exposure Use Case draft-xie-alto-lmap-00 Updated Use cases: Multi-domain Use Case draft-lachos-alto-multi-domain-use-cases-02 Cellular Use Case: draft-li-alto-cellular-use-cases-00

Document Updates – RFCs, IESG Processing, WGLC, New Adoption

- New RFCs
 - None
- IESG Processing (IESG telechat: 2021-12-02)
 - draft-ietf-alto-performance-metrics-19 (updated) Shepherd: Jan Seedorf
 - draft-ietf-alto-cdni-request-routing-alto-17 (updated) Shepherd: Vijay Gurbani
 - draft-ietf-alto-path-vector-19 (updated) Shepherd: Vijay Gurbani
 - draft-ietf-alto-unified-props-new-20 (updated) Shepherd: Vijay Gurbani
- New Adoption
 - None

Document Updates

- In the IESG Evaluation (2021-10-25)
 - [draft-ietf-alto-path-vector-19](#) (IESG telechat: 2021-12-02) Shepherd: Vijay Gurbani
 - OPSDIR LC Review (Tim Chown): Not ready: terminology scope, use case clarification, action: Add usage examples
 - GENART LC Review: Ready
 - ARTART LC Review: Ready
 - SECDIR LC Review: Haven't received yet
 - [draft-ietf-alto-performance-metrics-19](#) (IESG telechat: 2021-12-02) Shepherd: Jan Seedorf
 - SECDIR LC Review: Ready
 - TSVART LC Review: On the right Track
 - GENART LC Review (Elwyn Davies): Not ready: Registry lack two new fields, parameters definition
 - OPS DIR LC Review: Haven't received yet
 - ARTART LC Review (Christian Amsüss): Ready with issues
 - [draft-ietf-alto-cdni-request-routing-alto-17](#) (IESG telechat: 2021-12-02) Shepherd: Vijay Gurbani
 - GenART LC Review (Russ Housley): almost ready
 - ARTART LC Review: Ready with Nits
 - OPSDIR LC Review: Haven't received yet
 - SECDIR LC Review: Haven't received yet
 - [draft-ietf-alto-unified-props-new-20](#) (IESG telechat: 2021-12-02) Shepherd: Vijay Gurbani
 - ARTART LC Review: Ready
 - SECDIR LC Review: Ready
 - OPSDIR LC Review: Ready