



PERFORM

DYNATRACE AND AZURE



Perform 2024



JAY GURBANI

Dynatrace Partner team



KODAI

Solutions Engineer



NADA

Technical Support Manager



SAFIA

Solutions Engineer



SHAWN

Solutions Engineer

HANDS-ON TRAINING // powered by 

INTRO: KODAI

About me:

- Been with Dynatrace for ~10 years
- Born in Japan, moved to the US at 8 months old
- Family with two kids and a doggo
- Car and Lego enthusiast



INTRO: NADA

About Me:

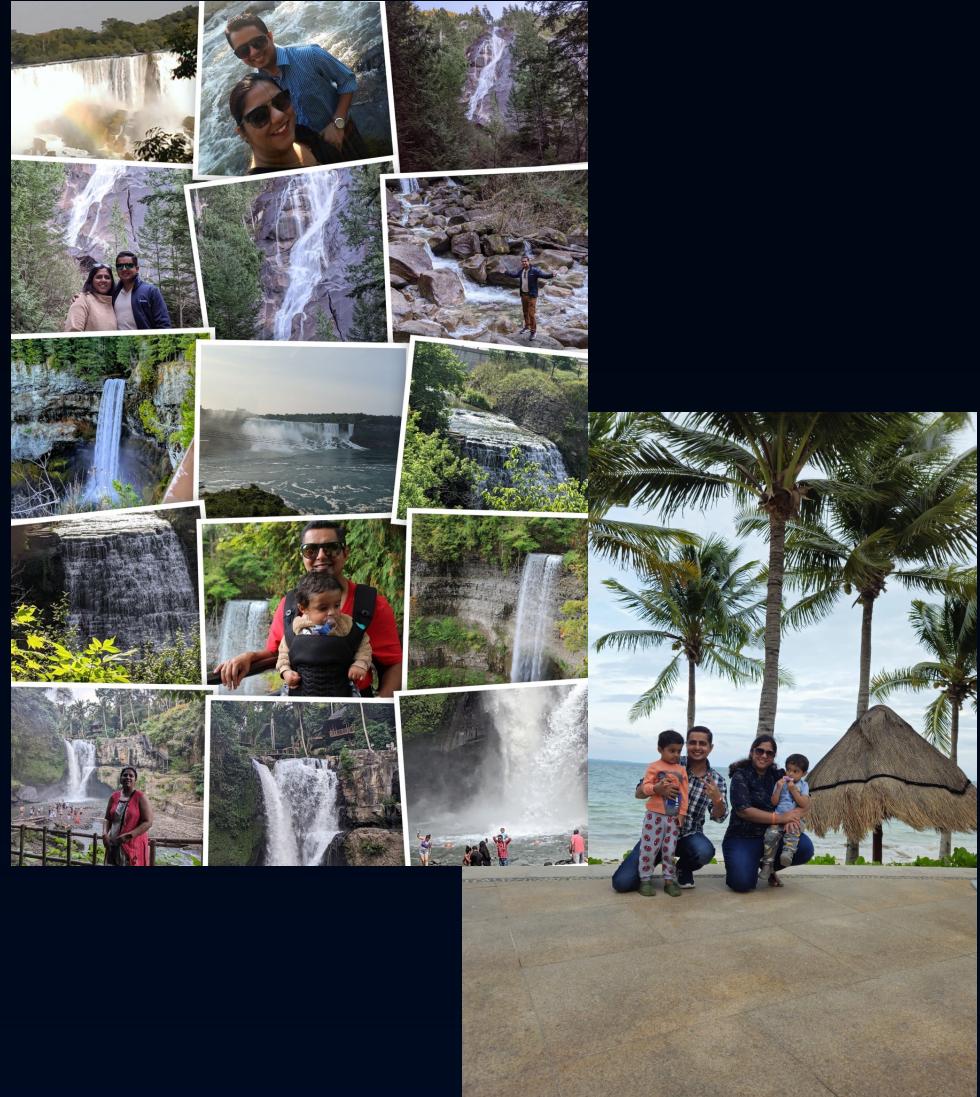
- I am from Egypt , been living in Austria for 7 years
- Started as a Software developer for the travel sector
- Moved to Technical Support in Dynatrace
- Self-developed Baker
- Huge Harry potter Nerd!



INTRO: SAFIA

About Me:

- I am from India, currently based out of Canada
- Software Developer in the past life
- Done it all in Dynatrace for 8 years – post and pre-Sales :D
- Avid Blogger, World Traveller, Bookworm
- Favorite pastime – being a mom to two toddlers!
- Waterfall chasing family.



INTRO: SHAWN



About me:

- Beautiful family of 6 and two dogs
- Horse Breeding family
- IT Career in banking, insurance, health care
- Engineering, Development, Architecture, Management
- Passion for innovation and removing obstacles

INTRO: SHAWN



Also, about me:

- Giant Nerd ☺
 - Board games
 - Co-op video games
 - Marvel movie fan
- Favorite Dinosaur: Triceratops

PRE-FLIGHT CHECK



Dynatrace University

- ✓ Check Pre-Reqs
- ✓ [Lab Guide](#)
- ✓ Azure terminal

Post session...

- ✓ Materials download

Azure

- ✓ Login works?
(incognito if not!)
- ✓ [Azure console](#)

Dynatrace

- ✓ Login works?
(incognito if not!)
- ✓ [Dynatrace console](#)

AGENDA



00:00 Team Intros & Preflight

00:10 Dynabank Intro

00:20  Azure Kubernetes & Dynatrace

00:40  Dynatrace config: Logs & Bizevents

01:00 Azure App Services & Dynatrace

01:20  Deploy App Service & Dynatrace

01:40 Azure Log Forwarder

01:45  Monitor APIM logs

02:00 BREAK (Drinks/Coffee available outside)

02:20 Dynatrace/Azure Integration

02:40  Setup Azure Connector

03:00 Bizevents and Logs in Dynatrace

03:20  “Day in the Life” scenario

03:40 Azure Dynatrace Native Integration

04:00 Thanks for coming!

HOT SESSION: SUCCESS REFERENCE GUIDE



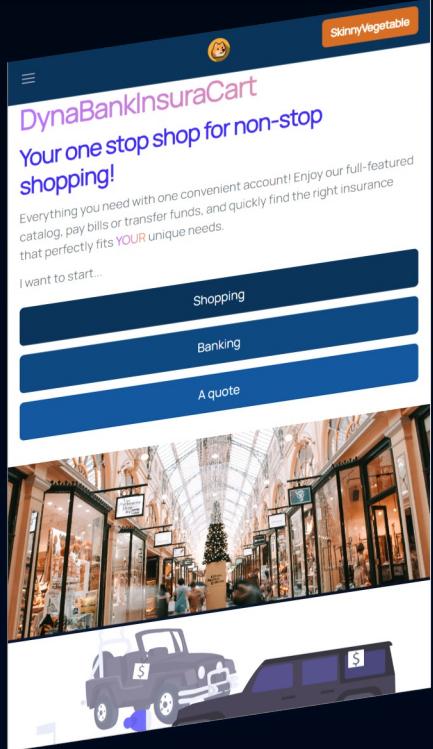
APP: DYNABANK



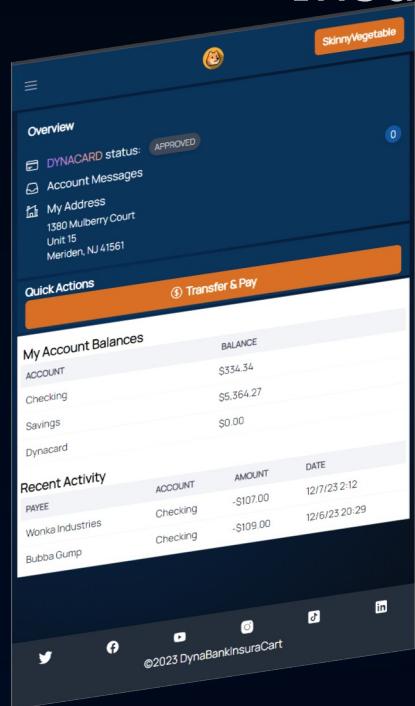
Our demo application for today

DYNABANK INTRODUCTION

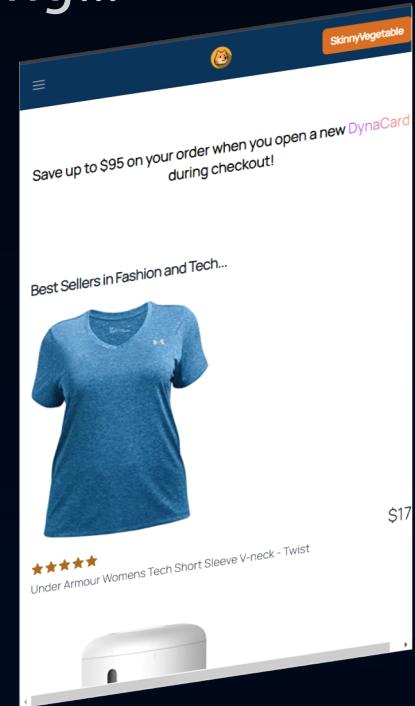
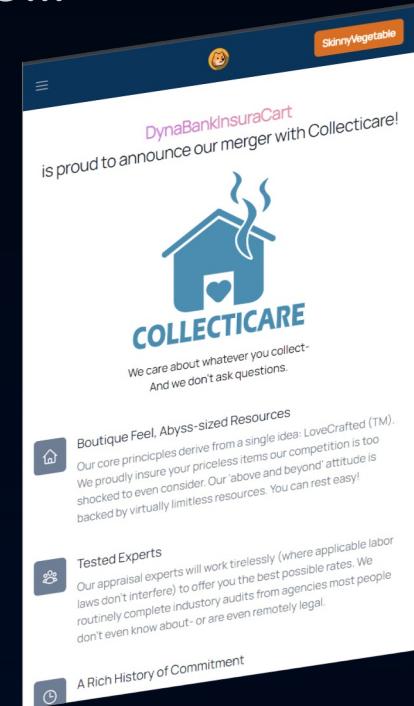
Your one stop
for... Banking...



