Workflow version control

This document details the workflow within Thywin, search engine project. It covers usage of GIT, Versioning and branching.

The following tools are used:

- GITHub for Windows

New Features

Each new feature will first be discussed internally with the development team. The development team will prioritize these features in collaboration with the customer. Features with a high priority will be developed before features with lower priority. A developer will be assigned to a feature based on availability and preference.

The workflow is accordingly:

1. Feature Idea gets formulated.
2. Idea discussed with customer and prioritized.
3. An initial implementation will be made outside the main development branch (*Details on this can be found in the Version Control subject*).
4. Initial implementation will be presented to customer.
5. Proper implementation will be made for integration within the main development branch for merge into master/release branches.

Bug Fixes

Once a bug has been reported, a how to reproduce will be written up. Once its cause has been identified, it will be fixed and merged into the active development branch. In case of a product breaking or critical bug, a hotfix will be applied containing just the fix to the release & master branches.

Version Control

Versioning

Thywin makes use of Semantic Versioning 2.0.0. (http://semver.org/). This means our versioning format is MAJOR.MINOR.PATCH.

We will increment the:

1. MAJOR version when you make incompatible API changes,
2. MINOR version when you add functionality in a backwards-compatible manner, and
3. PATCH version when you make backwards-compatible bug fixes.

GIT Usage

GIT will be our version control system. All code and documents will be stored in the GIT repository.
For the usage of GIT we have a simple set of rules:

1. All code pushed to the repository should compile.
2. All commits contain a proper description on what has been changed.
3. Only files related to the project can be pushed to the repository.
4. All code/files/folders are structured in agreement with the Thywin Coding Standards (see HAP-plan).

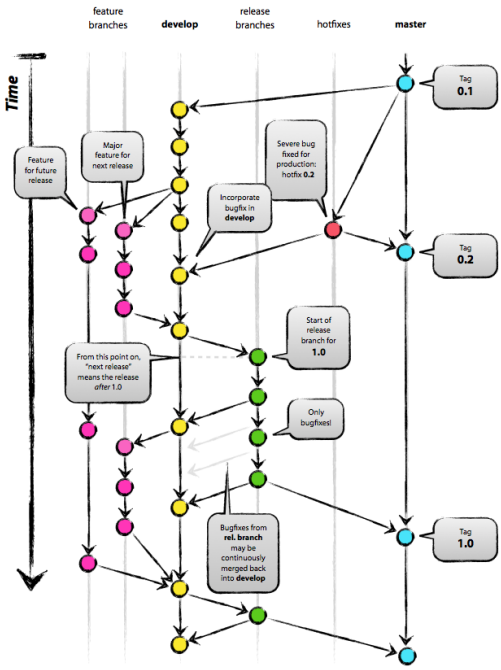
GIT Branching Model

We use a branching model similar to the model published on http://nvie.com/posts/a-successful-git-branching-model/. This means that there won't be any commits to the master directly. Instead, there is a development branch. This branch will be the base for all features being developed.

Once a new version has been marked, the development branch will make a pull request to the master branch, upon which the development branch will receive a feature freeze.

When a new release has been merged into the master, it will receive a tag with a correct version number.

Any features being developed are based off the development branch. Once a feature has been completed, it will be merged back into the development branch.



Branches

Name	Type
Master	Develop and Hotfix branches make pull requests to this branch - no other actions allowed. Should always be tagged with a version number.
HotFix-*	Only bases off Master. No merge into
Develop	Active development branch.
Feature-*	Based off the latest development branch. Can be rebased from latest development branch only.

Changelogs

Every commit should have a descriptive title and description in compliance with the Version control standards. By doing this, we are able to use our commits as a changelog.

Every release, public and private/closed, should have a changelog attached detailing what has changed and which are the new features. The changelog should have each entry clearly marked with a “fixed:”, “changed:”, “removed:” or “new:” tag in front for easy identification by users and developers.