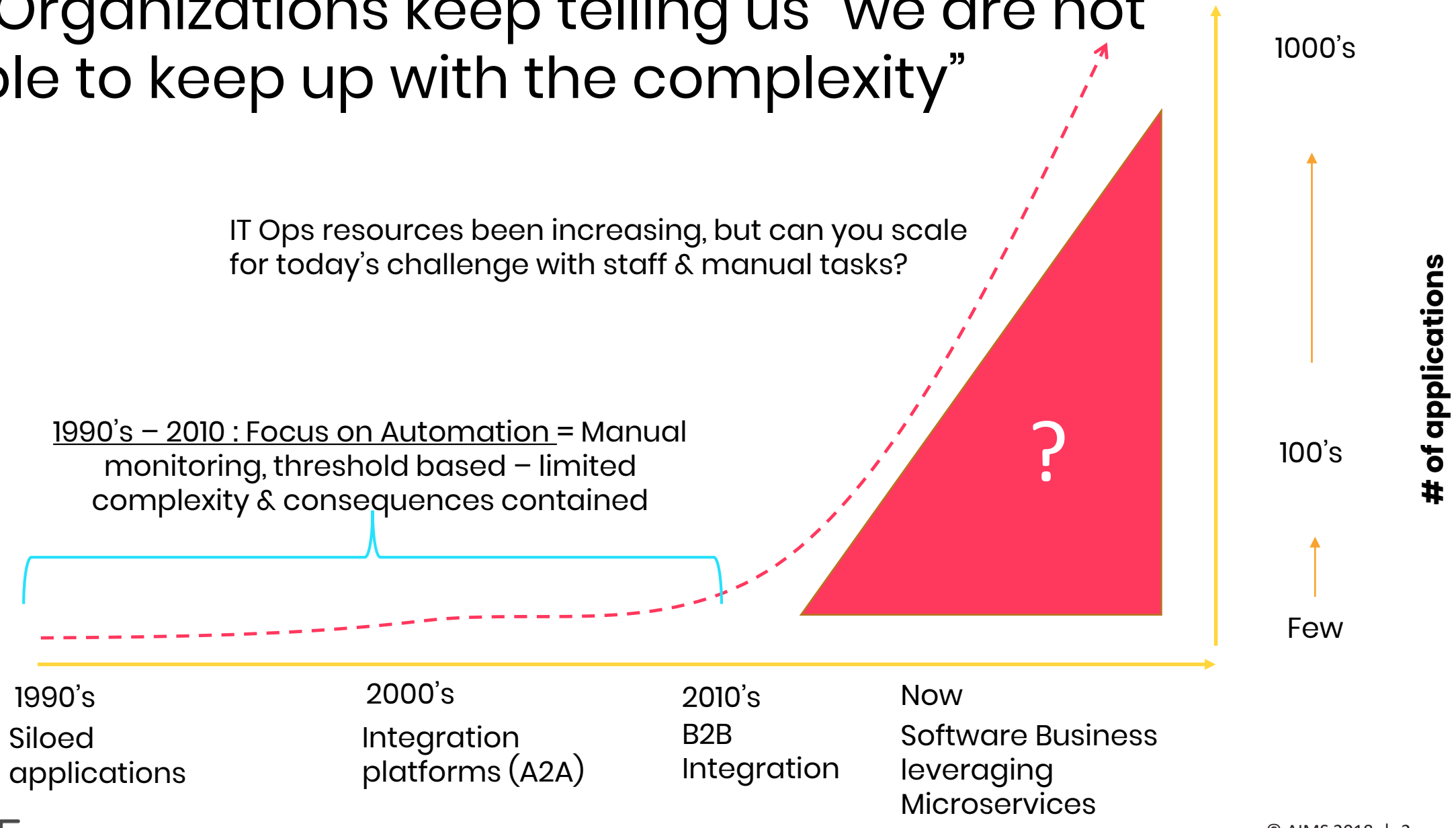
aims

AI-powered IT monitoring and analytics

Introduction

IT Organizations keep telling us “we are not able to keep up with the complexity”



AIMS for Azure

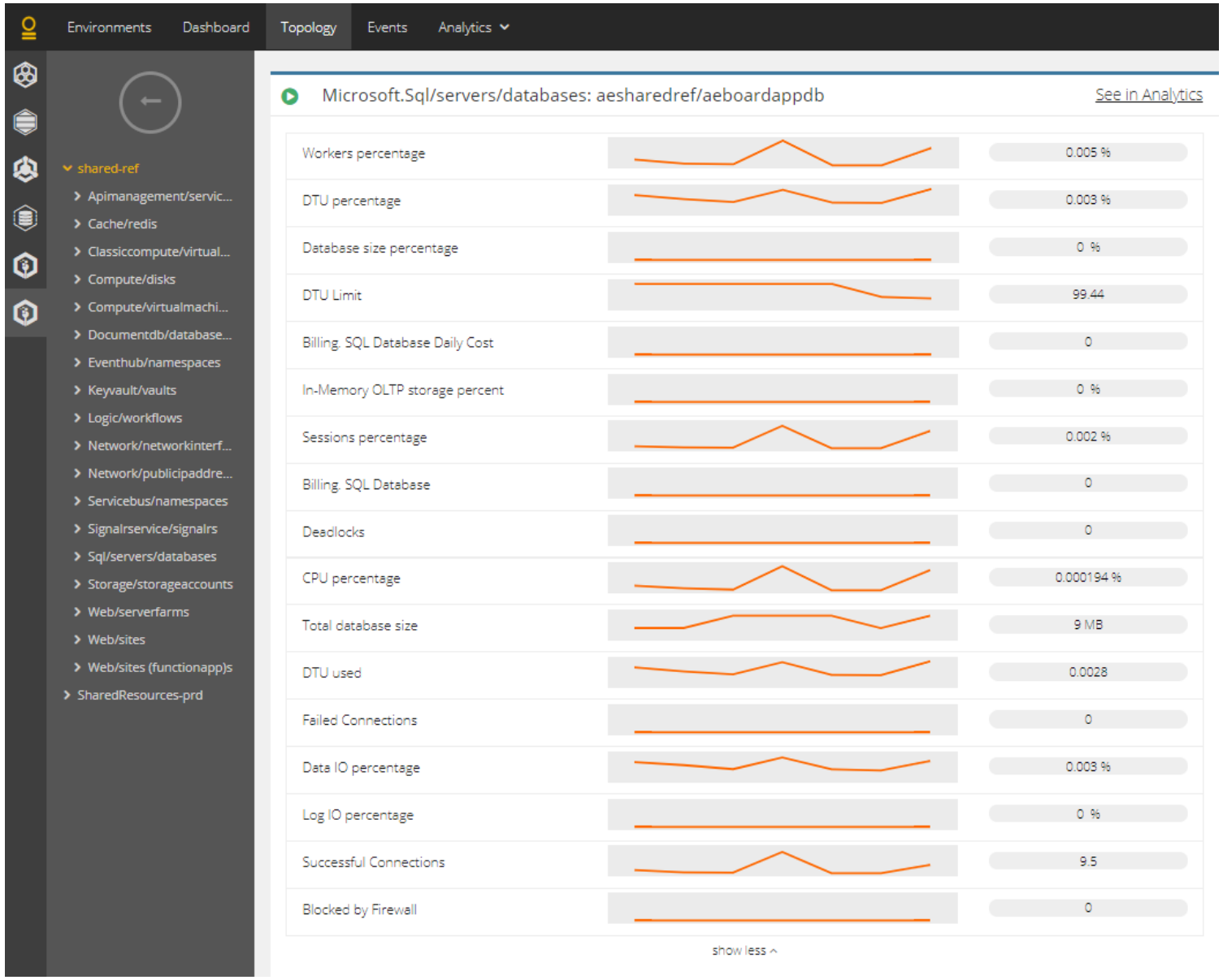
Leveraging the common AIMS Platform capabilities :

