

Applications of MPLS Guaranteed Bandwidth Services

Voice Trunking over MPLS Virtual Leased Lines

Target Applications

- **Voice Trunking**

 - Solution 1: Toll Bypass with Voice Network**

 - Solution 2: Toll Bypass with Voice/Data Converged Network**

 - Solution 3: Toll Bypass with VoIP Network**

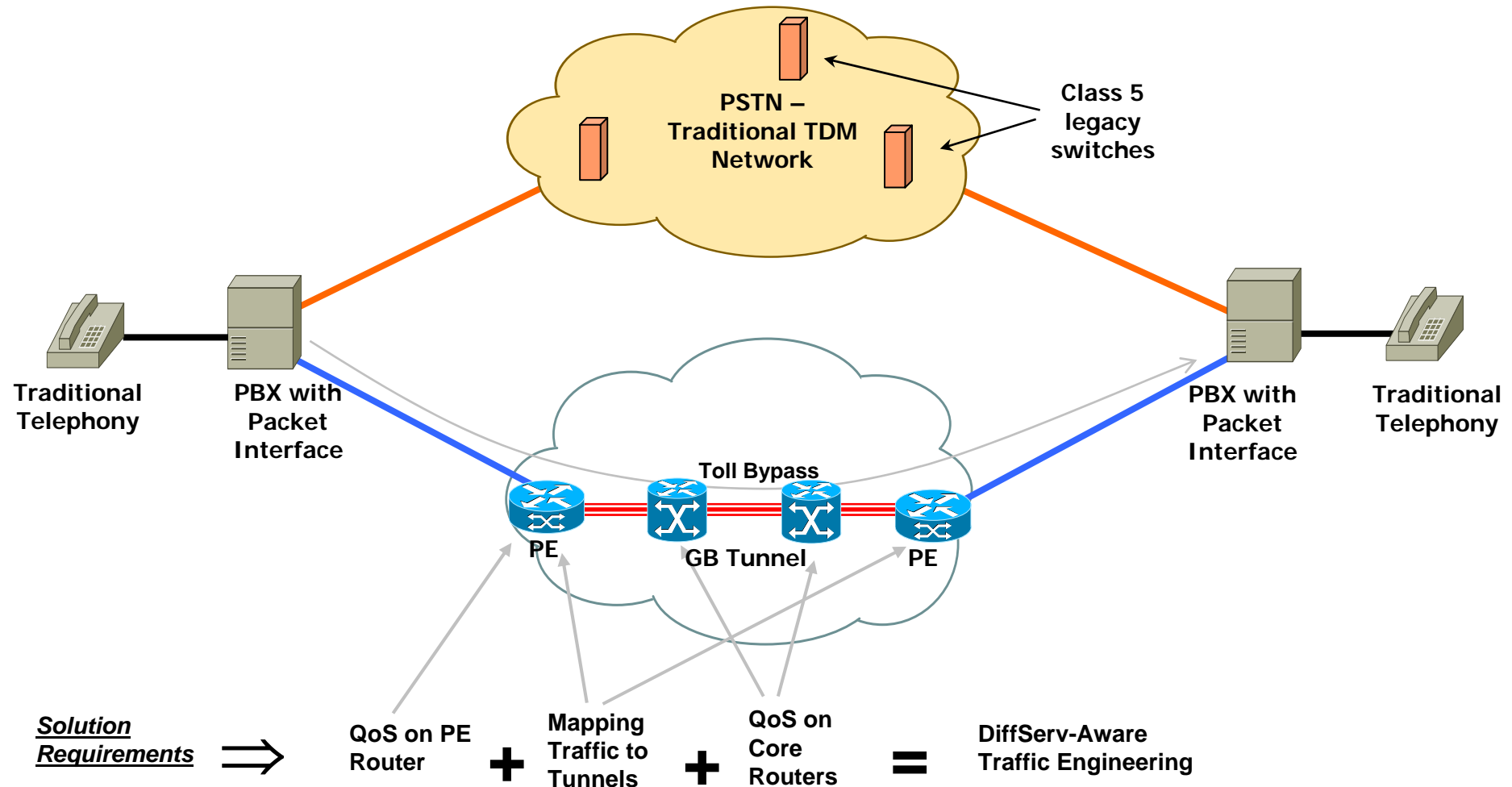
- **Virtual Leased Lines**

 - Solution 4: Virtual Leased Lines – Serial Links**

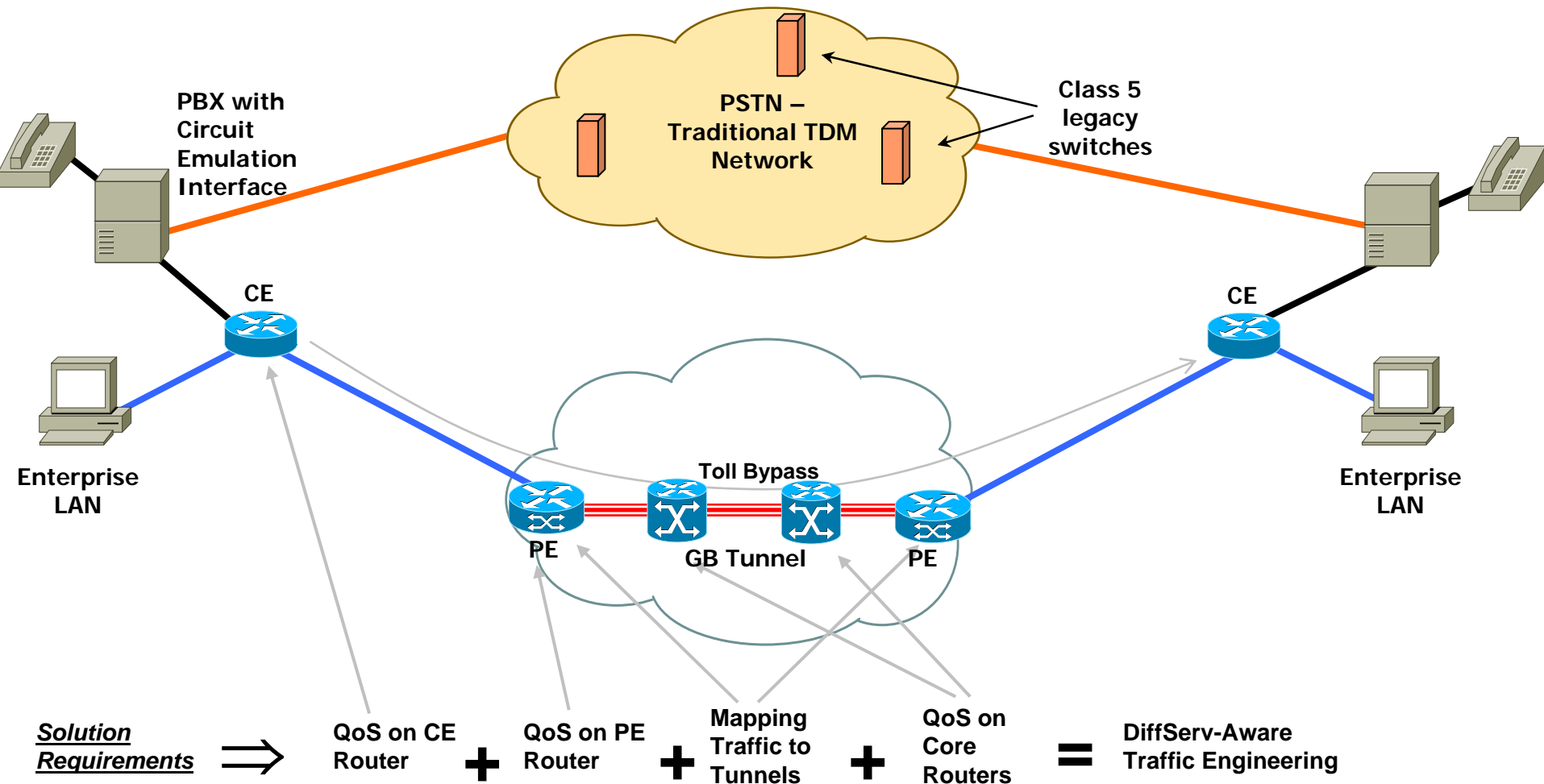
 - Solution 5: Virtual Leased Lines – Frame Relay**

