

# Application Brief: R&D and Training

One of the biggest complaints of networking hardware customers is that the network management software is rarely ready when the hardware is released. Executives of hardware companies are frequently reminded of this during user group meetings. But let's face it – hardware manufacturers are constantly between a rock and a hard place.

This is exemplified by the two major obstacles for Cisco management application developers and QA groups:

1. They need the latest hardware in order to develop the control and configuration software. Normally, they have to wait at least until a beta version of the device is ready. The device management application, therefore, cannot be shipped along with the device or the launch has to wait until the application is ready.

2. The hardware, instead of going to external customers, is diverted to internal customers, hence taking it out of the revenue stream.

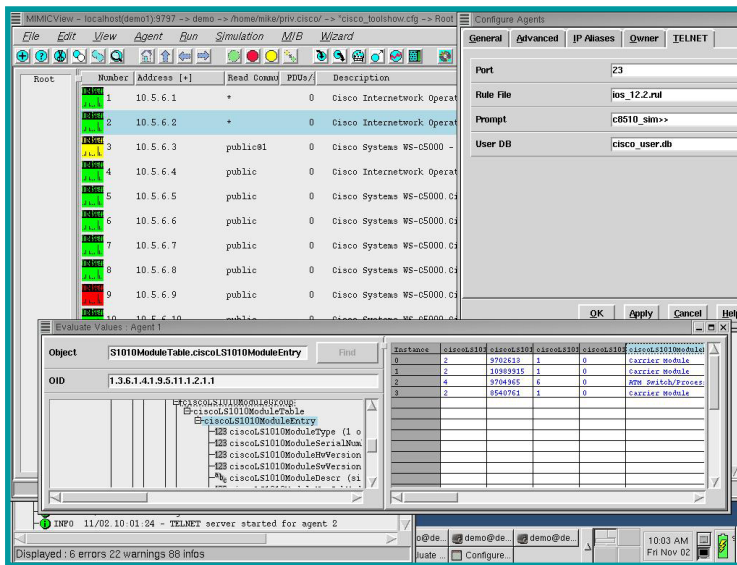
3. They need a lab full of equipment to create the real world networks. This is not only expensive, but also difficult to setup and maintain.

Cisco certification training providers and students also face these very same issues when they try to create

## MIMIC IOS Simulator

a variety of real-world scenarios and hardware configurations.

When confronted by these obstacles, many companies have turned to Gambit Communications' MIMIC agent simulation and IOS simulation products. MIMIC Simulator can be used in various organizations within device manufacturers. It is especially effective in controlling the costs associated with network management software development, while helping to move new hardware to the shipping/revenue phase quickly.



*MIMIC View: Easily configure Cisco agents individually or in a group, each with its own device type, IP address, port and community.*

MIMIC Simulator creates a virtual lab populated with thousands of Cisco or other types of devices. This helps to ensure the quality and scalability of management applications and to provide an adequate training lab. With the “virtual lab,” users enjoy unlimited access to virtual hardware devices – it's like giving each developer and tester their own personal lab.

The introduction of the MIMIC IOS Simulator, the industry's first integrated Cisco IOS® and SNMP simulation tool, allows users to simulate real-world network environments more completely. MIMIC IOS Simulator provides access to all the IOS commands in the simulation through a command line interface: for example, *set* (to set specific parameters), *show* (to display the current parameters) and *config* (to change the status of devices, such as setting SNMP access passwords). Developers and training providers have the ability to perform real-world IOS and internetworking testing and training using virtual Cisco devices.

MIMIC IOS Simulator ships with ready-to-use libraries of devices, networks and rules files for IOS simulations. This makes it easy to get started and to customize the environment.

MIMIC is a win-win for everyone:

Developers enjoy unlimited access to virtual hardware devices.

Customers appreciate receiving their new hardware **with** network management software.

Accounting likes to see internal hardware allocations decreased and revenue shipments increased.

Training providers can have a portable training lab with all negative/positive scenarios.

Students trying to receive certification can get a practice lab at home.

### Gambit Communications, Inc.

Founded in 1995, Gambit Communications is a leader in network simulation tools that enhance the productivity of network management developers and enterprise users while lowering their costs.



