

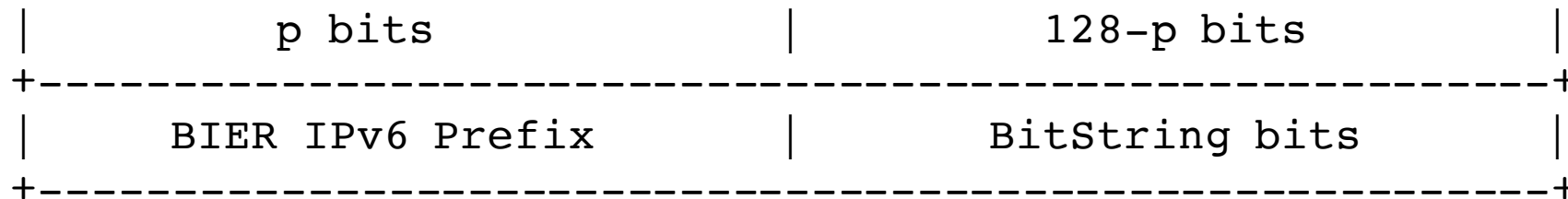
BIER over IPv6

draft-pfister-bier-over-ipv6-01

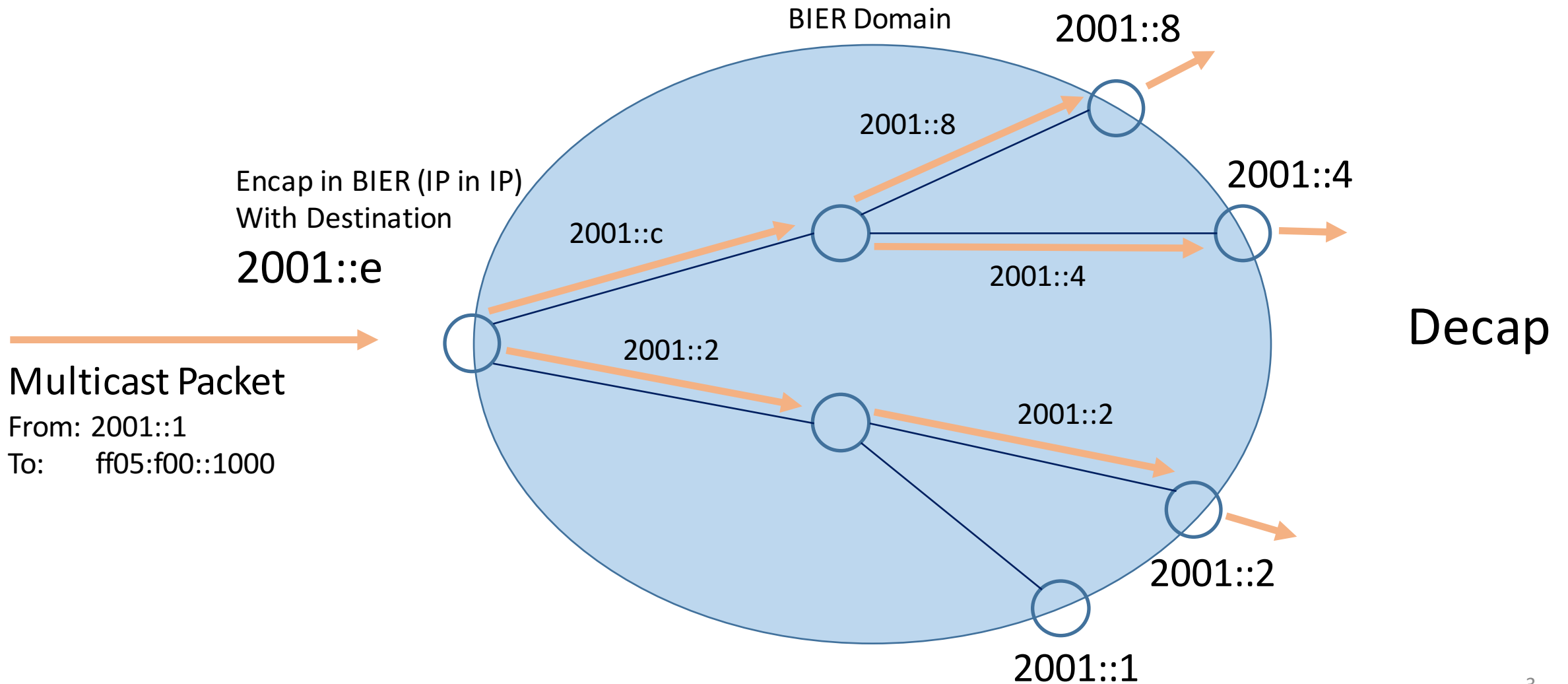
Update

In the previous episode of BIER over IPv6

- Some networks will not deploy MPLS
 - We should provide a **future-proof alternative encapsulation** => IPv6
- Leverage IPv6 header
 - Put BIER BitString in the **destination IPv6 address**.
 - **No IPv6 extension header**

