

# Updates for Information Model of C&U separation BNG

draft-wcg-i2rs-cu-separation-infor-model-01

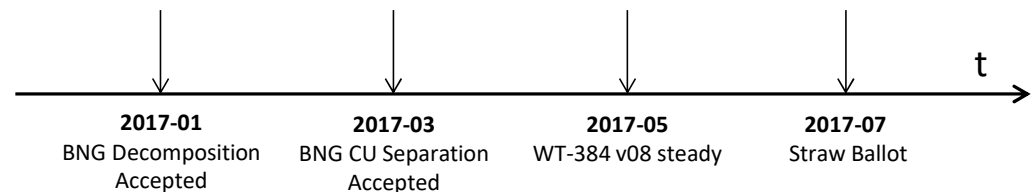
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# Design Concept

- **Background -BBF relative works:**

- BNG CU Separation got accepted by WT-384
- The steady version now is WT-384\_Rev.08
- WT-384 will enter straw ballot



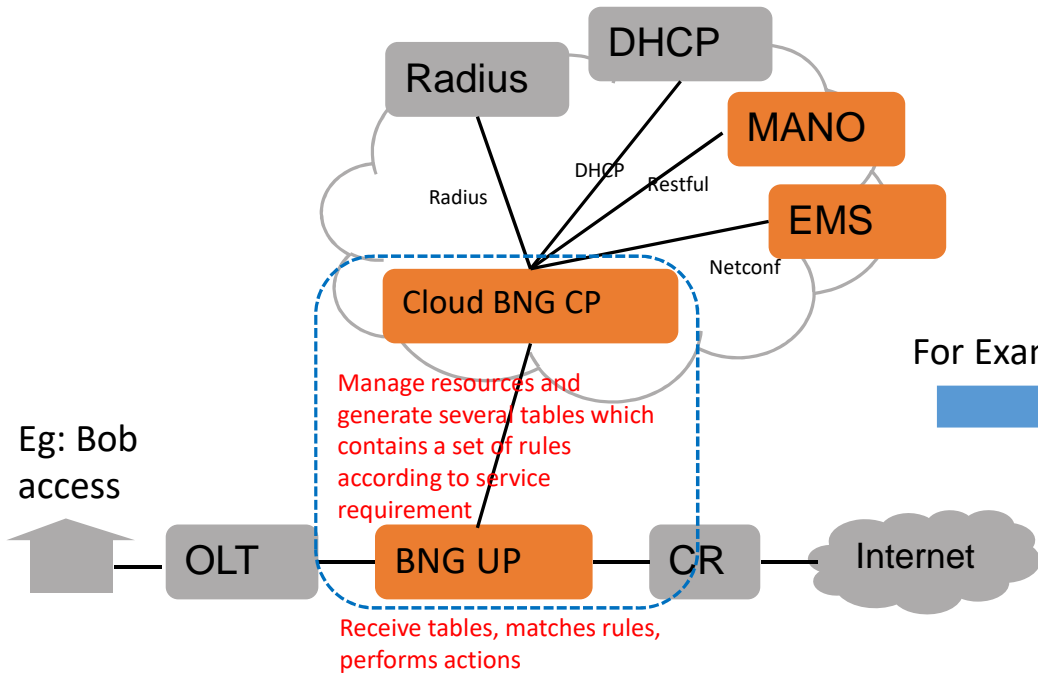
- **Motivation**

- **Improves Resource Utilization:** Centralized control plane provides the capability of unified managing the network resource & user's information. It has the overall view of resources and can distribute the resources as required.
- **Simplified Management:** Centralized control plane provides unified management interface to the outside system, such as EMS, DHCP server, Radius, etc.
- **Fast TTM:** Control plane and user plane can be extended separately according to different situations. It can help to shorten the time to marketing.
- **Dynamic control plane:** A large number of users access at any time. It requires a dynamic control plane to handle it.

