

CCAMP Agenda For IETF 103

Session I

Wednesday, November 7, 2018 (+07)

9:00-11:00 Wednesday Morning session I

Room: Boromphimarn 4

Presentation Start

Time Duration Information

0 9:00 6 Title: Administrivia - WG

Status - Reporting on WG drafts not being presented

Draft:

Presenter: Chairs

First RFC on microwave, RFC8432 on framework. Congratulations to MW team!

Just received Liaison from ITU

draft-ietf-ccamp alarm module in good shape and likely to go in last call
David Sinicrope (as BBF LS manager): my understanding of the alarm module is that the -05 has been published and all the comments have been addressed.
draft-ietf-otn-topo-yang ready for yang doctor review

Received lot of Liaisons: yesterday and the day before from ITU-T on dwdm if framework and also from MEF on L1 Service Attributes.

1 9:06 10 Title: Transport Northbound
Interface Applicability Statement

<https://tools.ietf.org/html/draft-ietf-ccamp-transport-nbi-app-statement-03>

Italo Busi

Daniele Ceccarelli: protection would be addressed in the next step?

(Yes) What's the plan for potential scenarios (on the last slide)?

Italo Busi: we are asking for WG interest and prioritize.

Daniele Ceccarelli: As individual, I will consider protection with higher priority. Draft is in good shape, continue with action items and then we can close.

2 9:16 10 Title: YANG models for WSON

Draft: <https://tools.ietf.org/html/draft-ietf-ccamp-wson-yang-15>

Draft: <https://tools.ietf.org/html/draft-ietf-ccamp-wson-tunnel-model-02>

Presenter: Young Lee

Created Github to manage all L0 models across WSON & flexigrid

introduced a new ietf-layer0-types module

Augmentation of TE-topology model is now available

Dieter Beller: we are aware of the changes about spectrum management.

Previously the model defined n and m values as in G.694.1 and I do not know

why it has been changed.

Young Lee: this is WSON, without any flexi-grid yet.

Daniele Ceccarelli: The draft is ready for YANG doctor's review.

3 9:26 10 Title: YANG models for flexi
grid

Draft: <https://tools.ietf.org/html/draft-ietf-ccamp-flexigrid-media-channel-yang-01>

Draft: <https://tools.ietf.org/html/draft-ietf-ccamp-flexigrid-yang-02>

Presenter: Young Lee

Little more instable, because te-tunnel model is little more unstable

Young Lee: pending issue is why moving away from n and m in favor of frequency. This is a matter of style, WSON uses frequencies. Gabriele and Dieter think integer are easier to configure. Aihua may have different opinions from an implementation point of view.

Gabriele Galimberti: my suggestion is to use m/n as integer. Can also apply to both WSON and DWDM. I am in favor of using n and m (integer)

Aihua Guo: frequency parameters used in implementation is usually integer. Even if using n/m, we are going to translate to frequency.

Gabriele Galimberti: issue is that frequency has many digits which need to be entered precisely. This is a common source of error

Dieter Beller: the formula in G.694.1 to calculate frequency from n/m is rather simple.

Gabriele Galimberti: depending on the granularity you can have fraction 2, 3 or more digits and this is a source of mistakes.

Aihua Guo: we need to understand how to encode the label restrictions because they may be restriction on the combinations of n and m.

Young Lee: conversion table may be helpful.

Gabriele Galimberti: the table is already done in the RFC.

Haomian Zheng: editorial: some drafts use flexi-grid and some flex-grid so it would be worthwhile aligning the terminology

Young Lee: I think the right term is flex-grid

Haomian Zheng: existing documents uses flexi-grid so better to use this term.

4 9:36 10 Title: A Yang Data Model for
L1 Connectivity Service Model (L1CSM)

Draft: <https://tools.ietf.org/html/draft-ietf-ccamp-llcsm-yang-08>

Presenter: Young Lee

Fatai Zhang: received a liaison from MEF, and need to check the consistency.

Young Lee: this is aligned to MEF63 from beginning.

Fatai Zhang: please check if there are any changes in MEF 63 to the last

version.

Dieter Beller: shall we liaise MEF to ask for their comments?

