

PROGRESS FLOWMON +
PROGRESS KEMP +
PROGRESS WUG

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BDM – Hungary & Adriatics

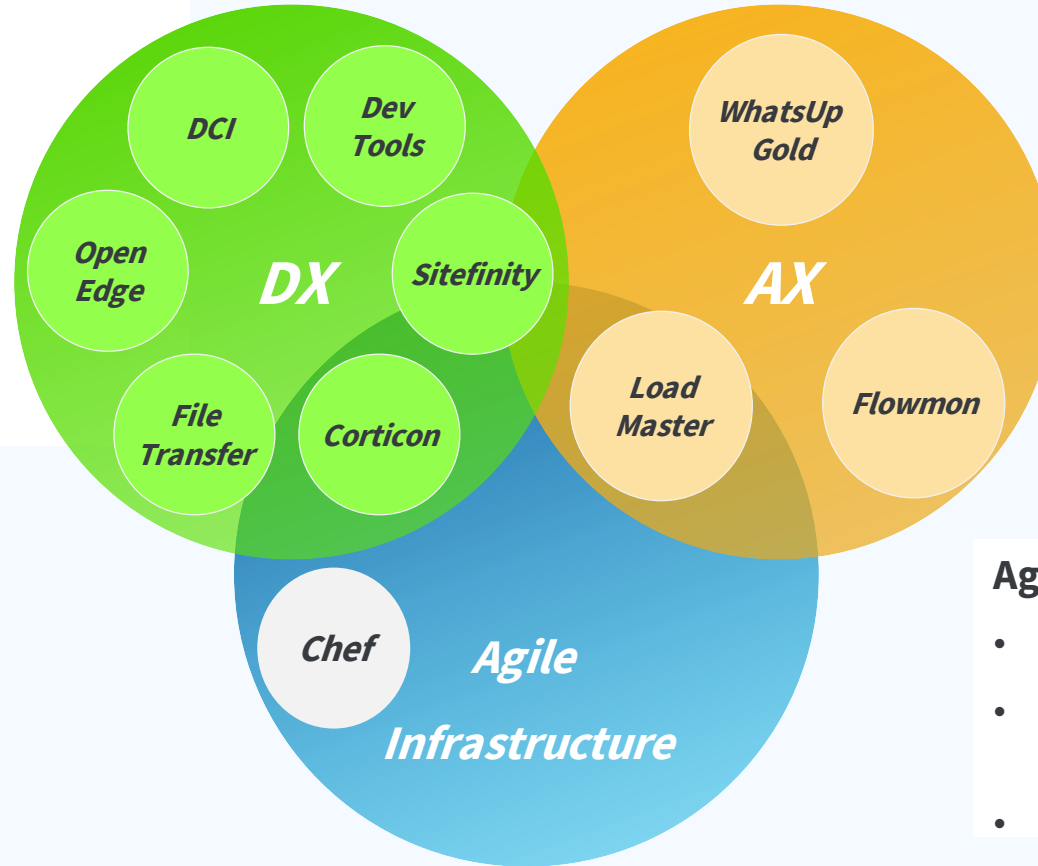
18.October.2022



Experience Composition in the Digital World

Digital Experience (DX) Management

- Multichannel experience (web, mobile, chat, headless)
- Decoupled presentation
- Content Management
- Digital decisions
- Data and application integration



Application Experience (AX) Management

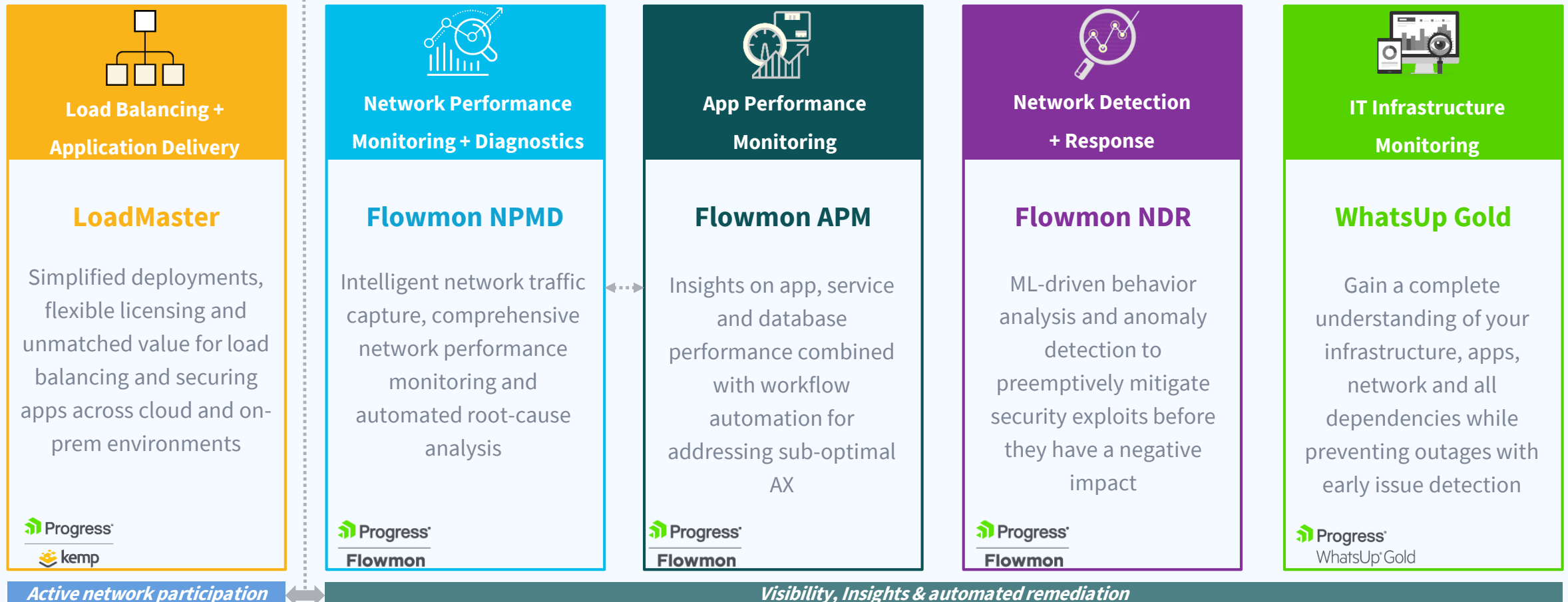
- Application, network and infrastructure visibility
- Intelligent application and service delivery
- Multi-dimension workload and network security

Agile Infrastructure

- Enable compliant, high velocity business changes
- Respond to experience degradation through elastic expansion
- Leverage Chef to provide response capability for both private and public cloud orchestration

The Progress AX Portfolio

Enabling operators to deliver the best **Application Experience**



Our Foundational Value Proposition

Effective Operations Across the Entire Application Lifecycle

Develop

Build applications that deliver great, personalized digital experiences

Deploy

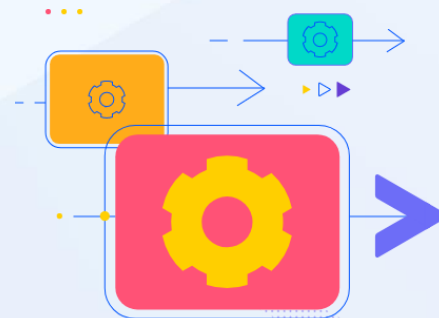
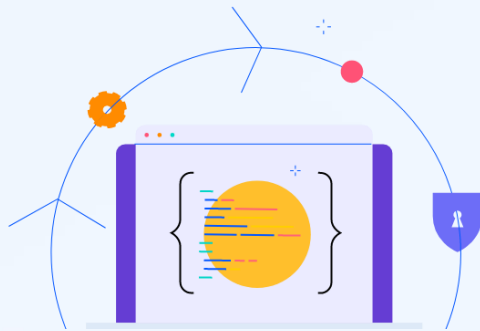
Streamline application publishing and delivery to get services deployed where, when and how they're needed

Manage

Provide infrastructure assurance and gain total control over Day 2 Operations



Applications and Services



Hybrid Cloud Ecosystems

Day 0

Day 1

Day 2

Monitoring, management, analytics

Element management

NMS

Map, config mgmt, assets, inventory

NTA

...

Traffic analytics

Néhány nehéz (?) kérdés



Mennyi adatot mozgattunk múlt héten?

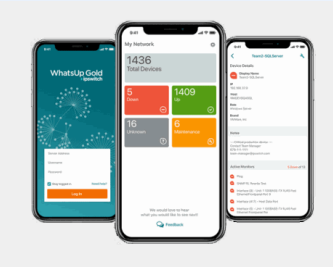
Hogyan oszlanak el az SAP FI 4 frontendjén a felhasználók?

Hányan dolgoznak a VPN-en keresztül?

Az 1-es épületben hány felhasználó van az AP-okon?

Kik nyerik a Facebook és Insta házi bajnokságot?

Milyen mértékben hatnak a mentési jobok a válaszigidőkre?



Element management

- Thought: everyone has it
- Open source sometimes just does not cut it
- WUG happens to be a top shelf product

Our Customers



NETWORK MONITORING

B2B Technology



Industrial



Healthcare



Financial Services



B2C / Retail



Our Customer Commitment

Everything we have—our people, technology, experience, continuous innovation and investments—ensures Your Progress.

WhatsUp Gold Key Features

Discovery

Anything with an IP

Working map

Dashboarding and reporting

Application Performance

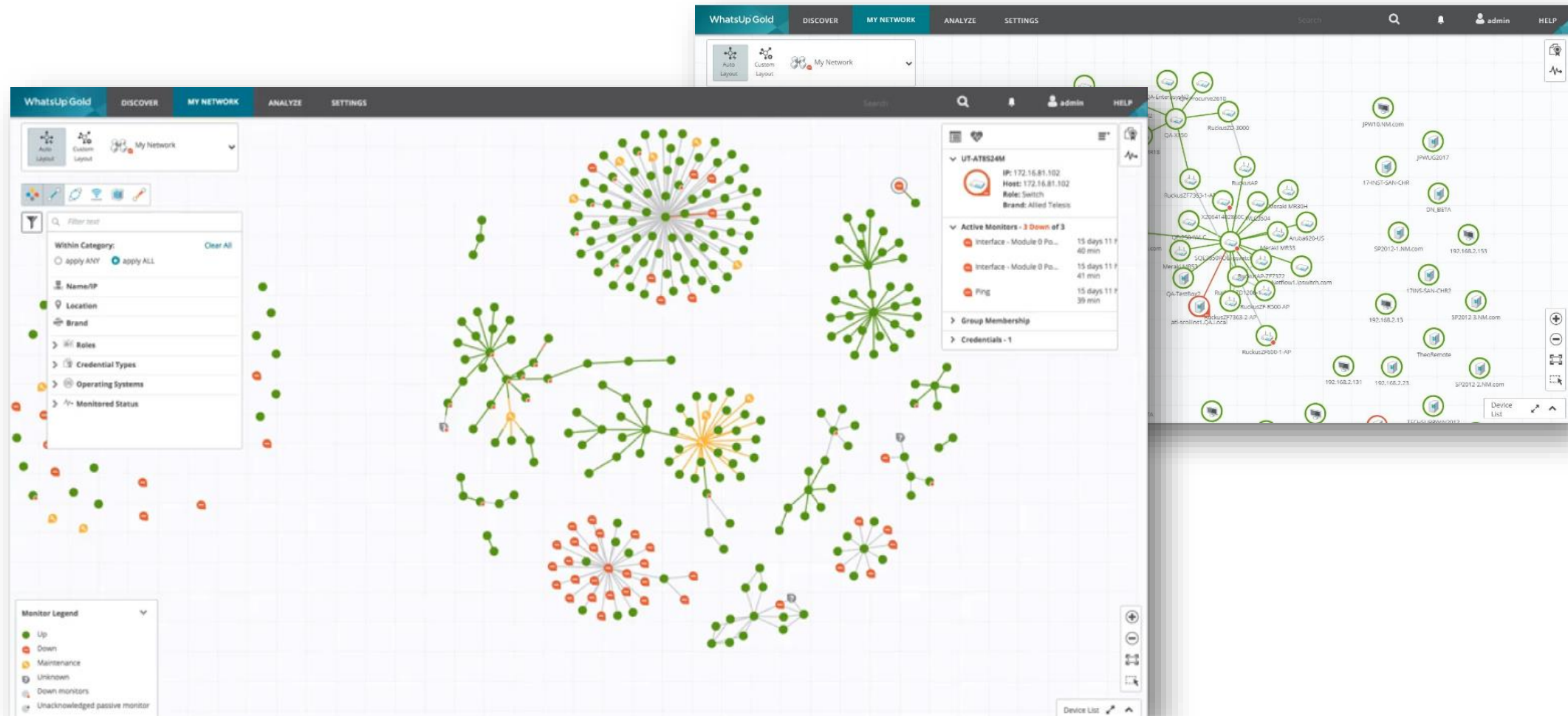
Monitoring – service inventory

Basic NTA

- Virtual Infrastructure monitoring
- Wireless Monitoring
- Cloud Monitoring
- Configuration Management
- REST API support
- Integrated Log Management
- Flowmon Integration

