



Application-centric
Performance & Cyber Threat Analytics

Uila Fast Facts

- HQ-Silicon Valley, CA, USA
- Global partner presence
- Best of VMworld and Interop Award winner
- Company Core Technology includes –
 - Application Dependency Mapping
 - Deep Packet Inspection (DPI)
 - Agentless Data Center Monitoring
 - Correlated Full-Stack Root Cause Analysis



Before we get Started

Your
Deployment?

Your
Role?

Your
Challenges?

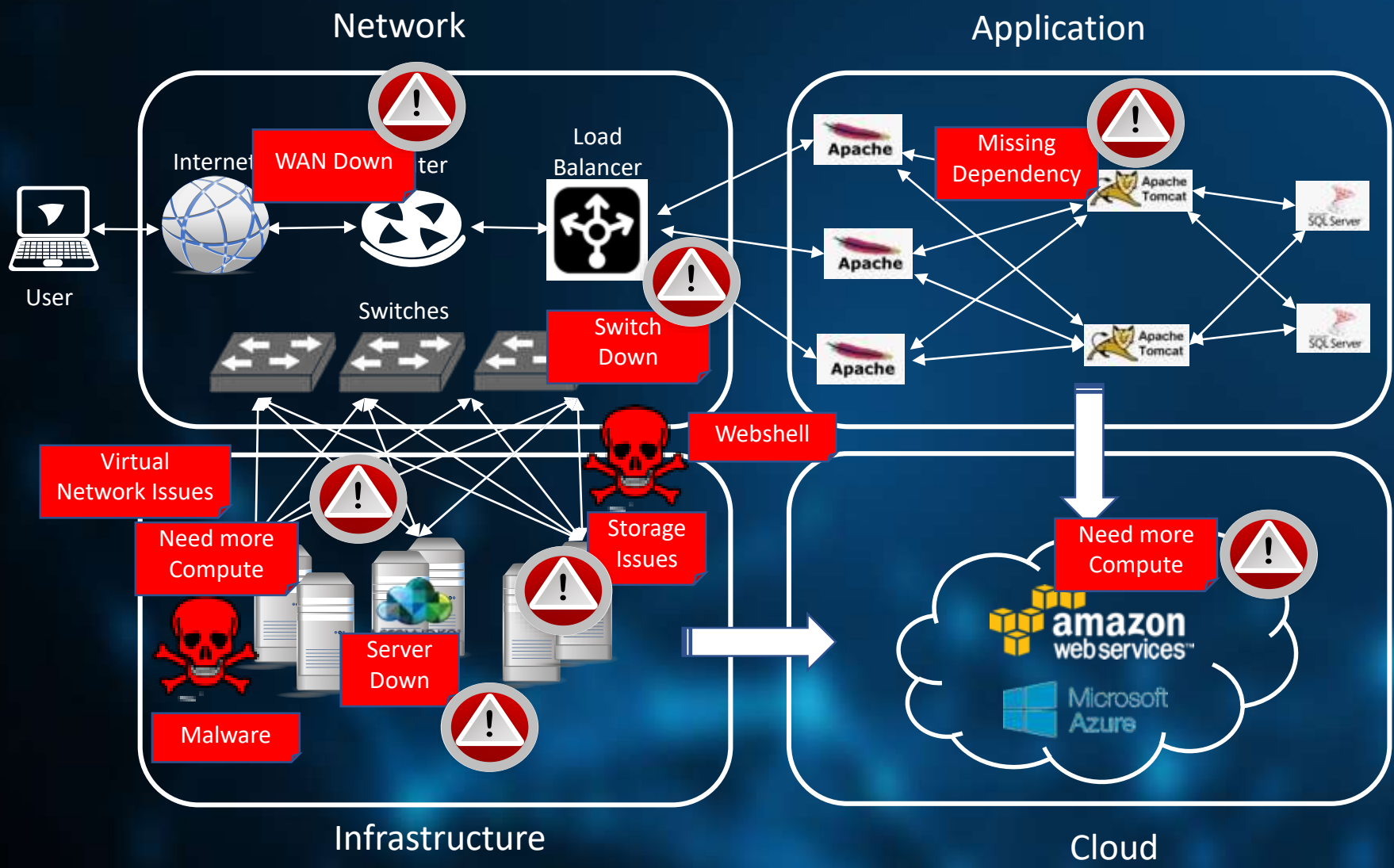
Initiatives?

You Face Many Challenges Daily



But are Expected to Resolve every issue or complaint in 15-30 min.....

The Disruption....



Performance Challenges & Cyber Threats

The Moment of Disruption when using multiple Silo tools!

DevOps with
APM

NetOps with
NPM

ITOps with
IPM/
Virtualization
Tools



SecOps
with
Security
Tools

CloudOps
with Cloud
Tools



What do organizations typically do to handle Disruptions?



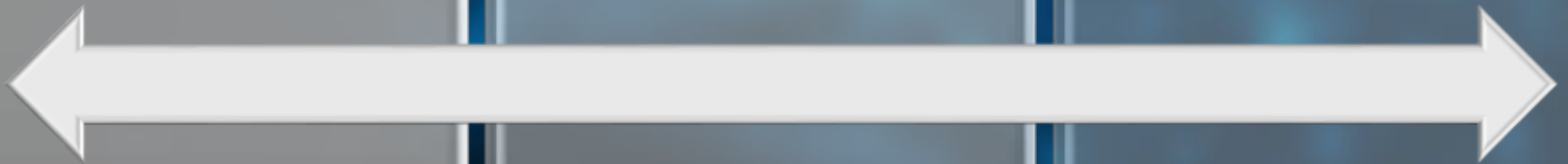
Hire more IT staff
(\$\$\$) or
overwork the
current ones