Insurance...



Shopping...



PEPPER INTRODUCTION

Features:

- Cloud-aware deployment assistant
- Build from the ground up!
- Shows every command in context
- Nerd Alert: Tony Stark reference



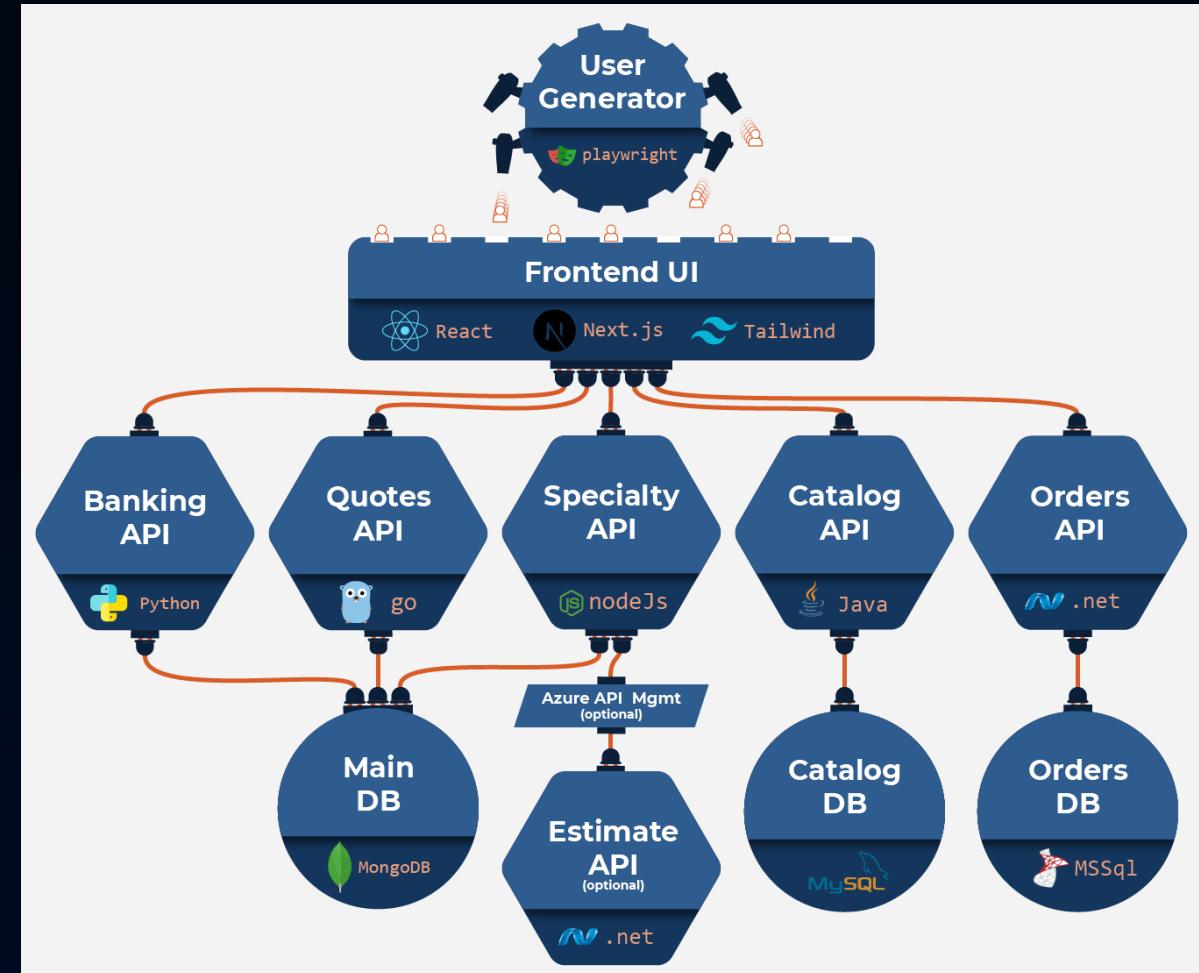
DYNABANK STRUCTURE

Features:

- Complex tech stack
- Active customer generation

We're starting with:

- AKS cluster with Dynabank
- Dynatrace Operator
- Core customer experience
- Administration & Operations Access



THE STORY SO FAR

- We've acquired Collecticare!
- Management directive to streamline the quoting process
- We've developed Instamation™ - instant estimates on new insurance policies
- We're leveraging Azure Web Apps for fast, scalable deployments

DynaBankInsuraCart is proud to announce our merger with Collecticare!



COLLECTICARE

We care about whatever you collect-
And we never call the Police. Never even heard of 'em.

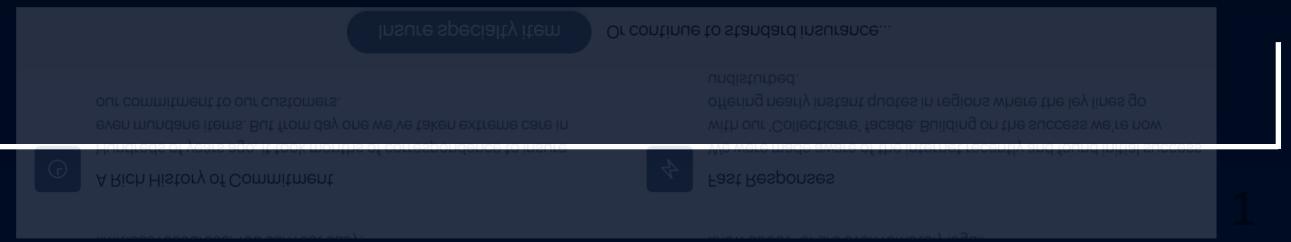
Boutique Feel, Abyss-sized Resources
Our core principles derive from a single idea: LoveCrafted™. We proudly insure your priceless items our competition is too shocked to even consider. Our 'above and beyond' attitude is backed by virtually limitless resources. You can rest easy!

A Rich History of Commitment
Hundreds of years ago, it took months of correspondence to insure even mundane items. But from day one we've taken extreme care in our commitment to our customers.

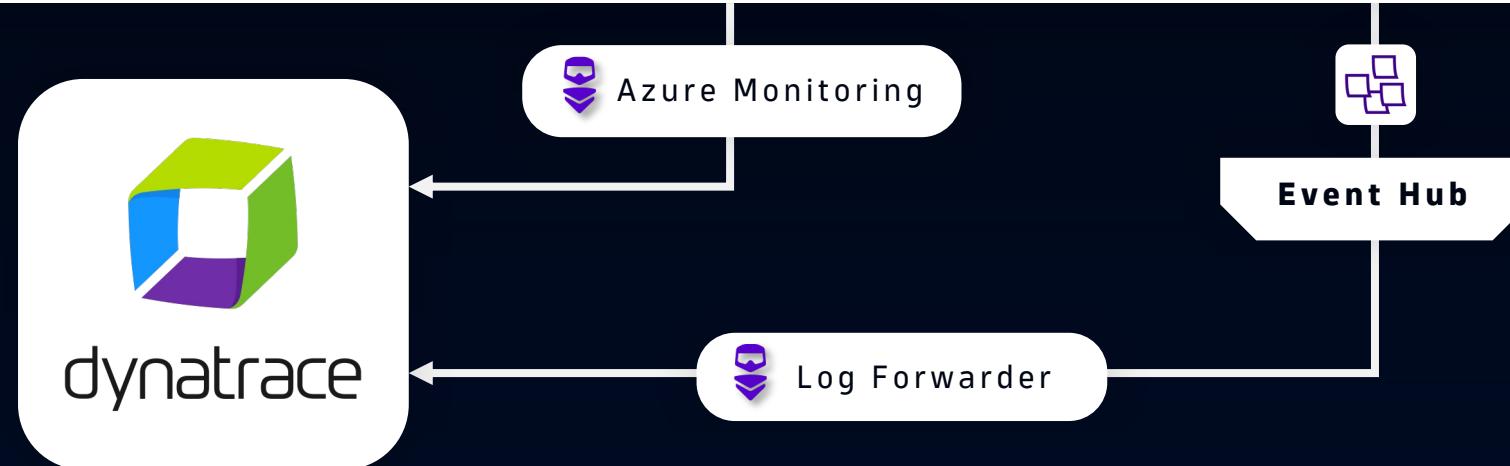
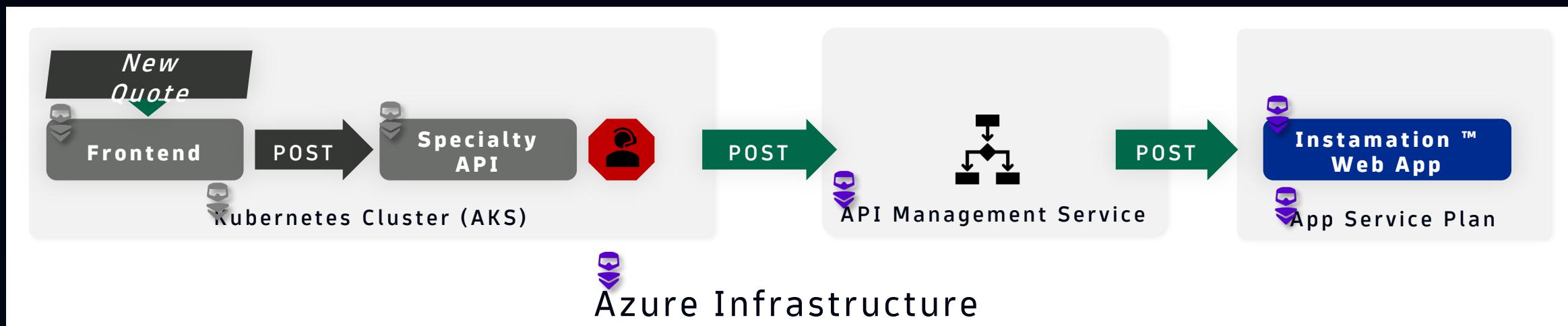
Tested Experts
Our appraisal experts will work tirelessly (where applicable labor laws don't interfere) to offer you the best possible rates. We routinely complete industry audits from agencies most people don't even know about- or are even remotely legal.

