Module 6.0

Advanced EdgeView Functionality



edgewater NETWORKS

Module 6.0: Performance Objectives

1. Manage EdgeView features
    1. basic EdgeMarc management
    2. configuring status and notifications
    3. applying templates

Module 6.0: Hands On Labs

Lab 1: Exploring EdgeView CLI interface

Lab 2: EdgeView GUI Menu familiarization

Lab 3: EdgeView User Management Setup & Configuration

Lab 4: Configure HTTPS & Secure EdgeView

Lab 5: DB Backup & Working with Administrative Tools

Lab 6: Managing client EdgeMarc & nodes

Lab 8: Diagnostic Capture & Analysis

Module 6.0: Demos

Demo 1: Basic EdgeView & Report Server install & setup using CLI & YaST2

Demo 2: Sanity Check Menu

Demo 3: Overview of EdgeView capabilities

- Using web based Icon Bar / GUI Pages
- Viewing EdgeMarc Inventory by Tenant & Group
- Launching an EdgeMarc GUI from within EdgeView

Demo 4: VoIP Analysis & SIP Call Flow Ladder Analysis

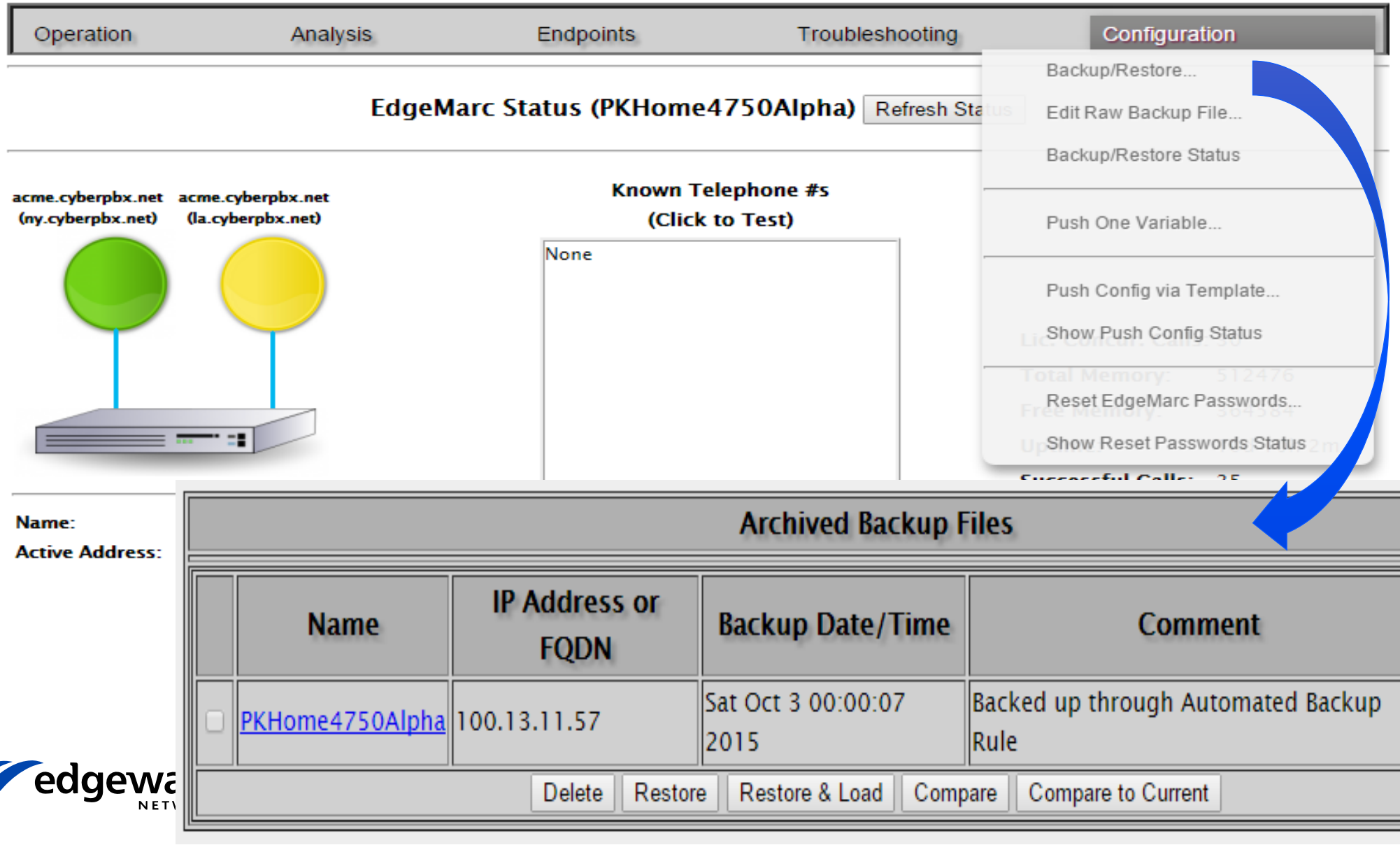
Demo 5: Report Server installation & configuration with EdgeView

Demo 6: Report Server overview of report capabilities

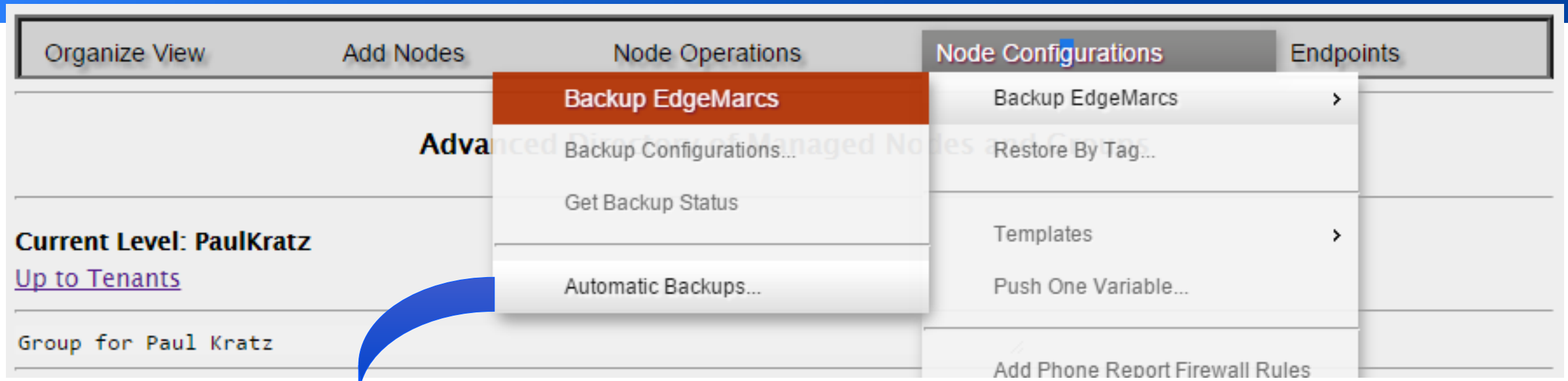
Lesson 6.1: EdgeView Common Functionality

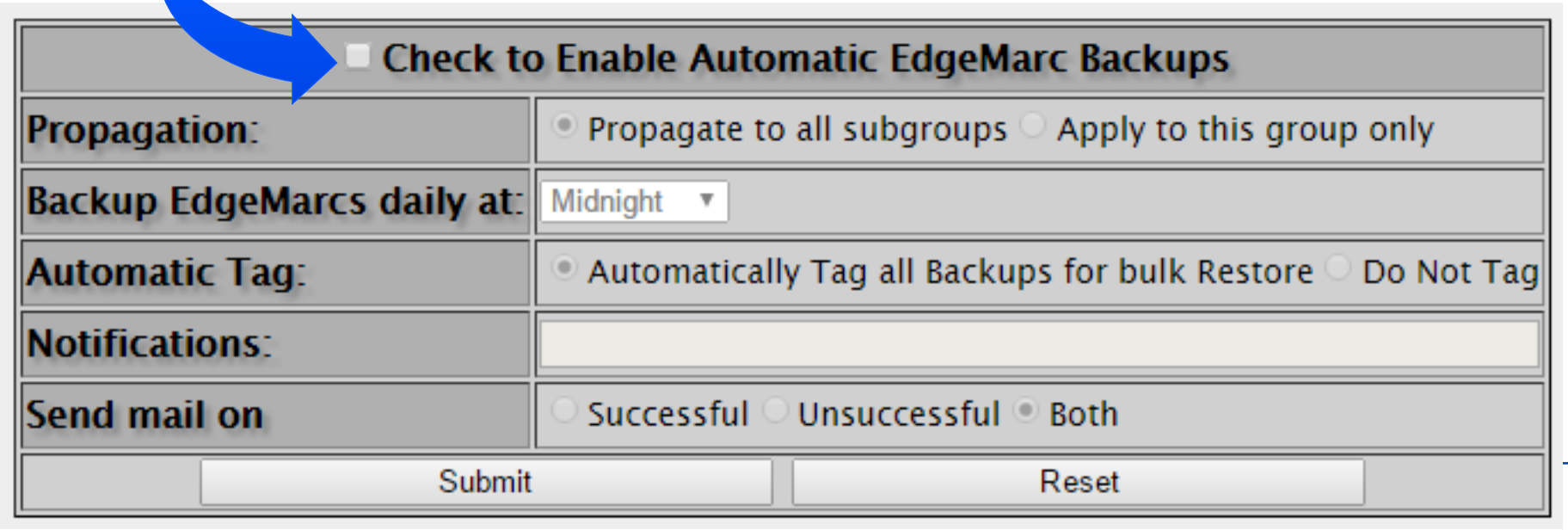
- Making Backups of Edgemarcs
- Signaling Captures & MAND logging
- Troubleshoot with Edgeview
- Report Server Overview
- New Edgeview Features for 14.1

