



SPECIALIZED IN MSP SOLUTIONS FOR:

- IT Monitoring
- Log & Data Management
- IT Asset Management

**MANAGING AN IT
INFRASTRUCTURE HAS
NEVER BEEN EASIER**

Agenda

1. About i-Vertex
2. i-Vertex IT Monitoring overview
3. i-Vertex Log Management overview
4. Licensing & Pricing
5. Key Technical and Selling Points
6. Success Stories
7. i-Vertex Partner Program
8. Q&A

ABOUT US

- Italian company
- Specialized in Enterprise MSP solutions
- More than 20 years of experience in the field



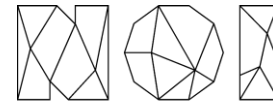
SIMPLICITY



TRANSPARENCY



RELIABILITY



TECHPARK SÜDTIROL / ALTO ADIGE



OUR SOLUTIONS



i-Vertix



IT MONITORING

- Network Topology Discovery
- Network Configuration Backup



LOG & DATA MANAGEMENT

- GDPR and other data protection regulations
- Network Traffic visualization & analysis



IT ASSET MANAGEMENT

- Automatic HW&SW Inventory
- Lifecycle, contracts, licences & more





i-VERTEX IT MONITORING

KEY FEATURES

1

Complete overview of
infrastructure and
services

2

Purpose-built for MSP
and Enterprise

3

ITOps:
several integrations available
(ITSM, CMDB & automation)

4

Intuitive, performing
& simple to use

5

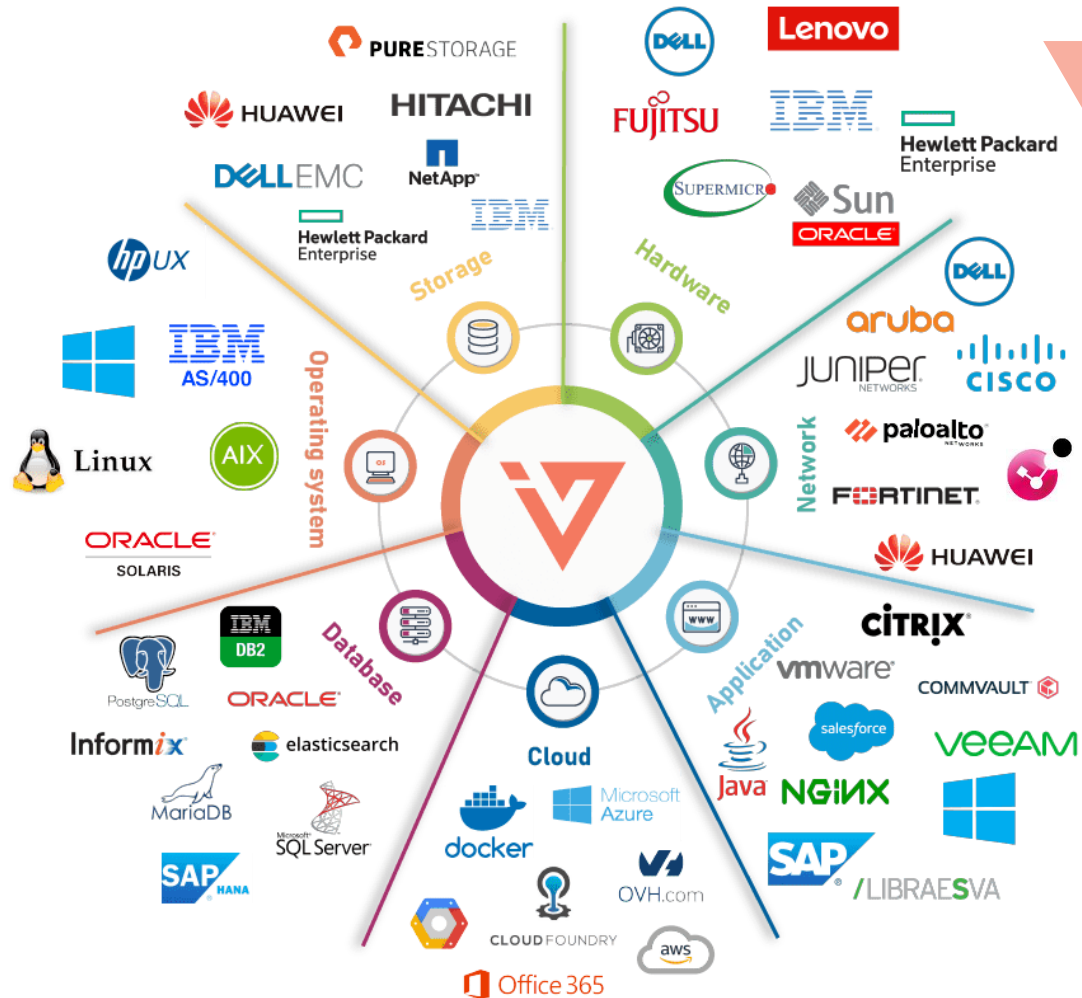
Flexible licensing
options

6

Very fast ROI



IT INFRASTRUCTURE & APPLICATION MONITORING FOR SERVICE PERFORMANCE



Synthetic User Monitoring
(Web, Desktop, Mobile, SAP Gui)

Cloud Monitoring
(Hyperscaler, Office 365, G Suite, etc.)

Application Monitoring
(Backup, application server, web server, ERP, etc.)

Database Monitoring
(Relational & non relational DB's)

Virtualization/Container Monitoring
(VMware, Hyper-V, Kubernetes, etc.)

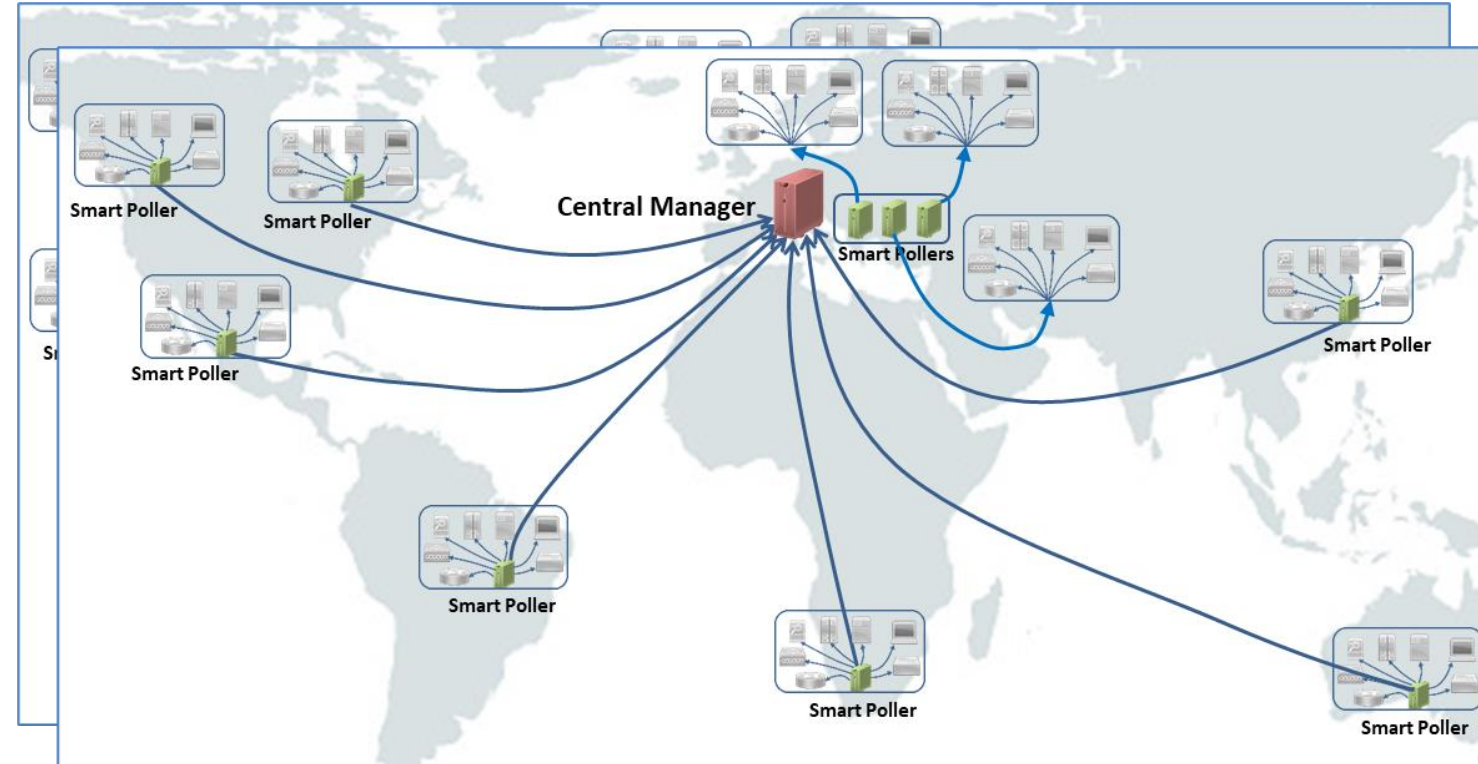
OS Monitoring
(Windows, Linux, Solaris, AIX, AS400, etc.)

Hardware/Network Monitoring
(Network, Storage, Server, UPS, etc.)



DEPLOYMENT SCENARIOS

- i-Vertex Central Manager deployed on premises, in private or public cloud
- Distributed architecture that natively fits geographically distributed environments
- Smart Pollers (virtual or hardware appliance with optional 4G module) able to work independently of Central Manager
- HA option for Central Manager
- Highly scalable (tens thousands devices, hundreds thousands monitors)
- TLS encrypted communication available between Smart Pollers & Central Manager