Fast Responses
We were made aware of the internet recently and found initial success with our 'Collecticare' facade. Building on the success we're now offering nearly instant quotes in regions where the ley lines go undisturbed.

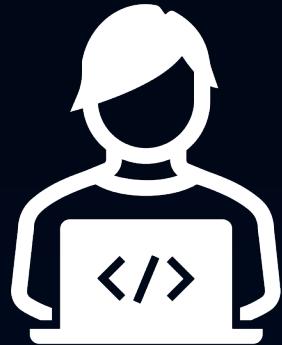
[Insure specialty item](#) [Or continue to standard insurance...](#)



HANDS ON: BACKGROUND

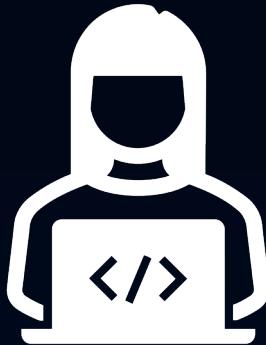


HANDS ON: DYNABANK



- Dynabank
 - Core features
 - Administration
- Dynatrace
 - Smartscape
 - Kubernetes Application view

HANDS ON: INSTAMATION ON AZURE

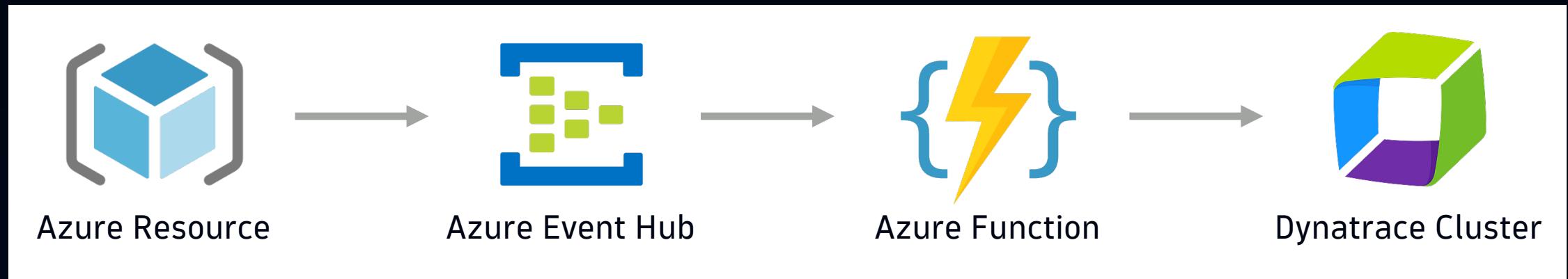


- Azure
 - Deploy web app and Dynatrace extension
 - Confirm working responses
- Dynabank
 - Configure Dynatrace for instant quoting
- Dynatrace
 - Confirm web app visibility

AZURE LOG FORWARDER

The background features a dynamic, abstract design composed of numerous thin, white, curved lines that create a sense of motion and depth. These lines are concentrated in the lower half of the slide, forming several distinct waves that radiate from the bottom right corner towards the top left. The color palette is a gradient transitioning from dark blue at the top to bright cyan at the bottom.

SENDING LOGS VIA LOG FORWARDER



Microsoft Azure Search resources, services, and docs (G+) More

Home > DLF | Resource groups > scw-useast2-common > scw-useast2-ehubns | Event Hubs >

scw-useast2-ehub (scw-useast2-ehubns/scw-useast2-ehub)

Event Hubs Instance

Search Consumer group Delete Refresh Give feedback

Overview JSON View

Essentials

Resource group (move) : scw-useast2-common	Status : Active
Location : East US 2	Namespace : scw-useast2-ehubns
Subscription (move) : DLF	Created : Tuesday, December 19, 2023 at 10:48:41 EST
Subscription ID : 9939cbf8-8de6-49a1-a641-b664b214838f	Updated : Tuesday, December 19, 2023 at 10:49:37 EST
Partition count : 2	Cleanup policy : Delete

Capture events
Use Capture to save your events to persistent storage.

Process data
Process data instantly with Azure Stream Analytics.

Connect
Authenticate with connection strings and SAS policies.

Checkpoint
Create consumer groups to checkpoint your events.

Generate data (preview)
Emit data to your event hub just with a few clicks.

Analyze data (preview)
Ingest to Data Explorer for near real-time analysis.

Event Hub Contents: 1 CONSUMER GROUP | Event Hub status: ACTIVE | Cleanup policy: [DELETE](#) | Partition count: 2

Show data for the last: 1 hour 6 hours 12 hours 1 day 7 days 30 days

scw-useast2-ehub (scw-useast2-ehubns/scw-useast2-ehub) | Shared

Event Hubs Instance

 Search

Add

 Search to filter items...

Policy

scw-useast2-ehubns-auth-rule

Settings

Shared access policies

Configuration

Properties

Locks

Entities

Consumer groups

Features

Capture

Generate data (preview)

Process data

Analyze data (preview)

Automation

SAS Policy: scw-useast2-ehubns-auth-rule

Save Discard Delete Regenerate Primary Key ...

 Manage Send Listen

Primary key

rPnhkl4zFC631wBsY4nJvljzePF6BfbZ++AEhDd7klo=



Secondary key

w2SHASAfcjNQz8gEgjh+SMRcX/H28PTS3+AEhF1Pfxs=



Connection string-primary key

Endpoint=sb://scw-useast2-ehubns.servicebus.windows.net;/SharedAccessKeyName=s...



Connection string-secondary key

Endpoint=sb://scw-useast2-ehubns.servicebus.windows.net;/SharedAccessKeyName=s...



SAS Policy ARM ID

/subscriptions/9939cbf8-8de6-49a1-a641-b664b214838f/resourcegroups/scw-useast2-...



Diagnostic setting

...

 [Save](#) [Discard](#) [Delete](#) [Feedback](#)

A diagnostic setting specifies a list of categories of platform logs and/or metrics that you want to collect from a resource, and one or more destinations that you would stream them to. Normal usage charges for the destination will occur. [Learn more about the different log categories and contents of those logs](#)

Diagnostic setting name

Dynatrace Logs

Logs

Category groups (i) audit allLogs

Categories

 Logs related to ApiManagement Gateway Logs related to Websocket Connections

Metrics

 AllMetrics

Destination details

 Send to Log Analytics workspace Archive to a storage account Stream to an event hub

For potential partner integrations, [click to learn more about event hub integration](#).