Buy MORE silo
tools that cover
additional areas



If you can't solve
the problem, just
ignore and move
on



Impact of Service Disruption



*IT Resource
Productivity*

*Employee
Productivity*

*Revenue &
Reputation*

*Legal Issues
from Data
Loss/Exposure*

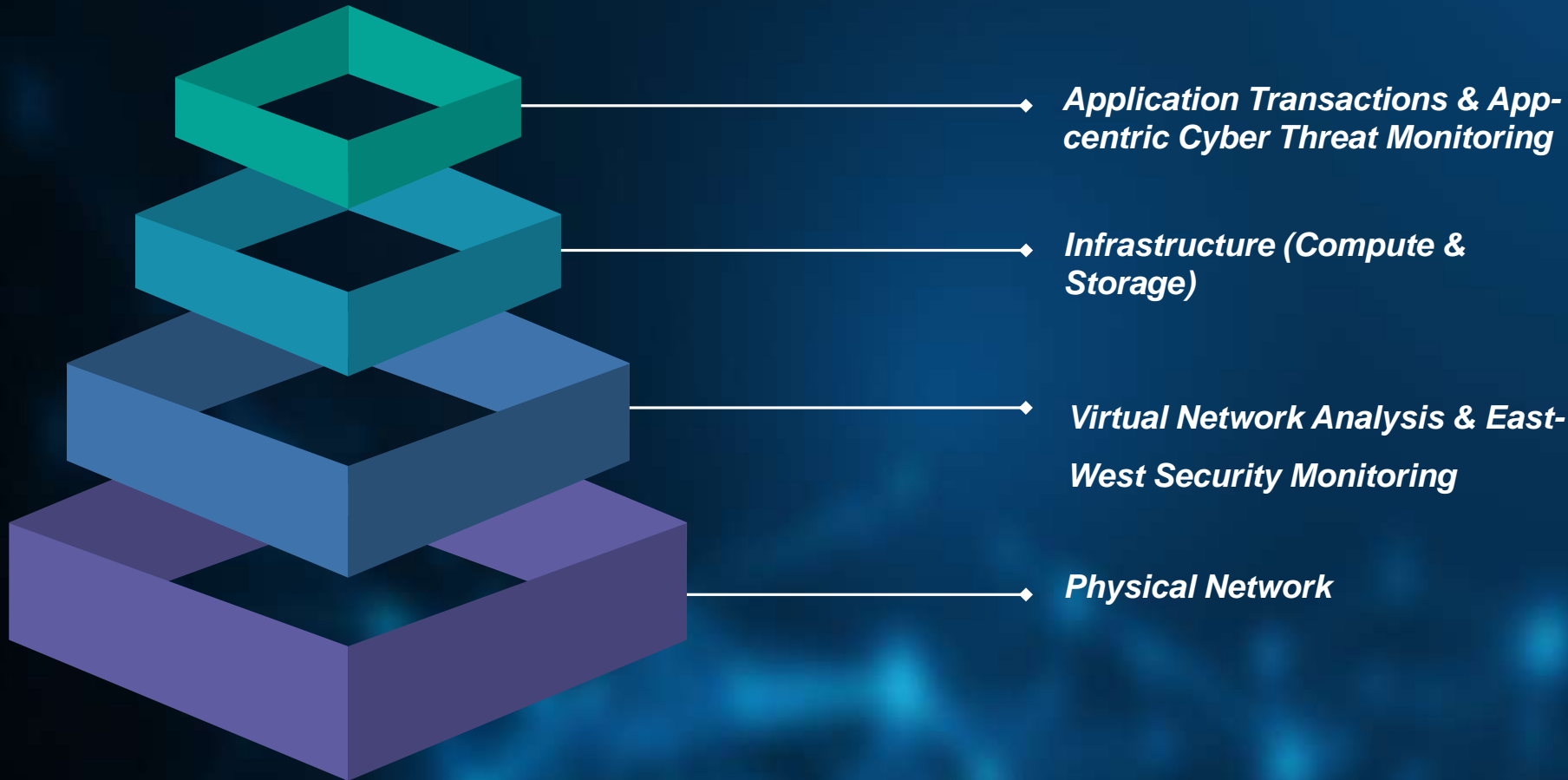
*Shadow
IT*

*Exclusion
from
Strategic
Initiatives*

Impact to Organization

Impact to IT
Employee

There is a New Approach for solving Disruptions

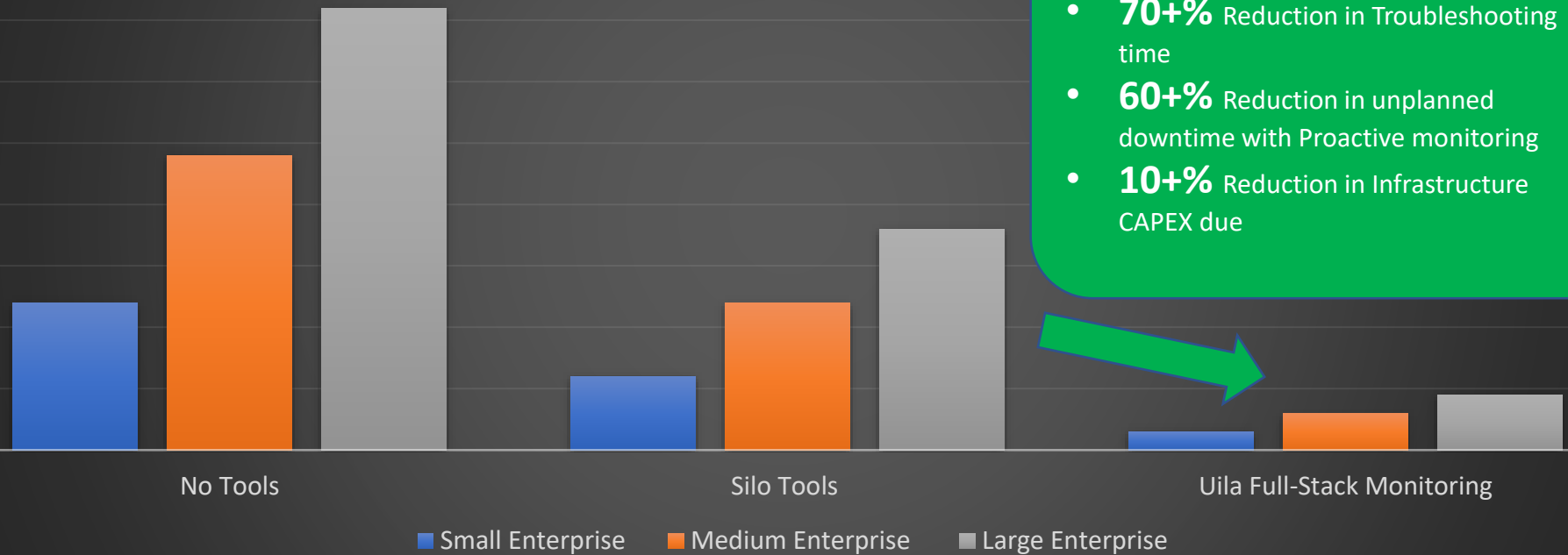


Uila's Application-Centric Full Stack Monitoring
for Data Center & Public Cloud

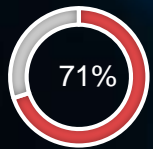
Results from Uila users

Time to solve Disruption

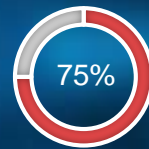
Troubleshooting time in hours



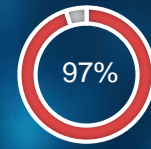
- **70+%** Reduction in Troubleshooting time
- **60+%** Reduction in unplanned downtime with Proactive monitoring
- **10+%** Reduction in Infrastructure CAPEX due



Uila Users Detect and Troubleshoot issues 70% faster



Uila Users Reduced Unplanned Downtime up to 60%



Reduction in Time for Cloud/Data Center Consolidation Pre-migration Assessments

Uila Core Benefits



Plan

Application Dependency
visibility for consolidations
& migrations



Resolve

Reduce MTTR with
Root cause Isolation



Optimize

Right size your
Deployment



Secure

Intelligent Threat
Detection

What Makes Uila unique?



