

# Simplify Security Operations

FMG / FAZ / FSM What's New

Q3 2020 Kevin Yang Technical Consultant Taiwan



## **Cybersecurity Market Trends**

### A Cybersecurity Platform that Enables Digital Innovation

#### Zero-Trust Network Access



Accelerated OT/IoT

- Operation Technology
- Millions of IoT Devices
- Mobility

Security-Driven Networking



**Accelerated**Converged Approach

- SD-WAN (ASIC)
- NGFW (ASIC)
- SASE (Cloud)
- ZTNA (Cloud)

Dynamic Cloud Security



**Accelerated** Cloud Adoption

- Security FOR the Cloud
- Security FROM the Cloud
- Work From Home (WFH)

Al-Driven Security
Operations



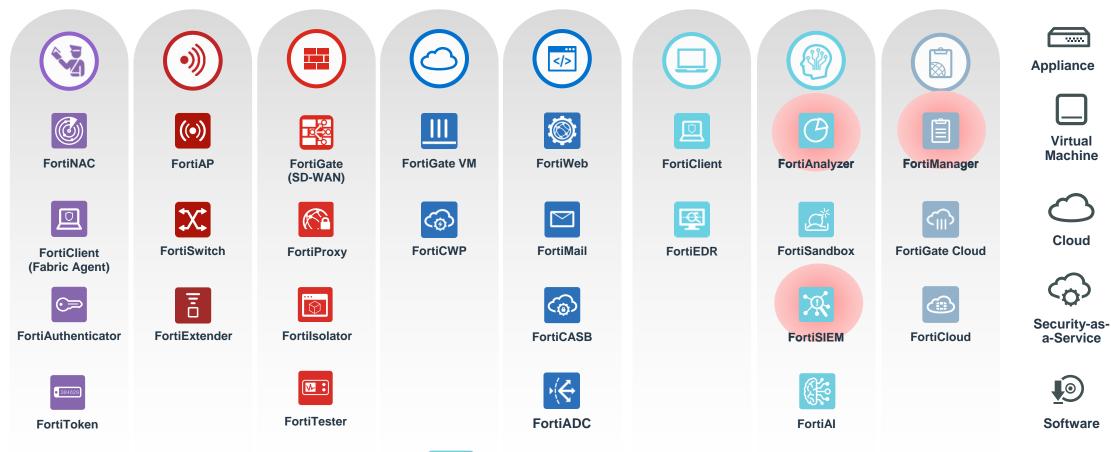
**Accelerated**Detection / Response

- Too Many Point Products
- Not Enough Skilled people
- Hard to implement Automation



## **Broadest End-to-End Cybersecurity Platform**

### Different consumption models available

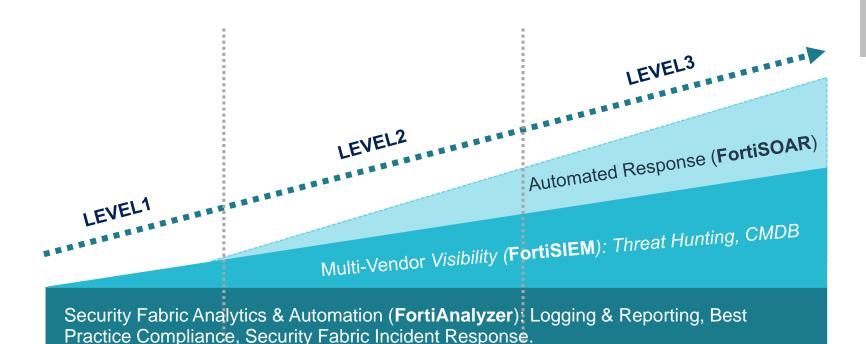






## **Simplify Security Operations**

Choose an offering aligned to your SOC maturity



Central Management (FortiManager): Central Configurations & Policies Management

The **SOC Maturity Framework** identifies which SOC capabilities are aligned to an organization based on their SOC maturity. FortiManager, FortiAnalyzer, FortiSIEM & FortiSOAR can be mapped to these capabilities.

**FortiSOAR** enables full orchestration and automation across the Security Fabric and multivendor environments.

FortiSIEM brings multi-vendor visibility across your network. Higher levels of correlation and customization can be integrated with the Security Fabric.

FortiAnalyzer provides logging, reporting, analytics and automation for all "on fabric" devices and endpoints.

FortiManager provides central configurations and policies management

## Security Operations Center (SOC) Maturity Framework

People, Process, Capabilities

	SOC Maturity LEVEL1	SOC Maturity LEVEL2	SOC Maturity LEVEL3
People	Medium business with one Team - IT & Security (<5 IT- security staff)	Med-Large business with dedicate security team (3-5 dedicated security staff)	Large enterprise with experienced SOC analysts / SOC Team (5+ Dedicated SOC Staff)
Process	Best effort incident response	Basic incident response plan	Advanced SOC processes and playbooks
Capabilities	<ul> <li>Logging &amp; Reporting</li> <li>Automated Detection &amp; Response</li> <li>Configuration Management</li> </ul>	Level 1 plus: •Multi-Vendor Incident Detection & Response	Level 2 plus: •Alert Management •Unified Orchestration Automation & Response



# FortiManager 6.4 What's New

## FortiManager 6.4 What's New

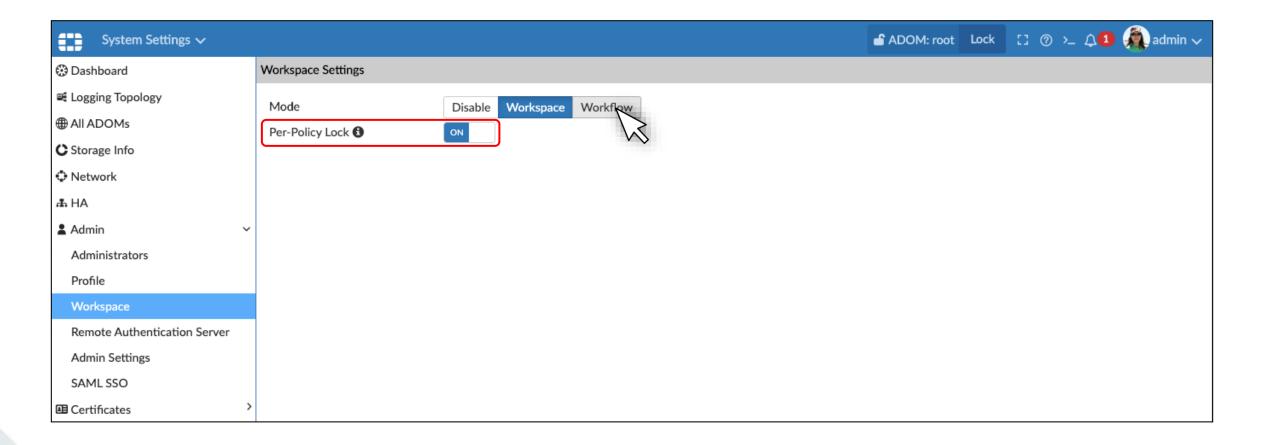
- Workspace Enhancement (per-policy lock / policy package lock)
- ADOM Selection & Revision Enhancement
- Normalized Interfaces
- Zero Touch Provisioning (ZTP) Enhancement
- Management Extensions SD-WAN Orchestrator





