Let's Ship This Thing! 🚀

By: Gary Ewan Park

Hello! I'm Scottish!


M.S.
Sucks

Slides

https://gep13.me/ShipItSlides

Code

https://gep13.me/ShipItCode

Agenda

- What is an issue?
- What is Semantic Versioning?
- What branching strategy should I use?
- What is GitVersion?
- What is GitReleaseManager?

What is an

issue?

Demo

Q. What is an issue?

A

> **…it is the focal point for work undertaken on a particular task/bug/feature in a product release.**

What is

Semantic Versioning?

Q. What is Semantic Versioning?

A

> **…a simple set of rules and requirements that dictate how version numbers are assigned and incremented. These rules are based on, but not necessarily limited to, pre-existing widespread common practices in use in both closed and open-source software.**

The Rules

Given a version number MAJOR.MINOR.PATCH, increment the:

- MAJOR version when you make incompatible API changes
- MINOR version when you add functionality in a backwards-compatible manner
- PATCH version when you make backwards-compatible bug fixes

Additional labels for pre-release and build metadata are available as extensions to the MAJOR.MINOR.PATCH format.

Examples

- 0.1.0
- 0.3.13
- 1.0.0
- 0.2.0-alpha.3
- 0.2.0-alpha.3+Branch.develop.Sha.e6eb071cd30974b80d7e237b85e7729a1d791e1e

Q

How do you know

when to bump

a version number?

Tools

- PublicApiGenerator
- Microsoft.CodeAnalysis.PublicApiAnalyzers

Q. How do you know when to bump a version number?

A

There is no quick answer 😿

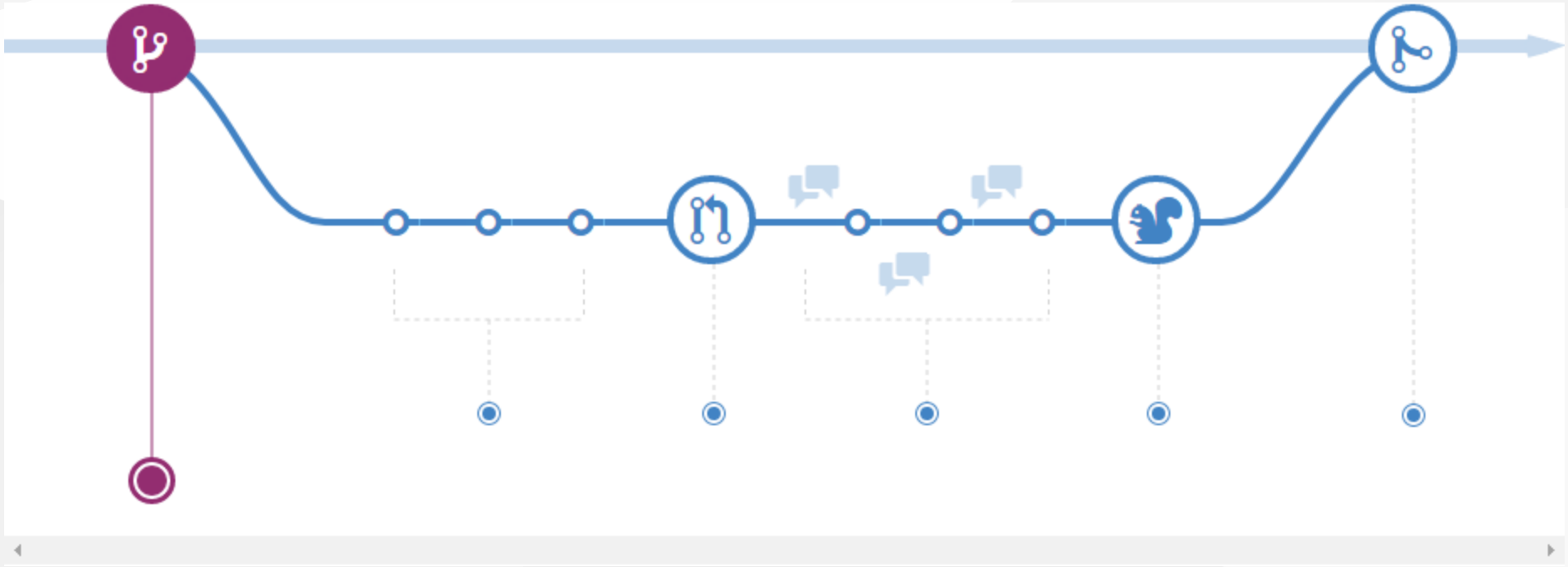
What

branching strategy

should I use?