Fast, Simple & Effortless Rollout without agents



Automated and App-centric Application Dependency Mapping



Automated Classification of over 3,200 Applications



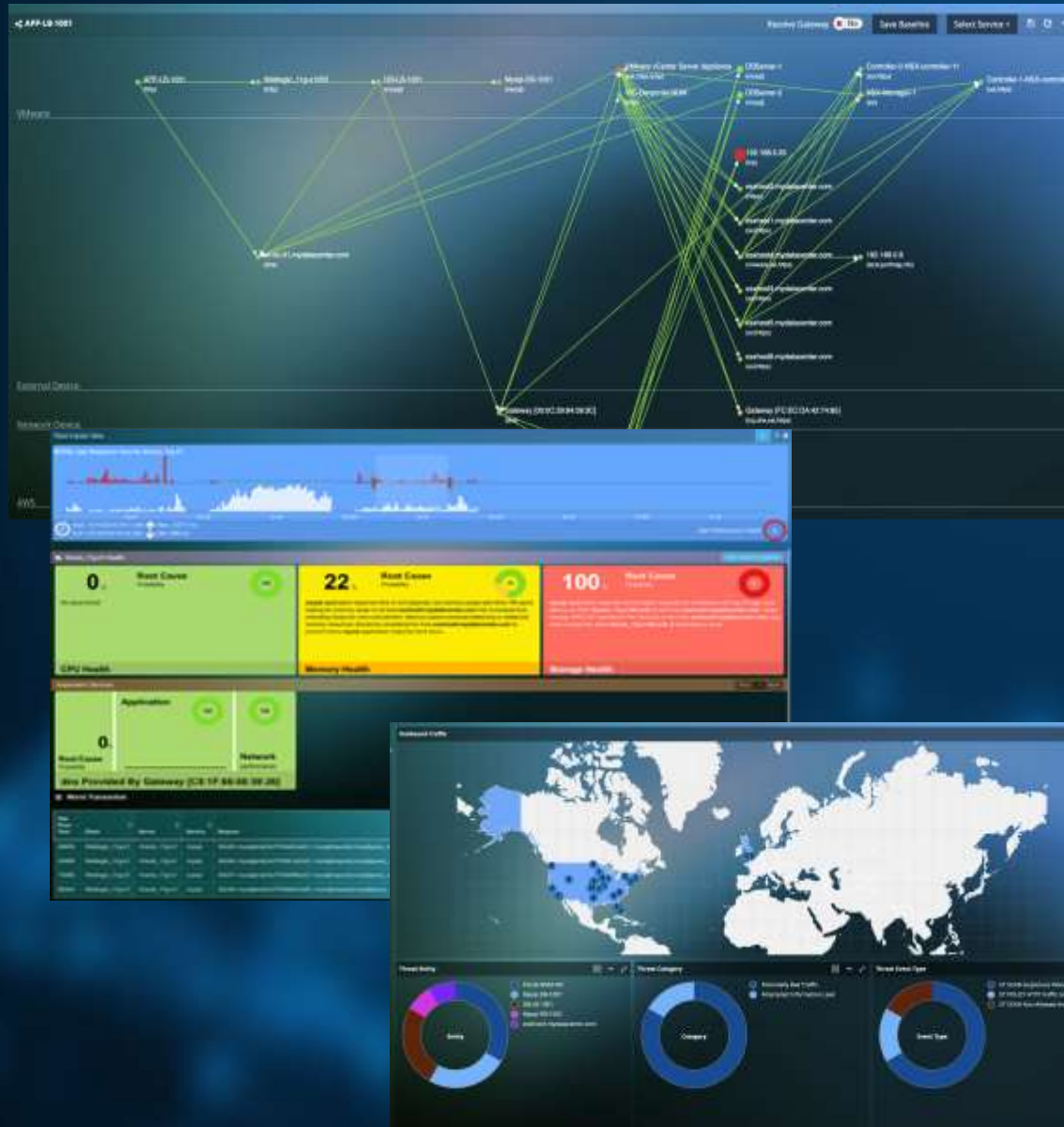
Consolidate your Tools with Correlated Root-Cause Analysis



App-centric troubleshooting & Cyber Threat Monitoring to cut the “alert noise”



Visualization of workloads across cloud boundaries



Users of Uila like you....