 **Progress**[®] WhatsUp[®] Gold

Network Viewing & Mapping



Dashboarding

Drag and Drop

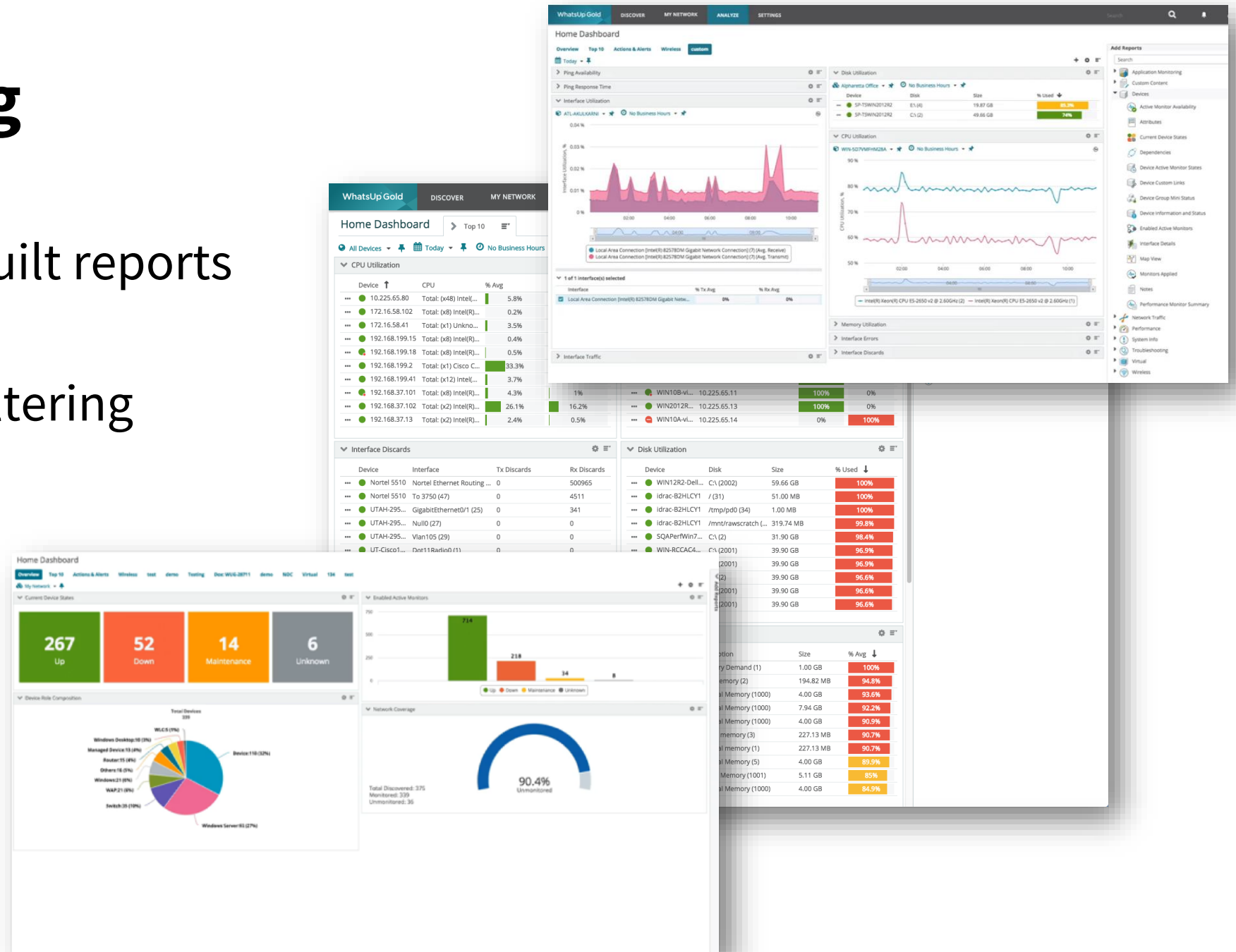
Hundreds of pre-built reports

Flexible Layout

Device and Time filtering

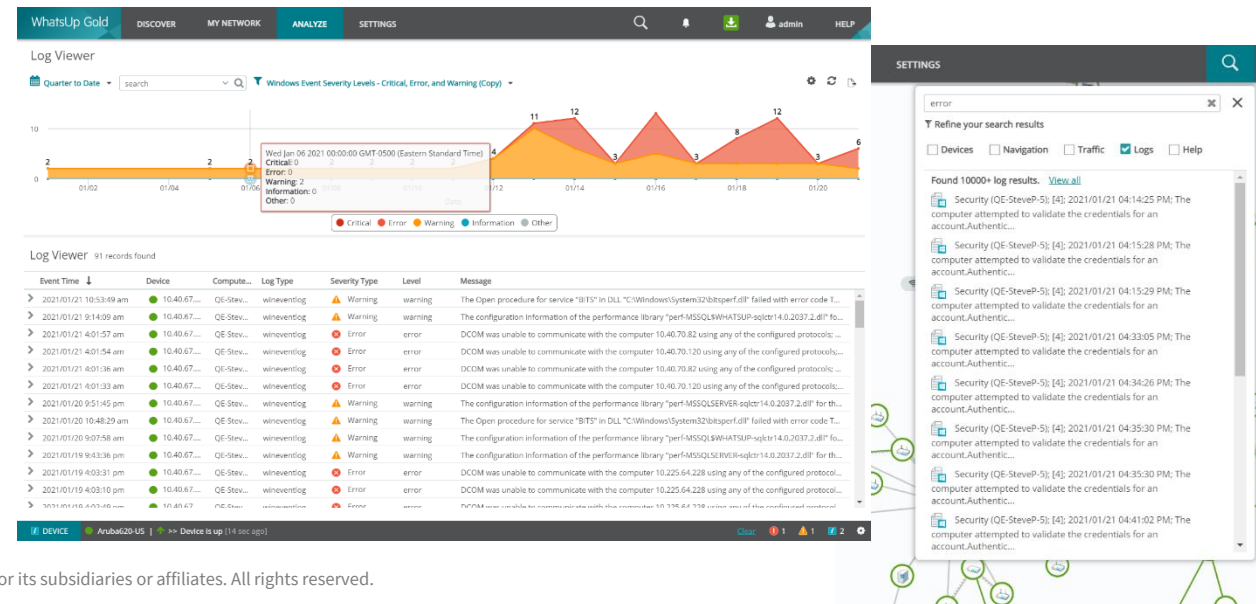
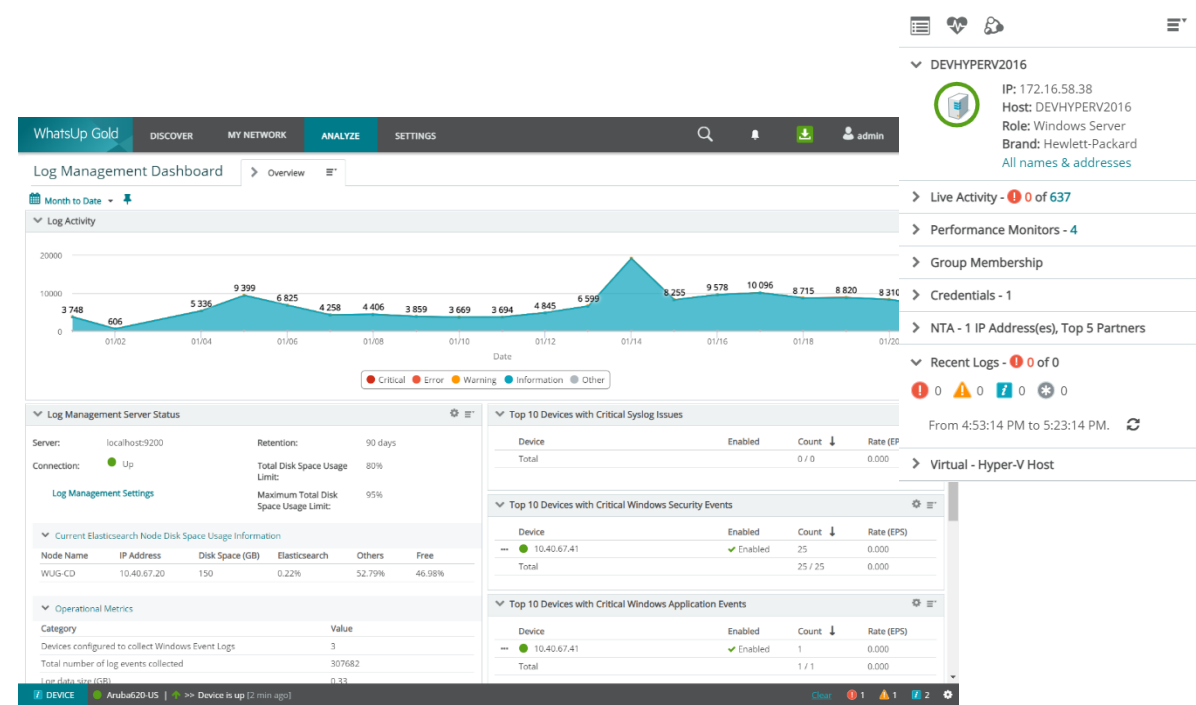
Scheduled exports

External views



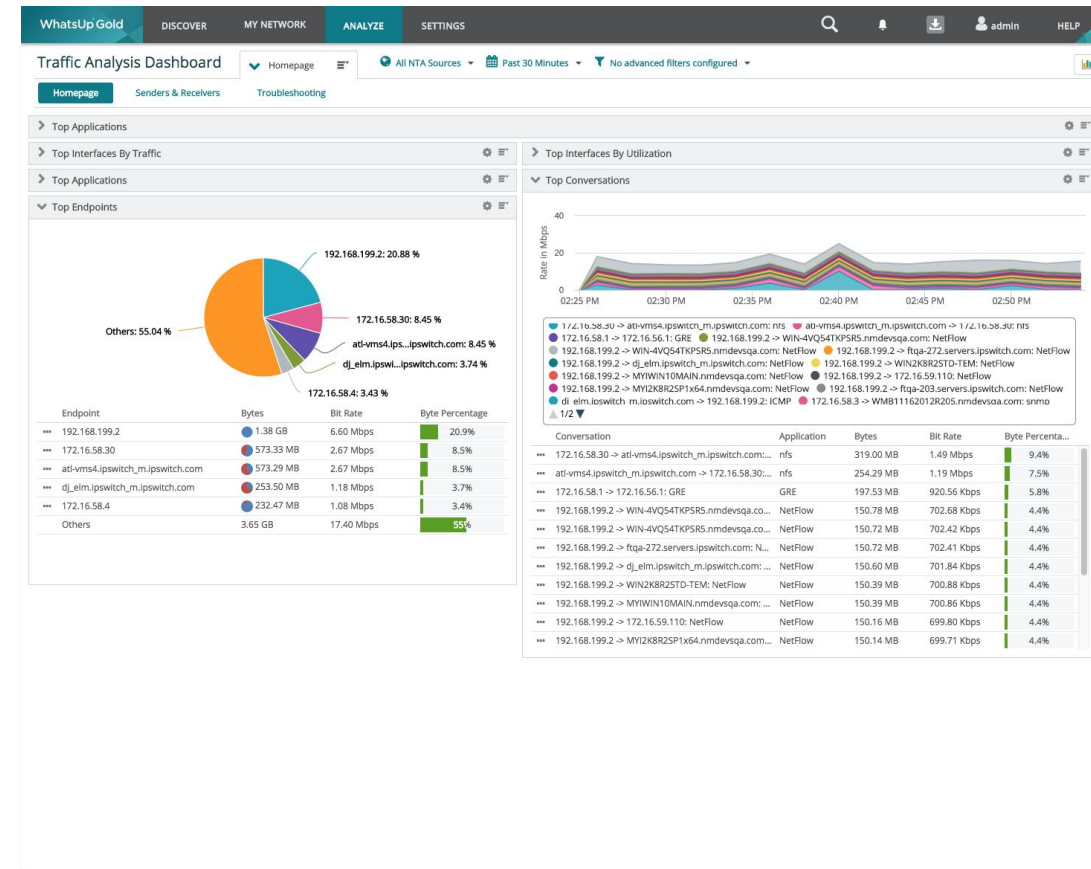
Log Management

Log Management within WhatsUp Gold
Monitor, filter, search and alert on logs
Ingest syslogs and Windows logs
Log info displayed in device card
Log viewer, log dashboard
Log search



