RADIUS extensions for PCP

draft-maglione-pcp-radius-ext-05

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Motivations

- `draft-ietf-pcp-dhcp` defines DHCP and DHCPv6 options which can be used to provision a PCP Server reachability information
- In a broadband network, customer information is usually stored on a AAA/RADIUS server and DHCP/DHCPv6 is used to populate user's configuration information
- This document specifies a new RADIUS attribute to carry one or a list of PCP Server Name; the information can be conveyed to the NAS that is co-located with DHCP/DHCPv6 server, which then populates the DHCP/DHCPv6 option for its clients
- A similar approach for provisioning the FDQN of the AFTR is already defined for DS-Lite in RFC 6519
IPv6 scenario of applicability

NAS translates PCP-Server-Name Radius Attribute into DHCPv6 option

PCPv6 (..Option_PCP_server)

DHCPv6 (Option_PCP_Server)

NAS: DHCPv6 Server
NAS: RADIUS Client

AAA Radius Server

User profile:
Username pwd
Delegated-prefix
...
PCP-Server-Name

PCP Server
PCP-Server-Name
Radius Attribute

```
<table>
<thead>
<tr>
<th>Type</th>
<th>Length</th>
<th>PCP-Server-Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td></td>
<td></td>
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</tbody>
</table>
```

- The PCP-server-name attribute contains a name or a list of names that refers to a PCP server the client requests to establish a connection to for PCP related service.
- The NAS shall use the name returned in the RADIUS PCP-server-name attribute to populate the PCP Server FQDN DHCP Sub-Option in IPv4 addressing context, or the PCP Server FQDN DHCPv6 Option in IPv6 addressing context.
- Context: This field indicates the IP connectivity context (IP4, IPv6 or Dual-stack).
History/Changes

-00: initial draft
-01: just refresh of the draft with no change
-02: integrated the comments received from Mohamed Boucadair
-03: incorporated changes made in RFC 6519 to resolve IESG’s comments
-04: refresh and update to references
-05: added Mohamed as co-author, replaced FQDN with “a name or a list of names”, editorial changes/clean up
Questions?