## Workspace Enhancement – Per-Policy Lock Support

### From ADOM Lock To Per-Policy Lock Support

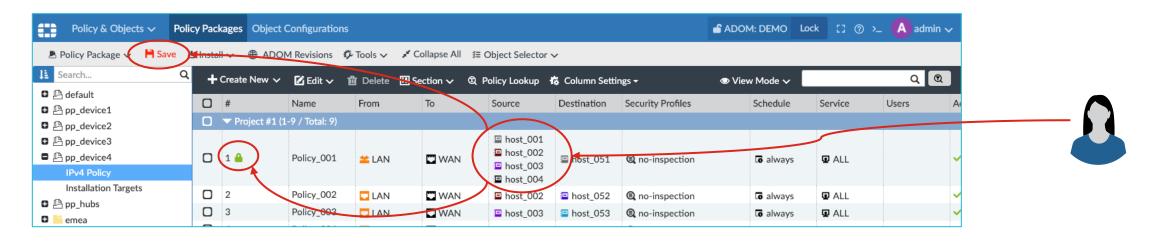


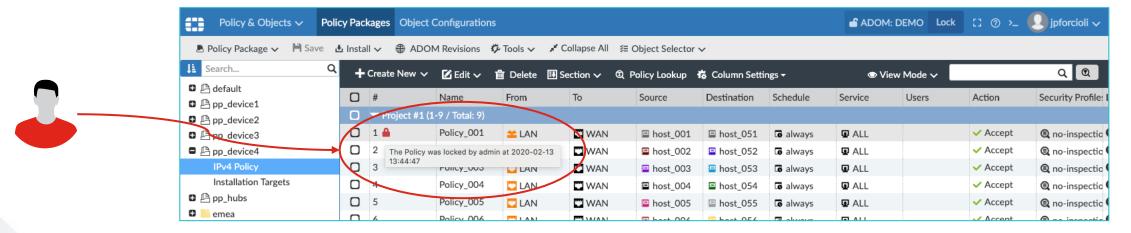




## Workspace Enhancement – Per-Policy Lock Support

### Implicit Lock



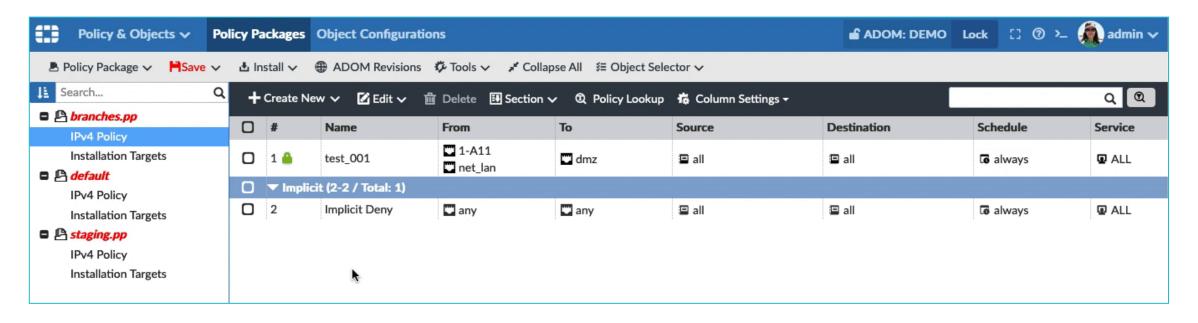






## Workspace Enhancement – Per-Policy Lock Support

New Save All Option To Save All Touched Policy Packages

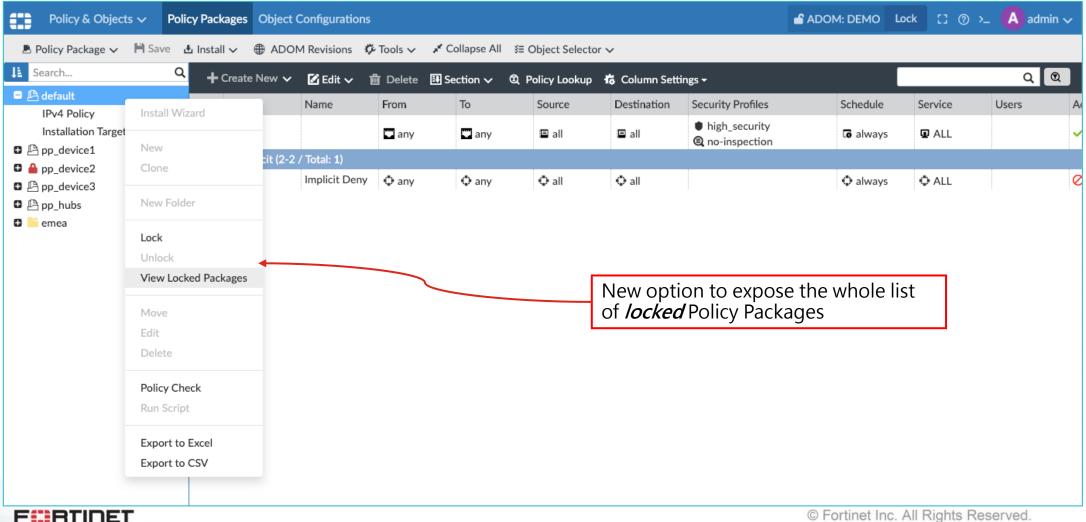






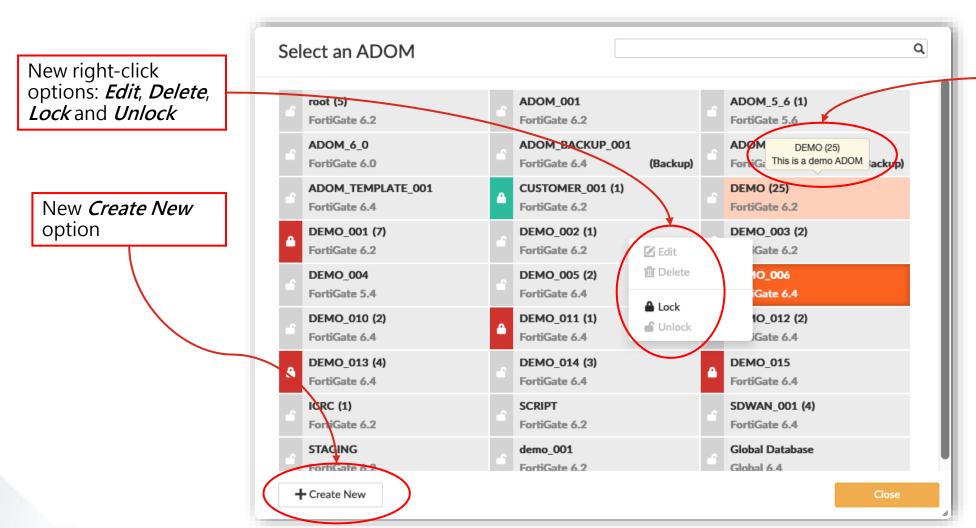
## View Locked Policy Packages Option

### Quick Check Locked Policy Packages



## **ADOM Selection Enhancements**

#### New Create New, Edit and Delete Options

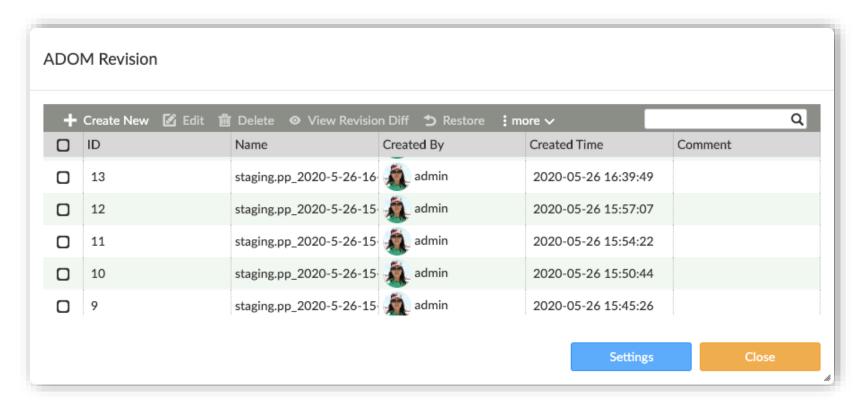


Tool-tip showing the ADOM *description* 



## **ADOM Revision Enhancements**

#### **Support Additional Templates**



**SD-WAN Templates** 

**FAP Profiles** 

**FSW Templates** 

**CLI Templates** 

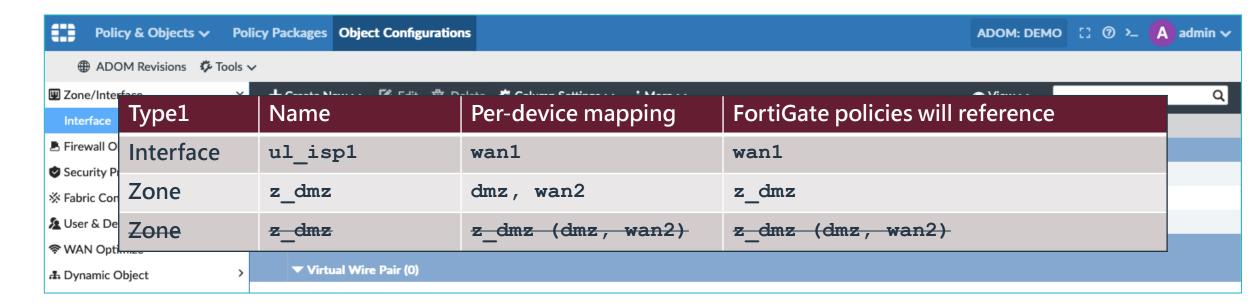
Certificate Templates





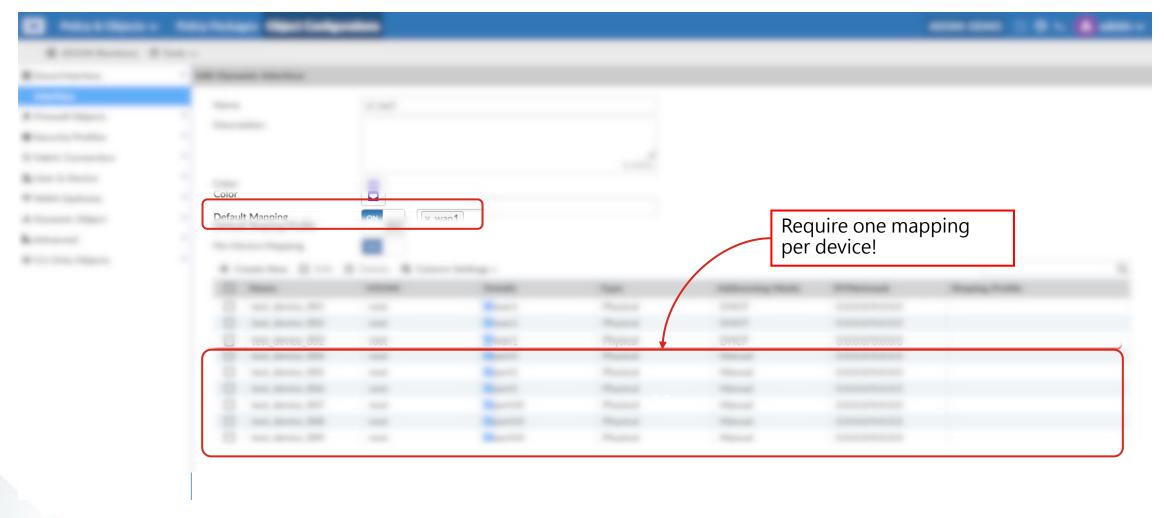
### Concern: Lot Of Wordings And Confusion

Dynamic Interface: Policy Zone vs Policy Interface



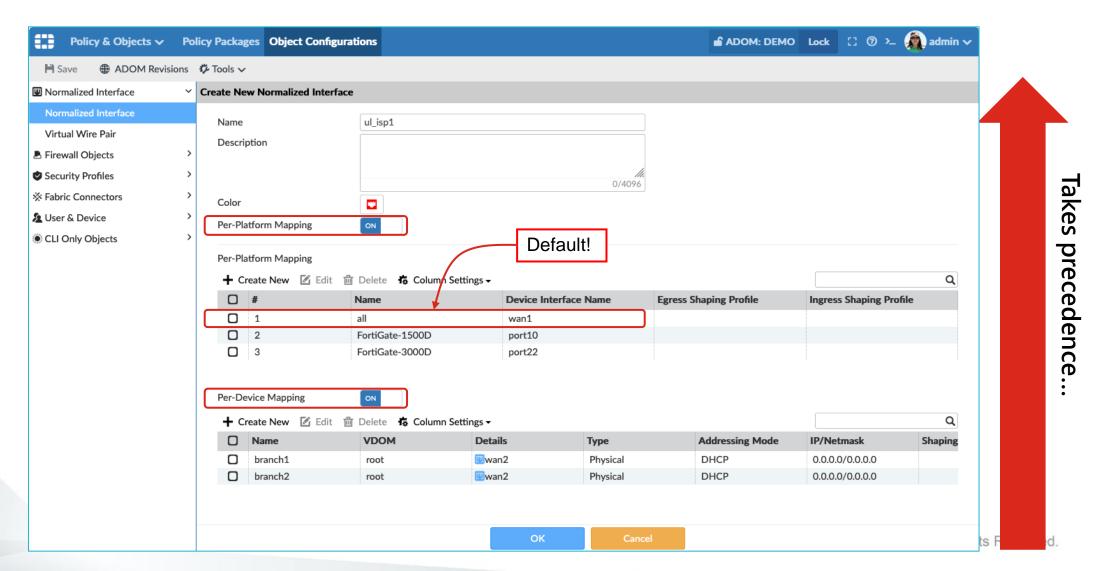


Concern: Per-Device Mapping Is Not Flexible Enough



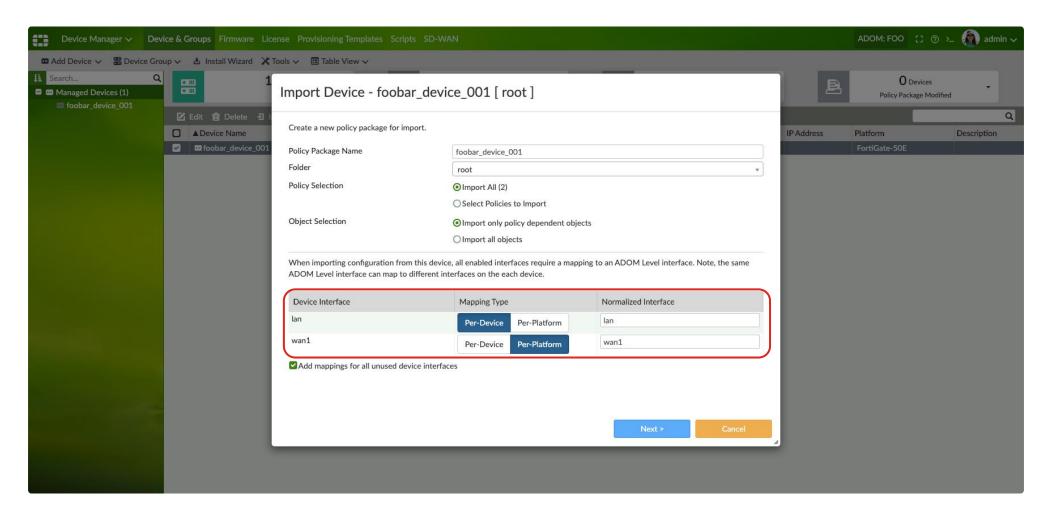


Using Rules: Per-Device, Per-Platform, Default Mapping!