- **Massive metrics**
- **Normal behavior**
- **Correlation**
- **Anomaly detection (Azure or Hybrid)**
- **Analytics & reports**
- **& out-of-the box install.**

To cover your *blind-spots* you need massive data

Examples:

- Azure
  - 18 resource types
  - 316 stat types
  - 6 statuses
- SQL:
  - 34 types
  - 125 stat types
  - 43 statuses
- BizTalk
  - 25 types
  - 19 stat types
  - 7 statuses



Extensive Microsoft Technology support & flexible to extend to additional systems

On-Prem

- BizTalk
- SQL
- Windows
- IIS
- File Count Monitoring
- HTTP Endpoint

Azure

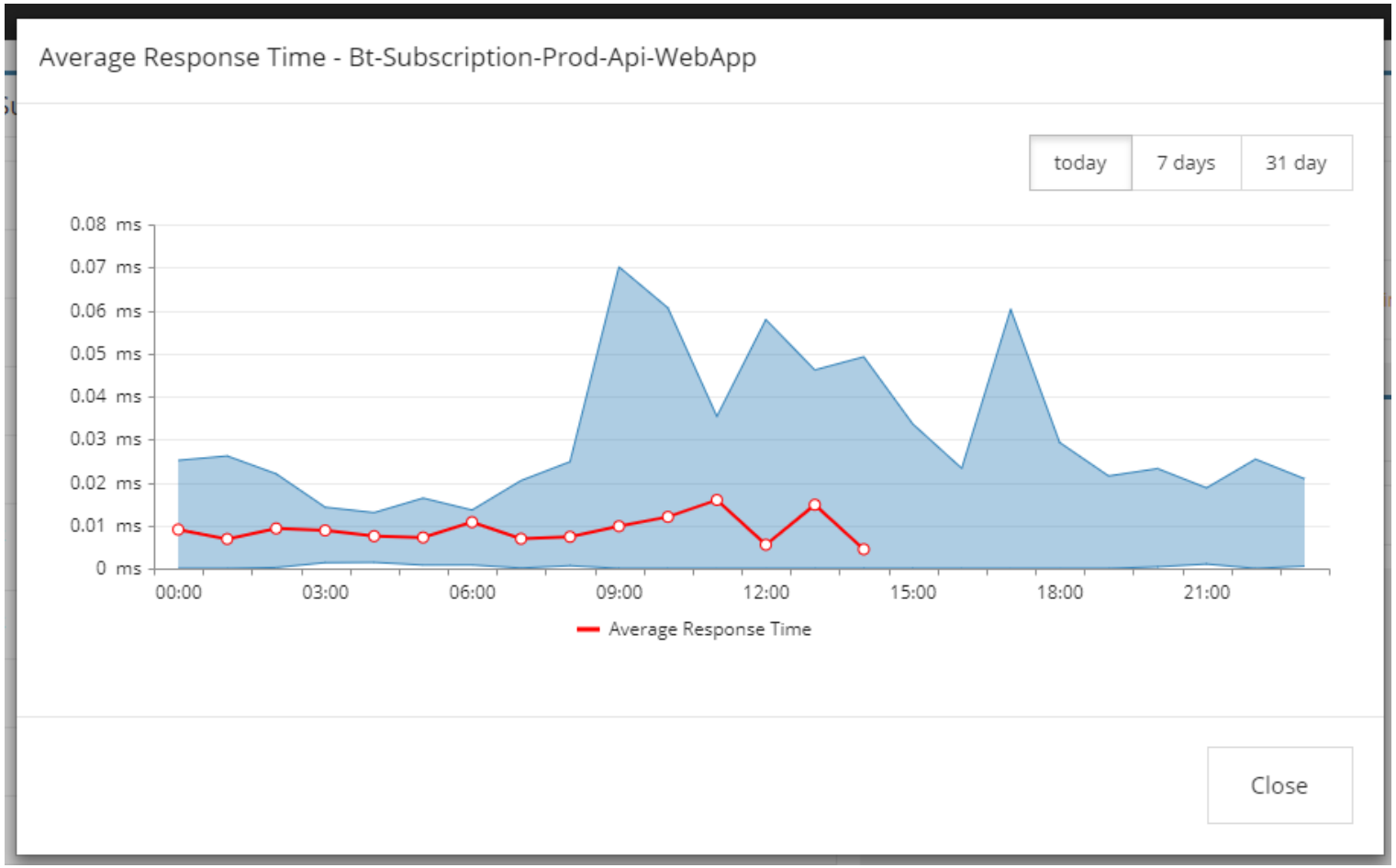
- API Management
- Cache / Redis
- Virtual Machines
  - Classic Compute
  - Compute / VMs
  - Compute / Disks
- Network / Network Interfaces
- Network / Public IP Addresses
- Cosmos DB
- Event Hub
- Key Vault
- Logic Apps
- Service Bus
- Signal R Service
- Azure SQL DB
- Azure Storage
- App Service Plans
- Azure Web Apps
- Azure Functions
- and more….
- **+ Azure billing data**