 - Solution 6: Virtual Leased Lines – ATM**

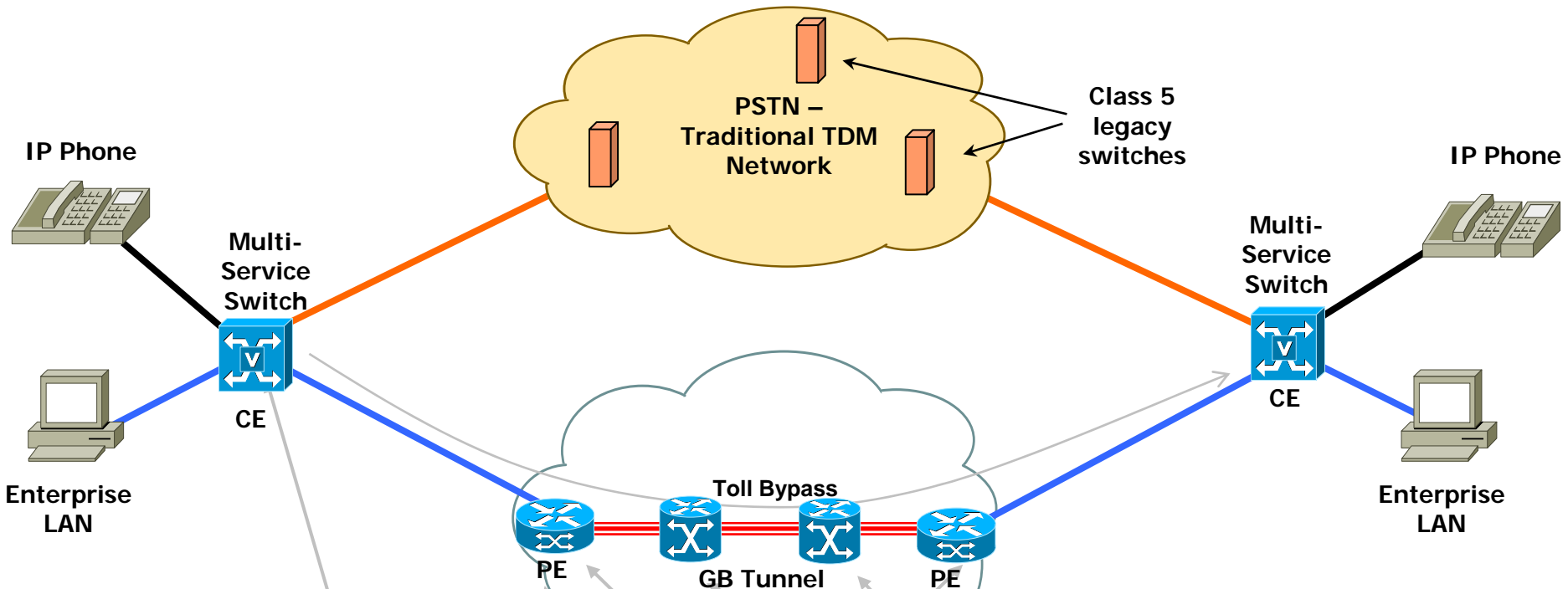
Solution 1: Toll Bypass with Voice Network



Solution 2: Toll Bypass with Voice/Data Converged Network



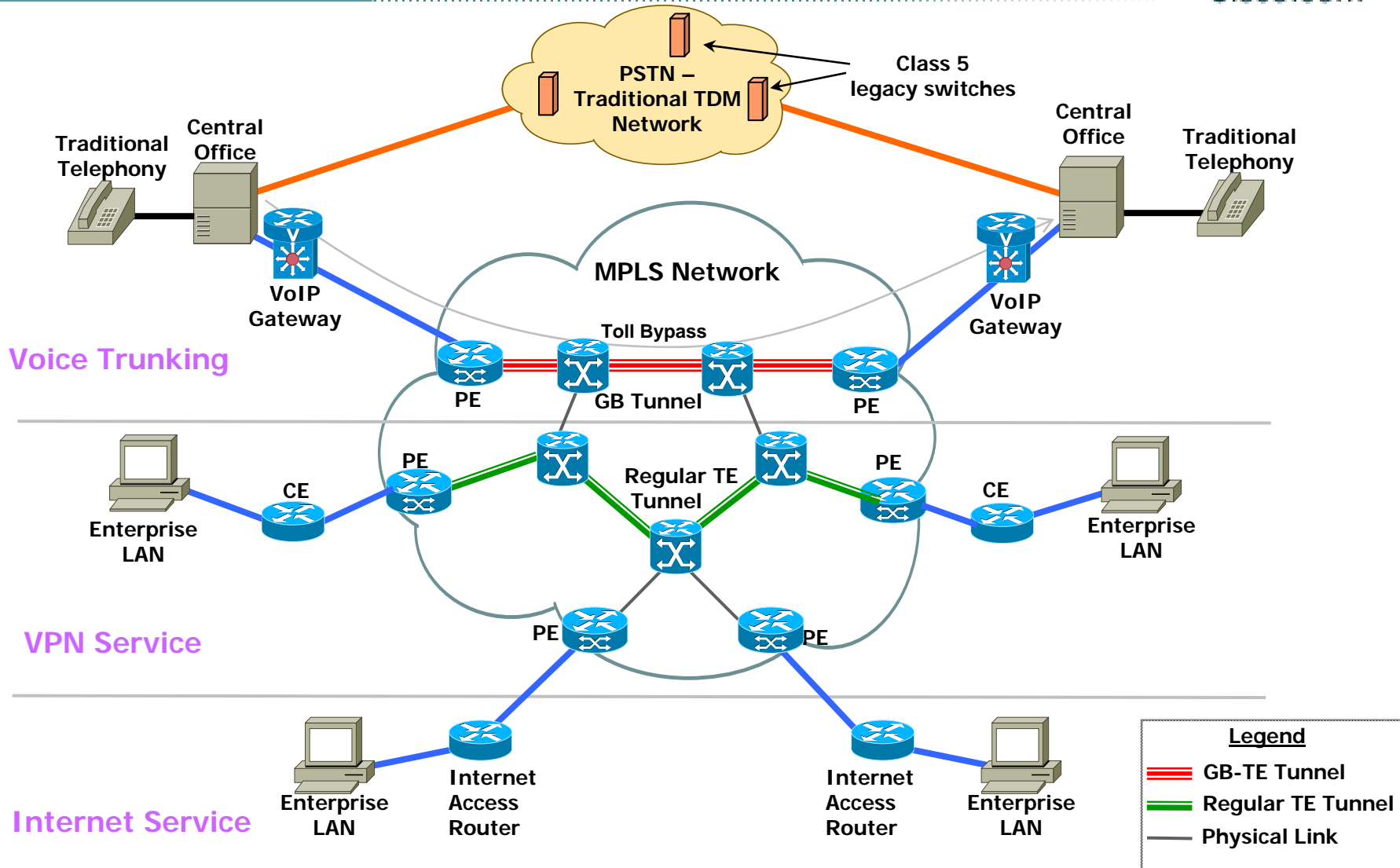
Solution 3: Toll Bypass with VoIP Network