Subscription

DLF

Event hub namespace *

scw-useast2-ehubns

Event hub name (optional) (i)

scw-useast2-ehub

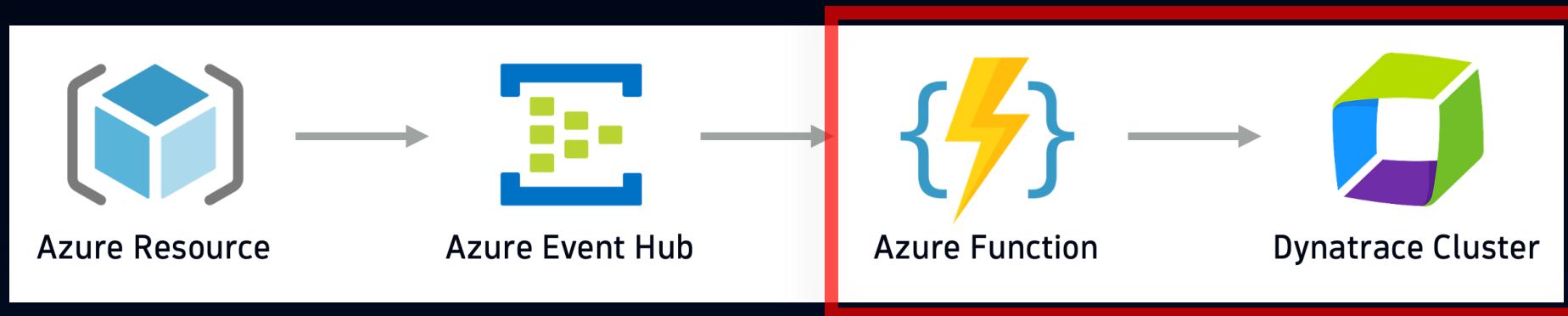
Event hub policy name

RootManageSharedAccessKey

 Send to partner solution

HANDS ON: AZURE LOG FORWARDER

1. Create web app diagnostic setting
2. Deploy Azure log forwarder
3. Validate results in the UI





Logs and events

Powered by Grail™

Explore your log data and Kubernetes events in simple mode. For deeper analysis, or to query business events, switch to advanced mode powered by DQL [DQL](#) Advanced modeFilter by [X](#)[Clear all](#)[Run query](#) Search attributes...

Search results

Execution time: 1 s

Scanned data: 939 kB

Attribute counts are estimated based on sampled data.

Favorites

Available attributes

- [Main](#)
- [Dynatrace](#)
- [Cloud services](#)
- [AWS](#)
- [Azure](#)
 - [azure.location](#)
 - [azure.resource.group](#)
 - [azure.resource.id](#)
 - [azure.resource.name](#)

 SCW-USWEST2-APIM

46

[Create processing rule](#)[Create metric](#)[Format table](#)[Actions](#)

timestamp	status	content
2023-12-21 14:41:57.243	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:57.2430174Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 4, "callerIpAddress": "20.22.167.237", "correlationId": "e8f8d82e-c706-4066-b4ca-3f8ba1980962", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
2023-12-21 14:41:56.676	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:56.6763869Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 4, "callerIpAddress": "20.22.167.237", "correlationId": "59ff5ffe-fc21-44b3-ba7c-e7dfb3b294c2", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
2023-12-21 14:41:53.632	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:53.6325701Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 4, "callerIpAddress": "20.22.167.237", "correlationId": "d2b6977c-92a0-482d-a55d-a400c2784d52", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
2023-12-21 14:41:48.693	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:48.6935945Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 191, "callerIpAddress": "20.22.167.237", "correlationId": "d07b13ee-3e90-4c9d-84fc-6b4f9d67d17c", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
2023-12-21 14:41:48.425	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:48.4250559Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 305, "callerIpAddress": "20.22.167.237", "correlationId": "9b7a902b-0b39-4bcb-a250-f428aa229223", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
2023-12-21 14:41:46.479	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:46.4796856Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 10, "callerIpAddress": "20.22.167.237", "correlationId": "5a0a0182-aa9f-41aa-9f87-3dd74ef8df45", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
2023-12-21 14:41:40.259	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:40.2597318Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 5, "callerIpAddress": "20.22.167.237", "correlationId": "b6284ed1-9fb4-41b7-8944-bb4e2f82aab1", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}
		{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:41:39.8535005Z", "operationName": "Microsoft.ApiManagement/GatewayLogs", "category": "GatewayLogs", "durationMs": 1, "callerIpAddress": "20.22.167.237", "correlationId": "b6284ed1-9fb4-41b7-8944-bb4e2f82aab1", "location": "East US 2", "properties": {"method": "GET", "path": "/api/v1/logs", "query": "version=0.41.16846.0&resourceId=SCW-USWEST2-APIM"}}



Logs and events Powered by Grail™

Explore your log data and Kubernetes events in simple mode. For deeper analysis, or to query business events, switch to advanced mode powered by DQL 

I Switch to Simple Mode

```
1 fetch logs //, scanLimitGBytes: 500, samplingRatio: 1000
2 | filter matchesValue(azure.resource.name, "SCW-USEAST2-APIM")
3 | filter matchesPhrase(content, "kodaiishikawa")
4 | sort timestamp desc
```

 Run query

Search results Execution time: 0 s Scanned data: 1.5 MB Visualization type: Table Single value Bar

timestamp	status	content	loglevel	log.source
2023-12-21 14:46:55.551	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:46:55.5511244Z", "operatio...	INFO	GatewayLogs
2023-12-21 14:46:55.191	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:46:55.1917287Z", "operatio...	INFO	GatewayLogs
2023-12-21 14:46:51.962	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:46:51.9624112Z", "operatio...	INFO	GatewayLogs
2023-12-21 14:46:48.376	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:46:48.3766062Z", "operatio...	INFO	GatewayLogs
2023-12-21 14:46:46.115	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:46:46.1151801Z", "operatio...	INFO	GatewayLogs
2023-12-21 14:46:43.872	INFO	{"DeploymentVersion": "0.41.16846.0", "Level": 4, "isRequestSuccess": true, "time": "2023-12-21T19:46:43.8723640Z", "operatio...	INFO	GatewayLogs

info | 2023-12-21 14:46:55.551 | Log

Content

```
{  
  "DeploymentVersion": "0.41.16846.0",  
  "Level": 4,  
  "isRequestSuccess": true,  
  "time": "2023-12-21T19:46:55.5511244Z",  
  "operationName": "Microsoft.ApiManagement/GatewayLogs",  
  "category": "GatewayLogs",  
  "durationMs": 4,  
  "callerIpAddress": "20.22.167.237",  
  "correlationId": "860660c9-26c2-46ba-90ae-68830d33e049",  
  "location": "East US 2",  
  "properties": {  
    "method": "POST",  
    "url": "https://scw-useast2-apim.azure-api.net/scw-webapp-kodaiishikawa1",  
    "backendResponseCode": 200,  
    "responseCode": 200,  
    "responseSize": 1096,  
    "cache": "none",  
    "backendTime": 3,  
    "requestSize": 823,  
    "apiId": "scw-webapp-kodaiishikawa",  
    "operationId": "658492c5dd7d3df88de5bcde",  
    "clientProtocol": "HTTP/1.1"
```