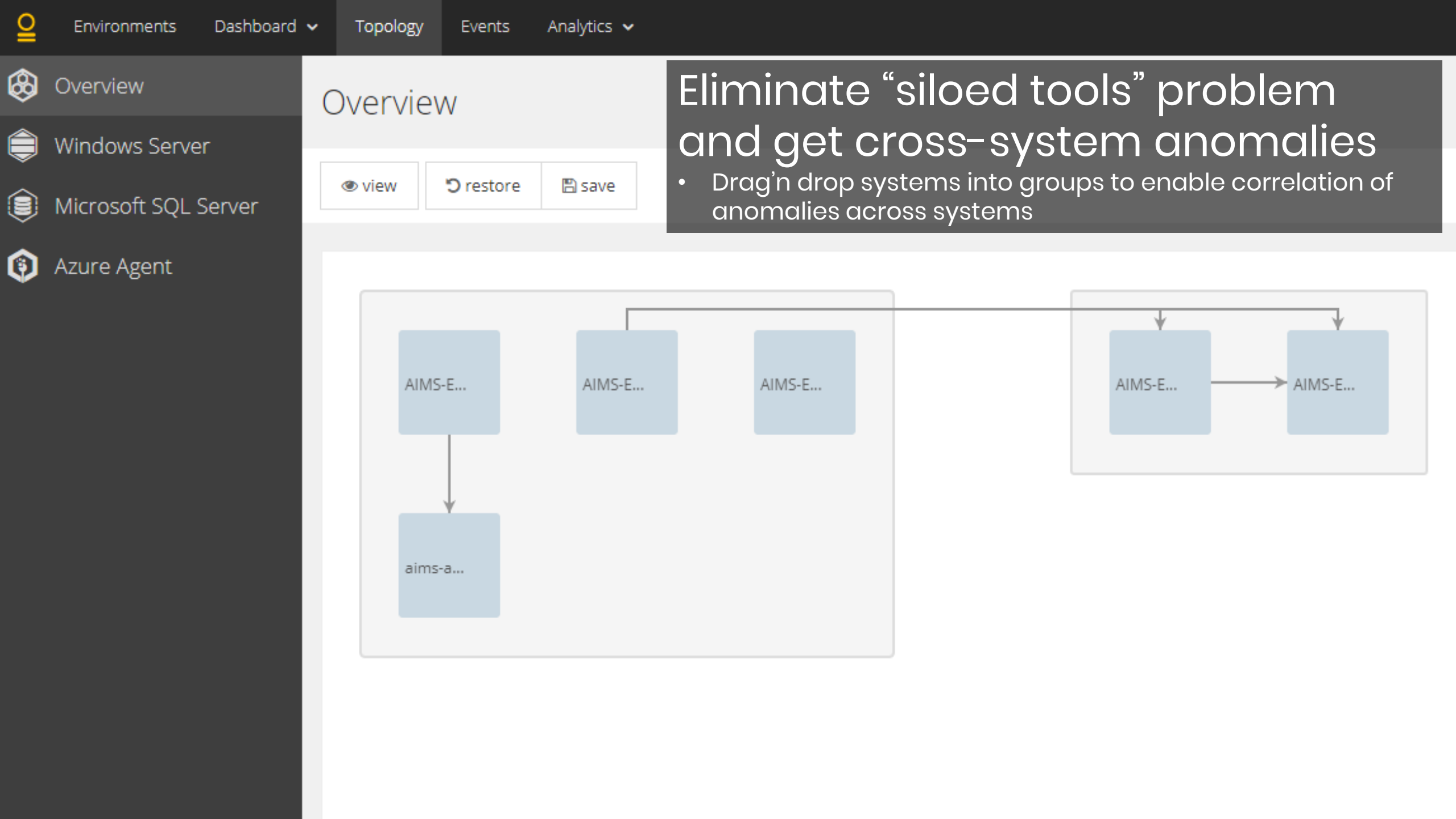
Eliminating manual thresholds and *alert fatigue*

