

STABLENET®

Holistic Multi-Cloud Monitoring

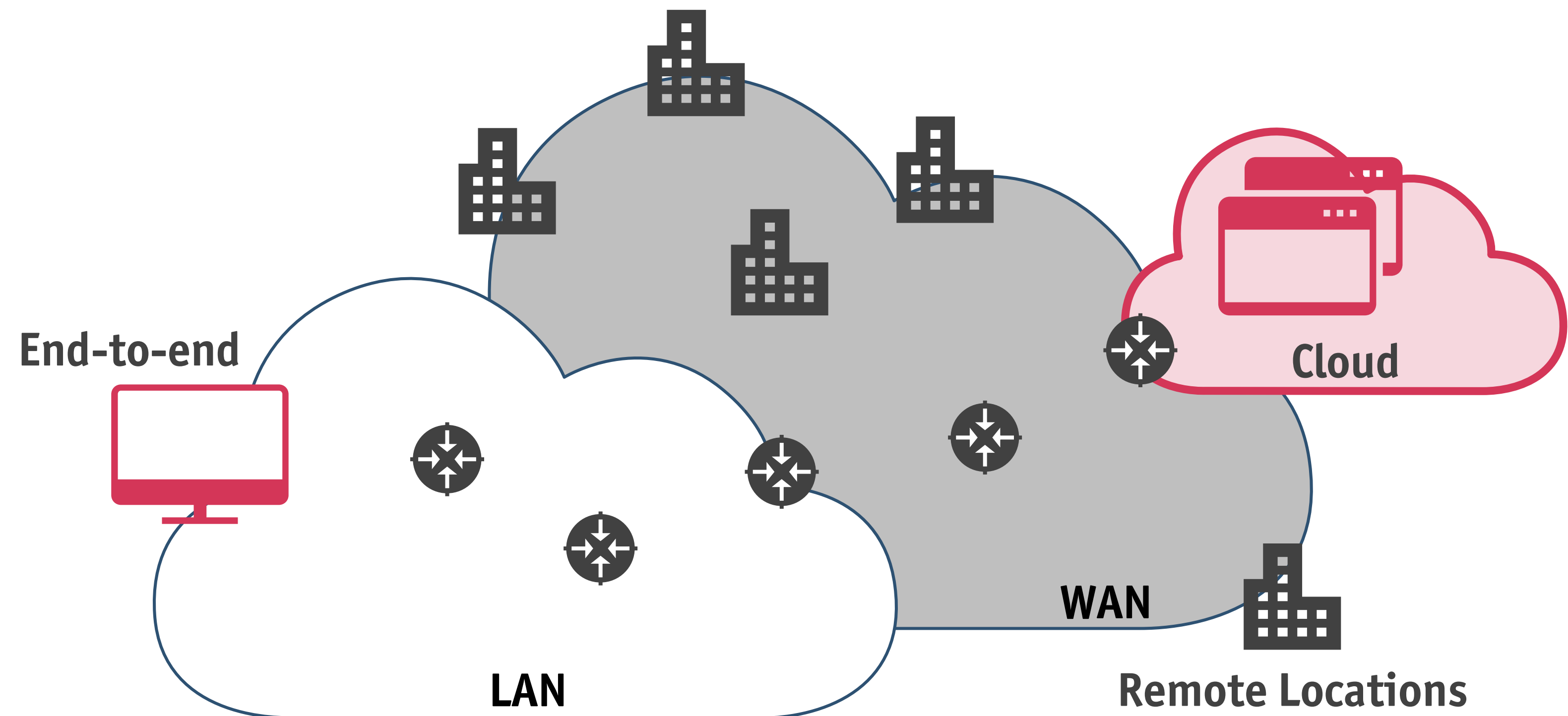
HOLISTIC MULTI-CLOUD MONITORING – TRENDS IN THE IT & TELCO INDUSTRY



- ▶ **Digitization** as one of the main challenges for today's companies
(independent of business area)
- ▶ **Public cloud** as a more and more attractive alternative to on premise solutions
- ▶ **Main public cloud players:** Amazon Web Services, Google Cloud, Microsoft Azure
- ▶ **Security concerns** as reason to keep business-critical applications in-house
- ➔ **Hybrid multi-cloud strategy combining public cloud and on premise solutions**
 - ➔ **Holistic cross-cloud/-provider monitoring of SLAs needed**

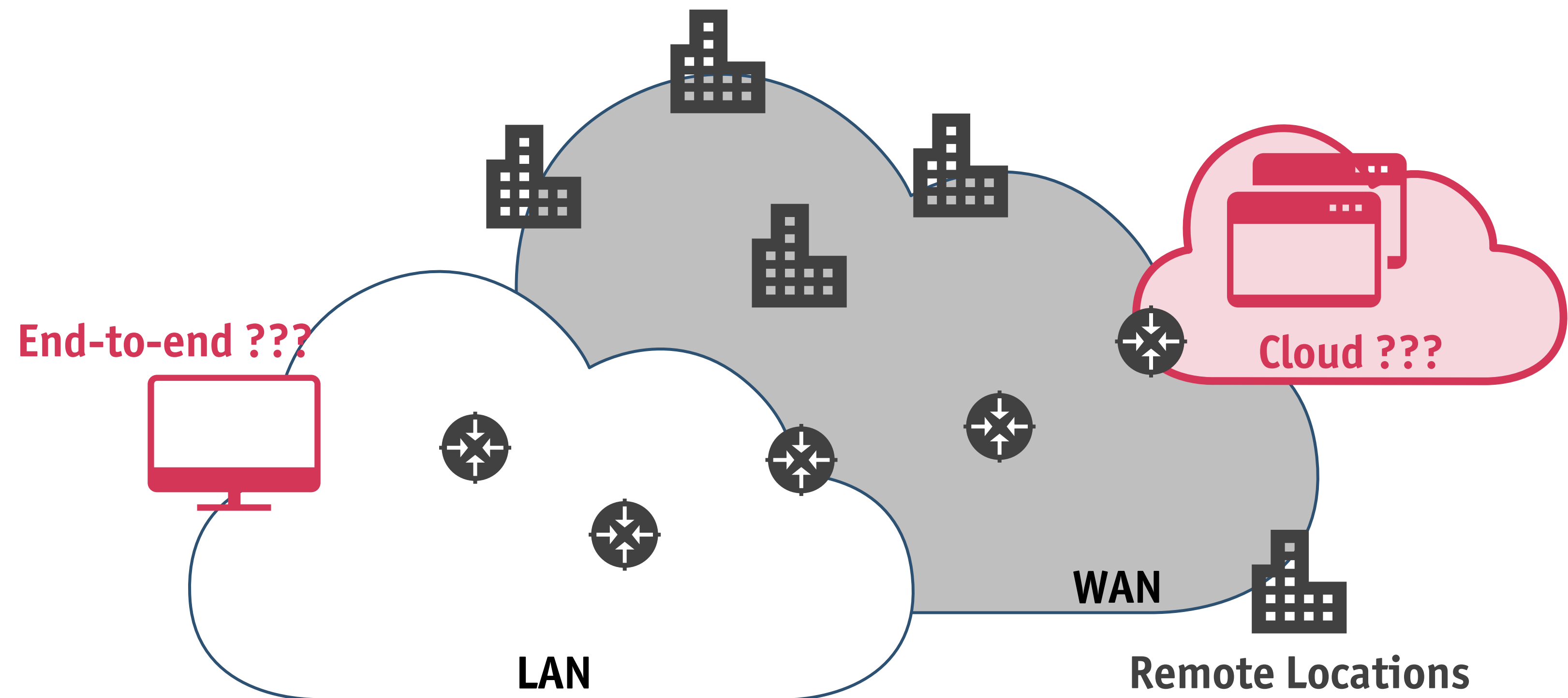
TYPICAL CHALLENGES – „STORY OF A NETWORK ADMINISTRATOR’S LIFE“

- × **Different Silos:** Network, Datacenter/Cloud, Host Systems, etc.



