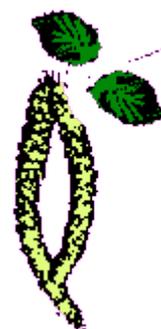


docoll system introduction



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1 Introduction

This document is an introduction to the docoll system version 0.7.6.

1.1 Related documentation

In descending order of likely usefulness to a new reader:

- "docoll directories and files"
- "docoll server sysadmin guide"
- "docoll rsync sysadmin guide"
- "docoll upgrade guide"
- RELEASE

For developers:

- "docoll Ruby coding standards"
- "docoll VBS coding standards"
- "docoll collating and indexing developer's guide"
- "docoll packager's guide"
- "docoll search developer's guide"

2 Overview

2.1 The problem

An organisation had produced many documents as computer files but had no document repository; the documents existed on the hard drives of Windows and GNU/Linux personal computers. There were many duplicate files, sometimes with different names. Documents had been copied without preserving the last modification times.

Sometimes a document was known to exist and was required urgently; significant staff time was used looking for it. Sometimes documents could not be found and were re-typed from hard copy.

There was no text searchable collation so people had no mechanism to search for prior relevant works. If long-serving people did not recall prior relevant documents, similar work could be repeated.

2.2 The docoll solution

The docoll (**d**ocument **c**ollation) system solved all the above problems insofar as it was possible to identify all the folders/directories that contain data on each client computer.

The docoll system is made up of three distinct parts, as follows.

2.2.1 Synchronisation

Running on each desktop and laptop, uses cwrscopy or rsync to synchronise configured folders/directories to a dedicated directory for each on the server, keeping changed files.

Runs at startup/boot or as otherwise scheduled, typically at least once a day. The synchronised files are available from a CIFS (formerly SMB, also known as "Windows share") file system on the server, allowing user-driven restores in the event of loss.

2.2.2 Collating and indexing

Running on the server, docoll periodically collates text-searchable files from "sources", including the dedicated directory for each desktop and laptop, to the document collation and uses Xapian's oindex to index them.

The collating and indexing scripts are the biggest custom component of docoll, comprising 5000+ lines of bash and Ruby scripts and using a Postgres database.

2.2.3 Interactive searching

Xapian's omega is used to provide interactive searching of the collation via a web browser.

2.3 Licences

Custom docoll code is GPL2+ licensed.

The components used by docoll:

- cwrsrc: combines several components, listed with license details at <http://www.itefix.no/i2/node/10650>
- PostgreSQL: PostgreSQL license detailed at <http://www.opensource.org/licenses/postgresql>
- rsync: GPL v3, <http://rsync.samba.org/GPL.html>
- Xapian: GPL2+, LGPL2+ and MIT_X. Details in copyright.csv downloadable via <http://trac.xapian.org/wiki/AutomatedBuilds> (direct download: <http://tartarus.org/~xapian-buildbot/copyright.csv>).

3 Further reading

For systems administrators: related documents "docoll directories and files", "docoll server sysadmin guide" and "docoll rsync sysadmin guide" .

For developers, related documents "docoll Ruby coding standards" , "docoll VBS coding standards" , "docoll collating and indexing developer's guide" , "docoll packager's guide" and "docoll search developer's guide".

4 Appendix – GNU Free Documentation License

Version 1.3, 3 November 2008

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