# **DHC Recharter**

2017-11-16 18:10 (UT+08h) DHC Chairs (Bernie Volz, Tomek Mrugalski)

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, IETF-100 DHC WG Singapore

#### **Current Charter**

<preface omitted>

The DHC WG has the following main objectives:

- 1. Develop extensions to the DHCPv6 infrastructure as required to meetnew applications and deployments of DHCP. The topics currently in development are:
  - DHCPv6 Stateful issues [RFC7550]
  - DHCPv6 Failover [RFC8156]
  - DHCPv6 Load Balancing [expired]
  - Extending DHCPv6 to work with multiple provisioning domains [expired]
  - DHCP provisioning of IPv4 clients over IPv6 networks [RFC7341]
  - Access Network Identifier options [RFC7839]
  - DNS registration for SLAAC [abandoned]
  - Active leasequery [RFC7653, RFC7724]
  - Secure DHCPv6 with Public Key [dead]
  - Dynamic Allocation of Shared IPv4 Addresses [RFC7618]

Additional topics may only be added with approval from the responsibleArea Director or by rechartering.

- 2. Develop documents that help explain operational considerations for the wider community.
- Issue updated versions of the DHCP base specifications - RFC 3315 (DHCPv6), RFC 3633 (DHCPv6 Prefix Delegation) and RFC 3736 (Stateless DHCPv6) so as to fix errata and bring the documents to the point where they can advance along the IETF Standards Track.
- In the process of updating the DHCP base specifications, in cases where time is of the essence, issue corrections and clarifications of the specifications in order to quickly address interoperability problems.
- 5. Write analyses and interoperability reports on existing DHC documents, including base specs.
- 6. When serious interoperability problems are found in other DHCP specifications, issue updated versions of those specifications to address the interoperability problems.

## Proposed Charter [1 of 2]

The Dynamic Host Configuration Working Group (DHC WG) has developed DHCP for automated allocation, configuration and management of IP addresses and TCP/IP protocol stack parameters. DHCPv4 is currently a Draft Standard and is documented in RFC 2131 and RFC 2132. DHCPv6 is currently a Proposed Standard and is being updated and the WG plans to advance the protocol to full standard.

The DHC WG is responsible for defining DHCP protocol extensions. Definitions of new DHCP options that are delivered using standard mechanisms with documented semantics are not considered a protocol extension and thus are generally outside of scope for the DHC WG. Such options should be defined within their respective WGs and reviewed by DHCP experts in the Internet Area Directorate. However, if such options require protocol extensions or new semantics, the protocol extension work must be done in the DHC WG. Or, when no respective WG exists, the DHC WG may take on the option definitions work with approval from the responsible Area Director.

## Proposed Charter [2 of 2]

The DHC WG has the following main objectives:

1. Issue updated version of the DHCPv6 base specification and, after an appropriate interval after publication as an RFC, advance the to full Internet Standard.

2. Develop documents that help explain operational considerations for the wider community if and as needed.

3. Assist other WGs and independent submissions in defining options (that follow RFC 7227 guidelines) and to assure DHCP operational considerations are properly documented.

4. Additional topics and any option definition work may only be added with approval from the responsible Area Director or by re-chartering.

### Remaining work to be considered

Following items are active and seem to have reasonable interest of the WG:

- Wrap up 3315bis (mostly done, @IESG now)
- Relay port (mostly done, @IESG now)
- YANG models (v6 work resumed recently)
- IOT options (LWM2M, MQTT options)
- MAC address assignment (surprise topic)

### **Proposed Next Steps**

- Update charter proposal as needed
- Recharter
- Promote 3315bis to Internet Std X months after its publication
- Continue other work (YANG seems to be the biggest outstanding thing)