Finance



Enterprise



Insurance & Legal



Manufacturing



Government



Service Provider & MSP



Retail, Hospitality, Transportation & Food Service



Services



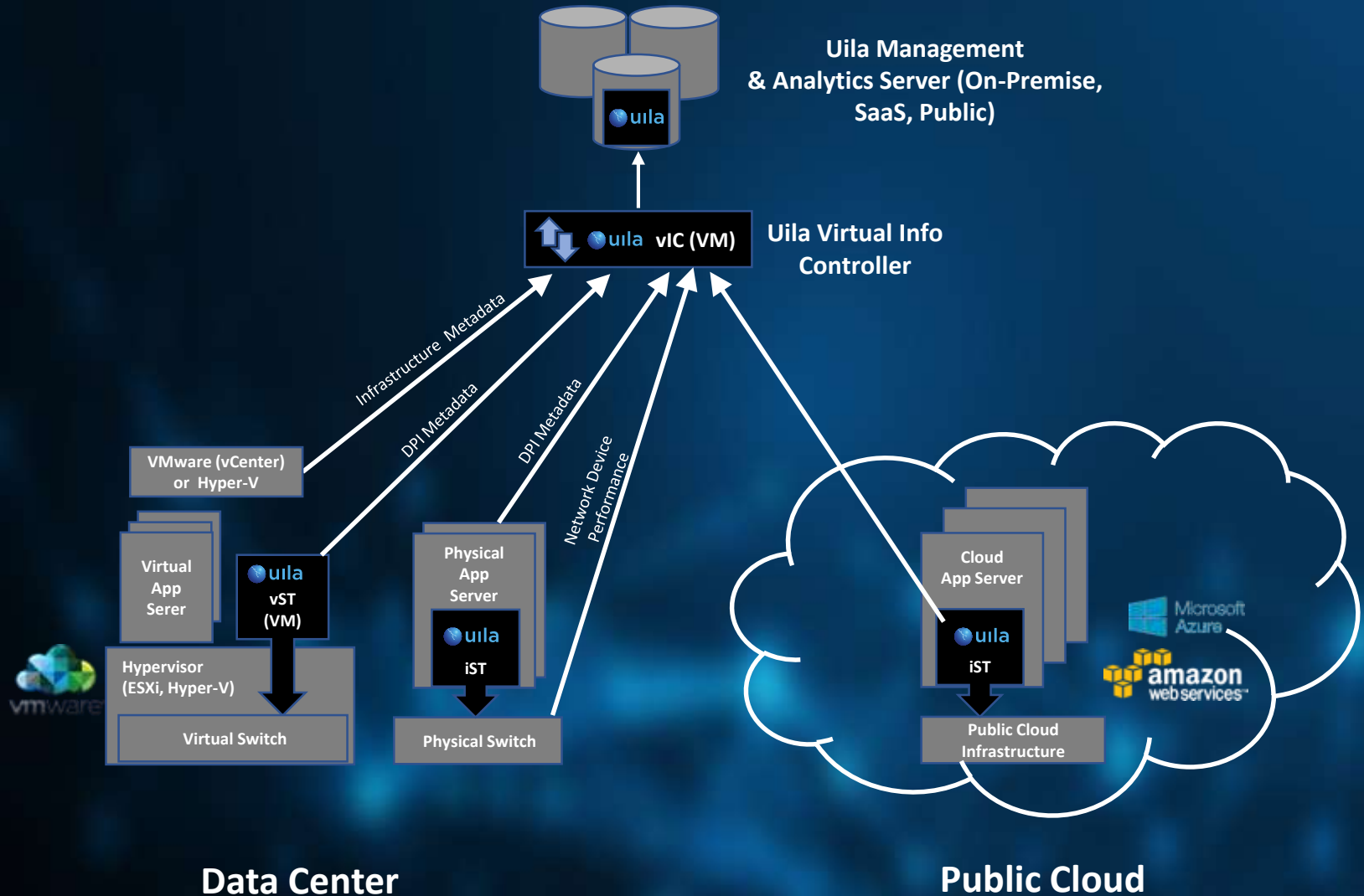
Education



Healthcare



Uila Architecture

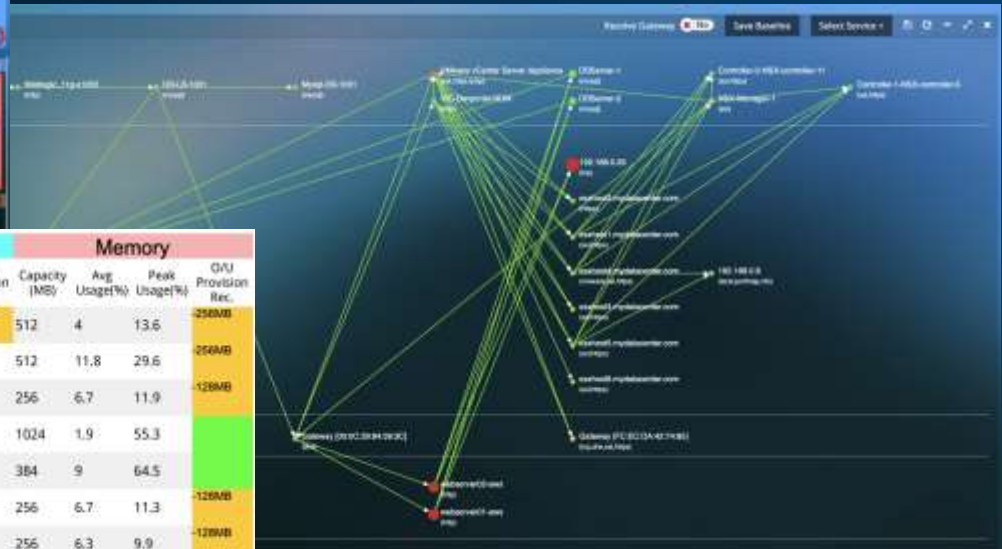


Uila Use Cases

Deep & Correlated Visibility across entire IT Landscape

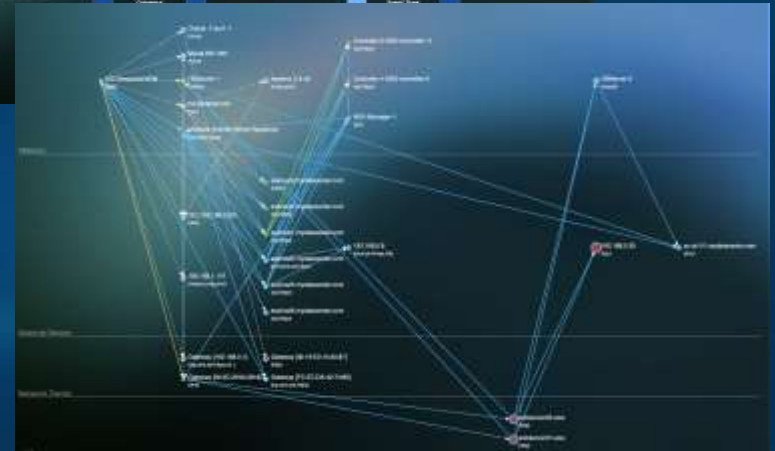
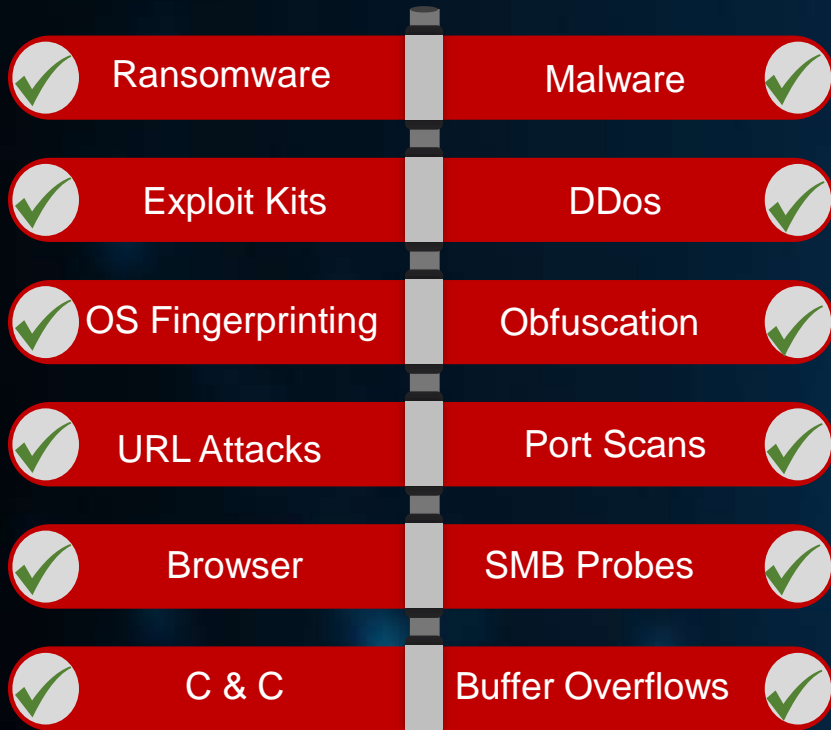


