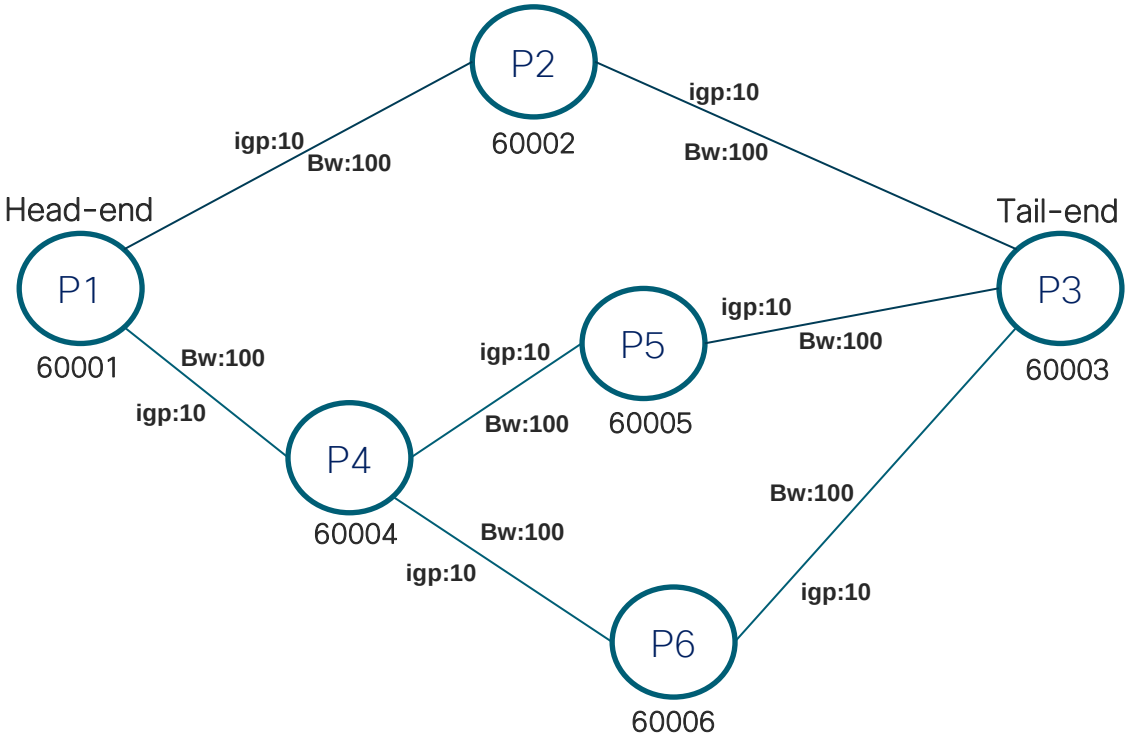
VISTA 后台API应用场景示例

应用场景举例

- 拓扑说明
- 示例一：创建BoD SR_Policy，计算路径
- 示例二：路径全局重优化
- 示例三：拥塞优化
- 示例四：路径还原

Example – 拓扑

- 图中Bw表示链路剩余可用带宽

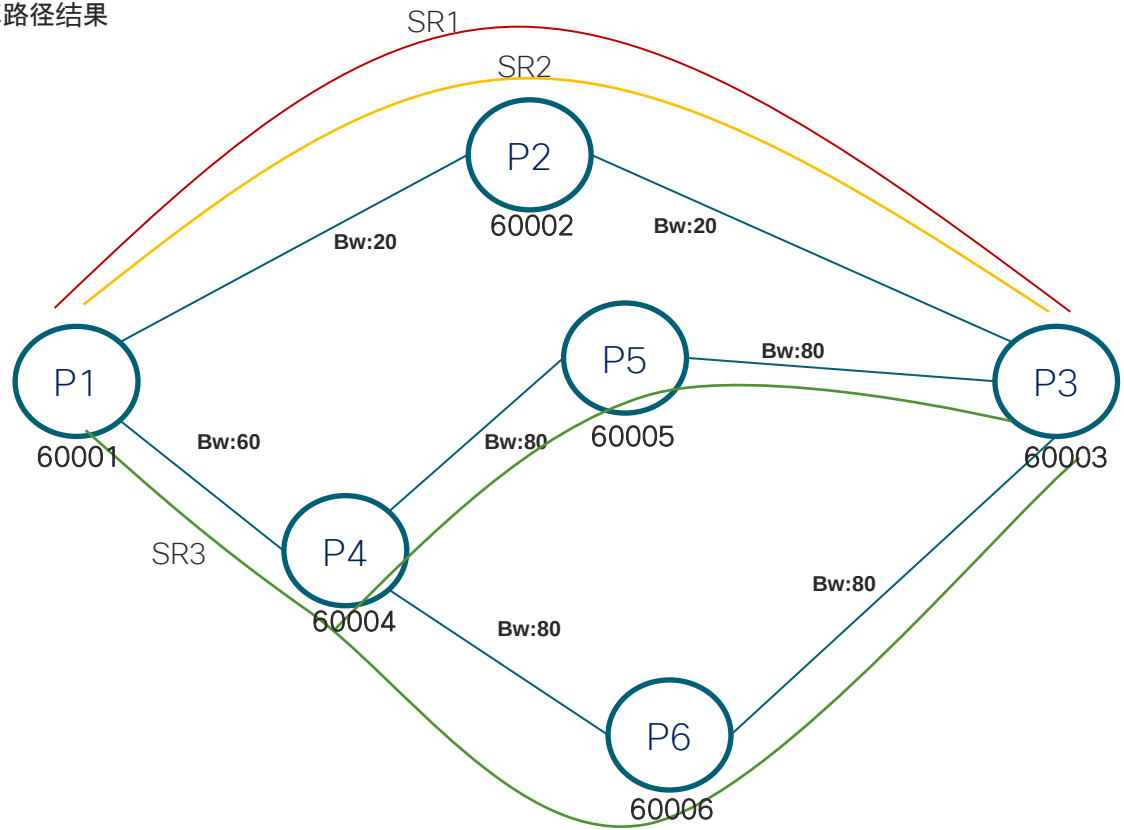


Example1 – Create SR1, SR2, SR3

- 图中Bw表示链路剩余可用带宽

- 依次创建SR1，SR2，SR3，根据拓扑环境和约束条件，计算路径结果
- 对应postman中，Vista_API_Scenario下的：
  - Example1--Create SR1
  - Example1--Create SR2
  - Example1--Create SR3

