PPVPN QoS
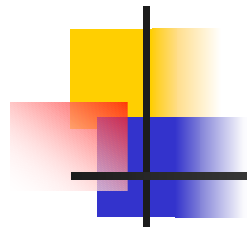
- Framework for QoS in Provider-Provisioned VPNs
  - draft-chiussi-ppvpn-qos-framework-00.txt
- QoS Considerations for L3 PPVPNs
  - draft-declercq-ppvpn-l3vpn-qos-00.txt

Framework for QoS in Provider-Provisioned VPNs

draft-chiussi-ppvpn-qos-framework-00.txt

Framework for QoS in PPVPNs

Status

- Renewed interest in this work
- New version .01 reflects comments and discussions from .00 version
- Changes from .00 version
    - Removed non-PPVPN specific material (more has to be cleaned up)
    - Improved reference models, hard and soft guarantees
    - Added material on QoS *within* the VPN
    - Expanded sections on QoS-related signaling
    - Clarified/reorganized/rewritten several sections from feedback received
- Content still needs to be further refocused, reorganized, and expanded where necessary
- We have additional co-authors

Framework for QoS in PPVPNs (cont.'d)

Moving forward - Work plan

- Make the draft more readable (shorter)
- Reduce non-PPVPN specific material
  - Drastically shorten background information and restoration section
  - Reference to other WGs/other documents for non-PPVPN material
- Merge with draft-declercq-ppvpn-l3vpn-qos-00.txt
  - Make draft more balanced between Layer 2/Layer 3 (right now Layer 2 issues are more prominently addressed
  - Keep the best of both drafts, better organization of QoS issues
  - Clearly identify PPVPN-specific issues, identify Layer-2-only/Layer-3-only/common issues

Framework for QoS in PPVPNs (cont.'d)

- Next version, will concentrate/add material on the following:
  - Define PPVPN QoS reference models
    - Clarify QoS properties/performance/implications of reference models
  - Define PPVPN SLAs
  - PPVPN-specific QoS issues
    - Organize PPVPN QoS issues in a crisper form (along the lines of draft-declercq-ppvpn-l3vpn-qos-00.txt) to facilitate readability and feedback
    - Expand issues related to automatic QoS provisioning
    - Remove excessively-narrow references to specific solutions
  - PPVPN-specific restoration issues
  - Inter-AS QoS issues
  - Others??? Please comment
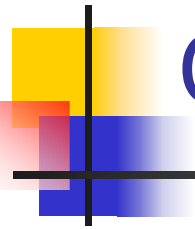
QoS considerations for L3 PPVPNs

draft-declercq-ppvpn-l3vpn-qos-00.txt
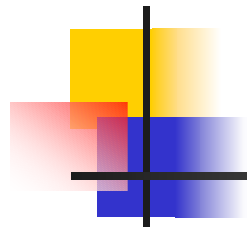
Motivation

- Existing PPVPN QoS framework document
  - L2VPN focused
  - L3VPN issues unclear
- Separate document to ease feedback on specific L3VPN QoS issues
- Draft organization specifically organized to
  - highlight which issues are PPPVN-specific and which are orthogonal
  - maximize readability

Content: Identified Issues

- default use of LDP-DU and LSP-merge
- default use of 1 LSP per PE pair for each direction
- mapping of packets into SP's traffic class
- use of Penultimate Hop Popping
- use of BGP signalling
- PPVPNs over non-MPLS networks
- provisioning example
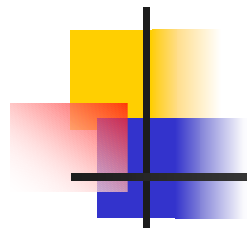
PPVPN QoS: Next Steps

- Solicit comments on the two existing drafts
  - For now, please comment on the separate drafts
  - Solicit feedback on which areas are of most interest
  - Solicit input on eventual additional issues that are missing
- Merge the drafts, keeping the best of each
  - Systematic/pragmatic approach to QoS
  - Completeness/Readability
  - **Solicit comments: should we have single framework or separate Layer 2/Layer 3 frameworks?**
    - We prefer single framework because a lot of issues are in common
- **Goal:** QoS Framework as the reference document for other QoS drafts defining solutions/QoS signaling extensions/QoS MIBs/etc.