i-VERTIX HARDWARE APPLIANCE

Cloud Poller,
Small Branch Offices

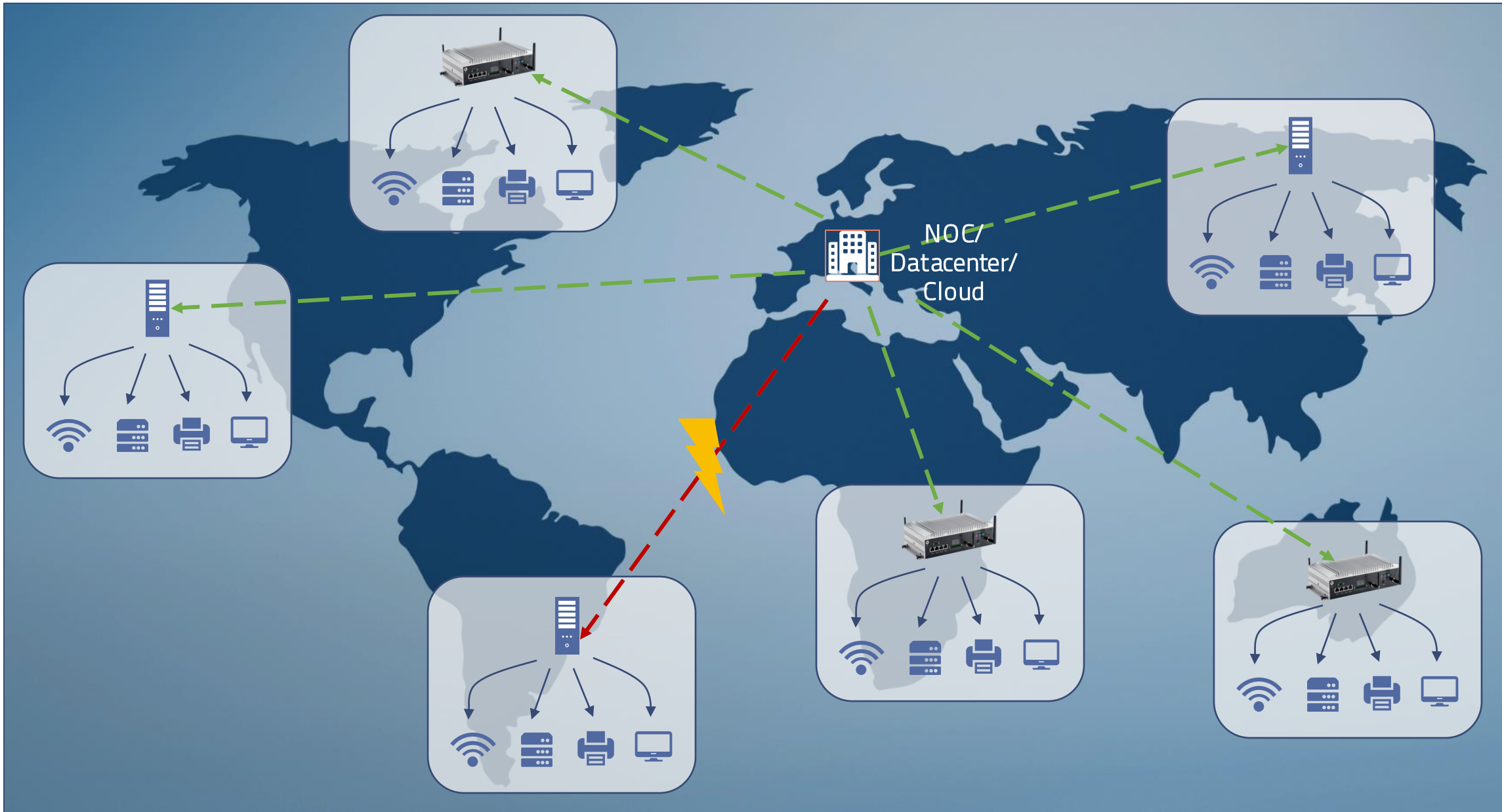
Cloud Poller,
Branch Offices, IoT

Branch Offices,
Industries, IoT,
extreme environment

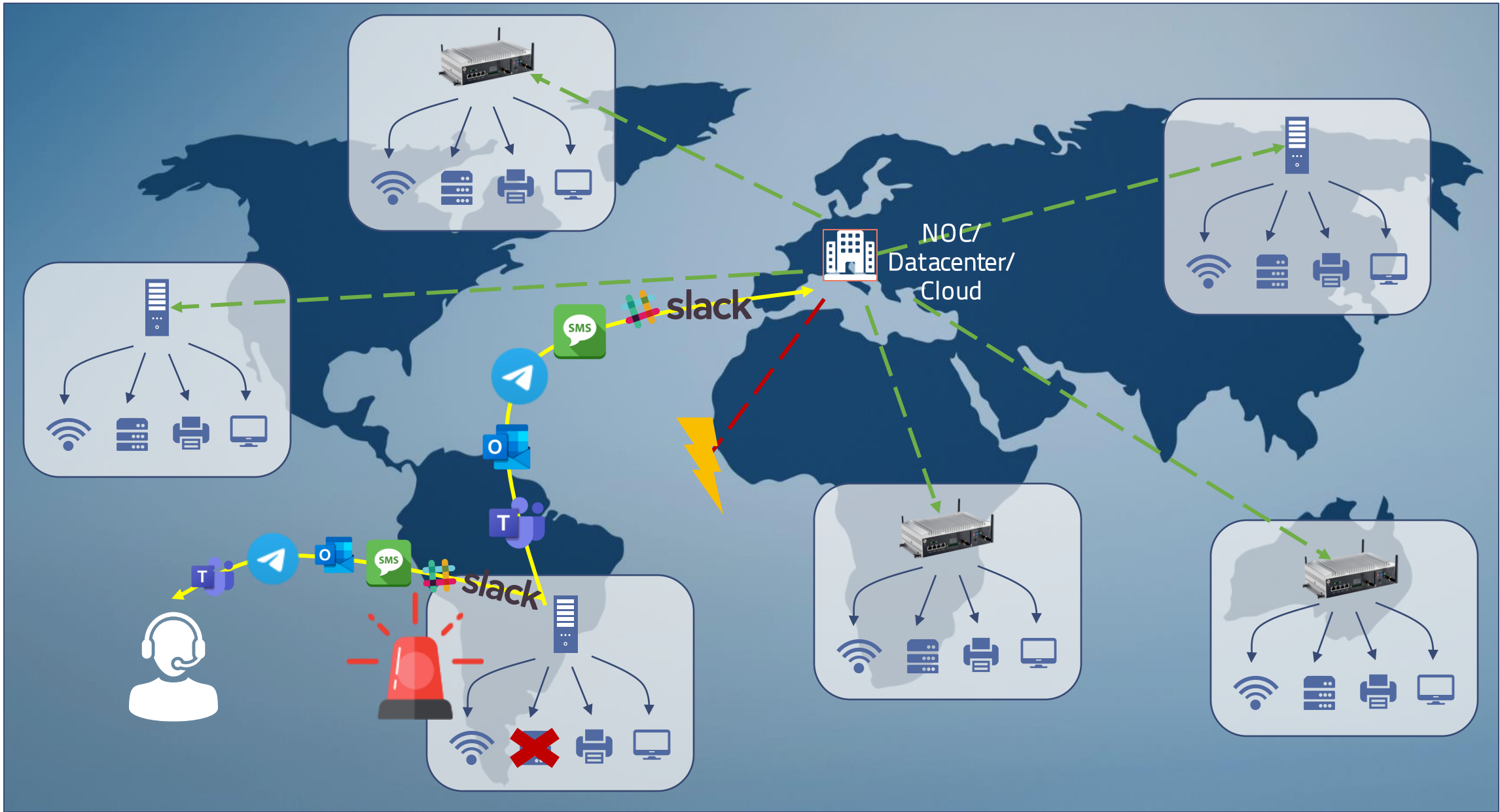
| |  i-Vertix Office |  i-Vertix Pro S2 |  i-Vertix Pro L |
|----------------------------|--|---|--|
| CPU Type | Intel Celeron J1900 | Intel i5-7200U | Intel i5-4300U |
| CPU GHz | 2 GHz | 2.50 GHz | 1.90 GHz |
| CPU No. Cores | 4 | 2 (4 Threads) | 2 |
| RAM | DDR3 2GB | DDR4 4GB | DDR3 8GB |
| HD Type | SSD mSATA-6Gb/s | M.2 SSD | SSD MLC SATA-6Gb/s |
| HD Size | 64 GB | 120 GB | 64 GB |
| LAN | 1 x 1Gb | 2 x 1Gb | 2 x 1 GB+ 4 Port PoE Switch |
| Serial / USB Ports | 4 x USB 2.0 1 x USB 3.0 | 4 x RS232 + 2 x RS485 4 x USB 2.0 4x USB 3.0 | 2 x RS232 2 x USB 2.0 2 x USB 3.0 |
| 4G Module | ✓ (Optional) | ✓ | ✓ |
| Digital input ports | ✗ | ✗ | 6 x in, 2 x out |
| Shock resistant | ✗ | ✗ | ✓ |
| Temperature range | 0°C – 40°C | 0°C – 60°C | -20°C – 60°C |
| IP40/IP67 | ✗ | ✗ | ✓ |



SMART POLLERS

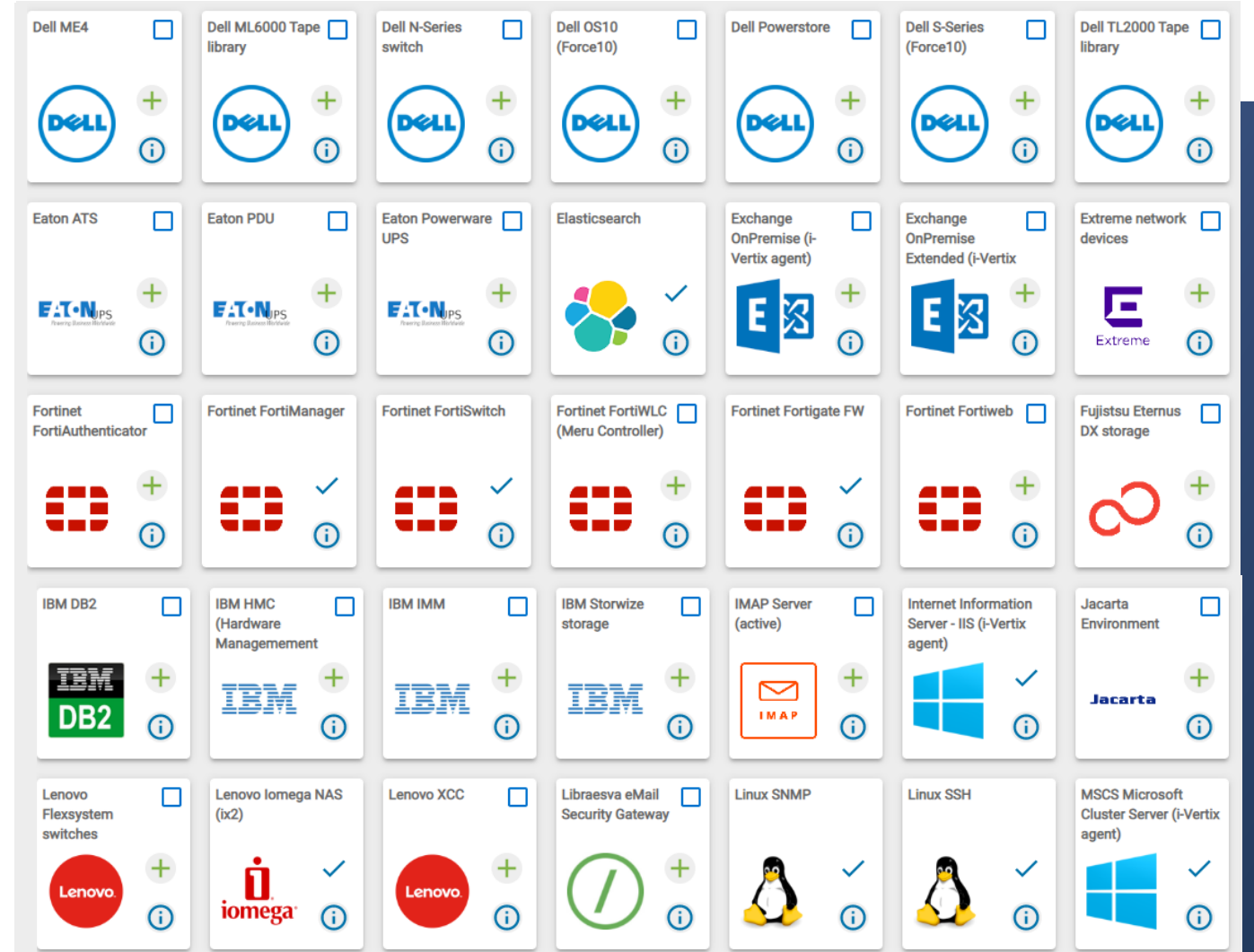


SMART POLLERS



PLUGIN STORE

- Support for over 600 devices, technologies and applications out of the box (network, database, cloud, storage, OS, applications, etc.)
- Templates & autodiscovery features included
- Easy to install & quick plugin update
- Ready to use



PLUGIN STORE

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The screenshot displays the Plugin Store interface with a grid of plugins. The 'Cisco standard network devices' plugin is highlighted, showing its description and supported features. Other visible plugins include Fortinet FortiAuthenticator, Fortinet FortiManager, IBM DB2, IBM HMC (Hardware Management), Lenovo Flexsystem switches, and Lenovo Iomega NAS (ix2).

Description

Cisco standard network devices (2800, 2900, 3750, Nexus, ecc)

protocols used: SNMP

- AAA server
- ARP table
- Configuration status
- CPU usage
- Environment
- HSRP
- Interfaces
- IPSLA
- Load
- Memory usage
- Flash memory usage
- QoS usage
- Spanning tree
- Stack status
- Uptime
- Voice calls
- VPC
- VSS
- WAN 3G

Discovery modes

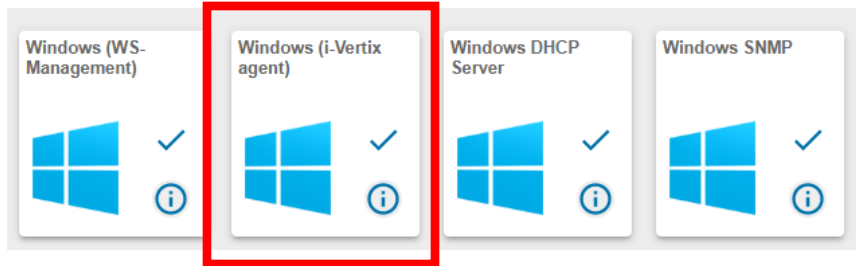
- AAA server
- Interfaces
- Spanning tree

Host Discovery

Network Topology Discovery

PLUG IN STORE

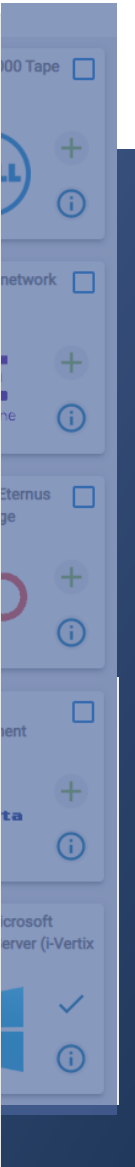
- Support for over 600 devices, technologies and applications out of the box (network, database, cloud, storage, OS, applications, etc.)
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- Ready to use



Windows (WS-Management)

protocols used: wsman (HTTP/HTTPS)

- CPU usage
- Eventlog
- Files date
- Files size
- Interfaces
- Memory
- Pagefile
- Pending reboot
- Processes
- Services
- Services auto start
- Service DHCP Client
- Service DNS Client
- Service Plug & Play
- Service Server
- Service TCP/IP NetBIOS Helper
- Service Windows Event Log
- Service Workstation
- Sessions
- Storages
- NTP time
- Uptime



IN-CONTEXT ALARMS, STATUS AND PERFORMANCE REPORTING

Monitoring > Resources Status

hosts: 0 Down, 0 Unreachable, 3 Up, 0 Pending | services: 4 Critical, 0 Warning, 4 Unknown, 97 Ok