Lesson 6.1: Managing Backups - Archived Backups



Lesson 6.1: Managing Backups - Automatic Backups

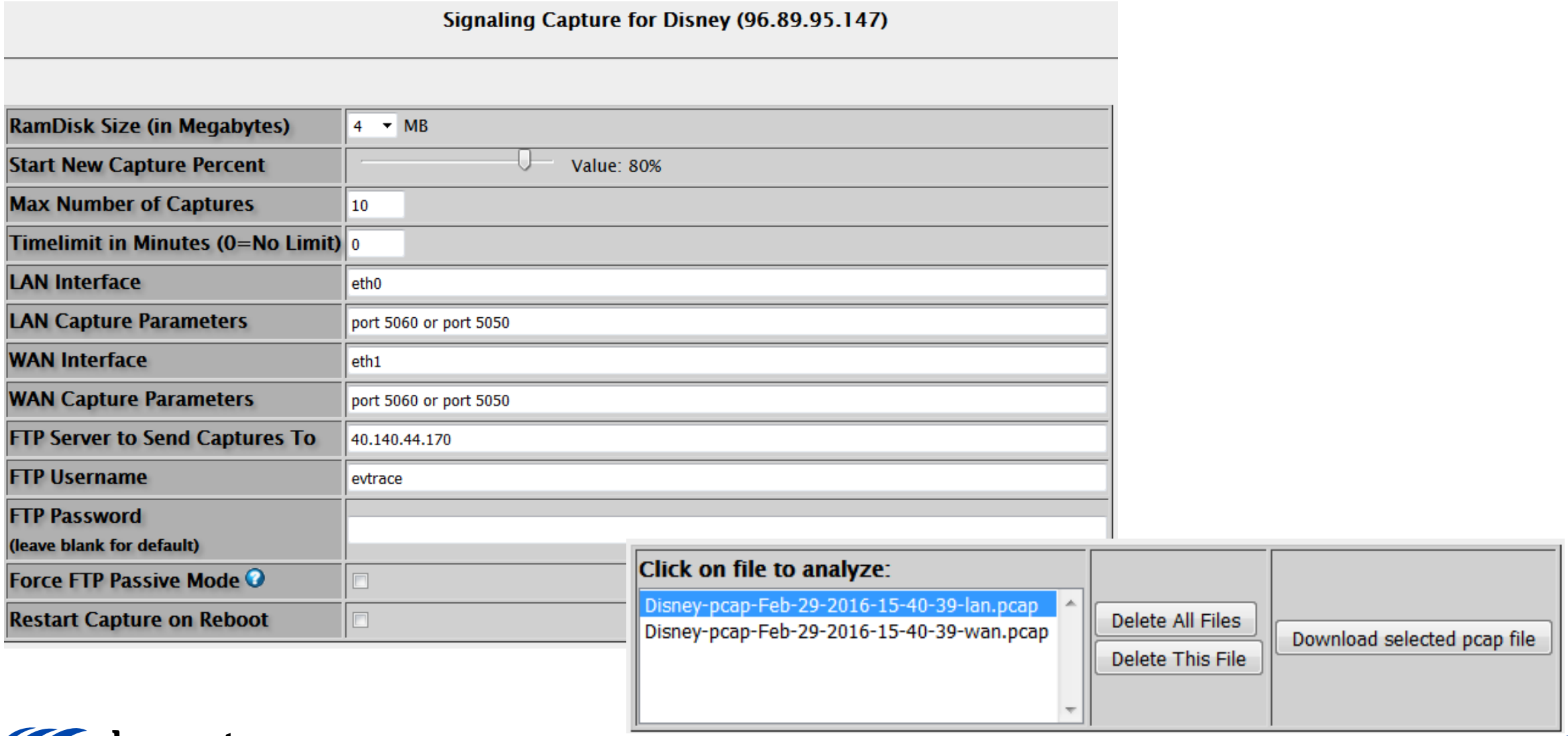




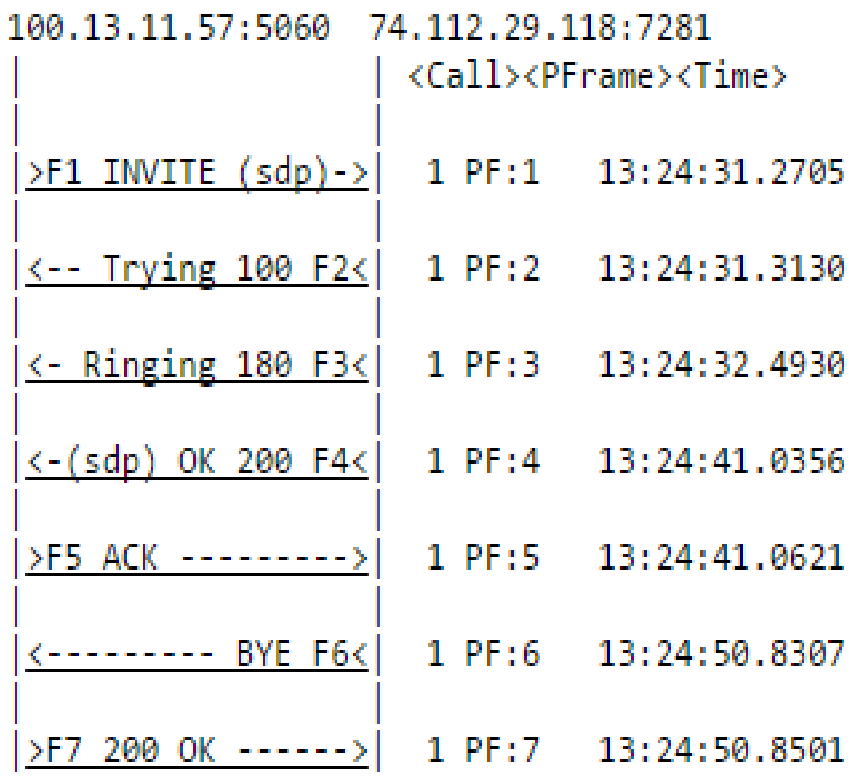
Lesson 6.1: Signaling Captures & MAND Logging

- We recognize that not all problems are able to be recreated on-demand
  - Intermittent, every third Wednesday in odd-numbered month problems are rare, but they do happen
- Wouldn't it be nice to perpetually capture all Signaling messages and have them automatically uploaded to your FTP server?
  - Hostname and time-date stamped for easy retrieval

Lesson 6.1: Signaling Capture – On Demand



6.1: Ladder Diagram



SIP MESSAGE 1 100.13.11.57:5060() -> 74.112.29.118:7281()
UDP Frame 1 29/Feb/16 13:24:31.2705 TimeFromPreviousSipFrame=0.0000 TimeFromStart=0.0000
INVITE sip:8132992616@acme.cyberpbx.net:7281;user=phone SIP/2.0
Via: SIP/2.0/UDP 100.13.11.57:5060;branch=z9hG4bK528988079C8FD386
Record-Route: <sip:4083517294@100.13.11.57;lr>
From: "4083517294" <sip:4083517294@acme.cyberpbx.net:7281>;tag=DC6A839D-4144BC34
To: <sip:8132992616@acme.cyberpbx.net:7281;user=phone>
Call-ID: a087aae1-773e3108-dece52ab@172.250.0.150
CSeq: 1 INVITE
Contact: <sip:4083517294@100.13.11.57:5060>
User-agent: PolycomVVX-VVX_1500-UA/3.2.2.0481
Supported: 100rel
Supported: replaces
allow-events: talk
allow-events: hold
allow-events: conference
Max-forwards: 70
Allow: INVITE, ACK, BYE, CANCEL, OPTIONS, INFO, MESSAGE, SUBSCRIBE, NOTIFY, PRACK, UPDATE, REFER
Content-Type: application/sdp
Accept-Language: en
Content-Length: 688

v=0
o=- 1456781070 1456781070 IN IP4 100.13.11.57
s=Polycom IP Phone
c=IN IP4 100.13.11.57
b=AS:256
t=0 0
a=sendrecv
m=audio 16834 RTP/AVP 115 102 9 0 8 18 127
a=rtpmap:115 G7221/32000
a=fmtp:115 bitrate=48000
a=rtpmap:102 G7221/16000
a=fmtp:102 bitrate=32000
a=rtpmap:9 G722/8000
a=rtpmap:0 PCMU/8000
a=rtpmap:8 PCMA/8000
a=rtpmap:18 G729/8000
a=fmtp:18 annexb=no
a=rtpmap:127 telephone-event/8000
m=video 16836 RTP/AVP 109 96 34 31
a=rtpmap:109 H264/90000
a=fmtp:109 profile-level-id=42800d
a=rtpmap:96 H263-1998/90000
a=fmtp:96 CIF=1;QCIF=1;SQCIF=1;K=1;N=1
a=rtpmap:34 H263/90000
a=fmtp:34 CIF=1;QCIF=1;SQCIF=1
a=rtpmap:31 H261/90000
a=fmtp:31 CIF=1; QCIF=1

Lesson 6.2: Troubleshoot with Edgeview

- Using the EVA to perform group level actions
- Using the EVA to monitor / maintain EdgeMarcs
- Using the EVA to troubleshoot EdgeMarcs

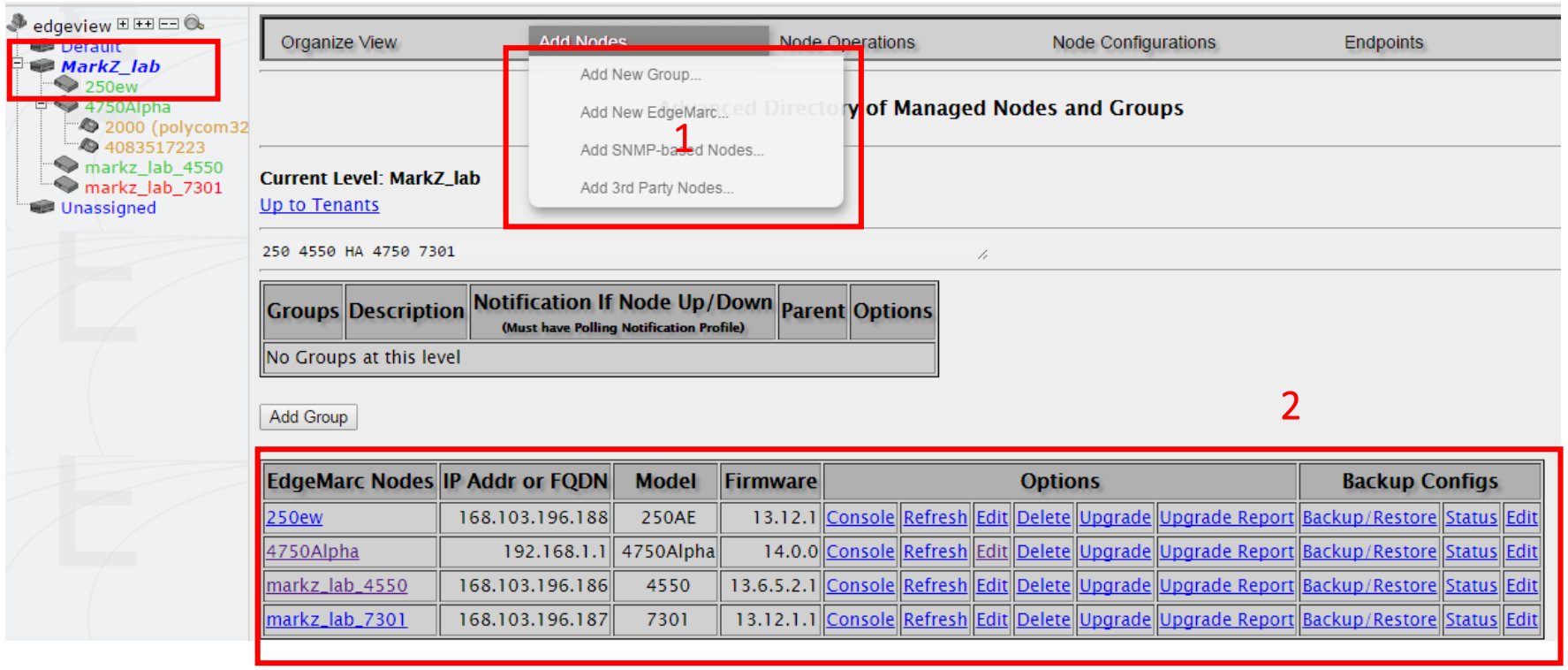
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Lesson 6.2: Perform group level management actions