Show more

 View user session

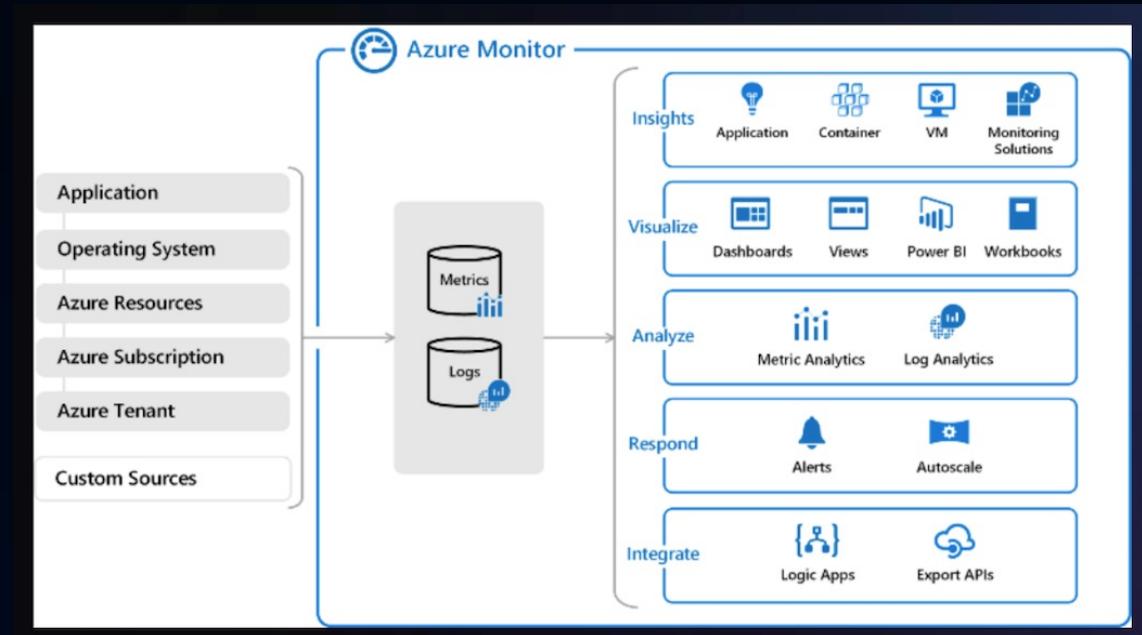
 View trace

AZURE MONITOR



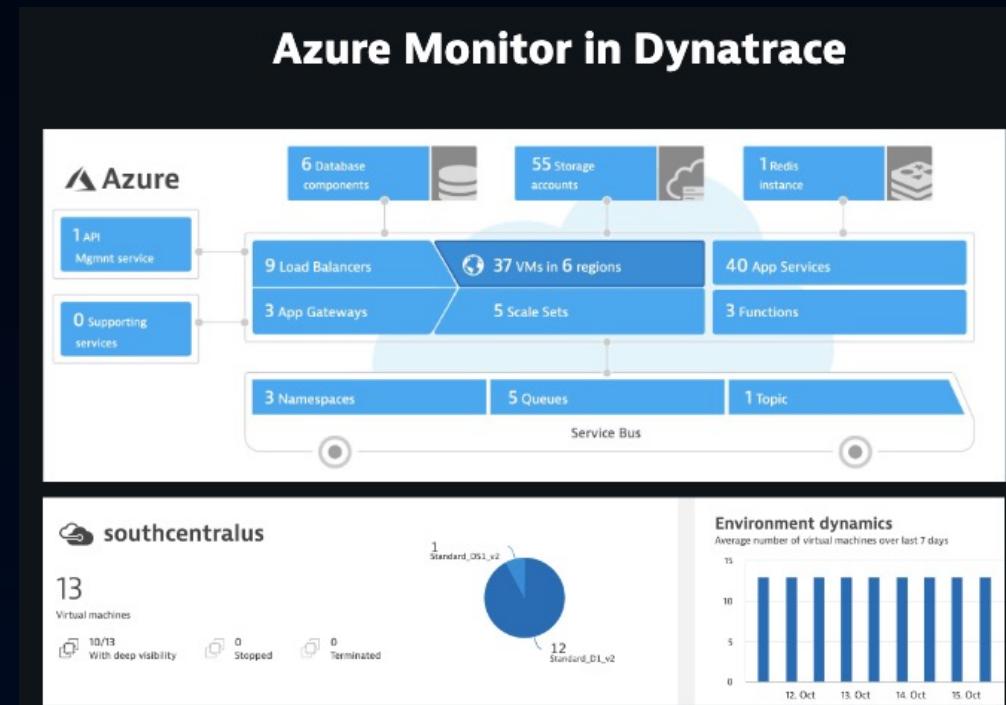
AZURE MONITOR

- Azure Monitor is a monitoring solution for collecting, analyzing, and responding to monitoring data from your cloud and on-premises environments.
- All data collected by Azure Monitor fits into one of two fundamental types, metrics and logs.

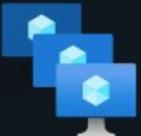


BENEFITS DYNATRACE BRINGS TO AZURE MONITOR AND APP INSIGHTS

- Dynatrace integrates, complements, and extends Azure Monitor and App Insights
- Dynatrace brings value by enriching the data from Azure Monitor and App Insights and extending observability into the platform with additional metrics for cloud infrastructure, load balancers, API Management Services, and more.
- Visual studio integration with App Insights strengthens Developers
- This extended observability improves operations, reduces MTTR and increases innovation.



FULL STACK SUPPORT FOR AZURE CLOUD NATIVE ARCHITECTURES



Deploy OneAgent - ARM Site Extensions and Azure Virtual Machine Scale Sets

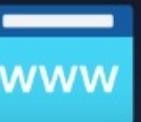


Containers & Kubernetes

- **AKS – OneAgent Operator**
- **Azure Service Fabric**

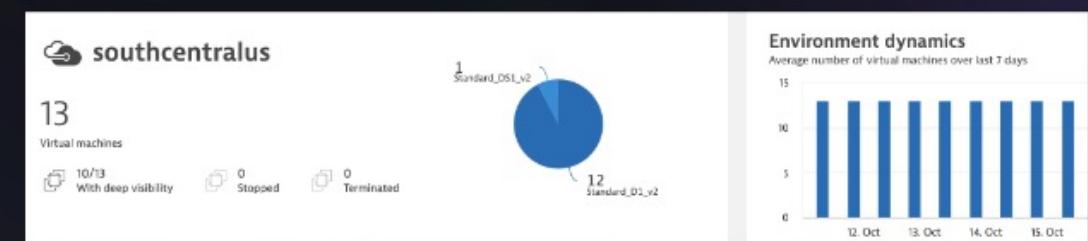


Code level insights for Azure App Services & Azure Functions



Azure Spring Cloud – AI-assisted problem detection and automatic root-cause analysis for Java Spring Boot applications

Azure Monitor in Dynatrace



HANDS-ON

DEPLOY SERVICE PRINCIPAL



Monitoring Prerequisites:

1. Dynatrace Admin Permissions
2. Active Gate capable of Azure monitoring
3. Azure admin Permissions

HANDS-ON

DEPLOY SERVICE PRINCIPAL



To Deploy the service-principal

1. Go to Azure CLI
2. Run this command to create a Service-Principal , add in the name of your user
 - az ad sp create-for-rbac --name <YourServicePrincipalName> --role reader --scopes /subscriptions/9939cbf8-8de6-49a1-a641-b664b214838f --query "{ClientID:appId,TenantID:tenant,SecretKey:password}"
 - This results in similar values

```
{  
  "ClientID": "afc5c967-1dbc-4072-89fc-5ff83b52be4a",  
  "SecretKey": "HYn8Q~MjuBvyYefSWoHA1JZwp9bK4yovsXqj~dvZ",  
  "TenantID": "cbc51a1b-63d3-4953-8118-ddb531ea243a"  
}
```

HANDS-ON

CONNECT AZURE INSTANCE IN DYNATRACE

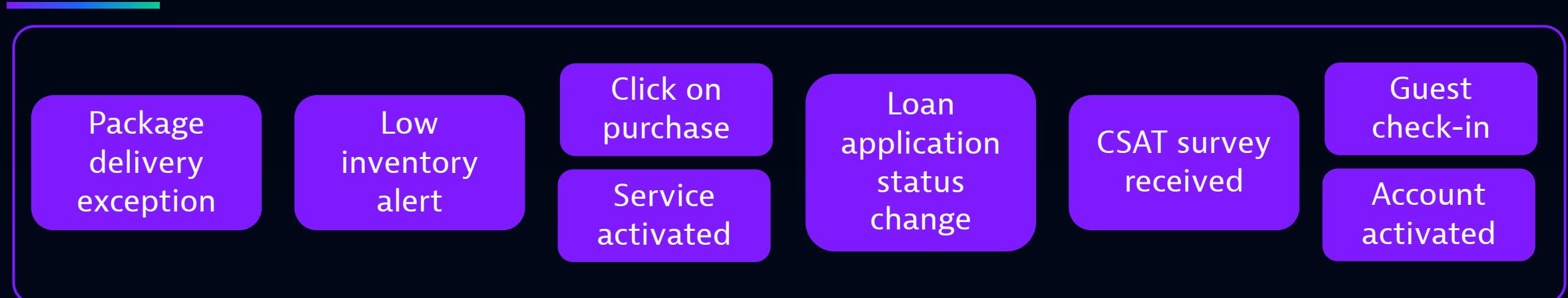


- Navigate to your Dynatrace Tenant Provided for you
- Go to Settings --> Cloud and Virtualization --> Azure
- Click on Connect New instance
- Create a connection name
- Add the ClientID, SecretKey and TenantID that were created in Azure Cli
- Click Connect --> Your Azure Instance is now connected in Dynatrace