July 4, 2022 4:01 PM

SEARCH

Resource State Status Host group Service group CLEAR

ACKNOWLEDGE SET DOWNTIME CHECK

| State | Resource | Host | Group | Service | Duration | Frequency | Next Run | Details |
|---------|--|------------------|-------|---------|----------|-----------|----------|--|
| UNKNOWN | Packet Errors ens192 | SRV-Linux | | | 2M 2d | 3/3 (H) | 1w 5d | UNKNOWN: No interface found |
| UP | i-Vertex-Central | | | | 8M 1w | 1/3 (H) | 1w 5d | OK - 127.0.0.1 rta 0.122ms lost 0% |
| UP | SRV-Linux | | | | 1M 4w | 1/3 (H) | 1w 5d | OK - 192.168.56.101 rta 0.030ms lost 0% |
| UP | www.i-vertex.com | | | | 3w 4d | 1/3 (H) | 29s | OK: Response time on port 443 is 0.066s |
| OK | i-Vertex Broker stats - Broker Master | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK: Broker statistics are ok |
| OK | i-Vertex Broker stats - Broker Module Master | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK: Endpoint output 'central-module-master-output' |
| OK | i-Vertex Broker stats - Broker RRD | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK: Broker statistics are ok |
| OK | i-Vertex Count Hosts/Services | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK: Number of current processes running: 1 - Total |
| OK | Gorgone - Nodes | i-Vertex-Central | | | 1M 4w | 1/3 (H) | 1w 5d | OK: authentication succeeded - Response time 0.12 |
| OK | SSH login | i-Vertex-Central | | | 1w 6d | 1/3 (H) | 1w 5d | OK: authentication succeeded - Response time 0.12 |
| OK | TCP Selenium response time | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK: authentication succeeded - Response time 0.12 |
| OK | CPU | i-Vertex-Central | | | 3w 4d | 1/3 (H) | 1w 5d | OK: 1 CPU(s) average usage is 9.00% - CPU '0' us |
| OK | Gorgone - Events | i-Vertex-Central | | | 1M 4w | 1/3 (H) | 1w 5d | OK: authentication succeeded - Response time 0.12 |
| OK | System Load | i-Vertex-Central | | | 1w 6d | 1/3 (H) | 1w 5d | OK: authentication succeeded - Response time 0.12 |
| OK | NTP | i-Vertex-Central | | | 8M 3d | 1/3 (H) | 1w 5d | OK: Time offset 0 second(s): Local Time : 2022-06-2 |
| OK | Uptime | i-Vertex-Central | | | 1w 6d | 1/3 (H) | 1w 5d | OK: System uptime is: 8h 22s, Linux i-vertex3robertc |
| OK | Ping | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK - 127.0.0.1 rta 0.030ms lost 0% |
| OK | PHP-FPM usage - pool ITAM | i-Vertex-Central | | | 3w 6d | 1/3 (H) | 1w 5d | OK: php-fpm active processes: 1 (33.33%), idle pro |
| OK | PHP-FPM usage - pool Monitoring | i-Vertex-Central | | | 3w 6d | 1/3 (H) | 1w 5d | OK: php-fpm active processes: 1 (100.00%), idle pro |
| OK | PHP-FPM usage - pool www | i-Vertex-Central | | | 3w 6d | 1/3 (H) | 1w 5d | OK: php-fpm active processes: 1 (16.67%), idle pro |
| OK | Process - centengine | i-Vertex-Central | | | 8M 1w | 1/3 (H) | 1w 5d | OK: Number of current processes running: 1 - Total |
| OK | Process - gorgone-action | i-Vertex-Central | | | 1M 4w | 1/3 (H) | 1w 5d | OK: Number of current processes running: 1 - Total |

Host Status Summary

Service Status Summary

Drill down into specific Alarm – Alarm details

Timeline with recent Alarm instances

Performance Graph

CPU graph on mon-001.i-vertex.cloud

1 DAY 7 DAYS 31 DAYS

FROM: 06/03/2022 4:20 PM TO: 07/04/2022 4:20 PM

cpu_0 (%) Min: 1.64 Max: 7.81 Avg: 2.94

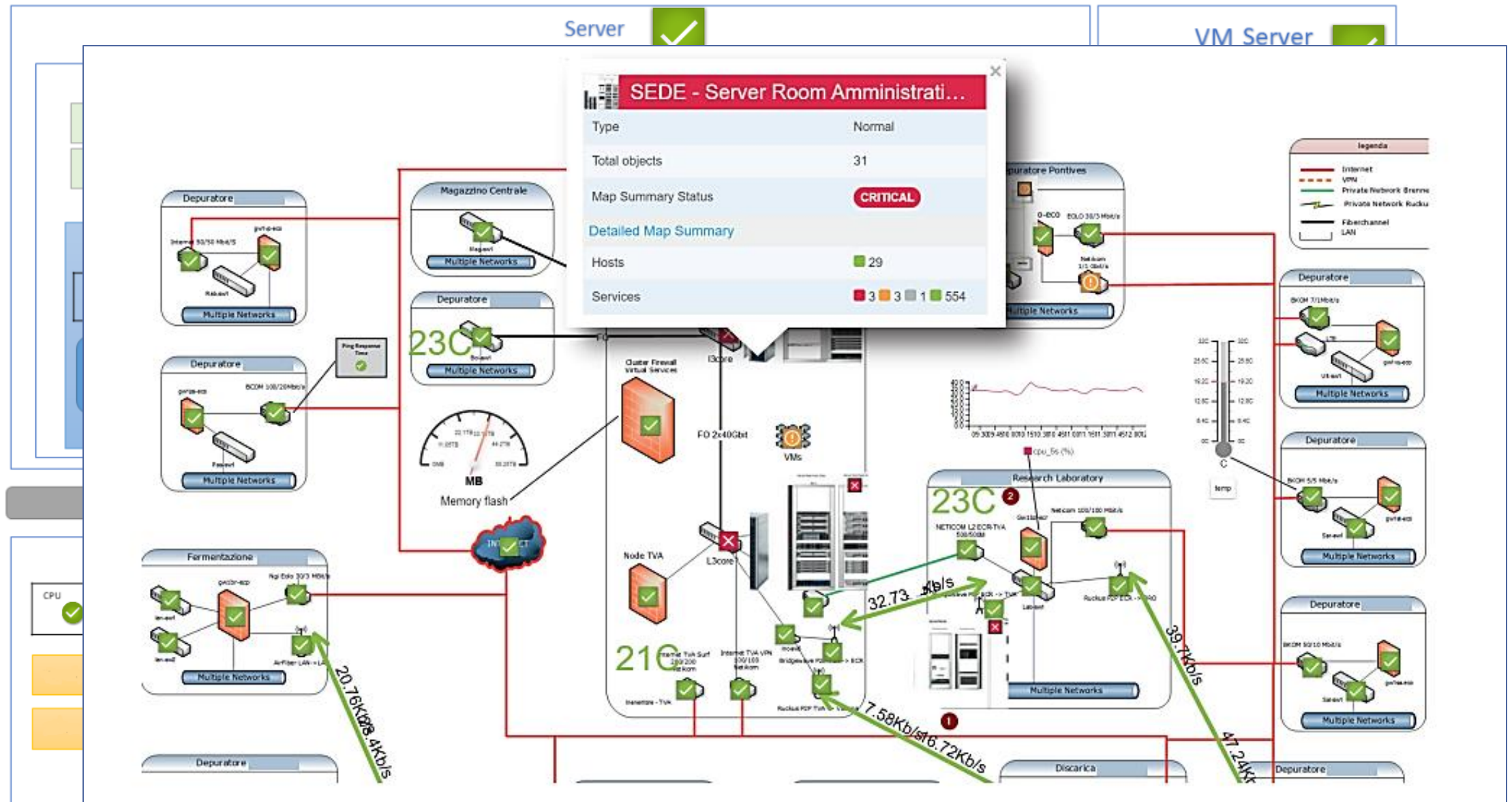
cpu_1 (%) Min: 1.8 Max: 8.04 Avg: 3

cpu_2 (%) Min: 1.83 Max: 8.15 Avg: 3.06

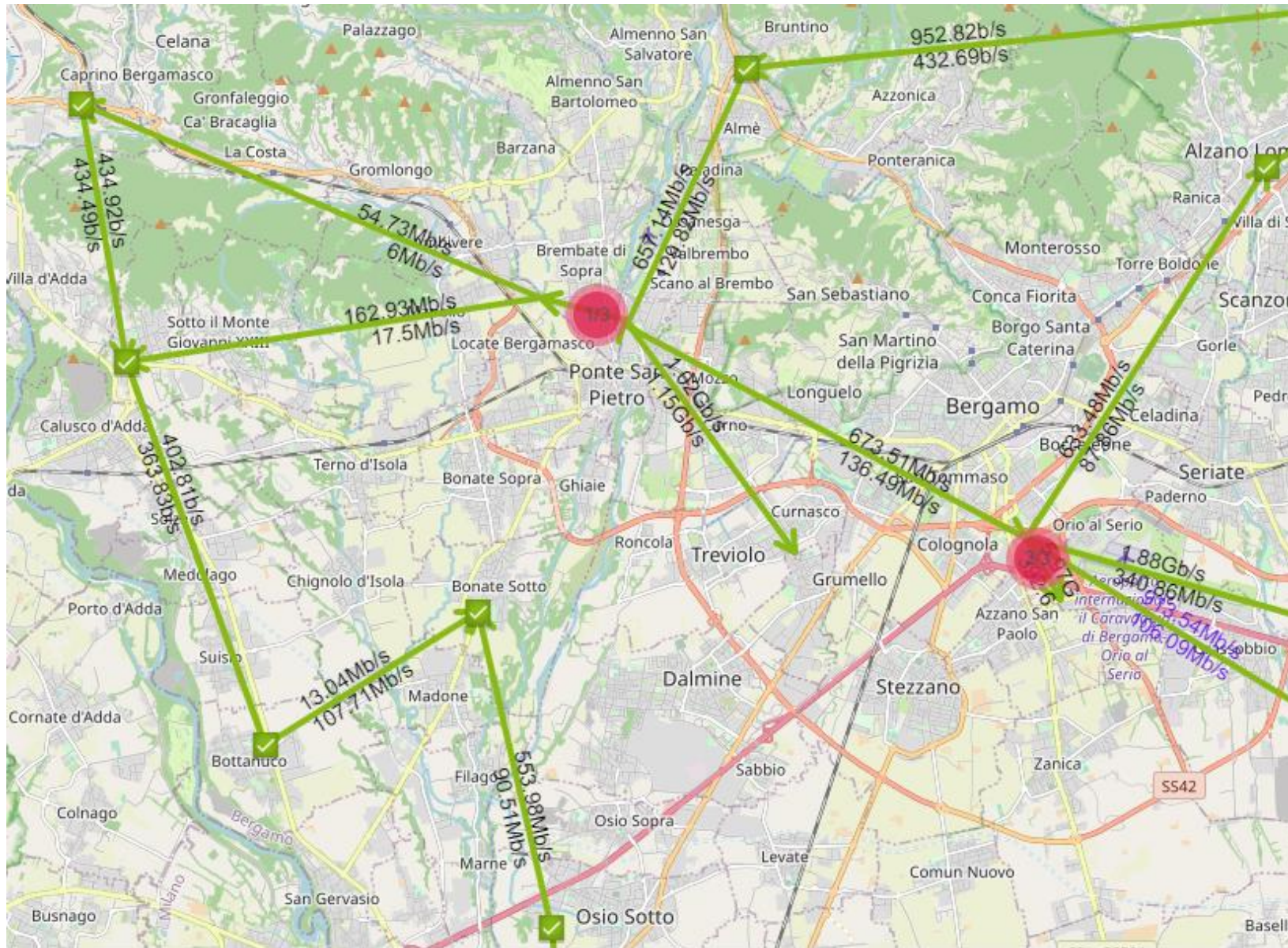
cpu_3 (%) Min: 1.58 Max: 8.1 Avg: 2.97

total_cpu_avg (%) Min: 1.79 Max: 8.03 Avg: 2.99

SERVICE AND DEVICE STATUS, PERFORMANCE DATA, THRESHOLDS VIOLATIONS EXPOSED ON MAPS, INFORMATIVE POP-UP



STATIC OR DYNAMIC GEOLOCALIZED MAPS



Oracle

Oracle RDBMS monitoring

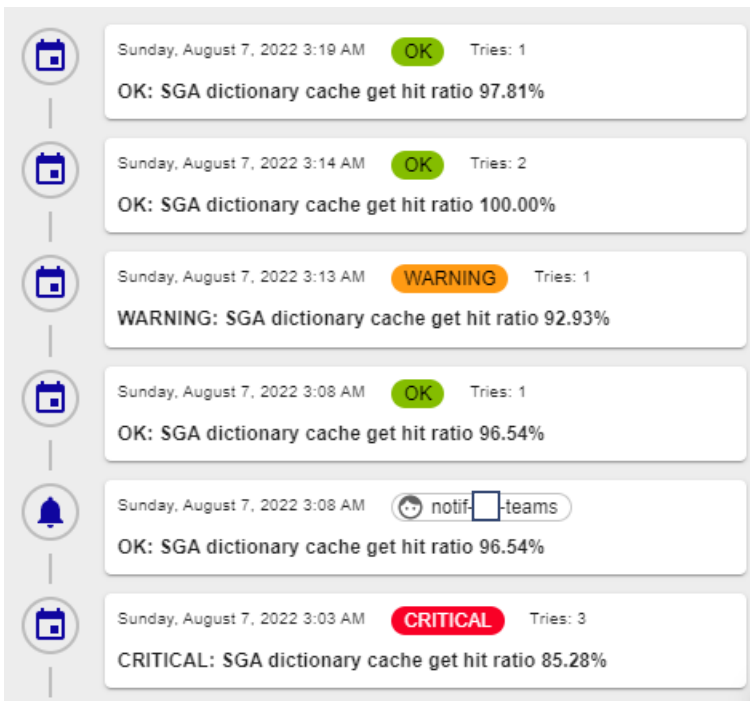
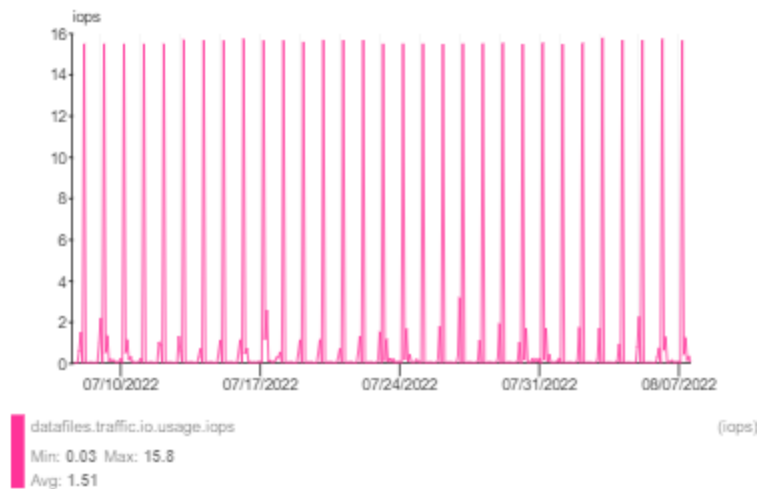
protocols used: Oracle Client (example: TCP 1521)