EVA facilitates performance of group level administrative actions on a target classification of EMs

1: New group creation

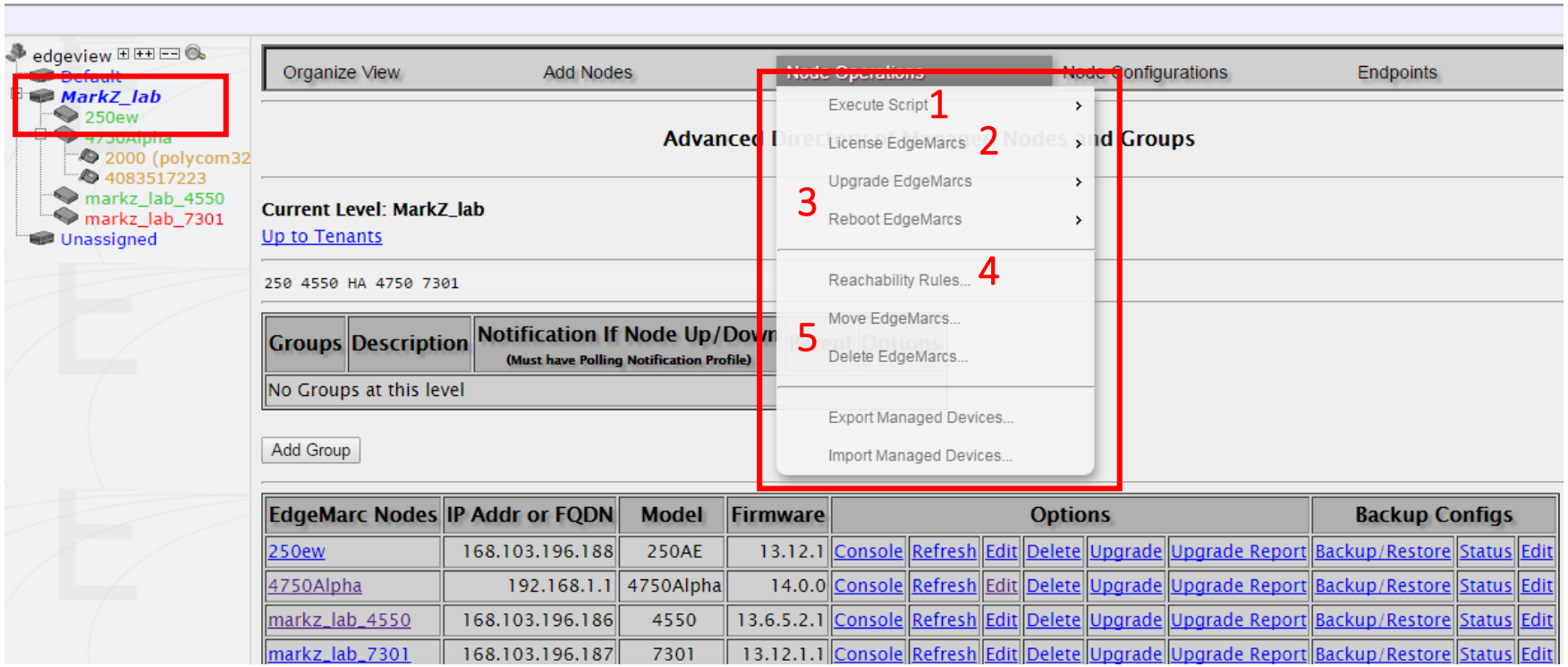
2: Group level management



Lesson 6.3: Perform group level management actions

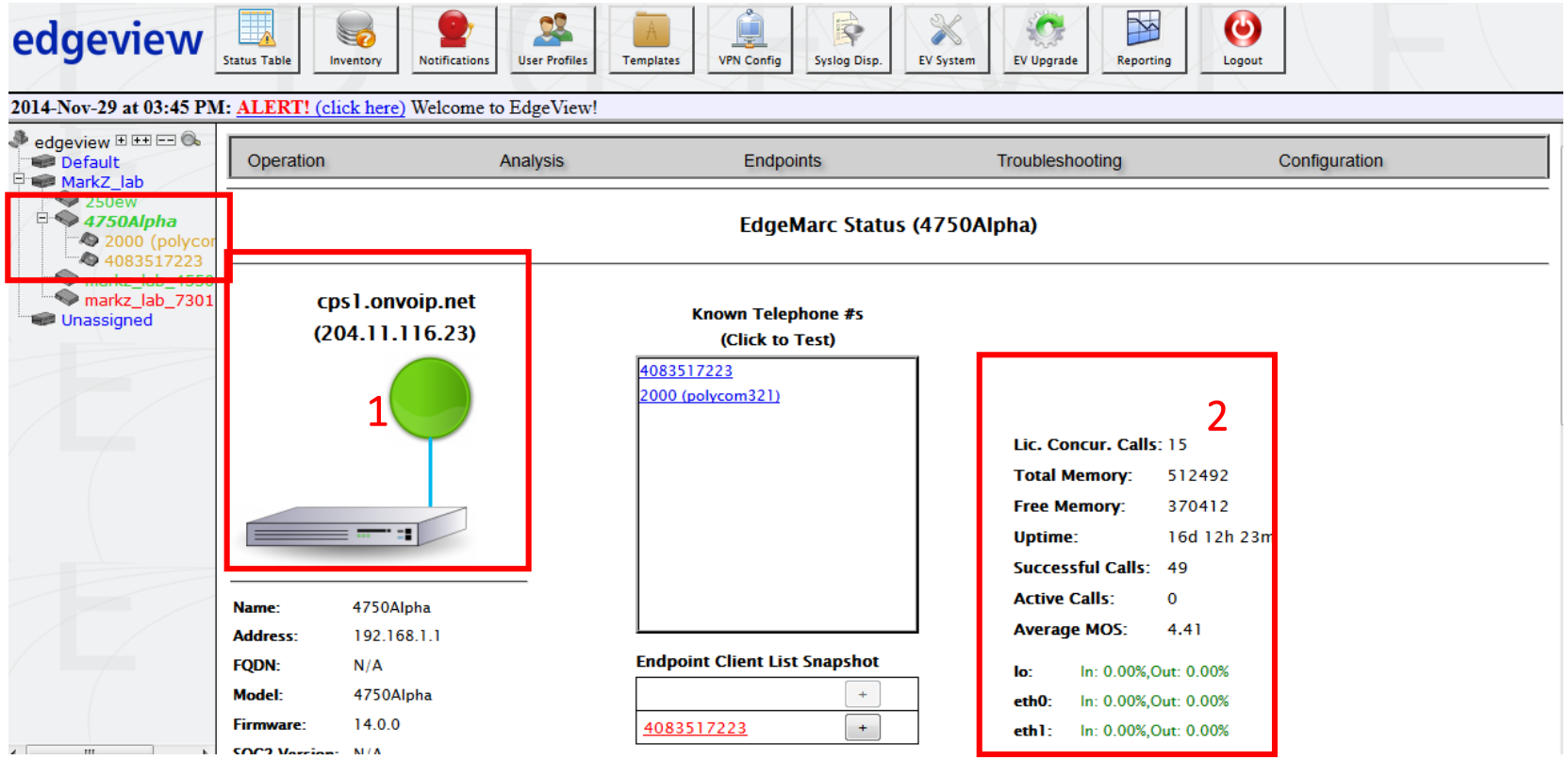
EVA facilitates performance of group level administrative actions on a target classification of EMs

1: Perform group level script execution
2: Push licenses via CSV file input to group
3: Upgrade and reboot group
4: Create reachability rules
5: Move EdgeMarcs between groups or delete them from groups



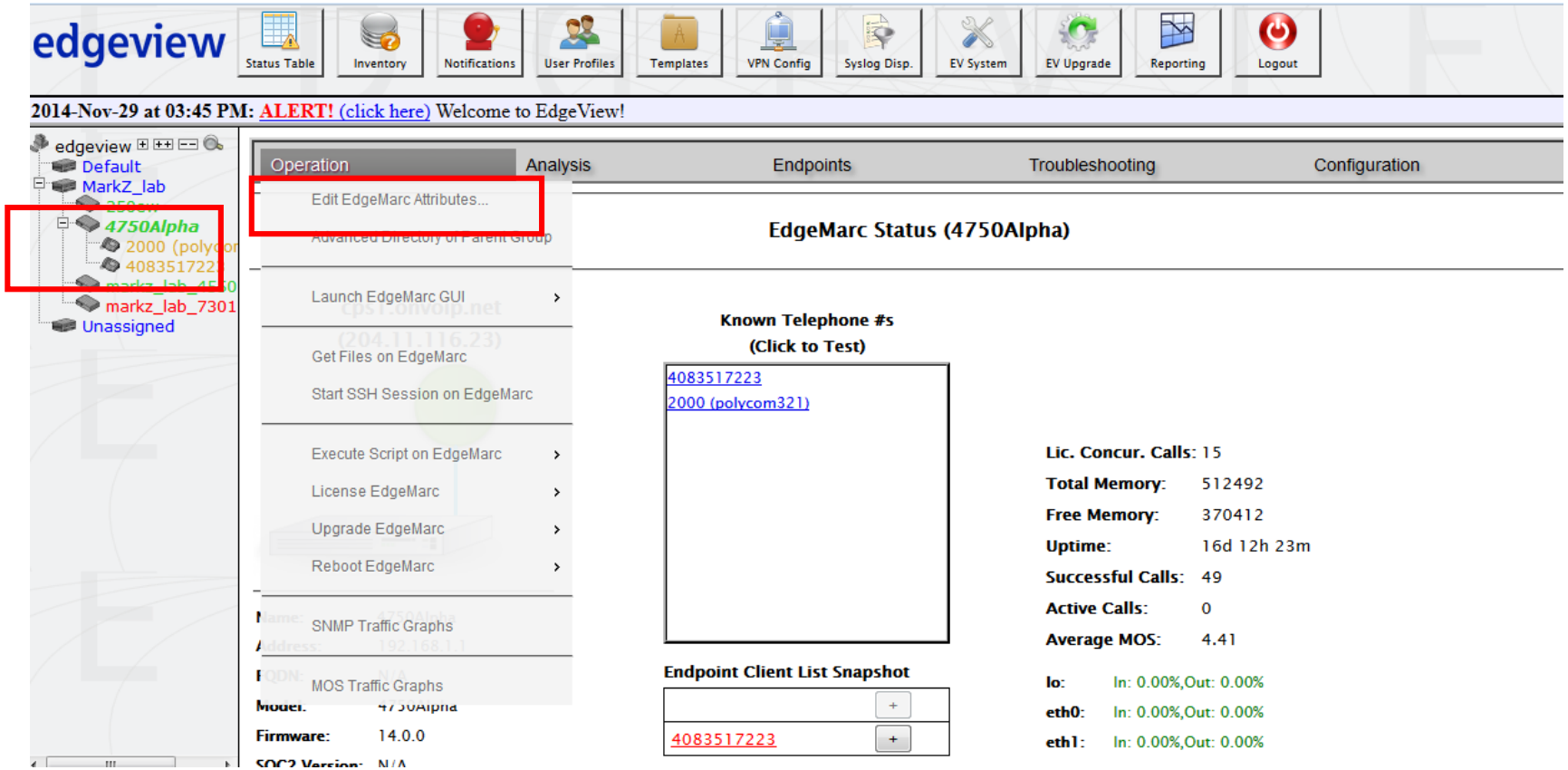
Lesson 6.3: monitor and maintain EdgeMarcs

Item 1: Exhibits the Softswitch/SBC reachability as per Survivability settings on EM
Item 2: Exhibits system health, number of successful calls since reboot, etc.



