HOMEGATE Meeting Notes:
Wednesday July 28th 09:00
Chairs: Ray Bellis and Jason Livingood
Total Attendees: Approximately 150
Wiki: http://trac.tools.ietf.org/area/tsv/trac/wiki/HOMEGATE
Jabber log at: http://www.ietf.org/jabber/logs/homegate/2010-07-28.txt

Notes submitted by: Chris Griffiths and Matt Zekauskas, edited by Ray Bellis and Jason Livingood

09:02 - Start

Agenda Bashing, Blue Sheets, Note Well - Ray Bellis

Jason Livingood - Review of the goals. Asked to review goals after the last BOF and held a virtual meeting before the IETF meeting to discuss charter and deliverables with other SDOs.

Jason requests ADs about thoughts on HOMEGATE, thoughts, wishes, etc.

Lars Eggert speaking (AD): Lars currently concurs with Jason about the direction of the bar BOF. There was lots of interest at the Bar BoF in Stockholm and at the first BoF. In the end, the ADs decided after the BOF that we should hold a workshop meeting before the second BoF to discuss possible overlap with other SDOs and understand what they were working on. Lars' takeaway was to check with other forums that HomeGate would not intrude on other organizations. As long as people check their work does not conflict with other bodies then the IETF should take this work on.

The first workshop was canceled due to the volcano and then we had a virtual meeting on July 13, 2010. After talking to other forums for a few months and in the workshop, fear that intruding on turf has diminished. It's clear in the charter. There is an issue with the Home Gateway Initiative (HGI) over the name of HomeGate, which may need to change. If you bring work, you have to explain its relationship to other SDOs' work. Then with that information, the ADs will decide whether the IETF can safely charter something without trampling on existing work.

Mark Townsley at the mic: On SDO interaction. He said that it is the IAB's job to define a liaison with other SDOs. It would be hard for someone here to do that cold.

09:08 - Review of Charter - Jason Livingood

See the HomeGate wiki for the current charter. Review of RFC 5434 - Does this proposed BOF meet the required items for forming a working group?

Jason reading highlights of proposed charter text. Covering scope limitation of no new protocols. All work will be re-laid the IESG for further review in new WG or existing ones.

Jason reviewed two newly added paragraphs at the end of the charter.

Ole Troan: no new protocols. Define problem here, recommendations on features/protocols, back to IESG if new protocol needed.

Dave Crocker at the mic: Defining profile sounds like protocol work. Where does protocol work stop and device work begin? Some of device profile work looks like protocol work - bringing parts together as cohesive service.

Fred Baker at the mic: CPE router specification at v6ops is at version 1. We don't have a problem looking at the same work, but how do we interact properly?

Paul Hoffman at the mic: Other SDOs working on protocol, there should not be a problem if HomeGate and IETF not doing protocol. Like first paragraph shown at the end (which is 2nd to last). Last paragraph: have to justify what HomeGate is doing - other SDOs are already saying, "must do IPv6". Why can't we have doc as long as we are not touching layer 2, and non-IETF protocols in documents?

Lee Howard at the mic: Spotted a redundant sentence in the charter (Ray removed in real-time). Other SDO should not be a gateway to the work the IETF does, should be informed.

Ray Bellis: Copy and paste error on paragraph now corrected.

Lars Eggert: Agrees with Paul and Lee about SDO being gateway to work that IETF can work on, but other SDOs should not be blocking our work. Agrees that other SDO have work that could be lifted out of their respective narrow scope for one access technology to larger scope as an RFC and Internet-wide level.

Christophe Altair: highlighted that other SDOs are doing lots of profiling work on IETF protocols themselves, not just on access technologies. Don't want to overlap. Looked at minutes of previous virtual meeting, request to clarify how work of groups overlap/interact.

Ole at the mic: In the last meeting minutes, there was a request to clarify how the work this working groups would interact and/or overlap with other SDO.

Lars Eggert: We thought very hard about how overlap should work. For a given work item how do we overlap topic specific. The AD and Chairs are all ears on how to make this work.

Dave Crocker at the mic: Significant work on overlap and charter work. Suggestion is anything that has taken this much discussion time (here), deserves resolution. We should try to identify what apparent current overlaps are, and address concretely.

Jason wants to skip forward to another agenda item to cover SDOs since we've been focusing so much on that. We have notes from the virtual meeting that Ray will review. We should also note, however, that SDOs only cover some of the home gateways, not many of the ones purchased at retail though.

Paul Hoffman at the mic: Agrees with Dave Crocker that liaisons should interface with other SDO and cover items. But it's not our responsibility to seek out SDOs that have done this. Some of SDOs moving on stuff, hard to predict, but IETF has liaisons and that's what those relationships are for.

