

# Chapter 1

## Autoconfiguration

### 1.1 About This Manual

Installation options for GateD depend on which version of GateD you are using and on how many architectures GateD will run.

You can use the autoconfiguration option if you are running on one of the supported operating systems. Supported operating systems include:

- Solaris 8 (32 and 64 bit)
- NETBSD 1.5
- FreeBSD 4.2
- BSD/OS 4.2
- Linux 2.4
- VxWorks 5.4.2

For a complete list, contact [support@nexthop.com](mailto:support@nexthop.com).

This manual gives examples of how to use autoconfiguration for a single-architecture build or for a multiple-architecture build. It also gives information on using manual configuration.

### 1.2 Overview

GateD uses GNU autoconf to detect platform-specific configuration options. Future versions will also support autoconfiguration. You do not need to install autoconf to build GateD. By default, GateD is compiled with all protocols available. You can disable support for some protocols using command-line flags.

### 1.3 Getting Started

To compile GateD for a single architecture with all supported protocols, use the following from the top level of the GateD release:

```
./configure
make depend
make
```

### 1.4 Compiling GateD for Multiple Platforms

To compile GateD for multiple platforms, do not build GateD in the original location. If you have already compiled for a single architecture, you can clean out the original location by typing:

```
make distclean
```

**make distclean** may be used to clean the program binaries and object files from the build directories. This target also removes files that **configure** created.

The example below shows how to build GateD for a single architecture, using **gated-u** as the source base for the directory:

```
cd gated-u
mkdir -p obj/myarch
cd obj/myarch
../../configure
make depend
make
```

New directories should be created under **obj** for each supported architecture by reiterating the above steps for different **myarch**'s

**Note:** When **make distclean** is used, the Makefiles generated in directories that were not entered during the build process are not removed. This set of directories is configured based on user request (e.g., flags to '**configure**') and operating system support.

## 1.5 Disabling Support for Specific Protocols

A list of compile time options can be generated by typing:

```
configure --help
```

Protocols may be disabled at compile time to prevent them from being compiled into the GateD binary. The **--disable-all** flag can be used to disable all protocols, allowing fine control over the enabled subset. For example, to build a GateD binary with only the OSPF protocol use:

```
configure --disable-all --enable-ospf
```

Protocol dependencies are automatically resolved by **configure**. For example, enabling the BGP module causes the ASPATH's module to be enabled.