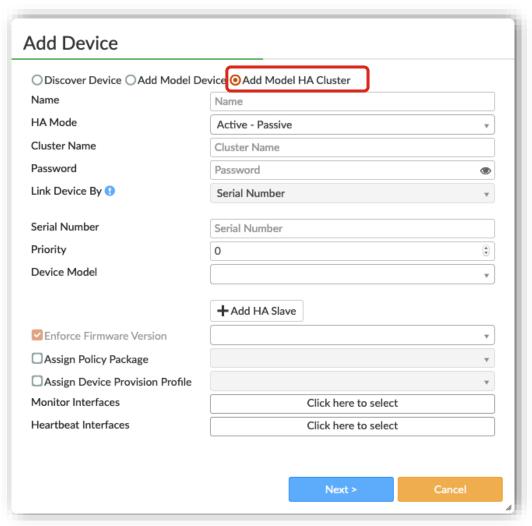
### **Update Import Policy**





## **ZTP Enhancements**

#### **New Cluster Model Device**

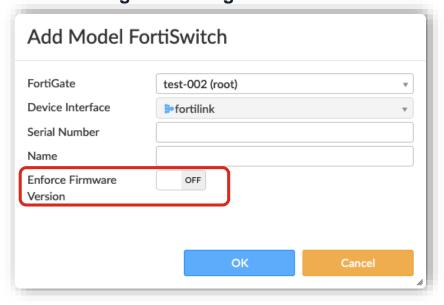




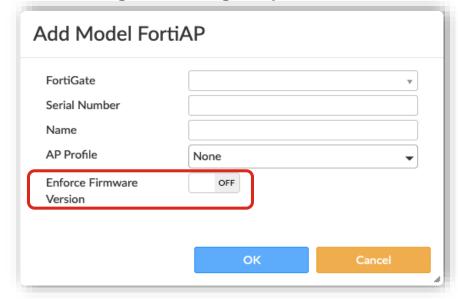
## **ZTP Enhancements**

#### Firmware Rectification For Model FortiSwitch And FortiAP

#### FortiSwitch Manager -> Managed Switches -> Create New

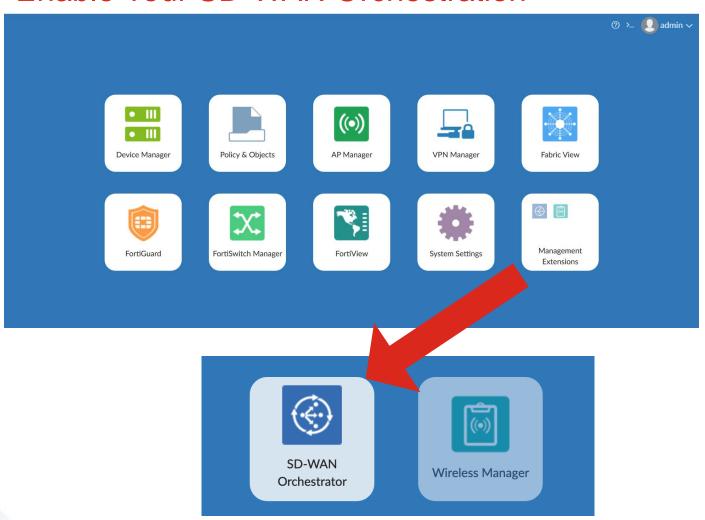


#### **AP Manager -> Managed Aps -> Create New**





#### **Enable Your SD-WAN Orchestration**

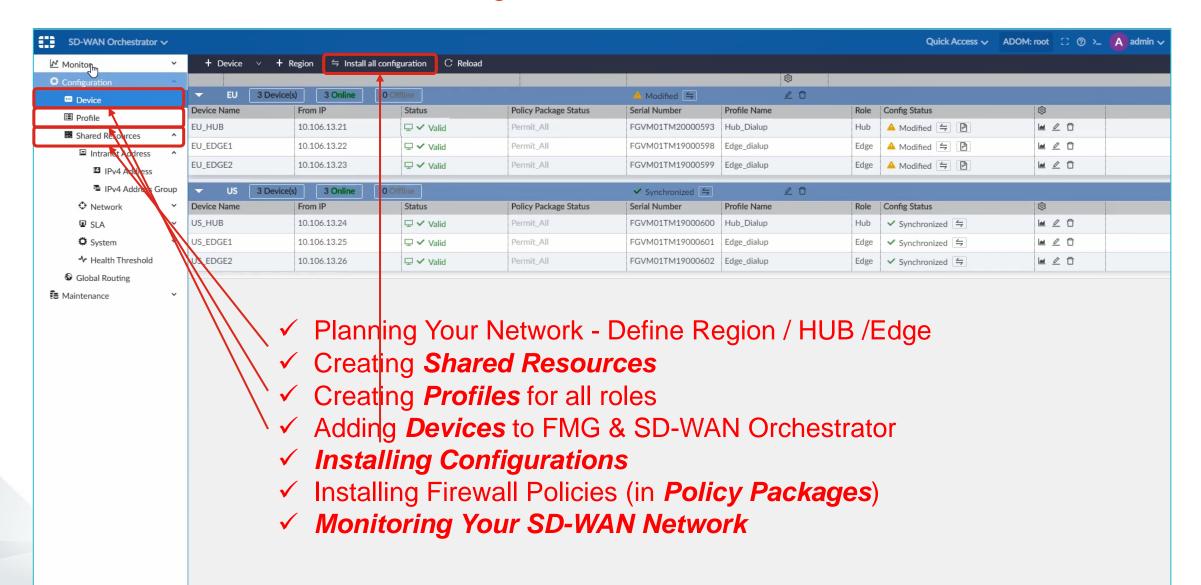


- Login into FortiManager
- Click on Management Extensions
- Click on SD-WAN Orchestrator
- It will free download and install the SD-WAN Orchestrator container into FortiManager
- After the icon color become solid, the SD-WAN Orchestrator is ready

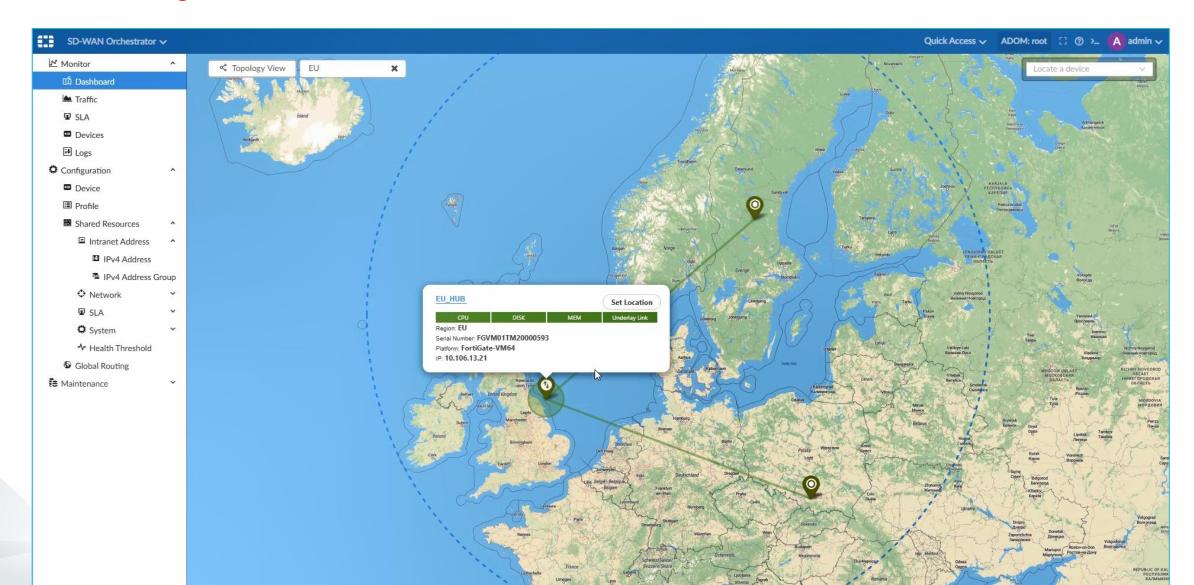
\*\* Managed FortiGate need to have SD-WAN Orchestrator Entitlement License



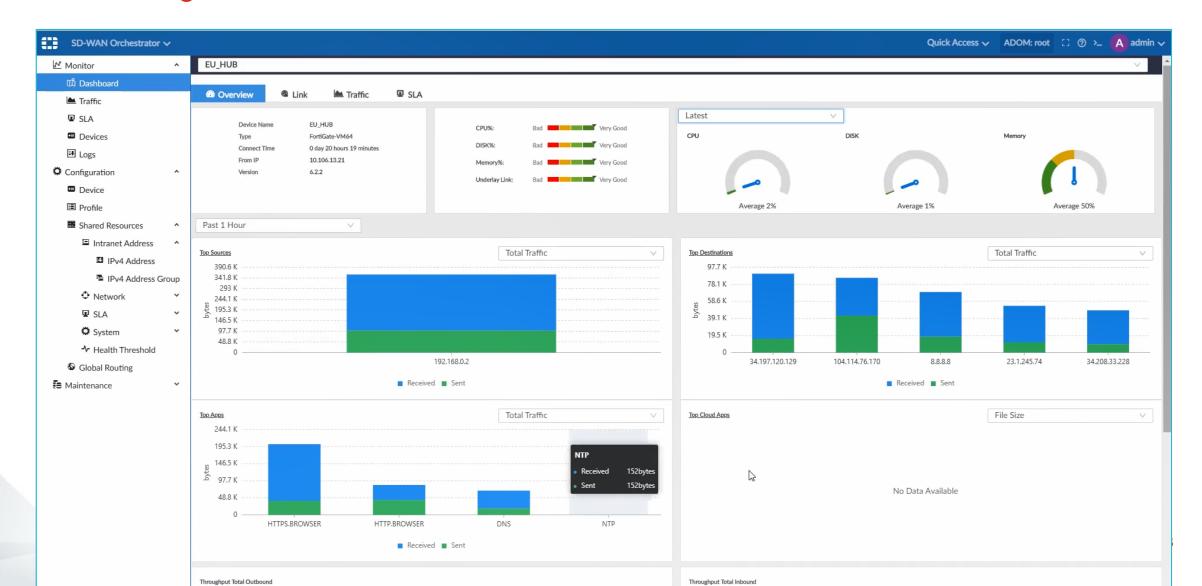
Streamline Your SD-WAN Configuration Process



Monitoring SD-WAN Devices And Network Traffic



### Monitoring SD-WAN Devices And Network Traffic



# What's New FortiAnalyzer 6.4.0

## What's New FortiAnalyzer 6.4.0

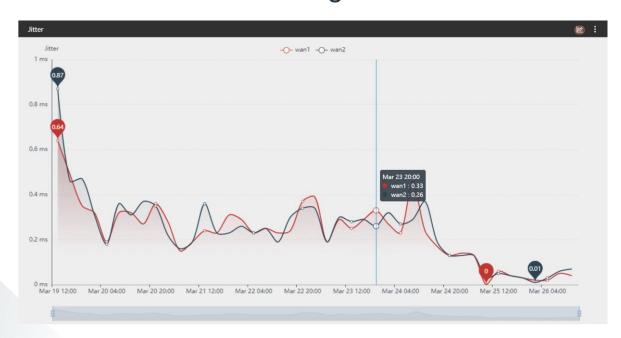
- SD-WAN Monitoring Dashboard and Reporting
- FortiSOC Introduction
- Fabric Logs Normalization (Fabric ADOM)
- FortiAnalyzer New Licenses Introduction

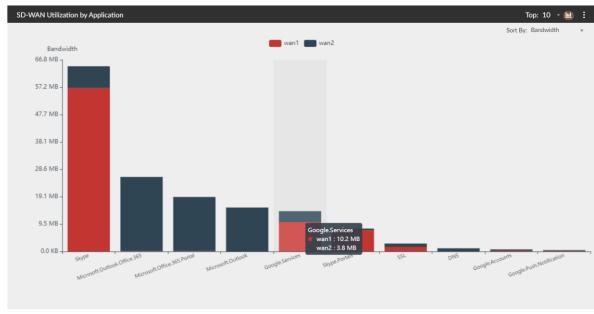


## **Security Driven Networking**

#### **SD-WAN Monitoring Dashboard**

- Charts similar to those available in the Secure SD-WAN Report can be found as widgets in the default SD-WAN dashboard of FortiView.
- The Monitors window in FortiView has a predefined Secure SD-WAN Monitor pane with 8 SD-WAN widgets.





## **Security Driven Networking**

## New Secure SD-WAN Report

#### Introduction Secure SD-WAN

As the use of business-critical, cloud-based applications and too organizations with multiple remote offices are switching from p architectures. SD-WAN offers business application steering, cost ware-as-a-Service (SaaS) applications, as well as unified commurits own shortcomings—especially when it comes to security with We aggregated key findings from the Secure SD-WAN assessme highlights are listed below, a more detailed view of each section



100 % SD-WAN Availabilit





53 % Average Business Application





#### SD-WAN Performance

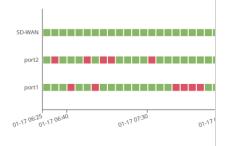
Performance link monitoring measures the health of li interfaces by sending probing signals through each lin on latency, jitter, and packet loss. If a link is broken, th routed through other links. When the link is working a traffic being sent to a broken link and lost.

#### Overview

Link Status Quality Before and After SD-WAN Impleme







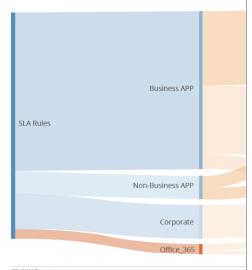
#### SLAs

Performance SLA by WAN Link (drill-down)

Multi-path technology can automatically fail over to the best avaidegrades. This automation is built into the FortiGate, which reduimproving their experience and productivity.