Id	He	Te	BW	Segs
SR1	P1	P3	40	60003
SR2	P1	P3	40	60003
SR3	P1	P3	40	60004 60003

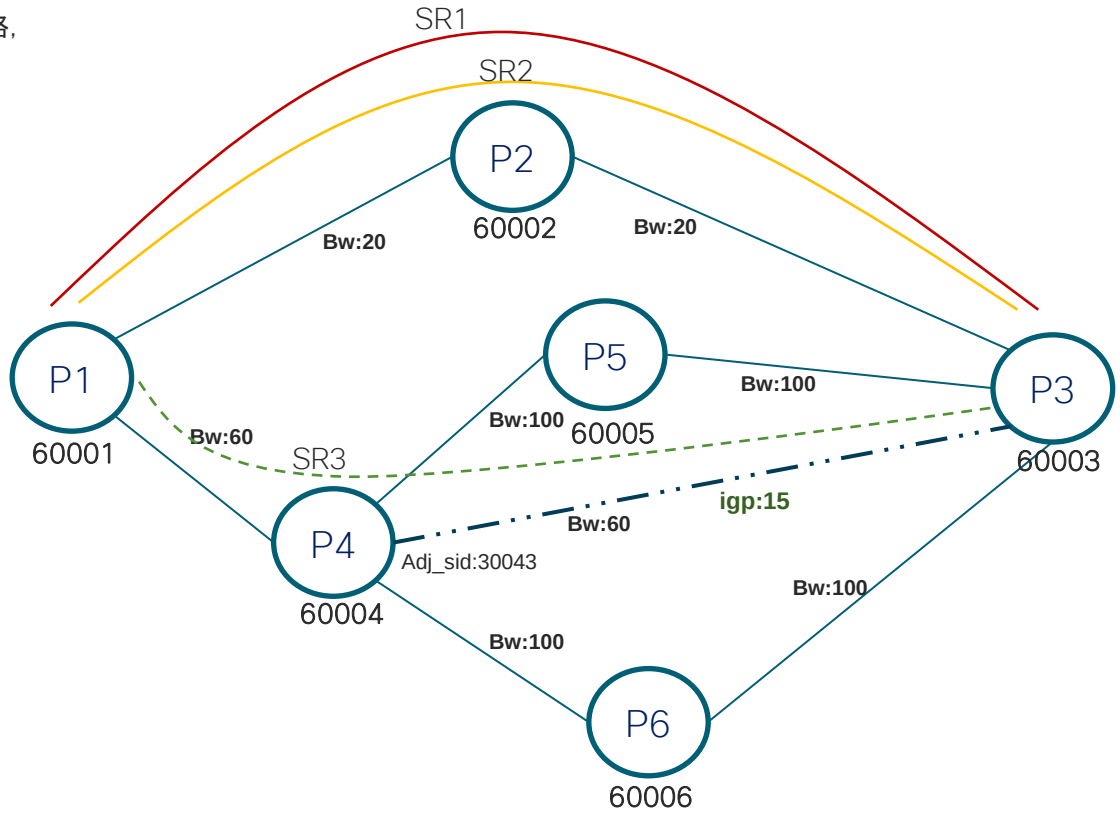


Example2 – Re-optimize

- 图中Bw表示链路剩余可用带宽

- 在Demo1的基础上，topo发生变化，新增P4-P3之间的链路，执行全局路径重优化
- 对应postman中，Vista_API_Scenario下的：
  - Example2--RE-Optimize