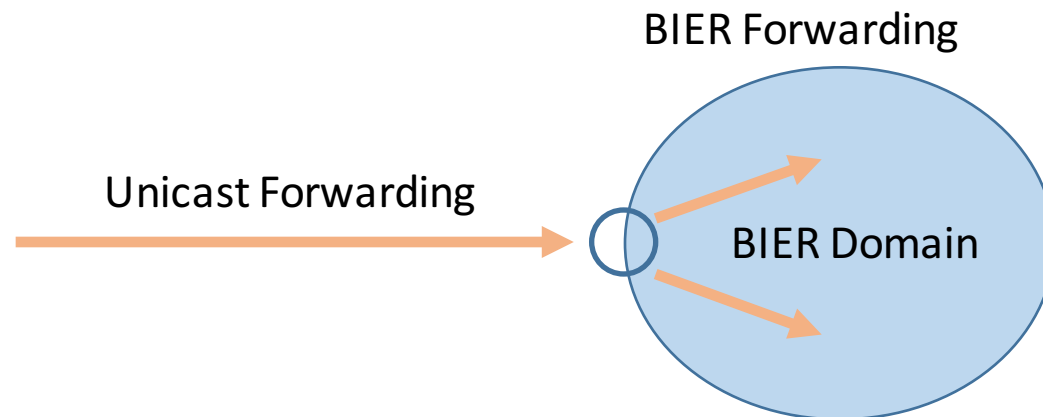


In the previous episode of BIER over IPv6



In the previous episode of BIER over IPv6

- BFERs are assigned a **BIER IPv6 address with a single bit set**
 - This address also is a **valid unicast address** (Forwarded as BIER, but no duplication).
- BIER IPv6 packets are similar to Unicast IPv6 packets.
 - **Can be forwarded as unicast up to the BIER (sub-)domain.**

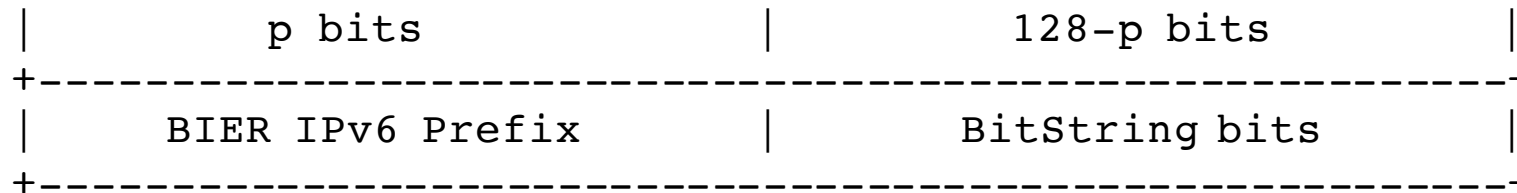


Outcome of the Interim Meeting

- MPLS and Ethernet encap **are identical and will be merged.**
- Leaves space for an 'other encap'.
 - BIER over IPv6 offers a different approach with additional features.

-01 Update

- Sub-Domain and Bit Set ID are implicit to the BIER IPv6 Prefix.
 - Longest prefix match can be used.
 - BitString length is $128 - \text{Prefix-Length}$



- Terminology error: ~~Routing Underlay~~ -> BIER Layer
- Some wording clarification

-01 Update

- Clearly mention that the BitString length is limited to ~100bits.
 - Architecture draft states:

Every BFIR MUST be capable of being provisioned with an Imposition BitStringLength of 256. Every BFR and BFER MUST be capable of being provisioned with a Disposition BitStringLength of 256.

[draft-ietf-bier-architecture-05]

- This looks very specific to the encoding.
 - What about BIER over small-MTU channels ?
 - Is this reasonable statement for future encapsulations and encoding ?

Next steps

- Consult 6man (on Tuesday).
- Relax BitString length requirements in the architecture draft ?
- Should this be the 'other encap' ?
 - Are there other candidates ?