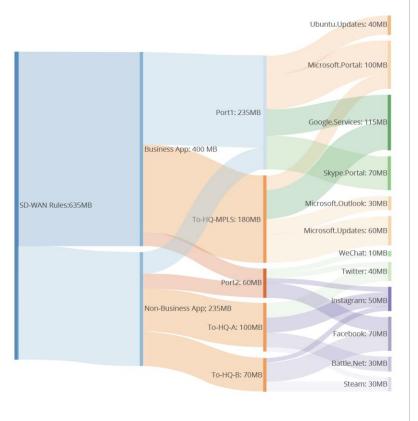
SLA Rules	Links	% Passed Latency Threshold	% Pa Jitter
BusinessCritical	Port1	99.8	98.1
	Port2	99.6	99.4
	TO-HQ-MPLS	98.7	89.5
Corporate	TO-HQ-A	89.1	87.9
	TO-HQ-B	99.5	88.3
Office_365	TO-HQ-A	89.5	79.5
	TO-HQ-B	87.9	98.7
LinkA	TO-HQ-A	88.3	89.1
NonBusinessCritical	Port1	99.5	99.5
	Port2	97.9	97.9

#### SD-WAN Interface Status Change Counts



#### FORTINET.

SD-WAN Bandwidth Utilization by Application and SD-WAN Link



SD-WAN Report page 4 of

## **FortiSOC Introduction**

#### Security Analytics, Detection, Response

- FortiSOC (Subscription Licenses)
  - FortiSOC dashboards
  - Automation playbooks
  - Expanded incident analysis page
  - Attach reports to incidents
  - Add comments to incidents
- Normalized Fabric logs







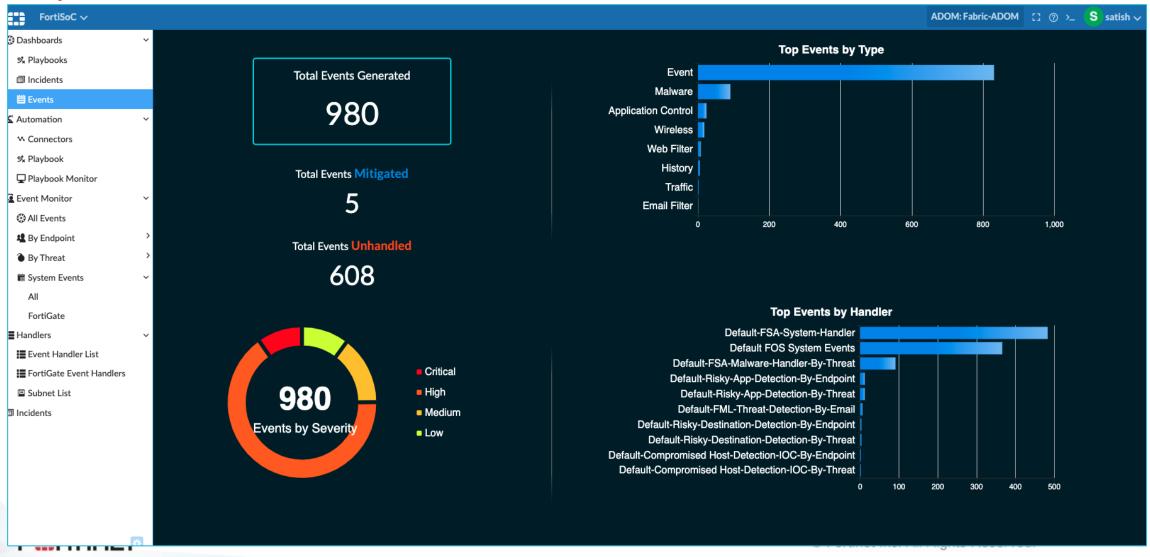
Advanced Detection



**Automated Response** 

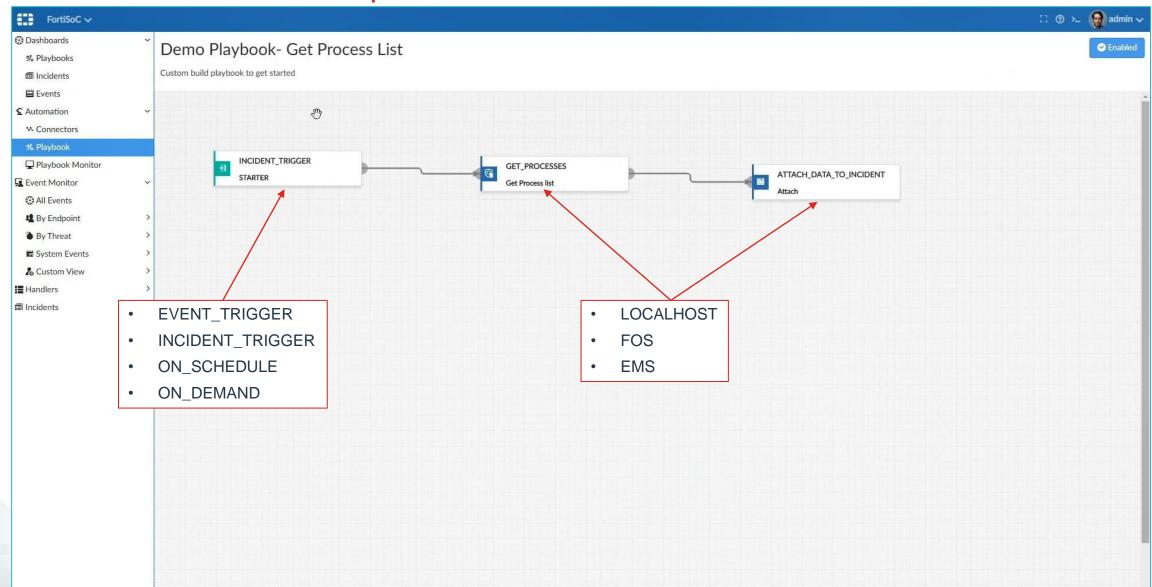
## FortiSOC – Dashboards

## Paybooks / Incidents / Events Dashboards



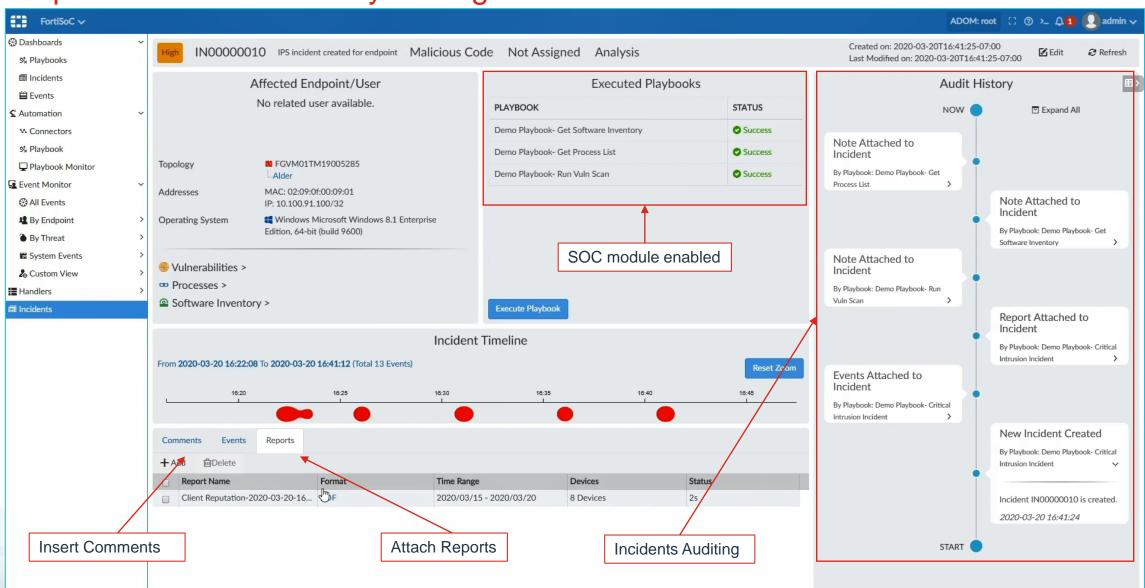
## FortiSOC – Automation Playbooks

**Automation Incident Response Process** 



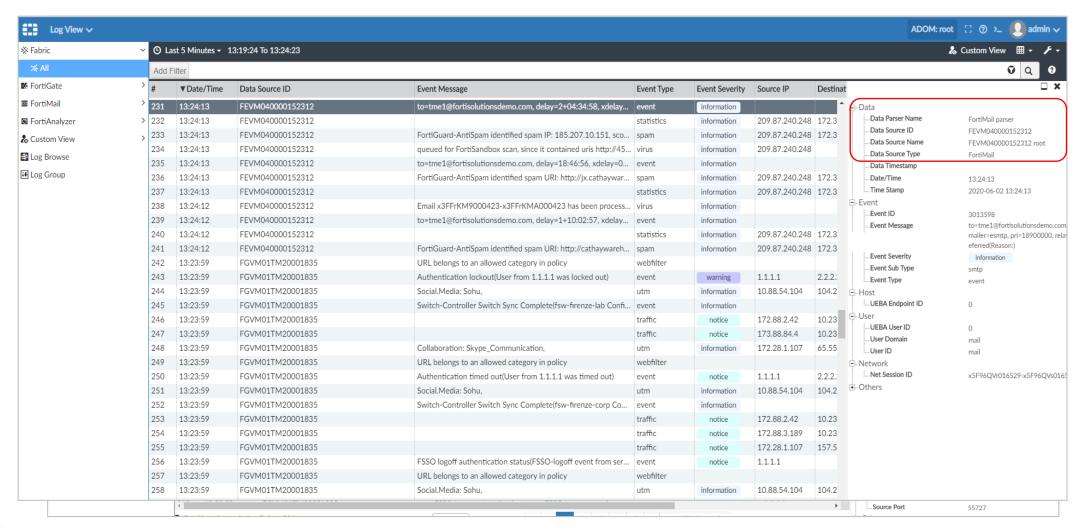
## **Incidents Tracking and Management**

## **Expanded Incidents Analysis Page**



## Normalized Fabric logs

#### All Logs From Different Fabric Devices Are Normalized in Fabric ADOM





# FortiAnalyzer New Licenses

## FortiAnalyzer Licenses

#### New Licenses introduced in Q2/2020

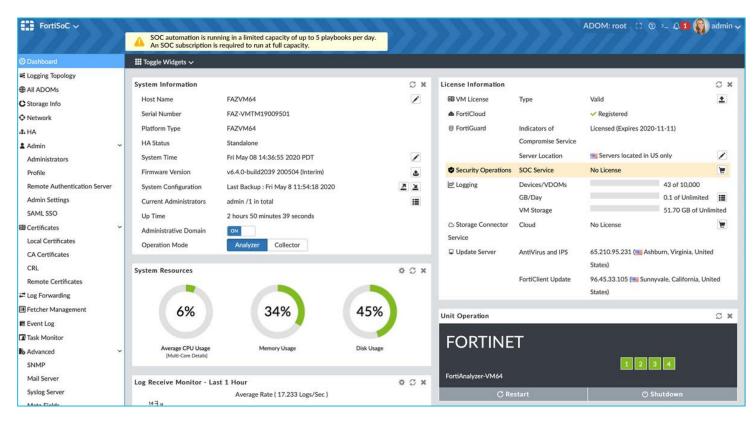
	FAZ Appliance	FAZ-VM		
New Licenses (Q2/2020)		S-Series	Perpetual	FAZ-Cloud
SOC subscription Service	Yes, à la carte and bundle option available	Included in FAZ-VM subscription license	Not supported	No support now. Coming in Q3
FAZ-VM Subscription	Not Applicable	Yes, VM-S, 24X7 FortiCare Contract,IOC & SOC service are included.	Not Applicable	Not Applicable
ADOM License	Perpetual license. Only apply to new platforms introduced in Q2/20 or later	Subscrition license. Available to increase the ADOM limit.	Not Applicable	No support now. Coming in Q3



## FortiAnalyzer SOC Subscription Service

#### FortiSOC Subscription Service

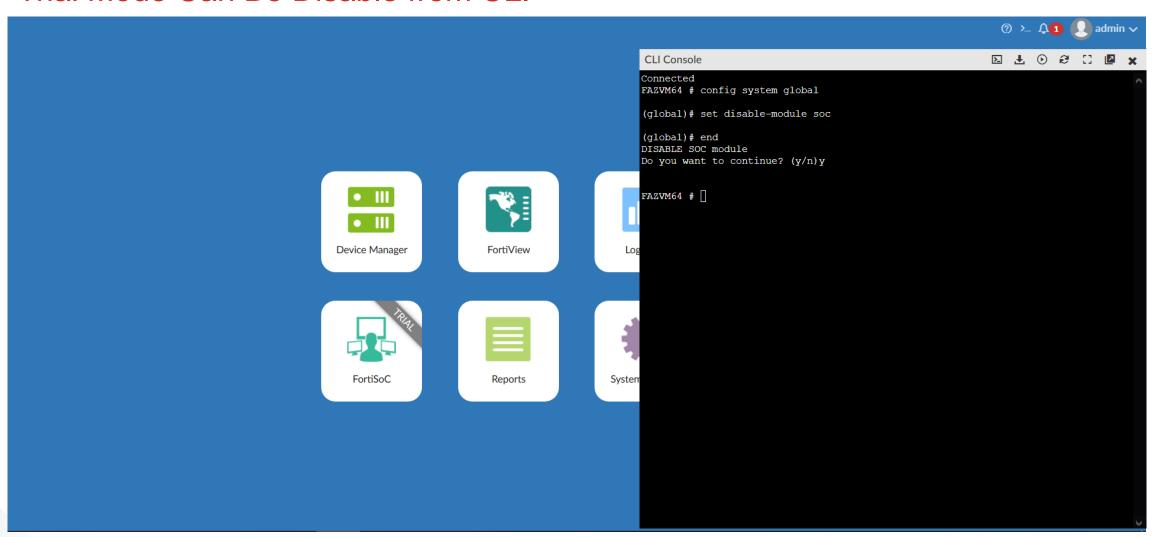
- FortiSOC Trial Mode:
  - Enable customers to easily try out SOC automation feature before purchasing the license
  - The 'Trial' banner & the license warning are moved
  - Try-it-out limits to 5 playbook executions per day





