

Data Model for Computing-Aware Traffic Steering (CATS)

draft-yl-cats-data-model-05

Huijuan Yao (China Mobile)

Changwang Lin (New H3C)

Zhenqiang Li (China Mobile)

Presenter : Quan Xiong (ZTE Corporation)

Luis M. Contreras (Telefonica)

Updates from Last Version

- Presented at IETF#123 and #124 and the comments and suggestions are very appreciated at the meeting and on the mailing list from :
 - Joel Halpern/Adrian Farrel/Peng Liu/
- Updates from version -04 to -05
 1. Editorial modification of the whole document after a deep review.
 2. Define the terms used in YANG model in section 1.1 Terminology.
 3. Remove the Forwarding-plane YANG.
 4. Change the structure of the draft to enhance the readability.

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Update: CATS System Architecture

- **Update overview of the CATS System to align with the framework and functional components defined in Framework I-D (draft-ietf-cats-framework), such as data plane, control plane, C-SMA and C-PS.**
- **Define the data base and interfaces as new terms used in YANG model.**
 - C-CIB: CATS Computing Information Base, responsible for maintaining CATS network computing information. Provides basic data for the C-SMA.
 - C-NIB: CATS Network Information Base, responsible for maintaining CATS network information. Provides basic data for the C-NMA.
 - CATS-SBI: CATS Southbound Interface between the CATS Forwarders and the CATS Control Plane (regardless of the protocols used in the Control Plane). It could be used to report computing metric information from CATS Forwarders to the Control Plane, and also could be used to send path and service policy information or service information from the Control Plane to CATS-Forwarders.
 - C-SMA API: CATS extended interface between the Control Plane or Management Plane and the C-SMA, or between CATS-Forwarders and service-instances, it is used to report service metric information to the Control Plane or CATS Forwarders.