Network Traffic Analysis (NTA)

- Uses Netflow and other flow protocols
 - NSEL, sFlow, Jflow, Ipflix
- Top talkers, top endpoints, top protocols etc.
- Device centric NTA



Application Performance Monitoring (APM)

Monitor an application's whole stack

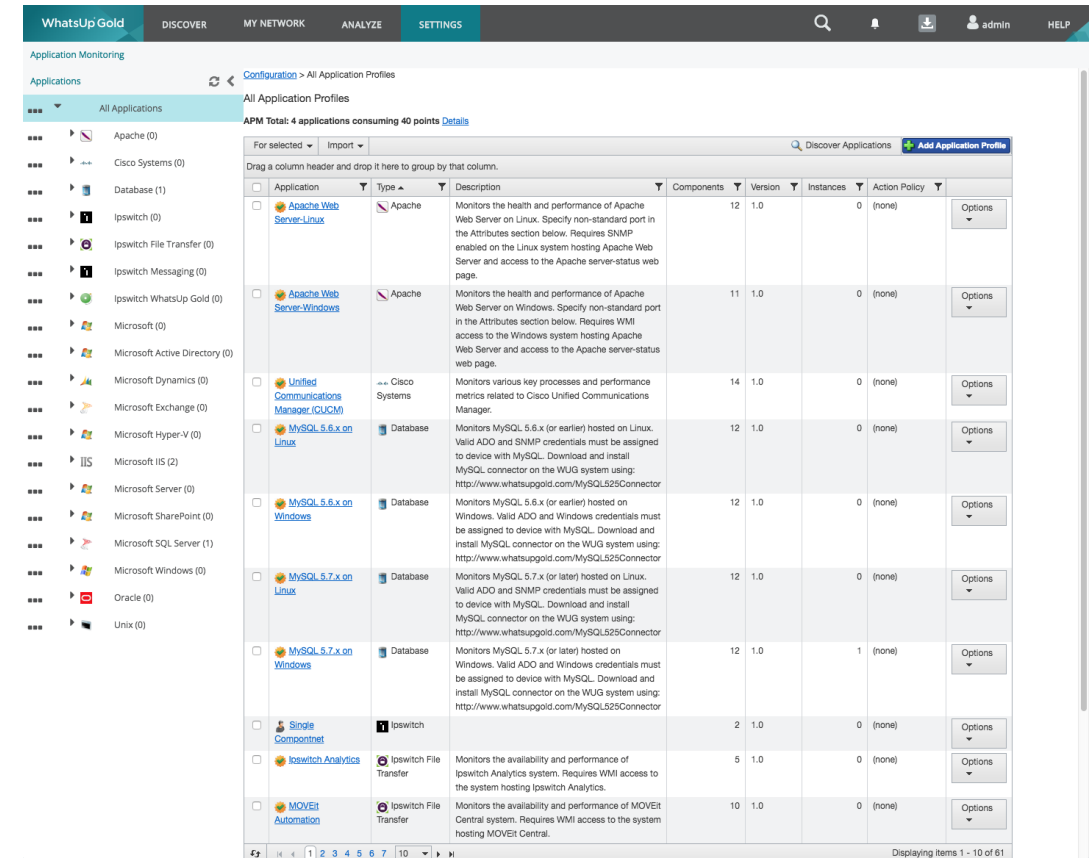
- Shows status on device badge

Built-in profiles allow for easy setup

Profiles:

Microsoft Exchange, SQL Server,
SharePoint and Active directory,
Linux, MySql, and Oracle

User defined profiles



The screenshot displays the 'Application Monitoring' section of the WhatsUp Gold software. It features a sidebar with a list of application categories and their counts, such as 'Apache (0)', 'Database (1)', and 'Microsoft Windows (0)'. The main area shows a table of 'All Application Profiles' with columns for Application, Type, Description, Components, Version, Instances, and Action Policy. The table lists various profiles like 'Apache Web Server-Linux', 'Apache Web Server-Windows', 'Unified Communications Manager (CUCM)', and several 'MySQL' versions on both Linux and Windows. Each row includes an 'Options' button for further configuration.

Application	Type	Description	Components	Version	Instances	Action Policy
Apache Web Server-Linux	Apache	Monitors the health and performance of Apache Web Server on Linux. Specify non-standard port in the Attributes section below. Requires SNMP enabled on the Linux system hosting Apache Web Server and access to the Apache server-status web page.	12	1.0	0	(none)
Apache Web Server-Windows	Apache	Monitors the health and performance of Apache Web Server on Windows. Specify non-standard port in the Attributes section below. Requires WMI access to the Windows system hosting Apache Web Server and access to the Apache server-status web page.	11	1.0	0	(none)
Unified Communications Manager (CUCM)	Cisco Systems	Monitors various key processes and performance metrics related to Cisco Unified Communications Manager.	14	1.0	0	(none)
MySQL 5.6.x on Linux	Database	Monitors MySQL 5.6.x (or earlier) hosted on Linux. Valid ADO and SNMP credentials must be assigned to device with MySQL. Download and install MySQL connector on the WUG system using: http://www.whatsupgold.com/MySQL525Connector	12	1.0	0	(none)
MySQL 5.6.x on Windows	Database	Monitors MySQL 5.6.x (or earlier) hosted on Windows. Valid ADO and Windows credentials must be assigned to device with MySQL. Download and install MySQL connector on the WUG system using: http://www.whatsupgold.com/MySQL525Connector	12	1.0	0	(none)
MySQL 5.7.x on Linux	Database	Monitors MySQL 5.7.x (or later) hosted on Linux. Valid ADO and SNMP credentials must be assigned to device with MySQL. Download and install MySQL connector on the WUG system using: http://www.whatsupgold.com/MySQL525Connector	12	1.0	0	(none)
MySQL 5.7.x on Windows	Database	Monitors MySQL 5.7.x (or later) hosted on Windows. Valid ADO and Windows credentials must be assigned to device with MySQL. Download and install MySQL connector on the WUG system using: http://www.whatsupgold.com/MySQL525Connector	12	1.0	1	(none)
Single Component	Ipswitch		2	1.0	0	(none)
Ipswitch Analytics	Ipswitch File Transfer	Monitors the availability and performance of Ipswitch Analytics system. Requires WMI access to the system hosting Ipswitch Analytics.	5	1.0	0	(none)
MOVEit Automation	Ipswitch File Transfer	Monitors the availability and performance of MOVEit Central system. Requires WMI access to the system hosting MOVEit Central.	10	1.0	0	(none)

Device-based Licensing

- On-premise perpetual license or subscription (10 - 100)
- All upgrades free with maintenance agreement (1st year included)



Why settle for this...

With competitors, you pay by the interface or 'monitor'. That means you have to figure out how many interfaces you want to monitor on each device. Often, they'll tell you that 'you only need to monitor a few interface per device'. Our question is 'why compromise'?



...when you can have this?

With WhatsUp Gold's device-based licensing you get maximal network monitoring coverage with less effort. Just decide what devices you want to manage and we make it simple from there. You pay by the number of devices you monitor and can apply as many monitors as you need.

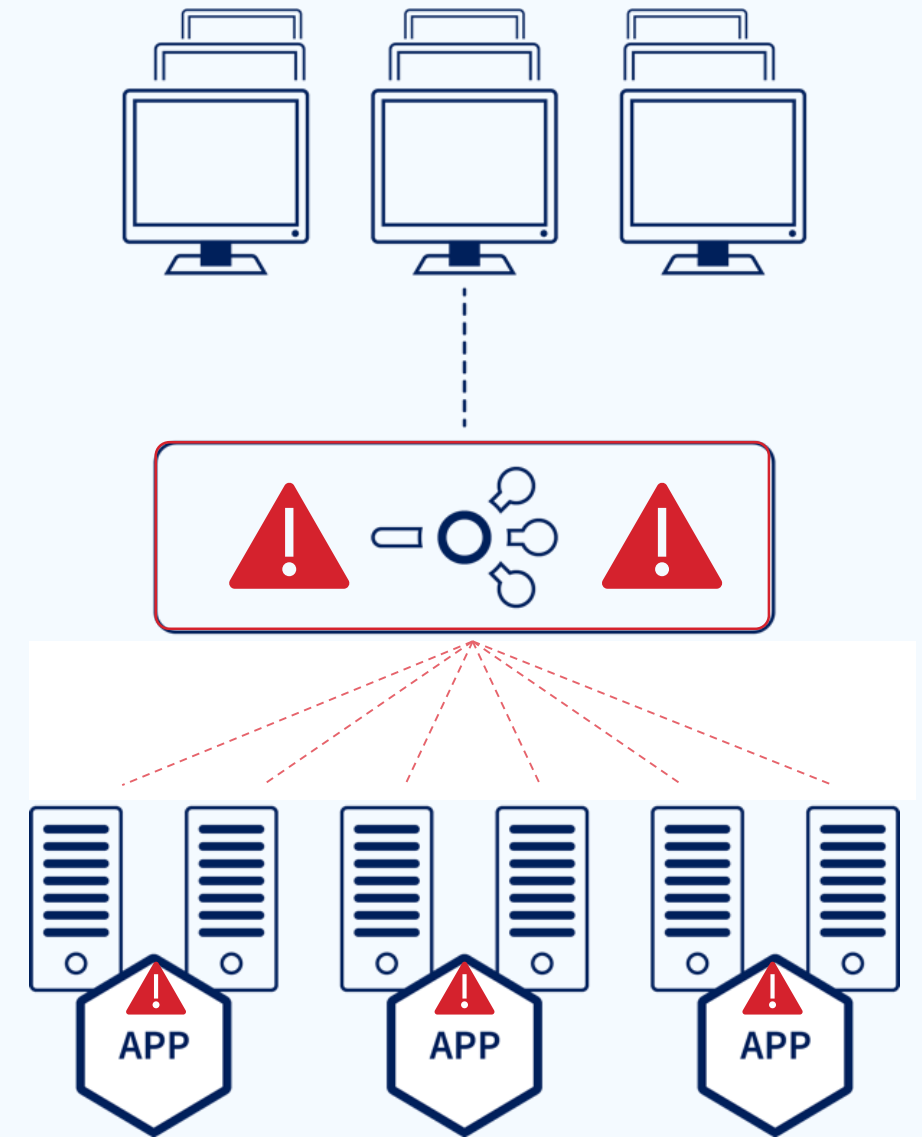
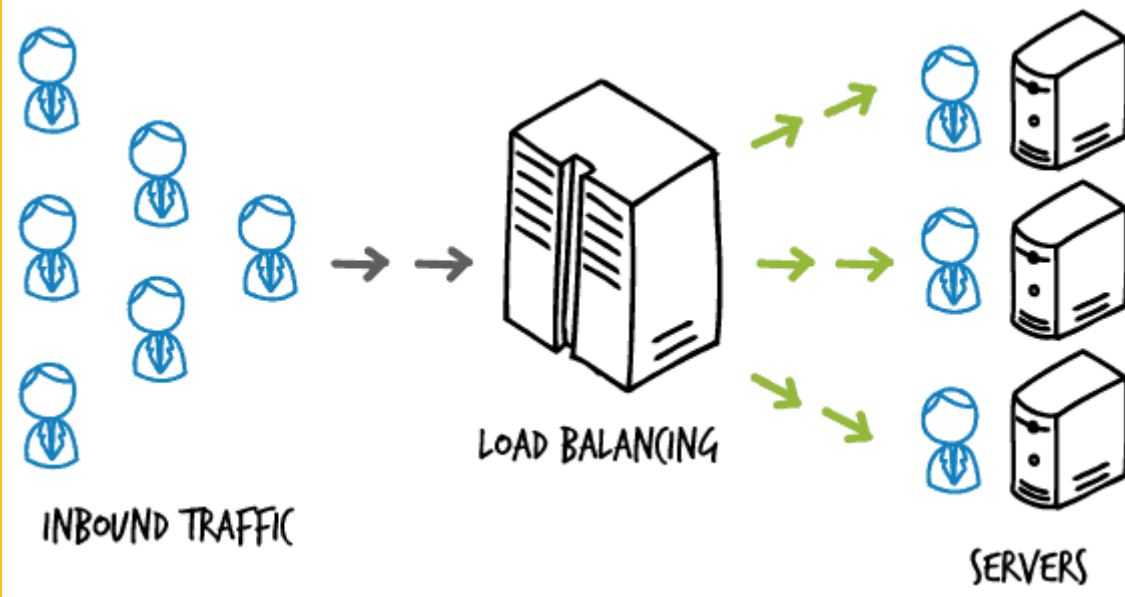


