

Course Outline

Security Center 5.7 Training : Advanced Troubleshooting	
Code	SC-OTC-002 (5.7)
Duration	3 days
Target audience	Technicians, Administrators, and IT Professionals
Prerequisites	Genetec's technical certification training (either SC-OTC-001 or, SC-STC-001) Genetec's advanced technical certification (SC-ETC-001) CCNA (or equivalent) is recommended.
Objectives	<p>To equip the participant with a deeper understanding of Security Center's video architecture with an emphasis on troubleshooting, thereby increasing autonomy and decreasing reliance on Genetec's support:</p> <ul style="list-style-type: none"> • Understand and apply logical troubleshooting methodology • Understand Security Center's server architecture • Understand Security Center's video streaming architecture • Understand the basics of the RTSP protocol • Use built in troubleshooting tools • Use command-line IP utilities and Wireshark to diagnose networking issues • Use Wireshark to diagnose video streaming issues • Understand and configure SQL server to accept outside connections • Understand the Genetec server console and run debug traces • Understand the Genetec Security Desk console and run debug traces • Understand the Diagnostic task and configure the Genetec Harvester tool • Understand the Genetec servers' default logging options
Certification	An open-book, multiple choice exam will be given at the end of this course.

Topic	Description
Module 1 : <i>Introduction</i> (1 hours)	<ul style="list-style-type: none"> • What to expect from this course • Troubleshooting methodology • GTAC and GTAP • Documentation online
Module 2 : <i>Architecture review</i> (3 hours)	<ul style="list-style-type: none"> • Role based architecture • Processes • Default video streaming architecture • Archivers • Redirectors and Network view
Module 3 : <i>The Network</i> (4 hours)	<ul style="list-style-type: none"> • Networking review • The Media Router • Multicast requirements • Command line IP utilities • NIC configurations • Config Tool's built in troubleshooting tools • RTSP Basics
Module 4: <i>Built in Tools</i> (3 hrs)	<ul style="list-style-type: none"> • Server Watchdog • The Diagnostic task and Harvester Tool • Default server logs • Video File Analyzer tool • Diagnostic keyboard shortcuts • Remote health monitoring • Windows Task Manager, Performance Monitor & Resource Monitor
Module 5: <i>Packet capturing</i> (3 hrs)	<ul style="list-style-type: none"> • Capturing packets • Identifying the root causes of packet loss • Overview of packet capturing techniques • Capture filters • Display filters • HTTP capture settings • Following TCP streams • Decode video stream as UDP
Module 6 : <i>The databases(s)</i> (2 hrs)	<ul style="list-style-type: none"> • Security Center's databases • Role to database connections • Genetec Service user and SQL connection(s) • Configuring SQL for remote access • SQL Management Studio (Express) • Single-user vs Multi-user modes
Module 7 : <i>The console(s)</i> (4 hrs)	<ul style="list-style-type: none"> • Server Console <ul style="list-style-type: none"> ○ Directory Console traces ○ Archiver Console traces ○ Media router console traces ○ Access Manager console traces • Security Desk Console • Config Tool Console