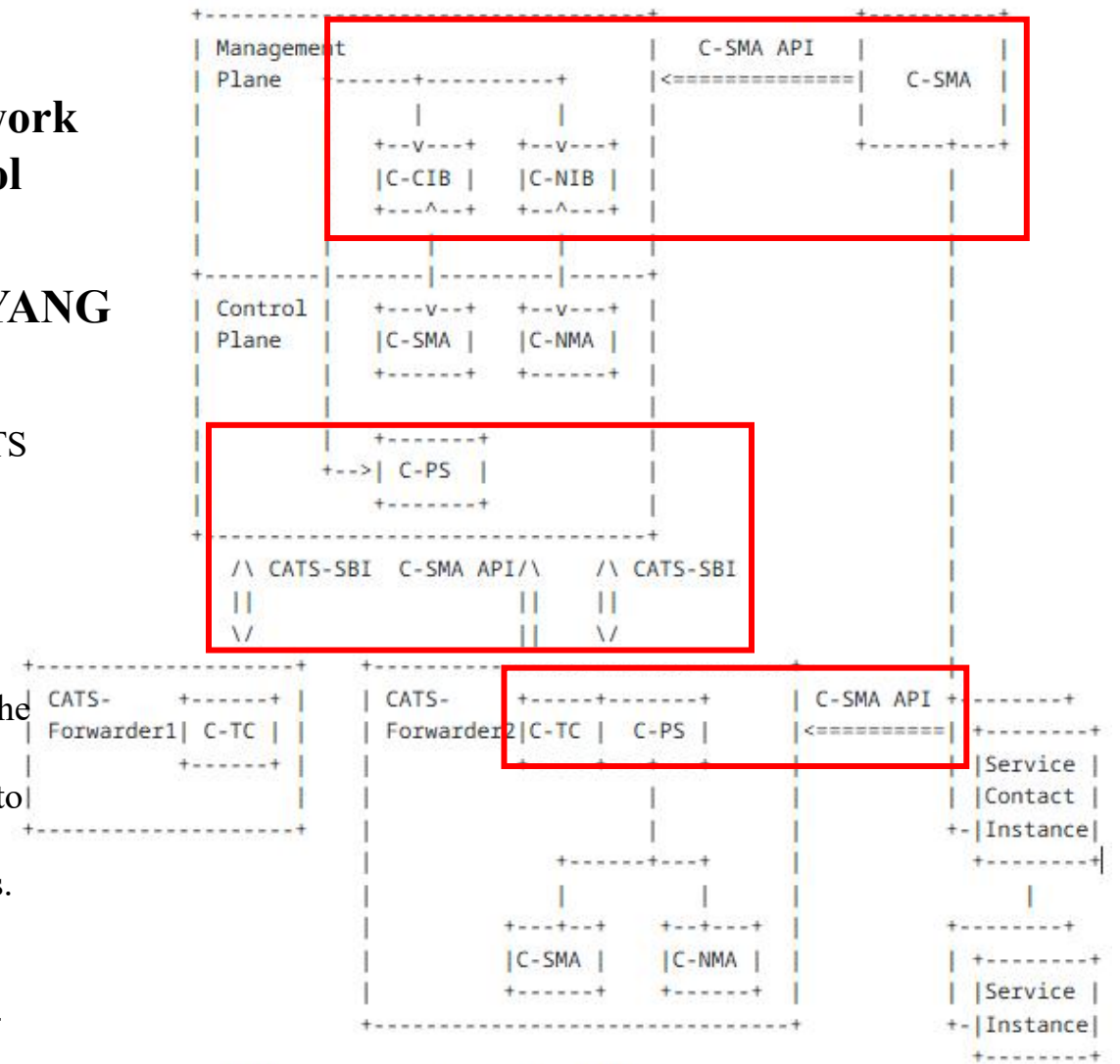
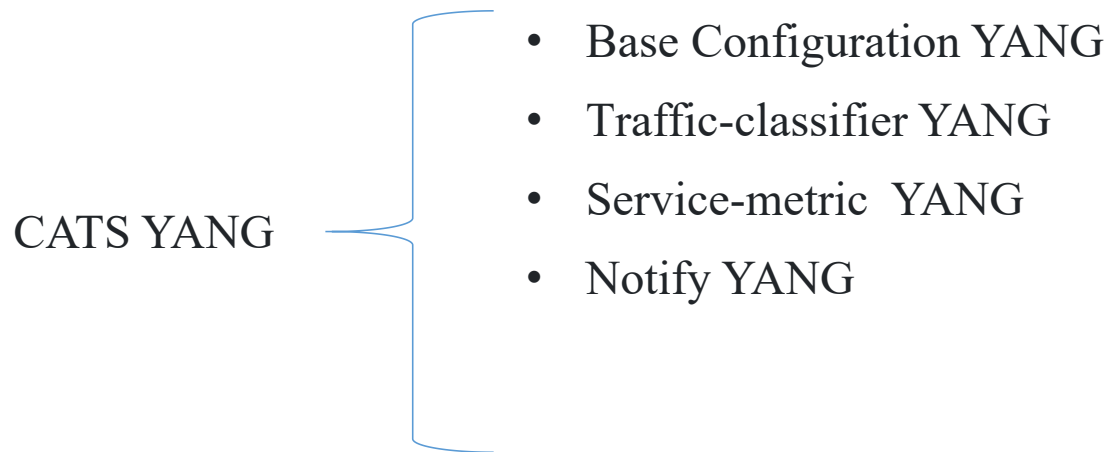


Figure 1: CATS System Architecture

Update: CATS Data Model Structure

- **The model extends the imports and augments ietf-routing YANG model defined in [RFC8349]. It is protocol-agnostic and adheres to the CATS framework and serves as a critical diagnostic and control mechanism.**
- **The CATS YANG model includes basic CATS objects, traffic-classifier objects, and service-metric objects and also includes YANG notifications (removed the forwarding-plane YANG).**

The CATS YANG data model is defined for the configuration and management of CATS corresponding data.



The CATS YANG data model is applicable to CATS-SBI interface and C-SMA API interface of CATS System.

Next Steps

- **Ask adoption?**

Thanks!