

## Key words for use in RFCs to Indicate Requirement Levels

[<draft-bradner-key-words-02.txt>](#)

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### Abstract

In many standards track documents several words are used to signify the requirements in the specification. These words are often capitalized. This document defines these words as they should be interpreted in IETF documents. Note that the force of these words is modified by the requirement level of the document in which they are used.

- 1. MUST** This word, or the adjectives "REQUIRED" or "SHALL", means that the definition is an absolute requirement of the specification.
- 2. MUST NOT** This phrase, or the phrase "SHALL NOT", means that the definition is an absolute prohibition of the specification.
- 3. SHOULD** This word, or the adjective "RECOMMENDED", means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
- 4. SHOULD NOT** This phrase means that there may exist valid reasons in particular circumstances when the particular behavior is acceptable

or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.

- 5. MAY** This word, or the adjective "OPTIONAL", means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option **MUST** be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option **MUST** be prepared to interoperate with another implementation which does not include the option.(except, of course, for the feature the option provides)

#### 6. Guidance in the use of these Imperatives

Imperatives of the type defined in this memo must be used with care and sparingly. In particular, they must only be used where it is actually required for interoperation or to limit behavior which has potential for causing harm (e.g., limiting retransmissions) For example, they must not be used to try to impose a particular method on implementors where the method is not required for interoperability.

#### **6. Security Considerations**

**These terms are frequently used to specify options or behavior in a way that can effect security risks. Careful consideration should be taken to understand the security implications of any use of these imperatives.**

#### **7. Acknowledgments**

**The definitions of these terms are an amalgam of definitions taken from a number of RFCs. In addition, suggestions have been incorporated from a number of people including Robert Ullmann, Thomas Narten, and Robert Elz.**

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