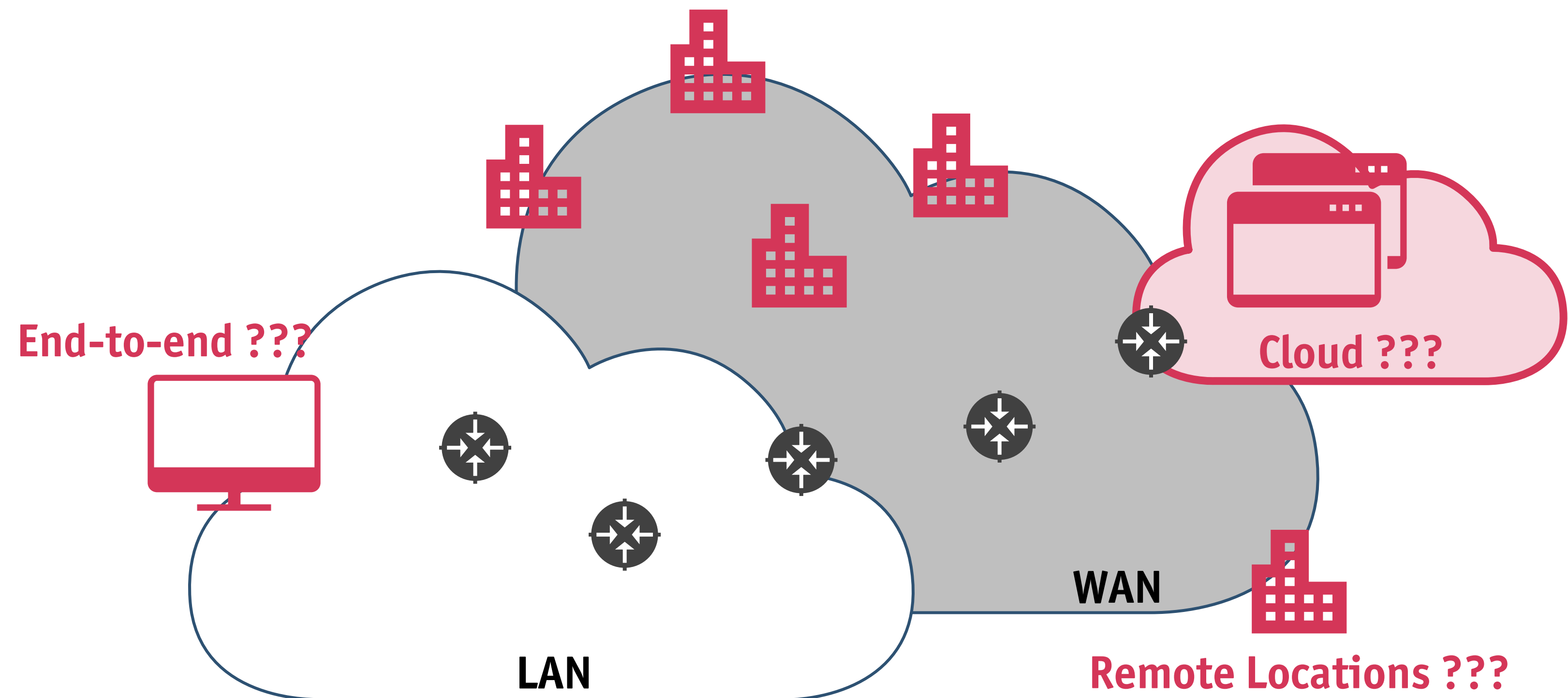
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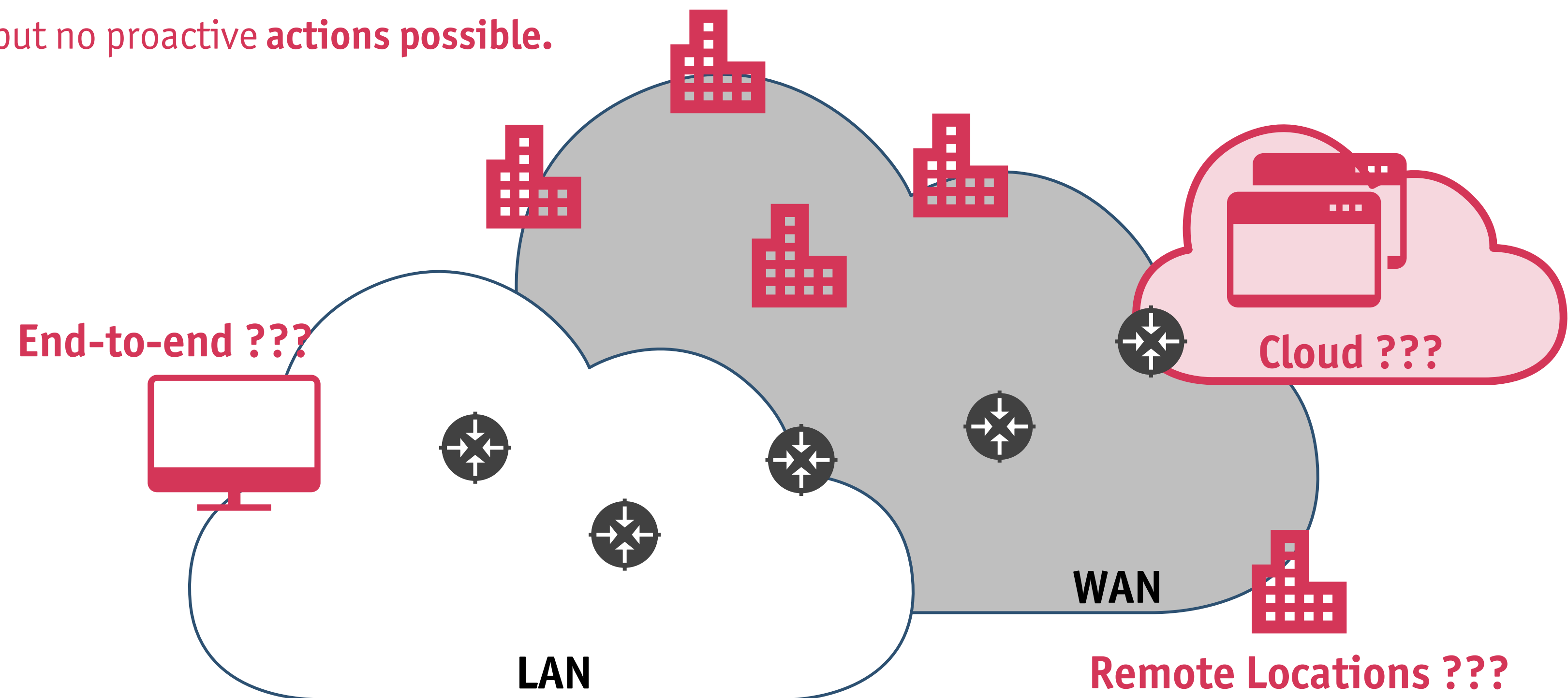
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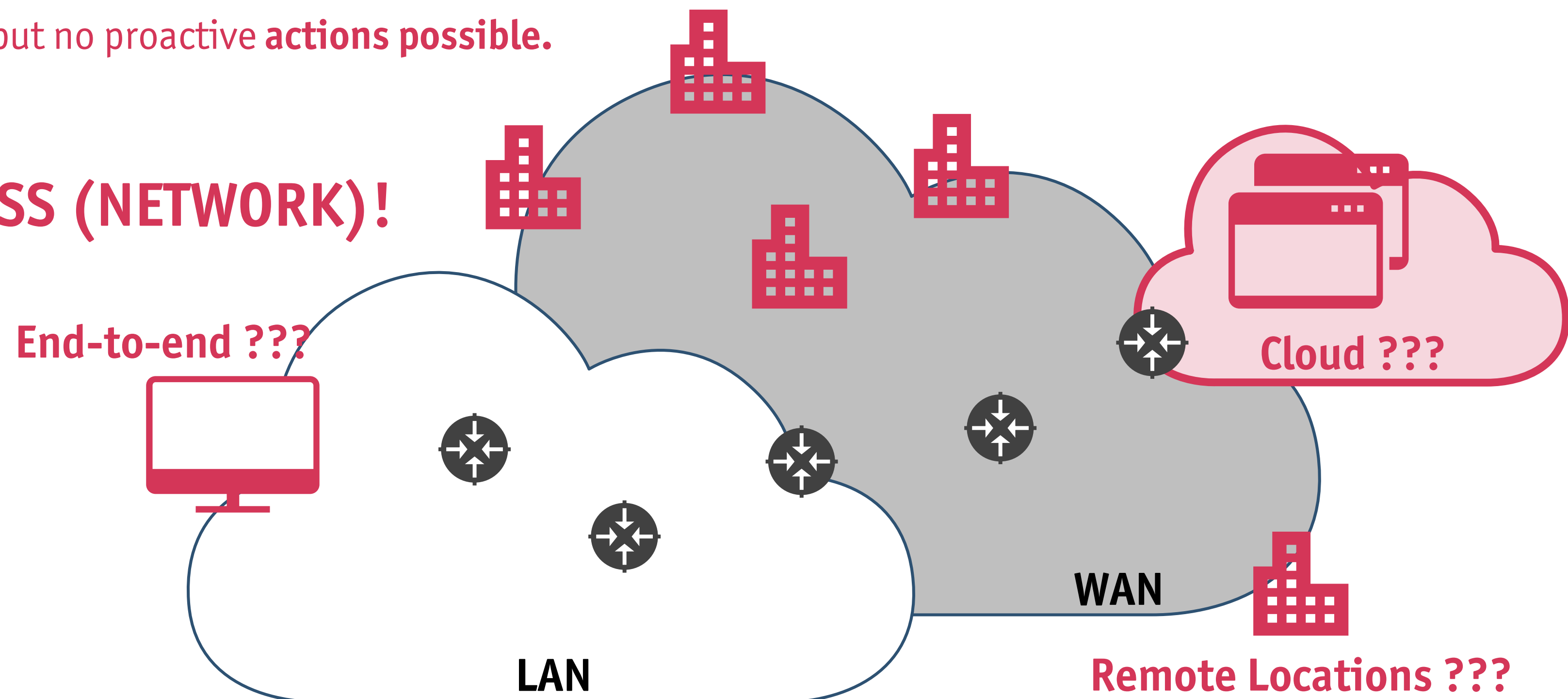
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- **No objective quantification** of subjectively bad quality. Is it really that bad?
- Customer is already unhappy. **Only reactive** but no proactive **actions possible**.



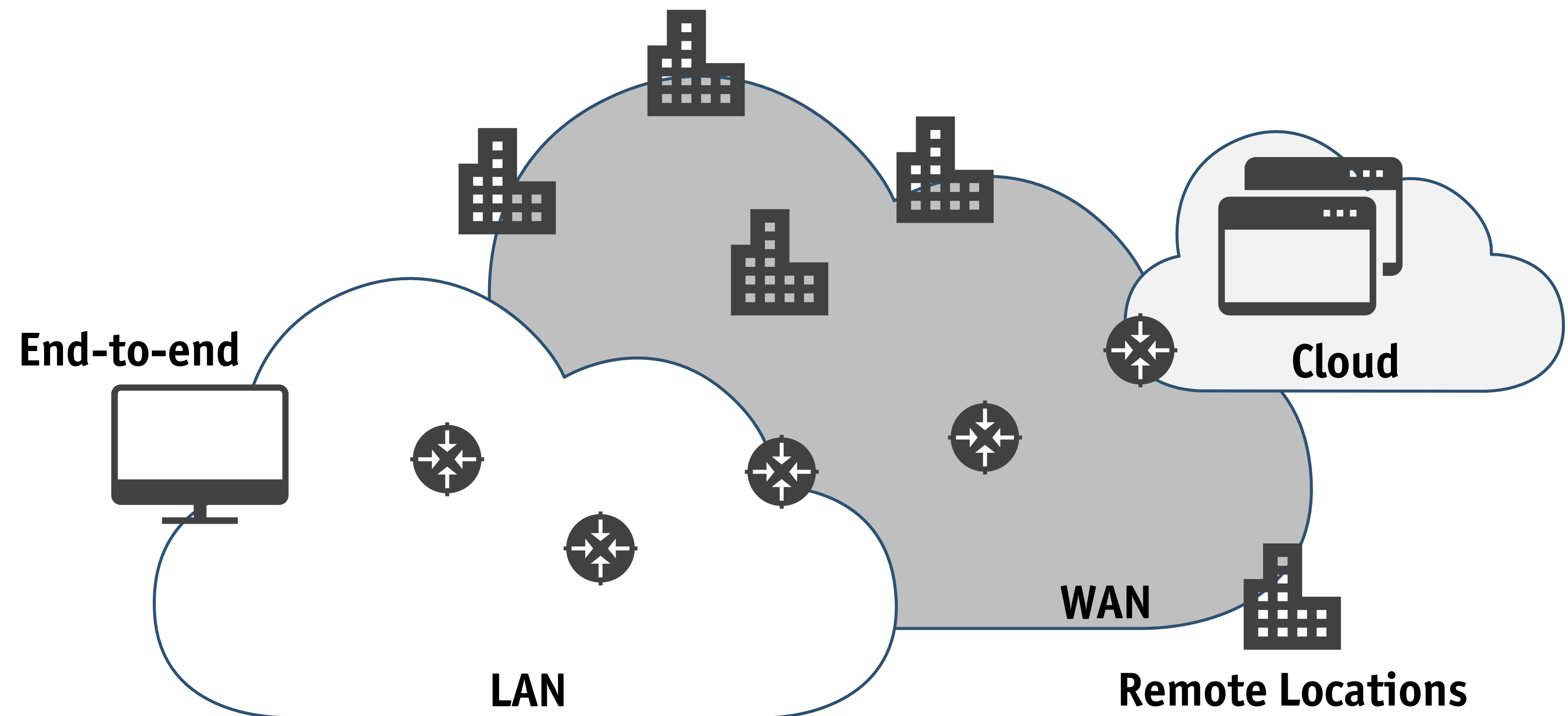
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IT'S NOT (ALWAYS) MY BUSINESS (NETWORK)!
(BUT HOW TO PROVE THIS?)