## FortiSOC Trial Mode

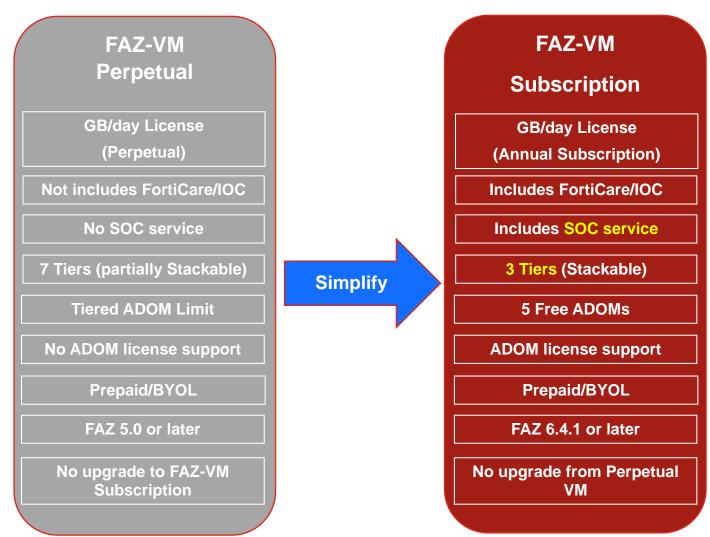
#### Trial Mode Can Be Disable from CLI



# FortiAnalyzer VM Licenses – Perpetual & Subscription

Simplify VM licensing to make it easier to order and renew

- Simplify licensing SKUs
- Everything included
  - VM
  - 24x7 FortiCare support
  - IOC service
  - New SOC service
- 3 Tiers Stackable
  - 5GB, 50GB and 500GB
- Fully stackable
  - No base license need
  - ADOMs, GB/day



## **ADOM License**

A new license for using ADOM on FortiAnalyzer and FortiManager

- 5 free ADOMs by default
- Customer will be charged a flat fee per ADOM for extra ADOMs they add
- This is only for the new NPI hardware models and FAZ/FMG S-Series (subscription based). No change for existing models.

# FortiAnalyzer CLOUD Licenses

## **Update**

FAZ Cloud Base	Base subscription for Cloud-based Events and Security Log Management plus IOC Service	
FAZ Cloud ADVANCED**	Advanced subscription to extend BASE for Cloud-based Events and Log Management with All log types plus IOC Service	
FortiAnalyzer Cloud Premium	Available in mid Q3 – Q4 time frame Include all logs + FortiCare + IOC + SOC service Support for FGT 1U in initial roll-out	
FortiCloud Premium Subscription***	Any customers choosing FortiManager or FortiAnalyzer Cloud will need FortiCloud Premium Subscription.	



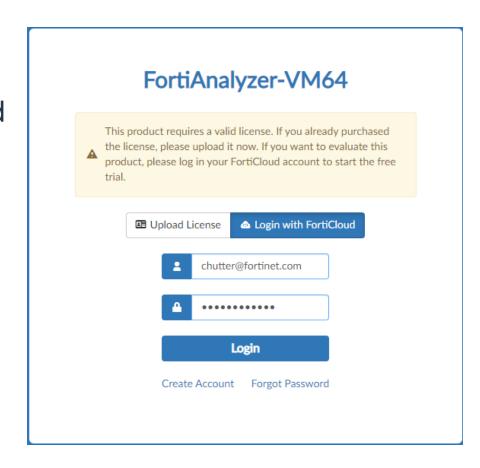
<sup>\*\*</sup> Will be Removed from Pricelist

<sup>\*\*\*</sup> FortiCloud Premium is per FortiCare Account

# FortiAnalyzer-VM / FortiManager-VM Free Trial

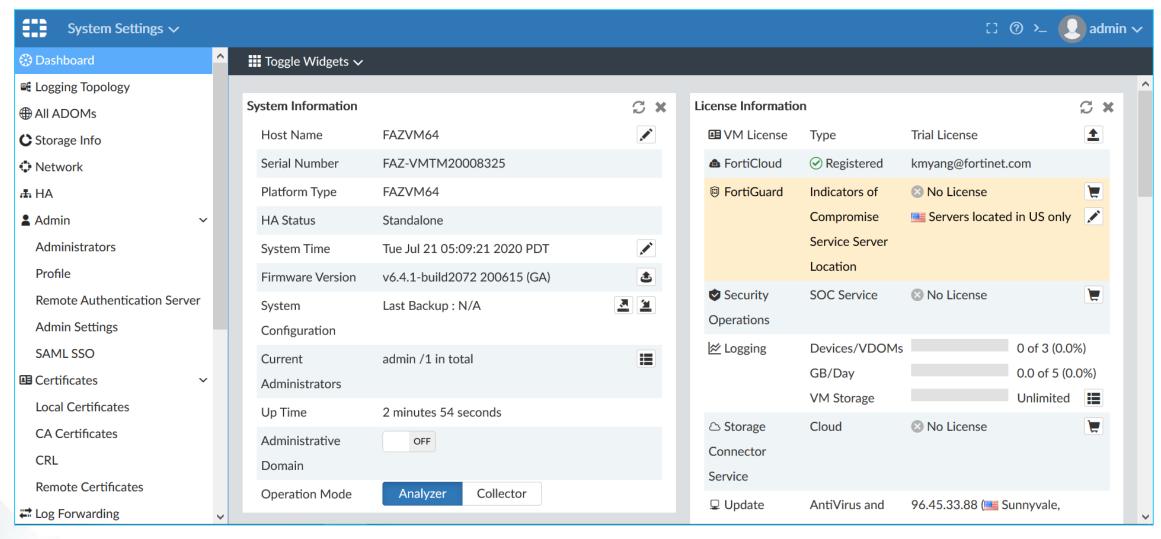
## Prompt admin To Login & Register With FortiCloud

- Register VM license or get a trial VM license
- If a VM license is not associated with your FortiCloud account, you can get a free trial license for up to three devices/VDOM and 5GB/day logs.
   Trial licenses do not expire.
  - FortiCloud account required
  - FAZ-VM / FMG-VM ONLY with ONE trial license per account
  - 5GB/Day logs with 3 devices:
  - FortiCare contract not included
  - No support for VM-Subscription
  - Not available for accounts with existing FAZ-VM / FMG-VM license



# FortiAnalyzer-VM Free Trial

### Free Trial License Status





# What's New FortiSIEM 5.3.0

## What's New FortiSIEM 5.3.0

- Architecture Update Agents Architecture and Features Recap
- Users Experience Optimization Analytics & Forensics Enhancements
- Streamline Incident Response Process Incidents & Cases Management



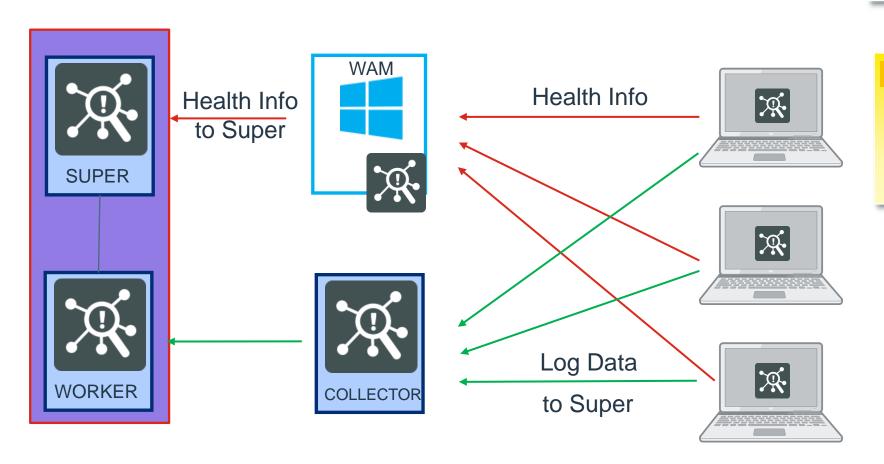
# Agents Architecture and Features

# Legacy Agent Architecture (Pre 5.2.1)

#### **Tips**



To offload event processing from Agents use a collector. Collectors typically forward to Super/Workers.



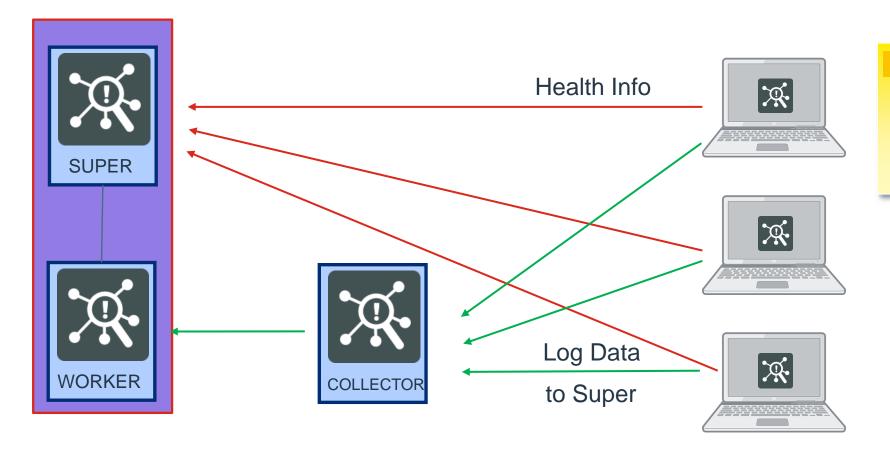
#### Tips



Collectors can be in remote location but agent must still be able to communicate with WAM.

# **Current Agent Architecture**

All Agent Communication is over HTTPS (TCP 443)



#### Tips



Agents MUST forward logs to a Collector.
Collectors typically forward to Super/Worker.

#### Tips



Collectors can be in remote location but agent must still be able to communicate with Super.

# FortiSIEM Agent Feature Summary

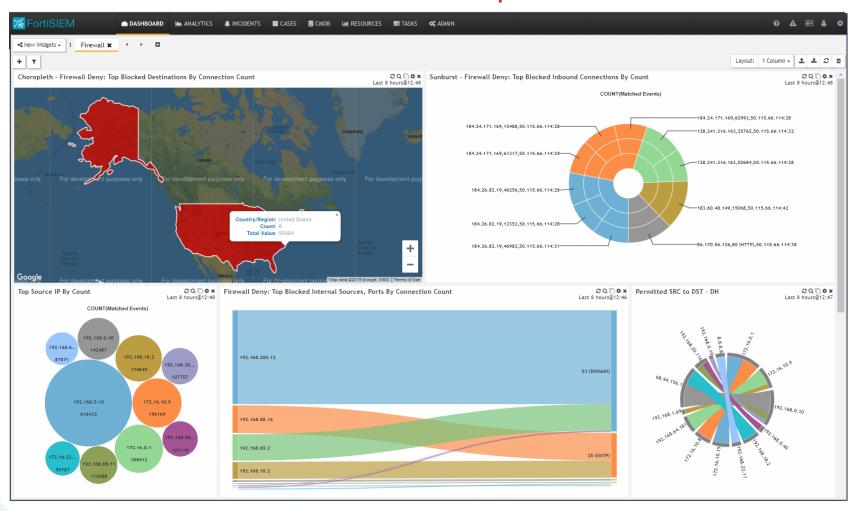
## **Advanced Log Collection Features**

	Feature	Windows	Linux
Agentless	Discovery	<b>✓</b>	<b>✓</b>
	Performance Monitoring	<b>~</b>	<b>~</b>
	Log Collection	<b>✓</b>	<b>✓</b>
FortiSIEM Agent Key Features	Secure Log Collection (TLS)	<b>~</b>	
	File Integrity Monitoring (FIM)	<b>✓</b>	<b>✓</b>
	<b>Custom Log File Monitoring</b>	<b>✓</b>	
	Central Management	<b>~</b>	<b>✓</b>
	DNS, DHCP, IIS logs		
	Installed Software Detection	<b>✓</b>	
	Registry Change Monitoring	<b>✓</b>	

# **Analytics & Forensics Enhancements**

## **More Visualizations Charts**

### More Charts For Dashboard & Reports



Wide range of data visualizations, including:

- Bar and line chart
- Table
- •GEO map
- Sankey and chord
- Choropleth
- Starburst
- Bubble
- Donut
- Heat map
- •... and more!