1. Metrics for each resource are stored to build a rich history of behavior for each metric and resource

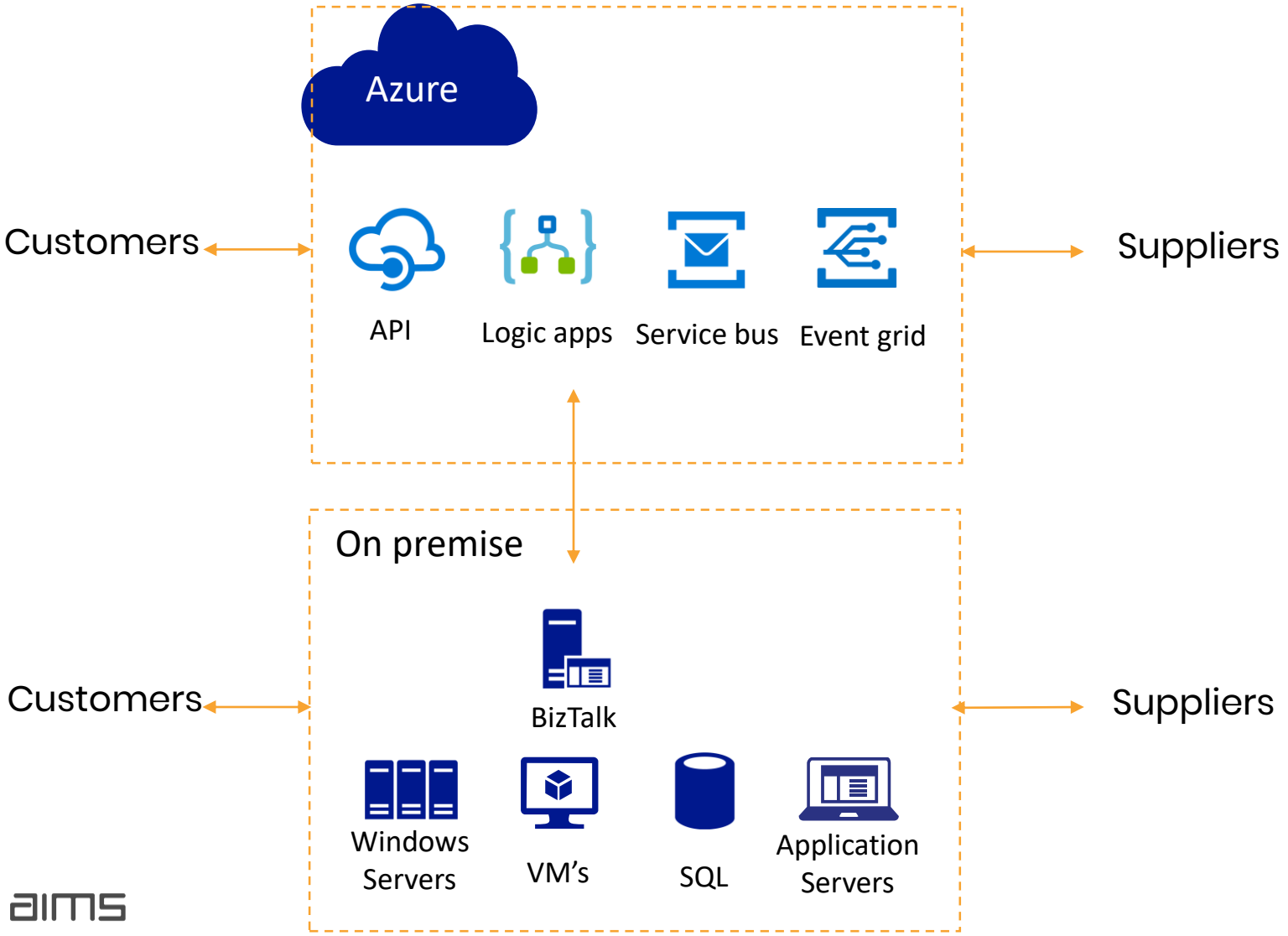
2. Metrics data are used to build cyclical normal behavior patterns with dynamic upper & lower thresholds

3. Data is used to automatically identify deviations from patterns

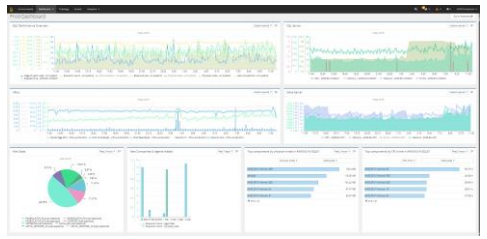



Environments
Dashboard
Topology
Events
Analytics
Overview
Windows Server
Microsoft SQL Server
Azure Agent
Overview
view
restore
save
Eliminate “siloed tools” problem and get cross-system anomalies
• Drag’n drop systems into groups to enable correlation of anomalies across systems
AIMS-E...
AIMS-E...
AIMS-E...
aims-a...
AIMS-E...
AIMS-E...

B2B – on prem, Azure (transition or hybrid)



IT Ops
Automated Insight



- Business process insight from underlying technologies
- Capturing data from all Azure PaaS & IaaS, On-premise tech including customer / partner end-points.

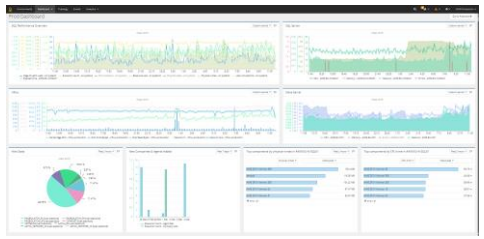
AIMS Production (all Azure)

Customers

Redis Cache

SQL databases, Windows Servers,
Influx databases running on VM's

AIMS IT Ops
Automated Insight



CDN

Web Apps

Storage

Functions

Databricks

Data Lake

VM

Capturing data
from all Azure PaaS
& IaaS

Move from re-active firefighting to pro-active prevention

- Leverage Anomaly warnings to identify & resolve situations before customers notice

Anomaly **High** 23.01.2019 17:20:00 — 23.01.2019 19:17:57

occurred on aimsazureagentbeta , aims-azure-agent-beta , aims-azure-agent-connect-beta

23.01.2019 17:20:00 | Ignored | id: 360

Anomaly detected

Table details | Timeline bars

See in Analytics

Parameter	Affected group / node	Deviation from normal behavior	Started	Ended	Duration
Data Out	aims-azure-agent-beta	561 % ↑	12 days	12 days	2 hours
Function Execution Count	aims-azure-agent-beta	Expected range: 0 - 131.05 — 400 % ↑			2 hours
IO Other Bytes Per Second	aims-azure-agent-beta	800 % ↑	12 days ago	12 days ago	2 hours
Data In	aims-azure-agent-beta	546 % ↑	12 days ago	12 days ago	2 hours
IO Write Bytes Per Second	aims-azure-agent-beta	260 % ↑	12 days ago	12 days ago	2 hours
Average memory working set	aims-azure-agent-connect-beta	infinite ↑	12 days ago	12 days ago	2 hours
Ingress	aimsazureagentbeta	374 % ↑	12 days ago	12 days ago	2 hours
Gen 2 Garbage Collections	aims-azure-agent-beta	220 % ↑	12 days ago	12 days ago	2 hours
Memory working set	aims-azure-agent-connect-beta	infinite ↑	12 days ago	12 days ago	2 hours
IO Read Bytes Per Second	aims-azure-agent-beta	567 % ↑	12 days ago	12 days ago	33 minutes
Function Execution Units	aims-azure-agent-beta	849 % ↑	12 days ago	12 days ago	2 hours