LOAD BALANCING



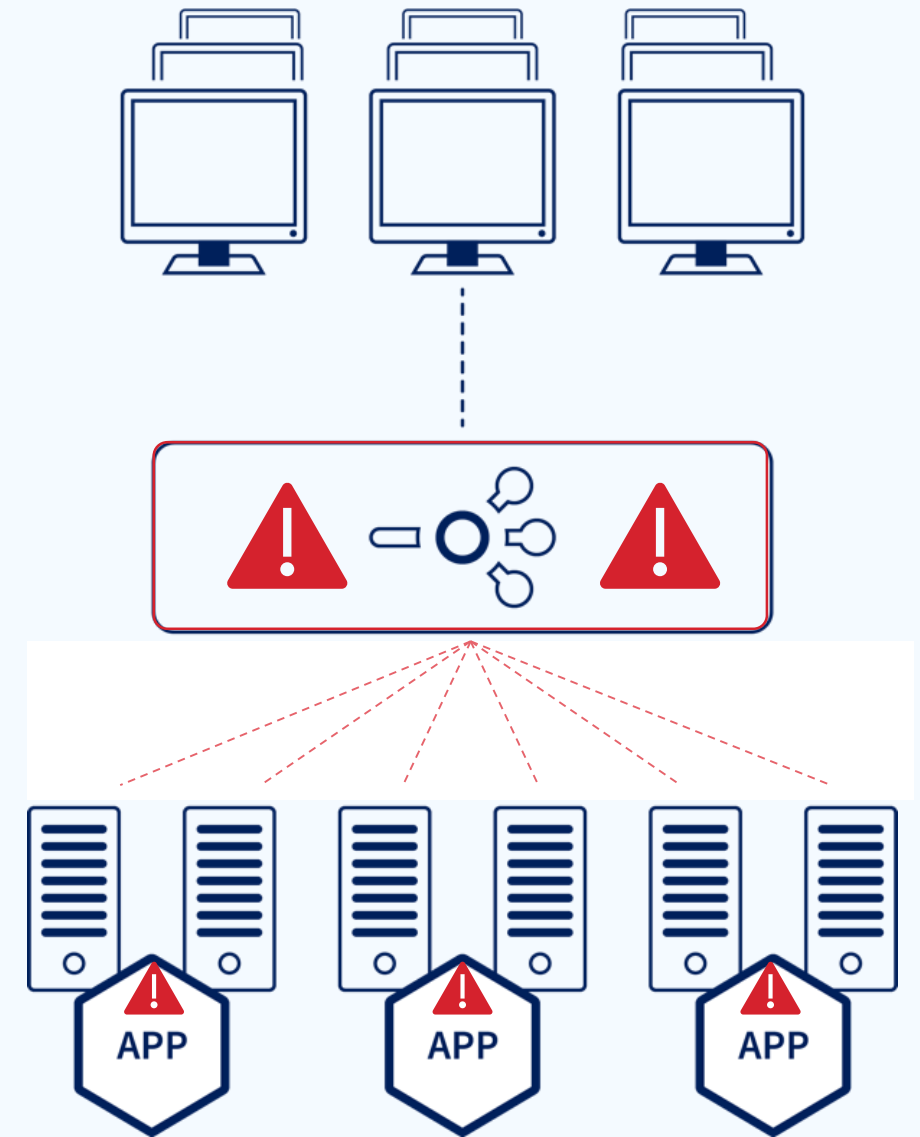
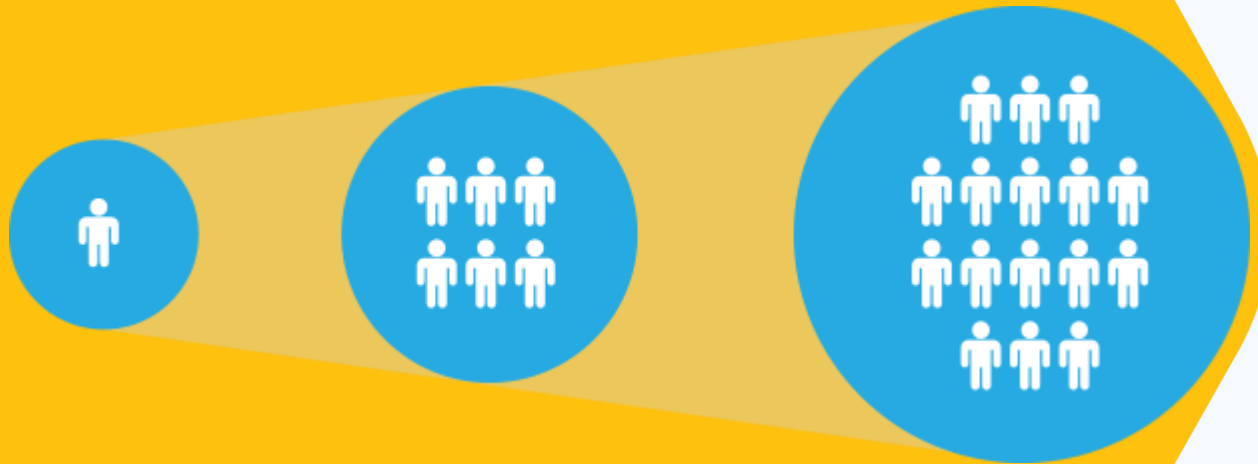
WHAT IS an LB?

- Between users and servers



WHAT IS an LB?

- Between users and servers
- Scalability

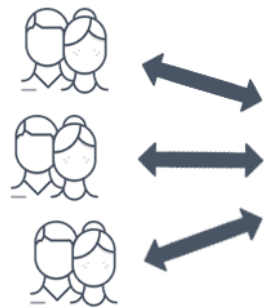


WHAT IS an LB?

- Between users and servers
- Scalability, availability



Application Clients (End Users)