## **Analytics – Click Reduction**

**Event Attribute** 

**CMDB Attribute** 

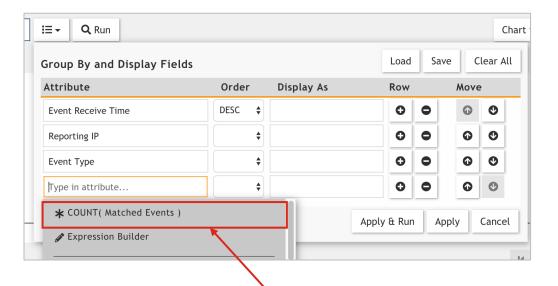
Paren

**Attribute** 

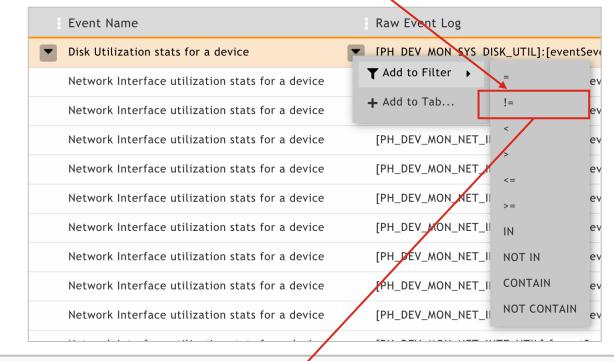
**Event Type** 

## **Users Experience Optimizations**

Filter Operator as an Option



Count is now a shortcut



Value

♦ PH\_DEV\_MON\_SYS\_DISK\_UTIL

!=



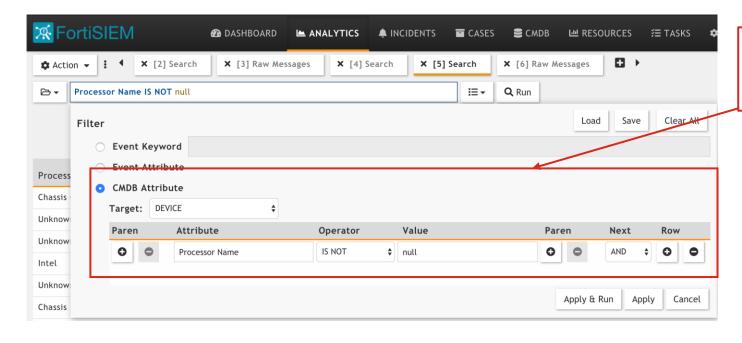
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0

Row

Next

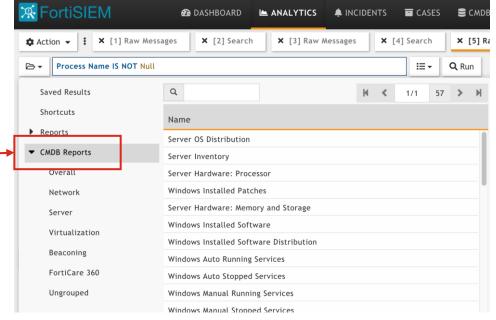
# **Analytics – Run CMDB Reports in Analytics**



Create Under Analytics as well

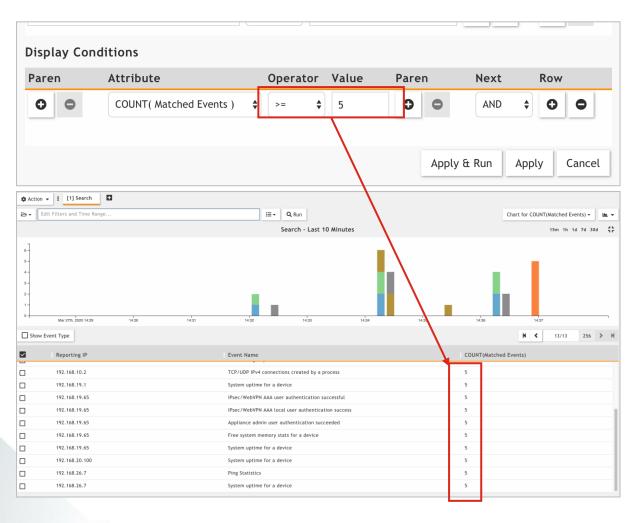
as under CMDB

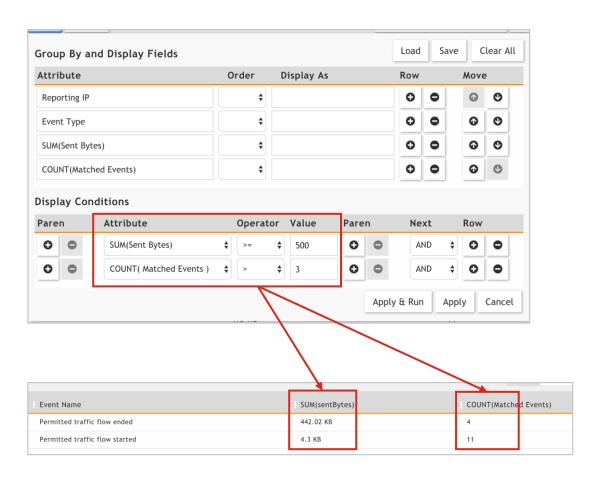
Execute Save Report from Analytics as well as under CMDB



# **Analytics – Display Conditions**

Limit The Search Results - Similar To SQL HAVING Command.





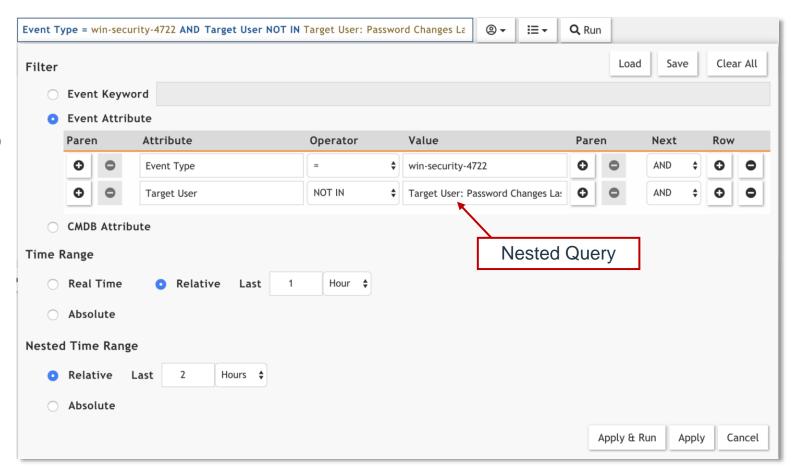


## **Analytics – Nested Searches**

# Nested search addresses a range of analytical questions such as:

- Show me all users with password a change within the last 2 days and no subsequent logins.
- Users with 20 failed logins and a Successful login.
- All devices that have not reported events within the last hour.

Realtime correlation engine can detect similar activity, but Nested searching supports queries on historical data.

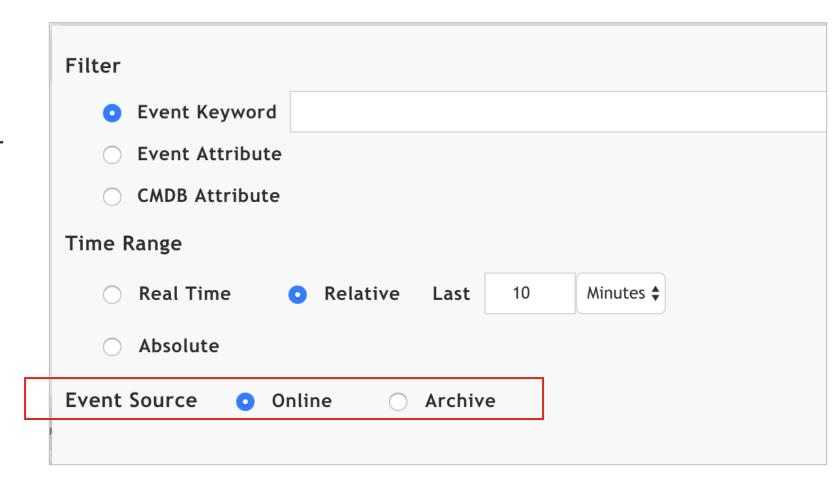




# **Analytics – Search Archive Without Restoration First**

# Query online or offline events data without restoration first.

- Reduces time to query archive.
- Reduces requirement for larger online event storage.
- Improves search experience.



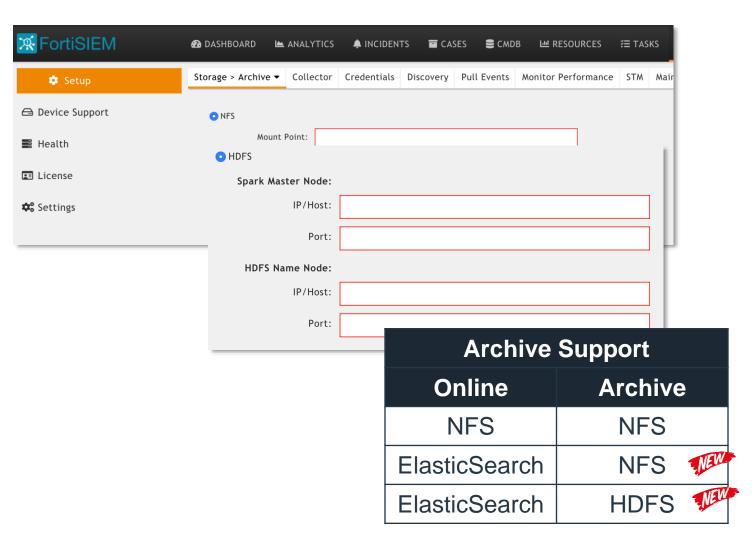


# **Events Archive – Archive Destination Setting From GUI**

Archiving events allows for scalable and cost effective storage of event Data.

### **Expanded Archive Destination**

- FortiSIEM event DB to NFS
- FortiSIEM ES to NFS
- FortiSIEM ES to HDFS with SPARK

