Developers Guide

Purpose: Explain MapBuilder development and management processes.

This document is loosely based on IEEE Std 1058-1998: Standard for Software Project Management Plans where it is applicable to Open Source projects.

Communication

IEEE Std 1058-1998: 4.5.3.5 Reporting plan
The various communication methods used by Mapbuilder are described at Contact.

Debugging

IEEE Std 1058-1998: 4.6.2 Methods, tools and techniques
Debugging provides numerous debugging tips.

Style Guide

IEEE Std 1058-1998: 4.6.2 Methods, tools and techniques
The Style Guide describes the coding style used by Mapbuilder.

Configuration Management

IEEE Std 1058-1998: 4.7.1 Configuration management plan

Configuration Managment is controlled using Subversion.
Release Process describes the Mapbuilder Release process.
Branching and Tagging describes the mapbuilder Braching and Tagging policy.

Documentation

IEEE Std 1058-1998: 4.7.3 Documentation plan
Mapbuilder's manually edited documentation is maintained within this wiki. Automatically generated documentation is also built and distributed in the mapbuilder/docs directory in each Mapbuilder release.

- Class Description (using JSDoc)
- Component Register
- Design
- Strategic Direction - A periodic status report and future planning document for Mapbuilder.

Issue Tracker

IEEE Std 1058-1998: 4.7.6 Problem resolution plan
Mapbuilder uses JIRA to track bugs and feature requests.
The review of the current code in trunk can be found here.

OSGeo Servers and Nightly Builds

Nightly builds of trunk and the OpenLayers integration branch are hosted xblade14-2.telascience.org.
Continuum is the build management software.

Further nightly build information may be found at The OSGeo Wiki

Roles and Responsibilities

IEEE Std 1058-1998: 4.4.3 Roles and Responsibilities
Contributers Guide describes the roles of Promoters, Users, Debuggers, Testers, Documenters, Coders and the Project Steering Committee.

Decision Making

Decision making is done by consensus as described in Decision Making.

Planning future work

IEEE Std 1058-1998: 4.5.2 Work Plan
IEEE Std 1058-1998: 4.5.3.1 Requirements control plan
IEEE Std 1058-1998: 4.5.3.2 Schedulecontrol plan

We use a loose variation of the SCRUM development, using a weeky cycle instead of 24hour cycle.

The list of future features is stored in JIRA at http://jira.codehaus.org/secure/IssueNavigator.jspa?mode=hide&requestId=11590.

Strategic Direction provides long term planning for the project.

Quality Control

IEEE Std 1058-1998: 4.5.3.4 Quality control plan
IEEE Std 1058-1998: 4.6.4 Product acceptance plan
IEEE Std 1058-1998: 4.7.2 Verification and validation plan
IEEE Std 1058-1998: 4.7.4 Quality assurance plan

- Acceptance Tests using Fitnesse
  - Getting Started
  - Pre-Requisitesa
  - Developing Acceptance Tests
  - Fitnesse References
- Acceptance Tests using Selenium
- Manual testing

Metrics collection

IEEE Std 1058-1998: 4.5.3.6 Metrics collection plan

Risk management

IEEE Std 1058-1998: 4.5.4 Risk management