- ASM Diskgroup usage
- Connected users
- Connection time
- Corrupted blocks
- Data File status
- Dataguard status
- Dictionary Cache usage
- Event waits usage
- Fast Recovery usage
- Invalid objects
- Library Cache usage
- Long queries
- Password expiration
- Process usage
- Redolog usage
- RMAN backup age
- RMAN backup problems
- RMAN Online backup problems
- Rollback Segment usage
- SQL numeric: custom SQL with numeric response
- SQL string: custom SQL with string response
- Tablespace usage
- TNS Ping

Discovery modes

- ASM Disk groups
- Tablespaces

Oracle Data File status graph on



| | |
|-----------|---|
| OK | <input checked="" type="checkbox"/> Ping |
| OK | <input type="checkbox"/> Oracle TNS ping |
| OK | <input type="checkbox"/> Oracle Tablespace usage - USERS |
| OK | <input type="checkbox"/> Oracle Tablespace usage - SYSTEM |
| OK | <input type="checkbox"/> Oracle Tablespace usage - SYSAUX |
| OK | <input type="checkbox"/> Oracle Tablespace usage - DIVA4 |
| OK | <input type="checkbox"/> Oracle Session usage |
| OK | <input type="checkbox"/> Oracle Rollback Segment usage |
| OK | <input type="checkbox"/> Oracle RMAN backup problems |
| OK | <input type="checkbox"/> Oracle RMAN backup age |
| OK | <input type="checkbox"/> Oracle Redolog usage |
| OK | <input type="checkbox"/> Oracle Process usage |
| OK | <input type="checkbox"/> Oracle Long Queries |
| OK | <input type="checkbox"/> Oracle Library Cache usage |
| OK | <input type="checkbox"/> Oracle Invalid Objects |
| OK | <input type="checkbox"/> Oracle Fast Recovery usage |
| OK | <input type="checkbox"/> Oracle Event Waits usage |
| OK | <input type="checkbox"/> Oracle Dictionary Cache usage |
| OK | <input type="checkbox"/> Oracle Datacache hitratio |
| OK | <input type="checkbox"/> Oracle Data File status |



VMware

Resource (Host and services)

| | |
|----------|---|
| OK | VMware Snapshot usage size |
| OK | VMware Connector statistics |
| OK | VMware vMotion Operations |
| OK | VMware Cluster CPU |
| OK | VMware Datastore latency 3PAR-SAS-LUN1 |
| OK | VMware Datastore usage 3PAR-SAS-LUN1 |
| OK | VMware Datastore count VM 3PAR-SSD-LUN3 |
| OK | VMware Datastore IO 3PAR-SSD-LUN3 |
| OK | VMware Datastore IOPS 3PAR-SSD-LUN3 |
| OK | VMware Datacenter Alarm |
| OK | VMware VM Snapshot age |
| OK | VMware VM Tools status |
| OK | VMware License usage |
| CRITICAL | VMware Host Alarm |
| CRITICAL | VMware Host storage adapters |

Information

Tuesday, September 20, 2022 11:58 AM **OK** Tries: 1

OK: Total rate of reading data: 284.00 KB/s, Total rate of writing data: 750.00 KB/s - Datastore '3PAR-SAS-LUN1' : accessible true, rate of reading data: 284.00 KB/s, rate of writi...

Tuesday, September 20, 2022 11:58 AM **OK** Tries: 1

OK: Cluster 'Standard' status is green [ha enabled: false] [drs enabled: false]

Tuesday, September 20, 2022 11:58 AM **OK** Tries: 1

OK: All snapshots are ok

Saturday, September 17, 2022 11:43 PM **WARNING** Tries: 3

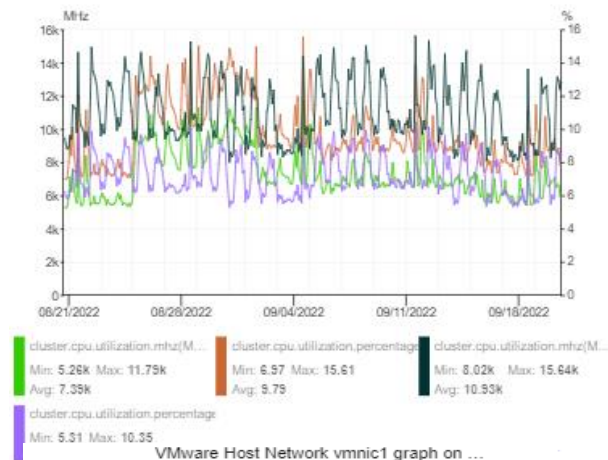
WARNING: Host 'srv-...-esx2...local' : physical interface 'vmnic0' traffic out: 922.87Mb/s (88.01 %)

Status information

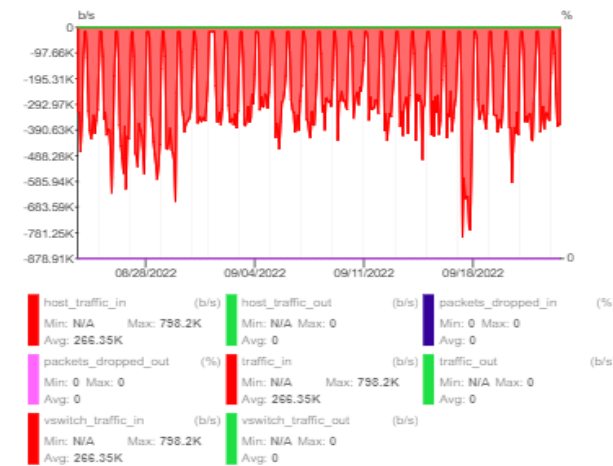
CRITICAL: Host 'srv-...-esx2...local' : lun 'HP Fibre Channel Disk (naa.600c0ff00014065645be7c5701000000)' status: error,timeout - path 'vmhba0:C0:T2:L0' status: dead - path 'vmhba0:C0:T3:L0' status: dead - path 'vmhba1:C0:T2:L0' status: dead - path 'vmhba1:C0:T3:L0' status: dead checking host 'srv-...-esx2...local' status connected, maintenance mode is false

Performance graph

VMware Cluster CPU graph on Moser



VMware Host Network vmnic1 graph on ...



Veeam

Veeam Backup monitoring

protocols used: HTTPS (i-Vertex agent)

- Backup job status
- Tape job status
- License expiration & usage
- Repositories
- VSB Jobs

Discovery modes

- Backup jobs
- Repositories



| | | |
|----|--|--------------------------------------|
| OK | | Veeam Repositories |
| OK | | Veeam Repositories |
| OK | | Veeam License |
| OK | | Veeam License |
| OK | | Veeam Job Status - efb02-backup-copy |
| OK | | Veeam Job Status - efb02-backup |
| OK | | Veeam Job Status - efb01-backup-copy |
| OK | | Veeam Job Status - efb01-backup |
| | | Veeam Job Status - doc03-backup |
| OK | | Veeam Job Status - bck01-backup |
| OK | | Veeam Job Status |

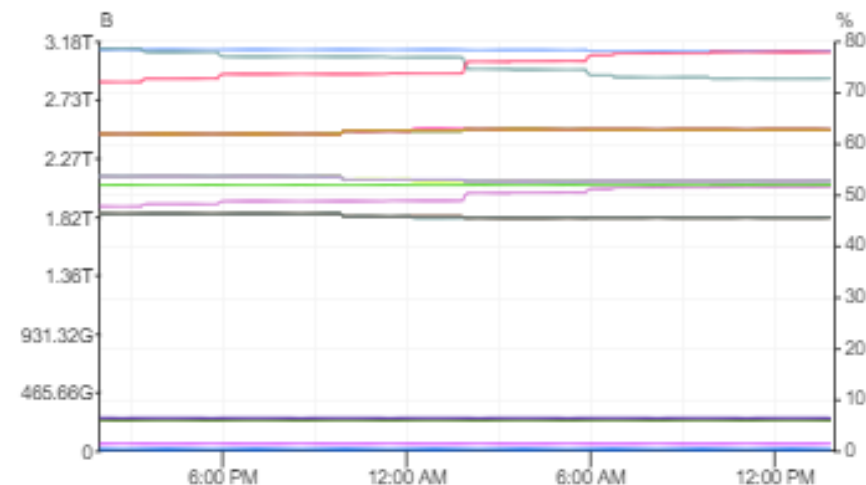
Status information

OK: Number of licenses: 1 - License '[redacted]' [type: perpetual] status: valid, instances total: 6 used: 0 (0.00%) free: 6 (100.00%)
 License '[redacted]' [type: perpetual] status: valid, instances total: 6 used: 0 (0.00%) free: 6 (100.00%)

Status information

OK: Total jobs: 1 - Job 'efb01-backup-copy' status: success [type: BackupSync], started since: 1d 8h 52m 39s
 Job 'efb01-backup-copy' status: success [type: BackupSync], started since: 1d 8h 52m 39s

Veeam Repositories graph on srv [redacted]



| | | |
|--|---|---|
| repository.space.free.bytes... Min: 16.98G Max: 17.18G Avg: 17.06G | repository.space.usage.bytes... Min: 61.67G Max: 61.87G Avg: 61.79G | repository.space.usage.pe... Min: 78.21 Max: 78.46 Avg: 78.36 |
| repository.space.free.bytes... Min: 2.9T Max: 3.13T Avg: 3T | repository.space.usage.bytes... Min: 2.87T Max: 3.1T Avg: 3T | repository.space.usage.pe... Min: 47.84 Max: 51.71 Avg: 49.95 |
| repository.space.free.bytes... Min: 2.47T Max: 2.5T Avg: 2.45T | repository.space.usage.bytes... Min: 2.1T Max: 2.14T Avg: 2.11T | repository.space.usage.pe... Min: 45.62 Max: 46.41 Avg: 45.94 |
| repository.space.free.bytes... | repository.space.usage.bytes... | repository.space.usage.pe... |



SAP - AWS - AZURE

SAP E2E



SAP R/3 monitoring

Protocols used: SAP client (TCP)

- CCMS – All Monitoring Contexts – Background – Long running jobs
- CCMS – All Monitoring Contexts – BackgroundService
- CCMS – All Monitoring Contexts – BusinessCommunication
- CCMS – All Monitoring Contexts – InstaceAsTask
- CCMS – All Monitoring Contexts – OperatingSystem
- CCMS – All Monitoring Contexts – R3Abap
- CCMS – All Monitoring Contexts – R3Syslog
- CCMS – All Monitoring Contexts – SpoolNumembers
- CCMS – Monitor Template – Dialog Overview
- CCMS – Monitor Template – Enqueue
- CCMS – Monitor Template – OperatingSystem
- Connection time
- Process count
- Exceed failed jobs
- Failed IDOCS
- Failed job
- Failed updates
- List IDOCS
- List jobs
- List processes
- Shortdumps counts
- Shortdumps recurrence
- Uptime
- Workload overview

SAP HANA DB monitoring

Protocols used: SAP HANA client for Linux

- Blocked transactions
- Connected users
- Connection time
- Disk usage
- Host CPU usage
- Host memory usage
- Volume usage

SAP Sybase ASE database monitoring

Protocols used: Sybase client (TCP)

- Blocked processes
- Connected users
- Connection time
- Database size
- Custom SQL

AWS



- Check Amazon API Gateway (AmazonApiGateway).
- Check AWS Backup.
- Check Amazon Billing.
- Check Amazon CloudFront.
- Check Amazon CloudWatch.
- Check Amazon CloudWatchLogs.
- Check Amazon Elastic Block Store (Amazon EBS).
- Check Amazon Elastic Compute Cloud (Amazon EC2).
- Check Amazon Elastic File System (Amazon EFS).
- Check Amazon ElastiCache.
- Check Amazon Application Elastic Load Balancing (Amazon Application ELB).
- Check Amazon Classic Elastic Load Balancing (Amazon Classic ELB).
- Check Amazon Network Elastic Load Balancing (Amazon Network ELB).
- Check Amazon shared File Systems (Amazon FSx).
- Check Amazon Health service.
- Check Amazon Kinesis Stream related metrics (AWS/Kinesis Service).
- Check Amazon Lambda.
- Check Amazon Relational Database Service (Amazon RDS).
- Check Amazon Simple Storage Service (Amazon S3).
- Check Amazon Simple Email Service (Amazon SES).
- Check Amazon Simple Notification Service (Amazon SNS).
- Check Amazon Simple Queue Service (Amazon SQS).
- Check AWS Transit Gateways.
- Check Amazon Site-To-Site VPN (Amazon VPN).