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**Your Best Move to Effective Network Management**

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# MIMIC IOS Simulator: Overview

**M**IMIC IOS Simulator fully supports Cisco IOS software and SNMPv1, v2, v2c, v3. Up to 10,000 devices can be simulated in a single workstation, and an unlimited number of devices can be simulated by distributing it over multiple workstations. An extensible environment allows new MIBs and devices to be added to the simulation. MIMIC IOS Simulator ships with

the following components to approximate a Cisco device:

**SNMP agent:** MIMIC simulates SNMP v1, v2, v2c, v3.

**IOS:** MIMIC simulates IOS in Telnet-enabled devices.

**Telnet:** MIMIC uses a standard Telnet server, allowing users to log into simulations in order to control the behavior and configuration of the simulations.

by capturing a “snapshot” of the device in operation. The Simulation can then easily replay the entire network.

**MIMIC IOS Recorder:** Enables users to make recordings of sessions between management stations and managed devices and to convert them into rules files for use with the simulations.

**MIMIC Compiler:** Import any SMI-compliant MIB and to extend the set of defined devices to support proprietary equipment.

**MIMICView:** A user-friendly GUI to manipulate the simulations.

**MIMIC Shell:** A command-line interface.

**Discovery Wizard:** Discover, record and simulate networks in a single step.

**MIB Wizard:** Import and compile multiple MIBs simultaneously.

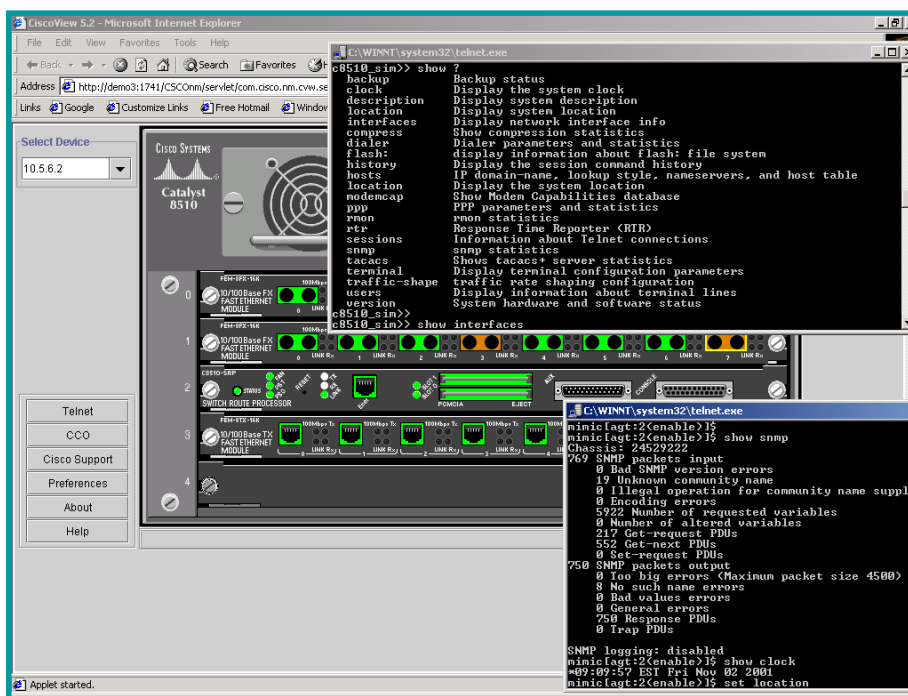
**Simulation Wizard:** Build a custom simulation quickly just by specifying the MIBs needed; seeding the simulation with values; specifying default values to use; or entering custom values.

**Topology Wizard:** Create topologies of devices, networks, their interfaces and interconnections.

**Update Wizard:** Provides notification of product updates and optional add-ons.

**Libraries:** Include devices from leading device vendors, like Cisco, Lucent, Nortel, and small and large networks, and over 1,200 MIBs.

**Platforms:** Supports Windows®, Solaris™ and Linux™.



*CiscoView configuring a Cisco Catalyst 8510 -- being simulated by MIMIC -- during a Telnet session.*

ready-to-go simulations for Cisco devices (such as the 3600, 6160, 6260, 6130, GSR 12000). In addition, the MIMIC IOS Simulator will support the following Cisco applications: CEMF (CDM, GSR Manager), CiscoWorks, CiscoWorks 2000 and CiscoView.

## MIMIC Protocol Support

MIMIC IOS Simulator simulates

## THE MIMIC PRODUCT SUITE

**MIMIC Simulator:** Simulates an entire network. Configurations are run-time customizable. MIMIC responds to queries on any of its configured IP addresses, so it is as if the NMS application is talking to actual devices.

**MIMIC Recorder:** Simulates the behavior of devices on a network