VM Name	CPU						Memory			
	Capacity (MHz)	core(s)	Avg Usage(%)	Peak Usage(%)	Top 10% Peaks Avg(%)	GPU Provision Rec.	Capacity (MS)	Avg Usage(%)	Peak Usage(%)	GPU Provision Rec.
Apache-2.4-s1	7244	4	1.2	42.2	11.2	2 cores	512	4	13.6	256MB
Apache-2.4-s2	1811	1	0.6	5.4	3.4		512	11.8	29.6	256MB
APP-LB-001	1811	1	0.3	0.5	0.3		256	6.7	11.9	128MB
APP-LB-1	1716	1	8.1	12.8	9.6		1024	1.9	55.3	
APP-LB-1001	1811	1	10.7	50.9	29.8		384	9	64.5	
APP-LB-101	1716	1	0.4	0.5	0.4		256	6.7	11.3	128MB
APP-LB-102	1716	1	0.3	0.5	0.3		256	6.3	9.9	128MB
APP Load Balancer	6864	4	0.1	0.1	0.1	3 cores	2048	1.1	2	1024MB
CitiBank-web-01	3432	2	0.2	0.3	0.2	1 core	1024	1.5	3	512MB
cloud-vm1	1716	1	0.4	0.5	0.5		1024	1.9	4.1	512MB



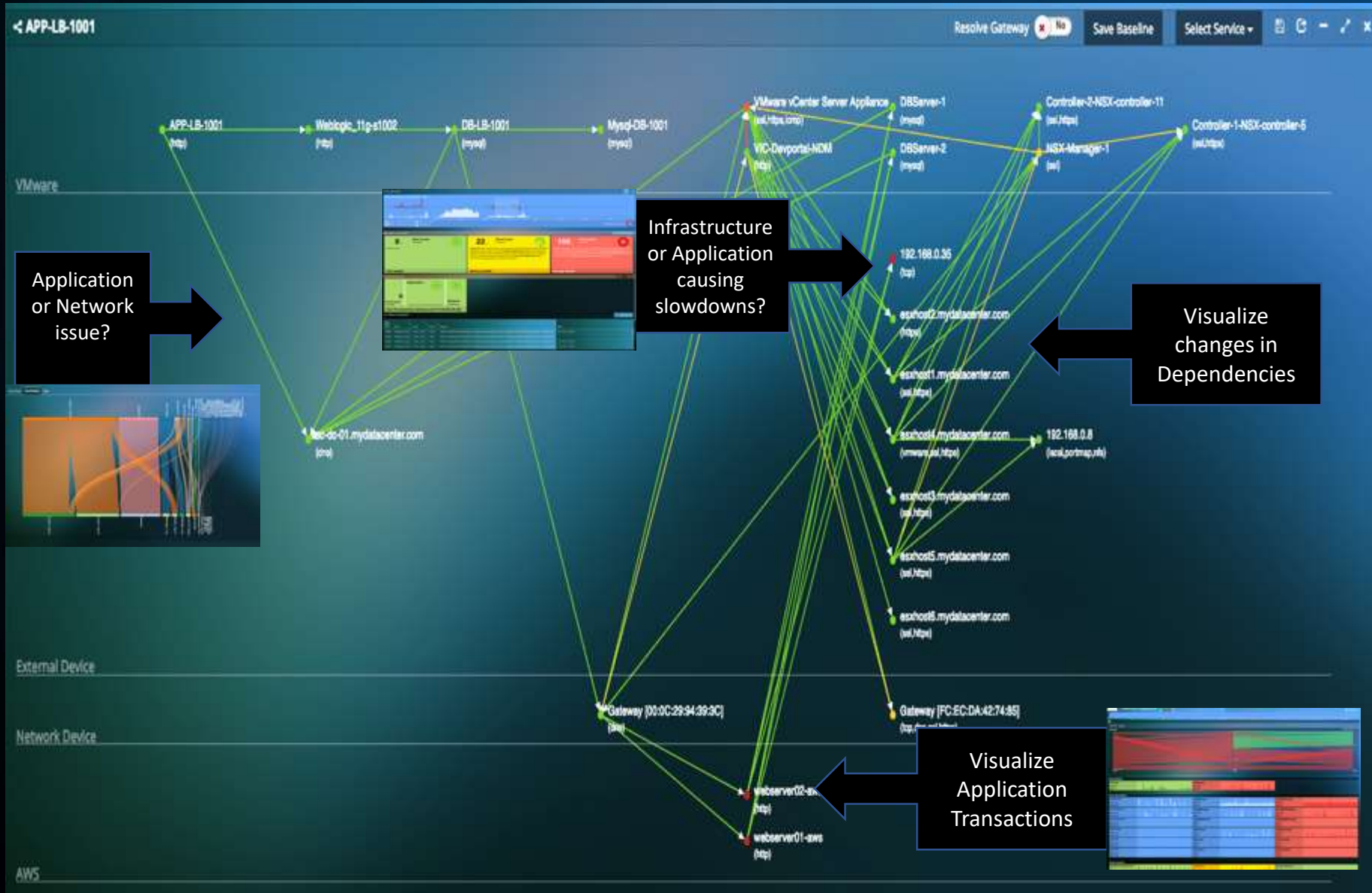
- Intelligent, Correlated and Automated Root-cause analysis across the stack for any application disruption
- Automated and Application-centric Application Dependency Mapping
- Right sizing guidance to avoid under- and over-provisioning of infrastructure resources
- App-centric driven troubleshooting to help focus on issues that matter