Dave Harrington at the mic: There is an IESG-created new work mailing list for cross-SDO work (new-work@ietf.org). There is a proposal to have people watch the new mailing list. There is a potential issue with having liaisons. There are a lot of organizations that want to liaison with IETF and participate. We work as individuals at the IETF. Looking at how to interface with other organization and overlap with them. The real approach is to go with the IETF approach. We can post our documents on this list and other SDOs can comment. Lots of organizations would like an official relationship with the IETF. In other orgs, this means we have to respond to docs from other organizations, which puts a burden on us. In fact, lots of quasi-organizations that would love to give the impression they are consulted
by the IETF. If you are going to come in with a proposal for new work, convince the chairs that it belongs, convince the ADs, ADs convince IESG -- use normal IETF mechanisms.

Daniel [Migault?] at the mic: Should be responsibility of the chairs to ensure other SDOs involved - invite SDOs to give feedback.

Dave Harrington: I would say no, Daniel. In no way are we going to make IETF work contingent on other SDOs. Recommends that they sign up for mailing lists - we have no membership requirements, charge no membership fees, and access to our documents is free. This is not true of other SDOs. There may be restrictions on IETF participants getting to other SDO information/mailing lists/documents.

Ray Bellis: Presenting information on HomeGate and related SDO work, from the virtual meeting.

On the mailing list there are 10+ pages of exhaustive notes from the virtual meeting. In the notes are pointers to presentations there too.

Broadband forum. Very keen, lots of members. Focusing on overall functional requirements. TR-124 document is effectively a profile document. Must have feature X and Y, although not much detail.

Home Gateway Initiative: Formed largely of incumbent telecoms operators in, Asia and Europe. Focus mostly on how to manage equipment remotely, remote diagnostics, next generation access technologies.

CableLabs is the research and development group for cable operators. Best known for DOCSIS®. Focused on triple play devices (voice-video-data), new "eRouter" spec: router + cable modem.

UPnP forum is concerned with stuff inside the home network, such as requesting a pinhole through firewall, ease of use within network. Security is a major concern, and a major work item for them.

It's not our intention to duplicate work being done elsewhere.

Our role is to provide guidance and recommendation documents to other SDO that their own documents can reference.

E.g.: RFC 5625 (BCP 152) documents known issues with DNS proxy implementations, and is now referenced by Broadband Forums TR-124 v2.

The hope is that other RFCs can be referenced in other documents produced by other SDOs.

Charter Scope Items – Jason Livingood

There are three key questions:

- Scope expressly home gateway type device - at demarcation between home net and Service Provider network. Or more generally technical issues in home network.

- Whether this exclusively focuses on fixing things with IPv6, or also IPv4 work? Variety of opinions offered so far.

- Proposed deliverables, which touches on IPv4/v6 discussion. Is it one doc, multiple docs, BCP docs, or some other form of RFC.

Paul Hoffman at the mic: Profile for IPv4 is not the best current practice (snarky). People have a practice to logo-ize things. Provide full conformance of a document, and very hesitant to do something that is only IPv4 only. People use RFC to logo-ize or standardize items. If deep concern that people will ignore doc if requires IPv6, option is to say two conformance levels to doc; full conformance, and then full conformance minus IPv6.

Jari Arkko at the mic: On IPv6/v4, we have gotten consistent feedback that folks should be on IPv6. Visible in feedback from SDOs; they want us to do IPv6 stuff. I think we should do IPv6 things, and things that are IP version agnostic. Also, are we doing profiles, are we doing new things?

Bob Briscoe at the mic: Logo-ization issue, there is an issue and the work items will be used that way. On advice on guys from my company who think about this, they were concerned on logo-ization issue.

Dave Crocker at the mic: How is this stuff going to get used? There's a question of doing IPv4 vs. IPv6 or both. Really tired of political correctness, where idealism and purity dominate choices. Question of doing IPv6 vs. IPv4 vs. combo needs to be practical point. This is a profiling WG, so has a hope of doing things soon. We need to make IPv6 operational in the real world; anything that is pure IPv4 is a mistake. There's no need to work on IPv4 only – focus on IPv6. Should focus on immediate need. Focus on IPv4/IPv6 combo.

Ole Troan at the mic: Current implementations don't focus on IPv4 and IPv6 and there is no overlap. Should focus on home nets and dual stack.

Dave Harrington at the mic: Little concerned about home networks getting into scope. It's important to work on "on the wire" protocols. Anything that's not going over the wire or "wireless"? Concerned about seven documents, three docs would be fine. Focus on BCP and info. Need a new document type (Best deprecated practice?).

Dave Thaler at the mic: Agree with Hoffman/Crocker, 80% of what Dave Harrington says. Do one document and BCP is fine. Home networks point should not be in this working group.

Mark Townsley at the mic: Not just question of hosts, but what if more than one router in the home, multicast variety of issues, particularly in IPv6 we don't have answer. Focus on home networking more generally -- at least focus on LAN side of network. If we extend to the host devices, then that is the point we flip the work over into the MIF WG. If we focus only on the gateway and just IPv6, not interesting.

