

# Home

## What is Beacon?

Beacon is a fast, cross-platform, modular, Java-based OpenFlow controller that supports both event-based and threaded operation.

Key features:

- **Stable** - Beacon has been in development since early 2010, and has been used in several research projects, networking classes, and trial deployments. Beacon currently powers a 100-vswitch, 20-physical switch experimental data center and has run for months without downtime.
- **Cross-platform** - Beacon is written in Java and runs on many platforms, from high end multi-core Linux servers to Android phones.
- **Open source** - Beacon is licensed under a combination of the [GPL v2 license](#) and the [Stanford University FOSS License Exception v1.0](#).
- **Dynamic** - Code bundles in Beacon can be started/stopped/refreshed/installed at runtime, without interrupting other non-dependent bundles (ie replace your running Learning Switch application without disconnecting switches).
- **Rapid Development** - Beacon is easy to get up and running. Java and Eclipse simplify development and debugging of your applications.
- **Fast** - Beacon is multithreaded, check out [performance benchmarks](#).
- **Web UI** - Beacon optionally embeds the Jetty enterprise web server and a custom extensible UI framework
- **Frameworks** - Beacon builds on mature Java frameworks such as Spring and Equinox (OSGi)

Ready to get started?

- [Quick Start Guide](#)
- [Your First Bundle Guide](#)

## Blog



### Beacon presented at HotSDN

David Erickson posted on Sep 19, 2013

Last month I presented Beacon at HotSDN'13 in Hong Kong, you can read the paper [here](#). You can also use the following BibTeX citation:



### v1.0.4 Released

David Erickson posted on Sep 13, 2013

Beacon version 1.0.4 has been released. The largest change is to the licensing, which has switched to BSD! Other changes are fairly minor. Head to the [downloads](#) page to get it.



### v1.0.2 Release

David Erickson posted on Oct 29, 2012

Beacon v1.0.2 has been released. You can view the [changelog](#) to see a list of bug fixes and improvements, and then get the new version on the [downloads](#) page. New to this release is an embedded tutorial bundle for use with the [OpenFlow Tutorial](#), and a set of archives that contain all the code, libraries, and documentation to get you going, plus Eclipse, the recommended Java editor. If you haven't completed a Beacon tutorial yet, give it a try today! I'd love to hear your feedback after completing it.

---



## Additional downloads for v1.0.0 release

David Erickson posted on Apr 13, 2012

I added [two new downloads](#) for the v1.0.0 release today. The first is a tar containing the OpenFlowJ v1.0.1 source code that is required when using the Beacon v1.0.0 source tar, and the second is a tar containing all the libraries needed to build and export Beacon (to your current platform) from the source package. If you use this package, Eclipse will not need to download and resolve the target from the network, which may be helpful for network-constrained situations, or if you find yourself needing to reset the target frequently.

---



## New Benchmarking Guide added

David Erickson posted on Jan 10, 2012

I've gotten a few requests on how to best configure Beacon for benchmarking so I've created a [Benchmarking Guide](#) discussing the topic. Please let me know in the comments if it is missing anything you would like to see!

## Recently Updated



• **sami Dabbour**

- [Configuration](#) commented Jun 11, 2015
- [Your First Bundle](#) commented Jun 03, 2015



• **Aziz Amerul Faozi**

- [Your First Bundle](#) commented May 07, 2015



• **Manogna Bheemineni**

- [Home](#) commented May 05, 2015



• **David Erickson**

- [Your First Bundle](#) commented Apr 26, 2015