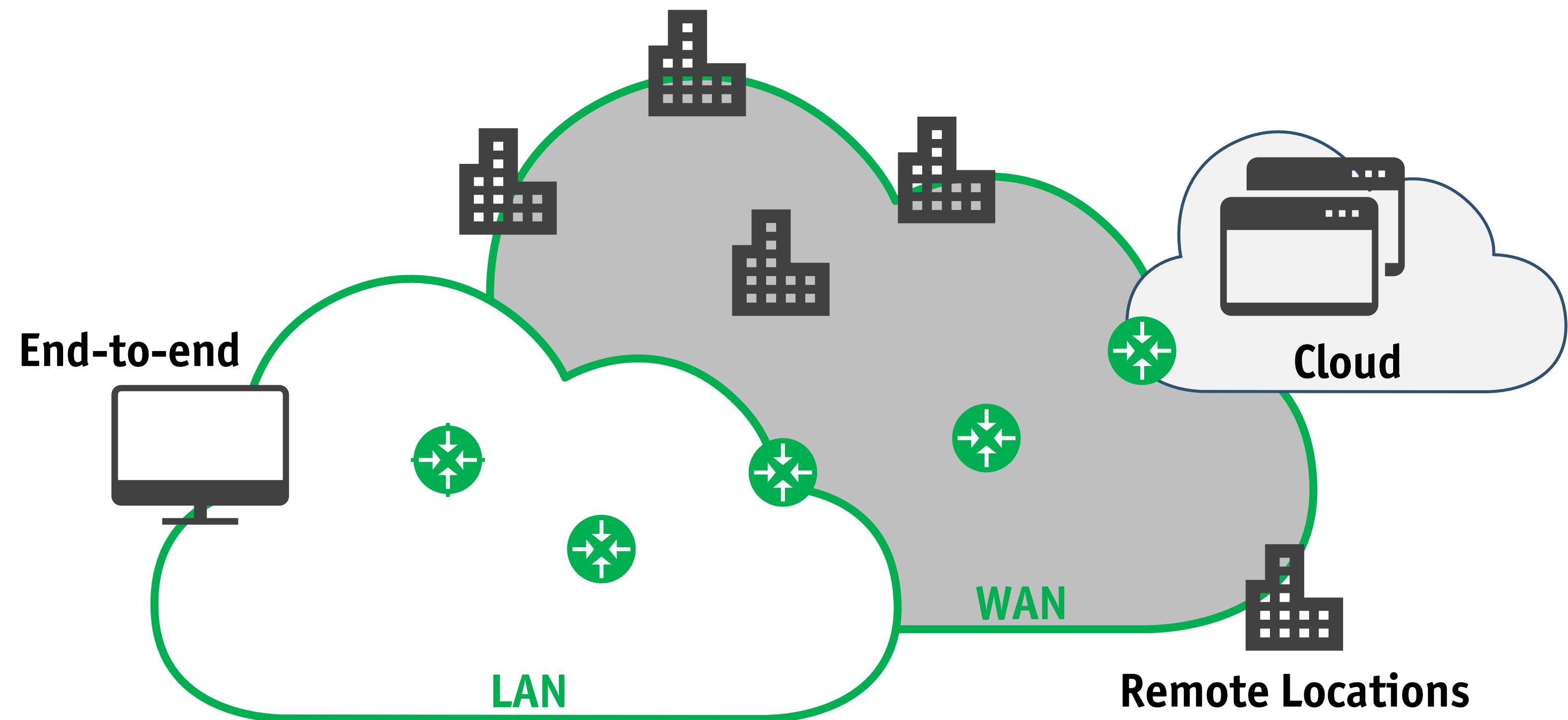


STABLENET® HOLISTIC VISIBILITY & MONITORING



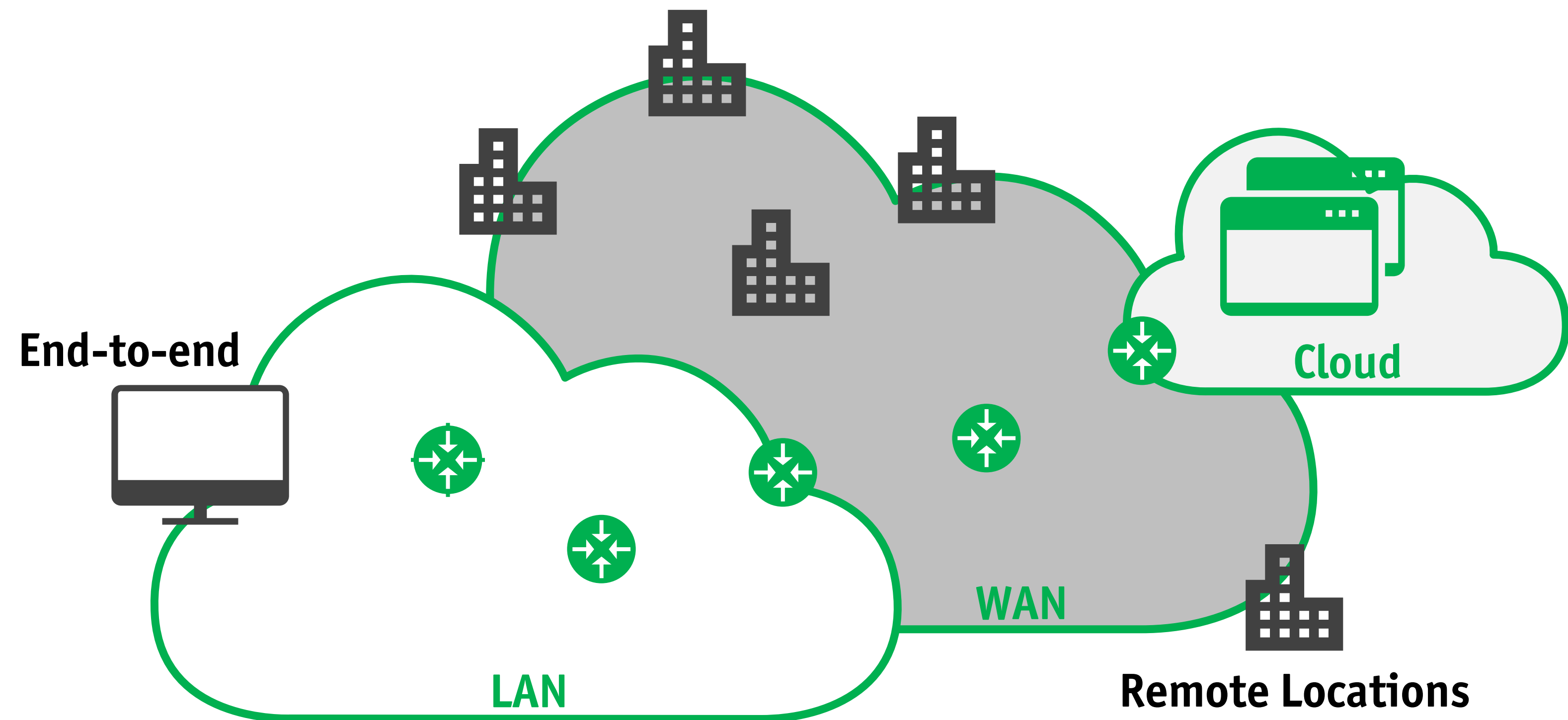
STABLENET® HOLISTIC VISIBILITY & MONITORING

✓ **Network Monitoring** cross vendors & technologies