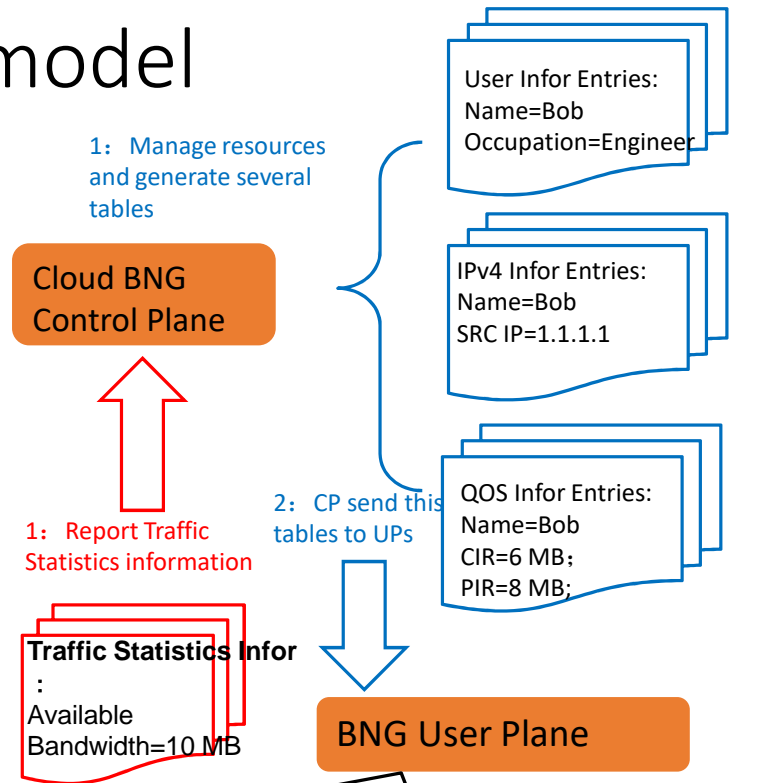
- **Objective**

- **Defines a set of information models to present the interaction interface between CP & UPs. It helps to achieve the interworking of different devices.**
  - Define an information model for Control-Plane. It presents that the Rules/Entries which are generated by the centralized Control-Plane.
  - Define an information model for User-Plane. It introduces what attributes will be reported by the User-Plane.

# The Usage Example of information model



For Example:



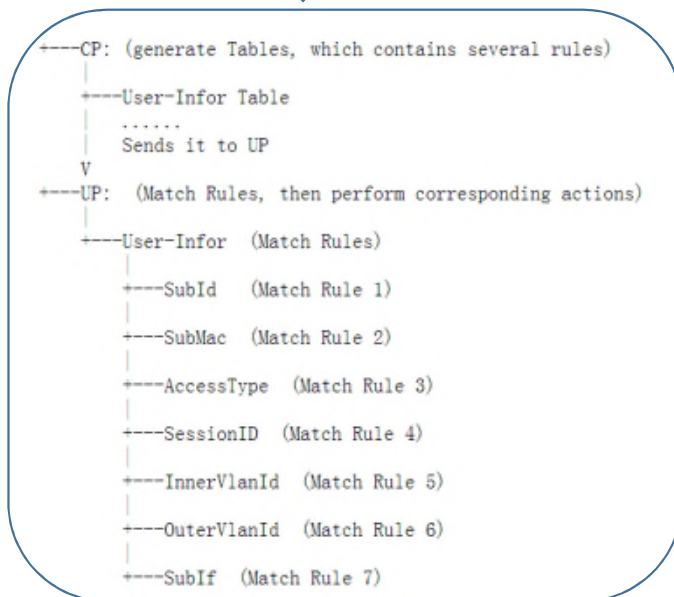
Policy:  
Rules:  
If Bob is an Engineer...  
If the source IP address is in the Marketing Subnet...  
Actions:  
Set Joe's IP address to 192.0.2.100  
Limit the bandwidth of application x to 10 Mb

Details of the use case can be referred to draft-gu-nfvrg-cloud-bng-architecture  
<https://www.ietf.org/internet-drafts/draft-gu-nfvrg-cloud-bng-architecture-01.txt>

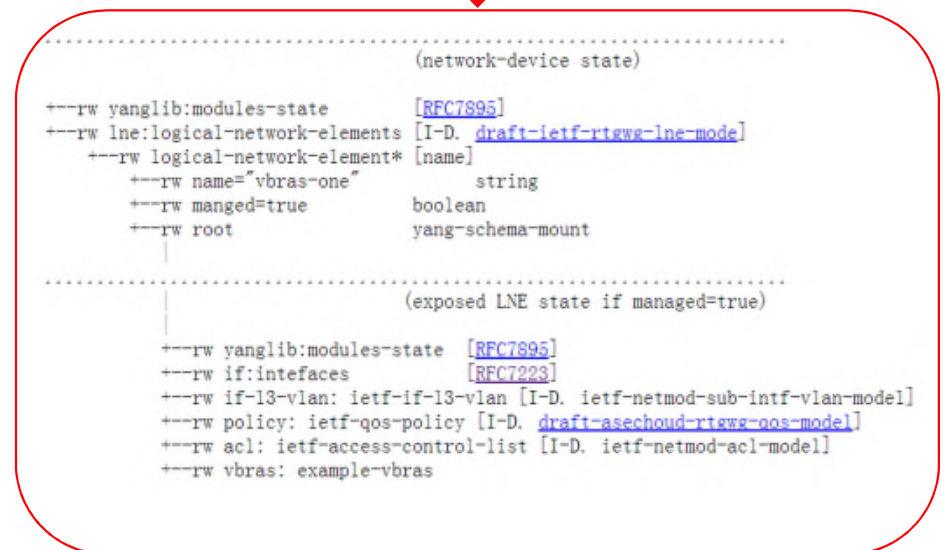
# Update in 01 version

- **Update the user-plane information model:**
  - Rewrite some UP's information model, corrects clerical errors to improve the readability.

e.g. User information



- **Adds an appendix section to brief introduce an example for CU separated BNG YANG data model.**
  - Reuse the existing works to assemble the YANG data model.
  - Present the instance of CU separated BNG.



# Next Steps

- Ally with corresponding works of BBF.
- Solicit more comments and suggestions.
- Prepare an other version to address received comments.
- Call for adoption...