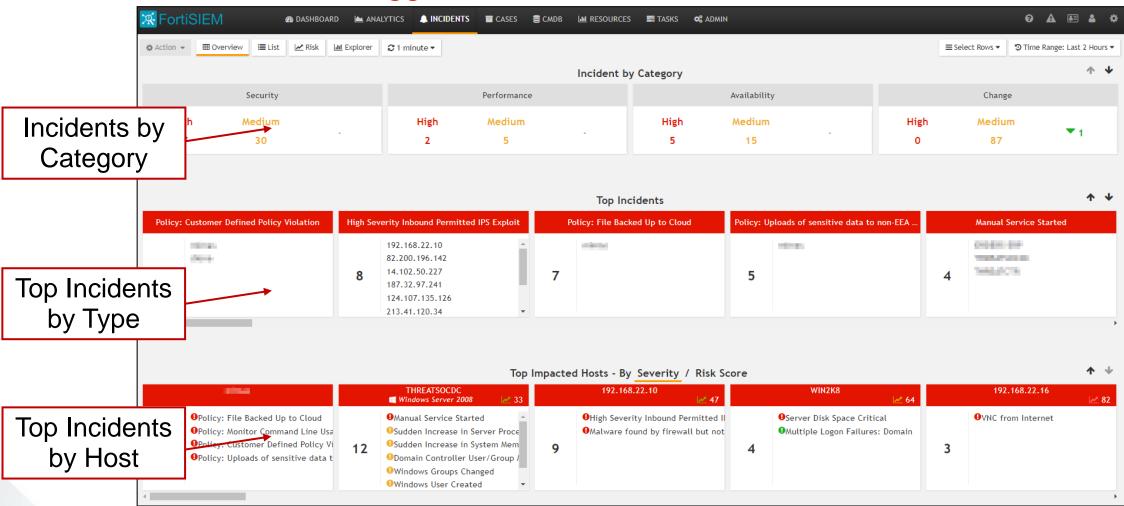




# Incidents & Cases Management

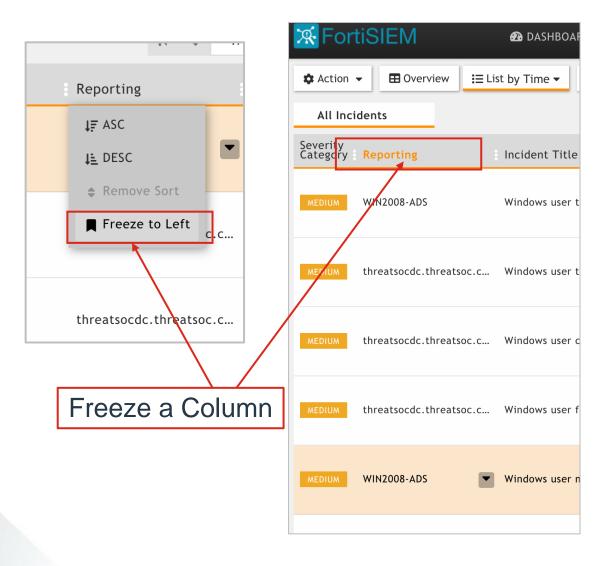
# Incident Views – Summary Dashboard

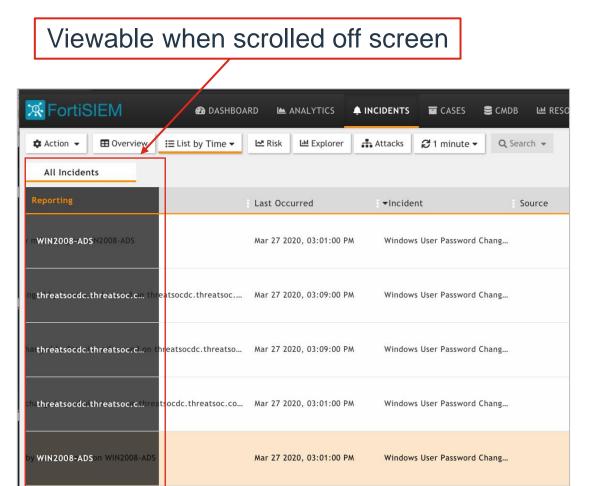
At-A-Glance View Of Triggered Incidents





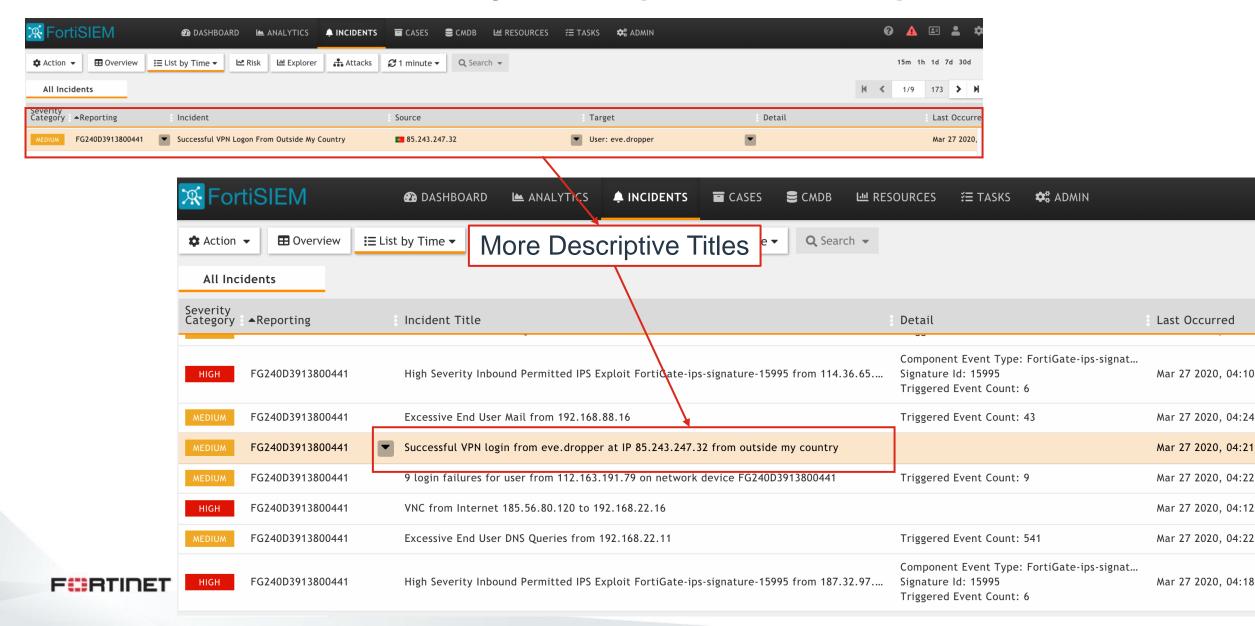
# Incident Views – List by Time (Incident Column Freeze)



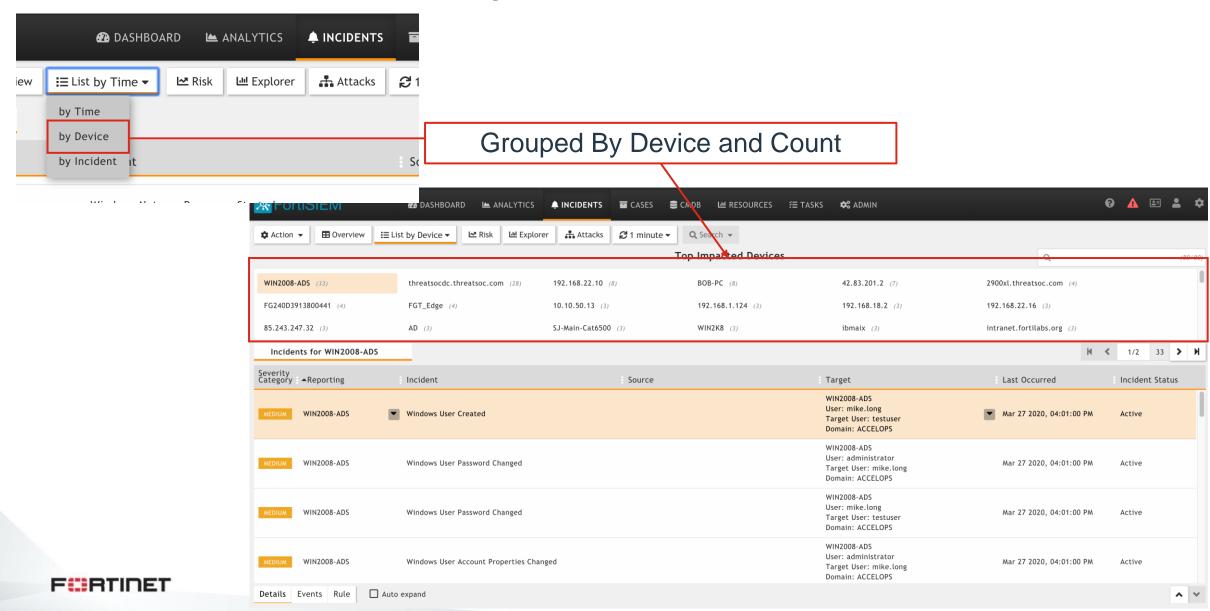




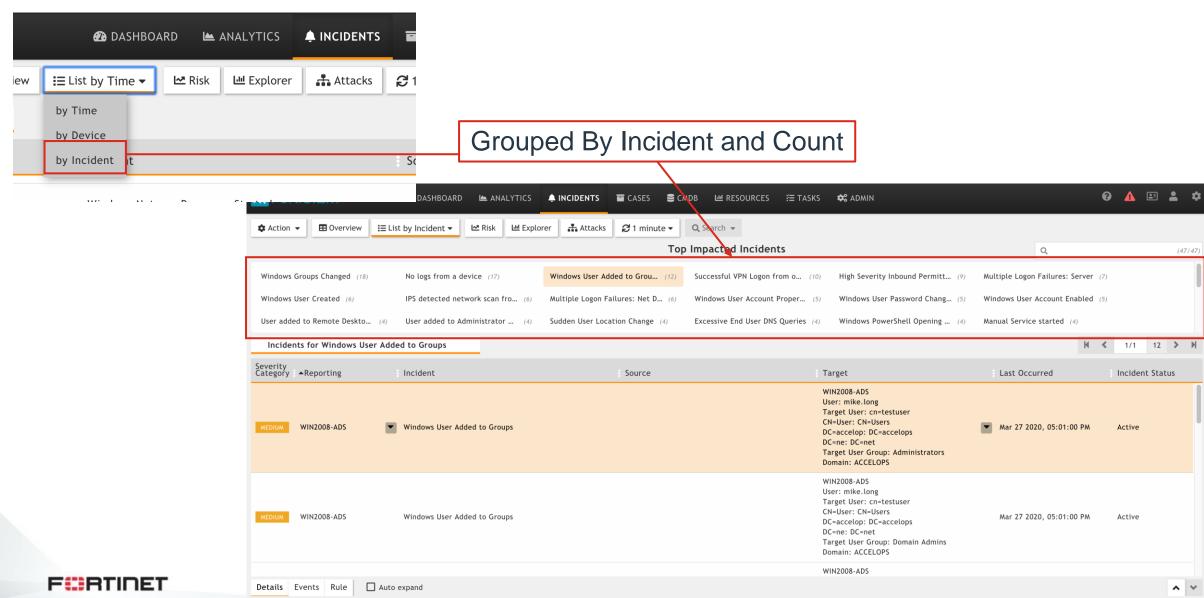
# Incident Views – List by Time (Incident Title)



