

Why is it Kerberos Principal and not Kerberos Principle?

Q: Why is it Kerberos Principal and not Kerberos Principle?

Context

- Kerberos, MIT's central authentication service
- Kerberos principal (your username and domain combination in Kerberos)

Answer

When used as a noun the word **principal** refers to the primary person in a group of people. For example, the principal of a school is arguably the most important person there. **Principal** can also refer to the primary thing of importance in a related set of things. For example, the principal of my loan, plus the interest, adds up to the total I owe. On the other hand the word **principle**, also a noun, refers to a foundational law or doctrine.

This can get complicated when the word **principal** is used as an adjective, where it means the most important *whatever the noun is*. So you could correctly say "this is the principal principle" if you wanted to really confuse people, but the other way around does not work.

In Kerberos, **principal** refers to the person (actually the thing representing the person). A Kerberos *principal* is the unique and complete identifier of a person, usually consisting of a name, such as `othomas`; a domain, such as `ATHENA.MIT.EDU`; and optionally an instance, such as `root`. The term Kerberos *principle*, on the other hand, is not commonly used at all. But if it were used it could correctly refer to something such as one of the fundamental rules or doctrines of Kerberos as a technology and concept.

Some examples

- `othomas@ATHENA.MIT.EDU` is my Kerberos principal
- "Not sending a password over the network during authentication" is a Kerberos principle