

# Kerberos Option for DHCPv6

draft-sakane-dhc-dhcv6-kdc-option-04.txt

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# Brief Background

- In some environments, DHCP is better to DNS to provide information.
  - Environments are described in the appendix of the draft.
- I had introduced this option to dhc-wg at IETF71.
- Ralph requested me to summarize requirements of krb-wg.
- I brought this option to krb-wg at IETF72, IETF73.
- Krb-wg accepted the Kerberos option to be a WG item at IETF74.

# Kerberos Option

- 3 sub-options are defined.
- Realm Name sub-option
  - Providing a realm name to a client.
  - Flags: only defines the default realm bit.
- KDC sub-option
  - Providing address of the KDC, a weight and a port number.
  - Providing a service type of the Kerberos protocol is an issue.
- Client Principal Name sub-option
  - Providing a client principal name to the DHCPv6 server.
  - The DHCPv6 server uses it to select suitable information for the client.

# Client and Server Behavior

- Single round trip protocol itself.
- RFC 4120 defines the way to provide an address of KDC by DNS.
- Section 3.1 describes a recommendation of KDC discovery for a client.

# Issues

- Section 6 stated these issues and gives proposed solutions.
- This section will be removed after the issues are solved.

# Service Type

- The Service Type specifies the transport medium of the Kerberos communication. The Kerberos specification [RFC4120] defines to use UDP and TCP for communication between clients and servers. Other transports are not defined in RFC 4120. However, SCTP might be used in the future. In addition, the Heimdal implementation can use HTTP as a transport type for that purpose.
- Need input from the krb-wg.

# Other configuration values

- CableLabs Configuration Option [RFC3495] is the option using in the PacketLabs Architecture [PCARCH]. This option can provide a timer and a counter to a client. The Kerberos option defined in this document can be added these feature as its sub-option if these are needed.
- These feature is out of scope of this document, and might be defined in another document in the future.

# Providing IPv4 Address

- One of the purpose of this specification is to configure an IPv6 client. However, the address family of the communication of any Kerberos service does not depend on the address family of the DHCPv6 service. Essentially, the DHCPv6 server could provide a set of IPv4 addresses of the KDC by using the KDC sub-option.
- I would like to stick just providing IPv6 address.

# Other issues on the mailing list

- Referral, default realm, etc...
- I almost made some responses to every thread. But, document needs to update.
- My apology is that I didn't keep discussion since last meeting.

# Request to WG

- Please update the krb-wg charter.
  - It was adopted as WG item at the last meeting.
- Please give any comment and any suggestion. I will send materials to continue discussion to the ML.

# End of presentation