Document Version Numbering

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1 Introduction

In writing and developing documents for projects, or individually for that matter, the ability to consistently track and reference a document has been an area of debate. In managing projects and bids people can be enhancing a document while a third-party is reviewing an earlier revision. How should all the documents be referred to such that all parties are able to refer consistently to the material? What approach to version numbering should be adopted?

In this paper two methods are presented for labelling the version of a document. The first, Major and Minor Versions, draws upon an analogy with software development and the labelling of revisions within source code files. The second method, Draft and Definitive Versions, draws more upon a manual approach to labelling documents. Finally, both approaches are drawn together to offer a unified approach. This is the methodology used in the production of this document.

2 Major and Minor Versions

In software development the use of Major and Minor version numbers is used of the form X.Y. X being the major version and Y the minor version number. This draws upon the analogy used by such software tools as RCS or CVS^1 .

The sequencing of document version is thus:

	Short Form
Version 1.0	v1.0
Version 1.1	v1.1
Version 1.2	v1.2
Version 2.0	v2.0
Version 2.1	v2.1

The uplifting of the numbering from one minor version number to the next or to the subsequent major version number is as follows. A change in minor version number occurs when, for example, new material is added to a document or comments and changes made following a review. The uplifting of the major version number occurs when significant changes are made to a document either by revision, addition of fresh material or alterations to the philosophy of the document.

So where does the numbering of the document start? The numbering could begin at either Version 0.1 since this is the work up to the first release at Version 1, or it commences at Version 1.0 as this is the beginning of the document's development. The selection should be the policy of the project, or the choice of the author for standalone documents.

2.1 Benefits

Each version of a document it uniquely numbered.

The major number of a document does not increase rapidly.

2.2 Drawbacks

All versions of the document are effectively definitive.

The version number of the document is revised with each release of the document whether for internal review or external delivery and can thus increase quite rapidly.

Externally visible documents may have a non-sequential structure which may

3 Drafts and Definitive Versions

In a Draft and Definitive convention of version numbering for documents, a document is formally in one of two distinct states, DRAFT or DEFINITIVE. What, however, is meant by DRAFT and DEFINITIVE, dictionary definitions can be found as follows:

DRAFT - Sketch of work to come, rough copy of document.

DEFINITIVE - Decisive, unconditional, final.

¹ It is recognised that such tools and systems can extend beyond two levels, but in general two levels should be more than sufficient for most documents.

By use of these two caveats on the number of the document a separation can be made between a document under work and one that is suitable for issue.

The sequence of documents versions is thus:

	Short Form	
Version 1 DRAFT A	v1_A	
Version 1 DRAFT B	v1_B	
Version 1 DEFINITIVE	v1	
Version 2 DRAFT A	v2_A	
Version 2 DEFINITIVE	v2	

In developing a document the Version starts at 1 and the DRAFT letter, starting at A, is increased with each updating until the document is ready for issue at which point it is made DEFINITIVE and the letter version stopped. The next developments of the document is at Version 2 DRAFT A until that is ready for issue.

Note: In developing a document should there be more that 26 drafts, A ... Z then the draft lettering would move to double letters, that is, ... Y, Z, AA, AB, AC ...

3.1 Benefits

A clear distinction between a document under preparation, DRAFT, and one for general release, DEFINITIVE.

A simple numbering scheme for all document versions.

3.2 Drawbacks

The number of the version can grow quickly, with the possibility that the difference between DEFINITIVE versions being small.

The reluctance and psychological barrier of making a document DEFINITIVE.

4 Combination of Major, Minor, Draft and Definitive Versions

A third option for the version numbering of documents is to combine both the Major, Minor and the Draft, Definitive schemes into a unified approach.

With this system the number Major and/or Minor revisions are controlled through the DRAFT and DEFINITIVE caveats

The sequencing of document versions is thus:

	Short Form
Version 1.0 DRAFT A	v1.0_A
Version 1.0 DRAFT B	v1.0 <u>B</u>
Version 1.0 DEFINITIVE	v1.0
Version 1.1 DRAFT A	v1.1_A
Version 1.1 DEFINITIVE	v1.1
Version 2.0 DRAFT A	v2.0_A
Version 2.0 DEFINITIVE	v2.0

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So where does the numbering of the document start? Since the first issued version will be Version 1.0 DEFINITIVE there is not the choice of Version 0.1 or Version 1.0 as for the Major, Minor used in isolation At Version 1.0 DRAFT A.

4.1 Benefits

A clear distinction between a document under preparation, DRAFT, and one for general release, DEFINITIVE.

Version number does not grow rapidly as per the Major, Minor version scheme, but still able to differentiate between amendments to a base document issue, minor number change, and an overhaul of the document through major number change.

4.2 Drawbacks

Slightly more complicated to administer and manage the labelling of documents.

5 Version Number Revision

In preparing a document, when should the version number of it be revised? In essence after any occasion when the document is published formally or informally.

Thus, assuming the basic Major, Minor scheme is being used. Version 1.0 is being developed. When this document is given to a colleague for reference, sent for review or published then the next time the document is worked upon it will be up-issued to 1.1 for a minor change or 2.0 for a major change.

By rigorously applying and revising the version as appropriate the confusion that can arise when comparing and contrasting a document can be minimised.

6 Summary

This paper has presented two separate styles for labelling the versions of documents and offered benefits and drawbacks for them both. Drawing upon the two separate approaches a combined version labelling system is discussed.

7 Abbreviations

CVS Concurrent Version Control, [1]

RCS Revision Control System

8 References

[1] http://www.cvshome.org

9 Feedback

If this paper has been of value, or even if it has not, feedback and comments are welcome. What questions has it raised? How could it be improved?

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About the Author

John S Glover received his M.Eng degree in Electrical and Engineering from the University of Leeds in 1989. Following a period with Ferranti undertaking research in the field of in-air acoustics, he returned to University and was awarded a Ph.D. from the School of Engineering, Durham University in 1995, for studies into Artificial Neural Networks. John has been enjoying working for LogicaCMG since 1994.

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