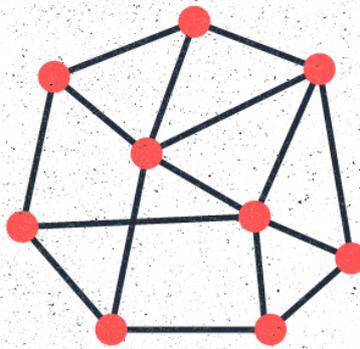# Best Network Simulators for Cisco CCNA, CCNP & CCIE Exams
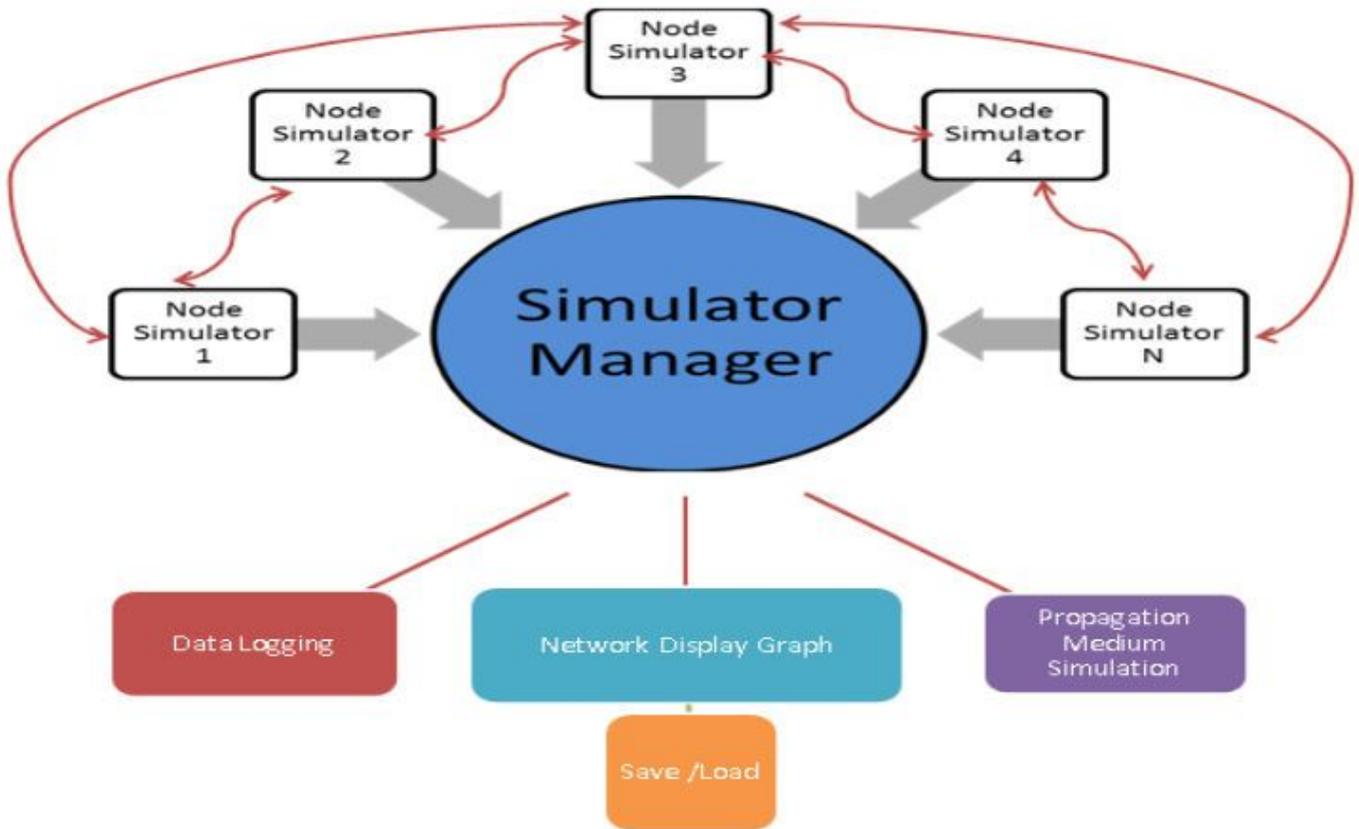
Network Simulators for Cisco CCNA, CCNP & CCIE Exams

Cisco has been the gigantic leader in the networking and technology community providing commercial solutions ranging from personal networking devices covering **PAN area** to enterprise solutions that provide connectivity across the globe. They have an impetus position in the market today and hence has been the eye of the entire tech community. Professional strive to get an overedge among their peers by getting trained with the expanding technology horizon.

What are Network Simulators?

Network simulators have been playing a key role for students preparing for their certification tracks, especially in the closing dates. With multiple scenarios to dangle with, it becomes crucial for professionals to visualize the implementation of the infrastructure while testing them as per the scenarios.

Network simulators are software available to simulate networking topology that may comprise of multiple networking and internetworking devices. These software are capable of simulating real networking devices but are bound by the limitations of commands and features that are already programmed into them, making them difficult to study scenarios like Policy Based Routing, etc that can only be observed using real networking devices.