BUSINESS EVENTS



CAPTURE ANY EVENT THAT'S IMPORTANT TO YOUR BUSINESS



Business events from anywhere



OneAgent



Web and mobile RUM

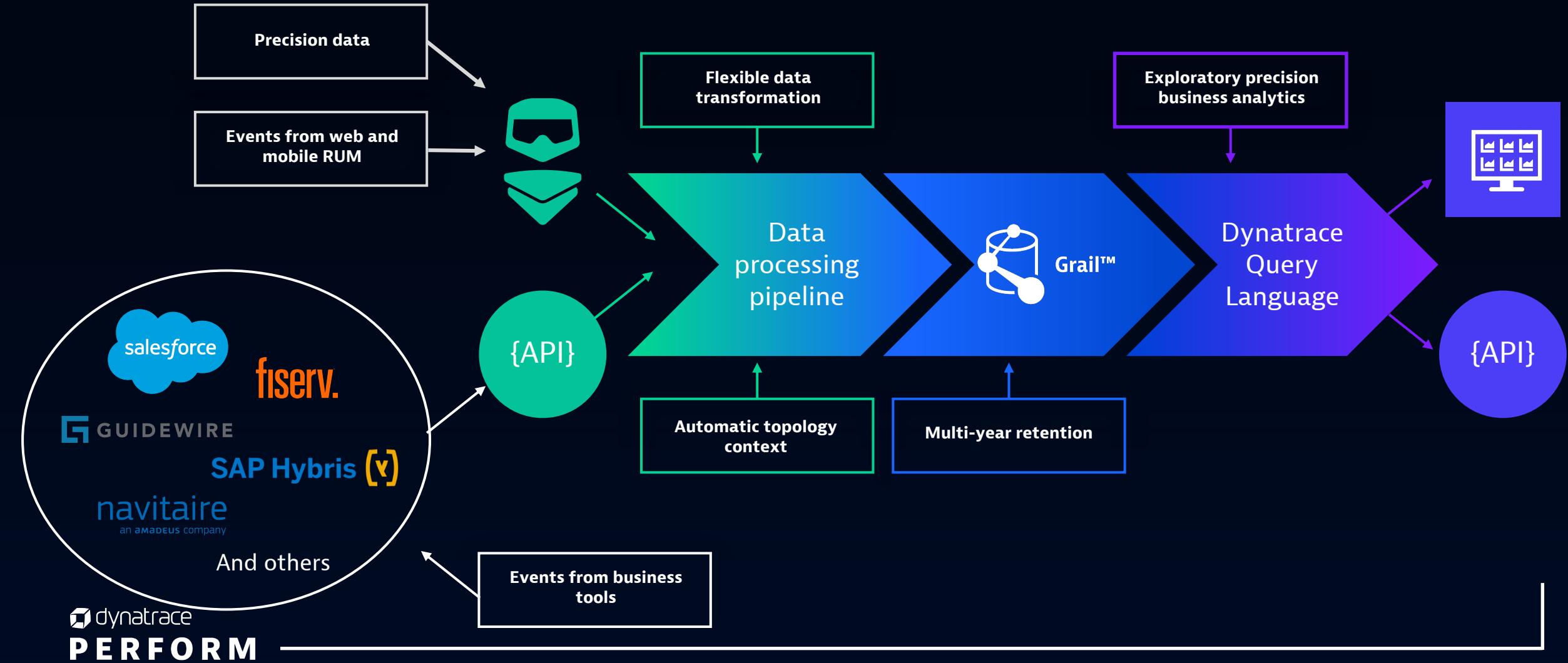


External business tools



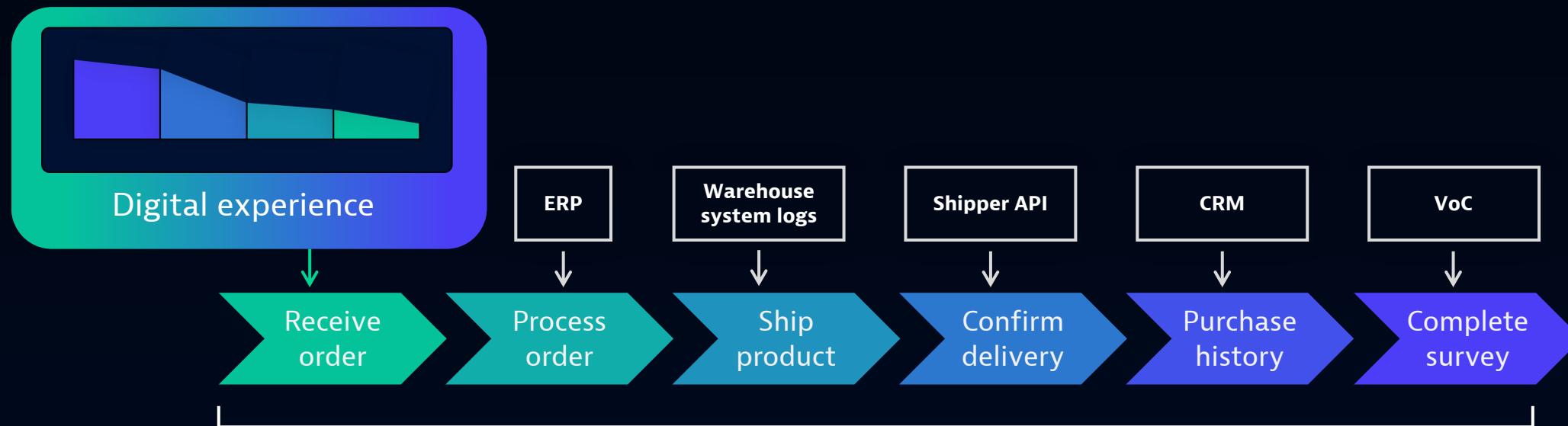
Log files

BUSINESS EVENTS: ARCHITECTURAL OVERVIEW



GAIN VISIBILITY INTO COMPLETE BUSINESS PROCESSES

Business events expand use cases beyond the digital conversion



Business processes and end-to-end customer experience

60.41

Hours

13

Process exceptions

2

Shipper exceptions

4.01

Net Promoter Score (NPS)

POWER BUSINESS DASHBOARDS, EXPLORATORY ANALYTICS, AND AUTOMATION

Report business KPIs and explore all your business data interactively

The image displays a composite view of three data visualization tools:

- Left Dashboard:** A dark-themed dashboard titled "Bobbleheads Dashboard". It includes several cards: "Orders and Reviews" (Orders Processed: 3597, Orders Sales: \$35790.0, Net Promoter Score (NPS): 85.0), "Order Processing and Warehouse Health" (Order to Warehouse: 8.75 hrs, Warehouse to Shipment: 24.71 hrs, Shipped to Delivered: 21.99 hrs, Order to Delivery: 54.74 hrs), and various charts and tables related to orders, reviews, and warehouse performance.
- Right Dashboard:** A light-themed dashboard titled "Trading Analysis". It shows a code editor with a query:

```
1 fetch bizevents  
2 | filter event.type == "com.easytrade.buy-assets"  
3 | fieldsAdd TradingVolume = amount*price  
4 | summarize sum(TradingVolume), alias: Trading_Volume, by: {bin(timestamp, 1h)}
```

, a table with 169 records, and a bar chart showing trading volume over time.
- Bottom Notebook:** A separate window titled "Notebooks" showing a notebook titled "Trading Analysis". It contains the same code as the dashboard, a table with 169 records, and a bar chart showing trading volume over time.



PERFORM

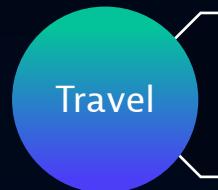
UNLOCKING NEW BUSINESS USE CASES ACROSS INDUSTRIES



Extract payment details from payment gateways



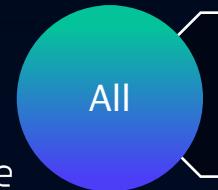
Secure restaurant table reservations in real-time



Get insight into check-in kiosks



Monitor payment processing



Reduce call center traffic with insight into business and IT errors



Track cellphone hardware upgrades



Measure the value of aggregators – quotes sent vs. policies bound



Monitor financial trading process of fund managers



Optimize carbon impact



Improve Salesforce administration with real-time performance insights

GRAIL



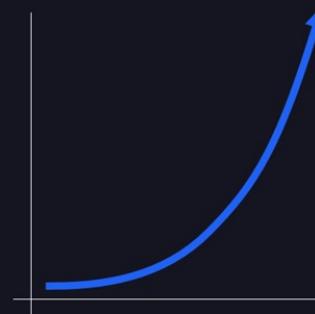
The Why?

THE WHY BEHIND GRAIL



THE CHALLENGE

Data collection
explosion



Data ingest grows
significantly



Silos without context
leads to alert storms and
increased MTTR



Automation and
intelligence is required



THE WHY BEHIND GRAIL



*Many Data
types*

- Traces
- Logs
- Metrics
- Events
- BizEvents
- SecEvents
- RUM
- Topology

*Single
Storage*

- Grail

*Flexible
Retention*

- Buckets
 - Years of retention across all data types

*Unified
Accessibility*



DELIVERY ANSWERS + INTELLIGENT AUTOMATION DRIVEN BY DATA



Grail™

Purpose-built data lakehouse

Focus on observability, security and automation
Optimized for Dynatrace AI to process billions of dependencies

Observability data in full context

Single datastore for all observability signals, with real-time topology mapping
Logs and traces, fully connected to get answers fast

100x more scalable

100 TB/day data ingest per tenant and growing!

Instant answers

No index, no schema definition, no rehydration
Data analytics at any time with Dynatrace Query Language

Cost efficient storage

No need to manage cold, warm or hot storage tiers

Blazing fast query performance

Massive parallel processing is up to 100 times faster
~1TB in ~1s @ 1000 cores

INTRODUCING GRAIL



GRAIL
™

LAUNCHED in OCT 2022

Causational data
lakehouse,
massively parallel
processing,
context-rich analytics



DELIVERING ANSWERS THROUGH DATA



LOG MANAGEMENT AND ANALYSIS POWERED BY GRAIL



LAUNCHED in OCT 2022



Logs to Metrics



Troubleshooting



Application Optimization



Audit and Forensics



DYNATRACE QUERY LANGUAGE



```
logs, from:now()-20m  
filter endsWith(log.source, "/media/datastore/server-data")  
and dt.host_group.id == "cluster_deve2e"  
select content, timestamp('yyyy-MM-dd HH:mm:ss') as ts  
      , ld json:settings  
      , ipaddr:client_ip //IPv4/6"  
ids ts,  
    type = settings[eventType],  
    tenant = settings[tenantId],  
    user = settings[userId],  
    change = settings[jsonPatch]  
filter in(type, array("UPDATE", "DELETE")) and type != "DELETE"  
groupby creates = countIf(type=="CREATE"), upd = countIf(type=="UPDATE")  
      , del = countIf(type=="DELETE")  
      , by:{tenant, user}  
idsAdd changes_per_min = (upd + del)/20  
order changes_per_min desc
```



Purpose-built
for observability and security

Powerful
for even advanced use-cases,
parsing built-in

Effortless
migration from e.g. Splunk

DAY IN A LIFE SCENARIO



- Go to Day In a life on the suschwowcode.io
- Download the .json file
- Go to Dynatrace -> Notebooks
- Upload/ Import the json file
- Follow the instructor