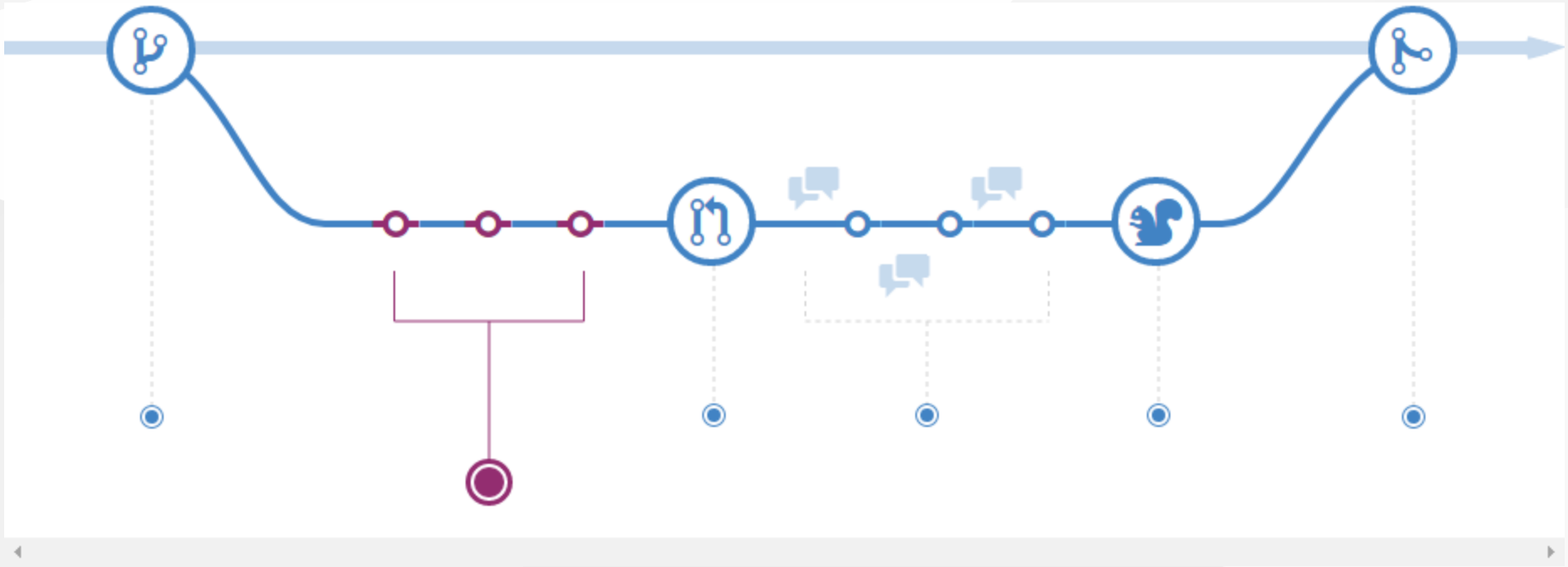
GitHub Flow

Create a branch



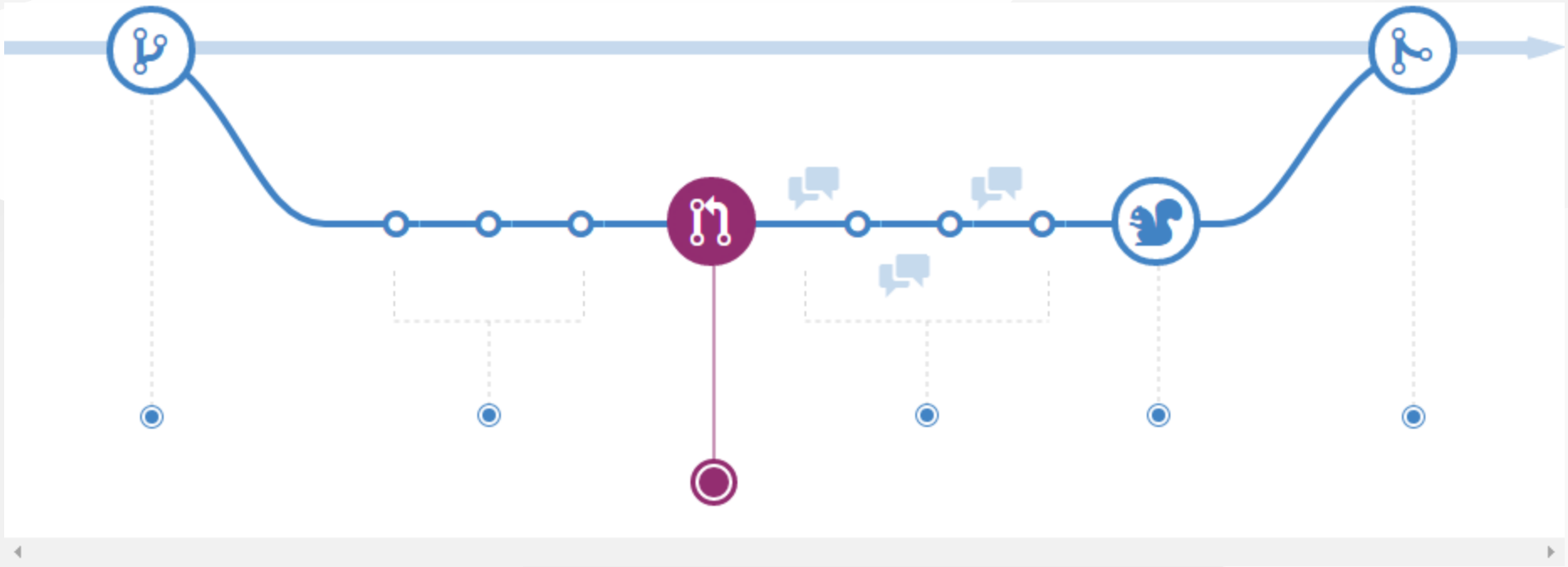
