



**codima**  
technologies

redefining the art of network management

autoVoIP™	autoVoIP™ Consultancy Kit	<b>autoVoIP™ Traffic Simulator</b>	autoMap™	autoAsset™	autoAnalyzer™ Consultancy Kit
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### Overview

autoVoIP™ Traffic Simulator is the unrivalled tool to address today's growing demand for simulation and testing to ensure successful implementation of VoIP networks.

### VoIP Today

Today's increasing VoIP usage requires complete solutions to ensure successful VoIP implementations. Simulating traffic and testing the limits of the VoIP network is crucial prior to operation. As is minimizing downtime and assuring quality of service on a daily basis to satisfy customers. An increase of a few percent in downtime per month equals hours of disrupted VoIP services.

### On autoVoIP™ Traffic Simulator

autoVoIP™ Traffic Simulator simulates VoIP traffic on all types of VoIP networks.

With add on Traffic Blaster, it measures quality of service and test the limits of a network by stress testing the VoIP network, an important task prior to installation.

Its advanced technology helps for example a consultant or an organization to prevent unnecessary project delays and future maintenance costs, as well as customer or client dissatisfaction.

autoVoIP™ Traffic Simulator can be used pre- and post deployment. It measures quality of service at different points on the network by simulating sythetic phone traffic.

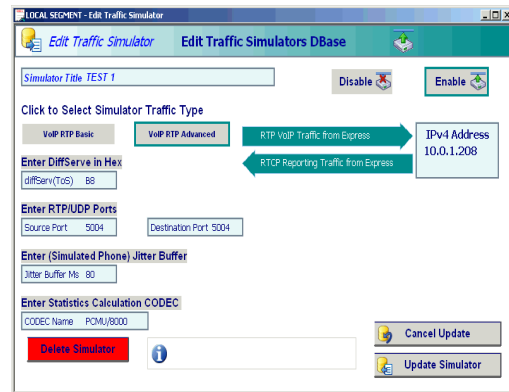
Add on Traffic Blaster stress tests the quality of service experience for each point on the network, when a traffic simulation is performed, by provding extra controlled loading of VoIP and non VoIP traffic.

Combining multiple autoVoIP™ Traffic Simulators with Traffic Blasters fully show the impact of adding groups of phones for example at different points on the network.

autoVoIP™ Traffic Simulator is created with the trademarks of Codima Toolbox, easy-to-use, cost efficient and highly visual.

autoVoIP™ Traffic Simulator can be deployed as stand alone or with add on module Traffic Blaster.

## Next Generation VoIP Testing Tools Simulates and Tests traffic to successfully deploy VoIP networks



### Value Proposition

- ▶ This is a true simulator which uses real RTP traffic sent at standard frame rates over UDP with RTP ports
- ▶ Combining multiple autoVoIP™ Traffic Simulators with Traffic Blasters fully show the impact of adding groups of phones for example at different points on the network

### Return On Investment

- ▶ Prevents projects delays  
Ensures QoS and customer satisfaction
- ▶ Lower installation costs

### Key Features

- This is a true simulator using real RTP frames, sent at standard frame rates over UDP with RTP ports. That ensures the QoS engineering in the network will treat the stream the same as normal VoIP Traffic - in contrast to an ICMP Pinger.

### Key Benefits

- Prevents unnecessary project delays
- Prevents future maintenance costs, keeping IT budgets on schedule
- Prevents customer or client dissatisfaction with the start up of the VoIP network

### Key Functions

- A minimum of two Host PCs are needed
  - One to run the Traffic Simulator
  - One to respond to the traffic, i.e., send back RTCP reports on the received traffic
- The remote end reports back using RTCP, in the same way a phone would. This method allows autoVoIP™ Traffic Simulator (and if required a third party) to measure jitter and frame loss
- Access automated Correlation Engine via the History Chart to find root causes
- Access report facility via the History Chart
- Multiple simulators may be defined to check multiple paths, such as remote sites on an occasional or continuous basis
- Can simulate multiple Codecs from one generator test stream
- Supports a number of Codecs, including:

PCMu	PCMa	G723 - 8k
G728	G726 -16	G729 - 8k
- Build traffic simulators\* - view the results associated with running the simulators\*
- Simulators provide user control of :
  - Target address
  - Priority (DiffServ)
  - Simulated phone jitter buffer
  - Codec used in statistics calculation show the impact on QoS when the Codec is changed

### Requirements

- Two Host PCs to provide platforms for :
  - Processor : 2 GHz or faster
  - Memory: 1Gb minimum
  - Operating System: Microsoft Windows XP Professional, Microsoft 2003 Server
  - Disk space : 30 Gb for live system
  - Monitor resolution : 1240 x 1024 (minimum)
- Sink System
  - Processor : 2 GHz or faster
  - Memory: 1Gb minimum
  - Operating System: Microsoft Windows XP Professional, Microsoft 2003 Server
- Disk space : 3 Gb for live system
- Monitor resolution : 1024 x 768 (minimum)

### Traffic Blaster

- Quality of Service (QoS) analysis - at a glance, see if VoIP is within safe limits, marginal or likely to be seriously degraded (6 color bands used)
- Sends out competitive traffic and non competitive traffic - to see what the QoS would be for a single user when different levels of VoIP and non VoIP traffic are present
- Multiple Traffic Simulators/Traffic Blaster systems can be used to emulate groups of phones at different locations on the network and monitor the QoS
- Safety facility, to ensure it does not send traffic out indefinitely - runs for 8 hours unmanned, stops and can be restarted manually, locally or remotely, for another 8 hours run
- Can be used to measure the effect of adding more phones to an existing VoIP system
- Distributed loading can be used to match the exact phone deployment together with independent QoS monitoring at each deployment cluster site
- Automatically explores the limits of the network, using autoCheck Mode it shows the QoS degradation as traffic patterns are automatically explored
- Automatically checks the QoS engineering using a sophisticated load generation algorithm
- Load specified by phone/codec using easy to understand phone counts
- Supports a number of Codecs, including:
  - G711 - 64k
  - G723 - 6.3k
  - G729 - 8k
  - Additional ones can be added
- Traffic loading may also be specified as bandwidth or frame loading
- QoS is measured in parallel for all simulation sites on the network giving a true indication of the behavior of the whole phone deployment
- Codima Correlation Engine provides an expert system to analyze the QoS graphs
- Results can be exported to HTML Reports