Environments | Dashboard | Topology | Events | Analytics | testazure

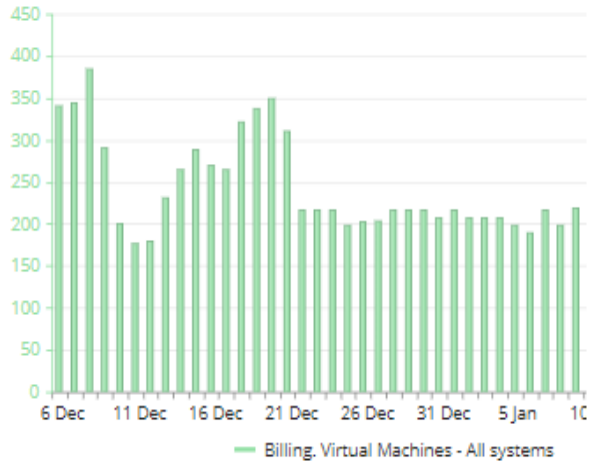
Azure Billing Report

+ block | restore | save | tpl | delete | private

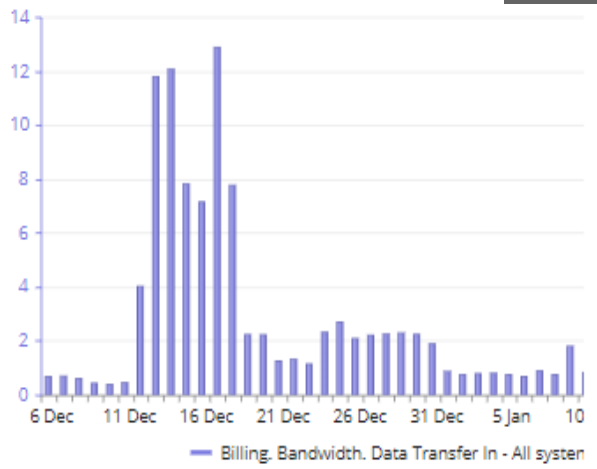
Use existing default reports or create custom dashboards and reports for any stakeholder

- Example for Azure billing metrics

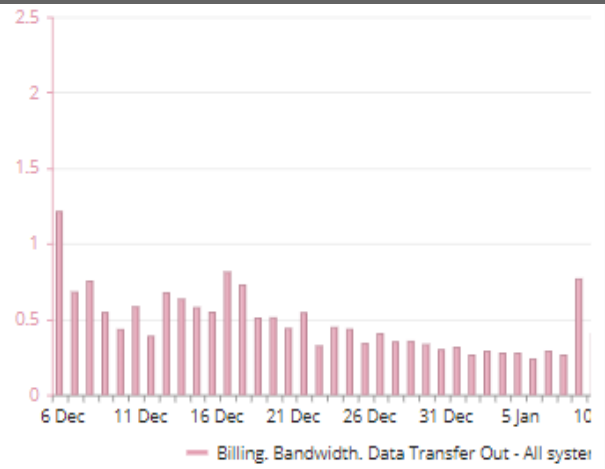
Billing Units - VMs test



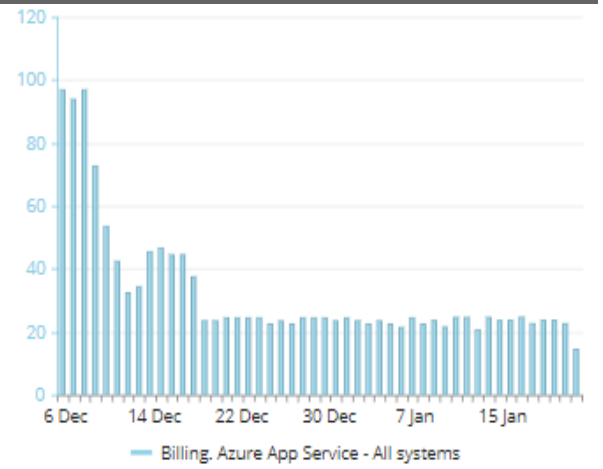
Billing Units - Data Transfer In



Billing Units - Bandwidth Out



Billing Units - Azure App Services



Activity & changes

Past 31 days

44 new nodes

08.01.2019 12:45	aimsazureagentbeta
08.01.2019 12:45	NorthEuropePlan
08.01.2019 12:45	aims-azure-agent-beta
08.01.2019 12:45	aims-azure-agent-connect-beta
15.01.2019 17:45	aimstestagent
15.01.2019 17:45	NorthEuropePlan
15.01.2019 17:45	aims-test-agent