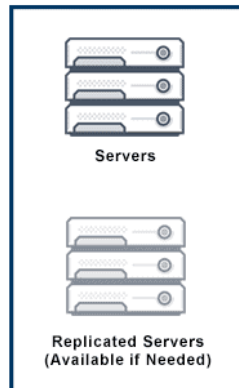
Internet



Load Balancer

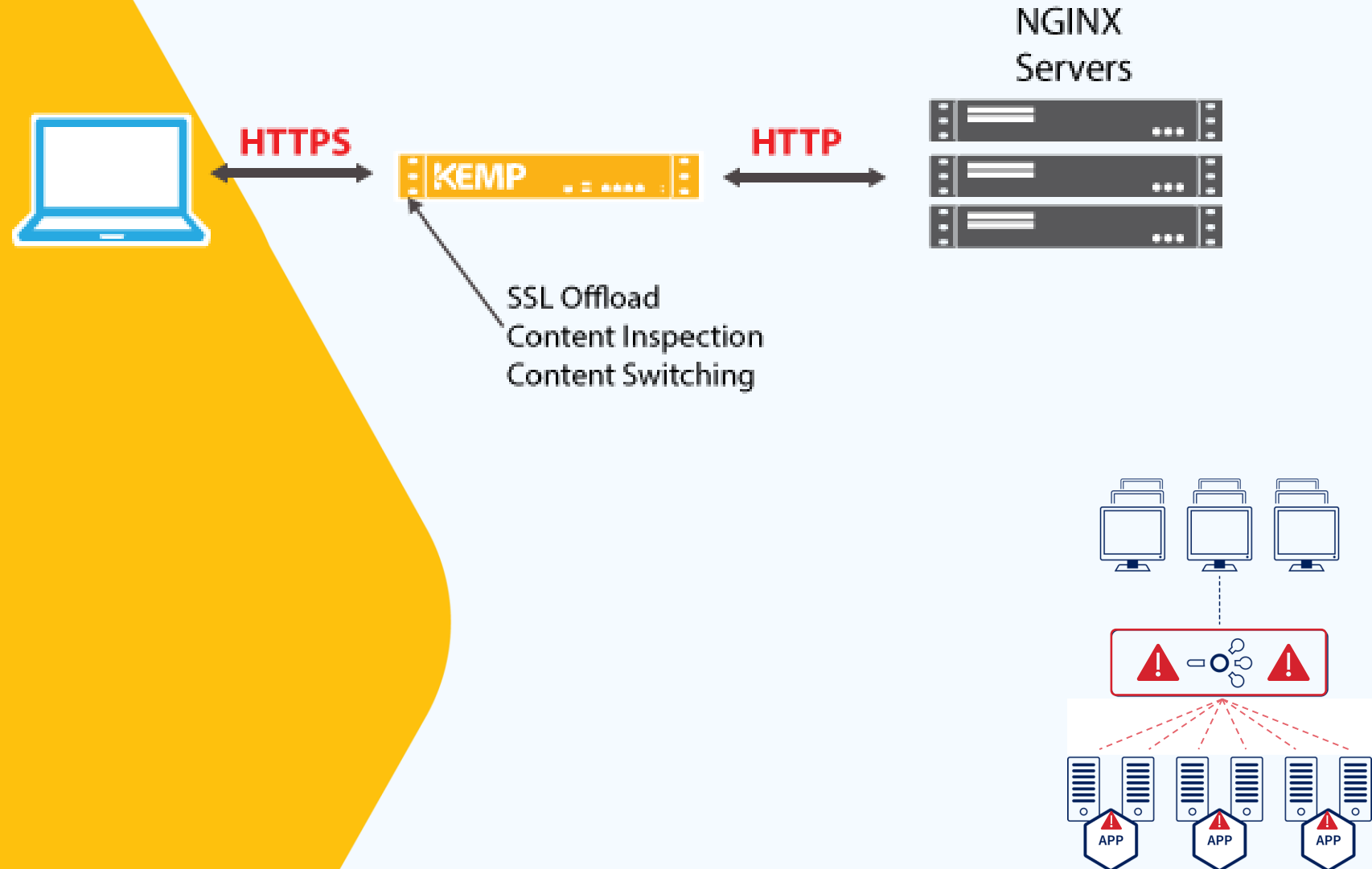


High Availability Cluster



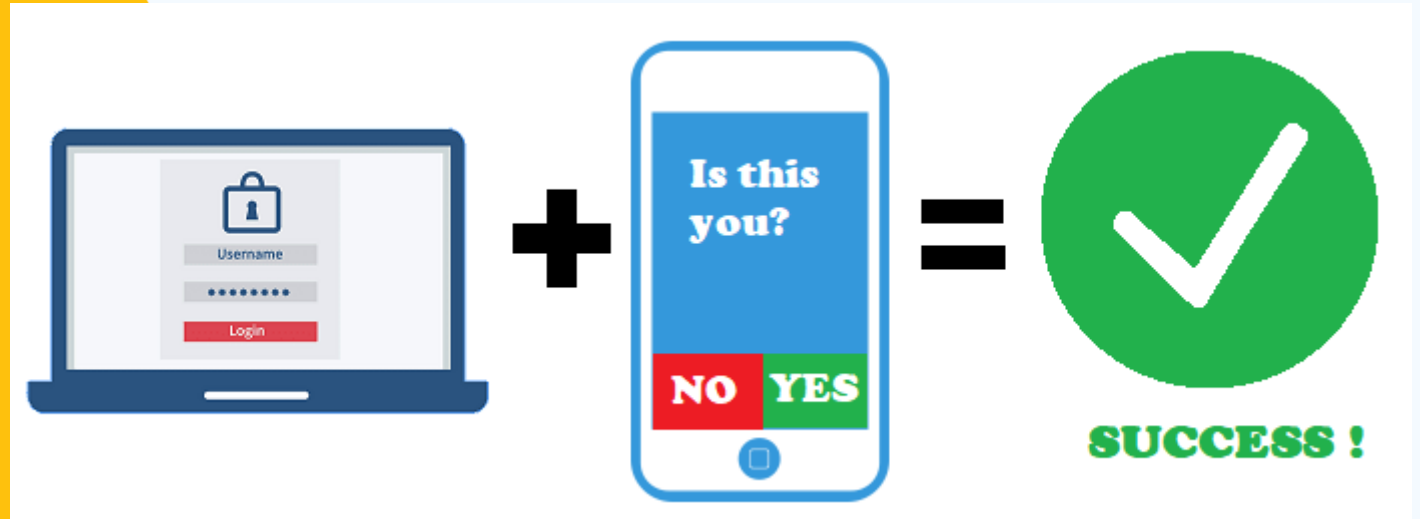
WHAT IS an LB?

- Between users and servers
- Scalability, availability
- SSL offload (decrypt, reencrypt)



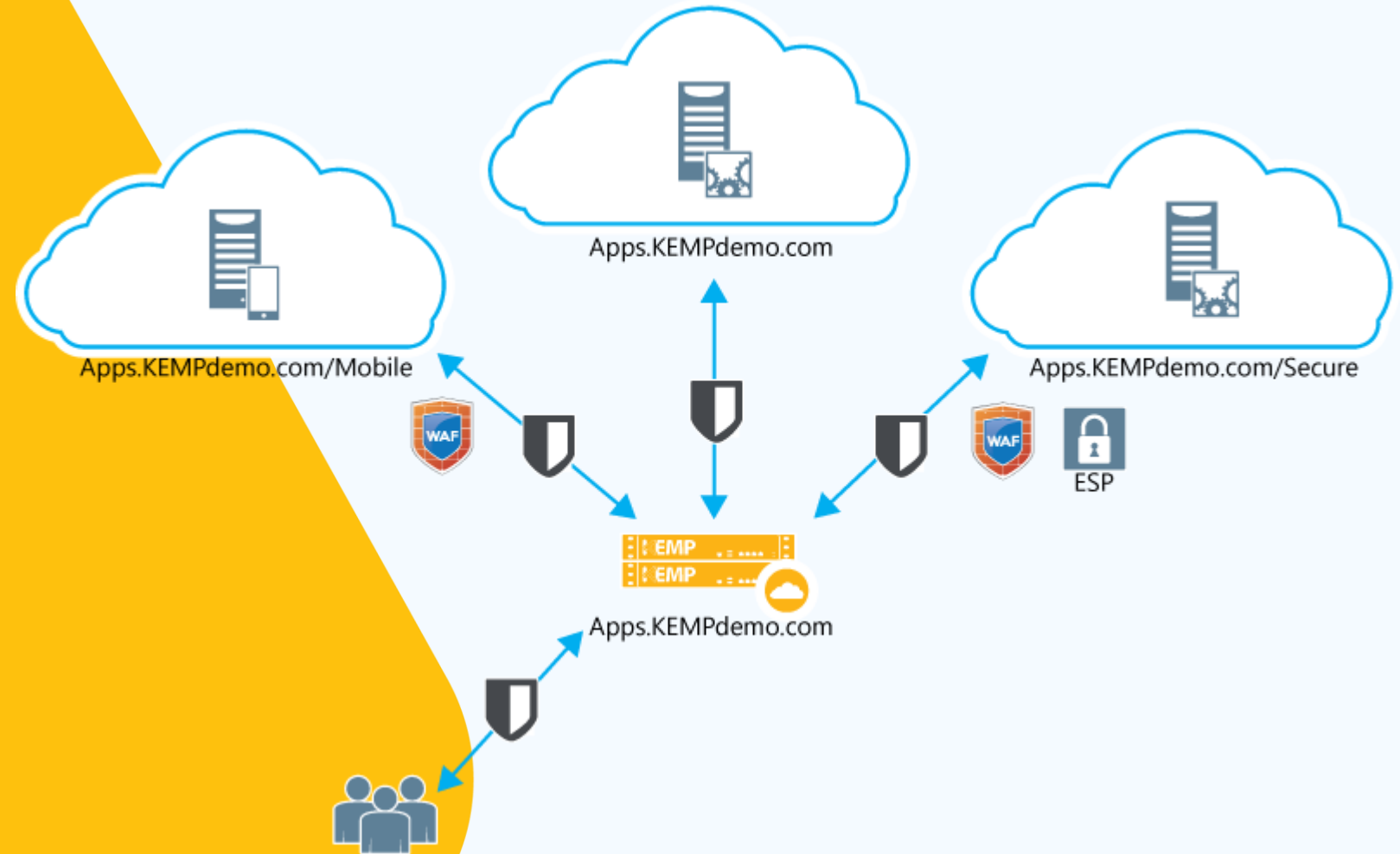
WHAT IS an LB?

- Between users and servers
- Scalability, availability
- SSL offload (decrypt, reencrypt)
- Authentication (2FA, SSO)



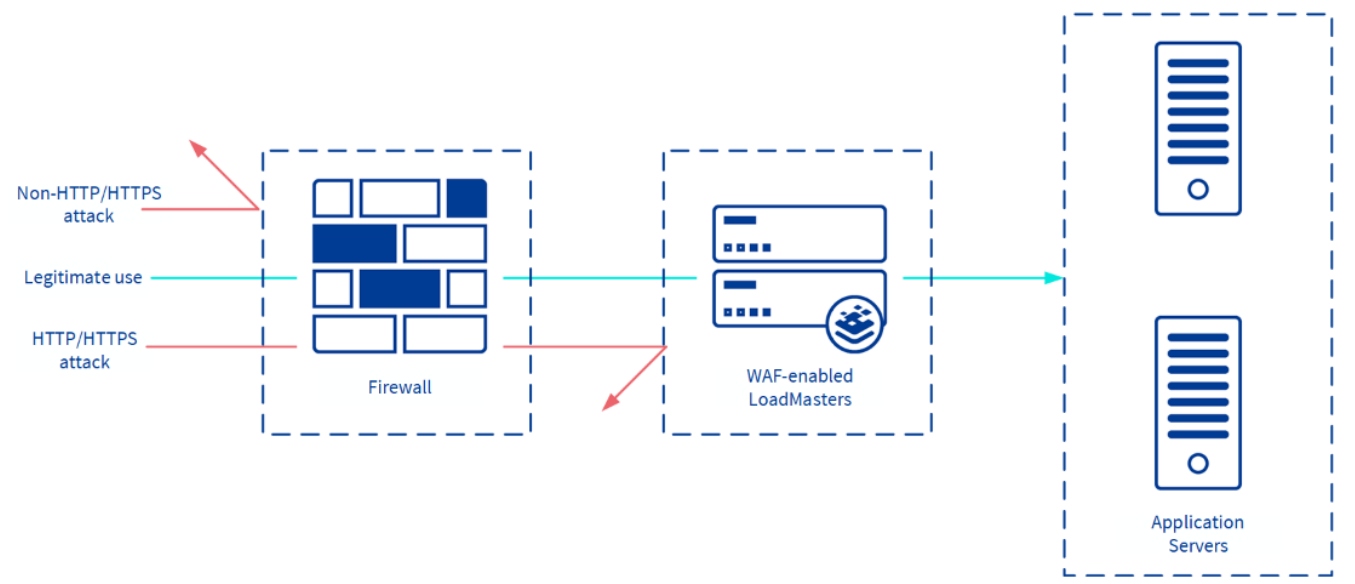
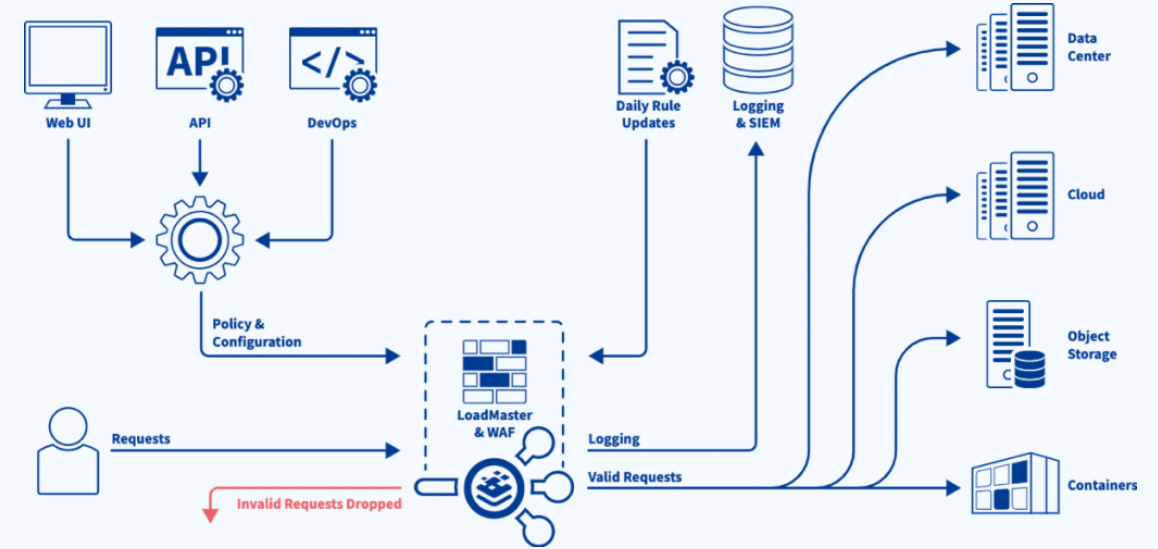
WHAT IS an LB?

