

Leveraging Open Source Software for a Sustainable Climate Database Management System Free from License Fees

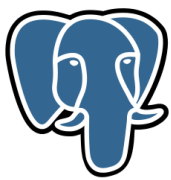


Introduction

CLiDE (Climate Data for the Environment) now supports East Timor and Pacific National Meteorological Services (NMS), improving data availability for climate monitoring leading to managing the risks posed by climate variability and change. CLiDE was developed with the core principles of portability, free and open source software and minimizing complexity whilst still maintaining all the functionality required by an NMS.

Software Components

PACCSAP products must be sustainable beyond the life of the project. With this in mind, we have built CLiDE from exclusively free and open source software.



PostgreSQL

- Advanced object relational database management system
- Safe and secure storage system for all our climate data



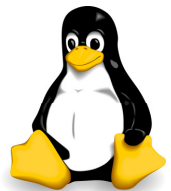
PHP programming language

- World's most popular web script language
- Powerful and easy to use



Apache HTTP server

- World's most popular web server
- Secure and fast



GNU Linux

- Highly capable operating system
- Minimizes computer virus issues
- CLiDE has been deployed to all our Partner Countries on the Ubuntu Linux distribution

Development Tools



DocBook XML

- Markup language for writing documentation with many output options
- Allows us to write both the user manual and help files from the same set of documents



Bugzilla

- Open source issue tracking system used by many major software development projects around the world
- Prioritise our development tasks



Git

- Rapidly becoming the most popular source code control system for open source projects around the world
- Allows for distributed development
- Enables developers to easily create and integrate software branches

Testing Tools



Selenium WebDriver

- Automatically test web applications



SimpleTest

- Unit testing library for PHP
- Integrated with Selenium WebDriver for front-end web testing from PHP