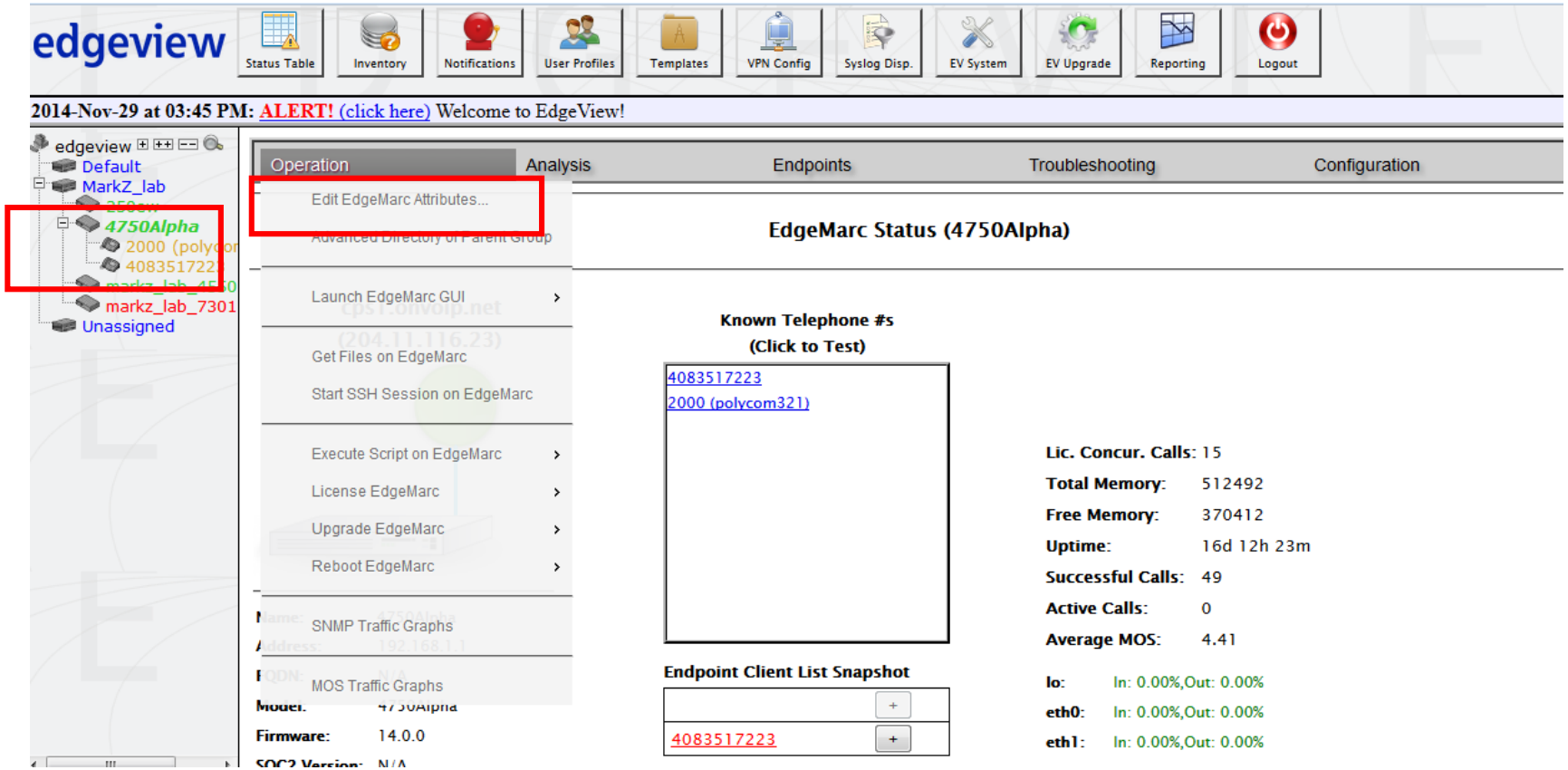
Lesson 6.3: Password Management

Use this menu set to edit the passwords that the EVA will utilize for SSH, Web, SNMP, etc for an EM



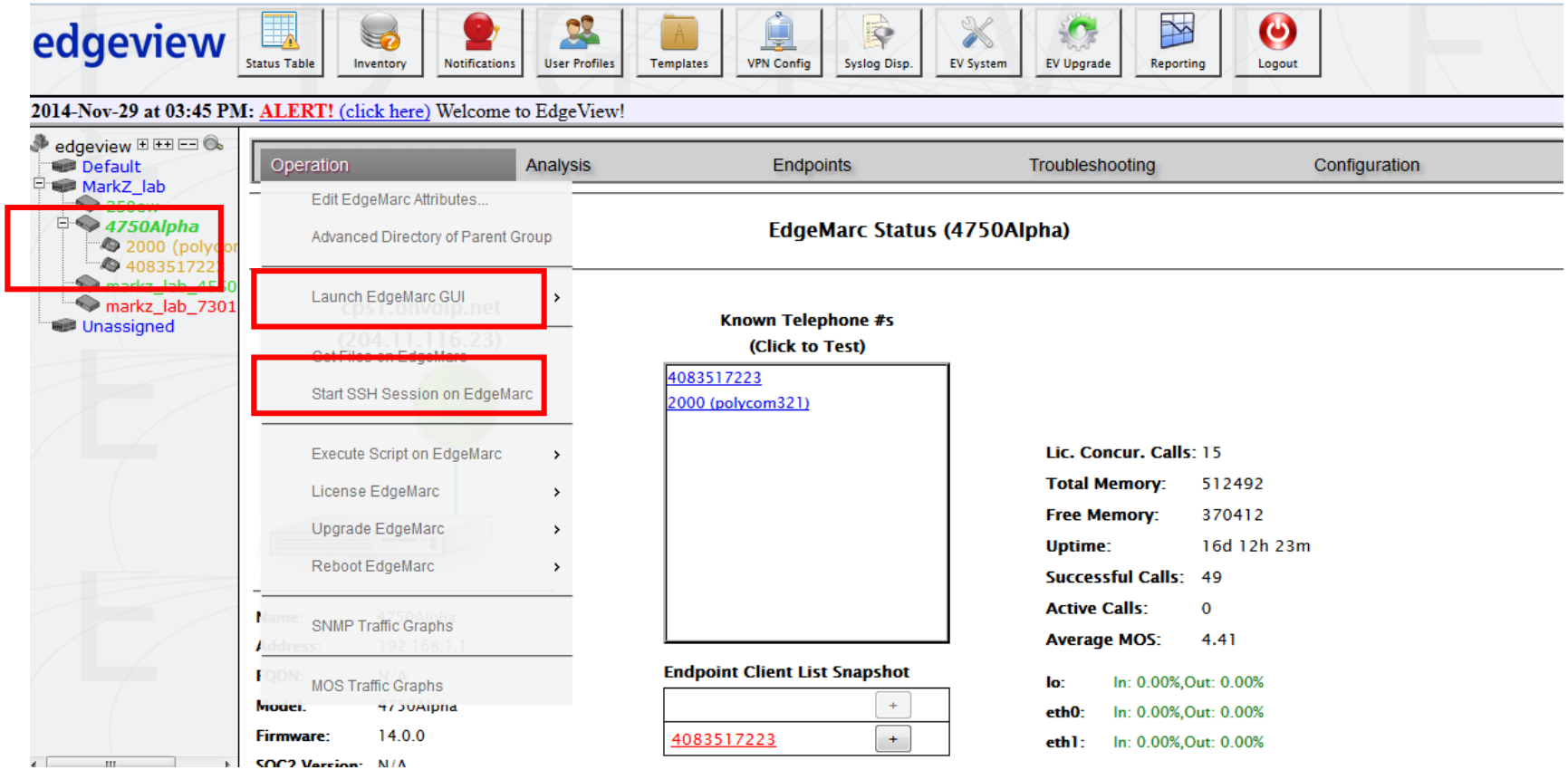
Lesson 6.3: EM Access Settings

Use this menu set to edit the passwords that the EVA will utilize for SSH, Web, SNMP, etc for an EM



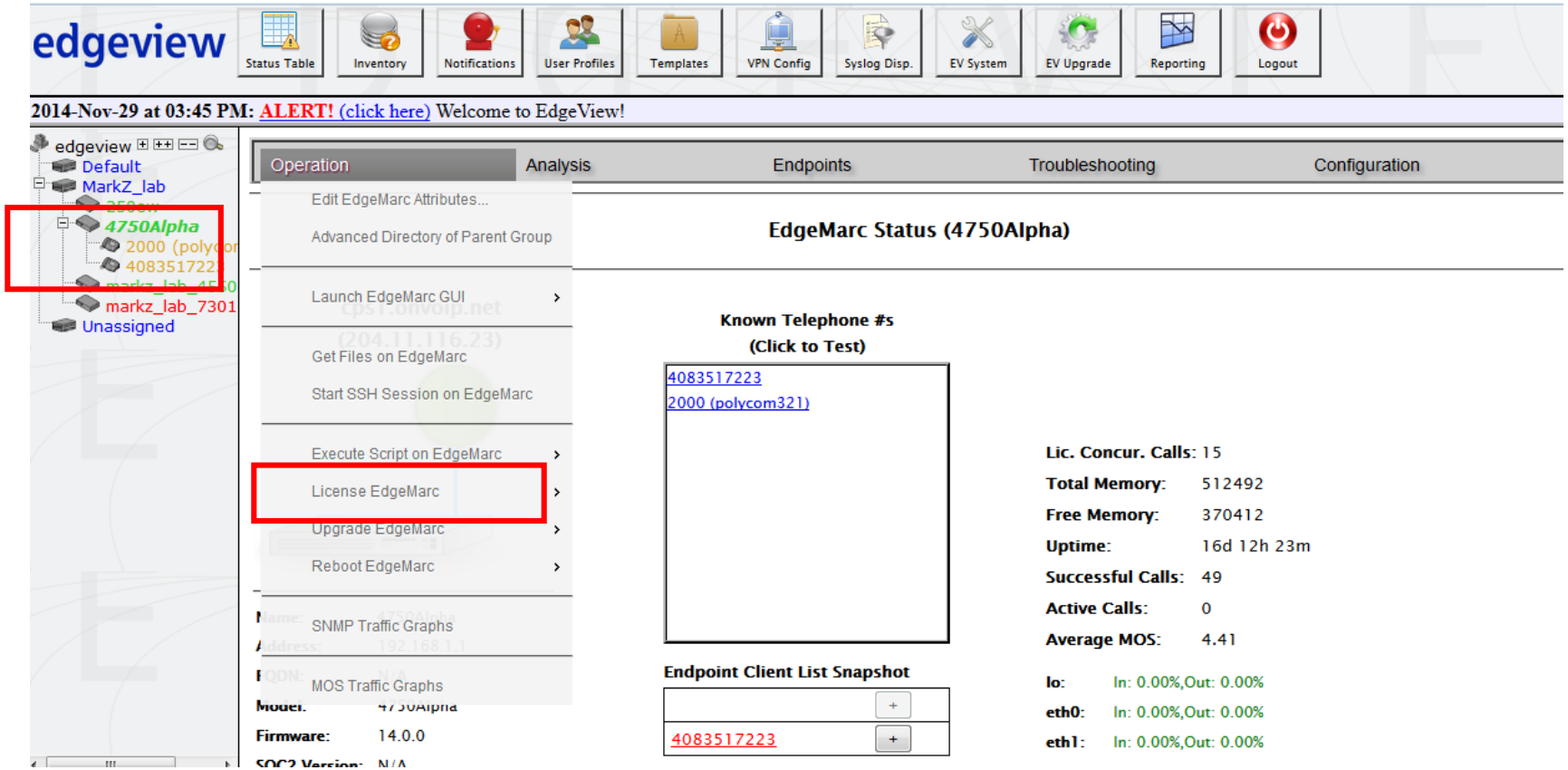
Lesson 6.3: Accessing an EdgeMarc GUI or SSH session

