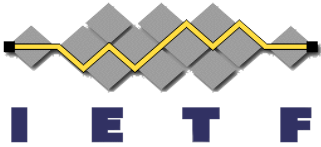


RADIUS extensions for DS-Lite

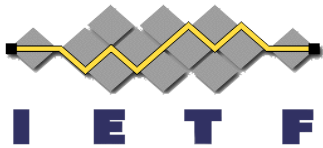
draft-ietf-softwire-dslite-radius-ext-04

R. Maglione – Telecom Italia
A. Durand – Juniper Networks



Main Changes

- Version -04 contains the changes to address the comments received from operations directorate review (Jouni Korhonen)



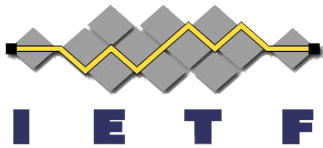
Operational comment 1

- **Comment:**

Section 5 shows that the Access-Request message may contain the DS-Lite-Tunnel-Name attribute. What is the purpose of this? What is put into the attribute when sent in the Access-Request? What happens if the NAS includes the attribute but the AAA server does not recognize the attribute?

- **Proposed resolution:**

This attribute MAY be used in Access-Accept packets as a hint to the RADIUS server; for example if the NAS is pre-configured with a default tunnel name, this name MAY be inserted in the attribute. The RADIUS server MAY ignore the hint sent by the NAS and it MAY assign a different AFTR tunnel name.



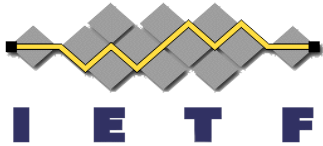
Operational comment 2

- **Comment:**

What happens if the NAS does not receive DS-Lite-Tunnel-Name attribute in the Access-Accept? How does a NAS behave in that case? Does it fallback to some possibly pre-configured default? Does the NAS terminate the session towards the B4?

- **Proposed resolution:**

If the NAS does not receive DS-Lite-Tunnel-Name attribute in the Access-Accept it MAY fallback to a pre-configured default tunnel name, if any. If the NAS does not have any pre-configured default tunnel name or if the NAS receives an Access-Reject, the tunnel cannot be established and NAS MUST terminate the session towards the B4.



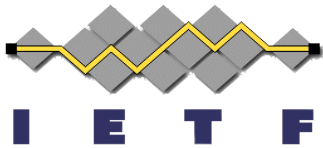
Operational comment 3

- **Comment:**

Can the NAS have a pre-provisioned default AFTR name? Would the AFTR name received in Access-Accept then overwrite the default?

- **Proposed resolution:**

If the NAS is pre-provisioned with a default AFTR tunnel name and the AFTR tunnel name received in Access-Accept is different from the configured default, then the AFTR tunnel name received from the AAA server **MUST** overwrite the pre-configured default on the NAS.



Operational comment 4

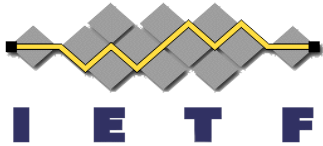
- **Comment:**

In a case the B4 refreshes the DHCPv6 binding, would the NAS initiate a new Access-Request towards the AAA server? Would DS-Lite-Tunnel-Name attribute be included in the Access-Request in this case? What if the Access-Accept does not contain the DS-Lite-Tunnel-Name attribute? What happens if the NAS receives Access-Reject in this case?

- **Proposed resolution:**

There are two different cases:

- DHCPv6 Renew
- DHCPv6 Rebind



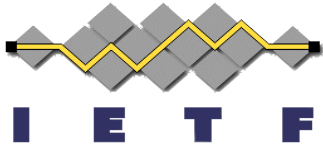
Operational comment 4

- **Proposed resolution: DHCPv6 Renew**

After receiving the DS-Lite-Tunnel-Name in the initial Access-Accept the NAS MUST store the received AFTR Tunnel Name locally. When the B4 sends a DHCPv6 Renew message to request an extension of the lifetimes for the assigned address or prefix, the NAS does not have to initiate a new Access-Request towards the AAA server to request the AFTR tunnel name. The NAS retrieves the previously stored AFTR tunnel name and uses it in its reply.

- **Proposed resolution: DHCPv6 Rebind**

The NAS receiving the DHCPv6 rebind message MUST initiate a new Access-Request towards the AAA server. The NAS MAY include the DS-Lite-Tunnel-Name attribute in its Access-Request. If the NAS does not receive the DS-Lite-Tunnel-Name attribute in the Access-Accept it MAY fallback to a pre-configured default tunnel name, if any. If the NAS does not have any pre-configured default tunnel name or if the NAS receives an Access-Reject, the tunnel cannot be established and NAS MUST terminate the session towards the B4



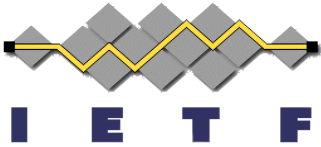
Operational comment 5

- **Comment:**

Is RFC5176 CoA operation possible? If so, it would make sense to document that also. That would map to a Reconfigure message sent by the NAS to the B4

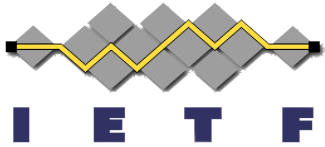
- **Proposed resolution:**

The Change-of-Authorization (CoA) message [RFC5176] can be used to modify the current established DS-Lite tunnel. When the NAS receives a CoA message containing the DS-Lite-Tunnel-Name attribute, the NAS MUST send a Reconfigure message to a B4 to inform the B4 that the NAS has new or updated configuration parameters. Upon receiving the new AFTR tunnel name the B4 MUST terminate the current DS-Lite tunnel and the B4 MUST establish a new DS-LITE tunnel with specified AFTR.



Editorial changes

- Removed acronyms from the abstract
- Moved draft *ietf-radext-ipv6-access* from Normative to Informative references
- Defined the data type of the DS-Lite-Tunnel-Name as string



Questions?



Thanks!