- **Between users and servers**
- **Scalability, availability**
- **SSL offload (decrypt, reencrypt)**
- **Authentication (2FA, SSO)**
- **Content switching**
 - mail.company.com
 - shop.company.com
 - web.company.com/intra
 - web.company.com/extra



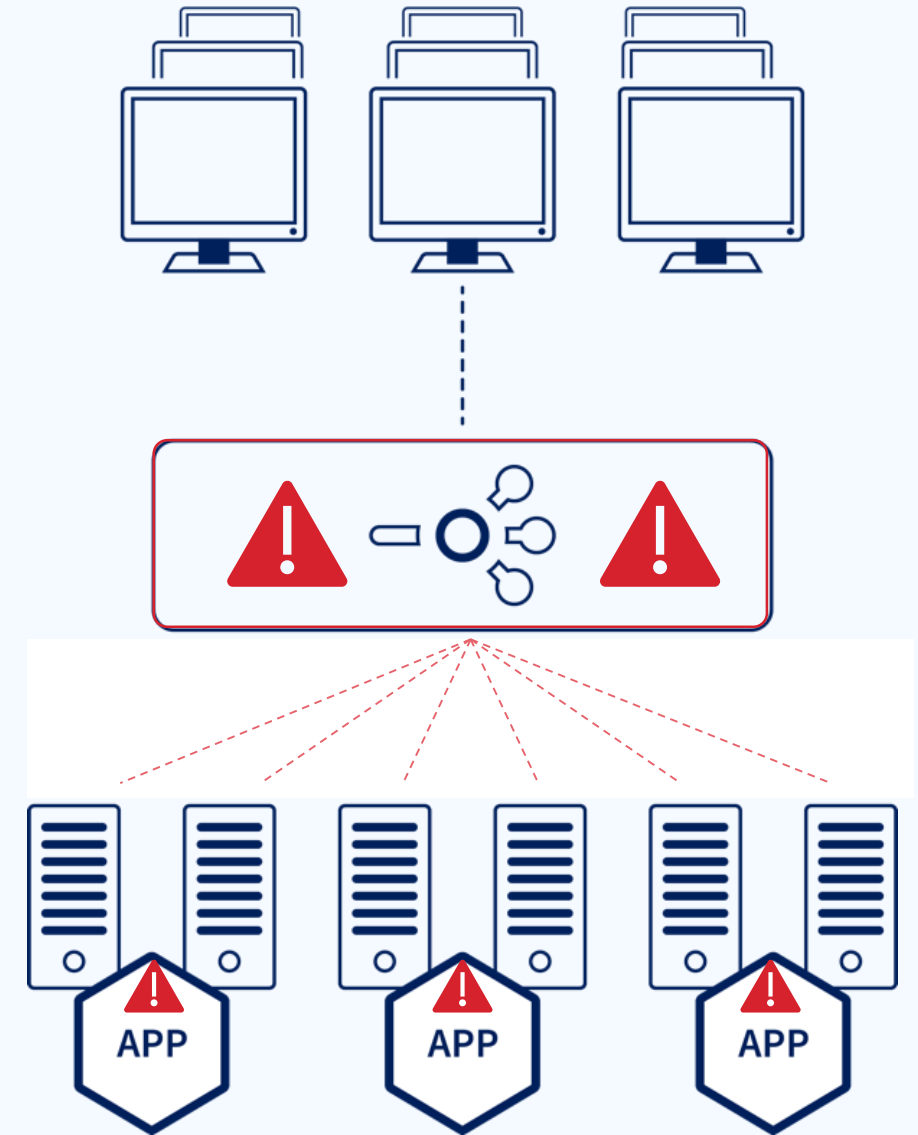
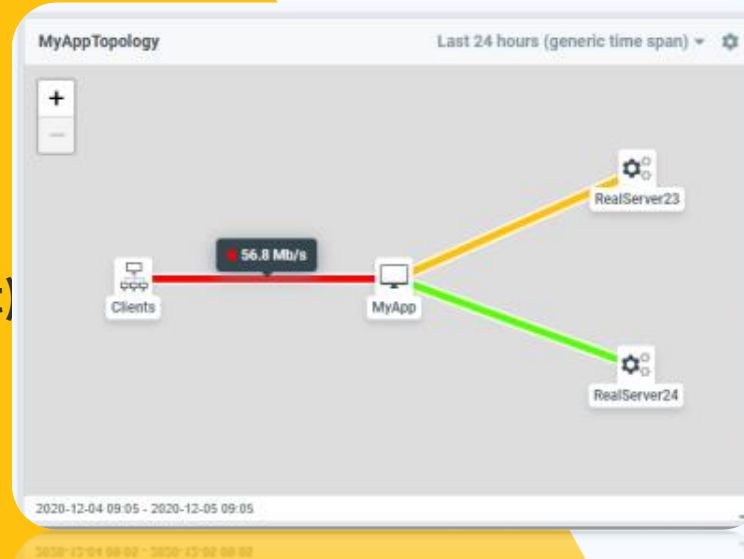
WAF

- Between users and servers
- Scalability, availability
- SSL offload (decrypt, reencrypt)
- Authentication (2FA, SSO)
- Content switching
 - mail.company.com
 - shop.company.com
 - web.company.com/intra
 - web.company.com/extra
- Caching, reverse proxy, WAF



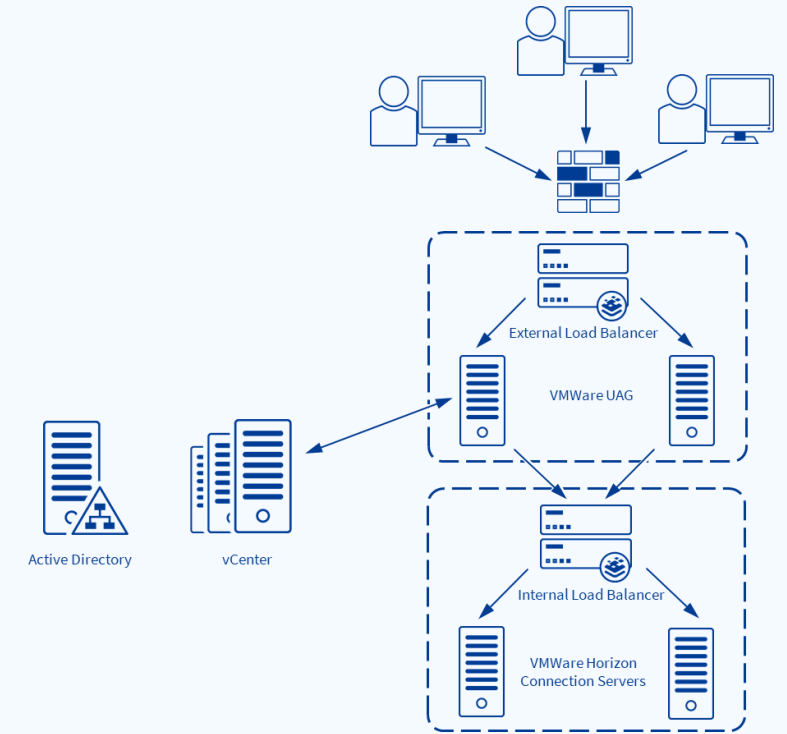
WHAT IS an LB?

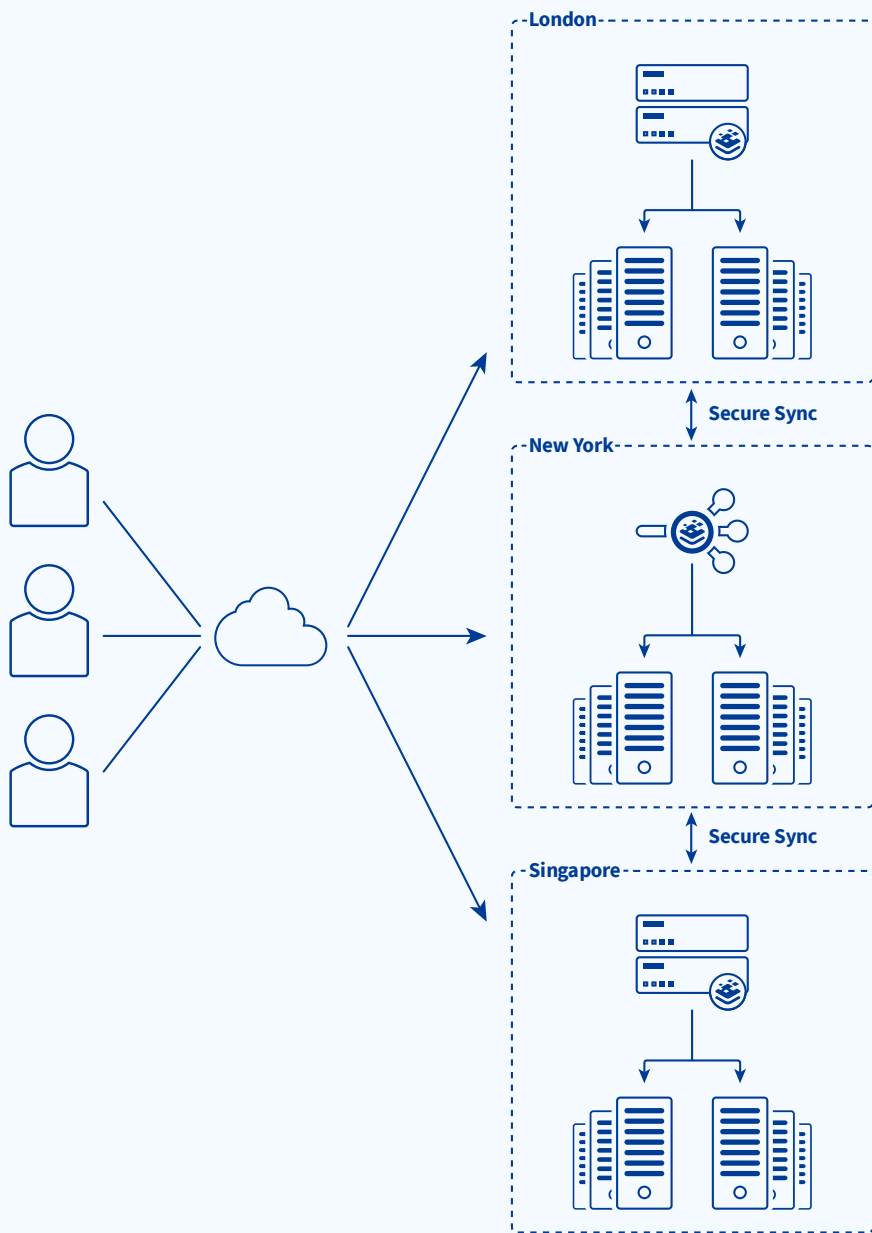
- Between users and servers
- Scalability, availability
- SSL offload (decrypt, reencrypt)
- Authentication (2FA, SSO)
- Content switching
 - mail.company.com
 - shop.company.com
 - web.company.com/intra
 - web.company.com/extra
- Caching, reverse proxy, WAF
- Visibility!!!
 - Cloud too
 - Ingress controller



USE CASES

- **Do we have one?**
- **Templates**
 - **TMG Forefront**
 - **Exchange (+ cca 80 apps)**
 - **Bespoke applications**
 - **Open source hacking replaced**
 - **VDI, desktop virtualization**
 - **Object storage**
- **KEMP load balancers reachable to anyone**

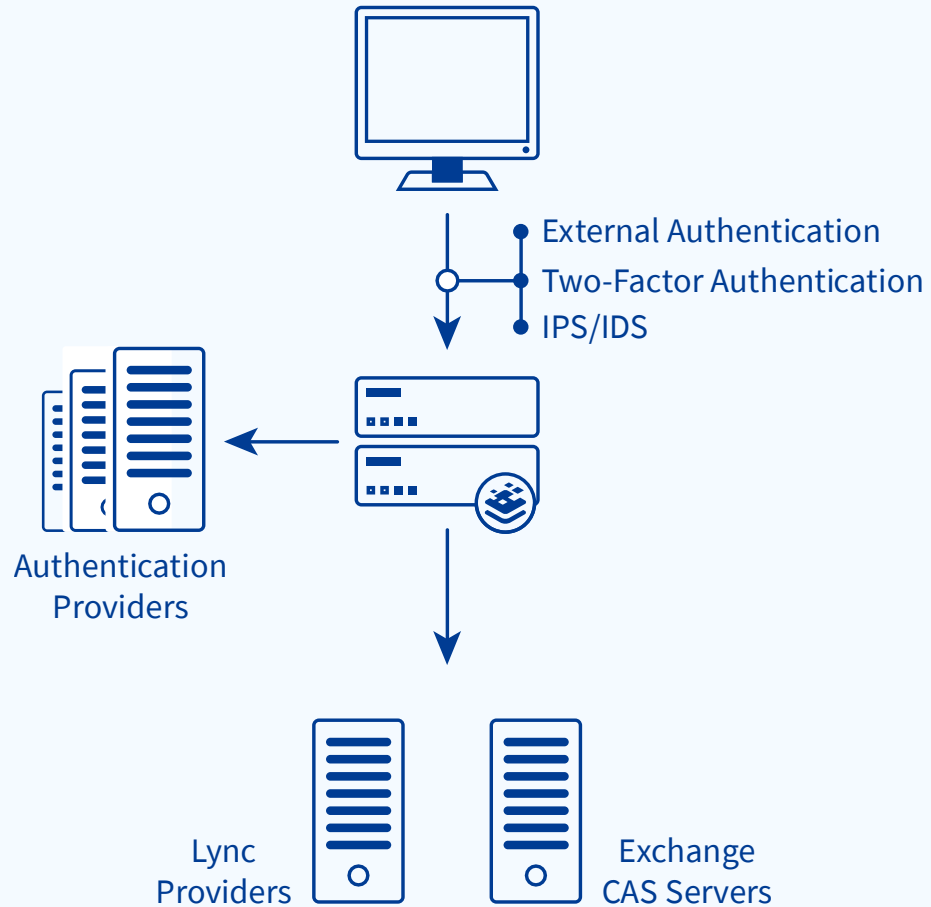




Global Server Load Balancing (GSLB)