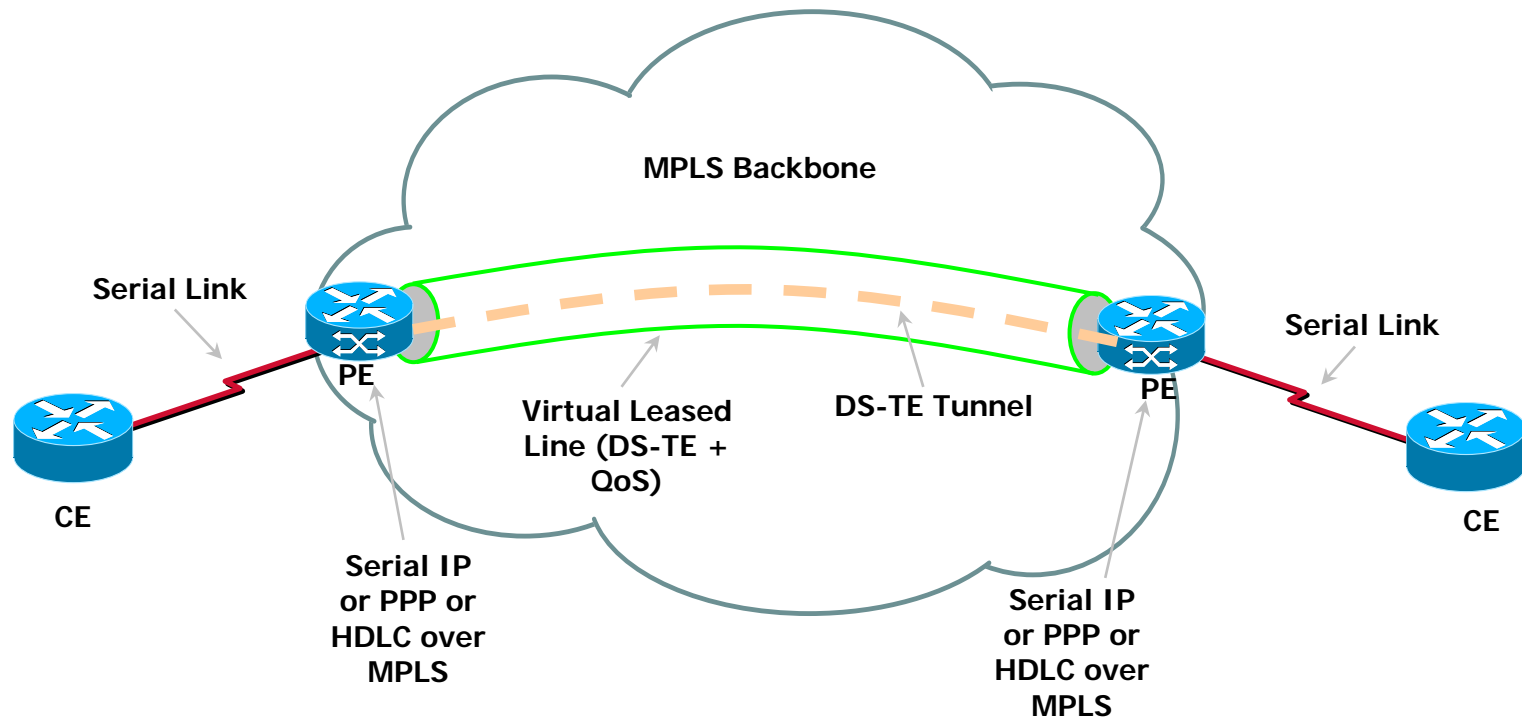
Solution Requirements ⇒

QoS on CE Router + QoS on PE Router + Mapping Traffic to Tunnels + QoS on Core Routers = DiffServ-Aware Traffic Engineering