Launch EM GUI – select either GUI proxy (through the EVA) or launch a local (PC) GUI (Firewall dependent)
Start SSH on EM – access the SSH console of target EM through the EVA (proxy)



Lesson 6.3: Upgrade EdgeMarc License Key

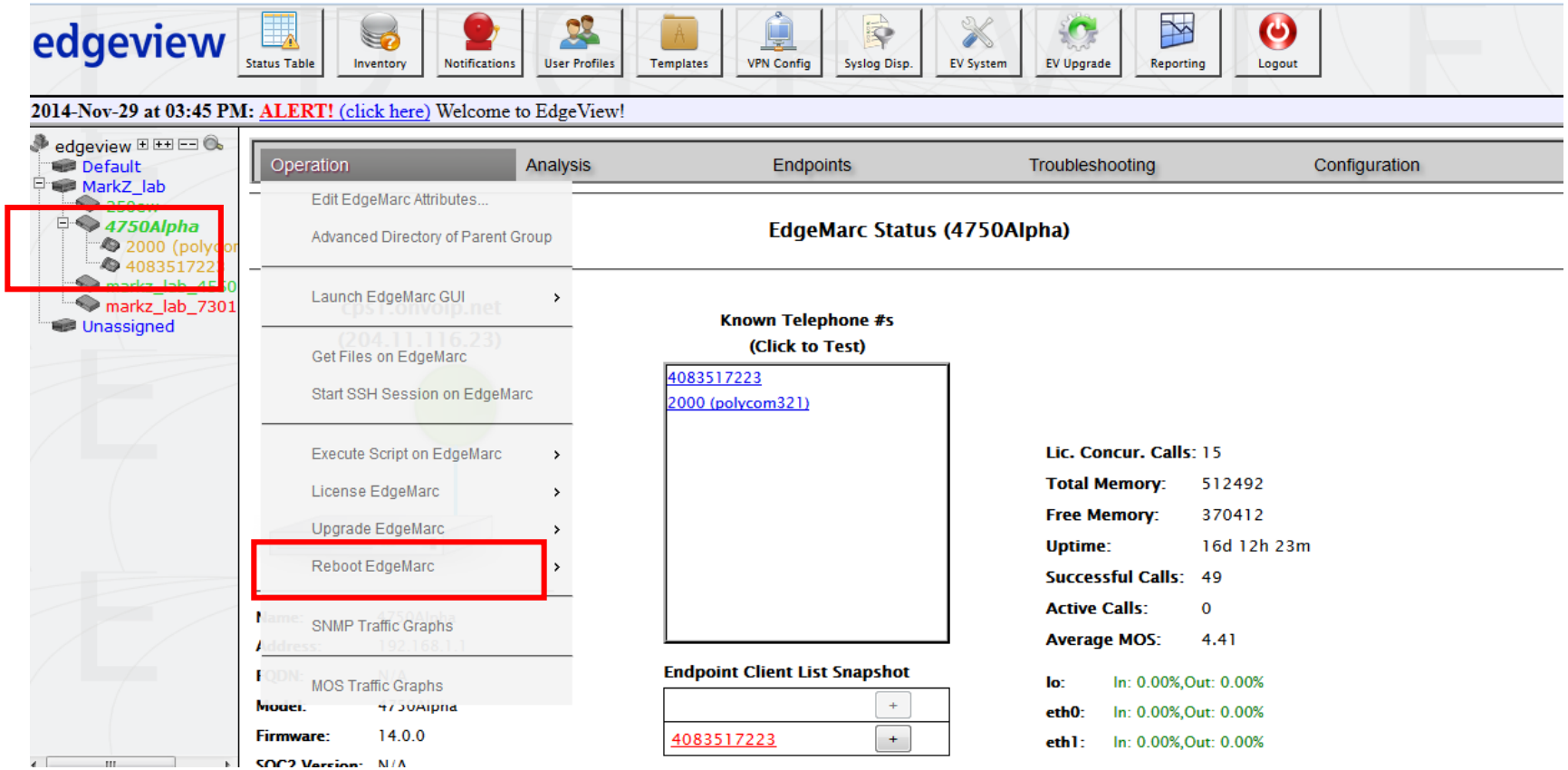
Use case: If an EM license needs to be upgraded from 5-15 calls, the operator can use this option to push a new license key



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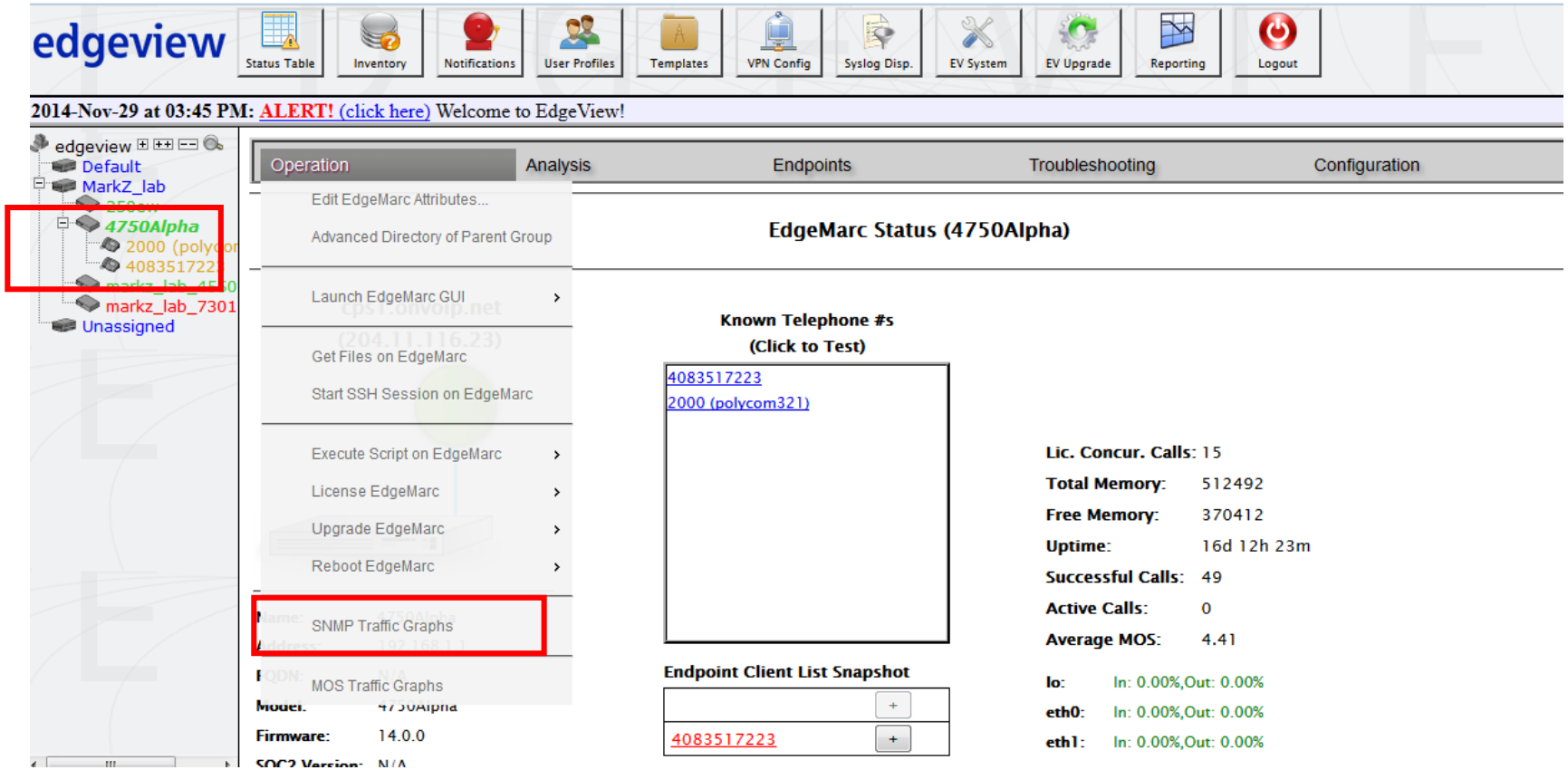
Lesson 6.4: Rebooting EdgeMarcs

Handle with care!!! By invoking this function, the operator can reboot the target EM (after a “are you sure you want to do that” dialogue ☺)



Lesson 6.4: Load monitoring

In some cases, understanding the load on an interface can yield reasons as to why a customer might be complaining of voice quality or signaling issues



