CAR-CT WG drafts
October interim

IDR chairs: Susan Hares, Jeff Haas, Keyur Patel
Editors of CAR: Dhananjaya Rao, Swadesh Agrawal
Editors of CT: Kaliraj Vairavakkalai, Natrajan Venkataraman
Issues raised in Adoption call Part 3 (8/29 Interim)

**CAR**
- Packing of PDUs
- Compatible new NLRI (AFI/SAFI)
  - Key fields (color/NLRI) + new NLRIS
- Support for SRv6 + Robustness + operations
  - Including SR-PCE, Colorful Locators
- Scaling + Scalable replacement for LU
- Intent at Service Level
- Good BGP LU Follow-on
- Use of Add Path (eBGP)

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**CT**
- Packing of PDUs
- Compatible new NLRI (AFI/SAFI)
  - Key fields (RD, NLRI, RT) + new NLRIS
- Support for SRv6 + Robustness + operations
  - Including SR-PCE, colorful locators
- Scaling + scalable replacement for LU
- Intent at Service Level
- Good BGP LU Follow-on
- Use of Add Path (iBGP)

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- CAR Anycast Scenario (A.7)
- CAR color mapping resolution (effective)
- CAR LCM and Color Communities
- CAR Non-Agreeing color domains for Anycast End-Points
- Filtering procedures/RTC (Sec 5)
- ECMP, protection in Non-agreeing color domains (non anycast)

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- CT Anycast Scenario Handling
- SAFI-76 use only in Option C
- Embedded MPLS label in 8277 addresses
- Use of multiple RTs with non-agreeing Color domains
- Multipath, local repair and churn suppression with RD in NLRI
- Support for multiple encapsulations
Forum 3 – CAR-CT Operational Issues

• Issue Summary for Github
  • Editors of CAR/CT should load into github repository
  • Summary sent to IDR mail list on 10/12/2022
  • Available on IDR wiki (text form and pdf form)

• Issue Summary based on mail list details (75 pages)
  • Full detail summary available on IDR Wiki CAR-CT adoption, Forum-3
  • Send sue a note if you want her to email you with detail

• Q/A on Summary is possible now or at IETF-115
Forum 3 – Issues

CT Issues raised

• F3-CT-Issue-1: SAFI-76 only in Option C
• F3-CT-Issue-2: Scaling Discussion
• F3-CT-Issue-3: BGP-CT and RTC
• F3-CT-Issue-4: CT NLRI Format
• F3-CT-Issue-5: Putting MPLS Label field into new SAFI format
• F3-CT-Issue-6: CT’s Discussion (claims) of Benefits of using RD

CAR issues Raised

• F3-CAR-Issue-1: BGP-CAR Appendix A.7 Anycast EP Scenario
• F3-CAR-Issue-2: BGP-CAR Consensus on the need for resolution schemes
• F3-CAR-Issue-3: Handling of LCM and Extended Communities
• F3-CAR-Issue-4: CAR Routing in Non-Agreeing Color domains for Anycast EPs
• F3-CAR-Issue-5: BGP Update Packing
WG issues raised – impact CAR and CT

- F3-WG-Issue-1: New Address Families [Shunwan Zhuang]
- F3-WG-Issue-2: Support for SR-v6 (Jingrong Xie)
- F3-WG-Issue-3: Key Operational Differences between CAR and CT drafts (Bruno Decraene)
- F3-WG-Issue-4: Intent at Service level [Ketan Talaulikar]
- F3-WG-Issue-5: Technology BGP-CT and CAR are based [upon] and implications [Jeffrey Zhang]
- F3-WG-Issue-6: Benefits of Route Targets [Swadesh Agrawal]
- F3-WG-Issue-7: Compatibility of BGP-CT and BGP-CAR to SR-PCE (Shraddha Hegde)
- F3-WG-Issue-8: Scaling and Expected Route size
CAR – First Things WG can help with

- Review and feedback for
  - Current version
  - Updates on SRv6 flows, considerations
  - Updates on filtering mechanisms
- Inputs on use-case scenarios
BGP-CT – First things WG can help with

- Text clarification for disallowing SRv6 transposition for SAFI 76.
- Text clarification Section 8. usage for Route Distinguisher
  - Configuration flexibility for Same RD and Unique RD
  - Label allocation modes for BGP-CT
- Text for expressing and processing end customer intent (on CE-PE Links)
  - Control Plane Procedures for signaling customer Intent through provider networks end-to-end
  - Data Plane Procedures for mapping customer intent to provider network SLA
- Other Clarification of draft text (as required)
CAR-CT Interoperability Document

• draft-haas-idr-bgp-diffract in WG adoption

• What interoperability needs to do: Determine a path to interoperable features
  • Larger discussion, “what’s a color for?”
  • Color in the NLRI (CAR) and not in NLRI (CT)
  • Impact of Packing and translation of Packing
  • Error handling
  • Filtering – RT, RD, and use of RTC
  • Expressing transport intent/color for inter-as VPN scenarios
Questions