AZURE



- Check Microsoft Azure Event Hubs namespaces & clusters.
- Check Microsoft Azure classic storage account.
- Check Microsoft Azure Kubernetes Service.
- Check Microsoft Azure Disks attached to Virtual Machines
- Check Microsoft Azure Functions Service.
- Check Microsoft Azure virtual machine.
- Check Microsoft Virtual Machine Scale Sets.
- Check Microsoft Azure Cosmos DB Accounts.
- Check Microsoft Azure SQL Elastic Pools.
- Check Microsoft Azure Database for MariaDB resources.
- Check Microsoft Azure Database for MySQL resources.
- Check Microsoft Azure Redis Cache service.
- Check Microsoft Azure SQL Databases (Microsoft.Sql/Servers/Databases).
- Check Microsoft Azure SQL Managed Instance.
- Check Microsoft Azure SQL Server.
- Check Microsoft Azure App Configuration.
- Check Microsoft Azure Event Grid.
- Check Microsoft Azure Service Bus namespaces.
- Check Microsoft Azure API Management service.
- Check Microsoft Azure Application Insights resources.
- Check Microsoft Azure Automation.
- Check Microsoft Azure monthly costs VS budget for subscription/resource group,
- Meta Plugin for Microsoft Azure resources discovery.
- Check Microsoft Azure Insights metrics service using Loganalytics API.
- Check Microsoft Azure Log Analytics
- Check Microsoft Azure monitor service using API.
- Check Microsoft Azure backup service, replication and failover health.
- Check Microsoft Azure resource manager.
- Check Microsoft Azure Network Application Gateway resources.
- Check Microsoft Azure CDN profile service.
- Check Microsoft Azure ExpressRoute.
- Check Microsoft Azure Firewalls.
- Check Microsoft Azure FrontDoor service.
- Check Microsoft Azure Network LoadBalancers.
- Check Microsoft Azure network interface.
- Check Microsoft Azure Public IPs.
- Check Microsoft Azure Traffic Manager service.
- Check Microsoft Azure Virtual Network.
- Check Microsoft Azure VPN gateways.
- Check Microsoft Azure Key Vaults.
- Check Microsoft Azure Container Registry (ACR) service.
- Check Microsoft Azure storage account.
- Check Microsoft Azure Storage Sync service.
- Check Microsoft Azure App Service.
- Check Microsoft Azure Web App Service Plan resources.
- Check Microsoft Azure SignalR resources.

AWS

AWS EC2 instance monitoring

protocols used: awscli, Rest API

- CPU usage
- Disk IO
- Network
- Instance status

AWS RDS (Relational Database Service) monitoring

protocols used: awscli (Rest API) You can get an overview of all gathered metrics from AWS/RDS in the [official documentation](#).

Monitored objects

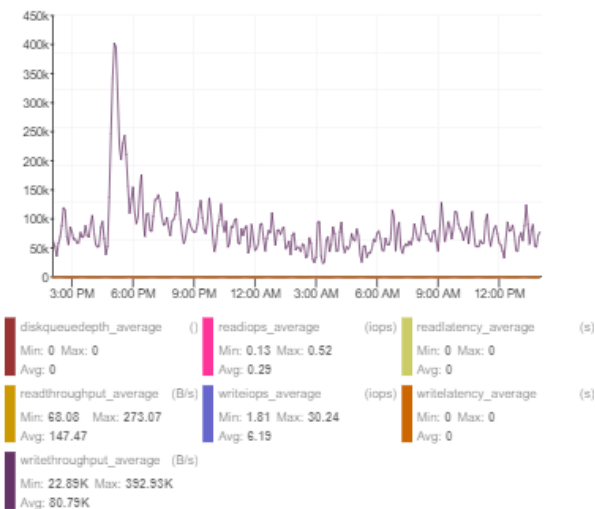
- Instances (MySQL, MariaDB, Oracle, SQL Server ...)
- Clusters (Aurora, ...)

Monitored metrics

- Connections
- CPU usage
- Disk IO
- Instance status
- Network
- Query statistics (Only available on Aurora MySQL)
- Storage usage
- Transactions (Only available on Aurora MySQL and partially Postgres)
- Volume usage (Only available on Aurora MySQL and Postgres)

| | | |
|----|-----|-------------------------|
| OK | aws | Transactions |
| OK | aws | Storage |
| OK | aws | Query statistics |
| OK | | Ping |
| OK | aws | Network usage |
| OK | aws | Instance status |
| OK | aws | Disk IO |
| OK | aws | CPU usage |
| OK | aws | Connections |
| UP | aws | aws-typo3cms-productive |

Disk IO graph on aws-typo3cms-productive



Status information

OK: Instance 'typo3cms-productive' average CPUCreditBalance: 576.00, CPUCreditUsage: 0.46, CPUUtilization: 4.80 %
 Instance 'typo3cms-productive' average CPUCreditBalance: 576.00, CPUCreditUsage: 0.46, CPUUtilization: 4.80 %



Sunday, August 7, 2022 2:25 AM **OK** Tries: 1

OK: Total instances available : 1, failed : 0, backing-up : 0, maintenance : 0, stopped : 0, storage-full : 0 - Instance 'typo3cms-productive' state :



Sunday, August 7, 2022 2:24 AM **WARNING** Tries: 2

WARNING: Total instances available : 0



VIRTUALIZATION AND CONTAINERS



Status

+ NOT INSTALLED

Description

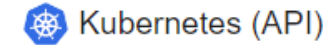
Docker monitoring

protocols used: Rest API (HTTP/HTTPS)

- Container usage
- Node status
- Service status

Discovery modes

- Containers



Status

+ NOT INSTALLED

Description

Kubernetes monitoring

protocols used: Rest API (HTTPS)

- Cluster events
- Cronjob status
- Daemonset status
- Deployments status
- Node status
- Node usage
- Persistent Volume status
- Pod status
- Replicaset status
- Replication Controller status
- Statefulset status

Discovery modes

- Cronjob status
- Daemonset status
- Deployment status
- Namespace - Cluster Events
- Namespace - Cronjob status
- Namespace - Daemonset status
- Namespace - Deployment status
- Namespace - Pod status
- Namespace - Replication Controller status
- Namespace - Replicaset status
- Namespace - Statefulset status
- Node status
- Node usage
- Persistent Volume status
- Pod status
- Replicaset status
- Replication Controller status
- Statefulset status

ALARMS & ACCESS CONTROL

ALARM MANAGEMENT

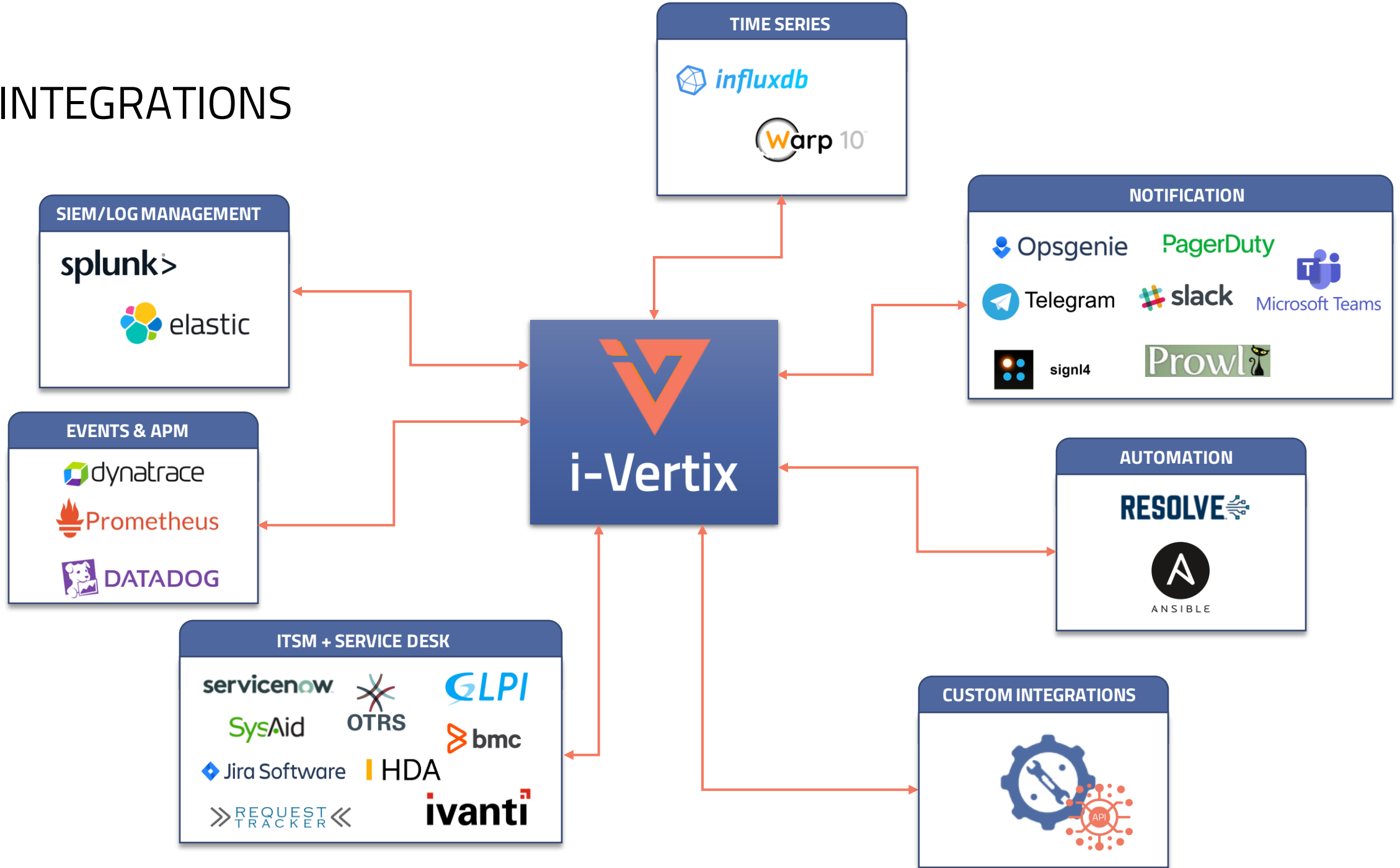
- Configuration of the centralized alarm Management
- Alerts sent by i-Vertex Poller through different channels (Mail, SMS, Pagerduty, Slack, Telegram, Teams, ...)
- ITSM connectors available
- Escalation Management

ACCESS CONTROL/ACL

- Granular RBAC
- Local authentication, AD/LDAP, OpenID (MFA, SAML, Office 365, ...)
- Configurable menu
- ACL for single resources (Host, Services)
- ACL for actions



INTEGRATIONS



NETWORK CONFIGURATION BACKUP

- Automatic backup of network devices configurations
- Multi brand support
- Configurations saved in a GIT repository
- Versions comparison
- Integrated in i-Vertex IT Monitoring
- MSP ready

Version A: 2021-09-27 22:13:17 | Version B: 2020-07-14 09:00:22 | Show side by side

Versions

| CHANGED | |
|---|---|
| 68 @@ -68,8 +68,6 @@ switch 1 provision ws-c2960s-48lps-1 | 68 switch 2 provision ws-c2960s-24ps-1 |
| 69 switch 2 provision ws-c2960s-24ps-1 | 69 ! |
| 70 ! | 70 ! |
| 71 - login on-failure log | |
| 72 - login on-success log | |
| 73 vtp domain | 71 vtp domain |
| 74 vtp mode transparent | 72 vtp mode transparent |
| 75 ! | 73 ! |
| 178 @@ -178,7 +176,7 @@ interface GigabitEthernet1/0/1 | 176 switchport mode access |
| 179 switchport mode access | 177 ! |
| 180 ! | 178 interface GigabitEthernet1/0/2 |
| 181 - description "DPC-231" | 179 + description "Spedizione Stampante" |
| 182 switchport access vlan 161 | 180 switchport access vlan 161 |
| 183 switchport mode access | 181 switchport mode access |
| 184 ! | 182 ! |
| 203 @@ -203,7 +201,7 @@ interface GigabitEthernet1/0/6 | 201 switchport mode access |
| 204 switchport mode access | 202 ! |
| 205 ! | 203 interface GigabitEthernet1/0/7 |
| 206 - description "DPC-232" | 204 + description " |
| 207 switchport access vlan 161 | 205 switchport access vlan 161 |
| 208 switchport mode access | 206 switchport mode access |
| 209 ! | 207 ! |
| 549 @@ -549,7 +547,6 @@ ip default-gateway 192.168.150.1 | 547 ip http server |
| 550 ip http server | 548 ip http secure-server |
| 551 ip http secure-server | 549 ip sla enable reaction-alerts |
| 552 - logging 192.168.150.130 | |
| 553 snmp-server community <configuration removed> | 550 snmp-server community <configuration removed> |
| 554 snmp-server trap link ietf | 551 snmp-server trap link ietf |
| 555 snmp-server trap timeout 60 | 552 snmp-server trap timeout 60 |

Pricing criteria and definitions

IT Monitoring

Easy **licensing** structure **including** the **entire monitoring feature set and unlimited concurrent users**

- **Number of Hosts.**
Host: a **device**, with one or more IP address: Network infrastructure device, server, storage, UPS, virtual host, virtual machine, web server host/URL, cloud host, etc.
Note: A host can have any number of interfaces, elements or monitors/sensors/services, including the ones of any Applications running on it.
- **Number of Smart Pollers**
Most often, 1 Smart Poller per main remote site or per Customer. 1 Smart Poller can typically monitor 8.000 -10.000 services. Exact number depends on polling interval, number and type of monitored services.
- **Add-ons**
 - Network Topology Discovery & Mapping (included in tiers \geq 1000 hosts)
 - Network Configuration Backup
- **Years** of Service/Subscription
- **High Availability** option
- **Test Environment(s)**

Exceptions:

- It can be **licensed per service**. A **service** is a single monitoring element: a status parameter or a performance metric. Other vendors call it "monitor", "sensor", "element". E.g.: PING, Interface, CPU load, etc.