Real-Time Threat Detection

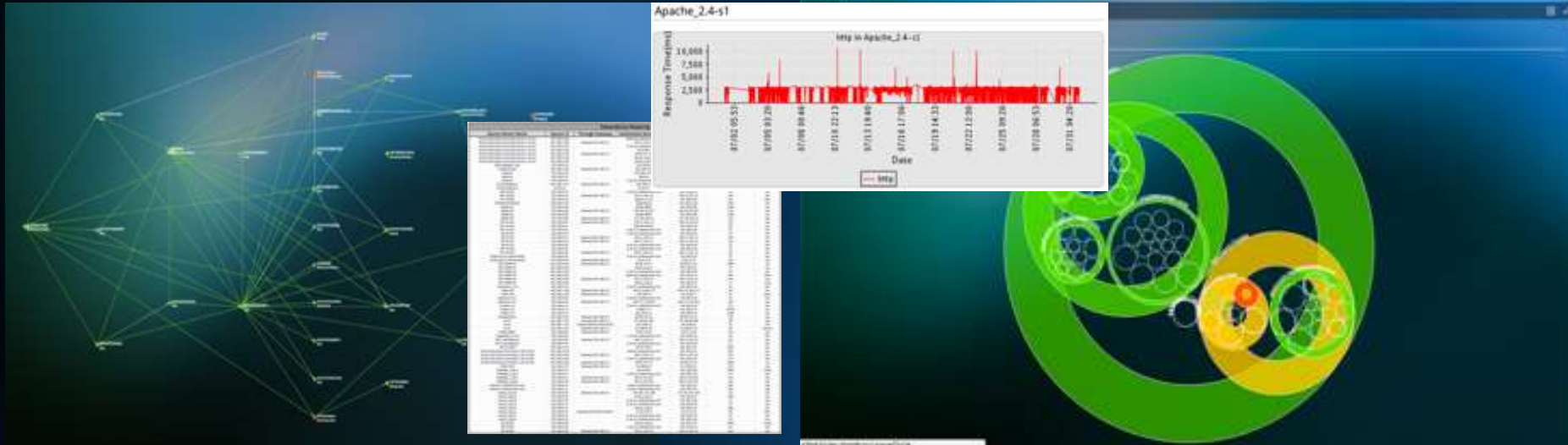


- Real-time Detection for thousands of threats & Data Exfiltration efforts
- Application-centric anomaly behavior analytics to understand impact due to threats
- Get proactive visibility into critical assets that could be potentially compromised as the attack moves laterally
- Application-centric monitoring to help you focus on issues that matter

Multi-Tier Visualization across Cloud Boundaries in a single pane



Pre-Migration Assessment



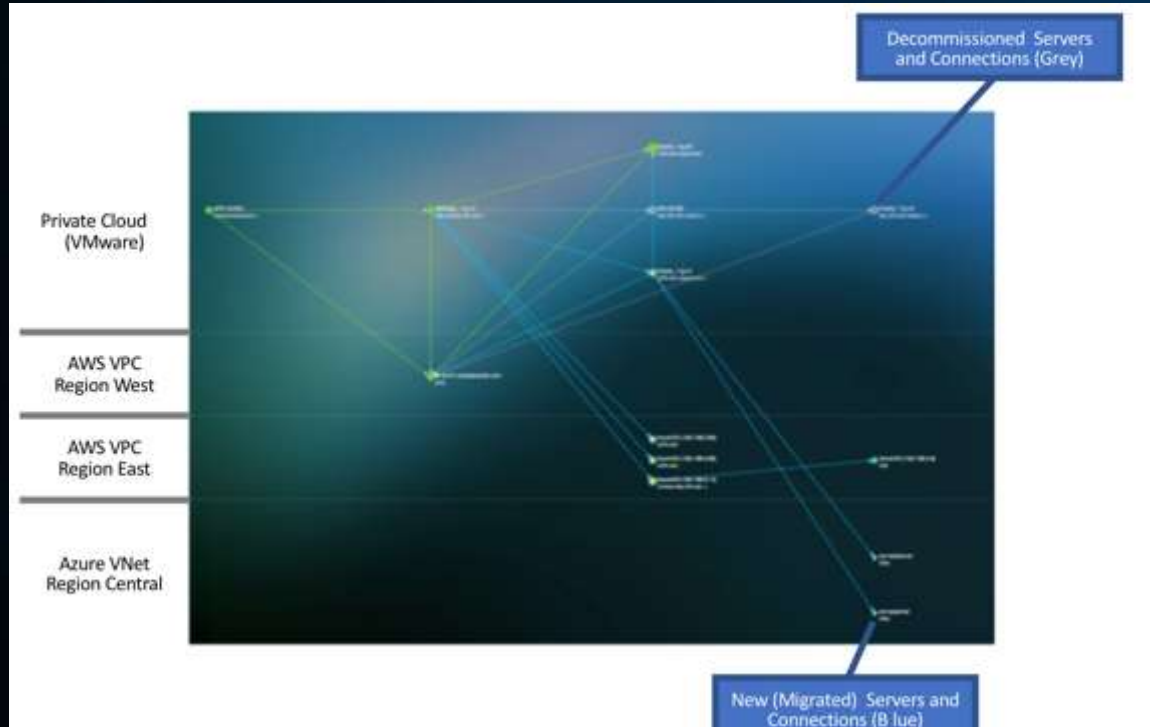
Automatically Identify any Application & their Interdependencies

Cost planning based on current and allocated resource usage

- **Dependency Mapping:** Non-disruptive, Automated & Agentless discovery of Application & Infrastructure Assets and their Interdependencies for Hybrid Cloud Migrations; Simple export of results to Migration team
- **Cost Planning:** Insights into current usage models for Compute, Storage and Network performance to make best placement decisions and align performance and economic targets for migration

No more time-consuming and error-prone manual dependency mappings

Continuous Monitoring During Migration



Real-time Visibility into migrated servers and connections

- Complete visualization into workload migration progress with new and retired servers and connections
- Real-time visibility allows for building confidence within the migration team, and also makes roll-backs or modifications very nimble, with minimum loss to business continuity

Migrate with confidence with real-time visibility into dependencies and bottlenecks during the actual migration

Solve problems before any Impact to Digital Business



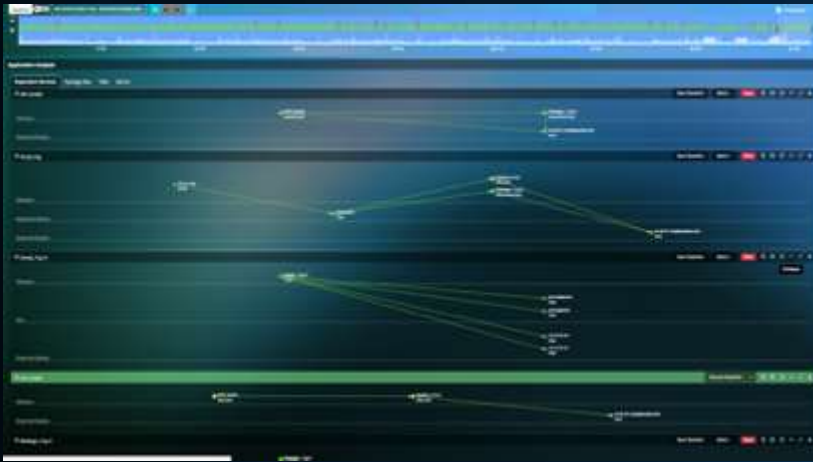
End-user Performance Monitoring

Actionable Full-Stack Root-Cause Intelligence

- Dynamically baseline application performance & reduce MTTR with Full-stack correlated visibility & Root-Cause Analysis across Application, Virtualization & Infrastructure layers.
- End-User Behavior Analytics to show performance from the user's perspective and prevent future incidents