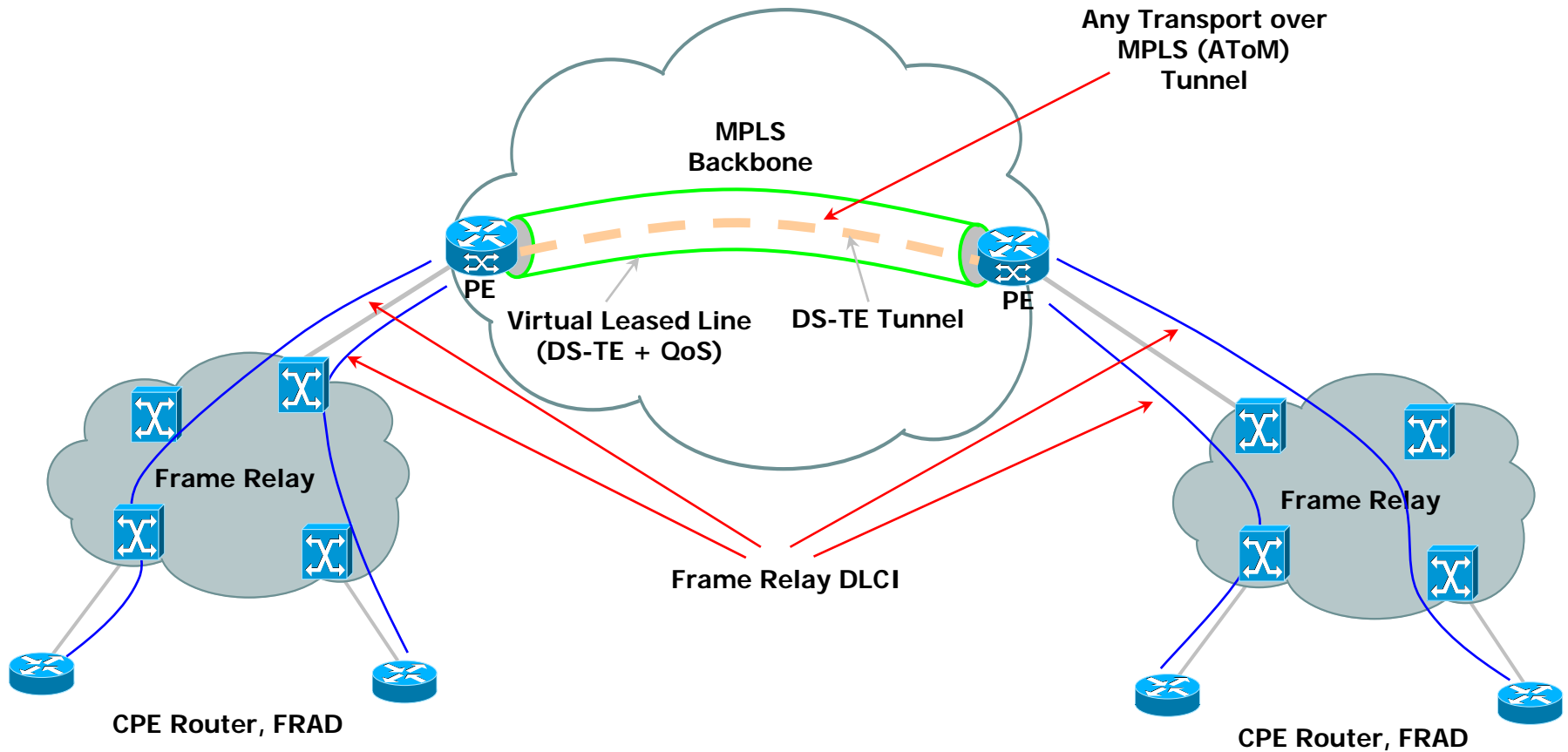
Voice Trunking Summary



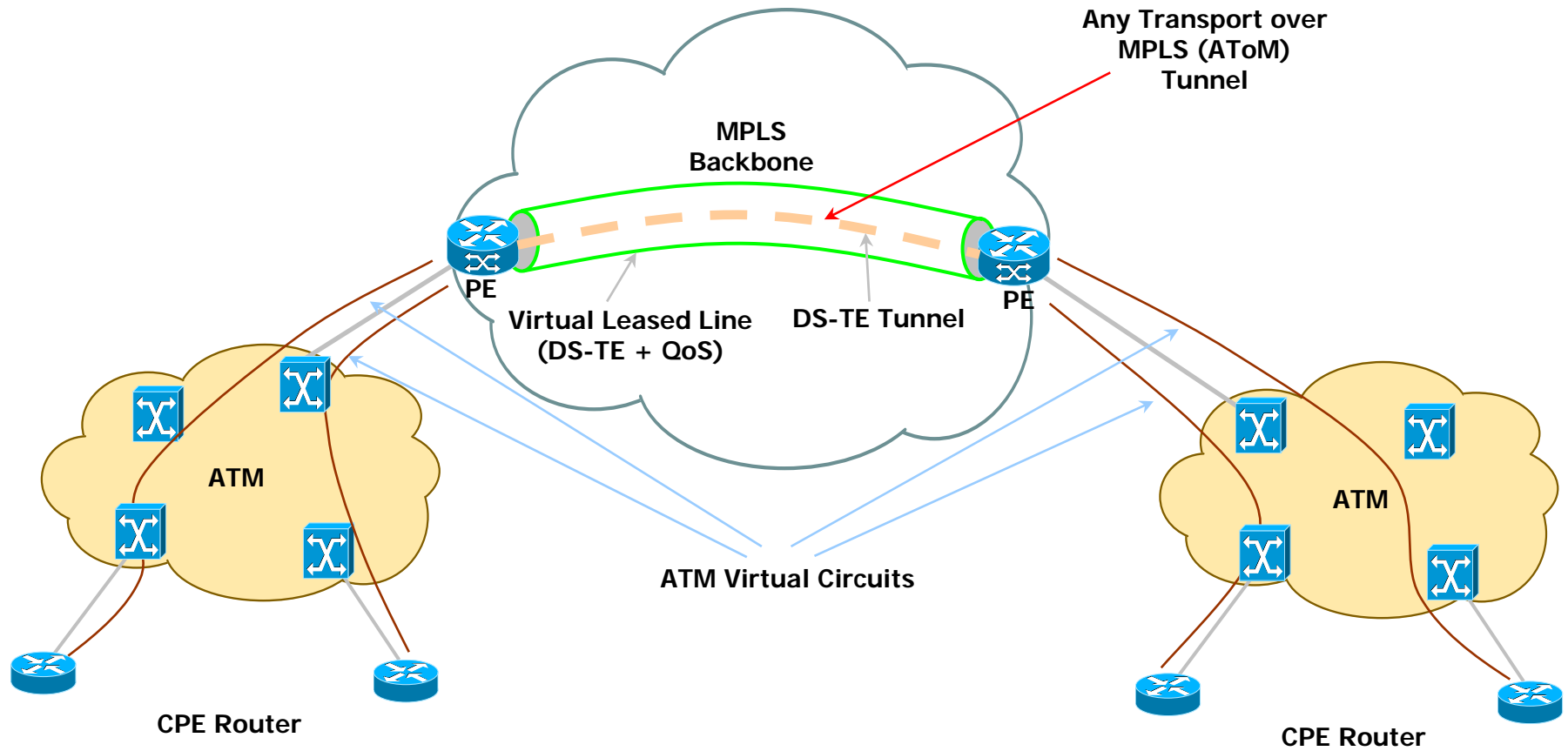
