History/Background

- Draft was 1\textsuperscript{st} presented in IETF 109 Online, November 2020.

- SR-Optimized ELAN with data-plane MAC learning:
  
  - \textbf{Maintains} the PW P2P semantics between 2 endpoints by presenting the endpoint by another SID under the service SID in the SID list.
  - Solves the \textbf{Active/Active Redundancy} and multipathing using Segment Routing \textbf{anycast} SIDs.
  - \textbf{Improves} the PW scale issue (e.g., 10,000 services will be presented by only 10,000 Service SIDs in both Control and Data Plane, regardless of how many endpoints participate in the service)
Benefits of SR-Optimized ELAN

• **Simpler** and much better **control plane** scale over legacy PWs, by splitting the endpoint ID from the service ID and representing them by 2 SIDs in the SID segment list.

• Maintain **data-plane MAC learning benefits** such as fast **convergence**, fast MAC move, and **scale** through conversational learning.

• Bring the benefits of **A/A multihoming**, **multipathing**, and **ARP suppression**.

• **Leverage** the benefits of **Segment Routing anycast SID** for redundancy and fast **convergence**, and to discover nodes sharing the same anycast SID to perform DF election.

• **Eliminate** the need for any **overlay fast convergence**!
Implementation and interest Updates

• We have a Broadcom implementation of many parts of the draft.

• We will be starting the process of trying the solution in providers' labs.

• Asking for WG adoption!
Thank You