More Collaborations between teams

Application-centric Insights for Infrastructure & Cloud Professionals



Automatically Identify any Application & their Interdependencies

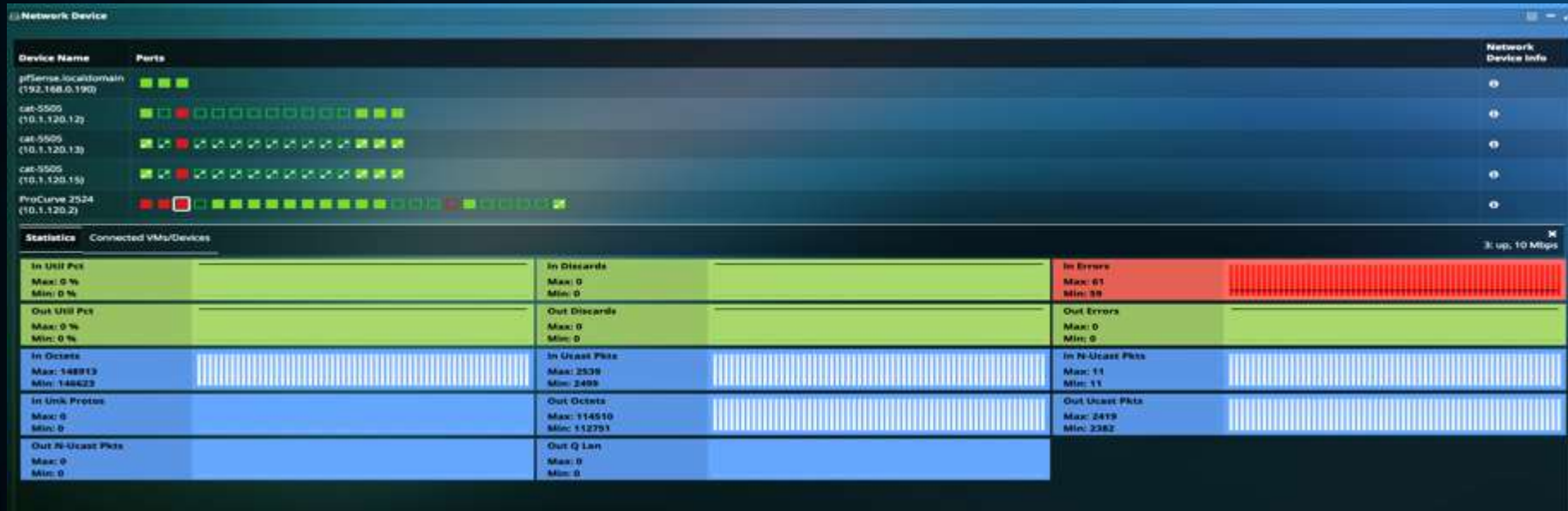


Actionable Root-Cause Intelligence

- Unique Application transaction visibility for your Infrastructure & Cloud teams
- Automatically Discover Application & Server Dependencies; Review Application Response times, Transaction volume and Traffic volume for each individual application across on-premise and multiple cloud providers in a single user interface for informed decision making

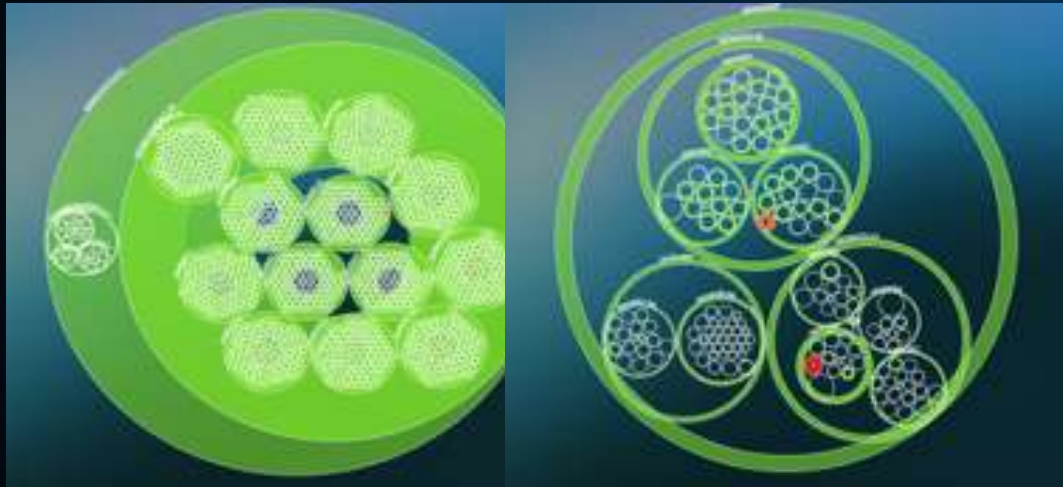
Single Console across your Multi-Cloud deployment

Application-centric Network Device Monitoring & Troubleshooting



- Prove its NOT the network for faster ticket escalation and reduced troubleshooting time for application issues by pin-pointing root cause to network devices (availability status, utilization, congestion, errors) right from ADM
- Extend your monitoring to remote offices from end-user's perspective & proactively identify remote network device issues
- Visualize status of the WAN link and the interconnection status with the rest of your switch fabric.