PERFORM

AZURE NATIVE DYNATRACE SERVICE



HANDS-ON TRAINING //



JAY GURBANI
Dynatrace

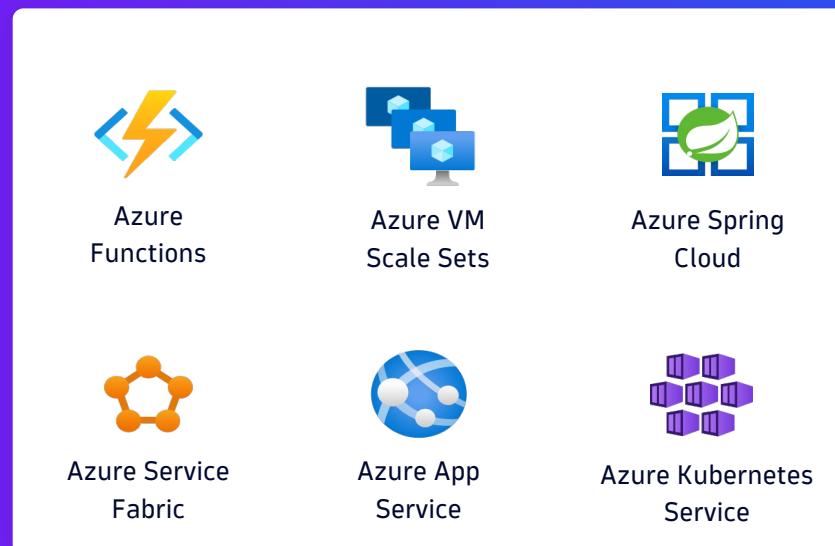
Strong Collaboration with MICROSOFT

- Leading intelligent observability platform
- Top Microsoft Marketplace Partner
- Deep technical integration – availability of Azure Native Dynatrace Service
- MACC eligible
- Well Architected & Cloud Adoption Framework

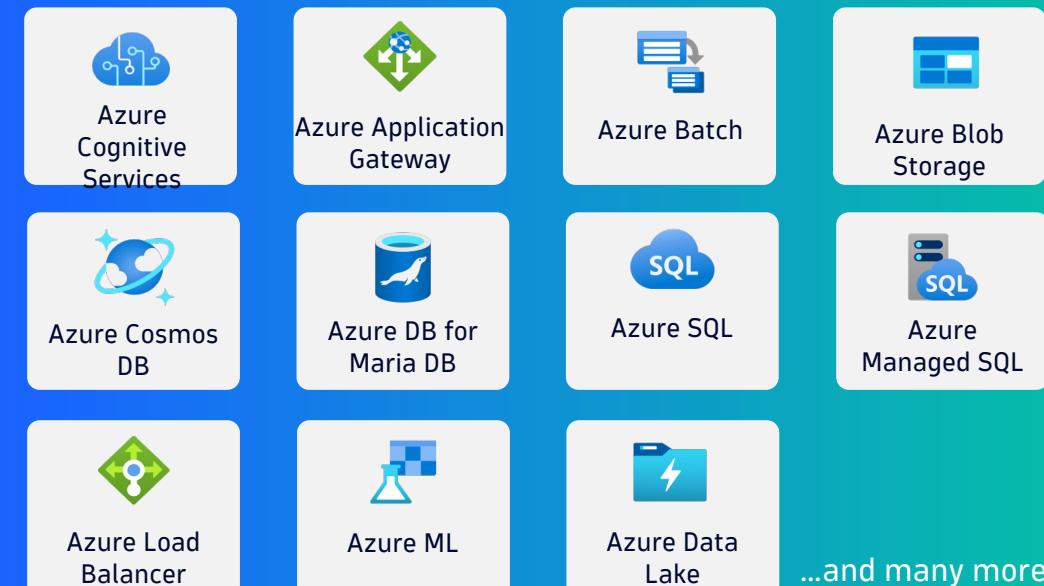
The screenshot shows the Microsoft Azure Marketplace product page for "Azure Native Dynatrace Service". At the top, it displays the Dynatrace logo and a 4.7 rating from 999 reviews. Below this, there are tabs for "Overview", "Plans + Pricing", and "Ratings + reviews". A descriptive text below the tabs reads: "Observability built for the modern cloud: Delivering answers and intelligent automation from data".



Dynatrace real-time observability into dynamic Azure environments



Ever growing support for Azure services



AZURE SAAS REGIONS

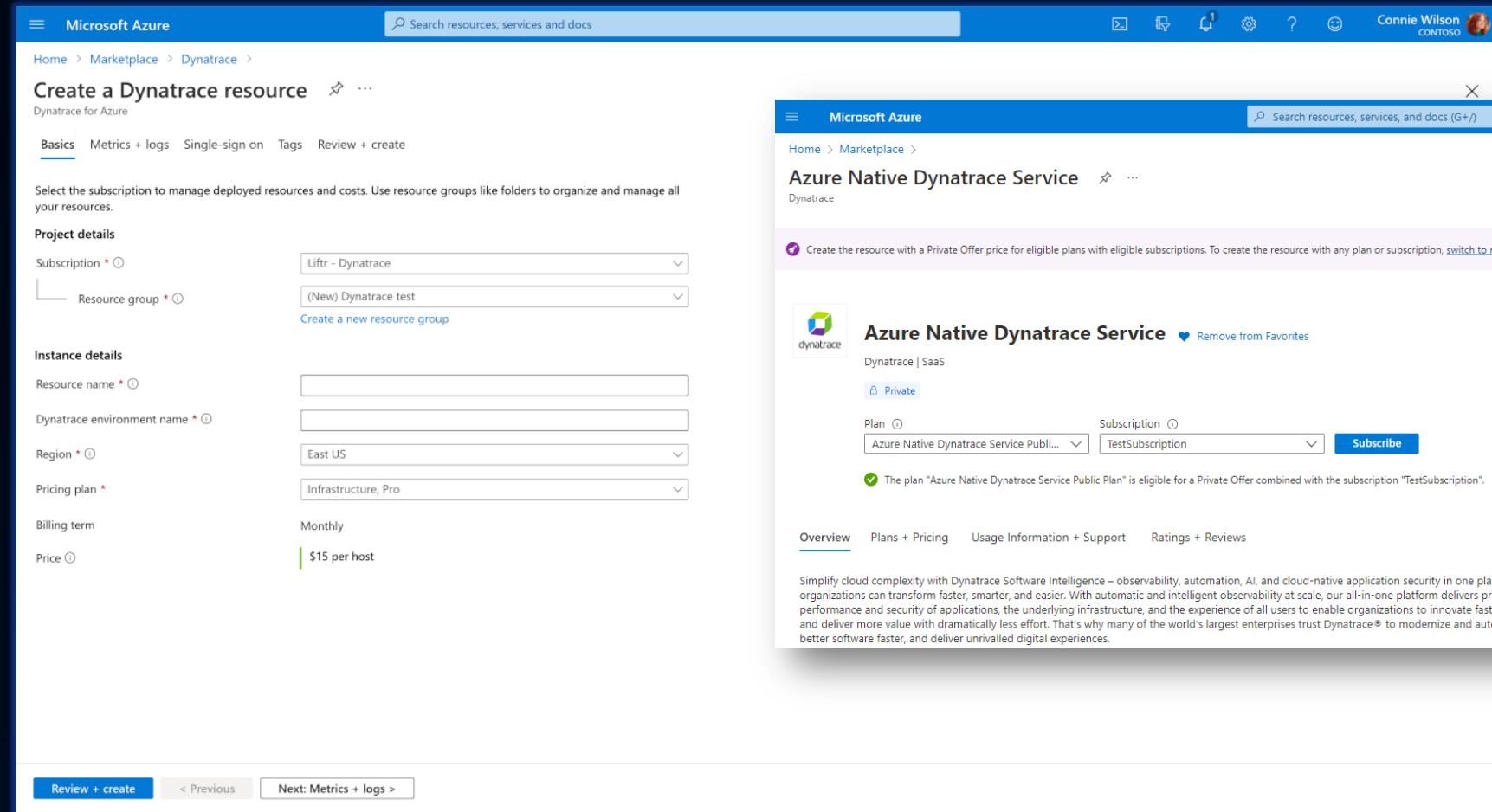
- Six Azure Regions:
 - US-East (Virginia)
 - US-West3 (Phoenix)
 - CA-Central (Toronto)
 - EU-West (Netherlands)
 - Switzerland North
 - UAE-North (Dubai)