Top components by Disk Write Operations/Sec in aims-beta

Past 31 days

Disk Write Operations/Sec | node types

AIMS-B-Master	13.81
aims-beta-influx	6.54
AIMS-B01	5.22
aims-b-agents	3.41

Top components by Network Out in aims-beta

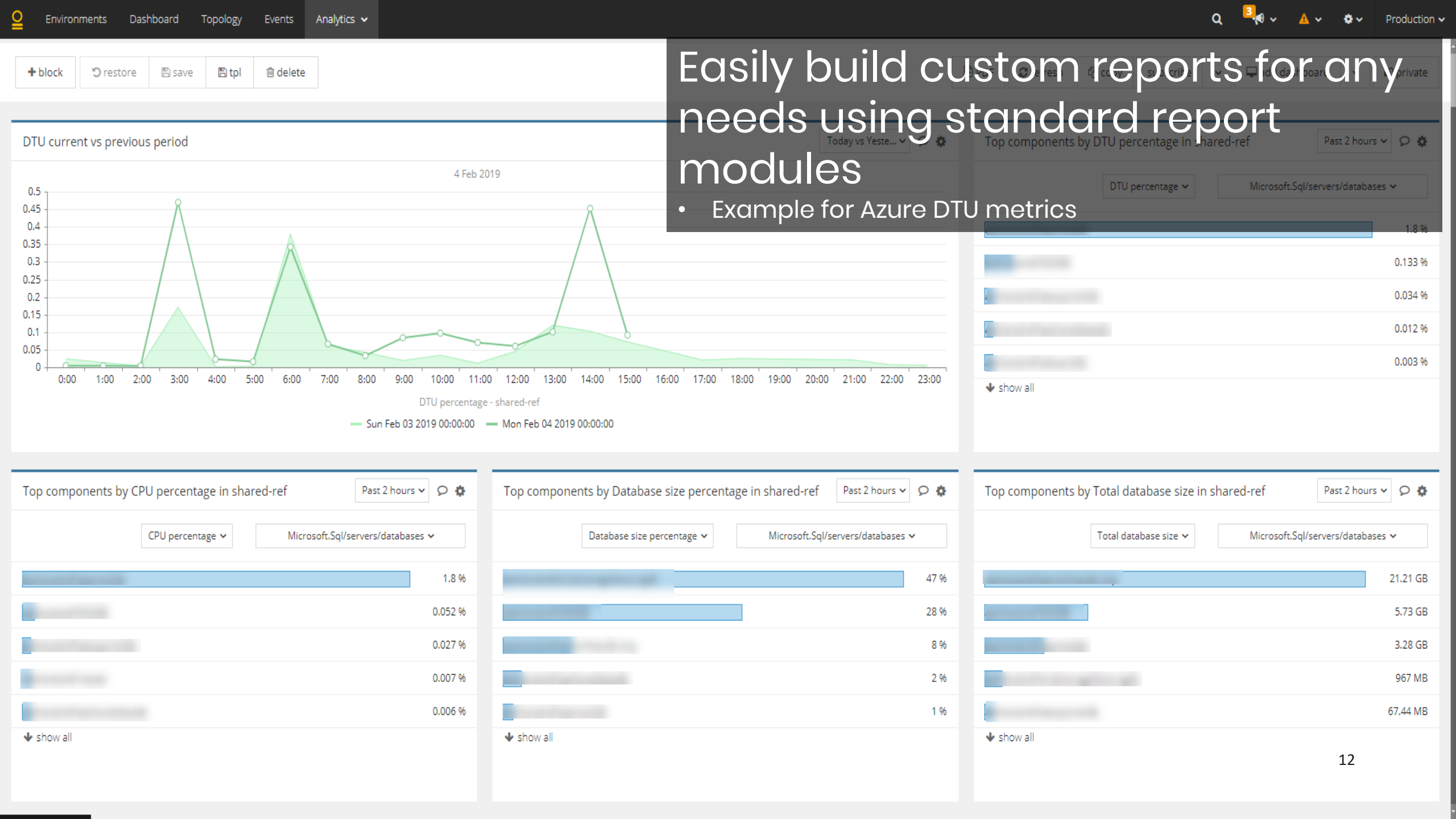
Past 31 days

Network Out | node types

AIMS-B-Master	379.25 GB
AIMS-B01	16.73 GB
aims-beta-influx	5.9 GB
aims-b-agents	3.15 GB

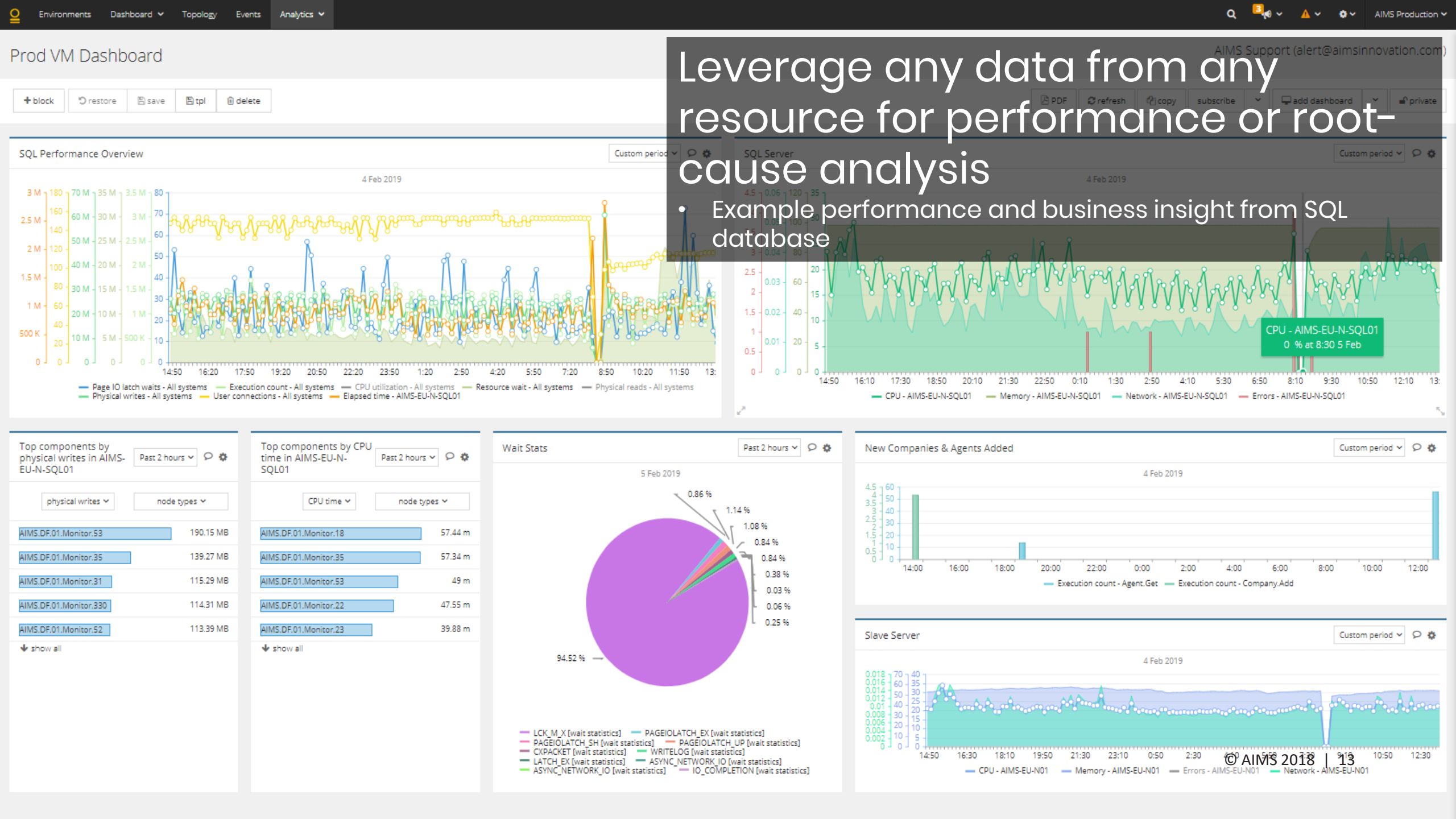
Easily build custom reports for any needs using standard report modules