Right-Size your Infrastructure & Cloud Investment



Real-time resource usage and allocation insights

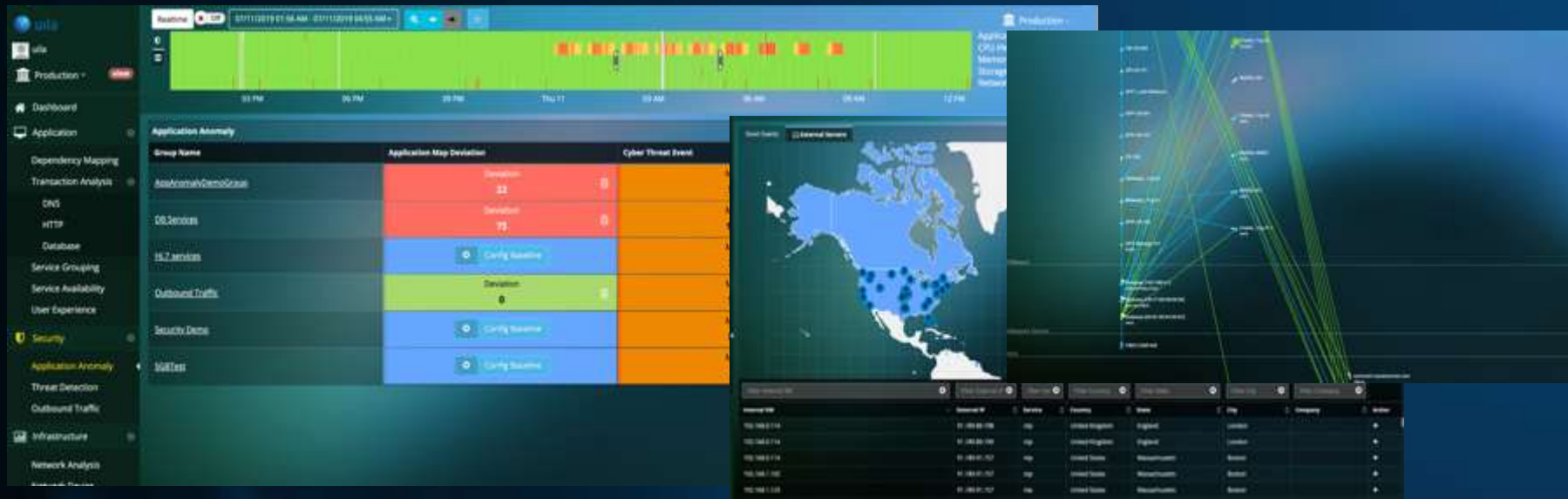
Resources Provision Summary								
VM Name	CPU				Memory			
	Capacity	Avg Usage(%)	Peak Usage(%)	Over Provision	Capacity	Avg Usage(%)	Peak Usage(%)	Over Provision
WebSphere_8.5-s1	3432Mhz	0.1	0.1		1024MB	0.9	1.7	
SQL_2012-n3	3622Mhz	0.2	0.3		2048MB	1.5	2.6	
NSX-WebApp-02	3432Mhz	0.1	0.1		512MB	2.	3	
SQL_2012-n1	6864Mhz	0.5	0.6		2048MB	1.6	2.7	
NSX-WebApp-04	3622Mhz	0.2	0.2		512MB	1.9	3	
APP-LB-102	1716Mhz	0.3	0.4		256MB	6.7	10.4	
vmware-id-analyzer-1.5.2	1811Mhz	1	1.2		2048MB	4.3	5.4	
DB-LB-101	1716Mhz	0.3	0.3		256MB	6.6	9.8	
SQL_2012-								

Rightsizing recommendations

- Visualize under-provisioned hosts or cloud resources leading to application performance issues
- Control your cloud spend and visualize unnecessary stretching of budget with over-provisioned infrastructure or cloud resources with expert rightsizing recommendations

Optimize Cloud & Infrastructure costs based on actual usage and uncover inefficiencies to reduce waste

Application Anomaly Behavior Analytics



- Application Map based visualization for business critical services to identify anomalies in application behavior that may occur before, during or as a follow up after a successful attack
- Visualize deviation (new services, unauthorized VMs/connections/external internet connections) from baseline security policy
- Map Outbound Traffic from your Data Center to the Internet to reduce risk associated with general Internet connectivity and identify malicious leakage of sensitive data

Application-Centric insights into any Anomalous Behavior

East-West Lateral Traffic Analysis



- Identify lateral east-west traffic patterns including SMB/SMB2 protocols that maybe used to transfer files/malware, password dumpers, etc.
- Identify unauthorized VMs/servers/connections as well as changes in traffic patterns for existing deployments

Comprehensive Visibility into Lateral Movement of Attacks

Advanced Application Analysis



- Deep Application Transaction, Network Traffic Analysis & Infrastructure Impact Before, During and After incident

Conclusive Chain-of-Evidence for any threat

Uila Proof of Concept (30-day)

Schedule	Steps	Uila Resource	Your Company Resource
Pre POC	<ul style="list-style-type: none"> • Schedule POC Date • Allocation of dedicated Uila resource • Commercial proposals for full deployment shared by Uila 	Uila Account Executive, Uila Technical Expert	Technical Sponsor, Executive Sponsor (for commercial proposal review)
Day 1	<ul style="list-style-type: none"> • Installation and configuration of Uila solution (1-2 hours) <ul style="list-style-type: none"> ○ Data Collection and analysis begins ○ Uila automatically starts baselining Application, Infrastructure and Network performance • Get access to Uila online university 	Uila Technical Expert	Technical Sponsor
Week 2	<ul style="list-style-type: none"> • Uila Solution Review (1 hour) <ul style="list-style-type: none"> ○ Recap of goals and requirements ○ Highlight areas to optimize for the Data Center/Cloud deployment ○ Troubleshoot and resolve pain points with Application/Infrastructure performance) • Uila User Interface deep-dive training 	Uila Account Executive, Uila Technical Expert	Technical Sponsor
Week 3	<ul style="list-style-type: none"> • Continue to familiarize yourself with Uila 	Uila Technical Expert	Technical Sponsor
Week 4	<ul style="list-style-type: none"> • Uila Management Review (1 hour) <ul style="list-style-type: none"> ○ Recap of goals and requirements ○ Discuss value of Uila with real-world data from your deployment • POC ends • Commercialization terms agreed 	Uila Account Executive, Uila Technical Expert	Executive Sponsor, Technical Sponsor


Uila Licensing

- Two flexible options
 - Annual Subscription – Includes upgrades, updates, & support
 - Perpetual License – Annual Support charged separately (annual support includes: technical questions/problems and software updates)
- Pricing
 - Private Cloud/Data Center:
 - Based on Total # of physical CPU in Hypervisor hosts where Uila Smart Taps are installed
 - Based on Total # of Non-virtualized application servers with Uila WMI/SSH integration
 - Public Cloud: Priced based on Total # of Cloud VM/Instances
 - Additional module for Network Device Monitoring based on # of active ports
 - Additional module for Cyber Threat Monitoring (Security)
- Training
 - Free Online Computer Based training
 - Optional Webex-based training with Uila Expert (16/48 hours)
 - Uila Expert Assistance on Performance Troubleshooting
- No additional charge for Uila SaaS Cloud or On-Prem
- No limit on # of user logins



Thank You

www.uila.com

 [@Uila_Inc](https://twitter.com/Uila_Inc)

Uila Software – Resource Requirements

- UMAS
 - 4 vCPU
 - 32 GB Virtual Memory; 24 GB Reserved
 - 800 GB Virtual Storage, local (Can be thin provisioned)
- vST
 - Each of the hosts monitored requires one vST installed as a guest VM, with average single vCPU usage of 70 MHz, and Monitor Port Group average 200 kbps bandwidth, pre-allocated
 - 1Gb memory required during installation and 500 Mb in run time
 - 2Gb disk space required during installation and 500 Mb in run time
- vIC
 - Installed as a guest VM with single vCPU average usage of 275 MHz, and Monitor Port Group average of 400 kbps network bandwidth
 - vIC's Virtual Resource allocation (depending on # of VM's monitored) is listed:

Scope	# of VM Monitored	vCPU	Virtual Memory	Local Storage
Small	0 ~ 500 VM	2 Cores	4 GB	8 GB
Medium	501 ~ 1,000 VM	2 Cores	8 GB	8 GB
Large	1,001 ~ 2,000 VM	2 Cores	16 GB	8 GB