



Requirements for Signaling of (Pre-) Congestion Information DiffServ Domain

draft-ietf-pcn-signaling-requirements-02

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Outline

- Issues in draft-ietf-pcn-signaling-requirements-02
- Next steps



Issues in draf-ietf-pcn-signaling-requirements-02

- Several comments have been provided by Michael and Phil
- Most of them are editorial that can be easily worked out
- Some of comments provided by Michael need discussion



Issues in draf-ietf-pcn-signaling-requirements-02

- Issue 1: For the following bullet, should we say the IPv4 or IPv6 address of the nodes to be more specific?
 - o identifiers of the PCN-ingress-node and the PCN-egress-node that specify the ingress-egress-aggregate to which the report refers
- Issue 2: Regarding flow identifiers, the following is not needed:
 - o IP address of PCN-ingress-node;
 - o IP address of PCN-egress-node
- Issue 3: requirement "2.3.2 Local information" exchange does not need to be explicitly stated



Issues in draf-ietf-pcn-signaling-requirements-02

- Issue 4: Remove section "2.3.3 Carry identification of PCN edge nodes" since it is part of the content.
- Issue 5: Remove section "2.3.4 Carry identification of ingress-egress-aggregates" since it is a part of the content.
- Issue 6: Add the following text to "Signaling load" requirement:
 - We give two examples that may help to achieve that goal:
 - Piggy-backing the reports by the PCN-egress-nodes to the decision point(s) onto other signaling messages that are already in place
 - Reducing the amount of reports to be sent by optional report suppression.



Issues in draf-ietf-pcn-signaling-requirements-02

- Issue 7: Changed the definition of the Reliability requirement into:
- As PCN reports are sent regularly, additional reliability mechanisms are not needed. This also holds in the presence of optional report suppression, as reports are sent periodically if actions by the decision point(s) are needed.



Issues in draf-ietf-pcn-signaling-requirements-02

- Issue 8: Removed the following text from the Security requirement:
- As PCN reports are sent regularly, additional reliability mechanisms are not needed. This also holds in the presence of optional report suppression, as reports are sent periodically if actions by the decision point(s) are needed.
 - PCN-signaling messages **MUST NOT** leak out of the PCN-domain. This can be easily accomplished, since messages are sent to the PCN-boundary-node's address;
 - PCN-boundary-nodes **MUST** validate the signaling messages, to avoid that they come from an attacker. Considering that all PCN-nodes are trusted, see [RFC5559], this requirement could be easily fulfilled by verifying whether a message arrives on an interface internal to the PCN-domain.



Issues in draf-ietf-pcn-signaling-requirements-02

- Issue 9: Removed completely section 3 and proposed new sections (proposed Section 3.3 is too abstract)

- 3.3 Requirements for the Signaling Protocol that Carries Data between the Decision Point(s) and PCN-Ingress-Nodes

The request messages **MUST** be addressed to the PCN-ingress-nodes. The report messages **MUST** be addressed to the decision point(s). The requests by the decision points and the reports by the PCN-ingress-nodes are sent only when flow termination is needed. As flow termination is an urgent action, it is important that the messages arrive quickly and reliably. This implies that these messages **SHOULD** be sent

- with high priority
- in a reliably fashion



Next steps

- Go to WG last call after solving current open issues?