- Georedundancy
- Hybrid Cloud
- Multi-site

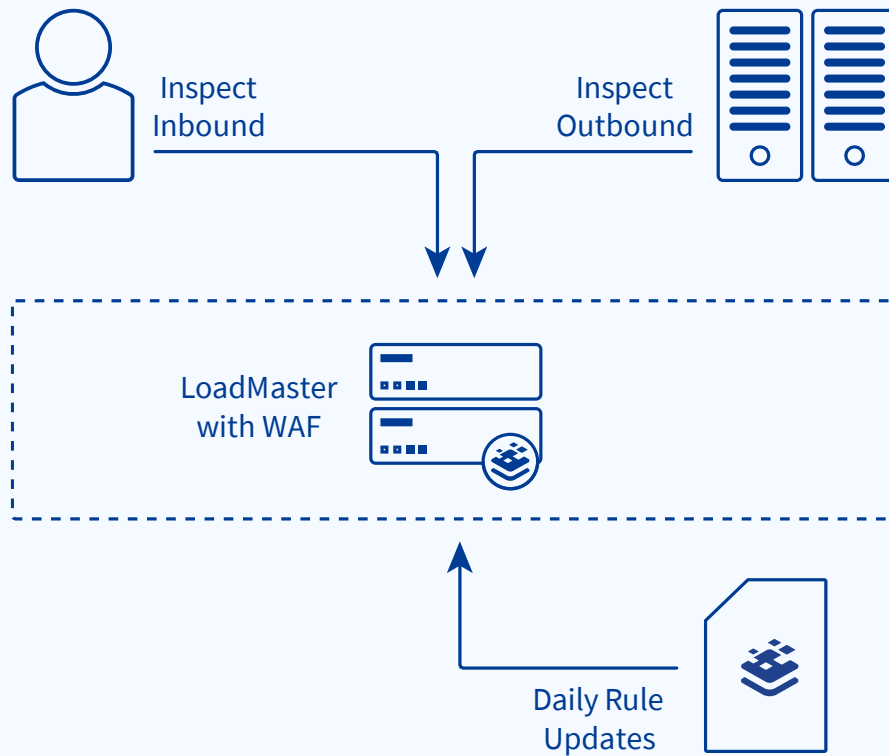
Edge Security Pack (ESP)



- Pre-Authentication
- Single Sign-On
- TMG REPLACEMENT
- ENCRYPTION
 - TLS 1.1, 1.2, 1.3
- MFA examples
 - RADIUS based 2FA
 - RSA SecurID
 - reCAPTCHA v2 support

Web Application Firewall (WAF)

- ALL IS WEB
- PUBLIC SERVICES
- EXCHANGE COMPONENTS
- WEBSHOP, EXTERNAL SERVICES
- CURRENT HOT TOPIC



LMX-3 boxes

- 8x 10/100/1000 RJ45 port
- 3.4 Gbps throughput
- 1700 SSL TPS (2k keys)



LMX-15 boxes

- 16x 10/100/1000 RJ45 port
- 4x 10 Gbps SFP+ port
- 15 Gbps throughput
- 12000 SSL TPS (2k keys)



Fundamental problem: no/low visibility

Elements...



Fundamental problem: no/low visibility

Elements...

Connections...



Fundamental problem: no/low visibility

Elements...

Connections...

Software...



Fundamental problem: no/low visibility

Elements...

Connections...

Software...

Inventory...



Fundamental problem: no/low visibility

Elements...

Connections...

Software...

Inventory...

Processes and procedures...



Fundamental problem: no/low visibility

Elements...

Connections...

Software...

Inventory...

Processes and procedures...

Amount to desires

No knowledge of actual use



Fundamental problem: no/low visibility

Elements...

Connections...

Software...

Inventory...

Processes and procedures...

Amount to desires

No knowledge of actual use

REASON: visibility
technology came late



The Good News

Telemetry standards matured
Can have detailed statistics
With L7/apps information
With timings
And packet capture
And machine learning
And security lessons



Different analytics types...

The facts

The troubleshooting

The patterns

The overviews

The reporting

The security analytics

The apps transactions



All on one pane of glass for cooperation

The facts

The troubleshooting

The patterns

The overviews

The reporting

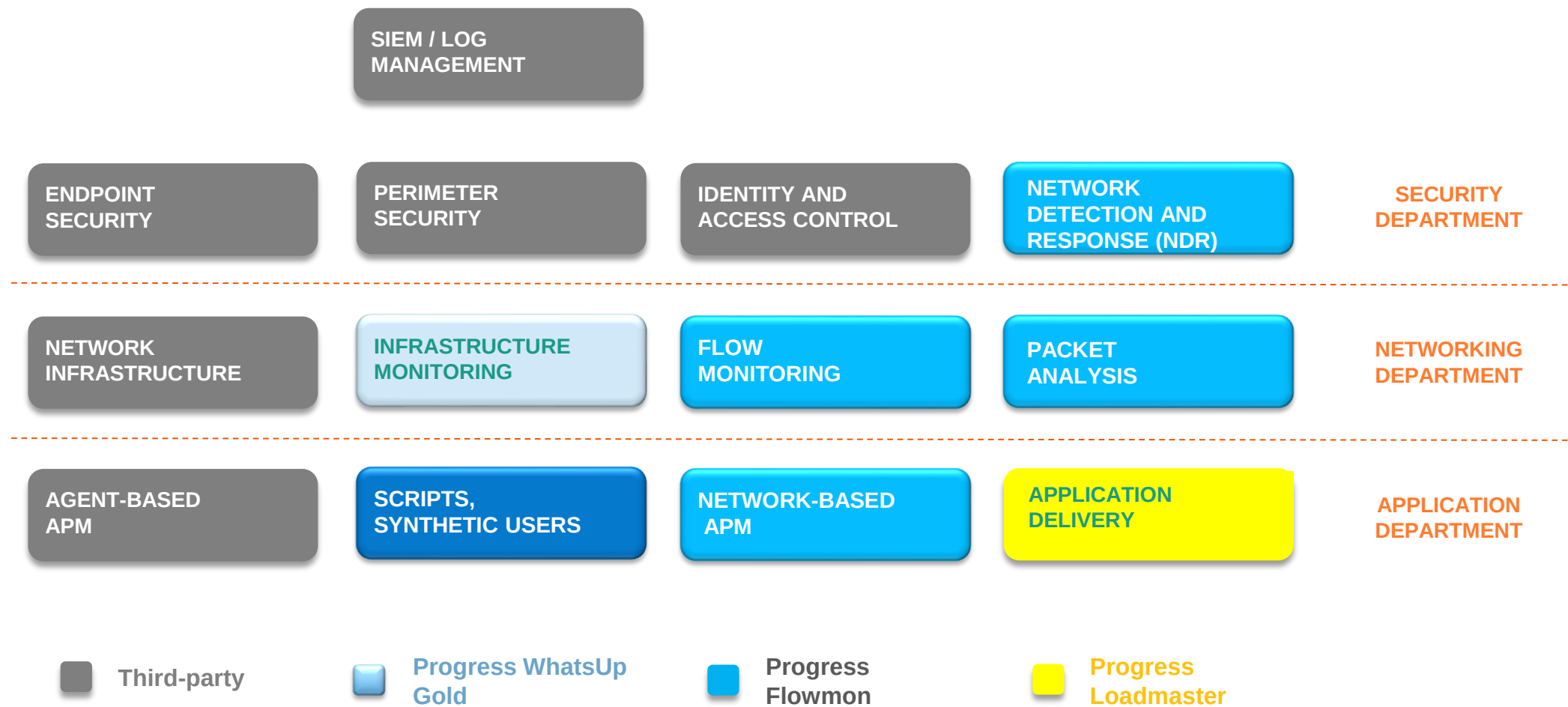
The security analytics

The apps transactions

- Systems engineers
- Systems engineers
- Architects
- Team leads
- Managers
- Security experts
- Devs, apps teams



Technology Landscape



Flowmon Network Performance Monitoring & Diagnostics



Single source of visibility across the entire environment



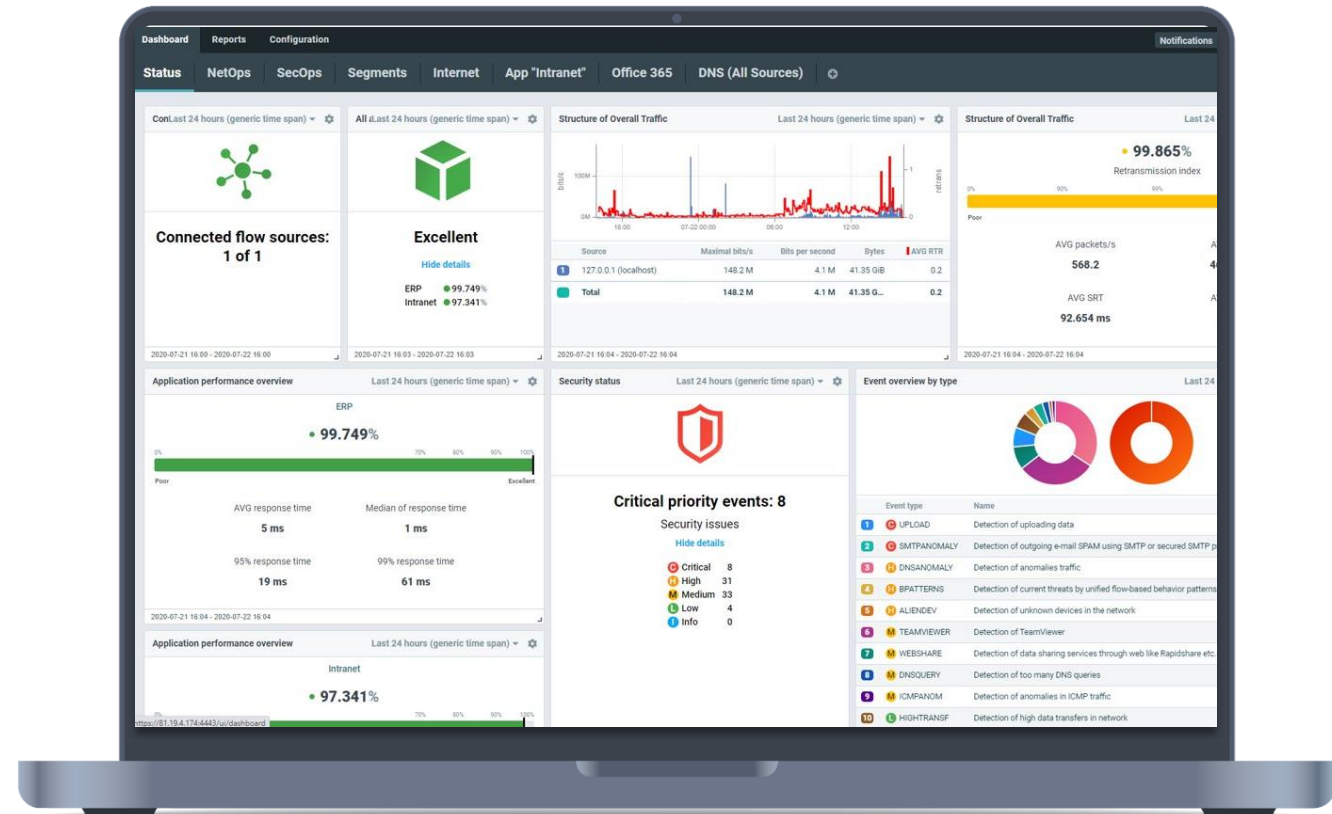
See performance degradations immediately