# Incident Views – List by Device

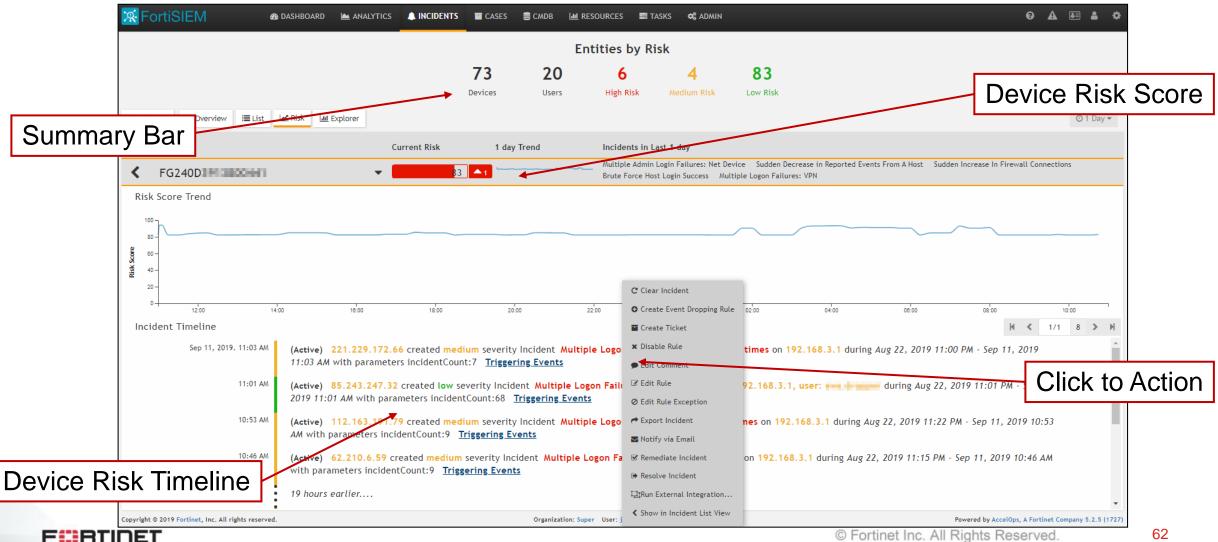


# Incident Views – List by Incident



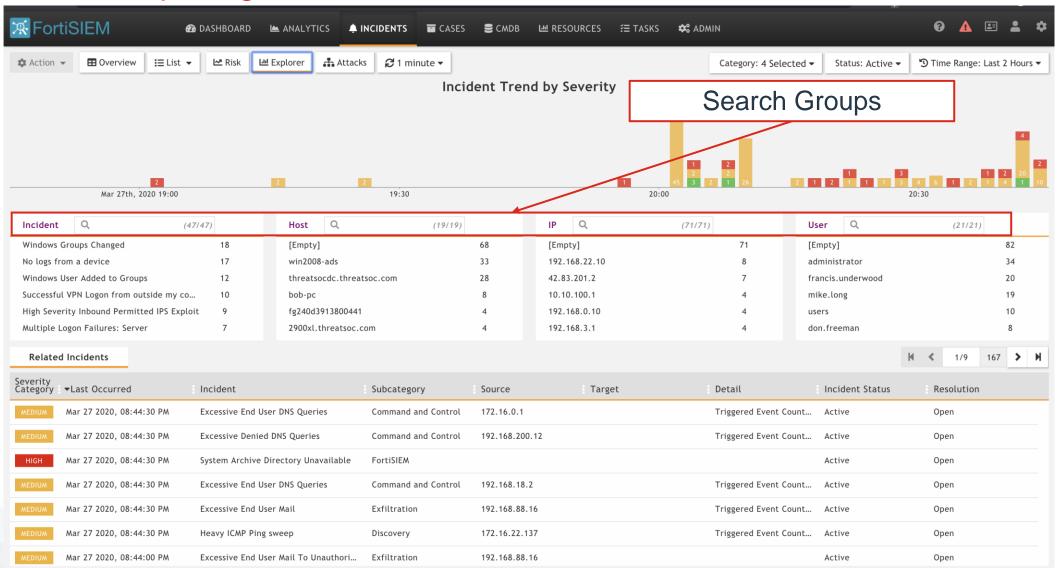
## Incident Views – Risk Dashboard

## User And Entity Risk View



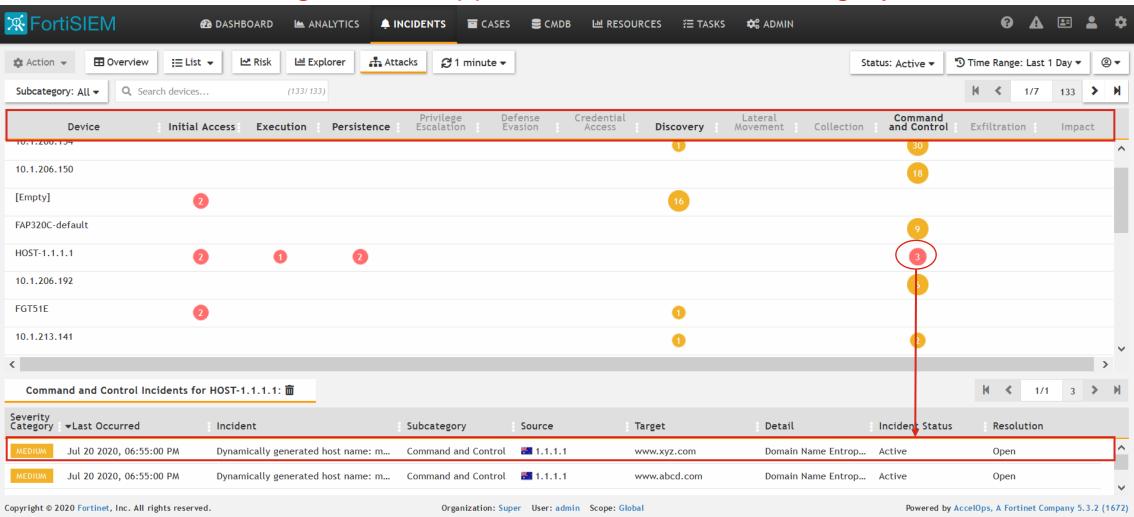
## **Incident Views – Explorer**

## **Instinct Exploring Incidents**



## **Incident Views – Attacks**

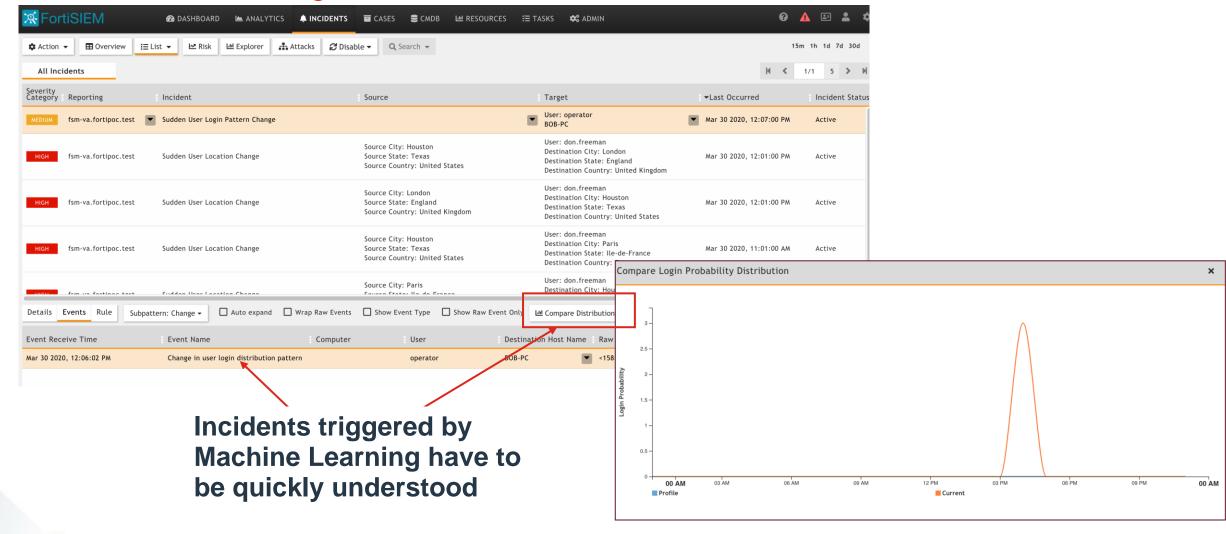
## MITRE ATT&CK Stages Are Mapped To The Rule Subcategory.





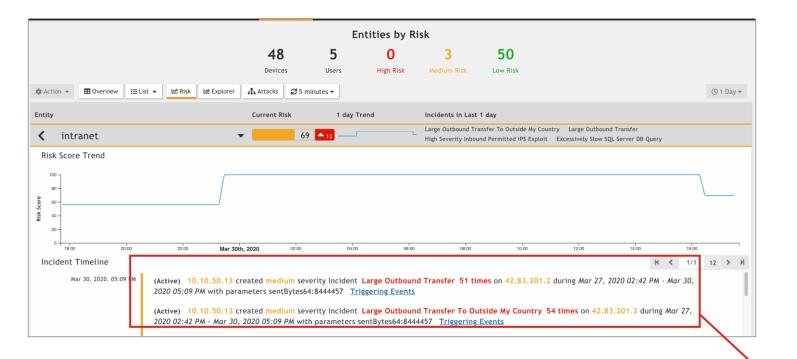
# Incident Visualization – Anomalous User Login Behavior

## **Anomalous User Login Behavior**

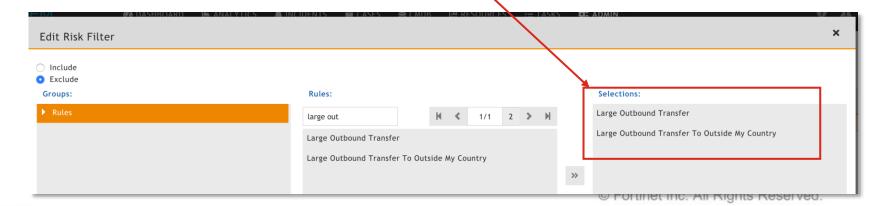




## Incident Noise Reduction – Risk Score Filter



Some Rules in particular environments need to trigger, but not contribute to the Risk score

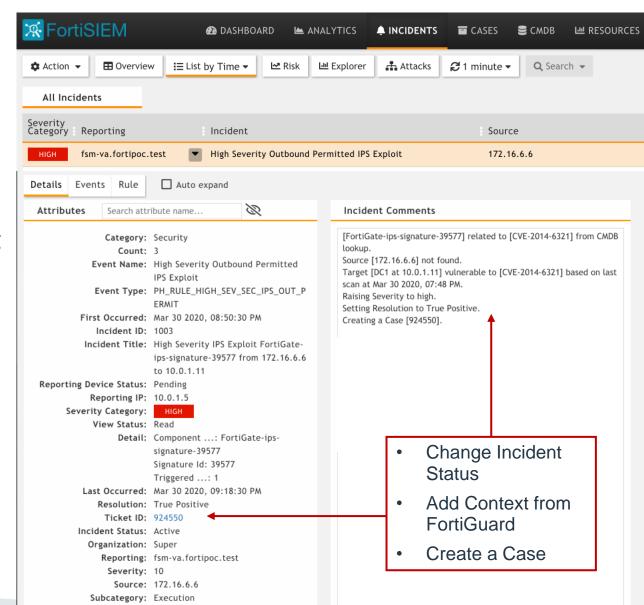




## Incident Noise Reduction – IPS False Positive Check

FortiSIEM can check if the IPS target is vulnerable to the attack and update the incident state.

- Reduces Incident False Positive Rate
- •Provides more immediate context to the Analyst regarding the Threat.
- •Integrates with FortiGuard to lookup the FortiGate IPS attack ID to CVE.





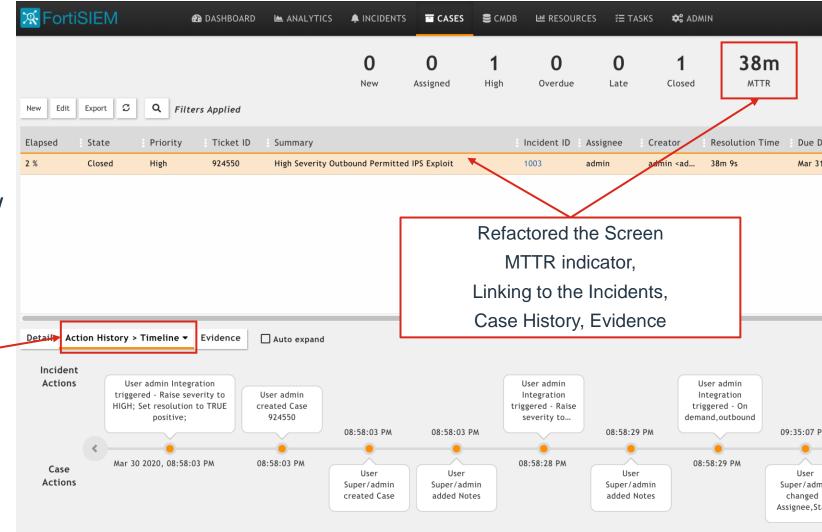
## **Case Management – Action Timeline**

## Tracking All Activities Of Case & Incidents

# Cases help manage multiple incidents and analyst activity.

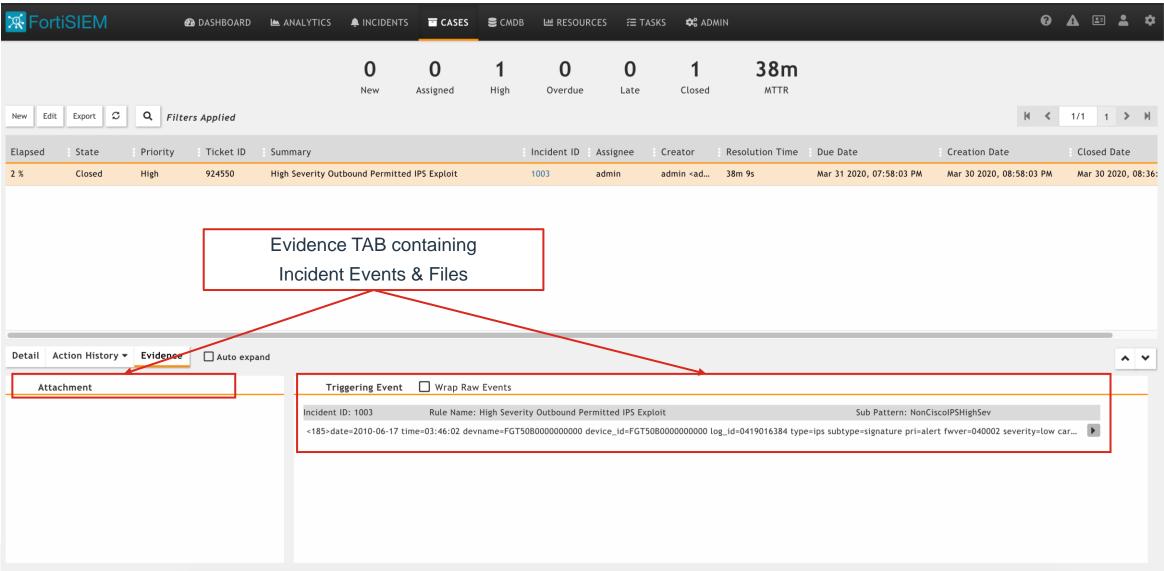
- Understand MTTR values
- New case timeline view
- Improved Case search and view
- Pivot between Incidents, Cases, notes and events.

See all actions by timeline





# **Case Management – Evidence**



# FERTINET

BMW i Motorsport Official Partner



