

## Storing Vendor Information in the LDAP root DSE

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### 1. Abstract

This document specifies two LDAP attributes, vendorName and vendorVersion that MAY be included in the root DSE to advertise vendor-specific information. These two attributes supplement the attributes defined in [section 3.4 of \[RFC-2251\]](#).

The information held in these attributes MAY be used for display and informational purposes and MUST NOT be used for feature advertisement or discovery.

### 2. Conventions used in this document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [\[RFC-2219\]](#)

### 3. Overview

LDAP clients discover server-specific data--such as available controls, extensions, etc.-- by reading the root DSE. See [section 3.4 of \[RFC-2251\]](#) for details.

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For display, information, and limited function discovery, it is desirable to be able to query an LDAP server to determine the vendor name of that server and also to see what version of that vendor's code is currently installed.

### [3.1](#) Function discovery

There are many ways in which a particular version of a vendor's LDAP server implementation may be functionally incomplete, or may contain software anomalies. It is impossible to identify every known shortcoming of an LDAP server with the given set of server data advertisement attributes. Furthermore, often times, the anomalies of an implementation are not found until after the implementation has been distributed, deployed, and is in use.

The attributes defined in this document MAY be used by client implementations in order to identify a particular server implementation so that it can 'work around' such anomalies.

The attributes defined in this document MUST NOT be used to gather information related to supported features of an LDAP implementation. All LDAP features, mechanisms, and capabilities--if advertised--MUST be advertised through other mechanisms, preferably advertisement mechanisms defined in concert with said features, mechanisms, and capabilities.

## [4.](#) Attribute Types

These attributes are an addition to the Server-specific Data Requirements defined in [section 3.4 of \[RFC-2251\]](#). The associated syntaxes are defined in [section 4 of \[RFC-2252\]](#).

Servers MAY restrict access to vendorName or vendorVersion and clients MUST NOT expect these attributes to be available.

### [4.1](#) vendorName

This attribute contains a single string, which represents the name of the LDAP server implementer.

All LDAP server implementations SHOULD maintain a vendorName, which is generally the name of the company that wrote the LDAP Server code like "Novell, Inc."

```
( 2.16.840.1.113719.1.27.4.43 NAME 'vendorName' EQUALITY
1.3.6.1.4.1.1466.109.114.1 SYNTAX 1.3.6.1.4.1.1466.115.121.1.15
NO-USER-MODIFICATION SINGLE-VALUE USAGE dSAOperation )
```

#### [4.2](#) vendorVersion

This attribute contains a string which represents the version of the LDAP server implementation.

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All LDAP server implementations SHOULD maintain a vendorVersion. Note that this value is typically a release value--comprised of a string and/or a string of numbers--used by the developer of the LDAP server product (as opposed to the supportedLDAPVersion, which specifies the version of the LDAP protocol supported by this server). This is single-valued so that it will only have one version value.

```
( 2.16.840.1.113719.1.27.4.44 NAME 'vendorVersion' EQUALITY
1.3.6.1.4.1.1466.109.114.1 SYNTAX 1.3.6.1.4.1.1466.115.121.1.15
NO-USER-MODIFICATION SINGLE-VALUE USAGE dSAOperation )
```

#### [5.](#) Notes to Server Implementers

Server implementers may consider tying the vendorVersion attribute value to the build mechanism so that it is automatically updated when the version value changes.

#### [6.](#) Notes to Client Developers

As mentioned in [section 3.1](#), the use of vendorName and vendorVersion MUST NOT be used to discover features.

Client implementations SHOULD be written in such a way as to accept any value in the vendorName and vendorVersion attributes. If a client implementation does not recognize the specific vendorName or vendorVersion as one it recognizes, then for the purposes of 'working around' anomalies, the client MUST assume that the server is complete and correct. The client SHOULD work with implementations that do not publish these attributes.

#### [7.](#) Security Considerations

The vendorName and vendorVersion attributes are provided only as display or informational mechanisms, or as anomaly identifying mechanisms. Client and application implementers must consider that the existence of a given value in the vendorName or vendorVersion attribute is no guarantee that the server was actually built by the asserted vendor or that its version is the asserted version and should act accordingly.

Server implementers should be aware that this information could be used to exploit a security hole a server provides either by feature or flaw.

## 8. References

### RFC-2219

Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997

### RFC-2026

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Bradner, S., "The Internet Standards ProcessùRevision 3", [BCP 9](#), [RFC 2026](#), October 1996.

### RFC-2251

Wahl, M., Howes, T., Kille, S., "Lightweight Directory Access Protocol (v3)", [RFC 2251](#), December 1997

### RFC-2252

Wahl, M., Coulbeck, A., Howes, T., Kille, S., "Lightweight Directory Access Protocol (v3): Attribute Syntax Definitions", [RFC 2252](#), December 1997

## 9. Acknowledgments

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