- Example for Azure DTU metrics



Leverage any data from any resource for performance or root-cause analysis

- Example performance and business insight from SQL database



Understand resources driving Azure costs

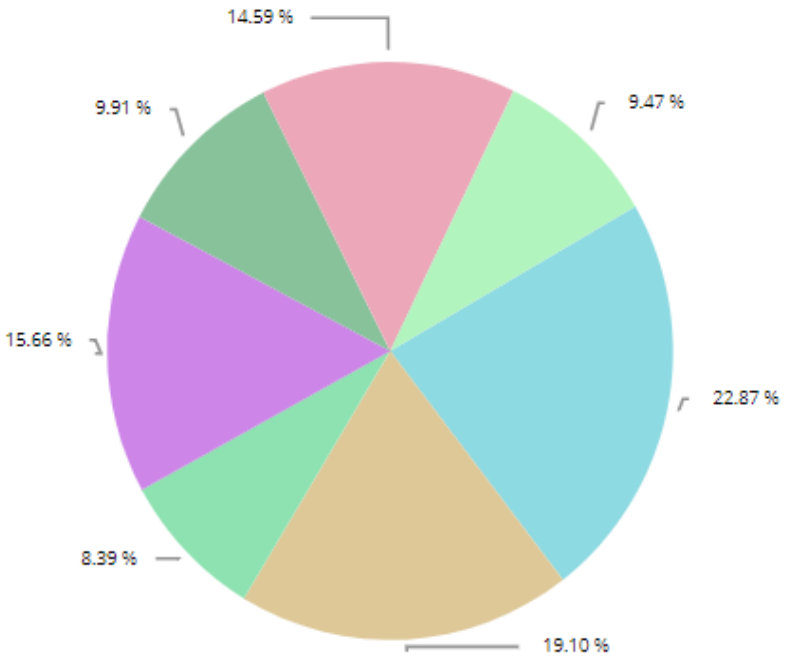
- Example for Azure VM's

Environments | Dashboard | Topology | Events | Analytics | testazure

Azure VM - Billing Bandwidth In & Percentage CPU

+ block | restore | save | tpl | delete | PDF | refresh | copy | subscribe | add dashboard | private

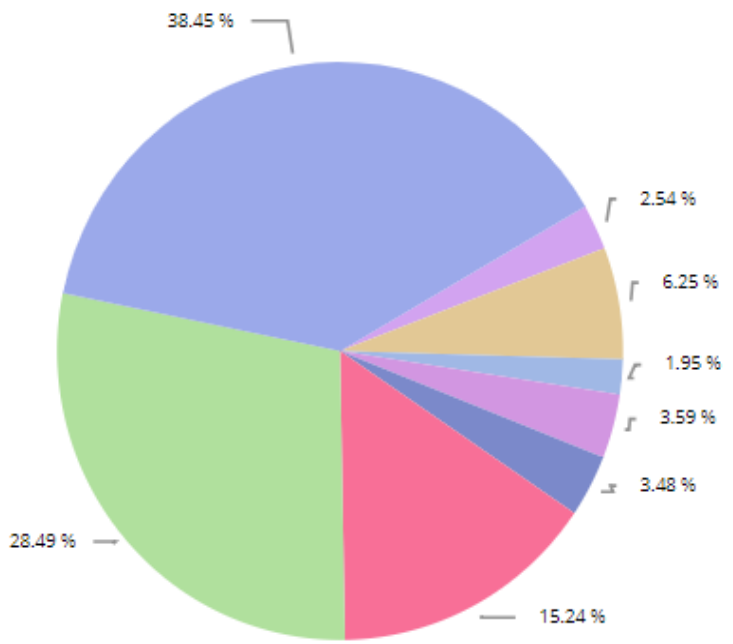
VM Billing Bandwidth, Data Transfer In



AIMS-B01 [Microsoft.Compute/virtualMachines]
aims-b-agents [Microsoft.Compute/virtualMachines]
aims-beta-influx [Microsoft.Compute/virtualMachines]
AIMS-B-Master [Microsoft.Compute/virtualMachines]
aims-alpha-influx [Microsoft.Compute/virtualMachines]
aimsiistest [Microsoft.Compute/virtualMachines]
BizTalkCLRNew [Microsoft.Compute/virtualMachines]

Billing. Bandwidth. Data Transfer In

VM Percentage CPU



aims-alpha-influx [Microsoft.Compute/virtualMachines]
AIMS-B01 [Microsoft.Compute/virtualMachines]
aims-b-agents [Microsoft.Compute/virtualMachines]
aims-beta-influx [Microsoft.Compute/virtualMachines]
aimsiistest [Microsoft.Compute/virtualMachines]
AIMSTestSQL [Microsoft.ClassicCompute/virtualMachines]
aimsmlimage [Microsoft.Compute/virtualMachines]
AIMSTestSrv2 [Microsoft.ClassicCompute/virtualMachines]