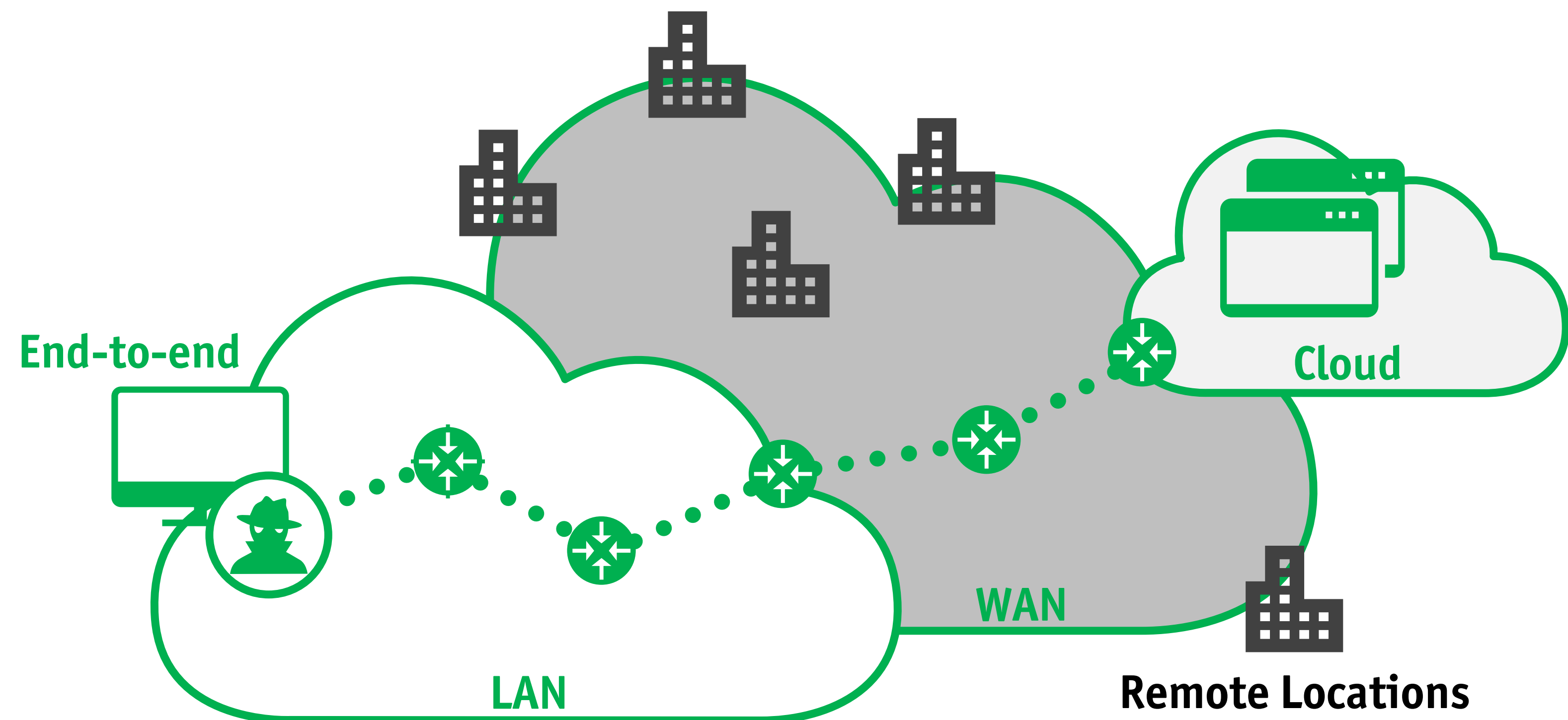
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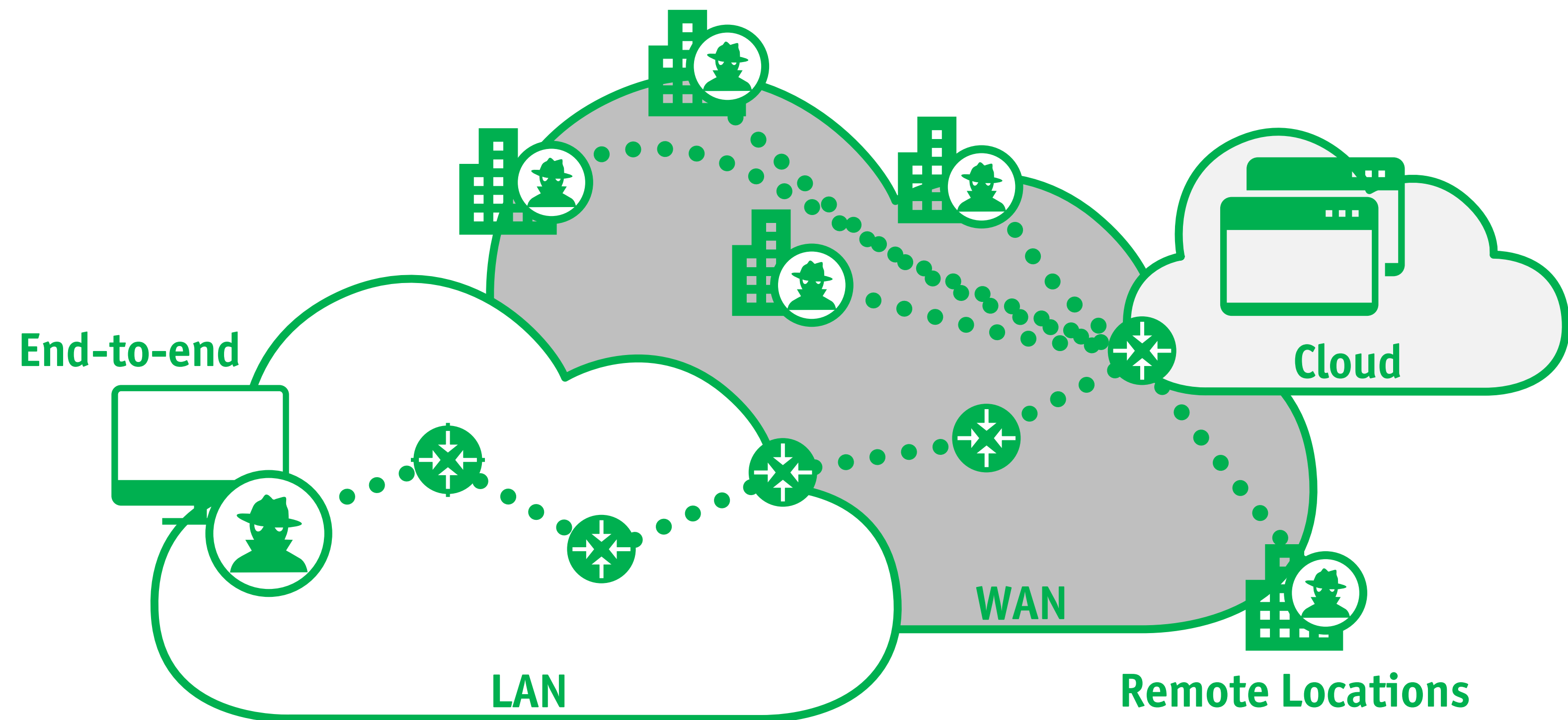
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(with very light weight / cost efficient StableNet® Embedded Agent)