Images borrowed from the [GitHub Flow Tutorial]

Add commits



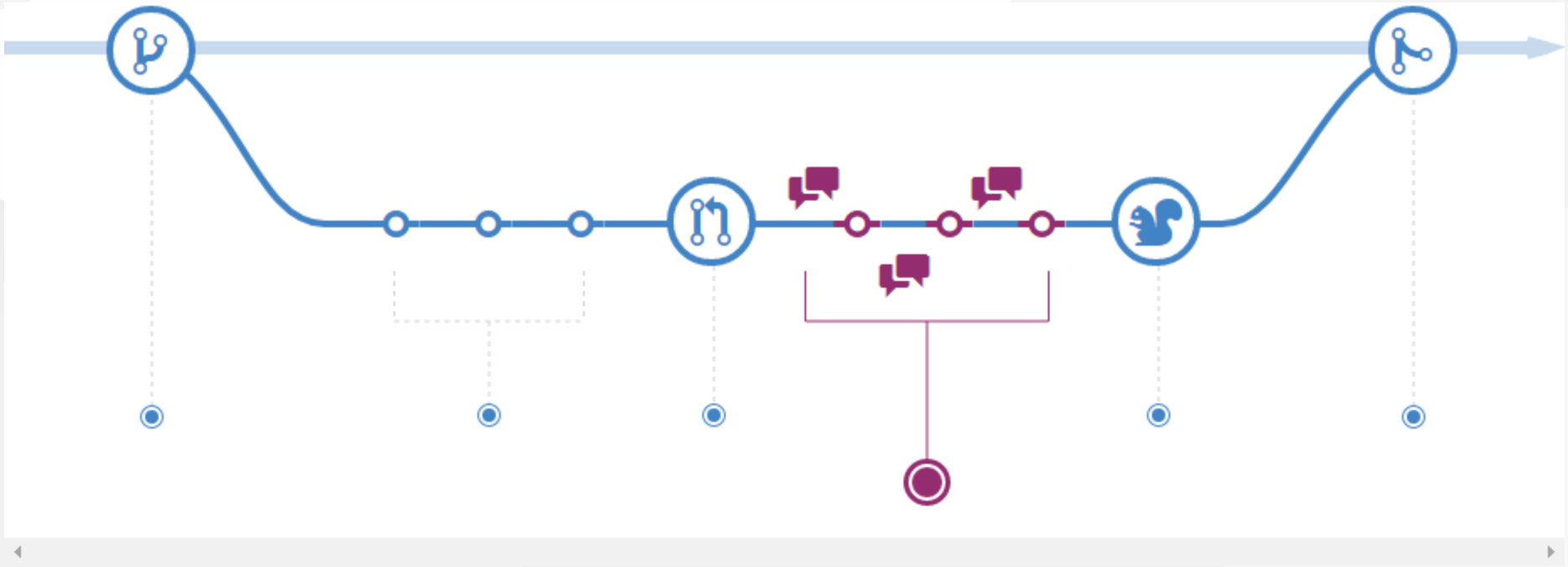
Images borrowed from the [GitHub Flow Tutorial]