Id	He	Te	BW	Seg
SR1	P1	P3	40	60003
SR2	P1	P3	40	60003
SR3	P1	P3	40	60004 30043 60003



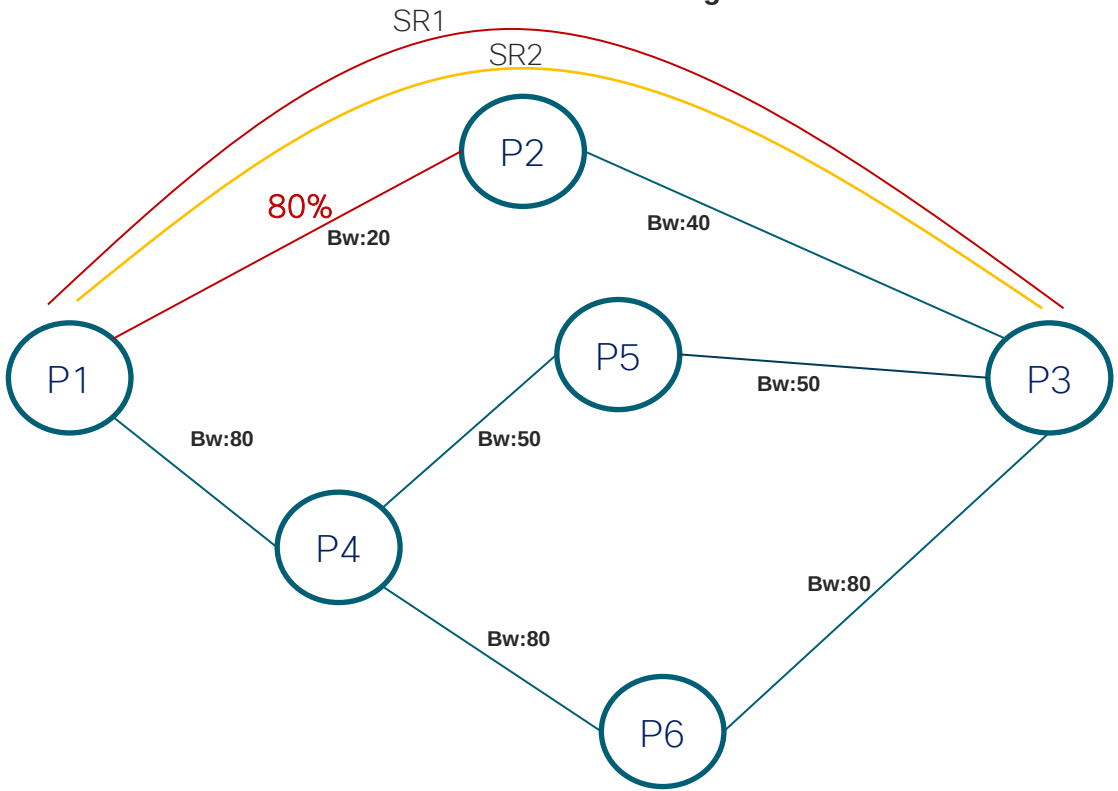
Example3 – Congestion Optimize

- 图中Bw表示链路剩余可用带宽

- P1-P2之间链路发生拥塞，执行路径拥塞优化
- 对应postman中，Vista_API_Scenario下的：
  - Example3--Congestion_Optimize