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Lesson 6.5: Sys_Report

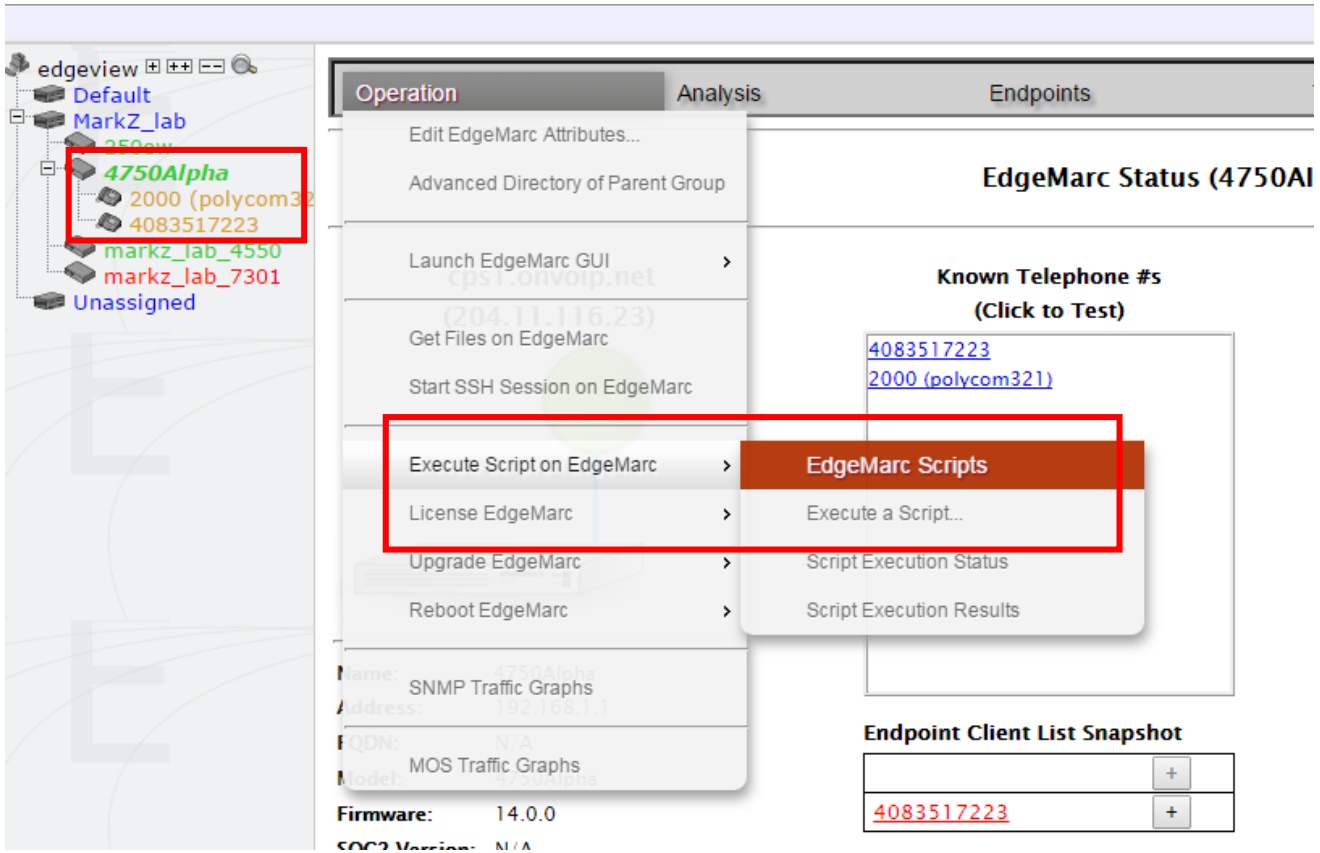
In any escalation case, there is a requirement to collect a “sys_report” which is a snapshot of an EdgeMarc’s health and “goings-on”. The EM CLI equivalent is: # sys_report

This command combines automates certain scripts and output from a multitude of commands, and provides the following

- Hardware info (/etc/platform)
- Firmware Version info (/etc/version)
- Date/Time stamp
- memory info (/proc/meminfo)
- Process info (ps –ef)
- File System info (df)
- CPU info (top)
- Active/configured interface info (ifconfig)
- Routing table display (route)
- certain mand files (tinfo, xml_info)
- VPN info and logs
- Kernel and OS output info (dmesg)
- message log output (var/log/messages and var/log/messages.old)
- Running configuration (mandctl dbg replay = /var/replay.cfg)

Lesson 6.5: Sys_Report

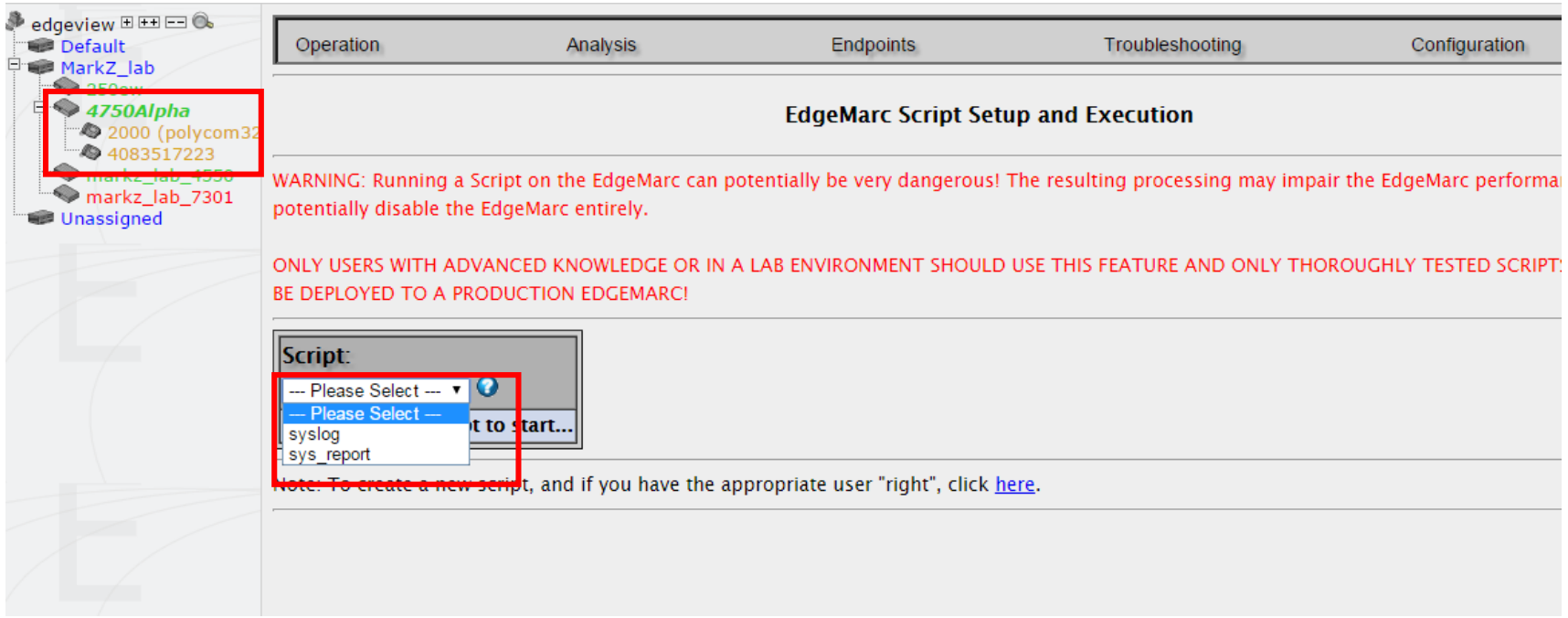
Under the Node “Operation”, select “Execute script on EdgeMarc →Execute script



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Lesson 6.5: Sys Report

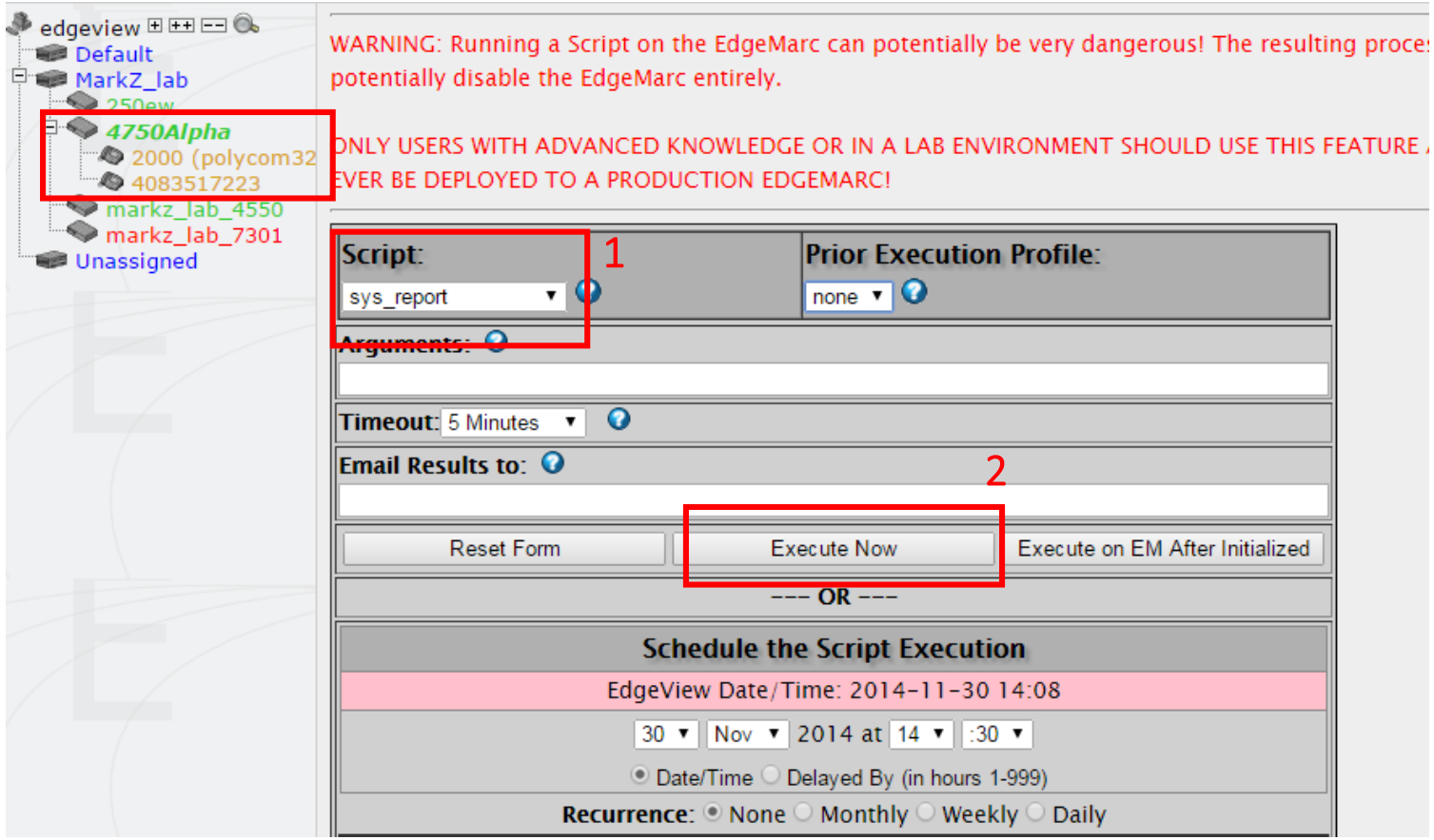
Select “sys_report” from the drop down menu