Open a Pull Request



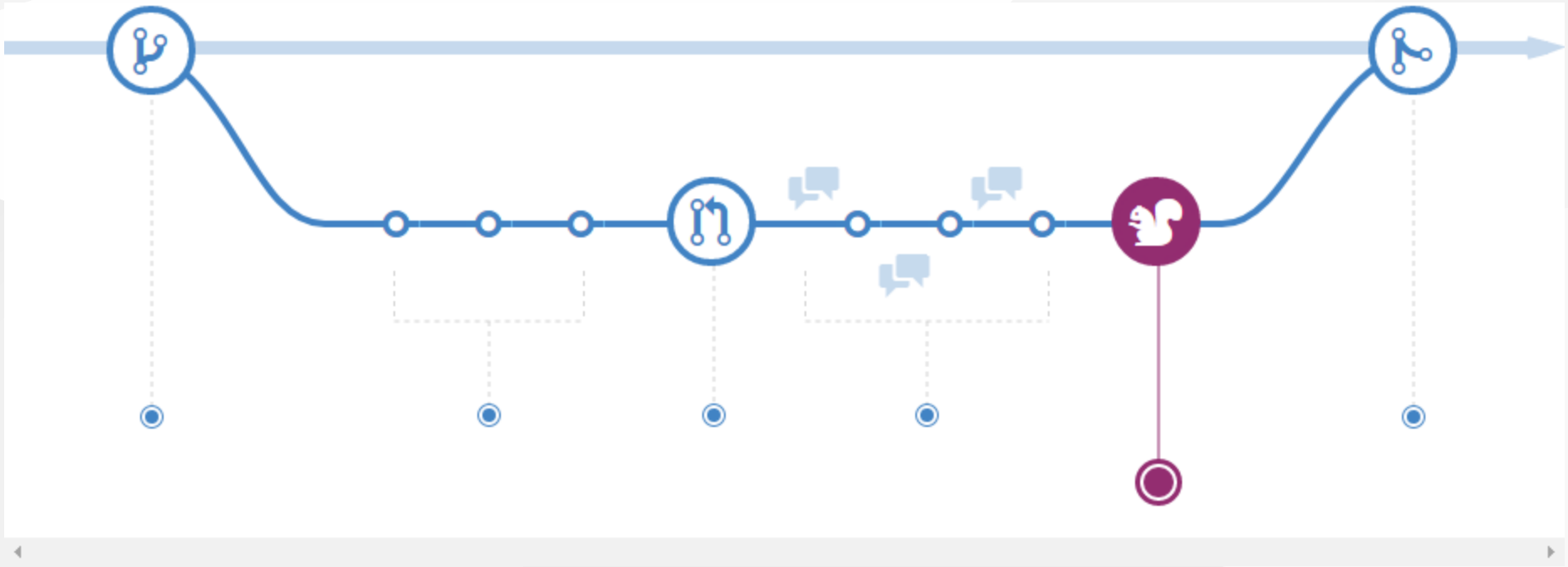
Images borrowed from the [GitHub Flow Tutorial]

