

# Extensions to RSVP-TE for Error Notification in GMPLS UNI

draft-hartley-ccamp-rro-editing-01.txt

## Authors:

**Matt Hartley ([mhartley@cisco.com](mailto:mhartley@cisco.com)) - Presenter**

**Zafar Ali ([zali@cisco.com](mailto:zali@cisco.com))**

**Oscar Gonzalez de Dios ([ogondio@tid.es](mailto:ogondio@tid.es))**

**Cyril Margaria ([cyril.margaria@gmail.com](mailto:cyril.margaria@gmail.com))**

**Xian Zhang ([zhang.xian@huawei.com](mailto:zhang.xian@huawei.com))**

## Agenda:

**Problem recap/history**

**Changes in v1**

**Use cases**

**Next Steps**

# Problem recap/history

- **In overlay networks, server nodes may wish edit RROs to hide network details from clients**
- **Idea originally introduced in draft-ietf-ccamp-rsvp-te-srlg-collect**
- **Moved to separate draft as it's more generally applicable to all RRO sub-objects.**
- **First presented at IETF 88 (Vancouver)**

# Changes in v01

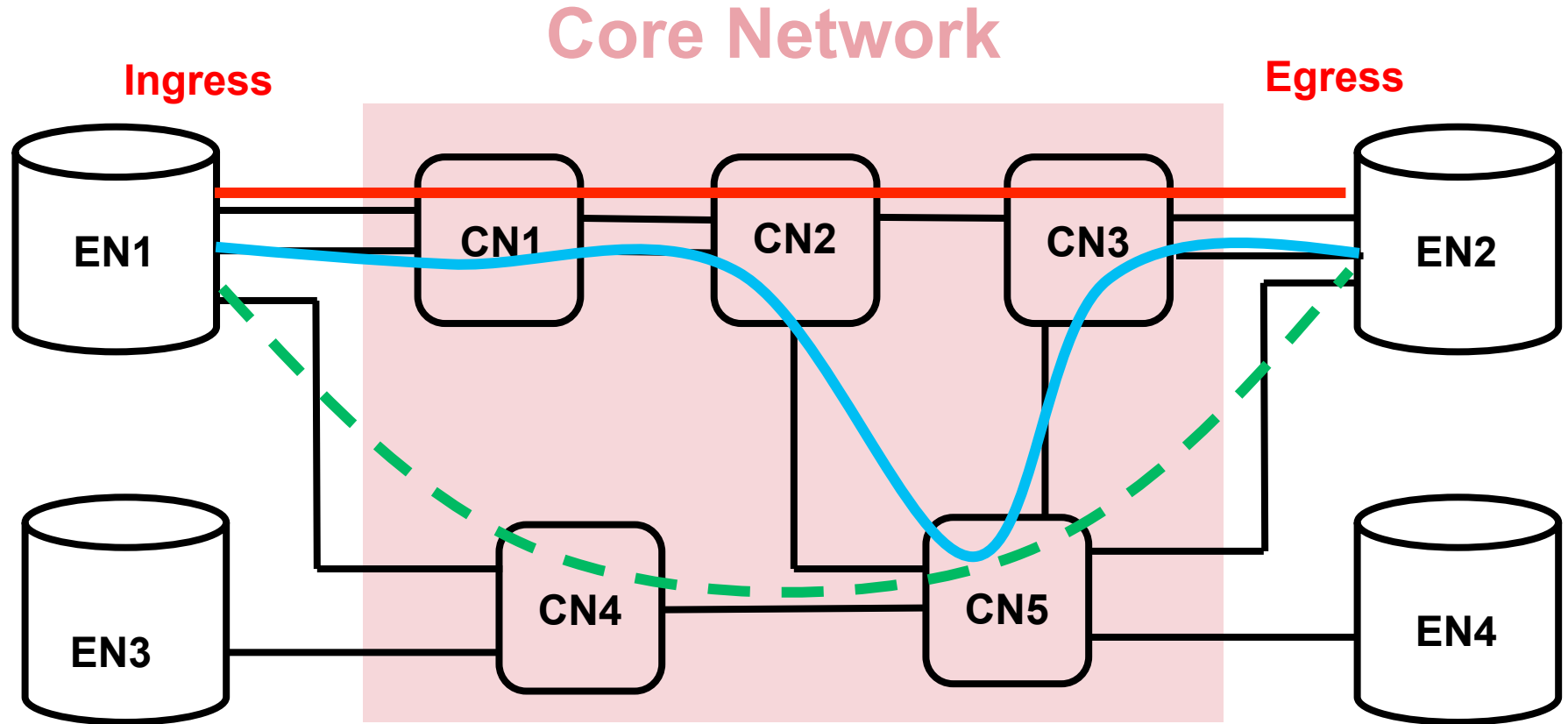
- **Xian added as an author**
- **Hop-by-hop recording of RRO changes removed**
  - **Now just one record of changes for entire LSP**
  - **Recorded in new LSP-attributes sub-object (not RRO sub-object)**
- **Address of editing node no longer recorded**
- **Editing flags simplified**
  - **One editing flag was redundant and has been removed**

# Use Cases

- **RRO reduction**
  - **RFC 3209 specifies that the RRO should be dropped completely if the message size exceeds the MTU**
  - **This draft allows for pruning or summarization so not all information need be lost.**
- **Client/server overlay networks**
  - **Clients wish to discover path properties (SRLGs, latency, etc).**
  - **These may be :**
    - **Propagated to higher layers for routing decisions**
    - **Used to specify requirements on other paths**
  - **It's useful for clients to know whether the information they're using to make decisions is incomplete or not.**

# Use cases

1. Are red and blue paths SRLG-diverse? Can packet-TE use them for FRR or path-protection?



2. I'd like to set up the green path so it's SRLG-diverse from red
3. I need a path with lower latency than red

# Use Cases: Overlay networks

- **Policy considerations**
  - **The relationship between the client and server operators may be highly variable**
  - **The amount of information transferred from the server to the client may also vary**
    - **Details may be supplied, summarized, or removed entirely**
  - **The server operator may or may not wish to inform the client of the changes that have been made**
- **The draft refrains from forcing policy on implementors or operators; they can make their own decisions.**

# Next Steps

- **This is the second presentation of this draft**
- **Comments and feedback would be appreciated**
- **We would like to move the draft towards WG adoption**

**Thank you**