Solution 4: Virtual Leased Lines – Serial Links



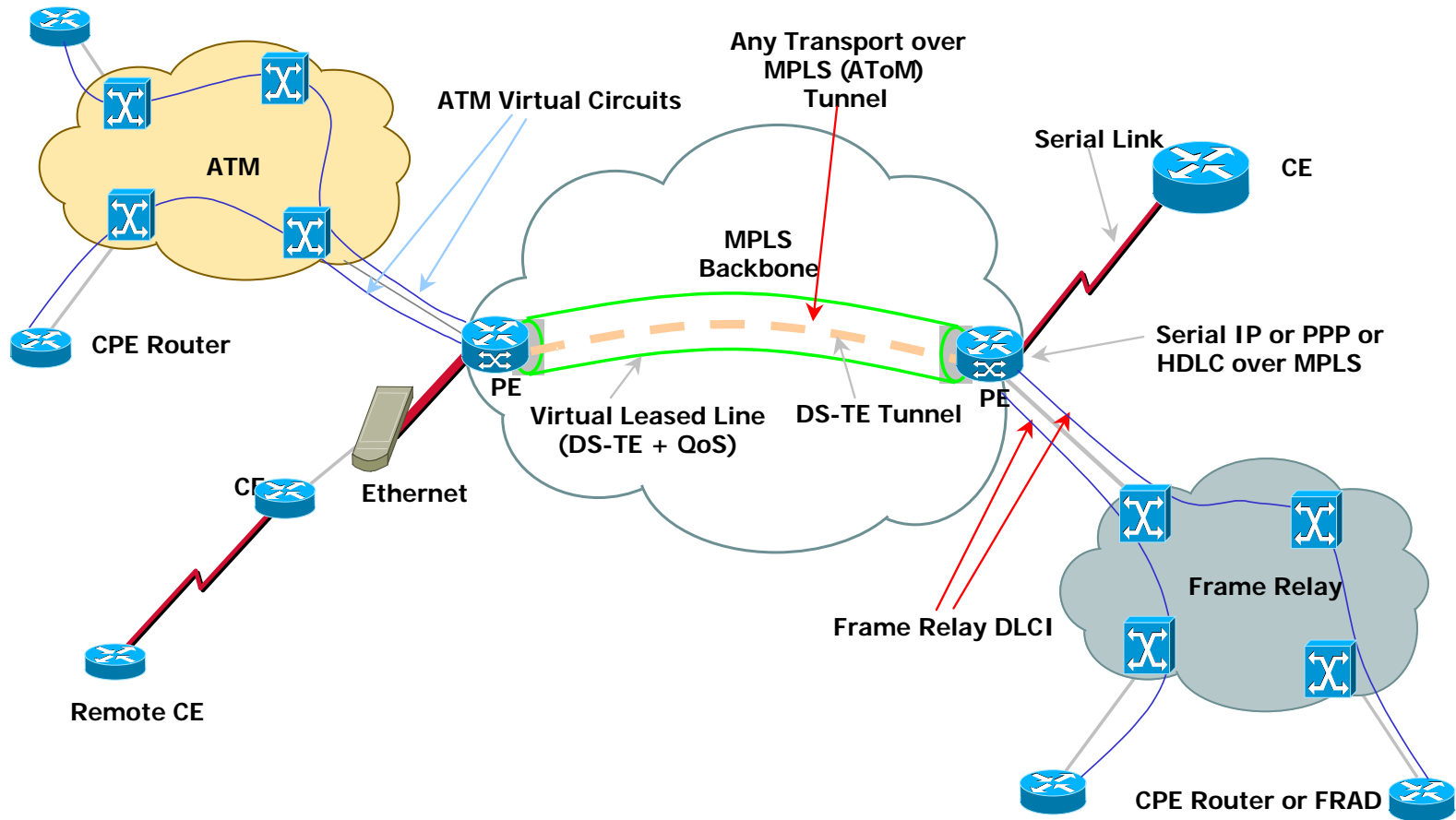
Solution 5: Virtual Leased Lines – FR Networks



