

Edge Virtual Bridging Proposed PAR

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Roadmap to Convergence

- Reflective Relay Services

VEPA Basic

- Enables hairpin forwarding on a per-port basis when a port aggregator is attached to a bridge port
- Independent of Multi-Channel and Remote Replication Services

- Remote Port Services

Multichannel

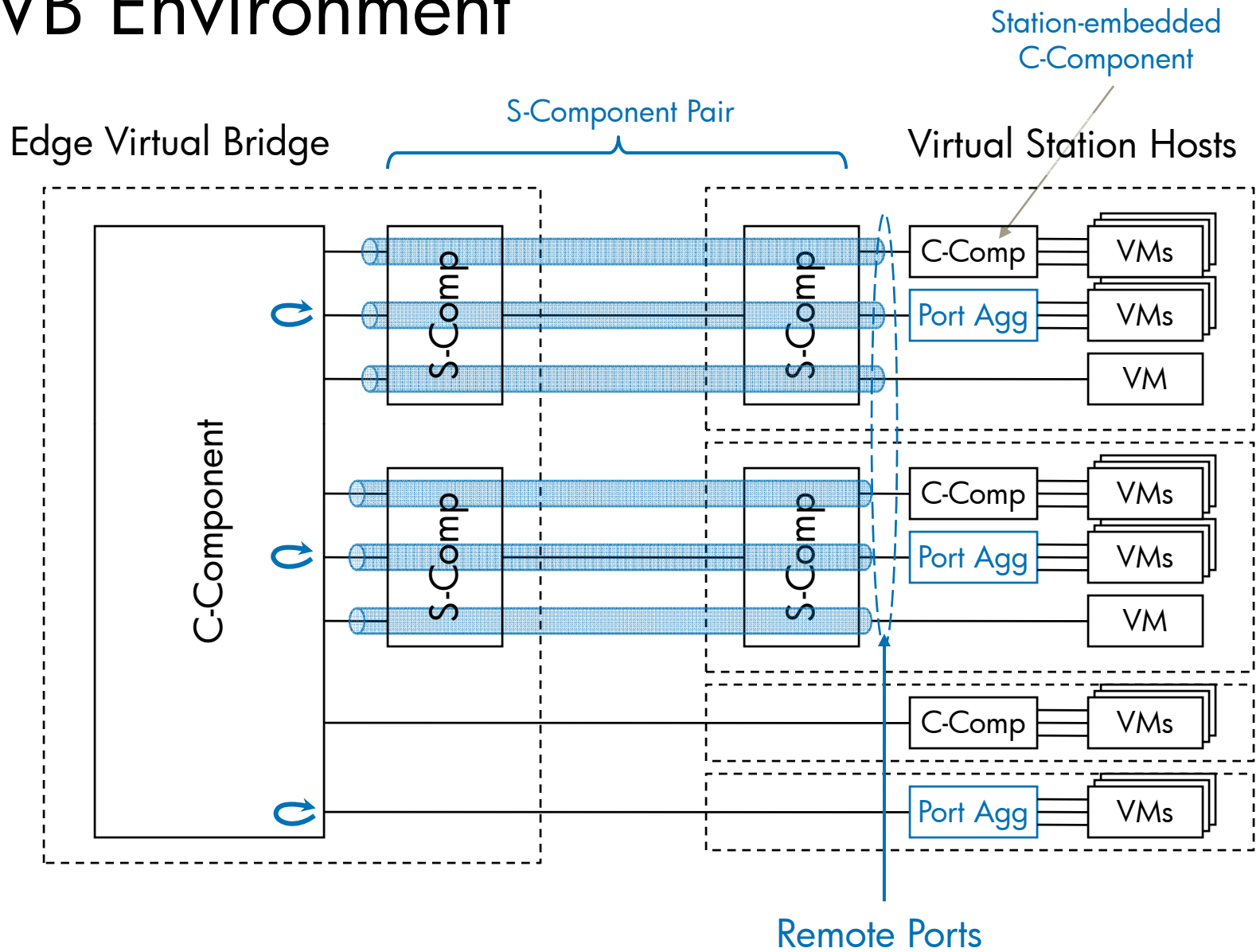
- Defines a Multi-Channel service to remote ports
- Uses paired, reduced-functionality S-Components
- Allows coexistence multiple services (e.g., port aggregation, embedded bridges (c-components), dedicated bridge links) on same physical link
- Discovery and coordinated configuration of remote ports

- Remote Replication Services

Replication Tag

- Defines a tag to represent a group of remote ports for which a frame is to be replicated
- Requires a protocol to communicate tag definitions
- Independent of Reflective Relay
- May be dependent on MultiChannel support

EVB Environment



PAR: Edge Virtual Bridging

Scope of Proposed Standard

This standard specifies protocols, procedures, and managed objects that:

- Provides for the discovery, configuration, and control of a pair of direct-attached limited-function S-components to extend the services of a customer bridge to remote ports and enable coexistence of multiple services on station-resident ports.(e.g. port aggregation services, embedded bridging)
- Provides for discovery, configuration, and control of a Reflective Relay Service for a bridge port when it is connected to a Port Aggregation Service.
- Defines the requirements for, and operation of, a Port Aggregation Service required to allow the loop free operation of the Reflective Relay Service.
- Provides for discovery of, and coordinated configuration of, station-embedded Port Aggregators and station-embedded C-Components.

Purpose

- The purpose of this standard is to allow multiple virtual stations to share a common bridge port to obtain the services of bridge relay.
- To enable coordinated configuration and management of bridge services for virtual stations.

PAR: Edge Virtual Bridging

Need for the Project

- Station (desktop and server) virtualization is introducing a proliferation of virtual stations that share access to a network through an embedded bridge.
- The embedded bridge in a virtual station host and bridges the adjacent network may be under different management domains. Network administrators may desire an extension of the adjacent bridge capabilities to the virtual station ports.
- A reflective relay service is needed so that inter-virtual-station traffic can be exposed to the relay in the adjacent bridge as well as its associated services (e.g., security, statistics, etc.).
- A pairing of limited-functionality S-Components is needed to allow for multiple virtual links between an adjacent bridge and a virtual station host so that the host can support multiple services (port aggregation, embedded bridging, dedicated bridge link).