IT Monitoring - Editions and pricing models

For resale to End Customers

Perpetual Edition (CAPEX)

- Perpetual product, one-time license purchase
- Yearly maintenance support, 1st year included free of charge

Subscription Edition (OPEX)

- Yearly subscription (includes support)
- "Break-even" is 3 years

Cloud SaaS Edition for SMB (OPEX)

- **No tiers**, no unused licenses, no upfront costs. Monthly fee based on **number of Hosts or Services and Smart Pollers** used
- Includes i-Vertex support and proactive monitoring
- Includes periodic installation of updates & patches (Central Management & Pollers), Hosting, Backup

For MSP services

MSP pay-per-use Edition (OPEX)

- **No tiers**, no unused licenses, no upfront costs. Monthly fee based on **number of Hosts and Smart Pollers** used. Fast & easy new customer enrollment & fully predictable budgeting
- **Minimum number of monitored Hosts = 1000**
- Includes i-Vertex support and proactive monitoring
- **Includes periodic installation of updates & patches (Central Management & Pollers)**
- Maximum flexibility: MSPs can dynamically adjust the extension of their services





I-VERTIX LOG & DATA MANAGEMENT

KEY FEATURES

1

Log centralization from different sources

2

High performance scalable & flexible architecture to meet any needs

3

Real-time and a posteriori analysis

4

Log classification per GDPR and other data protection regulations

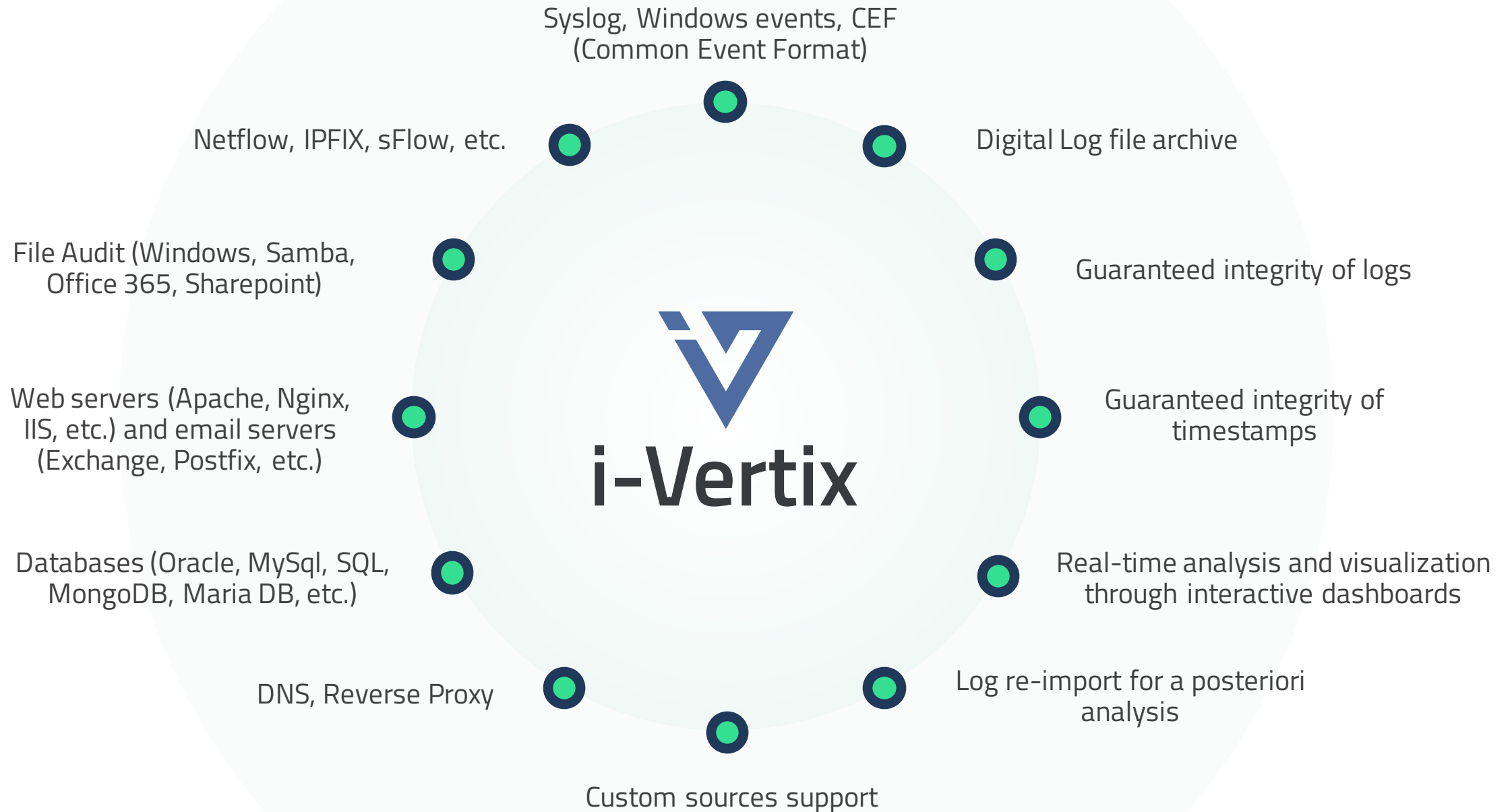
5

Cost-effective licensing not related to log sources, volumes and rates

6

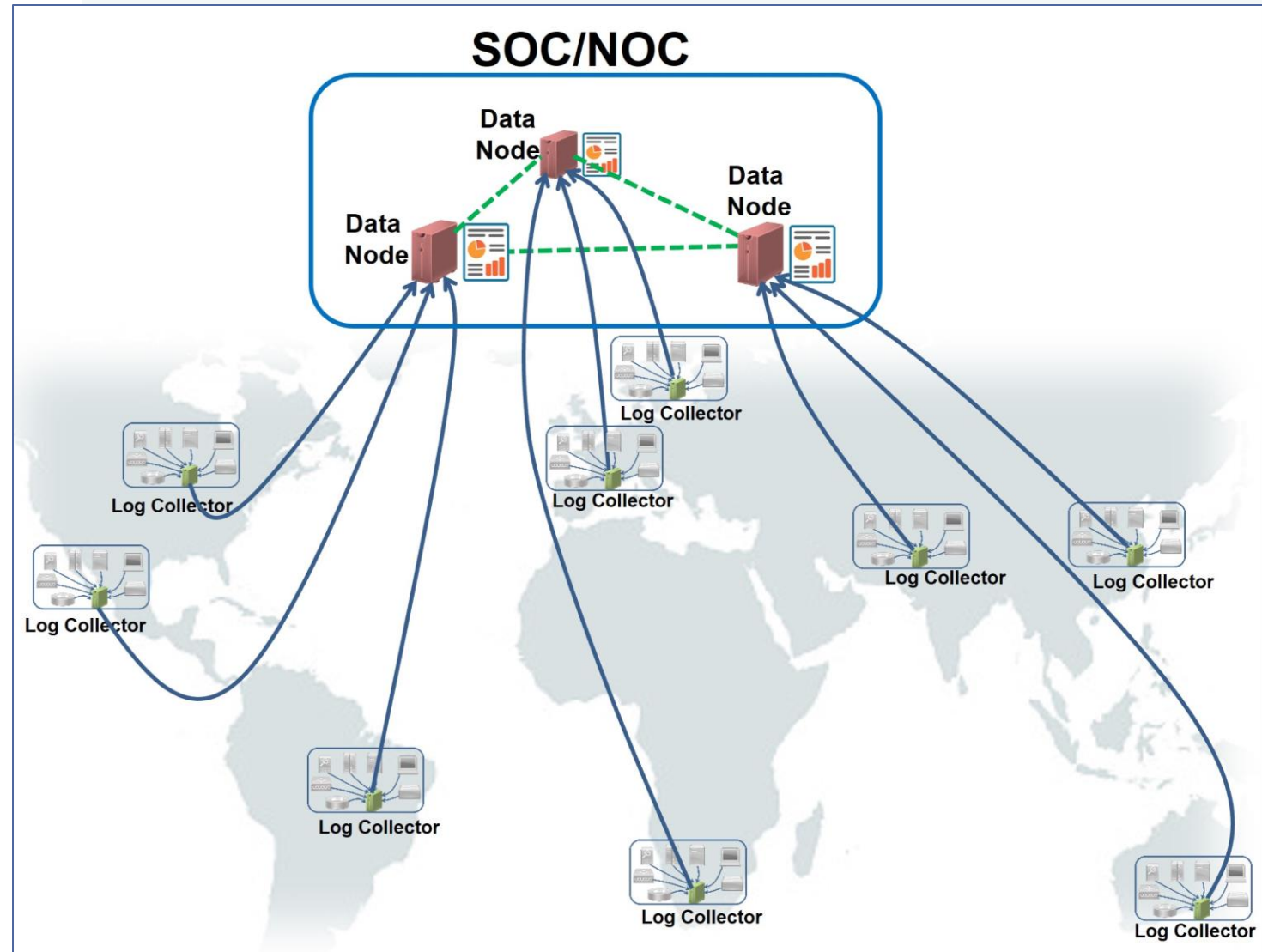
Easy creation of custom dashboards





ARCHITECTURE

- i-Vertex Data Node on premises, in private or public cloud
- i-Vertex Log Collector at main remote sites
- High availability & load balancing option for the Data Nodes
- Flexibility and scalability to meet any needs
- Log Collector features:
 - Parsing
 - Normalization
 - Ingestion
 - Archival
 - Compression
 - Encryption
- TLS encryption between Log Collector & Data Node



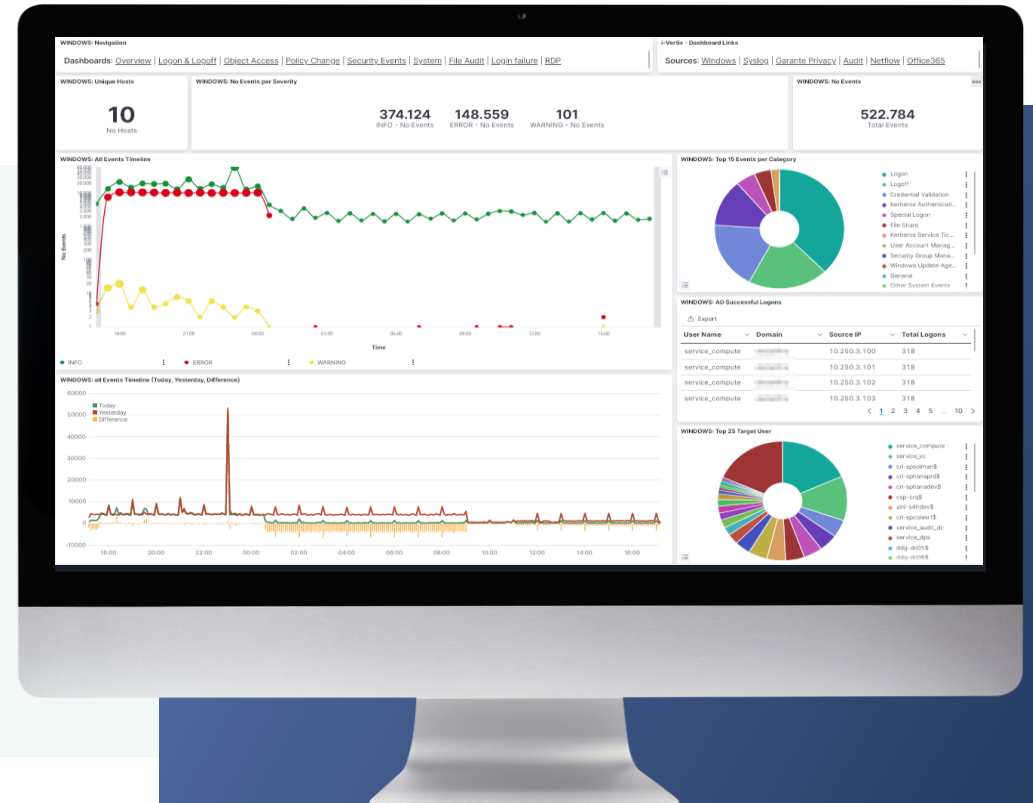
REAL TIME DASHBOARD

Intuitive analysis &
visualization of collected data

Quick & easy top down
analysis

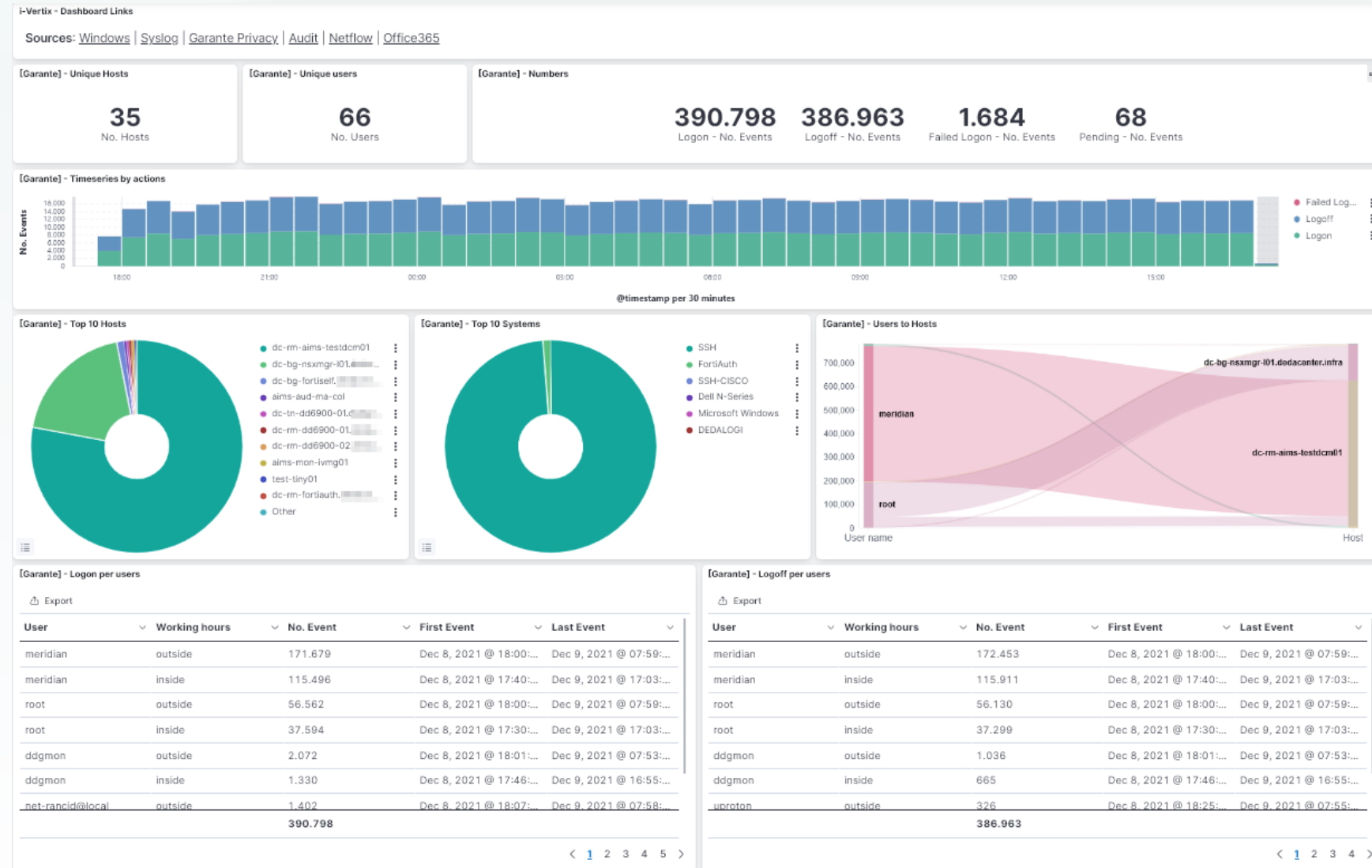
Preconfigured dashboards

Identification of problems,
anomalies, errors, etc.