Discuss and review your code



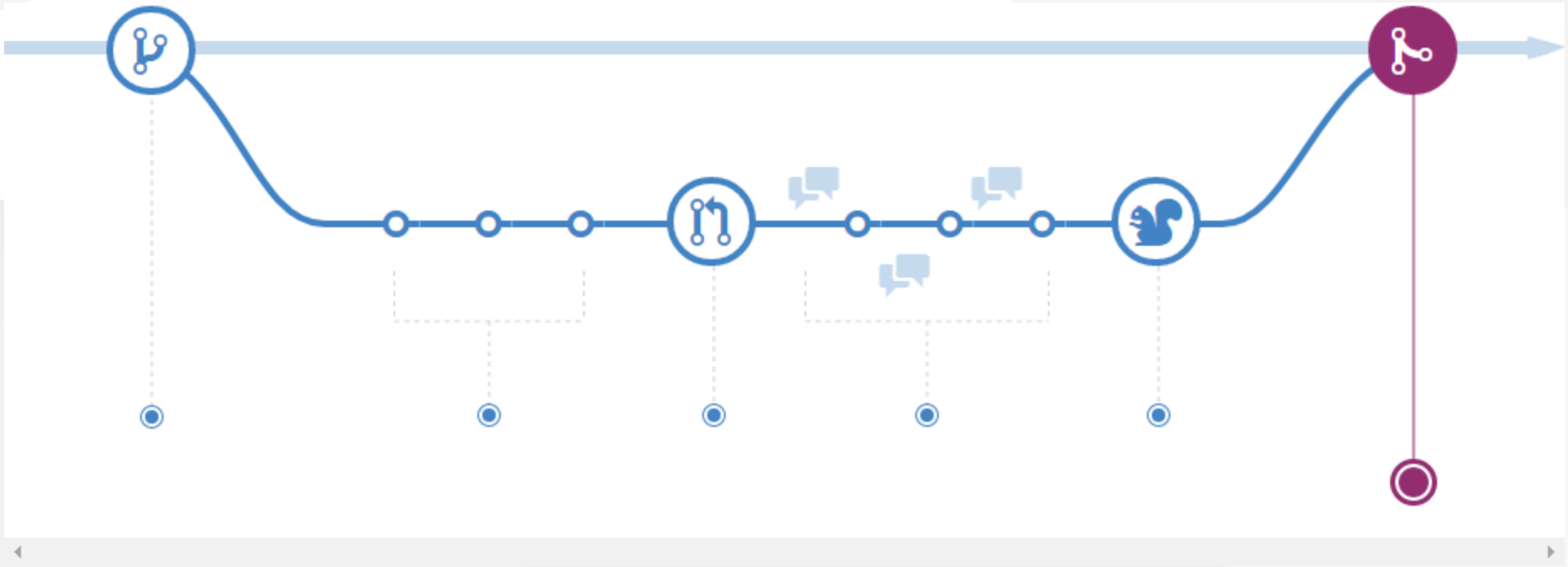
Images borrowed from the [GitHub Flow Tutorial]

Deploy



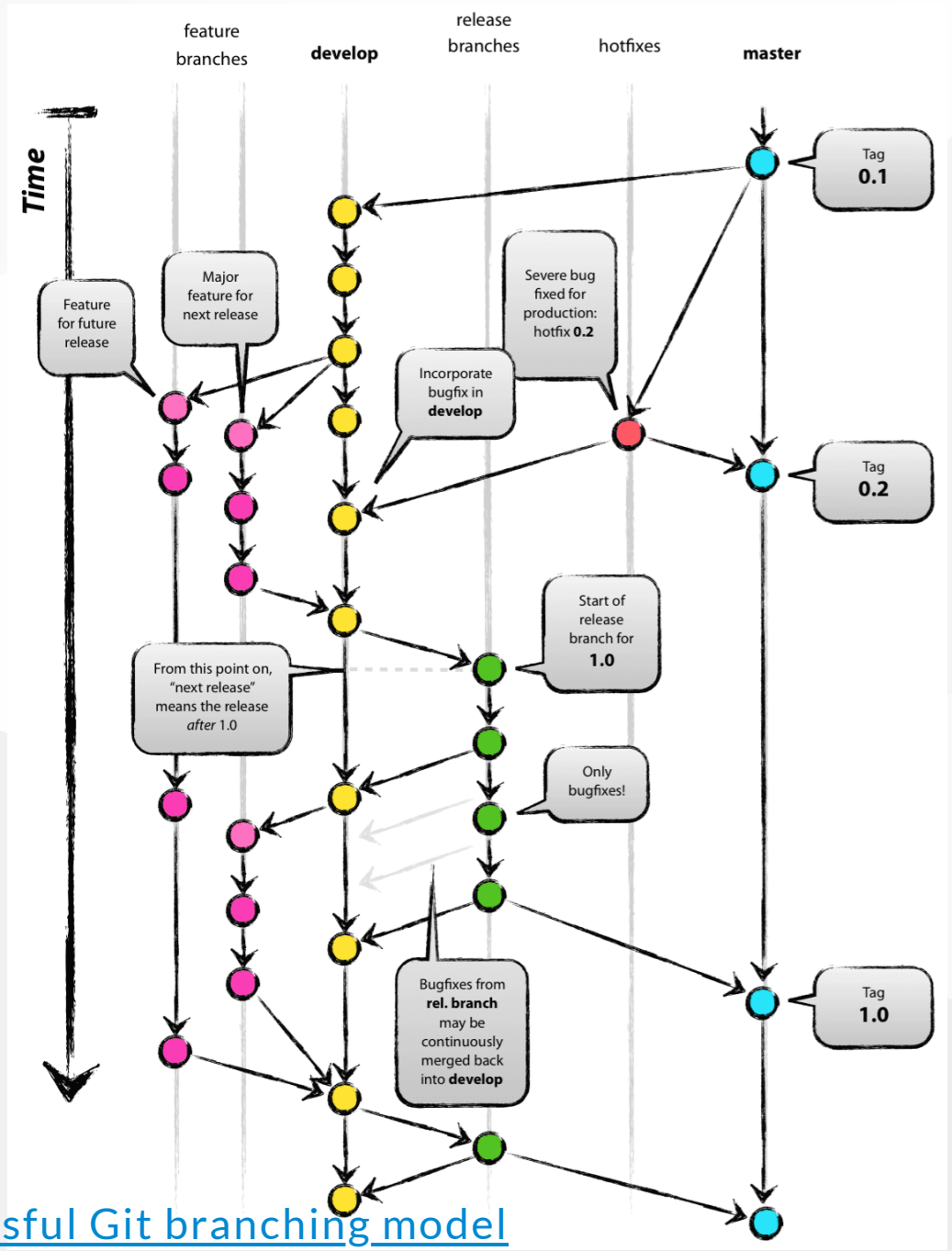
Images borrowed from the [GitHub Flow Tutorial]