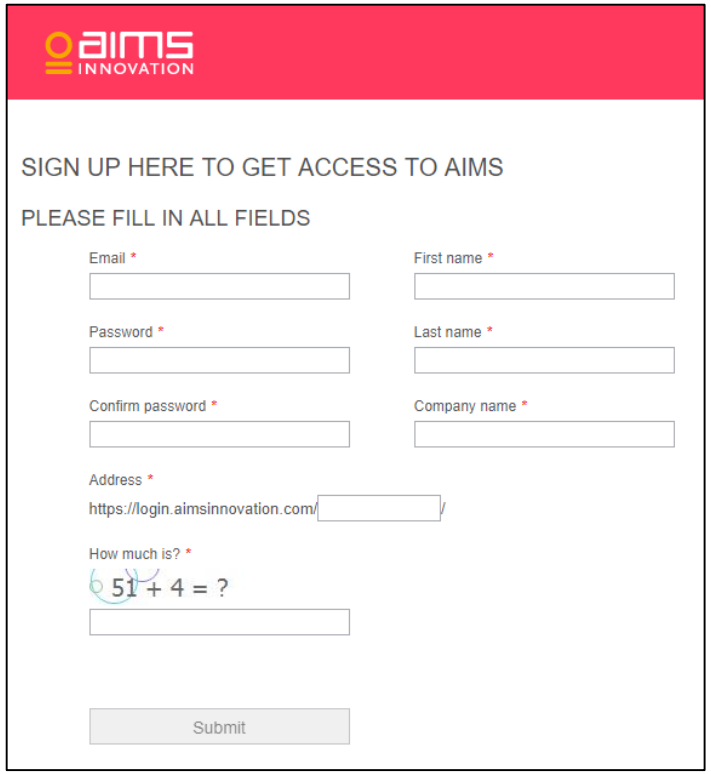
Percentage CPU

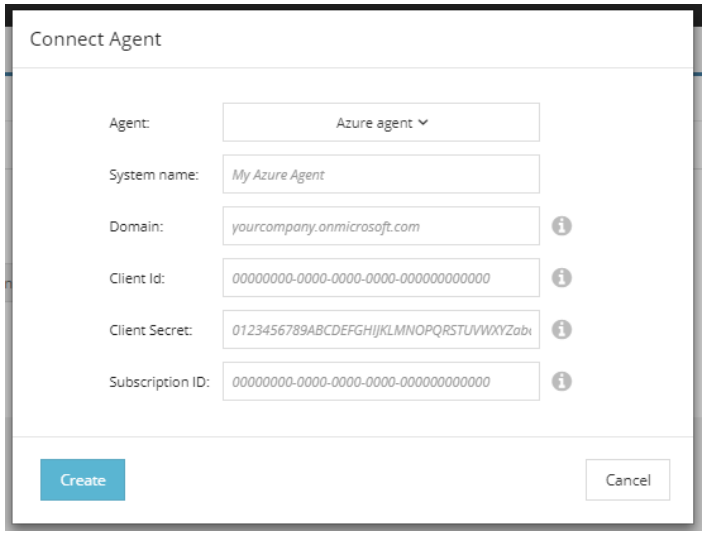
Automation of monitoring & Insight with deep technical support included

Cloud delivered and future proof	A scalable cloud based platform supporting on-premise technologies, Azure, SDK)
Software with a professional support	Tap into deep expertise when you need
Early notification of problems	Leverage machine learning to identify problems not possible with other tools
Eliminate manual work	Stop wasting time on monitoring set-up, triaging cry-wolf alerts and time consuming reporting
Create reports for stakeholders	Default and custom reports available to automate insight for your stakeholder
Control Azure costs	Get insight into what is driving your Azure consumption

Install is done in a few minutes - no need for lengthy implementations or instrumentation of code:

1. Signup for an AIMS account portal.aimsinnovation.com/signup
2. Create an environment (a logical group for your systems / agents)
3. Read the relevant install guides / pre-requisites
4. Install / connect the relevant systems / agents
5. Watch AIMS auto-detect systems, collect metrics, build normal behavior patterns, identify anomalies and build some reports for your stakeholders!
6. … And keep in mind AIMS Performance Experts are at your fingertips!





Adding Azure to AIMS is a configuration job

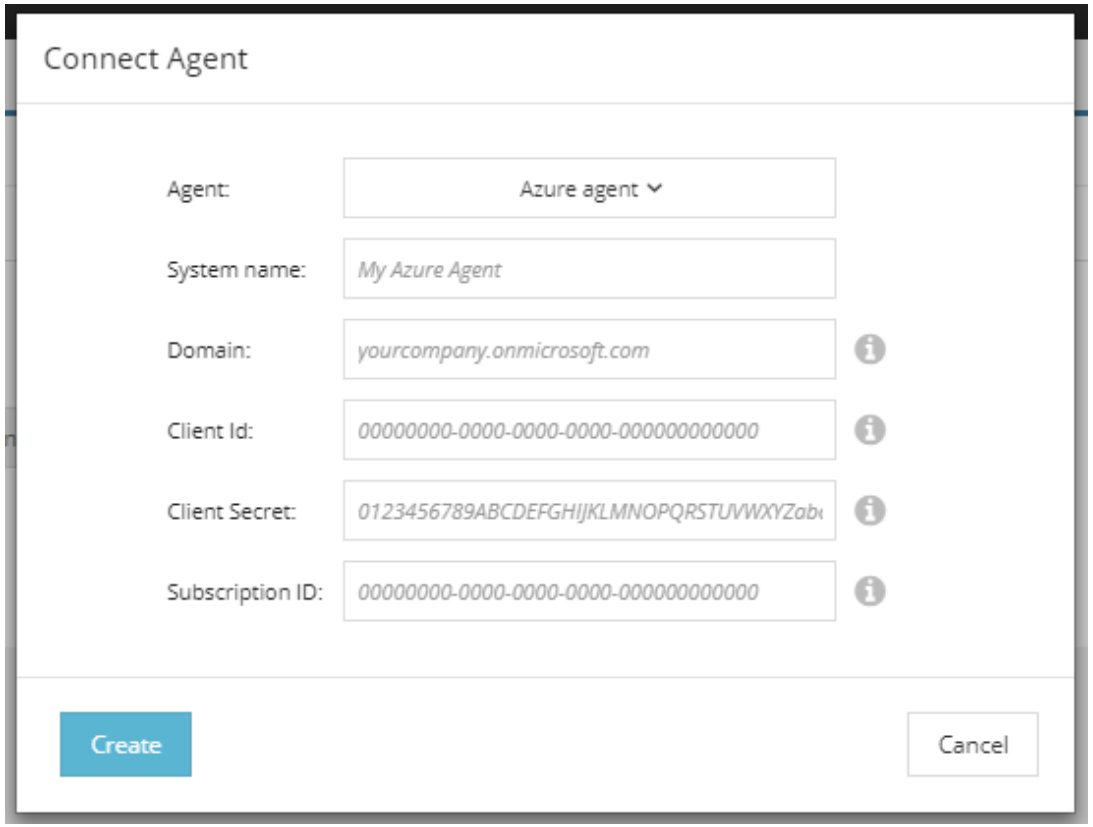
Adding Azure to your AIMS solution is done in a few minutes by following simple steps:

1. Set up the necessary privileges for AIMS in the Azure portal
2. Go to the config section of AIMS and select “Connect Agent”
3. Chose the “Azure agent” from the drop-down and fill in the remaining fields
4. Click “Create” and you are done!

For more details and useful tips check out :

- Install guide AIMS Azure

We recommend that you consider the logical grouping of resources in your Azure subscription as this will impact anomalies. AIMS considers resources in a resource group as a logical entity for Anomaly purposes.

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