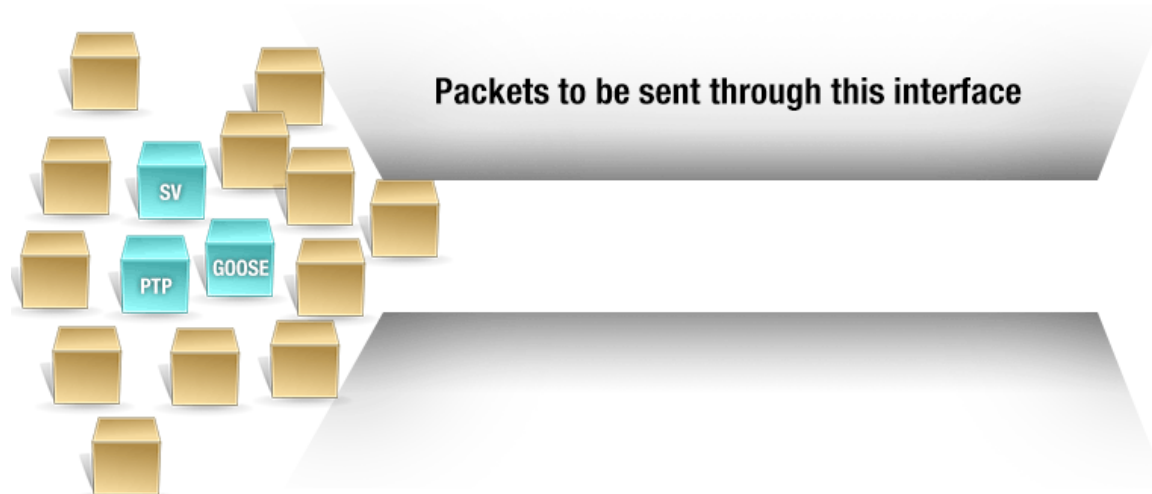

IEC 61850 New Substations Performance

Communication packets can be assigned different priorities, depending on their importance

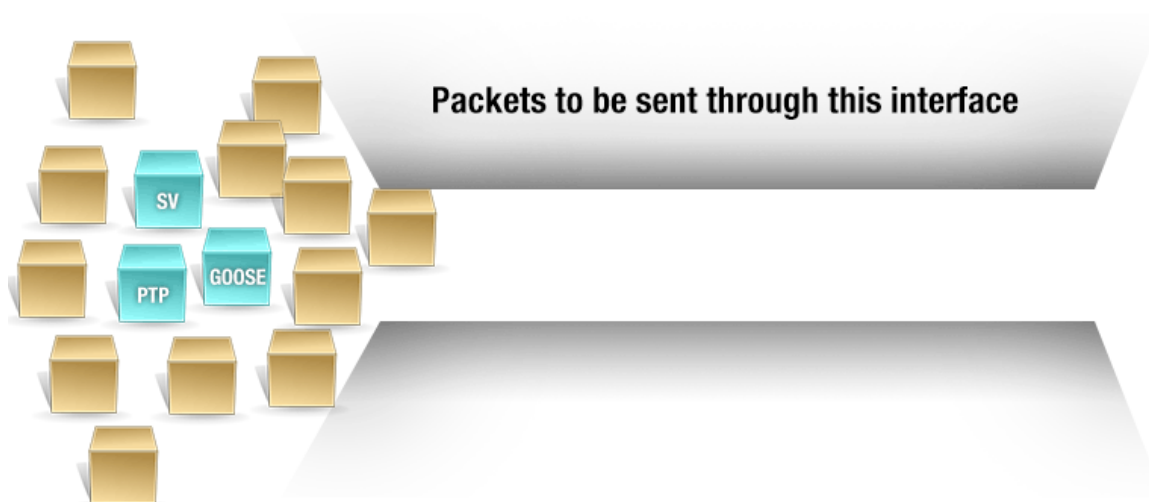


Performance

IEC 61850 QoS

Critical packet prioritization

- Communication packets can be assigned different priorities, depending on their importance
- Packet types: GOOSE, SMV, PTP
- Packet priorities: high, medium, normal, low



VLAN Technology

Enabling efficient and reliable communication

- **Trunk traffic reduction**

Removing bottlenecks on the trunk links requires a careful analysis to correctly configure the bridges in the network. The traffic can be filtered or restricted to specific domains in the network by VLAN

- **Traffic filtering**

To segregate traffic flow throughout the network

- **Device performance improvement**

Reduce the number of messages that end devices need to process

Time Synchronization Technology

Enabling efficient and reliable communication

Time Synchron onization Protocol	Typical Accuracy for Substations	Meets IEC 61850 Station bus requirement (1 ms)	Meets IEC 61850 Process bus requirement (1 ?s)
IEEE 1588-2008 PTP NTP SNTP IRIG-B DCLS	100ns 100ns 100ns 100ns 100ns	Yes Yes No Yes Yes	No No No Yes Yes

IEEE 1588-2008 PTP NTP SNTP IRIG-B DCLS

