

PROTECTRAIL (242270) - The Railway-Industry Partnership for Integrated Security of Rail Transport

Presentation of the demo

27 May 2014





ICT Demo Performed Scenarios

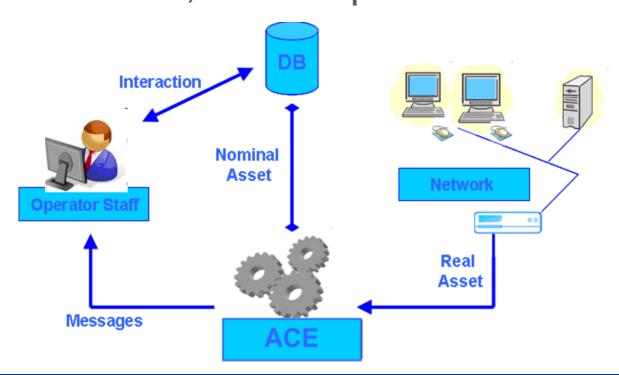
- Scenario 1: Asset Control
 - Unauthorised PC Connection or Disconnection of authorised devices;
- Scenario 2 : Asset Integrity
 - Cyber Attack: Conficker exploit against Win XP through a customized Metasploit distro.





Demo tools: ACE

Asset Control Engine detects differences in real time between real and nominal asset in the network, and outputs related alarms.







Demo tools: Log Correlator

Log Correlator collects logs incoming from security devices and performs <u>run time</u> correlation to detect:

- Unauthorised traffic;
- Cyber attacks.

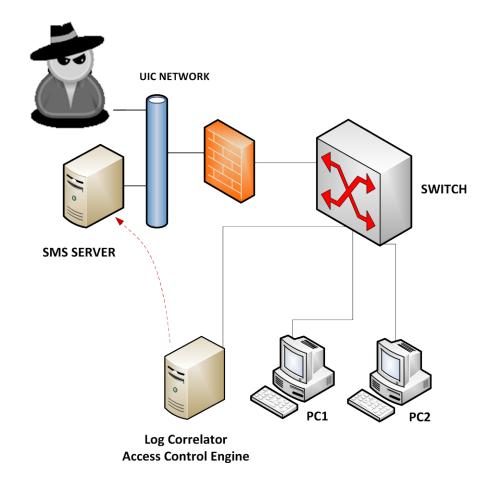








ICT Demo Architecture



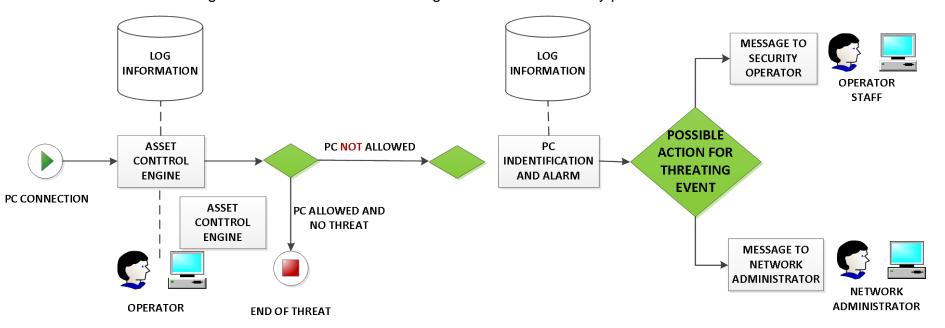




Demo Scenario 1

Scenario 1: Asset Control - Unauthorised PC connection

- √ Connection of an external host to ICT network.
- ✓ Asset Control Engine monitors ICT network configuration and detects any potential unauthorised intrusion.



Description

- ✓ ACE performs SNMP requests to switches and looks for differences between the real network and nominal asset in data-base
- ✓ ACE rises an Unknown Host Alarm if it is detected:
 - an IP address that is not included in the nominal asset.
 - a pair MAC and IP addresses not corresponding to the pair present in the nominal asset





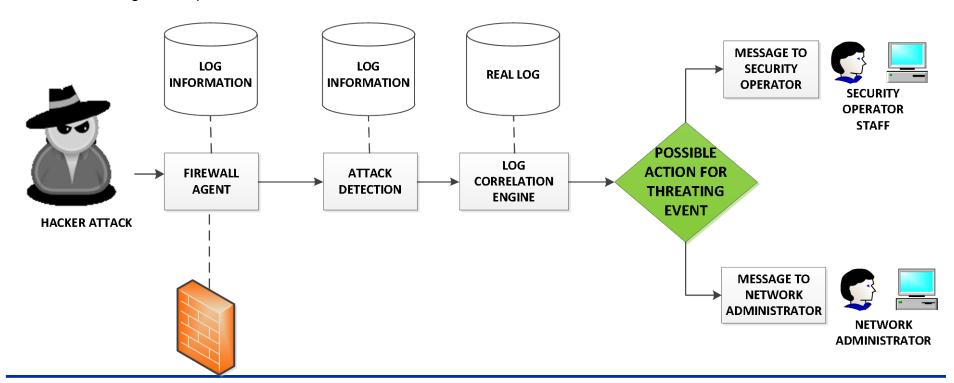
Demo Scenario 2

Scenario 2: Asset Integrity - Cyber Attack

✓ Hacker attacks for obtaining confidential information and/or compromise the availability of the ICT structure.

Description

- ✓ As the malicious connection (e.g. conficker exploitation) has been detected by the Firewall Agent, Log Correlation Engine performs a real time analysis of the recorded logs and detects the incoming anomaly.
- ✓ Armitage Metasploit tool will be used in order to simulate the attack scenario.







Thank you for your attention