Solution 6: Virtual Leased Lines – ATM Networks

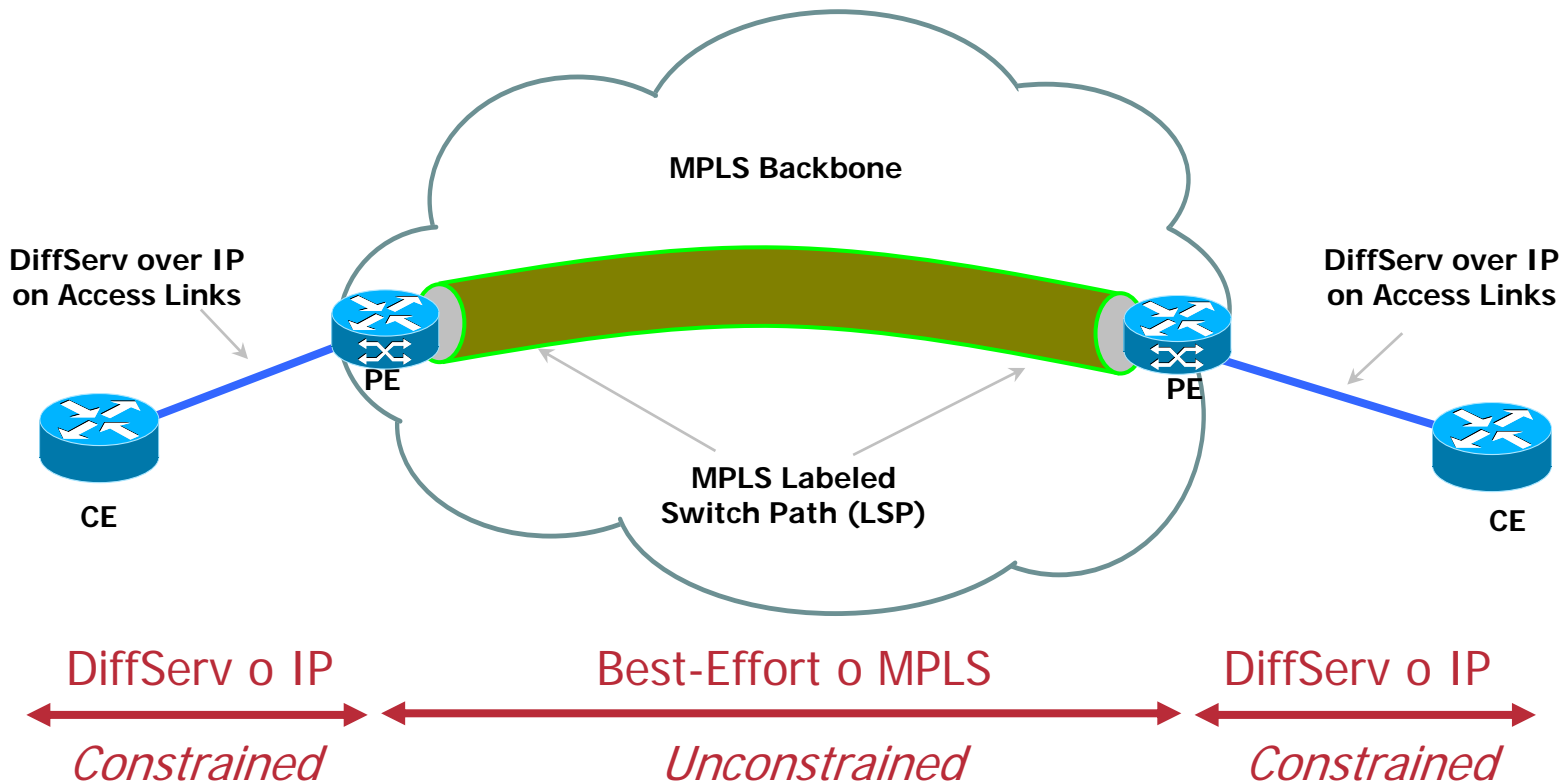


Virtual Leased Lines Summary

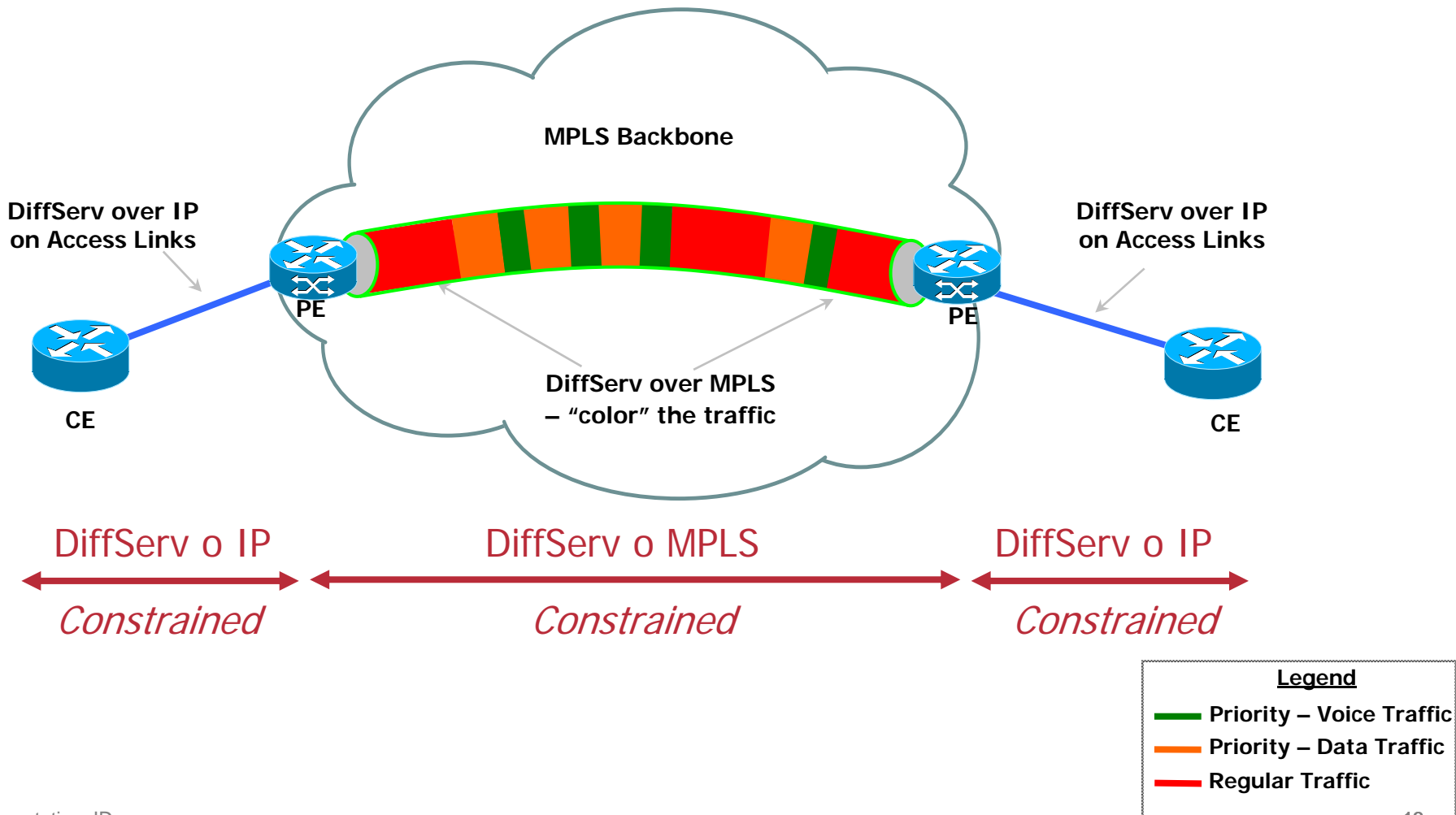


The Road to a QoS-Optimized Backbone

Road to a QoS-Optimized Backbone – Step 1



Road to a QoS-Optimized Backbone – Step 2



Road to a QoS-Optimized Backbone – Step 3

