

DHCP Option for User Authentication Protocol  
<[draft-ietf-dhc-options-uap-00.txt](#)>

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## Abstract

This document defines a DHCP [1] option that contains a pointer to a User Authentication Protocol server that provides user authentication services for clients that conform to The Open Group Network Computer Technical Standard.

## Introduction

The Open Group Network Computer Technical Standard, a product of The Open Group's Network Computer Working Group (NCWG), defines a network computer user authentication facility named the User Authentication Protocol (UAP).

UAP provides two levels of authentication, basic and secure. Basic authentication uses the Basic Authentication mechanism defined in the HTTP 1.1 [2] specification. Secure authentication is simply basic authentication encapsulated in an SSLv3 [3] session.

In both cases, a UAP client needs to obtain the IP address and port of the UAP service. Additional path information may be required,

depending on the implementation of the service. A URL [4] is an excellent mechanism for encapsulation of this information since many UAP servers will be implemented as components within legacy HTTP/SSL servers.

Most UAP clients have no local state and are configured when booted through DHCP. No existing DHCP option [5] has a data field that contains a URL. Option 72 contains a list of IP addresses for WWW servers, but it is not adequate since a port and/or path can not be specified. Hence there is a need for an option that contains a URL.

#### User Authentication Protocol Option

This option specifies a URL pointing to a user authentication service that will process authentication requests encapsulated in the User Authentication Protocol (UAP). UAP servers can accept either HTTP 1.1 or SSLv3 connections. If the URL does not contain a port component, the normal default port is assumed (i.e., port 80 for http and port 443 for https).

```

0                               1                               2                               3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+
|   Code   |   Length   |   URL   |
+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+---+

```

Code     TBD

Length   The length of the data field (i.e., URL) in bytes.

URL       URL pointing to the UAP service.

#### References

- [1] Droms, R., "Dynamic Host Configuration Protocol", [RFC-2131](#), March 1997.
- [2] Fielding, R., Gettys, J., Mogul, J., Frystyk, H., and T. Berners-Lee, "Hypertext Transfer Protocol -- HTTP/1.1", [RFC-2068](#), January 1997.

- [3] Freier, A., Karlton, P., and P. Kocher, "The SSL Protocol, Version 3.0", Internet Draft, November 1996.

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- [4] Berners-Lee, T., Masinter, L., and M. McCahill, "Uniform Resource Locators (URL)", [RFC-1738](#), December 1994.
- [5] Alexander, S. and R. Droms, "DHCP Options and BOOTP Vendor Extensions", [RFC-2132](#), March 1997.

#### Security Considerations

DHCP currently provides no authentication or security mechanisms. Potential exposures to attack are discussed in [section 7](#) of the DHCP protocol specification.

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