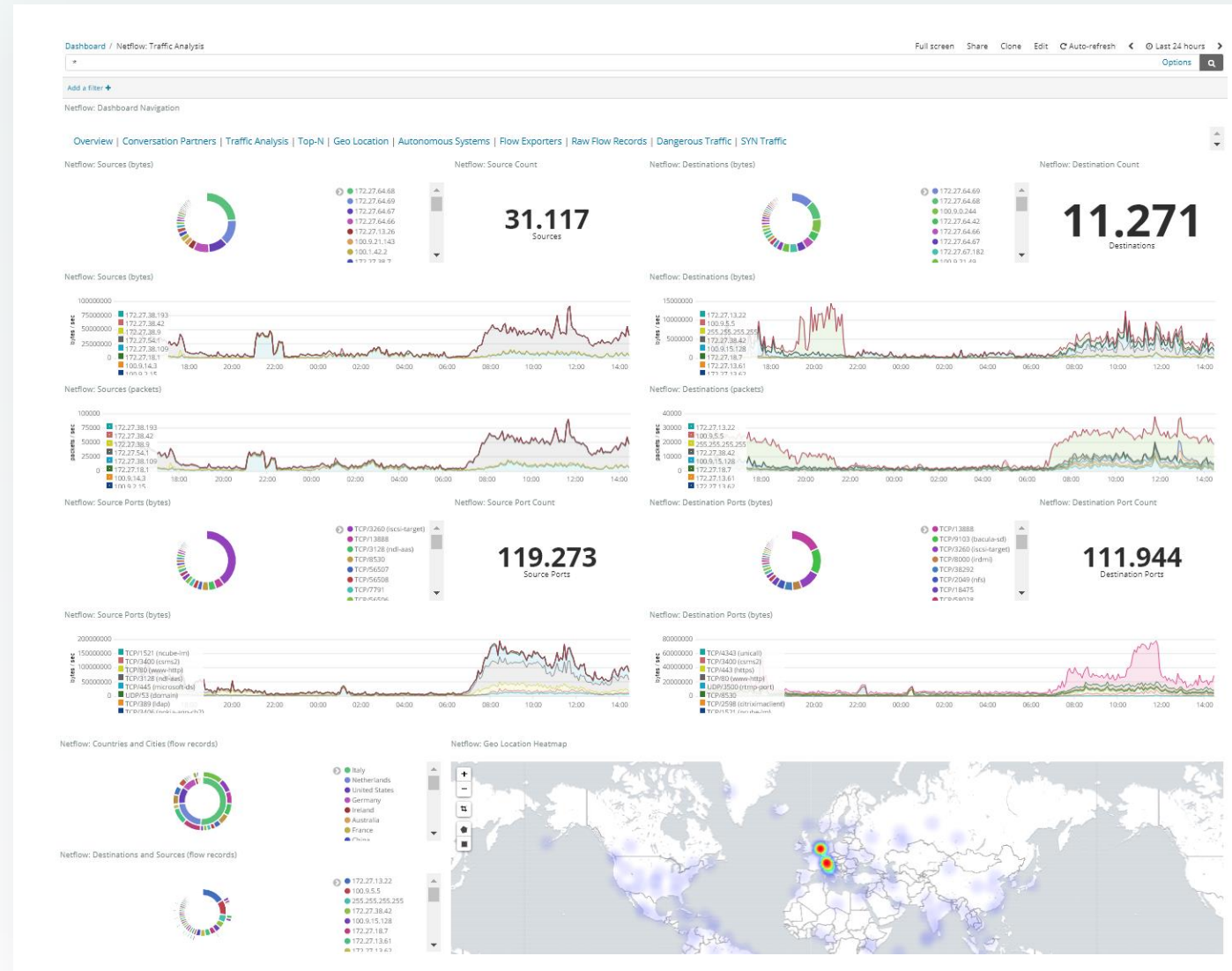
AUTHENTICATION ANALYSIS

- Normalization of authentication events, regardless of source type
- Centralized analysis of authentication events, regardless of source type
- An excerpt of supported sources:
 - Windows authentications
 - Windows NPS authentications
 - Office365
 - Linux SSH
 - IBM iSeries
 - Network devices, storages, etc.



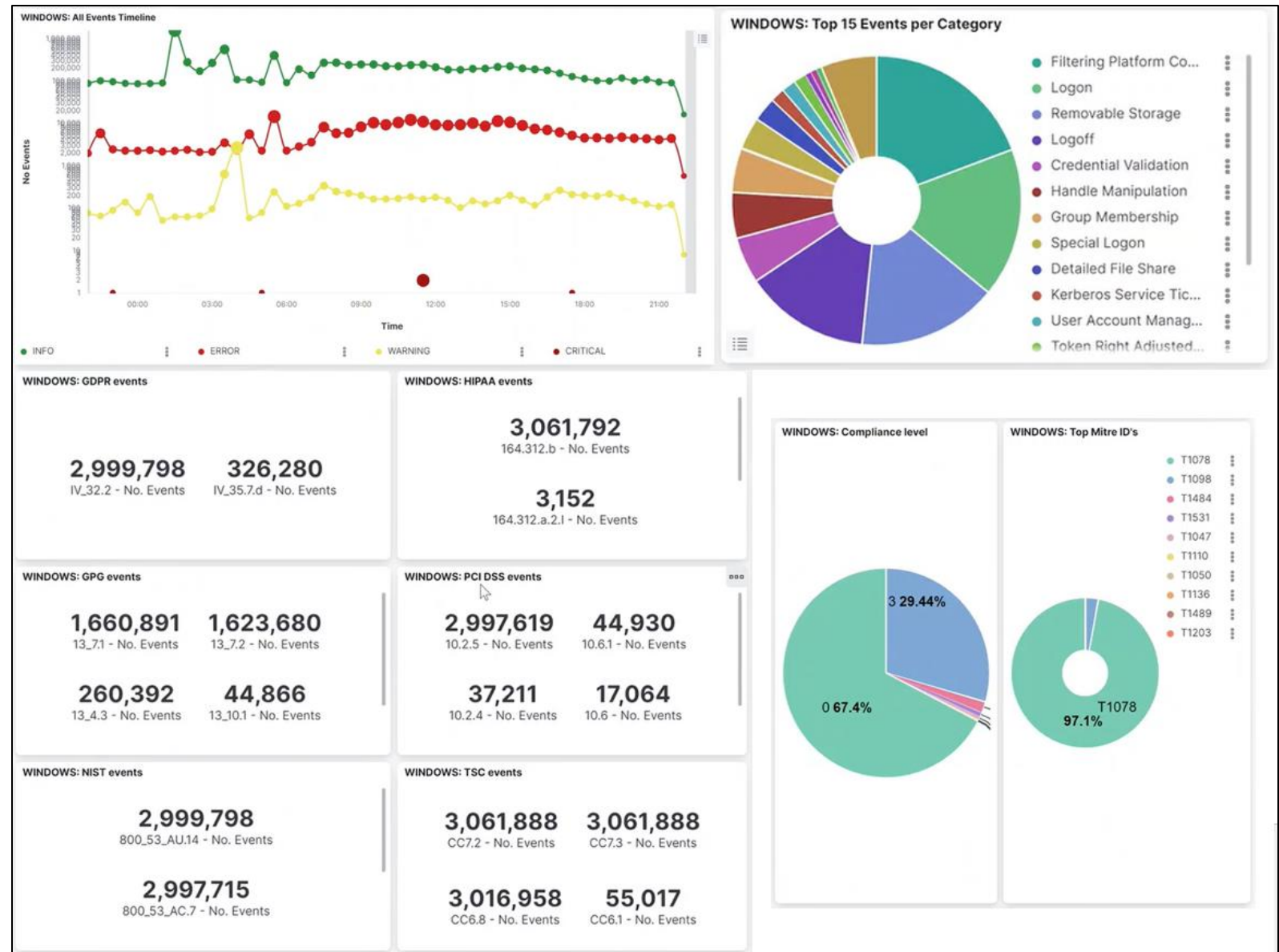
NETWORK TRAFFIC FLOWS ANALYSIS

- Netflow v5/v9 collector
- IPFIX collector
- sFlow collector
- Real time monitoring of network traffic & flow
- Dangerous sources detection (Malware, Ransomware, Tor)
- Creation of alarms on network traffic events (in combination with IT Monitoring)



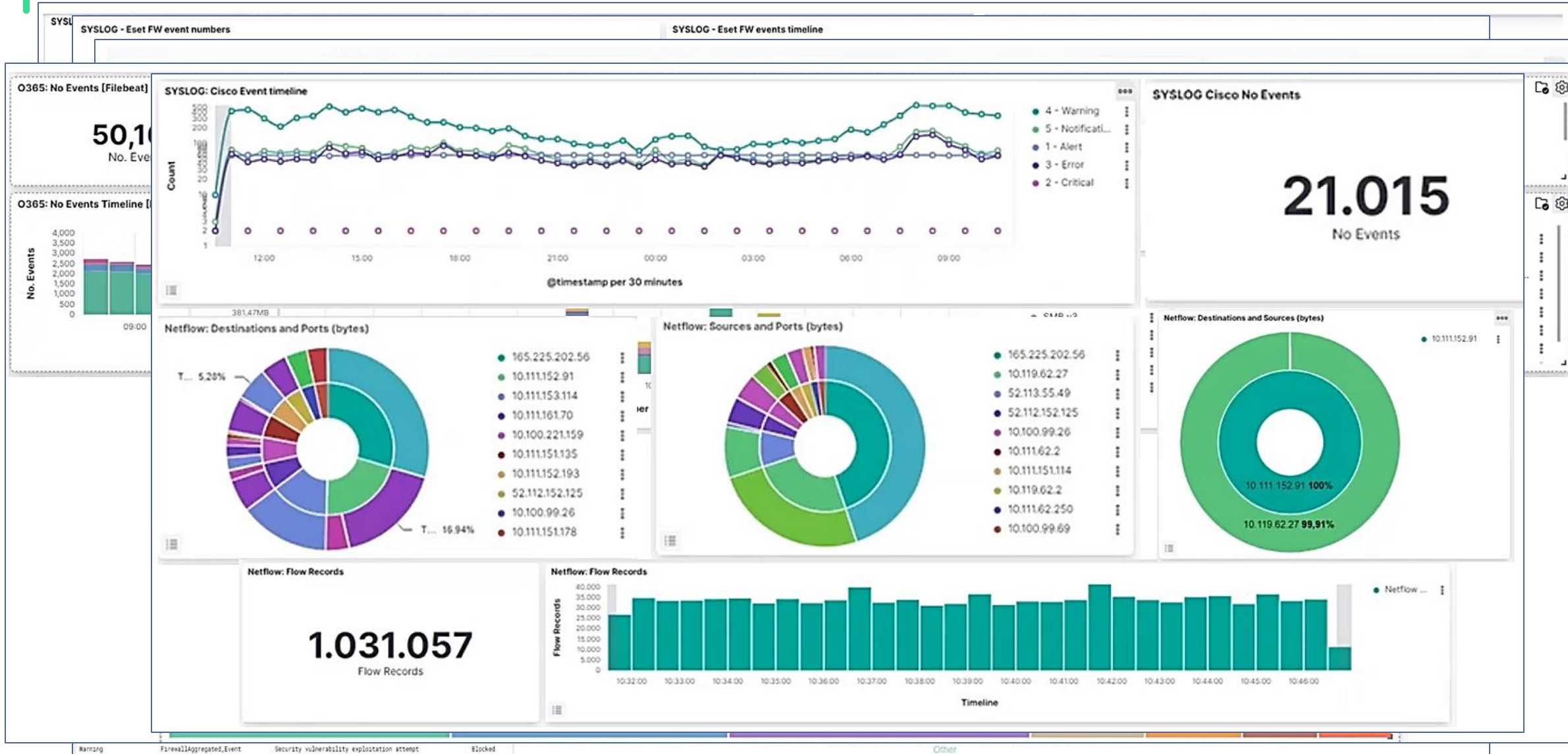
HELP WITH DATA PRIVACY REGULATIONS COMPLIANCE

- Regulatory compliance readiness support and visibility
- Applicable to Windows EventLog and Syslog messages
- Log Classification: GDPR, PCI DSS, GPG, HIPAA, NIST 800-53, TSC, Garante Privacy frameworks and standards
- Include specific information related to MITRE ATT&CK techniques
- Detect early indicators of attacks, reveal issues and provide forensic evidence