Merge

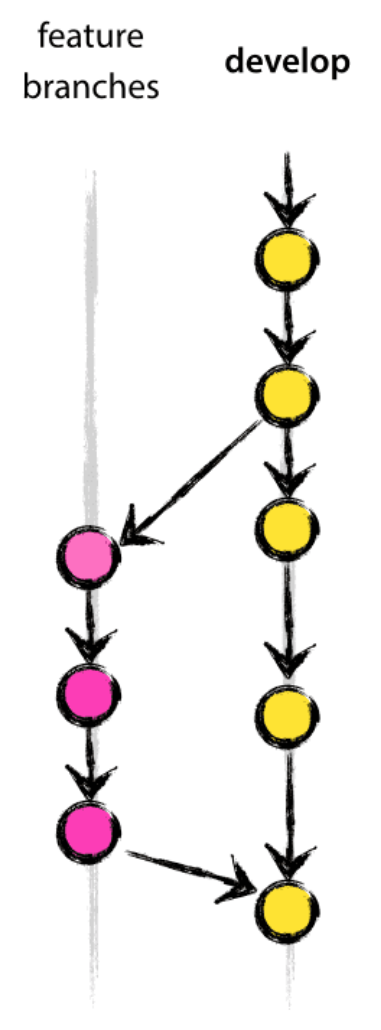


Images borrowed from the [GitHub Flow Tutorial]

GitFlow



Images borrowed from [A successful Git branching model]



Images borrowed from [A successful Git branching model]

Q. What branching strategy should I use?

A

It depends! 🤷

What is

GitVersion?