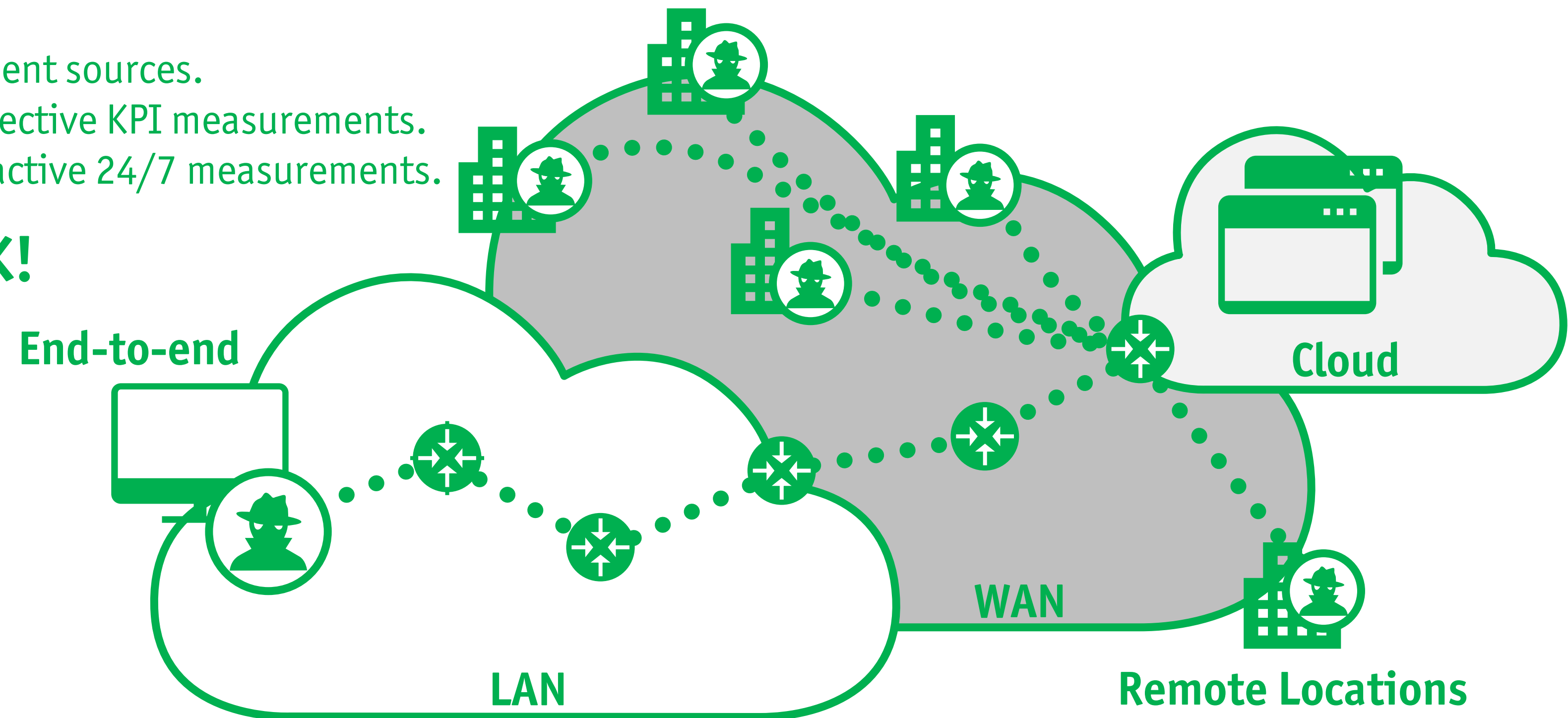


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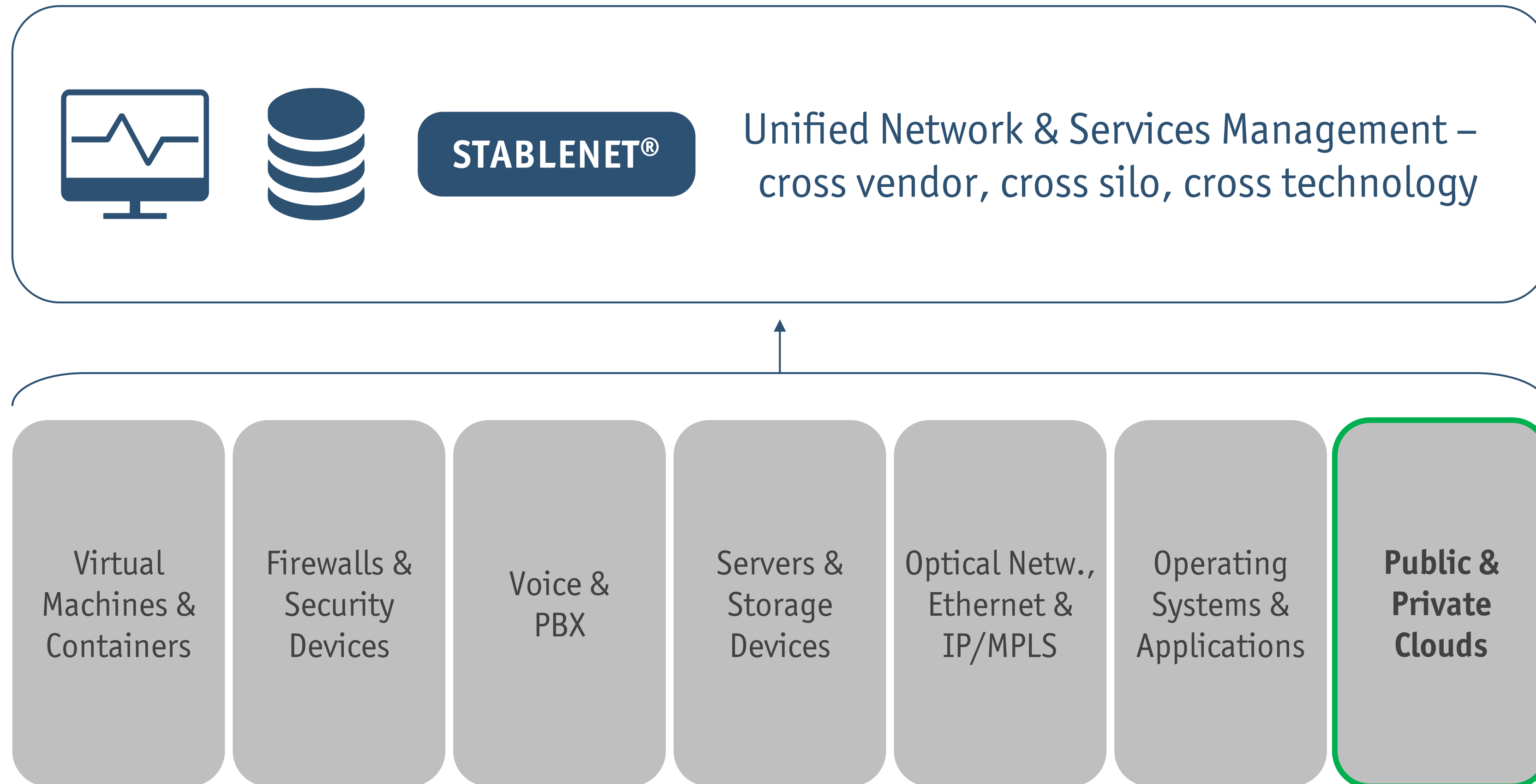
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- + Possibility of correlation of different measurement sources.
+ Quantification of the quality levels → more objective KPI measurements.
+ Anticipation of failures due to continuous, proactive 24/7 measurements.

IT'S NOT (ALWAYS) MY NETWORK!

NOW YOU CAN PROVE IT 😊



MULTI-CLOUD MONITORING – ROLE OF STABLENET®

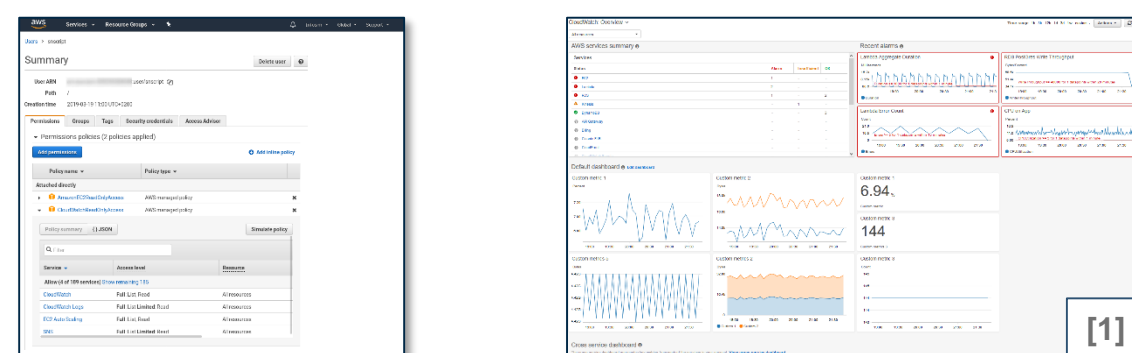


- Increased complexity through “cloud trend” (AWS, Office365, etc.)
- Yet another technology making life for IT Managers more complex
- StableNet® as key to keep control
- Network & Services Management based on one convergent platform (cross vendor, cross technology, cross silo)
- Integration of new technologies (Microsoft Azure, AWS, Office365, etc.)

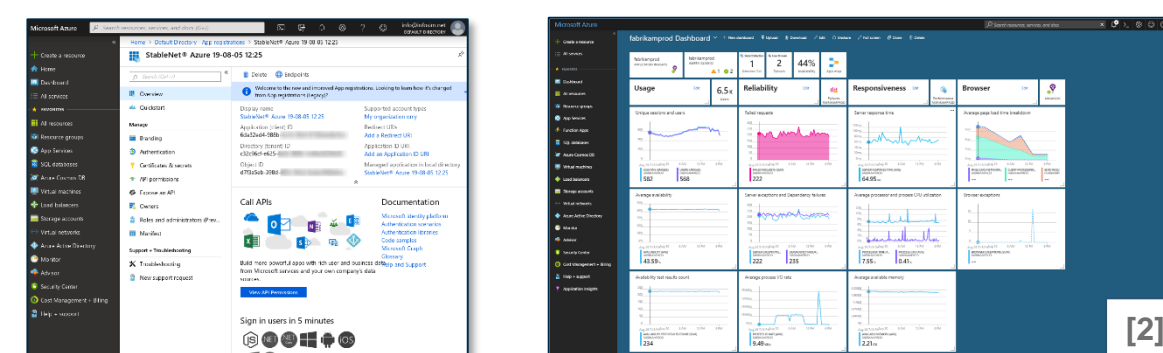
STABLENET® UNIFIED APPROACH

✓ Discovery & collection of **adequate metrics & KPIs**

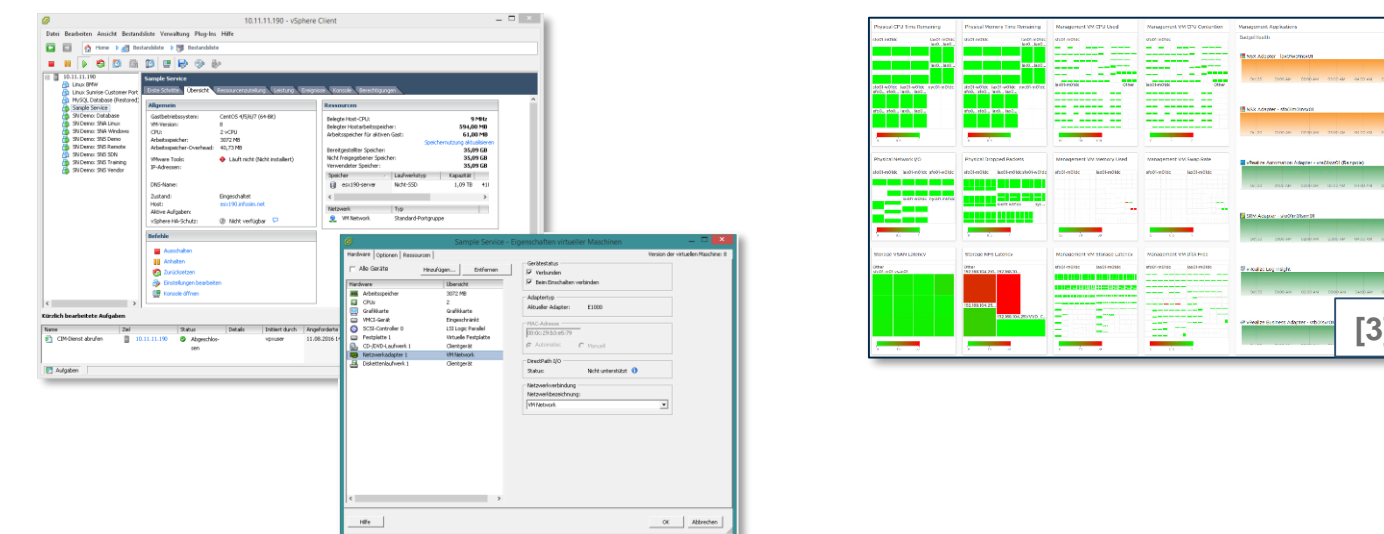
AWS Cloudwatch (API & Dashboards)



Microsoft Azure (API & Dashboards)



VMware vSphere/ESX (API & Dashboards)



Further Systems (APIs & Dashboards)

...

