

<draft-lefaucheur-rsvp-ecn-01.txt>

# RSVP Extensions for Admission Control over Diffserv using Pre-Congestion Notification

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# Drafts -

'Pre-Congestion Notification marking'  
draft-briscoe-tsvwg-cl-phb-02.pdf

'An edge-to-edge Deployment Model  
for Pre-Congestion Notification:  
Admission Control over a DiffServ  
Region'

draft-briscoe-tsvwg-cl-architecture-03

Controlled environment

further deployment models  
using PCN (future work)

- end-to-end / Open
- others?

Signalling extensions

- RSVP, draft-lefaucheur-rsvp-ecn-01
- NSIS (future work)

Border anti-cheating (related work)




draft-briscoe-tsvwg-re-ecn-border-cheat-01

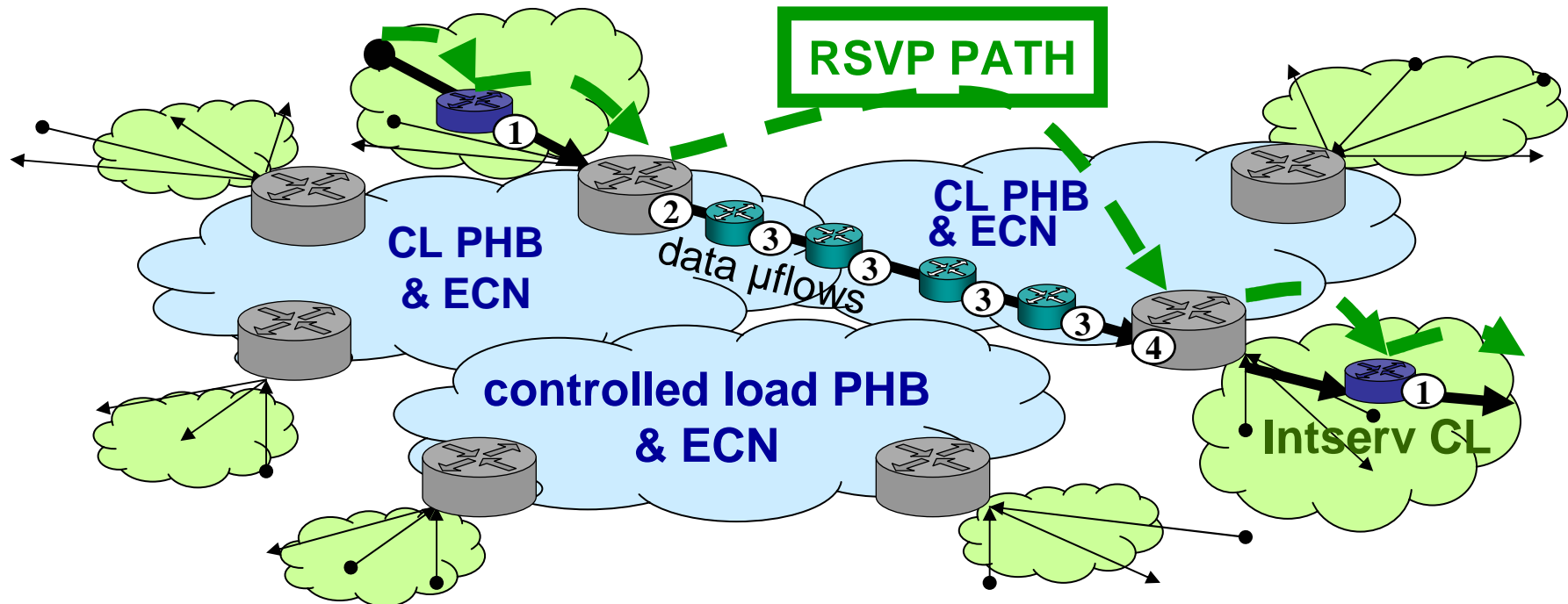
- extending CL-region across operators




PCN over MPLS (related work)