Young Lee. it would be a good idea

Daniele Ceccarelli: I am just writing the LS. Once we check the MEF LS we are ready.

5 9:46 20 Title: draft-lee-ccamp-
optical-impairment-topology-yang-00 + WG discussion
Draft: [https://tools.ietf.org/id/draft-lee-ccamp-optical-impairment-
topology-yang-00.txt](https://tools.ietf.org/id/draft-lee-ccamp-optical-impairment-topology-yang-00.txt)
Presenter: Young Lee

This is the exciting one.

Continuation of I0 Model

We have changed the name from WSON to Optical to make it more generic

Igor Bryskin: I have concerns with optical layer tunnels going into multiple domains. It is not only application code but there are other parameters to consider when you travel through multiple OLS domains

Young Lee: currently we did not touch that yet.

Igor Bryskin: questions for the chair, is it reasonable to consider ACTN scenarios where an optical tunnel crosses multiple domains, in a similar way as we consider OTN tunnels.

Daniele Ceccarelli: it is actually a question to the WG. You might have multiple optical domains under MSDC. Two operation modes as slides.

Gert Grammel: in theory some technology is independent of vendors, how to map with real deployment with different vendors/controllers is not an issue to be discussed in IETF.

Aihua Guo: about the augmentation, currently it's from te-topology, but may consider augmentation to wson/flexi-grid topology model.

Young Lee: this is the fair point, will look into make best re-use of existing ones.

Ruediger Kunze: as operator, to response Igor, it's useful to consider the multi-domain optical tunnels. This work is appreciated.

Italo Busi: I agree with Igor that we cannot setup multi-domain optical tunnel because of the state of the art of optical technology but I also agree with Daniele Ceccarelli that ACTN still makes sense in a multi-domain optical network to coordinate the setup of a multi-domain OTN tunnel triggering each PNC to setup single-domain optical tunnels.

Igor Bryskin: if the optical trail is fully aside within optical domain, why optical impairment is needed?

Gabriele Galimberti: the function can be either in MDSC or in optical domain controller, but they will have different parameters for configuration.

Italo Busi: agree with Igor, impairment information will be less useful on MPI, but will be useful for option 2 (optical domain controller configuration).

Young Lee: this is valid question to be investigated, we will figure out the difference for two options.

Gert Grammel: The confusing is because of associating domain with vendors. In IETF we should focus on domain for a technology, not vendor's domain.

Fatai Zhang: domain is usually administrative domain, and the definition of domain could be operation-dependent.

Daniele Ceccarelli: it's still possible to have single-domain multi-vendor.

Dieter Beller: we prefer reduce the scope, to understand what link attributes should be modeled first, and then expand to transponder.

Igor Bryskin: Packet and optical has different meanings on domains. The optical domain interaction can be achieved from northbound.

Young Lee: we are trying to make sure there is common interest in WG.

Daniele Ceccarelli: who believes we should do this work in WG? (almost everyone)

Igor Bryskin: are we willing to work on single-vendor solutions?

Young Lee: we are talking about multi-vendor transponder so it is not a single-vendor solution

Fatai Zhang: operators are looking for multi-domain and multi-vendor solutions today. Alien wavelength is a sort of multi-vendor solution

Adrian: even if the most typical case is single vendor, it would be beneficial to the operators to figure out how the multi-vendor works. GMPLS is good example to look into: it worked on multi-vendor inter-op, with mainly deployment as single vendor case.

Aihua Guo: even if for single vendor's domain, the use needs to understand more, such as the optical performance.

6 10:06 10 Title: Applicability of GMPLS for B100G Optical Transport Network

Draft: <https://tools.ietf.org/id/draft-merge-ccamp-gmpls-otn-bl00g-applicability-00.txt>

Presenter: Qilei Wang

After the London meeting we have understood that there are no protocol extensions required and therefore we decided to develop an applicability statement document instead of a framework

Gert Grammel: where do you see the OTUCn?

Qilei Wang: there is no need to configure the OTUCn, it can be automatically configured as a result of the server layer configuration

Gert Grammel: why the old hierarchy ended up at the ODU layer w

Italo Busi: ODUk is switched in the electrica domain while ODUCn is not, so the ODUCn is the lowest server layer for ODUk (like the OTUk)

Gert Grammel: once set up OTU, all the ODU is set up. There's another step to do. The assumption is that the server is always there.