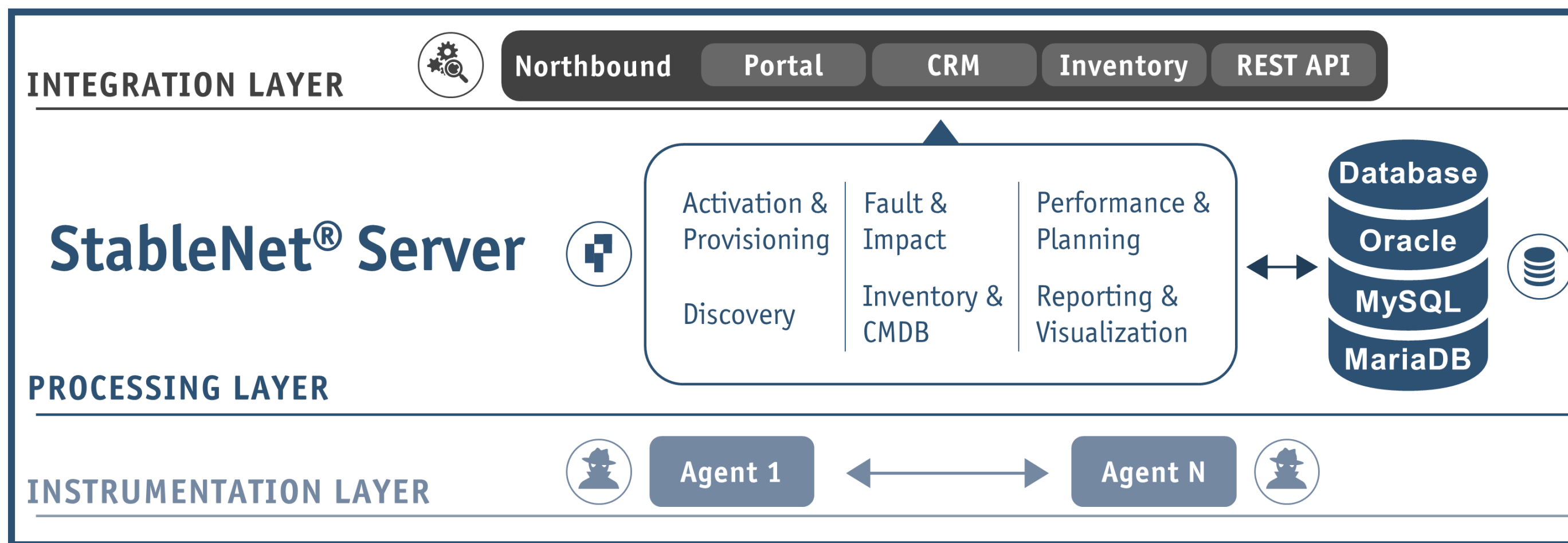
Picture sources (downloaded on Sep 5th 2019):

[1] <https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/images/monitoring-overviewpage-console.PNG>

[2] <https://docs.microsoft.com/en-us/azure/azure-monitor/app/media/overview-dashboard/0001-dashboard.png>

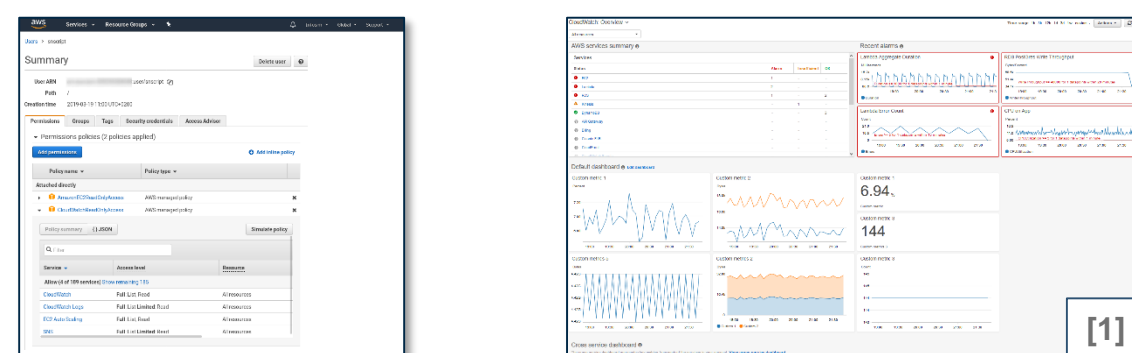
[3] <https://docs.vmware.com/en/VMware-Validated-Design/4.3/com.vmware.vdd.sddc-monitor.doc/images/GUID-25FDE11A-6017-4826-A09E-88D133F61DA0-low.png>

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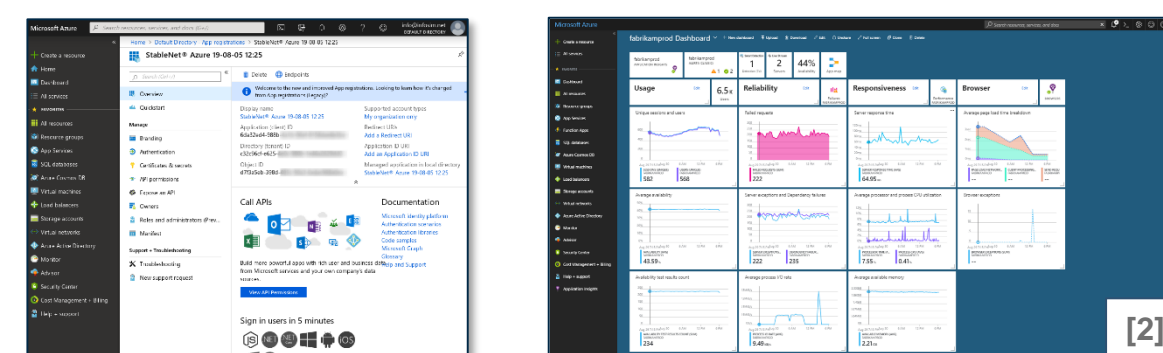


- ✓ **Automated** grouping, filtering and aggregation of data
- ✓ Fault Management and **automated root cause analysis**
- ✓ Seamless integration with **activation & provisioning**
- ✓ Discovery & collection of **adequate metrics & KPIs**

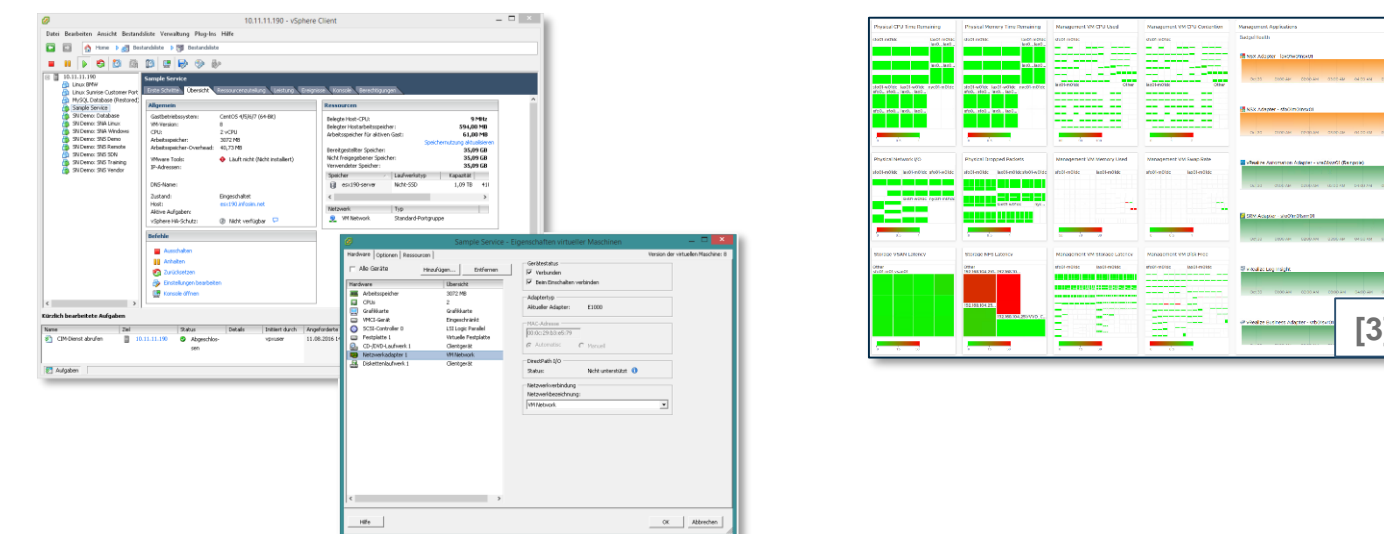
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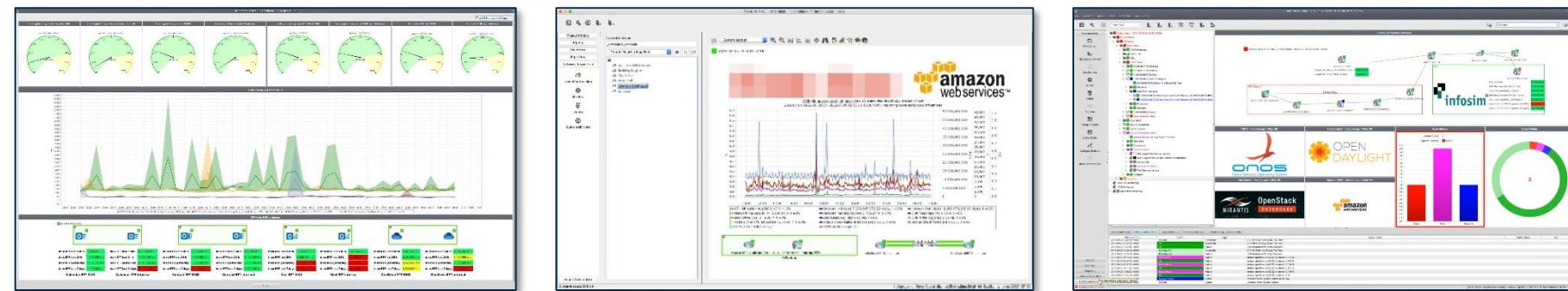
[2] <https://docs.microsoft.com/en-us/azure/azure-monitor/app/media/overview-dashboard/0001-dashboard.png>

[3] <https://docs.vmware.com/en/VMware-Validated-Design/4.3/com.vmware.vdd.sddc-monitor.doc/images/GUID-25FDE11A-6017-4826-A09E-88D133F61DA0-low.png>