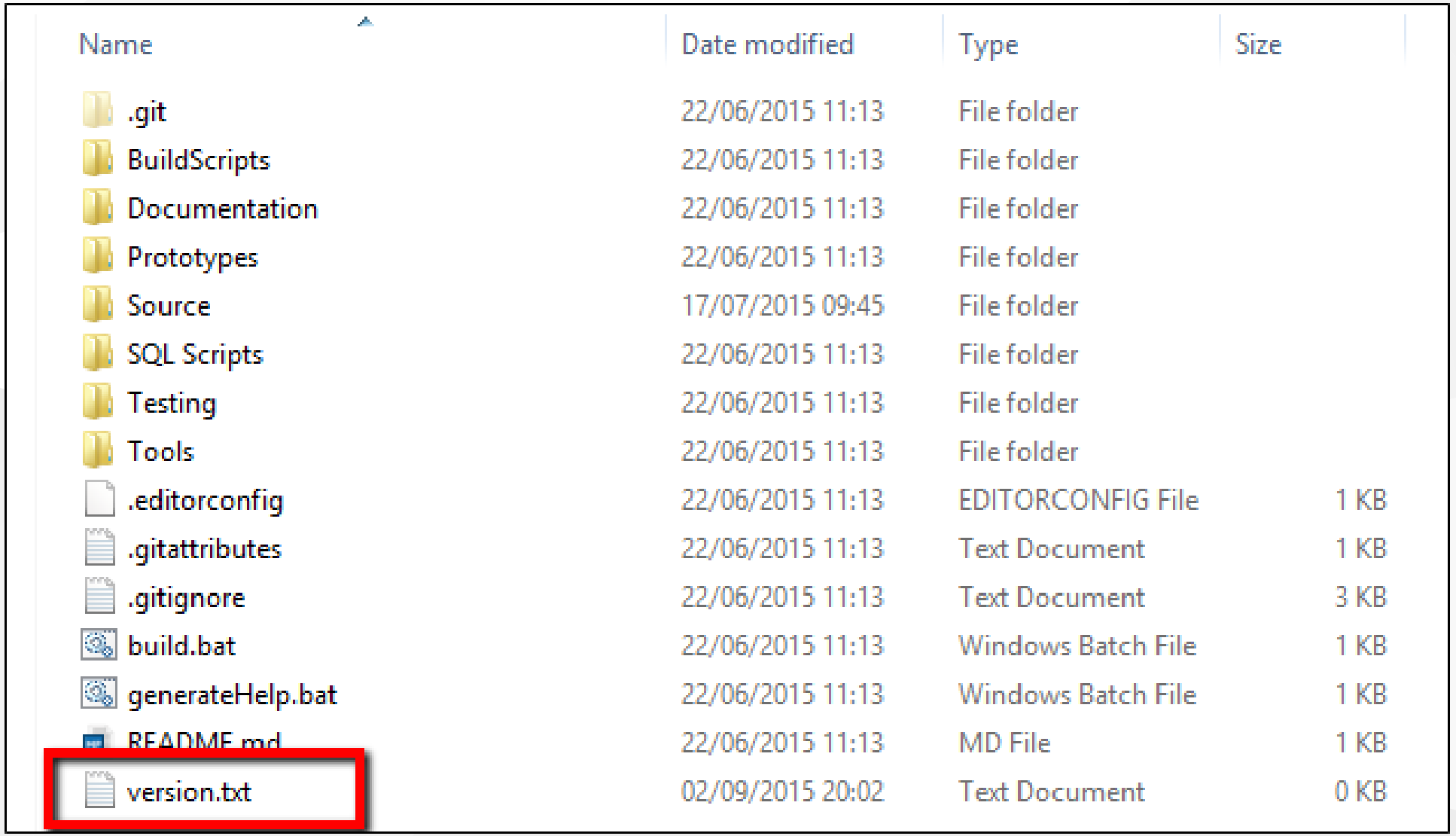
A

“...a tool to help you achieve Semantic Versioning on your project.

Demo

Why do I need

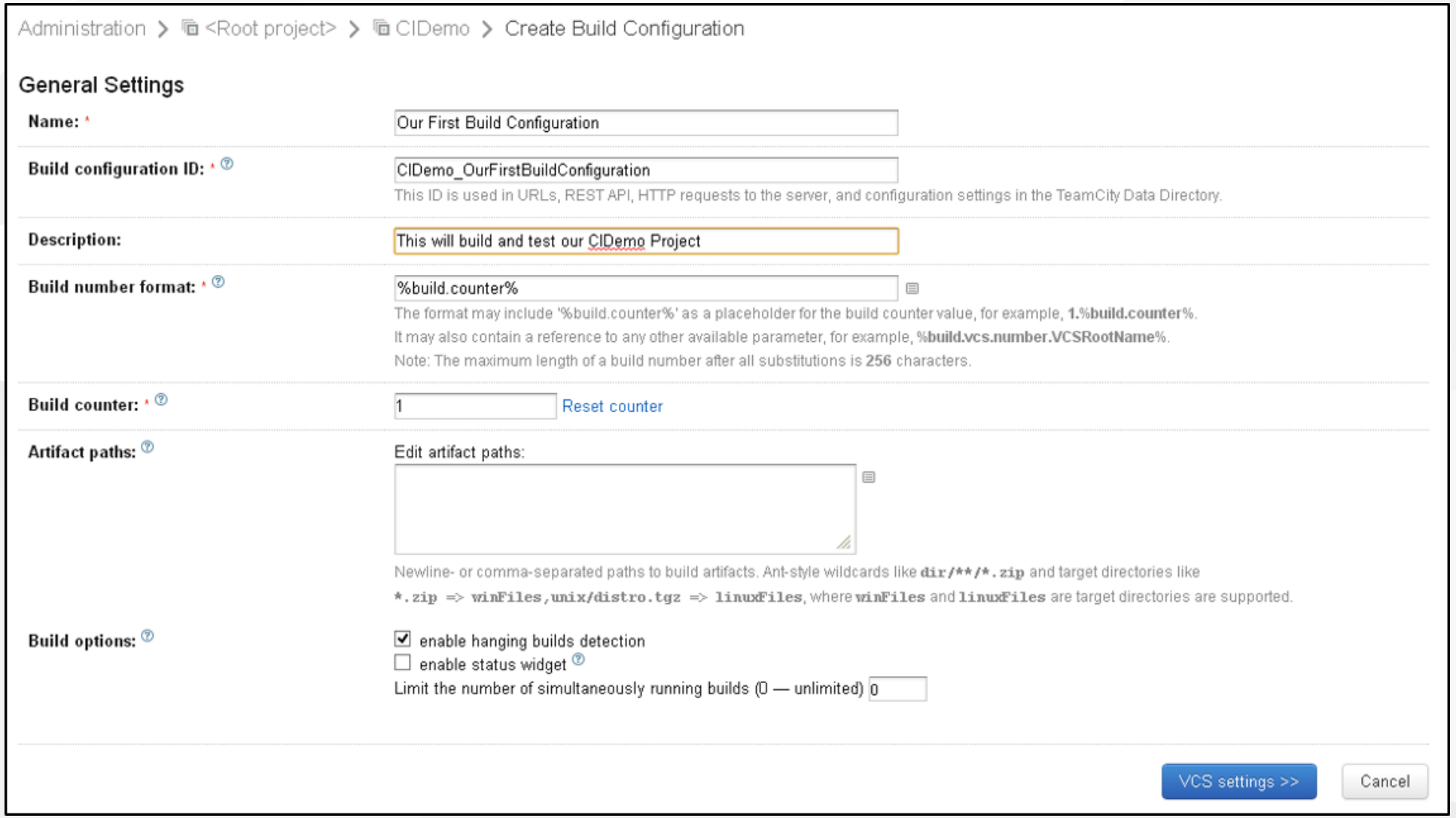
GitVersion?



