

Proposal #: 1833H
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Nox 1.0 Feature Set

Overview

The following feature set defines Nox 1.0 in relation to the current stable version, Nox 0.5. While not exhaustive, this list provides the salient features relating to documentation, usability and system design. Note that in addition to the feature set mentioned, a number of bug and compatibility fixes will be included in the Nox 1.0 code base.

Feature	Description
OpenFlow 0.9 support	A branch of Nox 1.0 will support the 0.9 protocol. Multiple OpenFlow protocols will not be supported simultaneously.
OpenFlow 1.0 wire-compatibility support.	Support for 1.0 wire format. Not all OpenFlow features will be exposed through Nox, though extension of the code base should provide the full feature set.
Doxygen documentation	Inclusion of Doxygen documentation markup and initial documentation for the infrastructure and core components.
Reduced component complexity	A number of the seldom-used components which increased compile time and caused confusion will be removed from the code base. These include persistent storage and many of the web services interfaces.
Improved access to network events	The authenticator component will be extended to include logic for detecting new hosts on the network and addresses associated with those hosts.
Support for static linking	The build system will be updated to support static linking. This is particularly important for cross compilation environments in which the binary is to be moved to an embedded platform.

Feature	Description
Integrated system testing harness	In addition to the existing unit testing framework, Nox 1.0 will include a testing harness that will execute full system-level tests.
Improved utf8 support	String handling on the backend will support both ASCII and utf8 encodings without error.
Compatibility updates	Support for more recent versions of boost, xerces, automake, g++ and libtool will be added to the codebase.