Mark Andrews at the mic: Design boxes so they can daisy chain or spread to mesh boxes - have to deal with upstream with IPv4-only, IPv6-only, or dual stack. Focus on dual stack in the home.

Dave Oran at the mic: Very strongly wants to focus on routing in the home and access in the home. Other SDOs are focused on singe boundary of user side or service provider side. Much less attention has gone on the user side.
Take our scope: communication, access to Internet services and routing for home networks, possibly with multiple routers. I think that distinguishes us from other SDOs.

Dave Thaler at the mic: Focus on hosts should be done in the MIF WG

But Mark's point, and Dave Oran's too – home routers that aren't at the edge of a network. Once upon a time a gateway was what we now call a router. In this meeting, we have changed term. Should we change "HomeGate" to "HomeRoute"?

With some of these devices we often don't know until after they're bought and plugged in whether they are on the service provider boundary or not.

15% of homes might be subnetted, e.g. a wireless LAN separate from the home gateway that connects to the ISP. Some host devices are already double-NATted. The recommendations here apply to both. So for that I agree with Mark, change the name to "Home Route".

Dave Crocker at the mic: The reason they call them gateways is because they do more than route, they have firewalls, NAT, etc. Thought Mark comments added multiple deliverables. The first deliverable should be IPv4/IPv6 specified. Focus on multi-homed items.

I was going to respond to Mark – a perfect response; clear reasonable, but problematic :)

There was one deliverable before, now I think 2 or 3, an evolution of a single activity. "Half of this stuff is in the IPv6 WG, so this isn't interesting". Great! Do something uninteresting, but very useful instead.

The #1 deliverable – an IPv6/v4 single entity functional profile that makes the most common existing case the most viable the most quickly.

I raised a point about much more interesting environments that need to be covered. I don't have a multi-homed home, but I'm not surprised that others do and it will become more important getting ahead of curve would be nice. That's the #2 deliverable

#3 is integration of home networks without necessarily touching hosts per-se.

Lee Howard at the mic: Use case of router vs. gateway are not the same. We should be IPv6 focused, but we need to look at IPv4 since there is still work there. BCPs are needed even if they're not "C" (i.e. not current practice).

Deliverables – we need BCPs. I think there will be things that we can discover and throw over the wall to other WGs.
Paul Hoffman at the mic: I think people are thinking old school gateway vs. router. I wasn't thinking that way myself. DNS proxies, application layer gateway, those are the functions of a gateway, not just routing, and I did have an intention to talk about that.

10:00 – Working Group Formation

Jason Livingood is now looking to find consensus in the room to focus on starting working group. Seems to sense consensus to focus on home networks more generally, focus on both IPv4/IPv6 and one document but could evolve.

IPv4/vIP6/dual-stack: Sense consensus is to focus on both IPv4 and IPv6. This is very practical, especially given IPv4 to IPv6 transitions now beginning.

Deliverables: Not so much consensus, but one document, but that could evolve over time.

Profiles vs. something else: will be ongoing discussion.

Want to ask whether there is consensus to form a WG, assuming we can work out details on mailing list.

Dave Thaler at the mic: Question #1 is the wrong one. Three options:
- focus on device at boundary home network and ISP
- routers within home.
- routers and hosts in home.

Dave Oran at the mic: What functions are handling DNS, routing, etc. Device focus is on what a particular box should do. What do particular profiles cover. Maybe the device focus is causing the problem here.

We're stumbling over something, and trying to have it both ways:

- functional focus – protocols/functions routing dns firewall other-services
- device focus – what should a particular box do?

One of the things IETF is good at is not specifying a particular box, but functions. Perhaps the device focus is what is causing a problem? We need functional focus.

Jason Livingood: Start on device focus has evolved with discussion to more network focus.

Mark Townsley at the mic: Need clarity on the 3rd question. Adopt the functional focus on home gateways and still leave IPv6 work in v6ops. We can't ignore hosts – MIF can take on any requirements that come out of here.

Dave Harrington (AD comment) at the mic: We have a focus on what a device should do. Thinks a functional focus scopes the problem less. I'm afraid of the WG going off in too many directions.

I like the distinction between functional and device – think it is a good thing to do. I'm concerned with having a functional focus for the WG charter, I'm not sure it would be clear enough.

Ole at the mic: Disagrees with David's assessment of the scope of function focus.
Device focus is extremely wide. TR-124 has hundreds of references.   I think we need
function before device.

Bob Briscoe at the mic: from Dave's [(which?)] comment way to define functions talking
about, then scoped group, then have a profiling group

Jason Livingood:

Assume we work this out on the mailing list, that's the key one to work through.

Assuming we work out details on the device/function questions with the mailing list and
the IESG, is there consensus that interesting work for IETF to do or not?

Is there consensus to form a working group?

Larger room hum

Is there anyone who disagrees that there is consensus?

Very small hum.

Who will work on WG items?

26 people.

Are there any AD directed comments and suggestions? No.