

GS Lab VmSat Tool

A VoIP monitoring and security assessment tool



VmSat – GS Lab’s VoIP monitoring/assessment tool – is designed to monitor, analyze and test VoIP infrastructure and services. This tool provides analysis of real time VoIP traffic including a quality metrics report and remedial reasoning for quality deterioration. In addition to this, VmSat can also assess VoIP network vulnerability using a sequence of generic attack templates. The attacks covered are flood attacks and message attacks.

VmSat is developed with the following objectives:

- Aid *owners/users* of VoIP infrastructure to test, audit, and uncover security vulnerabilities in their deployments,
- Help *third parties* test, audit, assess, and uncover security vulnerabilities in the VoIP infrastructure,
- Help OEMs of VoIP infrastructure test, audit, assess, and uncover security vulnerabilities in their VoIP products before shipping, and
- Use in collective educational and training endeavors for awareness creation.

| Capabilities | Enabling Features |
|---------------------------------|--|
| Real time monitoring of network | <ul style="list-style-type: none">▪ Monitoring of bandwidth utilization and QoS metrics using standard based calculations▪ Call stats/categorization▪ Filtering criteria such as IP address and caller name▪ Detection of power off and system crash situations |
| Attacks | <ul style="list-style-type: none">▪ Standard SIP protocol checks▪ SIP message attacks▪ Flooding attacks or DoS attacks |
| Custom attack templates | <ul style="list-style-type: none">▪ Generic attack templates and ability to take customized data set from administrators▪ Meta language API provided to create custom attacks |
| Discovery | <ul style="list-style-type: none">▪ Infrastructure discovery of SIP elements such as SIP server and SIP clients |
| Alarms and debugging | <ul style="list-style-type: none">▪ Graphical representation of entire SIP call flow based on trace criteria▪ Alarm generation on vital parameters such as too many consecutive failed calls, high delay, packet loss, etc. |

To learn more about GS Lab’s software assets and services, please write to us at services@gs-lab.com or visit www.gs-lab.com.