Professionals have been using these to practice and prepare for their certifications as well. Once you start preparing for the exam, it becomes irrelevant at times how simulators with more featured is the go-to tool. How simulations can effectively replicate the scenarios with all the essential metrics in place is what the most aspirants sought for.
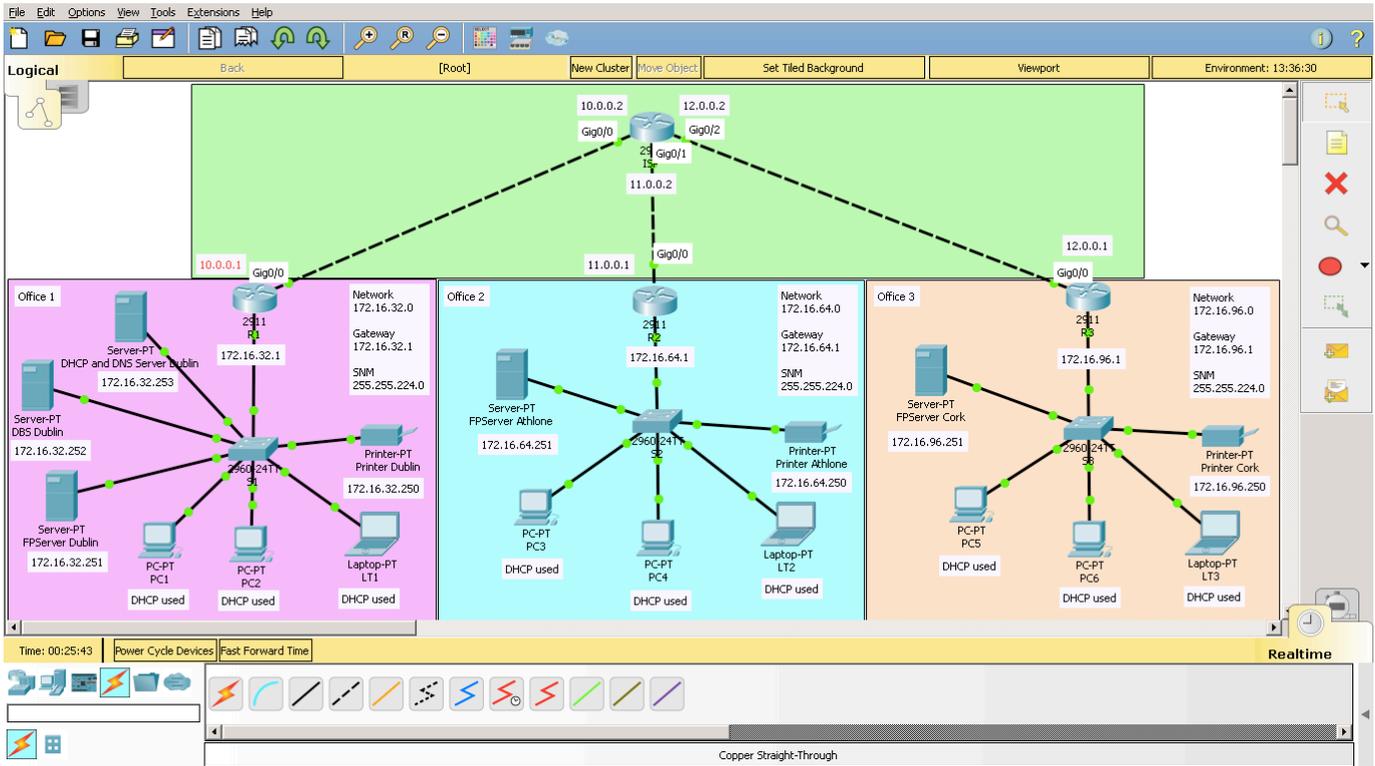
Most recommended Network Simulators

The software provides assistance with preparations and is probable. Simulations softwares are used primarily to study the network infrastructure of the organization or any test case at hand. A comprehensive list of tools has been listed below that covers most of the proficient tools.

1. Packet Tracer
2. GNS3
3. NetSim

1. Packet Tracer

Being the Cisco proprietary network simulation tool, Packet Tracer is capable of simulating Cisco networking and internetworking devices namely routers, switches, firewalls, etc. The software was initially a part of the education aid of **NetAcad** but later was made available for

public use for free.

Pros :

The application is available for free and has a very good cross-platform

usage. Availability of a variety of devices & connections to provide a realistic approach towards labs.

Realistic Terminal enables a user to configure and troubleshoot technologies on the devices through command line interface.

Cons:

The devices available are limited to Cisco and hence, people willing to try [hands-on](#) other technologies need to look for other alternatives to expand their horizons. Also, Packet tracer lacks built-in labs which are overwhelming for any new users that have just started working with the simulator.

2. GNS3

[GNS3](#) is a very popular network emulation tool that covers a wide variety of vendors apart from Cisco. The simulator is available in the client\server application.

Pros:

The software package for free to use for any individual and provides community labs. The network topologies can be modified as the requirement.

Being an open-source project, the guidelines for all aspects of your requirements are available at ease in an excellent format.

Cons:

Running real-time Cisco software would require proprietary Cisco Softwares or IOS images. Complex setup process for running simulations as well as the requirement of multiple components to run the latest version of software.

3.NetSim

NetSim, as it is popularly called Boson NetSim, is a simulator put forth by the Boson IT organization to assess and provide high-quality training for professionals seeking Cisco certification.

Pros:

Scenarios developed pertaining to specific [Cisco exams](#) and providing high-quality [Lab](#). Allows access to realistic features of a network terminal and device customization options.

Cons:

Paid Tool and licensing fees for each Cisco module, keeps a number of users away pushing them towards their Cisco alternatives.

The lack of simulation modes, lack of topology information and customization options make it a difficult choice for many aspirants as twerking of network topology is difficult.

Each of the alternatives as discussed pertains to a specific type of networking professionals and hence selecting the most viable options for one's preparations rests greatly in the hand of the professional itself.

Professionals working at Networkers Guru have been proficient enough to make use of the simulation software to work on the technology available. Hence, we provide real lab access as well as simulation practice sessions to provide an overall network coverage session for the candidates that are interested in pursuing [Cisco certifications](#). If you are interested in pursuing your Cisco Certification with us, [reach out to us](#).