

# Inter-Carrier MPLS Issues

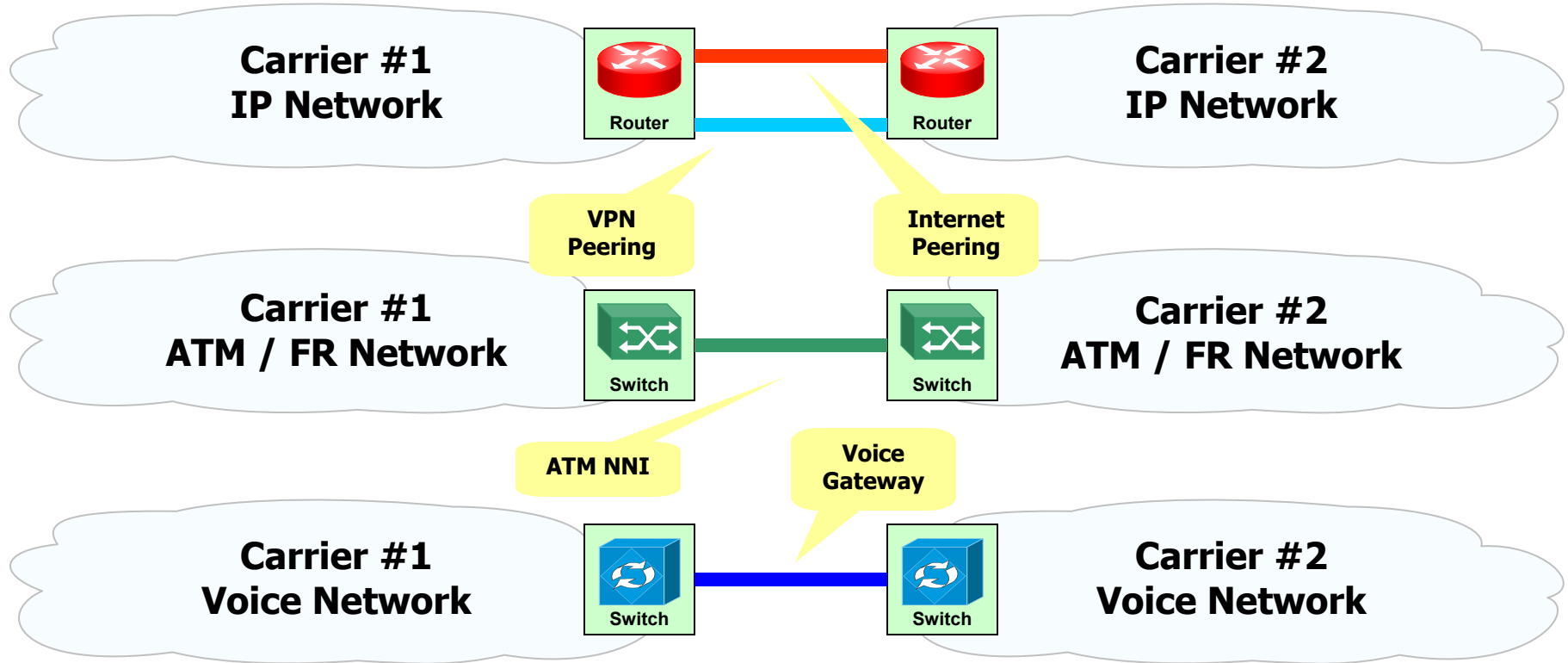
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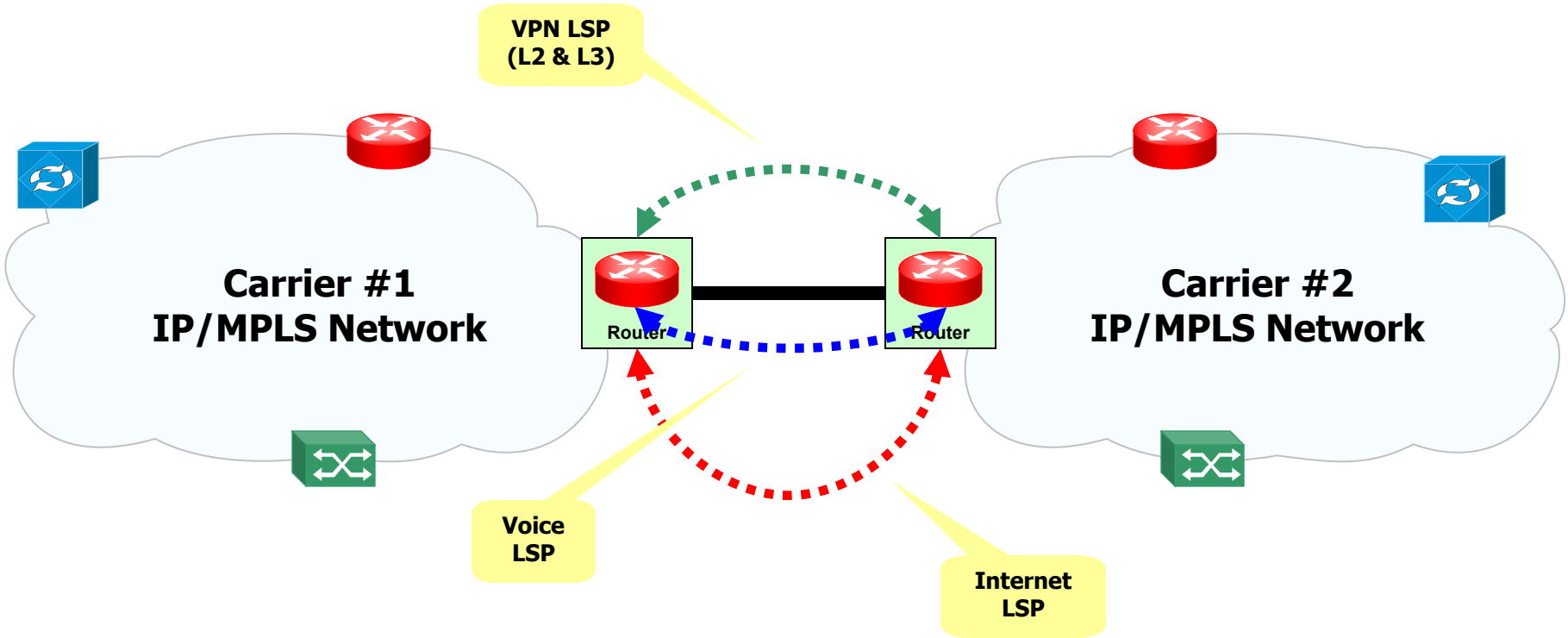


