

RADIUS issues in IPv6 deployments

draft-hu-v6ops-radius-issues-ipv6-01

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Issues encountered

- Issue #1: Identifying users of different protocols
 - If RADIUS is only used for authentication but not configurations assignment by centralized AAA, the NAS got troubles to verify whether the user is authorized to be assigned an IPv4, IPv6 address or both, for example.
- Issue #2: Network or Host on Customer Premises?
 - There are two models of IPv6 service delivery, “framed service to a single host”, or “home network through CPE”.
 - The situation is similar to #1.
- Issue #3: Protocol Specific Accounting
 - The current semantics of accounting is for all traffic over the given Access Service

Possible solutions

- Vendor-Specific Attributes
 - Work for all;
 - Suffer from interoperation problems.
- Special implementations of NAS
 - Work for issue #1, #2;
 - Set several domains on NAS accordingly, like “v4, v6 or dual-stack”, with “Framed Host, or Home Network ”
 - Require the users to attach additional information like “@*domain*” when sending request, for BNG to verify the category of users locally without AAA procedure.
- Define new Attributes
 - Work for all;
 - For issue #3, would propose to define Attributes for “Framed” services like,
 - Acct-Framed-IPv4-input/output-*
 - Acct-Framed-IPv6-input/output-*

Next step

- Adopt it as an informational document?
- Then, what's the right direction of the approaches?