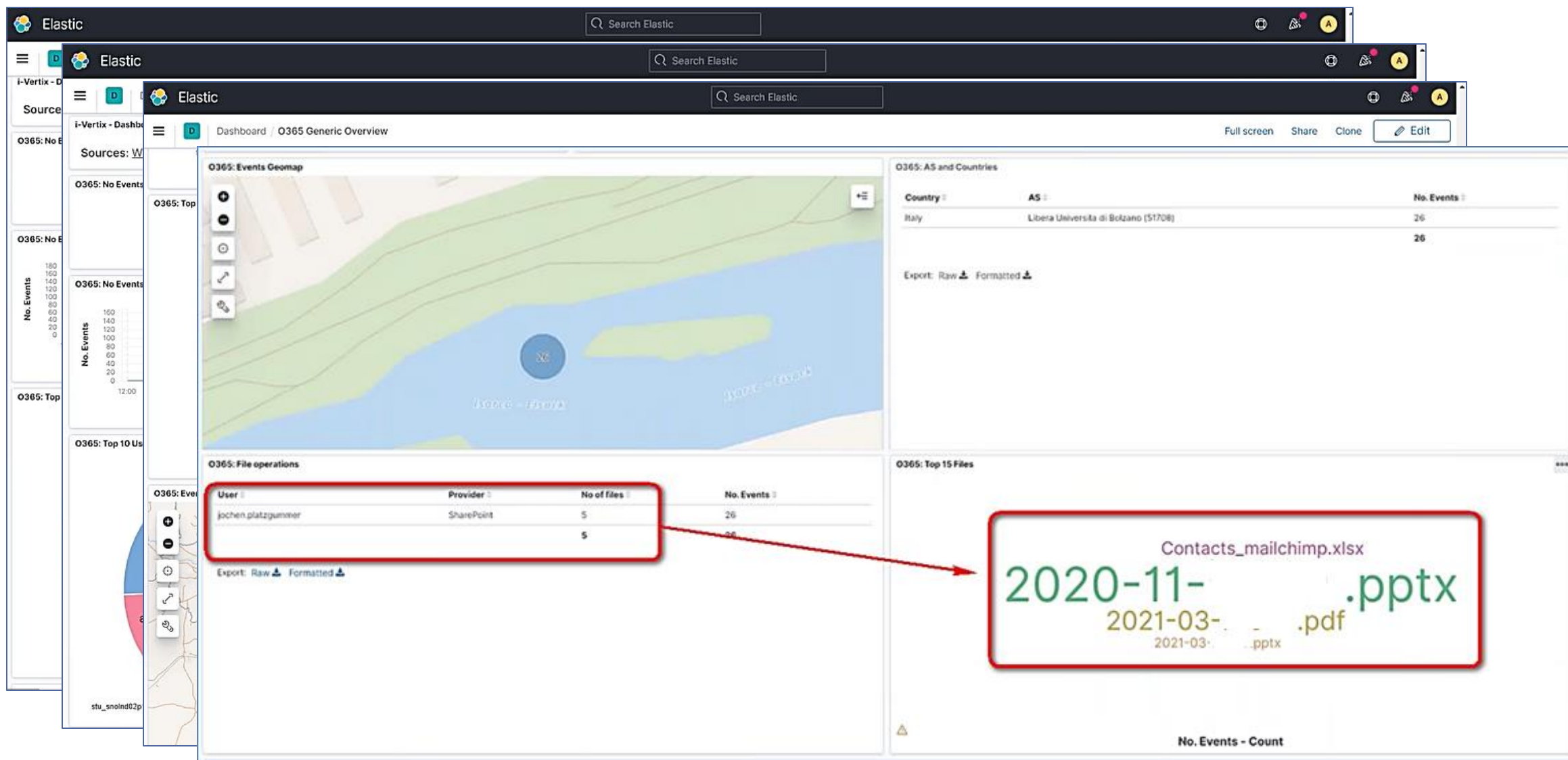
LOG MANAGEMENT EXAMPLES

Eset, Fortinet, Microsoft Office 365, Cisco Syslogs, Netflow



LOG MANAGEMENT EXAMPLE

Microsoft Office 365 → SharePoint



OSs



DNS & REV PROXY



WEB SERVERS



CLOUD



MAIL SERVERS



NETSCALER



DBs



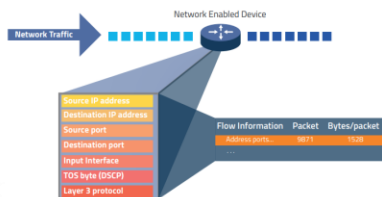
FWs



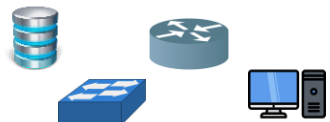
APPLICATIONS



NETFLOW ENABLED DEVICES



DEVICES SENDING SYSLOG

**Implement a Log Collection strategy.**

Use your SIEM to manage only critical logs/events and use i-Vertex Log&Data Management to:

- perform effective data aggregation, parsing and normalization across all different data sources,
- discard background noise / lower value events,
- optimize log retention, reducing storage requirements and maintenance costs,
- classify/enrich your data according to policies and Data Protection regulations,
- send only important/critical, filtered and normalized data to your SIEM.

This leads to optimized Log and Data Management strategy, substantial savings on SIEM pricing, fast ROI.



Pricing criteria and definitions

Log&Data Management

- Number of **Data Nodes**
2 Log Collectors are included FOC
- **Additional Log Collectors**
- **Years** of Service/Subscription
- **High Availability** option (3+ Data Nodes)
- **Test Environment(s)**

No limits on log rate or log volume per day or number of log sources



Log&Data Management - Editions and pricing models

For resale to End Customers

Standard Edition

- **Perpetual Model (CAPEX)**
 - Perpetual product, one-time license purchase
 - Yearly maintenance support, 1st year included free of charge
- **Subscription Model (OPEX)**
 - Yearly subscription (includes support)
 - "Break-even" is 3 years

Platinum Edition Subscription Model (OPEX)

- All capabilities of Standard Edition +
 - Enhanced Alerting and Reporting
 - LDAP/AD authentication; SSO (SAML, OpenIDConnect)
 - Encryption at rest / FIPS 140-2 mode
 - Machine Learning
 - Etc.
- Yearly subscription (includes support)

For MSP services

MSP pay-per-use Model (OPEX)

- **No tiers**, no unused licenses, no upfront costs.
Monthly fee based on **number of Data Nodes and Log Collectors**.
Fast & easy new customer enrollment & fully predictable budgeting
- Includes i-Vertex support
- **Includes periodic installation of updates & patches (Data Nodes and Log Collectors)**
- Maximum flexibility: MSPs can dynamically adjust the extension of their services





QUICK RECAP – KEY POINTS

Key technical and selling points - IT Monitoring

- **Simple, clear and effective all-in-one pricing.** No hidden costs
- **The most flexible licensing on the market:** customer can choose, **per-device (with unlimited monitors/services) or per-monitor/service, + Smart Pollers**
- **Smart Pollers** that guarantee continuity of monitoring activities/services
- **Completeness: 600+** devices/applications supported “out of the box”
- **Vendor agility and speed** when it comes to adding a feature, monitoring new devices, integrating with 3rd party tools
- **MSP-grade solution:** distributed architecture, multi-tenancy, role-based access control, massive scalability, fast customer onboarding
- **MSP-grade support** that includes ordinary maintenance
- **Multiple deployment options:** on-premises, in Cloud, hybrid, hosted and SaaS
- **Integrations** with 3rd party solutions (ITSM, CMDB, Automation, etc.) that preserve existing IT investments & “know-how”
- **Comprehensive REST API framework**
- **“Beyond IT Monitoring”:** multi-platform Synthetic User Monitoring



Key technical and selling points - Log & Data Management

- **Simple, clear and effective per “Data Node and Log Collector” licensing and pricing.** No hidden costs
- **Completeness: 30+** log formats supported “out of the box” and support of **custom** ones
- **Vendor agility and speed** when it comes to adding a feature, supporting new log sources, integrating with 3rd party tools
- **MSP-grade solution:** distributed architecture, multi-tenancy, role-based access control, massive scalability, fast customer onboarding
- **Multiple deployment options:** on-premises, in Cloud, hybrid
- **Integrations** with 3rd party solutions that preserve existing IT investments & “know-how”
- **Comprehensive REST API framework**
- **“Beyond Log Management”:** log enrichment, geo-localization and classification to help with Data Protection regulations and industry standards compliance



A dramatic mountain landscape with a person on a ridge and a flock of birds in the sky. The scene is overlaid with a semi-transparent blue filter and a large, stylized white 'X' shape. The text 'SUCCESS STORIES' is centered in white, with a green horizontal line underneath it.

SUCCESS STORIES

SUCCESS STORIES – IT Monitoring

THE CUSTOMER

Large government institution, providing **digital online services** to nearly 5 million citizens

GOALS & CHALLENGES

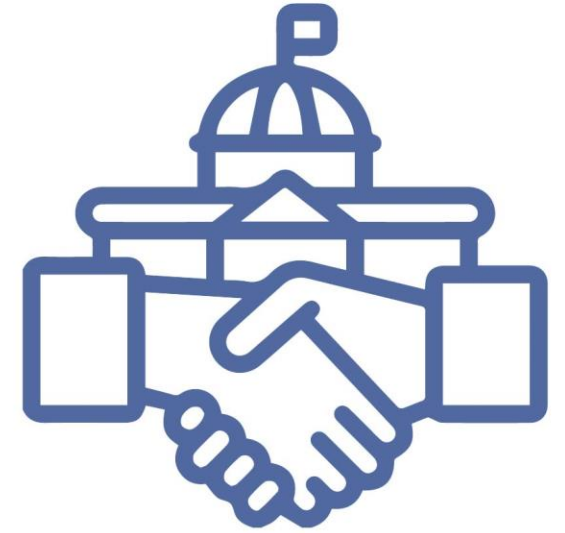
- **Proactively monitor the whole IT infrastructure** using a consolidated solution
- Constantly check **health and performance of online applications** to guarantee services availability to citizens
- **Rationalize investment** and **meet budget constraints**

SOLUTION

- **i-Vertex IT Monitoring** installed On Prem in customer DC
- Around **20 Smart Pollers**, both virtual and HW appliance, deployed across DC and main sites
- **Tens thousands monitors configured**, including around **500 Synthetic User Monitoring scenarios**

BENEFITS

- **Modernization** of IT Monitoring service, via replacement and **consolidation** of 3 platforms
- **Rationalization of IT investments and efforts**
- **Simplified platform maintenance and administration**
- **Agility** to support new IT projects, equipment and applications
- **Increased visibility/control and responsiveness**, with **60% incidents resolution time reduction**



SUCCESS STORIES – Log&Data Management

THE CUSTOMER

Large MSSP providing Infrastructure and **Security managed services** from its NOC/SOC

GOALS & CHALLENGES

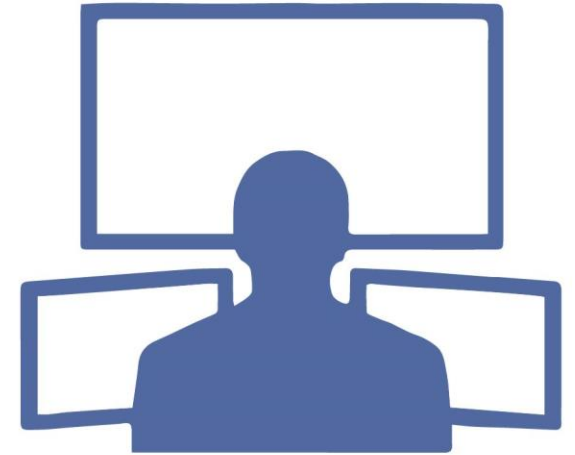
- Offer **Log Management services to 100+ customers** using a consolidated solution
- **Easily onboard** new customers
- **Easily support new log sources and formats**
- **Scale**, sustaining **growing log rates and volumes** while meeting **systems specs. and storage budget constraints** in order to offer a **reasonably-priced service** to customers
- **Data retention** > 6 months for Data Privacy regulations compliance

SOLUTION

- **i-Vertex Log&Data Management** installed On Prem in MSSP DC SOC
- **5 Data Nodes in HA** cluster configuration
- 1 to 3 Log Collectors per customer, installed at customers' sites (**130+ Log Collectors** in total)
- **8 billion log records, 4+TB data in Elastic**
- **Long term backup on S3**

BENEFITS

- **Enriched service portfolio/offering**
- **Fast customer onboarding**
- **Simple platform maintenance and administration**
- **Ability to quickly support new log sources and formats** requested by new customers





PARTNER PROGRAM

NEXT TO OUR PARTNERS

- 3 levels available: Active, Silver e Gold
- Presales & marketing support
- Technical & commercial trainings/certifications
- Competitive prices & discounts
- NFR license/Cloud instance
- Joint events



BENEFITS

| | Active | Silver | Gold |
|--|--------|--------|------|
| Brochures | ✓ | ✓ | ✓ |
| Client case studies | ✓ | ✓ | ✓ |
| Pre-sales demonstration | ✓ | ✓ | ✓ |
| Discount on licenses, tech support, training | ✓ | ✓ | ✓ |
| Pre-sales training | ✓ | ✓ | ✓ |
| Temporary license for PoC demonstration | ✓ | ✓ | ✓ |
| NFR i-Vertex | | ✓ | ✓ |
| New version information | | ✓ | ✓ |
| Communication and/or joint events | | ✓ | ✓ |
| Discounts on expert professional services, trainings, certifications | | ✓ | ✓ |
| Technological innovation Workshops | | | ✓ |
| QoS meetings | | | ✓ |
| Roadmap preview | | | ✓ |



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ATTENTION!