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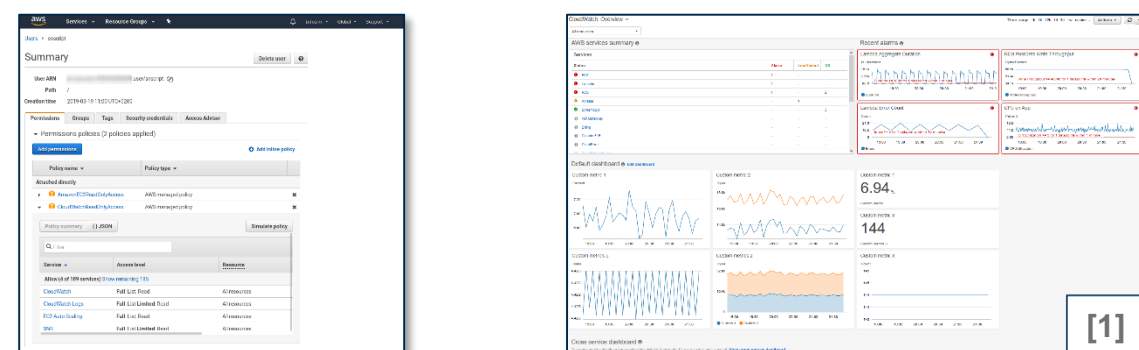
Unified Dashboards & Weather Maps cross silo, technology, vendor

Key information in the pocket

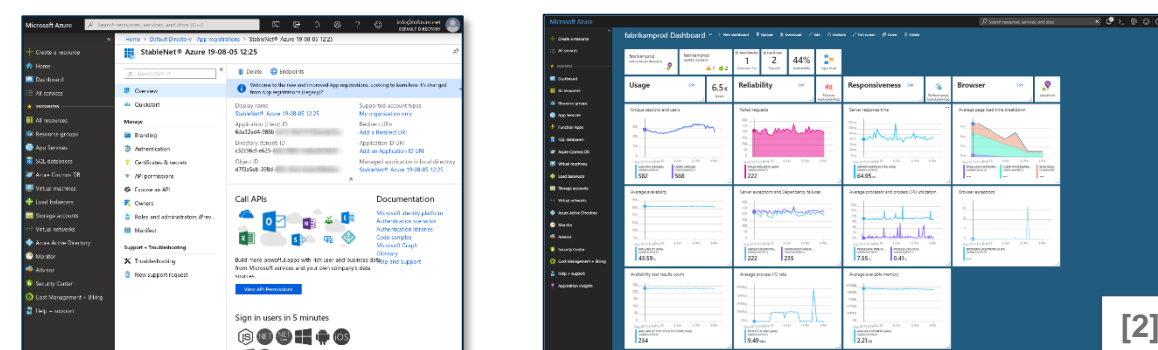


- ✓ **Visualization & reporting** tailored to your needs
- ✓ **Automated** grouping, filtering and aggregation of data
- ✓ Fault Management and **automated root cause analysis**
- ✓ Seamless integration with **activation & provisioning**
- ✓ Discovery & collection of **adequate metrics & KPIs**

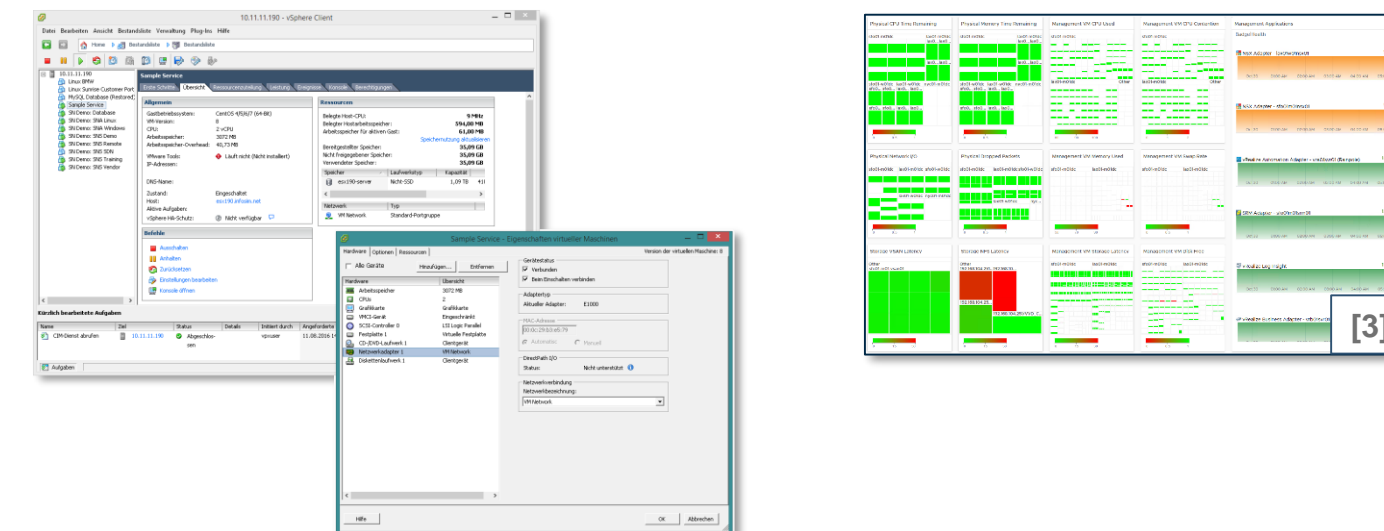
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MONITORING OF CLOUD SERVICES

SUPPORTED FUNCTIONS

Available performance parameters

- Service Availability (%)
- Used Disk Capacity (MB)
- Success End-to-End Latency
- Percentage CPU (%)
- Input/Output Data throughput (MB)
- and a lot of additional parameters ...

Example: AWS

- Monitoring of EC2 (Elastic Cloud Compute) (VMs of AWS)
- Monitoring of EWS (Elastic Block Storage) (virtual storage of AWS)
- Monitoring through the API of AWS CloudWatch

Comparable Functionality on Azure, VMware, etc.

Support for Office365

SUPPORTED FUNCTIONALITY IN STABLENET®

COLLECT

ANALYZE

ROOT CAUSE ANALYSIS

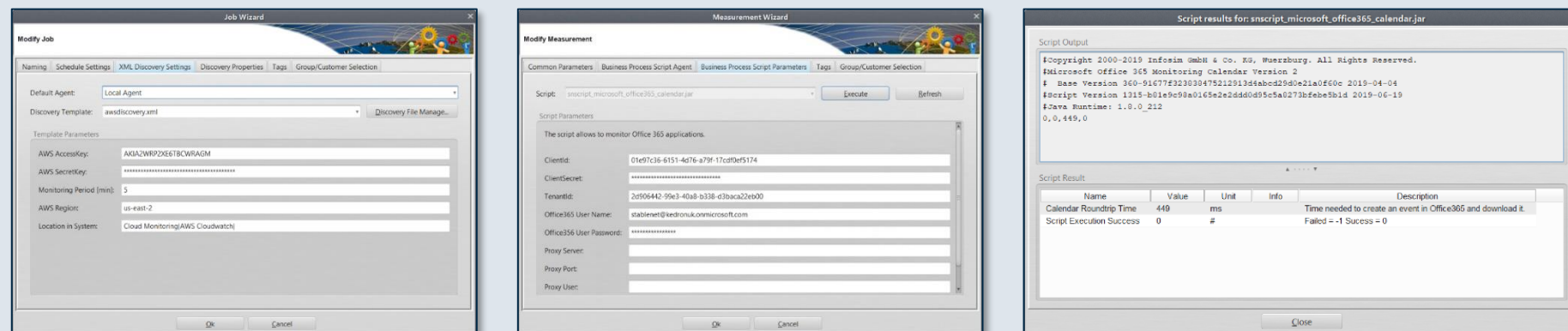
COMPLETE OPERATIONAL
VISIBILITY

SUPPORTED CLOUD SERVICES



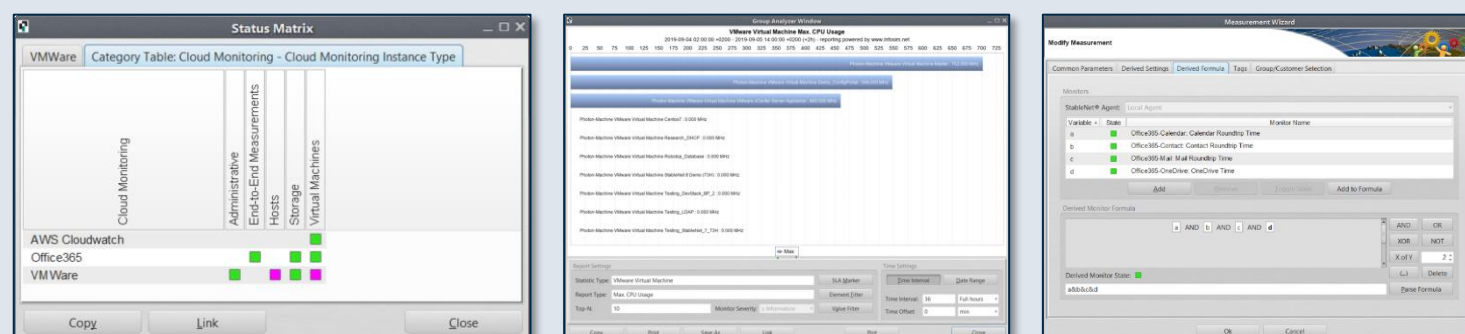
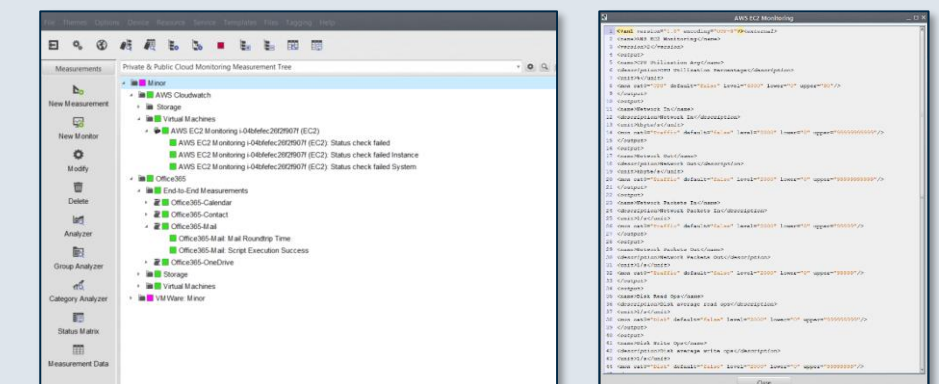
Monitoring of other cloud services on request