- MPLS & ECN/PCN, draft-davie-ecn-mpls-00

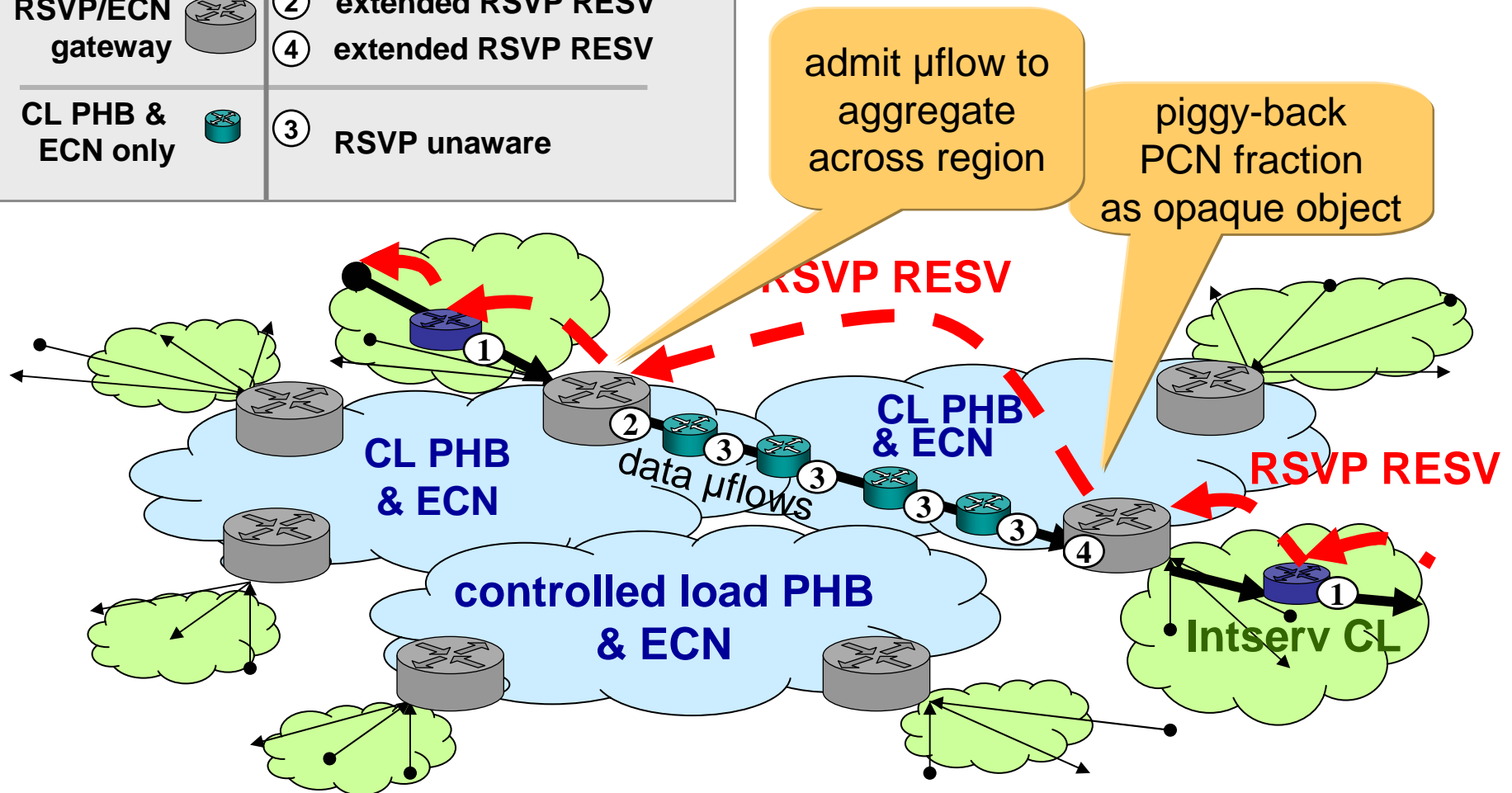
# admission control

| IP routers  | Control signalling                           |
|---|--|
| Reservation enabled  | ① standard RSVP PATH                         |
| RSVP/ECN gateway     | ② standard RSVP PATH<br>④ standard RSVP PATH |
| CL PHB & ECN only    | ③ RSVP unaware                               |



| IP routers  | Control signalling                           |
|---|--|
| Reservation enabled  | ① standard RSVP RESV                         |
| RSVP/ECN gateway     | ② extended RSVP RESV<br>④ extended RSVP RESV |
| CL PHB & ECN only    | ③ RSVP unaware                               |

# admission control



# Proposed Extensions: New Object: CL-ECN Object

Reflects ratio of CE marked  
Packets.  
FOR ADMISSION CONTROL

In Resv Messages

```
+-----+-----+-----+-----+
|           Congestion Level Estimate           |
+-----+-----+-----+-----+
|           Sustainable Aggregate Rate           |
+-----+-----+-----+-----+
```

Reflects Sustainable Aggregate Rate  
FOR PREEMPTION

# Proposed Extensions: New Error Codes

- No CL-capable Egress GW
- Egress GW cannot compute Congestion Level Estimate
- CL-ECN Probes Required

# Next Steps

- Reflect upcoming progress of PCN-based admission control and preemption mechanisms