Italo Busi: that's the assumption in the draft. We focus on how ODUk is

setup over an existing ODUCn, no matter how the ODUCn has been setup, There are no protocol extensions needed but the way to use the existing protocols is not trivial so it is worth describing them

Gert Grammel: I understand we are limiting the scope of the document but something else is needed for a complete solution

Italo Busi: yes

Gert Grammel: it's okay to limit the scope, however there is still underlying issues that may impact this work.

Qilei Wang: we may look into this later. Sergio: look for electrical capability, photonic layer is not in the scope of this draft.

Fatai Zhang: do we still need make minor changes? For example, how to differentiate ODU4 with ODUC10 (regarding slide P4)? Please figure out.

Gert Grammel: OTUCn is electrical

Fatai Zhang: nothing new or minor change to existing protocols? If no, how can the control plane know it's ODUC10(P4).

Qilei Wang: Will double check.

7 10:16 10 Title: A YANG Data Model for Microwave Topology

Draft: <https://tools.ietf.org/id/draft-ye-ccamp-mw-topo-yang-01.txt>

Presenter: Amy Ye

Daniele Ceccarelli: please use the list to discuss the open issue.

Daniele Ceccarelli: it's good to see ETSI agree to use IETF models.

Anyone against the adoption this document? (None)

Daniele Ceccarelli: we will take this to the list.

Daniele Ceccarelli: we have topology models for different technologies (OTN, WSON,...), so I do not see any reason not to have a MW topology as well. It is good that ETSI has selected the IETF TE Topology model for the plug-test

Is anyone against adoption of this document? No one

We will take it to the list.

8 10:26 8 Title: Framework on Customer Premises Equipment Control in Optical Transport Networks

Draft: <https://tools.ietf.org/id/draft-zheng-ccamp-cpe-otn-fwk-00.txt>

Presenter: Haomian Zheng

We are limiting the scope to just OTN CPEs

Daniele Ceccarelli: the problem is there and we can end-up with either an applicability statement or with new protocol/model extensions

Young Lee: is it CMI?

Haomian Zheng: it depends on where the CPE is. CPE belongs to the customers (CNC), but usually configured by MDSC. There is different approaches for deployment, but definitely can belong to CMI.

9 10:34 8 Title: A YANG Data Model for
Transport Network Client Signals
Draft: <https://tools.ietf.org/id/draft-zheng-ccamp-client-signal-yang-03.txt>
Presenter: Italo Busi
Igor Bryskin: service definition, service is ELAN service. Do we have other
definition other than MEF service? Whether it's on IP or optical network,
the service is the same.
Italo Busi: most of them are MEF service. Depends on the definition of
L2VPN. How you configure from the MSDC on PNC
Gert Grammel: I don't think the service is the same on IP and optical
network.
Igor Bryskin: service decoupled to technology

10 10:42 8 Title: A YANG Data Model for
Flex Ethernet (FlexE)
Draft: draft-xiaobn-flex-e-yang-mod-00
Presenter: Qilei Wang

Daniele Ceccarelli: ITU approved WI on switchable FlexE, if it should be
refreshed in the frmk draft?
Loa Andersson: should do this but need more time. We should target in
modeling OIF IA.
Qilei Wang: Prefer to flexE interface and switching into separate document,
as they are different.

11 10:50 10 Title: IP - WDM interface
extensions drafts
Draft: <https://tools.ietf.org/id/draft-dharini-ccamp-dwdm-if-param-yang-05.txt>
Draft: <https://tools.ietf.org/id/draft-galimbe-ccamp-iv-yang-06.txt>
Draft: <https://tools.ietf.org/id/draft-dharinigert-ccamp-dwdm-if-lmp-07.txt>
Draft: <https://tools.ietf.org/id/draft-ggalimbe-ccamp-flex-if-lmp-05.txt>
Presenter: Gert Grammel/Gabriele Galimberti
Daniele Ceccarelli: it's time to move forward the WDM interface drafts. Is
there any objection to the two WDM interface draft? Run polling on the
list.

Adjourn 11:00