HOLISTIC MULTI-CLOUD MONITORING LIVE – KEY TAKE AWAYS



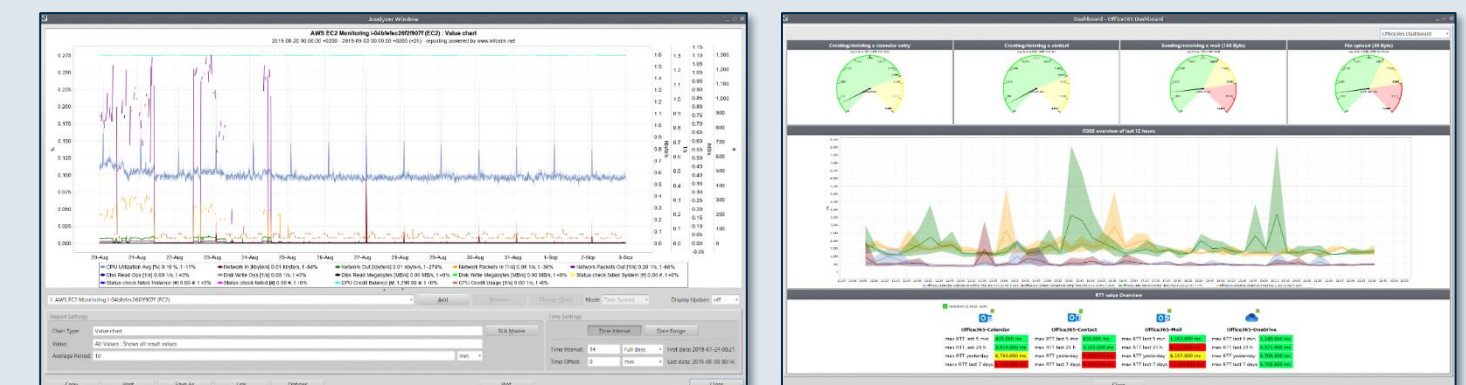
✓ Convenient, scalable setup & discovery

✓ Automated data tagging



✓ Consolidation and correlation of various information sources

✓ Holistic visualization & reporting tailored to your needs

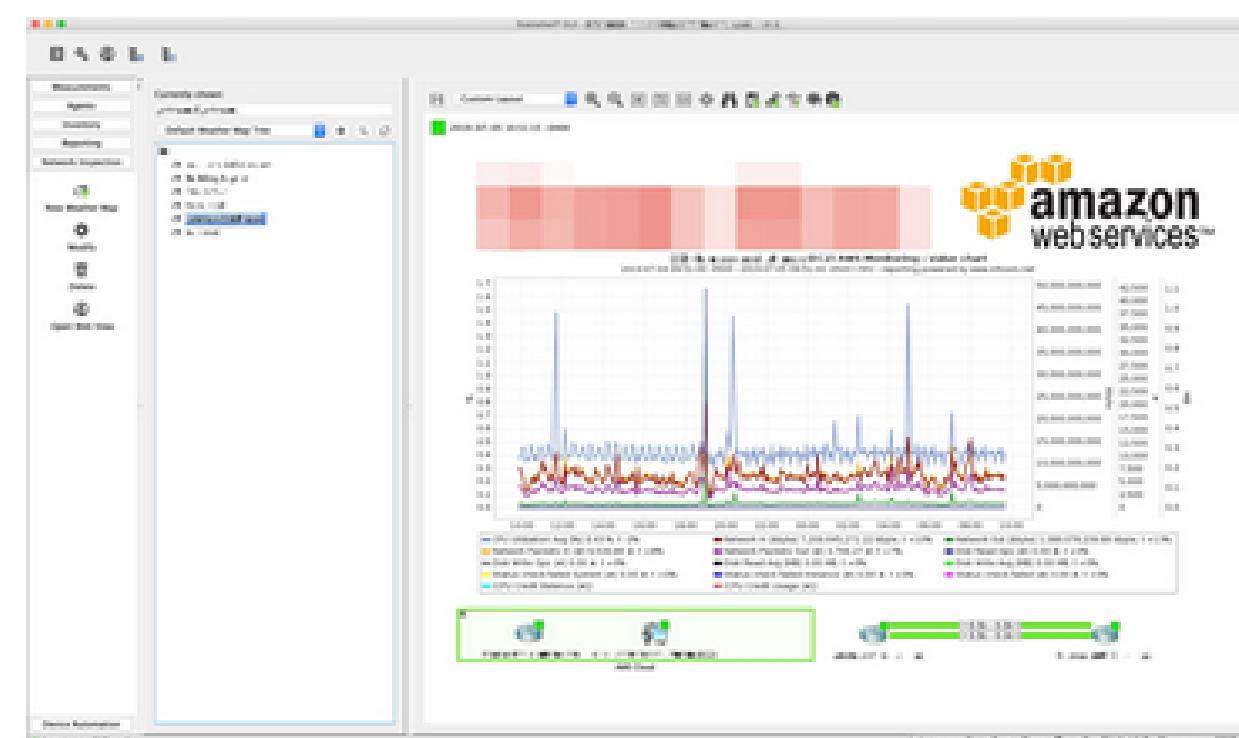


CLOUD MONITORING WITH STABLENET® – EXAMPLE USE CASES & SCREENSHOTS



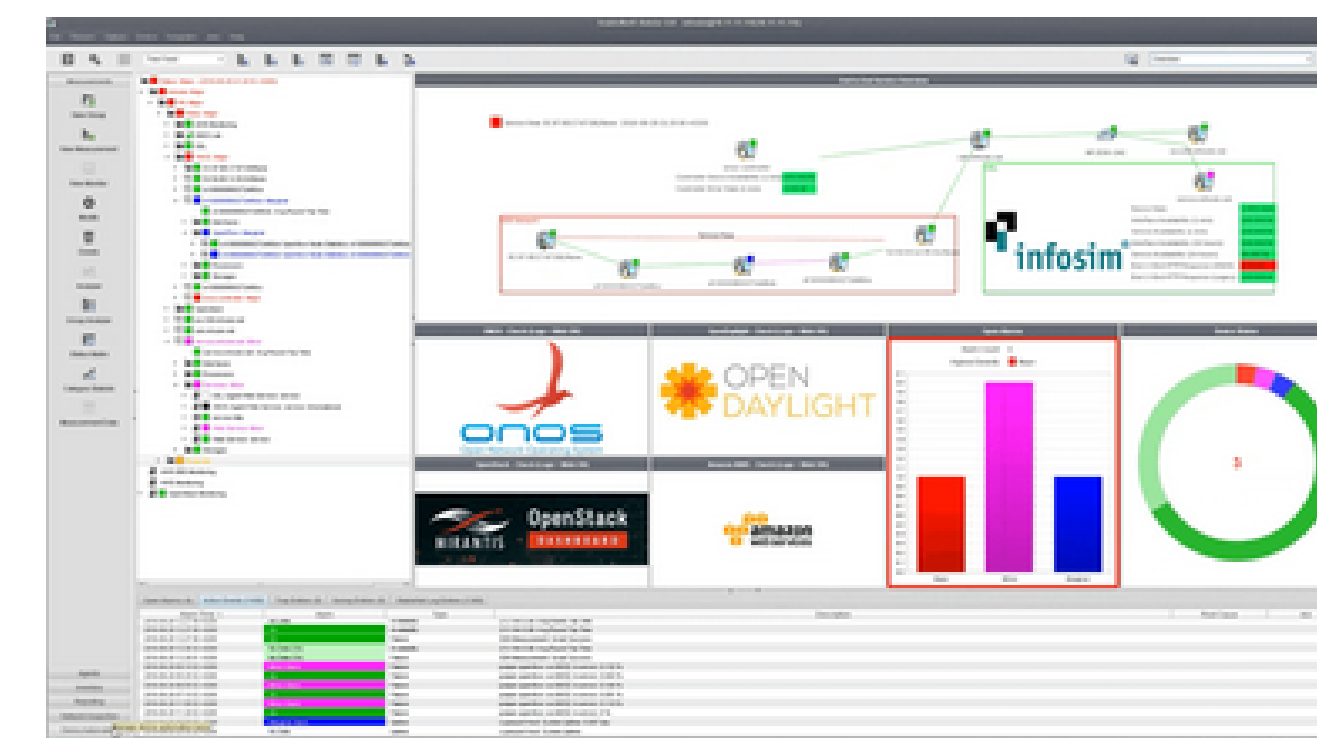
Office 365 Monitoring

This customer dashboard offers an example for Office 365 monitoring. It helps to get a quick overview of processing times and other KPIs for various typical tasks in Office applications, such as Calendar, Contact, Mail, and OneDrive.



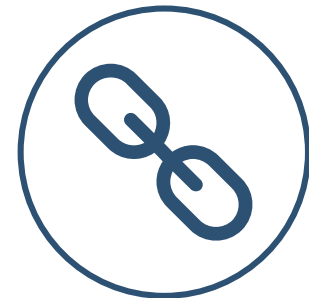
AWS Monitoring

In this example, we show a StableNet® WeatherMap with an overview on various AWS KPIs, links between sites, etc. – Among others, StableNet® is measuring CPU Utilization, Disk Read/Write Speeds, and Network In&Out.



Unified SDN, NFV & Cloud

This dashboard shows multi-cloud monitoring integrated in a larger overall context. Public and private clouds (VMware, OpenStack, and AWS) combined with SDN (ONOS, OpenDaylight, OpenFlow) as well as legacy infrastructure.



StableNet® Website

www.infosim.net/stablenet

StableNet® Webinars

www.infosim.net/stablenet/resources/webinars

StableNet® Videos

www.infosim.net/stablenet/resources/#stablenet-videos

StableNet® Product Sheets

www.infosim.net/stablenet/resources/#product-sheets

StableNet® Proof of Concept

www.infosim.net/stablenet/resources/proof-of-concept

StableNet® Solution Briefs

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StableNet® White Papers

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StableNet® Case Studies

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Thank you

