Time-Sensitive Networking (TSN) Profiles (Selection and Use of TSN tools)

### TSN Components
(Tools of the TSN toolset)

#### Synchronization
- Bounded low latency:
  - Credit Based Shaper [802.1Qav]
  - Frame Preemption [802.1Qbu & 802.3br]
  - Scheduled Traffic [802.1Qbv]
  - Cyclic Queuing and Forwarding [802.1Qch]
  - Asynchronous Traffic Shaping [802.1Qcr]
  - Shaper Parameter Settings [P802.1Qdq]
  - QoS Provision [P802.1DC]
  - Cut-Through Forwarding [P802.1DU]
  - Enhancements to CQF [P802.1Qdv]
- High availability / Ultra reliability:
  - Frame Replication and Elimination [802.1CB]
  - Path Control and Reservation [802.1Qca]
  - Per-Stream Filtering and Policing [802.1Qci]
- Zero congestion loss = Bounded latency

#### Reliability
- Synchronization
- Resource Management

#### Latency
- Bounded low latency:
- High availability / Ultra reliability:
- Zero congestion loss = Bounded latency

#### Resource Management
- Dedication resources & API:
  - Stream Reservation Protocol [802.1Qat]
  - Link-local Registration Protocol [802.1CS]
  - TSN Configuration [802.1Qcc]
  - Foundational Bridge YANG [802.1Qcp]
  - YANG for CFM [802.1Qcx]
  - YANG for 802.1Qbv/Qbu/Qci [P802.1Qcw]
  - YANG for CBS [P802.1Qdx]
  - YANG for LLDP [P802.1ABcu]
  - YANG & MIB for FRER [P802.1CBcv]
  - Extended Stream Identification [P802.1Cdb]
  - LLDPv2 for Multiframe Data Units [P802.1ABdh]
  - Resource Allocation Protocol [P802.1Qdd]
  - TSN Configuration Enhancements [P802.1Qdj]
  - Multicast and Local Address Assignment [P802.1CQ]

#### More on TSN standards and ongoing projects at: https://www.ieee802.org/1/tsn