# Today's Interconnection Architecture



Technology based interconnect using multiple circuits and networks

# The Future



**Application based logical interconnect  
using one physical circuit**

# Service Provider Issues/Requirements Summary

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- Some of the Inter-AS issues/requirements described in the following IETF draft.
  - <http://www.ietf.org/internet-drafts/draft-ietf-tewg-interas-mpls-te-req-09.txt>
- Performance
  - Optimal E2E Path Computation
    - Security vs Functionality. What is the happy medium?
  - Reoptimization
    - Should a partner have the ability to cause state changes in your network?
  - DS-TE Support
    - How many Service Classes?
    - Best Practice or per-partner agreement?
- High Availability
  - Fast ReRoute and Diverse Path Support
    - One for the vendors !!

# Issues and Requirements

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## ■ Scalability

- Aggregation and Hierarchy
  - Let's plan for the future !!

## ■ Management

- E2E Monitoring and Provisioning
  - What can you see and do on someone else's network?
- Measurements
  - Consistent E2E model, possibly a 3<sup>rd</sup> party?
  - SLA metrics, best practice?
- Interoperability
  - Not only vendor equipment but carrier architectures.
- Confidentiality
  - Securing a network without compromising functionality.
- Policy Control
  - Attack mitigation, protecting the control/data planes

# Issues and Requirements

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- Business Issues
  - Settlements
  - Transit Arrangements