Id	He	Te	BW	Priority	Seg
SR1	P1	P3	40	2	60003
SR2	P1	P3	40	1	60003

Before Congestion Optimize
congest-threshold: 80%



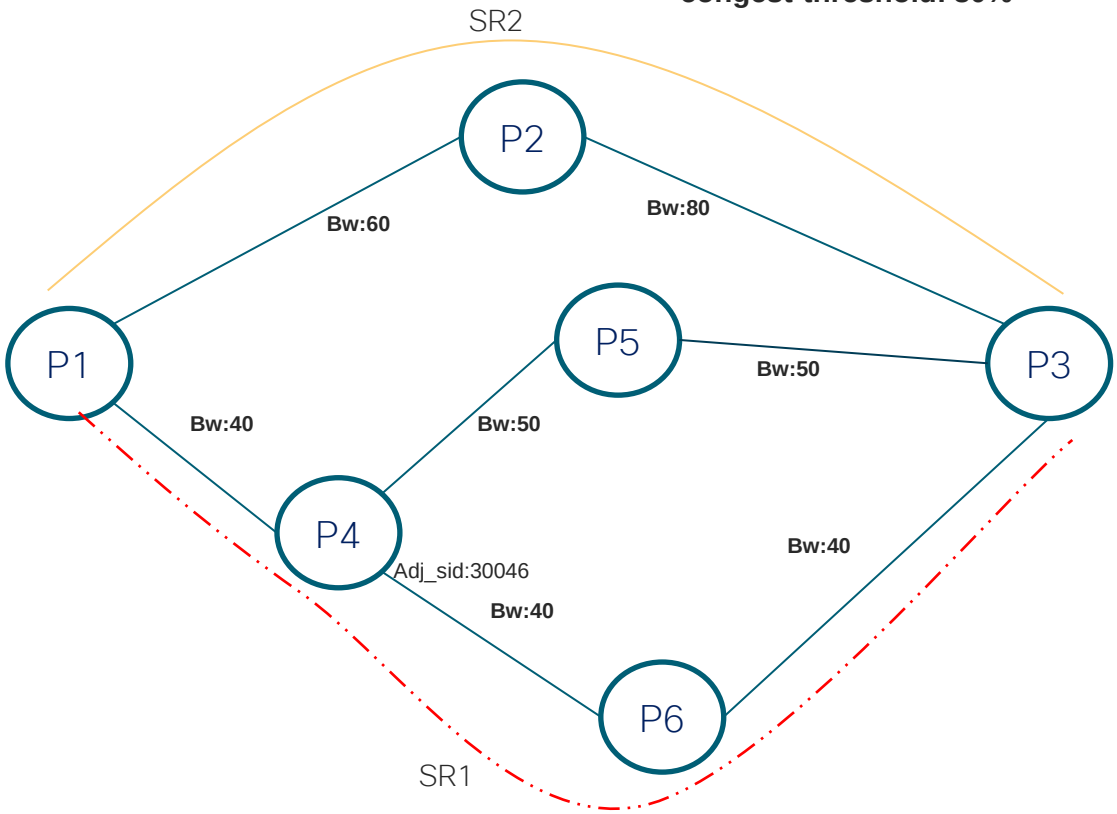
Example3 – Congestion Optimize Cont.

- 图中Bw表示链路剩余可用带宽

拥塞优化后，SR1路径被调整到P1-P4-P6-P3

Id	He	Te	BW	Priority	Seg
SR1	P1	P3	40	2	60004 30046 60003
SR2	P1	P3	40	1	60003

After Congestion Optimize
congest-threshold: 80%



Example4 – Path Restore

- 路径还原，根据topo中选中的节点，链路，通过计算还原出逐跳路径
- 对应postman中，Vista_API_Scenario下的：
  - Example4--PATH Restore
- 举例：

1. 选中节点（P1，P4，P3），还原路径如绿色曲线（ECMP）

["P1","P1:30014","P4","P4:30045","P5","P5:30053","P3"],

["P1","P1:30014","P4","P4:30046","P6","P6:30063","P3"]

2. 选中节点（P1，P3），还原路径如红色曲线

[“P1”, “P1:30012”, “P2”, "P2:30023", "P3"]