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Lesson 6.5: Sys Reports

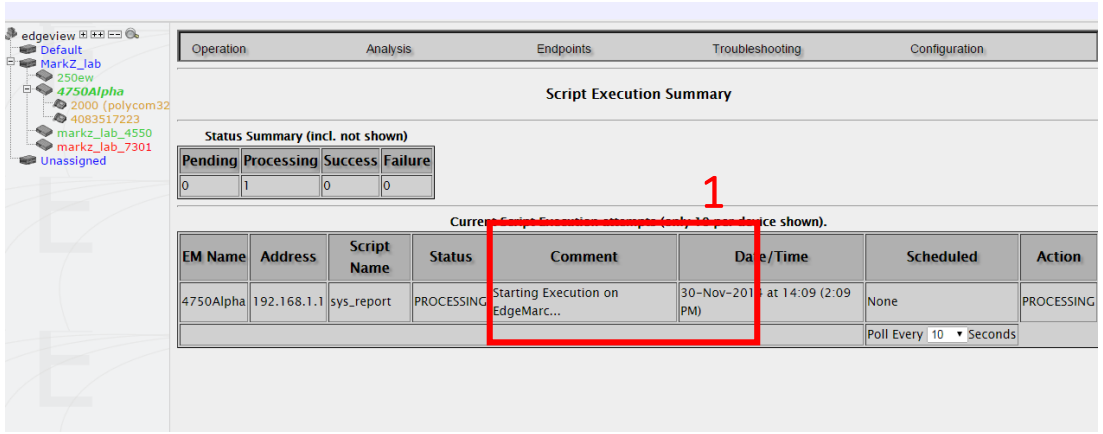
1: Choose “sys_report” script
2: Choose “Execute Now”

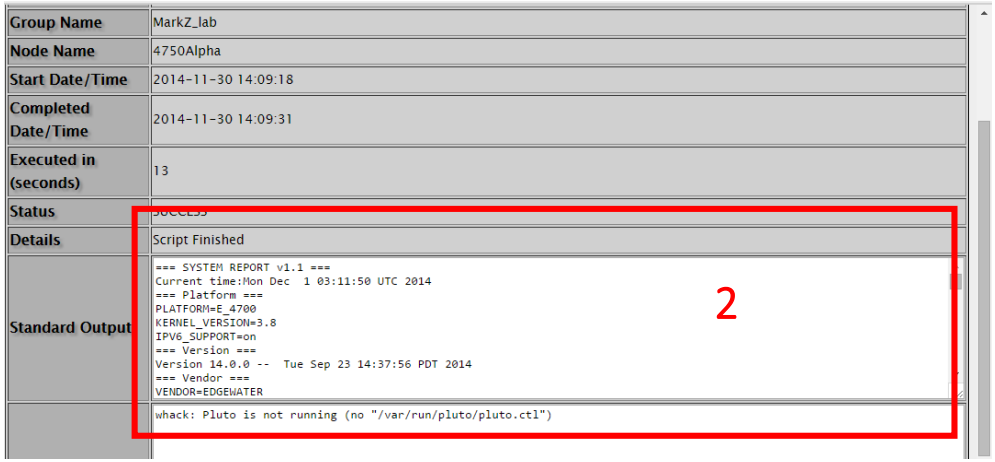


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Lesson 6.5: Sys Reports

1: EVA provides script execution status
2: Output of “sys_report” script is available for copying

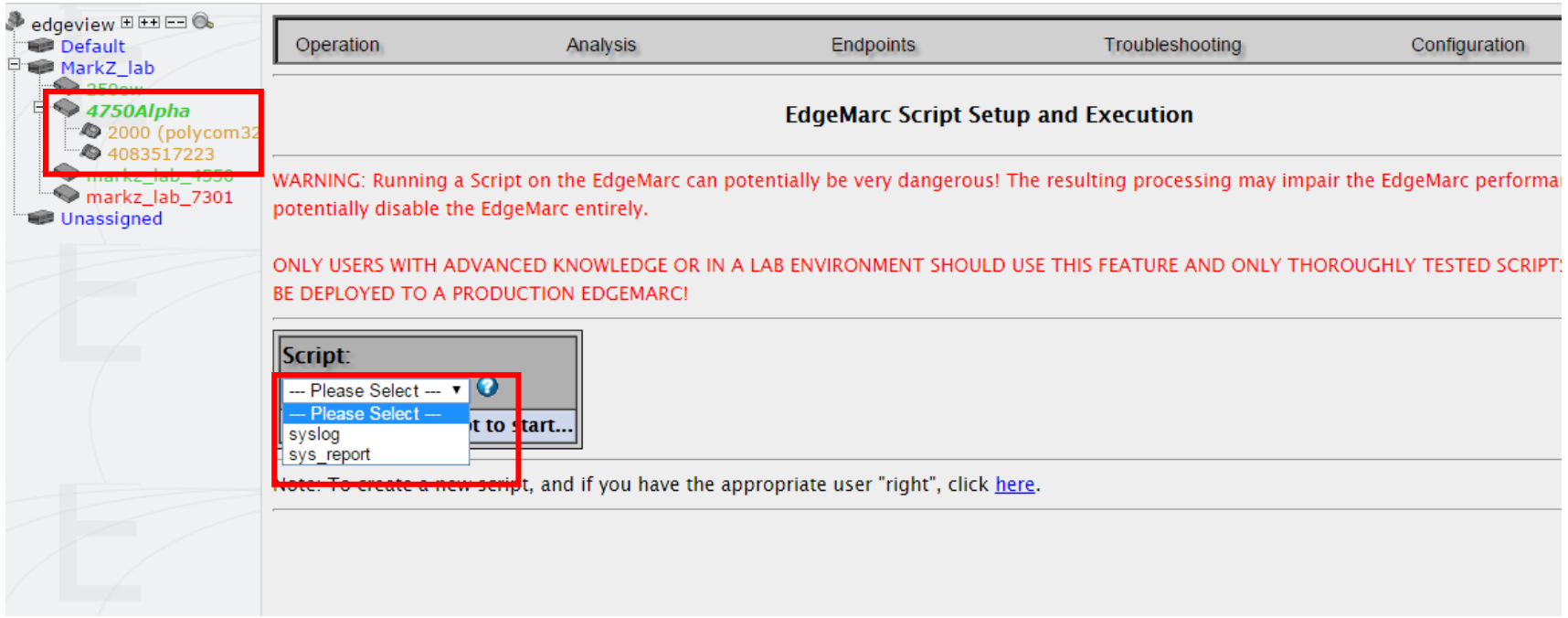




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Lesson 6.5: Sys Log

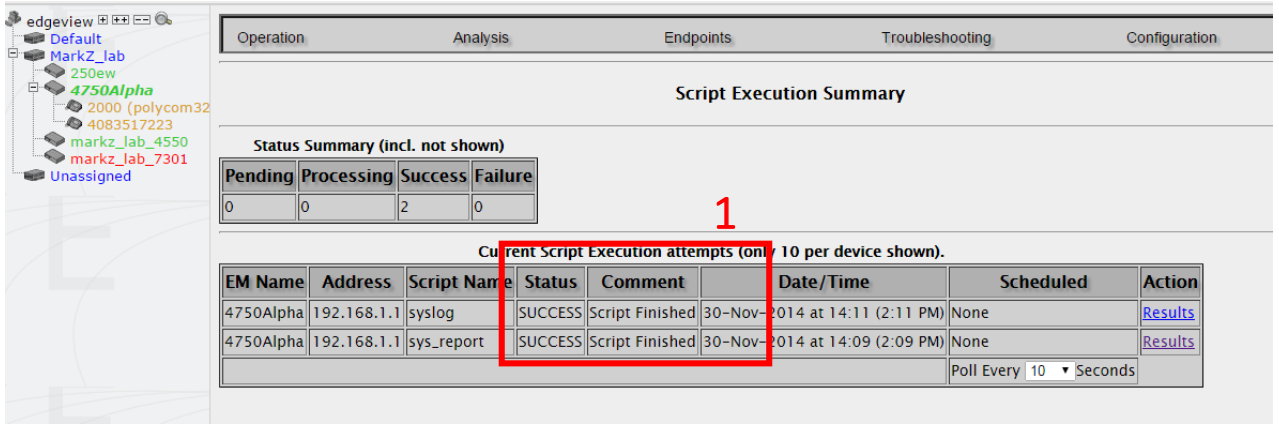
Select “syslog” from the drop down menu

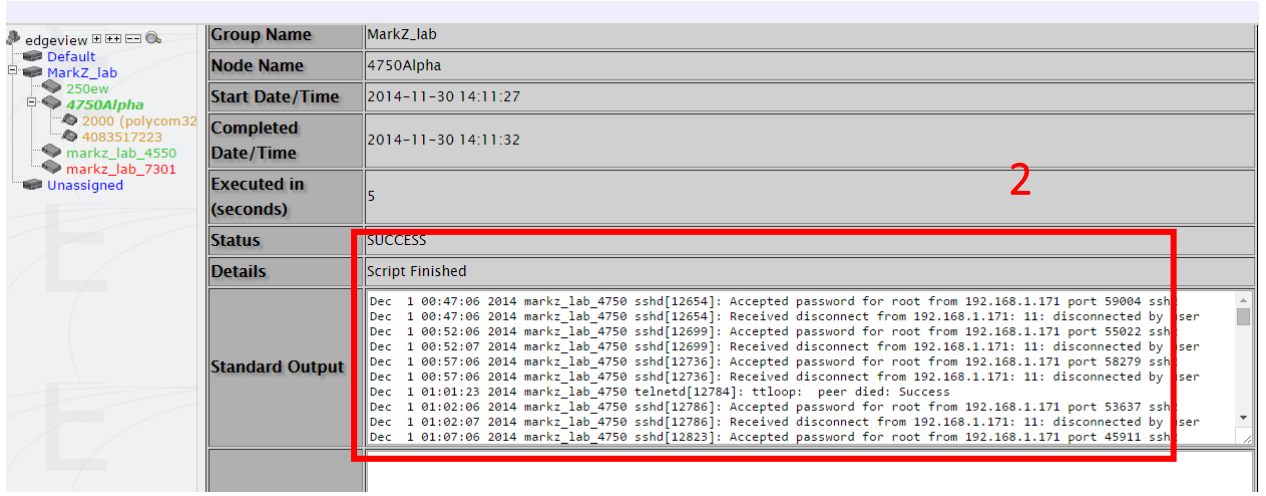


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Lesson 6.5: Sys Log Report

1: EVA provides script execution status
2: EVA displays the syslog file from the target EM

