GAMBIT COMMUNICATIONS CASE STUDY





MIMIC Simulator Helps Pepco Identifying and preparing for Crisis Situations

"MIMIC Simulator is a powerful tool that is easy to use. Because it has the ability to capture all the different SNMP versions, it minimizes the number of devices that need to be purchased saving money and lab space. "

Albert Jennings
PHI NOC Engineer



NMS discovering simulated devices By MIMIC Simulator

Pepco Holdings, Inc. is one of the largest energy delivery companies in the Mid-Atlantic region, serving about 2 million customers in Delaware, the District of Columbia, Maryland and New Jersey. PHI also provides energy efficiency and renewable energy services through Pepco Energy Services.

PHI uses various network management platforms (NMS) to manage their large production network. The engineers managing the network need to configure it to handle all issues and failures. This is a complicated task considering that there are new challenges appearing everyday. They needed a way to create all those problem scenarios in the test lab so they can configure NMS appropriately and train the engineers to identify the root cause of those problems. It was not practical for them to have a test environment to be of the same size as the production network. That made the task of recreating problems not only hard but many times impossible. To reconstruct the daily issues of a scalable product network, PHI decided to supplement their NOC environment with thousands of simulated devices, using MIMIC SNMP Simulator.

MIMIC enables PHI engineers to setup a scalable simulated network with 10,000 devices. They simulate different combinations of routers, switches, firewalls, WLAN controllers from many different manufacturers. Using the MIMIC Recorder they could duplicate their production network in the test lab. Their plan is to use the simulated network to create complex scenarios and test NMS thoroughly. That way they can take multiple snapshots to re-create events and identify interesting situations in the network. With MIMIC they can record and repeat events as and when needed which helps in performing the root cause analysis. MIMIC can enable them to run regression tests continuously for extended periods of time, and store those complex scenarios for future use. Also, MIMIC can generate a variety of traps from the simulated devices and create many worst case scenarios. Being able to simulate thousands of devices in a single workstation reduces the equipment and lab maintenance budget.

PHI has implemented MIMIC for testing of challenging situations, evaluation of new devices in the network before deployment and growth planning, and training the staff without impacting the live network.

MIMIC plays an important part in PHI's network planning, testing and training. It assists in performing the root cause analysis along with reducing capital expenditures.