Monitor availability, usage, capacity



Reveal bottlenecks, analyze errors, automate detection



Flowmon Network Detection & Response



Automatic detection of threats hidden in network traffic



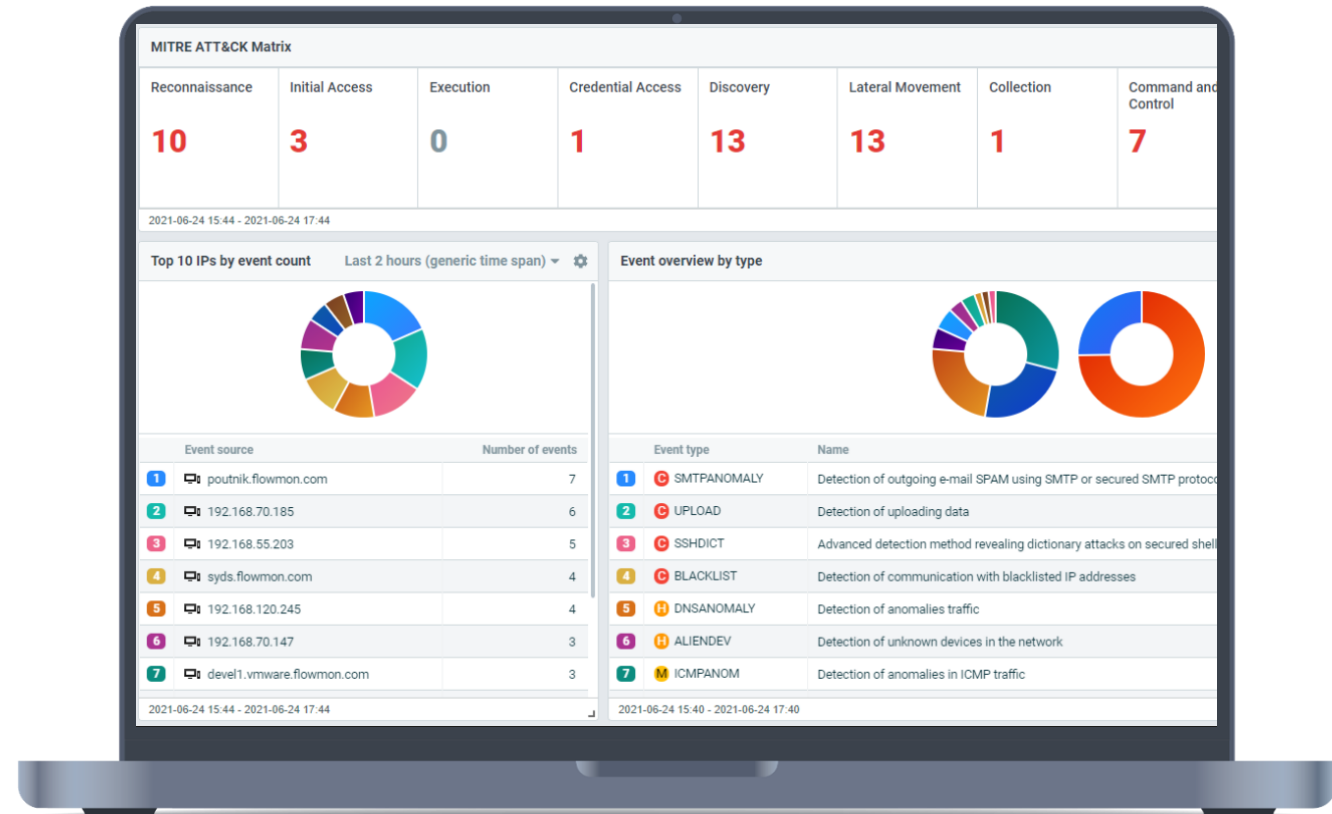
Leverage context-rich anomaly investigation



Noise-free insight thanks to ML-powered engine



Real-time detection, providing information for remediation.



Flowmon ADS Intelligence



Machine Learning



Adaptive Baseline



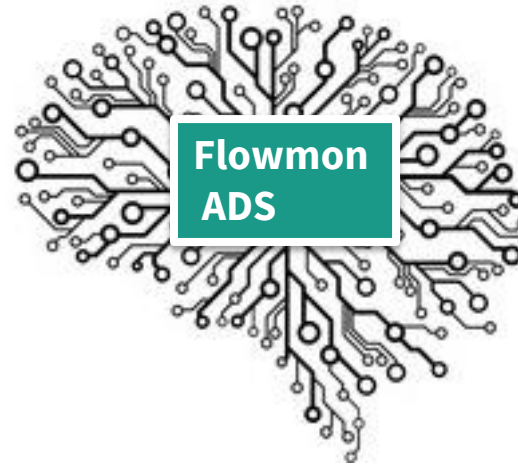
Heuristics



Behaviour Patterns



Reputational Data



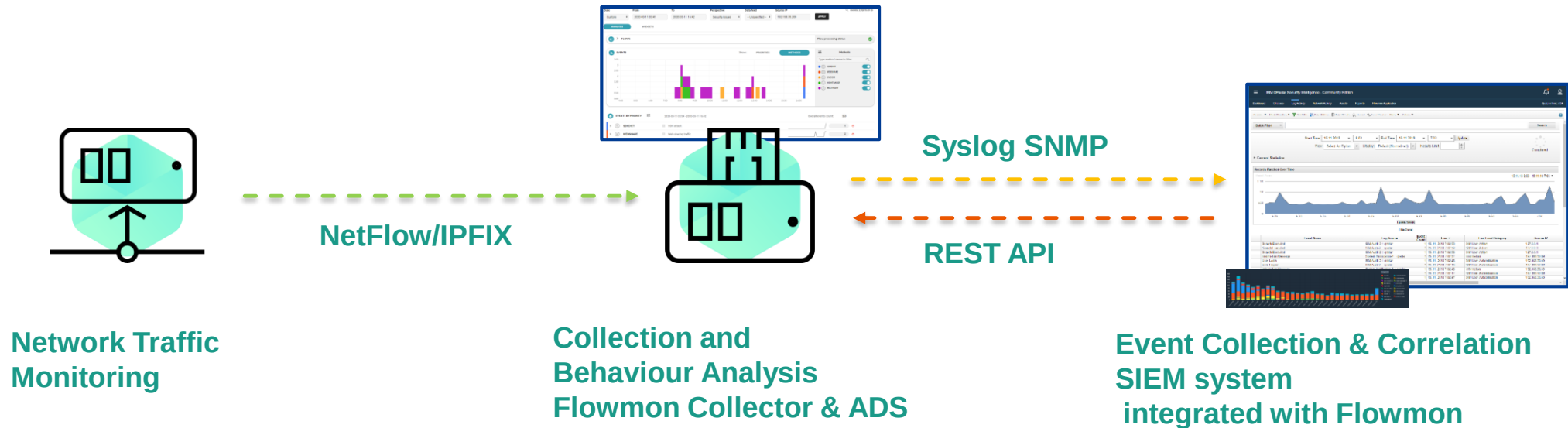
200+ Individual Algorithms

40+ Detection Methods

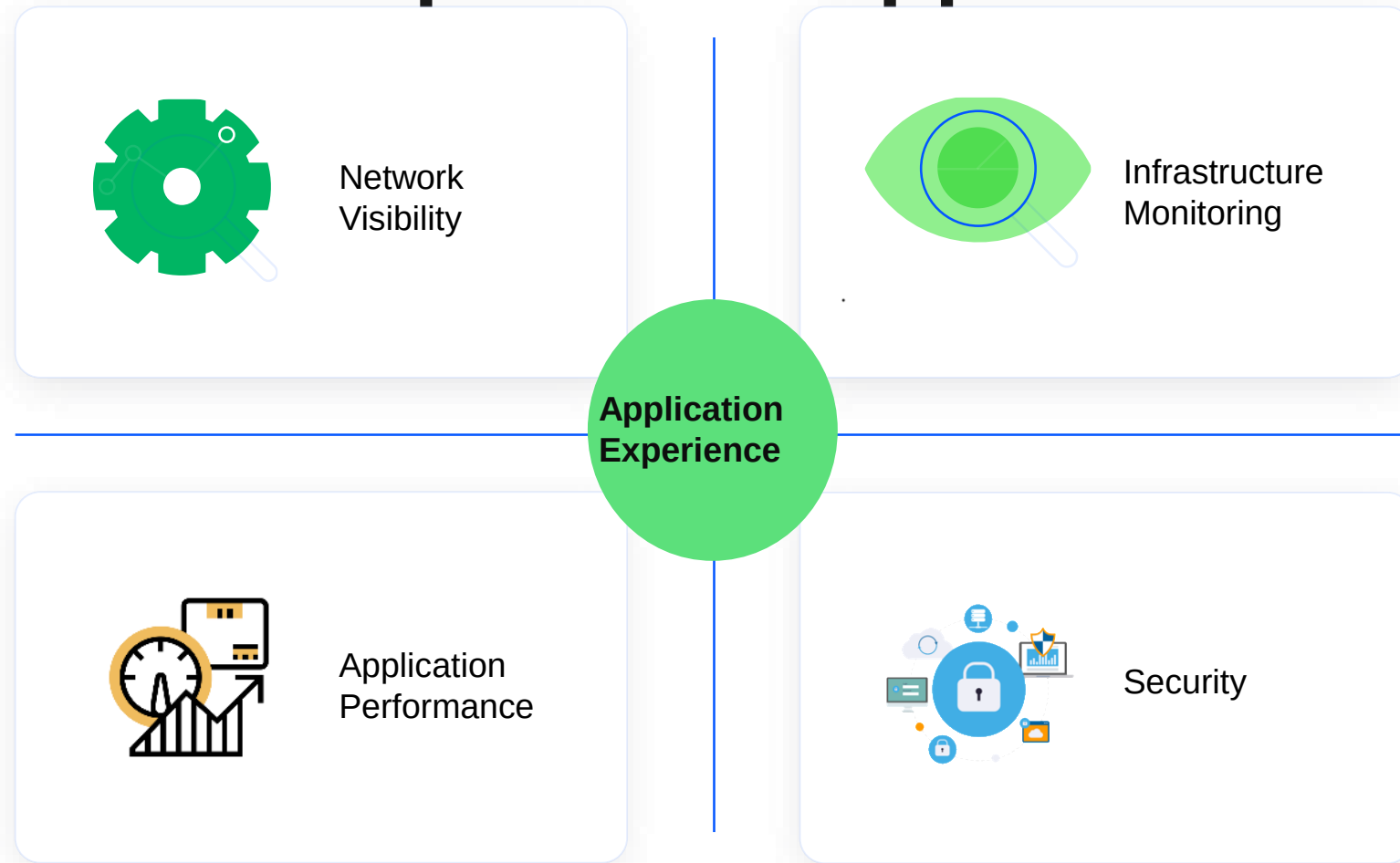
Threat & Anomaly Alerts
&
Event Evidence

SEIM and Security Analytics Integration

- Syslog feed of events are provided to log management, SIEM, big-data platforms, incident handling and SOAR tools
- Response tools are only as useful as their event sources



An Application Experience Approach



Provides the assurance mechanisms required for delivering great digital experiences by enabling I&O teams total control over application, network and infrastructure day 2 operations

Thank you!

