IETF 109

SPRING
SR Compression
Design Team Report

Members:
Cheng Li, Chongfeng Xie, Darren Dukes, Peng Shaofu,
Ron Bonica, Sander Steffan, Wim Hendrickx

Presenter and Chair:
Weiqiang Cheng
Overview of design team

• Members of the design team
  • Chaired by:
    Weiqiang Cheng of China Mobile
  • Other members of the team:
    Cheng Li of Huawei
    Chongfeng Xie of China Telecom
    Darren Dukes of Cisco
    Peng Shaofu of ZTE and
    Ron Bonica of Juniper
    Sander Steffann of SJM Steffann Consultancy
    Wim Henderickx of Nokia

Mail list
  • [https://www.ietf.org/mailman/listinfo/srcomp](https://www.ietf.org/mailman/listinfo/srcomp)
  • The mailing list is private, but the archive can be read by anyone.

Documents
  • Internet Drafts in Data tracker of IETF
  • The github for minutes and documents [https://github.com/IETF-srcomp](https://github.com/IETF-srcomp)

Meetings
  • e-meetings
    • Twice per week/Weekly meeting
  • F2F meetings
    • During IETF meeting
Work Scope for Design Team

The design team is to produce (rough) consensus (of the DT) outputs to the WG on two related topics:

1) **What are the requirements for solutions to compressing segment routing information for use over IPv6;**

2) **A comparison of proposed approaches to compressing segment routing information for use over IPv6.**
If the design team has insights into the number of solutions:
are several already standardized?
is there value in picking one / some?

this may be included in the requirements readout. If the design team can not agree, or does not think it is helpful to report this aspect, that is also acceptable to the chairs.
Tasks and Time Plan

- **Stage 1: IETF108 to IETF109**
  - **Main Tasks:**
    - Discuss the requirements and metric for SR over IPv6 compression
      - The Design Team focus on the document to help WG to understand the Problem Statement, Requirements, metric and Scope of SR over IPv6 compression.
  - **Output:**
    - Draft: Requirements will cover both data plane and control plane

- **Stage 2: IETF109 - IETF110**
  - **Main Tasks:**
    - Data Plane and control plane solutions discussion and comparison based on Requirements document.
  - **Output:**
    - Draft: Solution analysis document including evaluation information based on the requirements document
Progress of Design Team

Finished the -00&-01 version of SRv6 Compression Requirements draft.

Kick off  
2020.07.22

First Draft  
For DT review  
2020.09.30

Draft -00  
For WG review  
2020.11.2

Draft -01  
For WG review  
2021.11.15

Twice meeting per week

Overview of Requirement draft

- SRv6 SID List Compression Requirements
  - Dataplane Efficiency and Performance Requirements
    - Encapsulation Header Size
    - Forwarding Efficiency
    - State Efficiency
  - Functional Requirements
    - SID list length
    - SID summarization
  - Operational Requirements
    - Lossless Compression
  - Scalability Requirements
    - Adjacency segment scale
    - Prefix segment scale
    - Service Scale
  - SRv6 Base Coexistence
- SRv6 Specific Requirements
- Protocol Design Requirements
  - SRv6 Base
  - SRv6 Functionality
- Appendix
  - Heterogeneous SID lists

Requirements items that have been agreed within Design Team
Requirements items without unanimous consensus within Design Team
Next Steps
Requirements Completion

1 week:
gather feedback on requirements

End of December:
Decide on rough consensus requirements
Publish a new revision
Analysis Phase

January:
The SRCOMP team will provide a list of proposals to analyze

IETF 110:
Analysis draft revision 00
Questions?