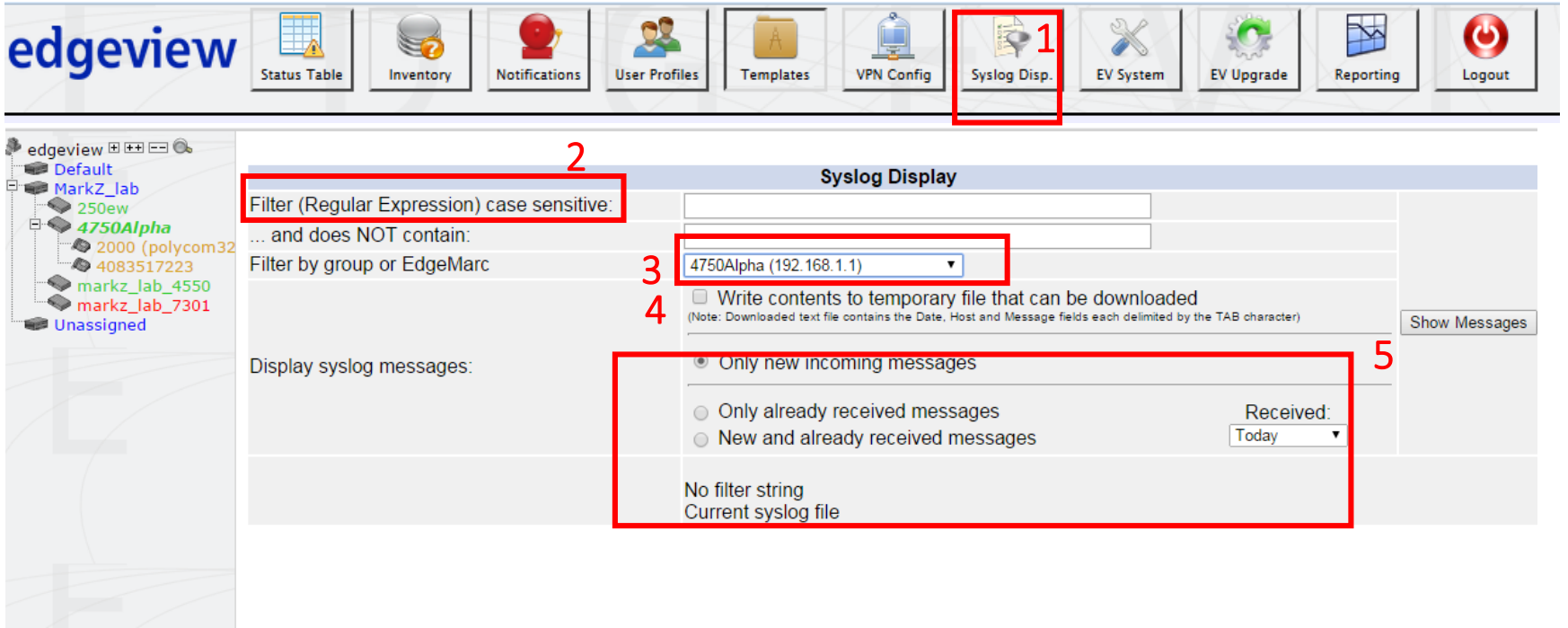




Lesson 6.5: Sys Log Display

EVA allows for another method to collect syslog records from either a group of EdgeMarcs or individual EdgeMarcs for trending analysis

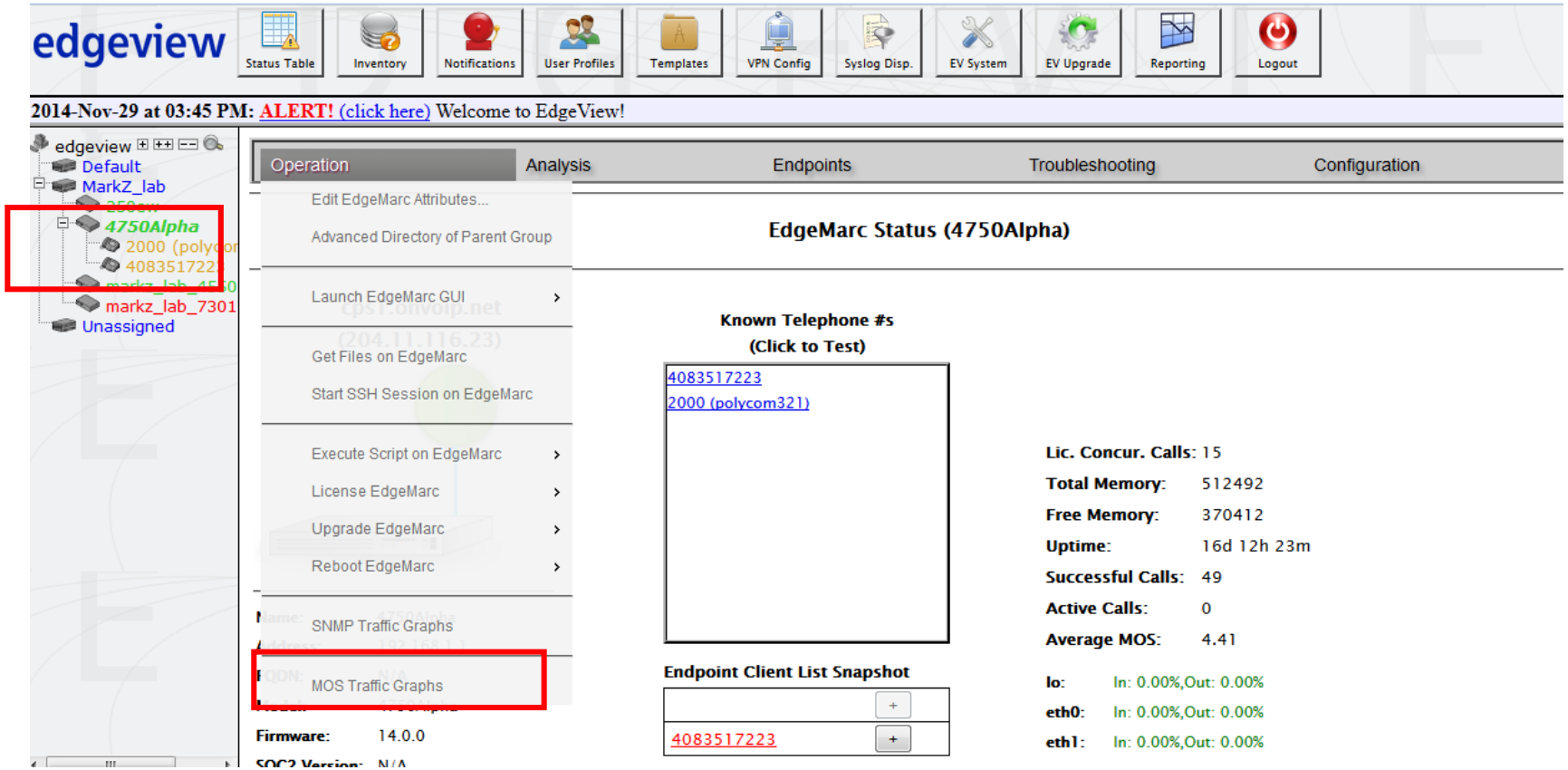
1: Select “Syslog Disp.” from top navigation pane
2: Choose a filter (regex)
3: Choose either individual or group
4: Select to have the contents of the report output on screen or in a text report
5: Choose collection timeframes (new, already received, or both)



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Lesson 6.5: MOS Graphing

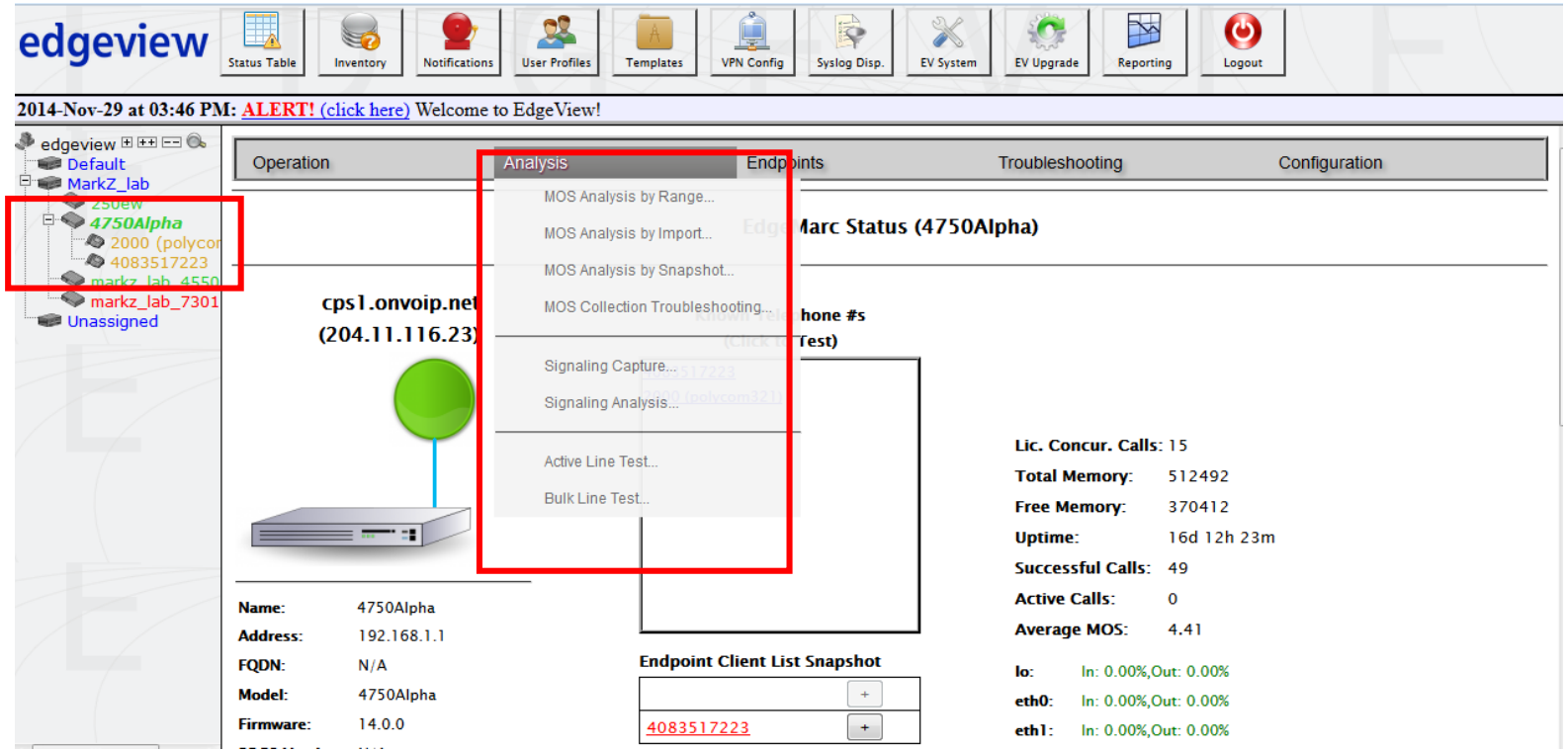
A graphical view of recent MOS scores; this can allow the operator to see a trend in call quality measurements, as opposed to raw measurements with detail data



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Using Edgeview to troubleshoot EdgeMarcs
- analyze call quality and signaling issues-

The “Analysis” tab and submenus allow the operator to perform MOS analysis and signaling captures from the EVA console, rather than from the EM console



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Lesson 6.5: MOS Call Analysis

EVA MOS analysis provides flexible parameters to gather and correlate data:

- By a data/time range
- By importing a pcap file
- By viewing a near-term snapshot in time
- Also provides a step-by-step troubleshooting method to ensure that the EVA can collect MOS data.

