

Multiple Interfaces (MIF) WG

IETF 95, Buenos Aires

Margaret Wasserman mrcullen42@gmail.com

Hui Deng denghui@chinamobile.com

Note Well

Any submission to the IETF intended by the Contributor for publication as all or part of an IETF Internet-Draft or RFC and any statement made within the context of an IETF activity is considered an "IETF Contribution". Such statements include oral statements in IETF sessions, as well as written and electronic communications made at any time or place, which are addressed to:

- The IETF plenary session
- The IESG, or any member thereof on behalf of the IESG
- Any IETF mailing list, including the IETF list itself, any working group or design team list, or any other list functioning under IETF auspices
- Any IETF working group or portion thereof
- Any Birds of a Feather (BOF) session
- The IAB or any member thereof on behalf of the IAB
- The RFC Editor or the Internet-Drafts function

All IETF Contributions are subject to the rules of [RFC 5378](#) and [RFC 3979](#) (updated by [RFC 4879](#)).

Statements made outside of an IETF session, mailing list or other function, that are clearly not intended to be input to an IETF activity, group or function, are not IETF Contributions in the context of this notice. Please consult [RFC 5378](#) and [RFC 3979](#) for details.

A participant in any IETF activity is deemed to accept all IETF rules of process, as documented in Best Current Practices RFCs and IESG Statements.

A participant in any IETF activity acknowledges that written, audio and video records of meetings may be made and may be available to the public.



I E T F

Logistics

- Note taker and jabber scribe
- Meeting materials (Slides, Agenda, etc)
 - <http://tools.ietf.org/wg/mif/agenda>
- XMPP
 - mif@jabber.ietf.org
- Mailing list
 - mif@ietf.org
 - <http://www.ietf.org/mailman/listinfo/mif>

Agenda

1 Agenda bashing (Chairs, 3 min)

2 MIF document status review (Chairs, 5 min)

2.1) MIF MPVD API requirements IPR disclosure
draft-kline-mif-mpvd-api-reqs

3 MIF working group document update

3.1) draft-ietf-mif-mpvd-ndp-support (Jouni, 10 min)

4 MIF Recharter discussion (Chairs, 45 min)

5 MIF related document

5.1) Homenet naming architecture document (Ted, 10min)

5.2) draft-mccann-dmm-prefixcost (John, 10min)

Working group document status

1 draft-ietf-mif-happy-eyeballs-extension-09

This draft has been submitted to IESG for publication

2 draft-ietf-mif-mpvd-id-02

This draft is waiting for clarification on how ID will be used.

3 draft-ietf-mif-mpvd-ndp-support-03

Active working group draft will be presented later

IPR on draft-kline-mif-mpvd-api-reqs

Microsoft has submitted an IPR disclosure on this draft

Terms are reasonable and Non-Discriminatory License to All Implementers with Possible Royalty/Fee (RAND)

It's not working group work item, so we are informing the working group of this claim to be considered if we discuss adopting this work.

Recharter discussion

Guidelines for the discussion:

Some of our key contributors are not here in Buenos Aires, so if you have an opinion about this discussion, please post it on the mailing list in addition to raising your comments in the MIF meeting this afternoon.

No final decision will be made until everyone, here and elsewhere, has had a chance to express their opinion on this topic, which means that we will not be making a final decision today.

Recharter discussion

Three options for the WG:

Rechartering,

Going on hiatus until the community has more experience with PvDs,

Closing the group.

Recharter discussion

The purpose of the MIF Working Group is to define how hosts should behave in the presence of multiple concurrent network connections. Multiple network connections can be made over multiple physical network interfaces, a combination of physical and virtual interfaces (VPNs or tunnels), or even over a single interface that connects to more than one external network.

Nodes attached to multiple networks may encounter problems due to conflicting network configuration information and/or due to the simultaneous use of multiple available networks. These problems are outlined in the RFC 6418: Multiple Interfaces and Provisioning Domains Problem Statement.

The Multiple Interfaces (MIF) WG defined the architectural concept of a Provisioning Domain (PvD) to denote a consistent set of network configuration information associated with a network connection, and provided a solution framework for nodes that are connected to more than one PvD in RFC7556: Multiple Provisioning Domain Architecture. The existence of a PvD may be inferred by the host (resulting in an implicit PvD), or explicitly configured (resulting in an explicit PvD).

Recharter discussion

The MIF Working Group is focused on three remaining items:

1. Determining how explicit PvDs will be configured.
2. Determining how hosts can discover more information about a PvD to which it is attached. This might include: a PvD ID, connectivity characteristics for the connection, costs associated with use of the network connection, etc.
3. Determining the requirements for a MPVD API, and defining an abstract MPVD API which will allow applications and middleware to determine and manipulate information about local PvDs. Among other things, this API could allow advanced applications to choose a PvD for an outbound connection, thus influencing next hop selection, source address selection, interface selection, and DNS server selection.

The MIF WG may also provide advice to operating system developers or application developers on how to provide an improved connectivity experience when a host is attached to multiple networks or when there is a change in the set of networks to which a host is attached.