Name	Date modified	Type	Size
.git	22/06/2015 11:13	File folder	
BuildScripts	22/06/2015 11:13	File folder	
Documentation	22/06/2015 11:13	File folder	
Prototypes	22/06/2015 11:13	File folder	
Source	17/07/2015 09:45	File folder	
SQL Scripts	22/06/2015 11:13	File folder	
Testing	22/06/2015 11:13	File folder	
Tools	22/06/2015 11:13	File folder	
.editorconfig	22/06/2015 11:13	EDITORCONFIG File	1 KB
.gitattributes	22/06/2015 11:13	Text Document	1 KB
.gitignore	22/06/2015 11:13	Text Document	3 KB
build.bat	22/06/2015 11:13	Windows Batch File	1 KB
generateHelp.bat	22/06/2015 11:13	Windows Batch File	1 KB
README.md	22/06/2015 11:13	MD File	1 KB
version.txt	02/09/2015 20:02	Text Document	0 KB

```
[assembly: AssemblyTrademark("")]
[assembly: AssemblyCulture("")]
[assembly: NeutralResourcesLanguage("en-GB")]

[assembly: AssemblyVersion("0.2.0.0")]
[assembly: AssemblyFileVersion("0.2.0.0")]
[assembly: AssemblyInformationalVersion("0.2.0.0")]
```


Administration > <Root project> > CIDemo > Create Build Configuration
General Settings
Name: *
Our First Build Configuration
Build configuration ID: *
CIDemo_OurFirstBuildConfiguration
This ID is used in URLs, REST API, HTTP requests to the server, and configuration settings in the TeamCity Data Directory.
Description:
This will build and test our CIDemo Project
Build number format: *
%build.counter%
The format may include '%build.counter%' as a placeholder for the build counter value, for example, 1.%build.counter%.
It may also contain a reference to any other available parameter, for example, %build.vcs.number.VCSRootName%.
Note: The maximum length of a build number after all substitutions is 256 characters.
Build counter: *
1
Reset counter
Artifact paths:
Edit artifact paths:
Newline- or comma-separated paths to build artifacts. Ant-style wildcards like dir/**/*.zip and target directories like
*.zip => winFiles,unix/distro.tgz => linuxFiles, where winFiles and linuxFiles are target directories are supported.
Build options:
enable hanging builds detection
enable status widget
Limit the number of simultaneously running builds (0 — unlimited) 0
VCS settings >>
Cancel

A

To make version assertion reliable and consistent

What is

GitReleaseManager?

Q. What is GitReleaseManager?

A

“...a tool that will help create, and manage, a release for your application/product.

Demo

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- Blog: https://gep13.co.uk
- GitHub: gep13

Questions

Learn More

- GitVersion Documentation
  - https://gitversion.net/docs/
- GitReleaseManager Documentation
  - https://gittools.github.io/GitReleaseManager/docs/
- Git Branching Strategies
  - https://www.atlassian.com/git/tutorials/comparing-workflows
- GitFlow
  - https://nvie.com/posts/a-successful-git-branching-model/