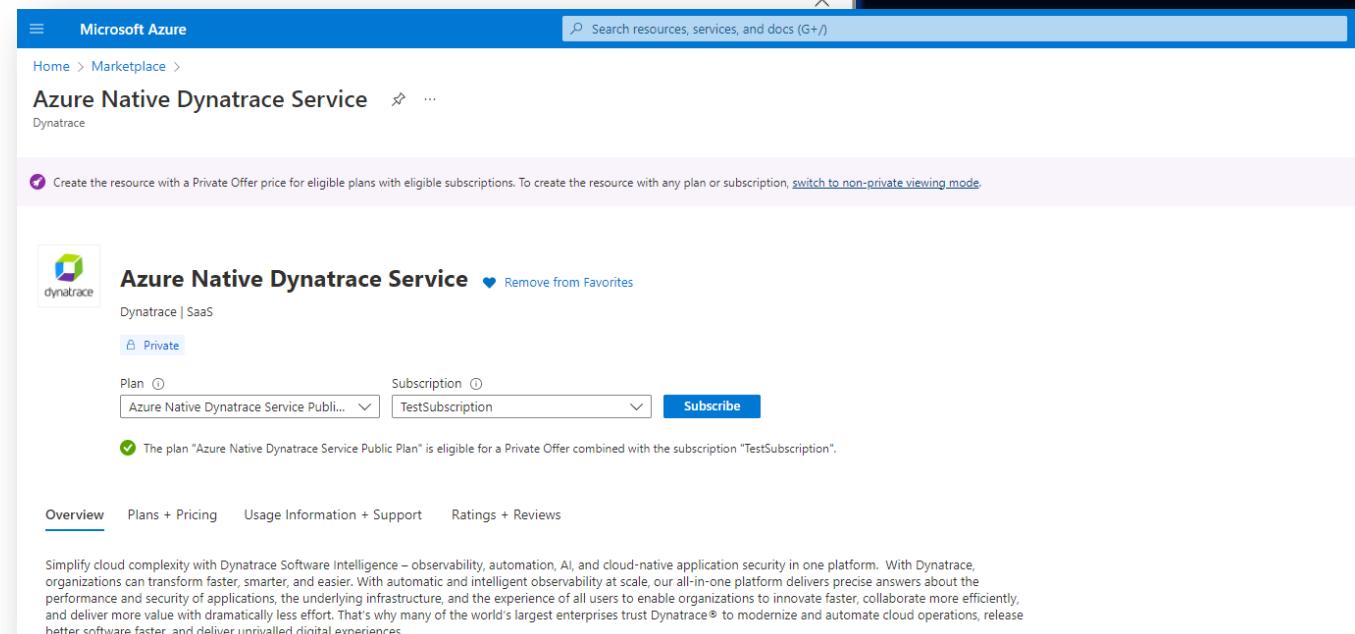
AZURE NATIVE DYNATRACE SERVICE



Setup and Deploy Dynatrace SaaS within the Azure Portal



The screenshot shows the 'Create a Dynatrace resource' wizard in the Microsoft Azure portal. The 'Basics' tab is selected. The 'Subscription' dropdown is set to 'Liftr - Dynatrace'. The 'Resource group' dropdown shows '(New) Dynatrace test' and has a 'Create a new resource group' option. Under 'Instance details', the 'Resource name' field is empty. The 'Dynatrace environment name' field is also empty. The 'Region' dropdown is set to 'East US'. The 'Pricing plan' dropdown is set to 'Infrastructure, Pro'. The 'Billing term' is 'Monthly' and the 'Price' is '\$15 per host'. At the bottom, there are 'Review + create' and 'Next: Metrics + logs >' buttons.



The screenshot shows the 'Azure Native Dynatrace Service' listing in the Microsoft Azure Marketplace. It is categorized under 'Dynatrace | SaaS'. The 'Plan' dropdown is set to 'Azure Native Dynatrace Service Public Plan' and the 'Subscription' dropdown is set to 'TestSubscription'. A 'Subscribe' button is visible. A note indicates that the plan is eligible for a Private Offer. Below the plan selection, there are tabs for 'Overview', 'Plans + Pricing', 'Usage Information + Support', and 'Ratings + Reviews'. A descriptive paragraph about Dynatrace's software intelligence capabilities is present.

AZURE PORTAL SSO

- Use Azure AD to login to your Dynatrace Tenant

The screenshot shows the Microsoft Azure portal interface. On the left, the navigation pane includes sections for Overview, Activity log, Access control (IAM), Tags, Settings (Single sign-on, Properties, Locks), Dynatrace environment config (Metrics and logs, Monitored resources, Virtual Machines, App Services), Automation (Tasks (preview)), and Support + troubleshooting (New support request). The main content area displays the 'alliances_liftr_demo_jg' resource group details, including its status as 'Subscribed' with a 'Pricing plan' of 'azureportalintegrationprivatepreview' and a 'Billing term' of 'Monthly'. A 'Get started' button is visible. Below this, a 'Get started with Dynatrace' section introduces Dashboards, Logs, and Smartscape® Topology. A large blue arrow points from the Azure portal towards the Dynatrace Application Overview dashboard on the right. This dashboard provides real-time monitoring insights with four main panels: Customer Experience (107k satisfied, 6.58k tolerating, 4.29k frustrated), Requests (25.2k requests for various URLs like www.commerceeasytravel.com), Duration (5.95s average duration), and Errors (1.34k errors for various URLs). It also features a Smartscape topology map and an Application Health chart.

TRANSACT DIRECTLY THROUGH AZURE

The image shows two side-by-side screenshots of cloud service management interfaces.

Microsoft Azure Invoices (Top):

- Left Sidebar:** Home > Easy Travel > Easy Travel | Invoices
- Header:** Microsoft Azure, Search resources, services, and docs (G+), pawel@siwek.ninja PAWEŁ PRIV
- Main Content:** Overview of invoices for the "Easy Travel" subscription. It includes sections for Default payment method (Card ending with 1234), Next invoice (due 6/9/2021), and Useful links (Update sold to, Add invoice recipients). A table lists 12 invoices from 2020 to 2021, all marked as Paid.

Invoice ID	Billing Period	Invoice date	Total amount	Status	Type	Download
G004504806	5/1/2021 - 5/31/2021	6/9/2021	€0.00	Paid	Azure Marketplace and Reservatio...	Download
G003989989	4/27/2021 - 4/30/2021	5/9/2021	€0.00	Paid	Azure Marketplace and Reservatio...	Download
E0600DVH1D	1/17/2021 - 2/16/2021	3/11/2021	€6.23	Paid	Azure services	Download
E0600DKKAH	12/17/2020 - 1/16/2021	2/11/2021	€8.07	Paid	Azure services	Download
E0600D9KA5	11/17/2020 - 12/16/2020	1/11/2021	€7.98	Paid	Azure services	Download
E0600CZ74H	10/17/2020 - 11/16/2020	12/11/2020	€8.26	Paid	Azure services	Download
E0600COLYK	9/17/2020 - 10/16/2020	11/11/2020	€7.86	Paid	Azure services	Download
E0600CEDQV	8/17/2020 - 9/16/2020	10/11/2020	€8.23	Paid	Azure services	Download
E0600CEPQV	7/17/2020 - 8/16/2020	9/11/2020	€8.23	Paid	Azure services	Download
E0600CEPQV	6/17/2020 - 7/16/2020	8/11/2020	€8.23	Paid	Azure services	Download
E0600CEPQV	5/17/2020 - 6/16/2020	7/11/2020	€8.23	Paid	Azure services	Download

Dynatrace Environment (Bottom):

- Left Sidebar:** Home > Dynatrace > pbora-Dynatrace
- Header:** Search, Refresh, Disable, Delete, Change plan, Configure single sign-on
- Main Content:** Overview of the pbora-Dynatrace environment. It shows details like Resource group, Region, Subscription, and Tags. The Billing term is set to Monthly.

SINGLE CLICK DEPLOYMENT

- One-click deployment for Azure VM's and App Services

The screenshot shows the Dynatrace Azure extension settings interface. On the left, there's a sidebar with options like Overview, Activity log, Access control (IAM), Tags, Settings (Single sign-on, Properties, Locks), Dynatrace environment config (Metrics and logs, Monitored resources, Virtual Machines, App Services), Automation (Tasks (preview)), Support + troubleshooting (New support request), and Dynatrace logo.

In the main area, there's a dialog titled "Install the Dynatrace OneAgent". It has a radio button for "Enable Log monitoring" set to "Yes". Below it is a "Host group" input field containing three items: "demo3", "dt-orders-services", and "litrdemovm". Each item has a status indicator: "Running" for demo3 and dt-orders-services, and "Not Installed" for litrdemovm. To the right of the host group are several status columns: "Not installed" (green), "N/A" (grey), and "N/A" (grey).

At the bottom of the dialog are "OK" and "Cancel" buttons. A large green callout box with a purple border is overlaid on the bottom right of the dialog, containing the text:

No need to generate a PaaS token for installer Download.
Bulk installation for many VM's

GRANULAR ENVIRONMENT BY ENVIRONMENT CONTROLS

- At-a-glance view which resources are sending metrics and logs
- Easily control which resources can send metrics and logs via Azure tags

The screenshot displays two windows from the Microsoft Azure portal.

The left window shows the "Create a Dynatrace environment" wizard in "Metrics and logs" mode. It includes sections for "Metrics" and "Logs". Under Metrics, it says "Metrics for Virtual Machine (VM) and App Services resources will be collected through Dynatrace OneAgent". Under Logs, it says "Logs for all defined sources will be sent to Dynatrace based on the tags inclusion/exclusion criteria". There are checkboxes for "Send subscription activity logs" and "Send Azure resource logs for all defined sources". Below these is a table for filtering logs by tags.

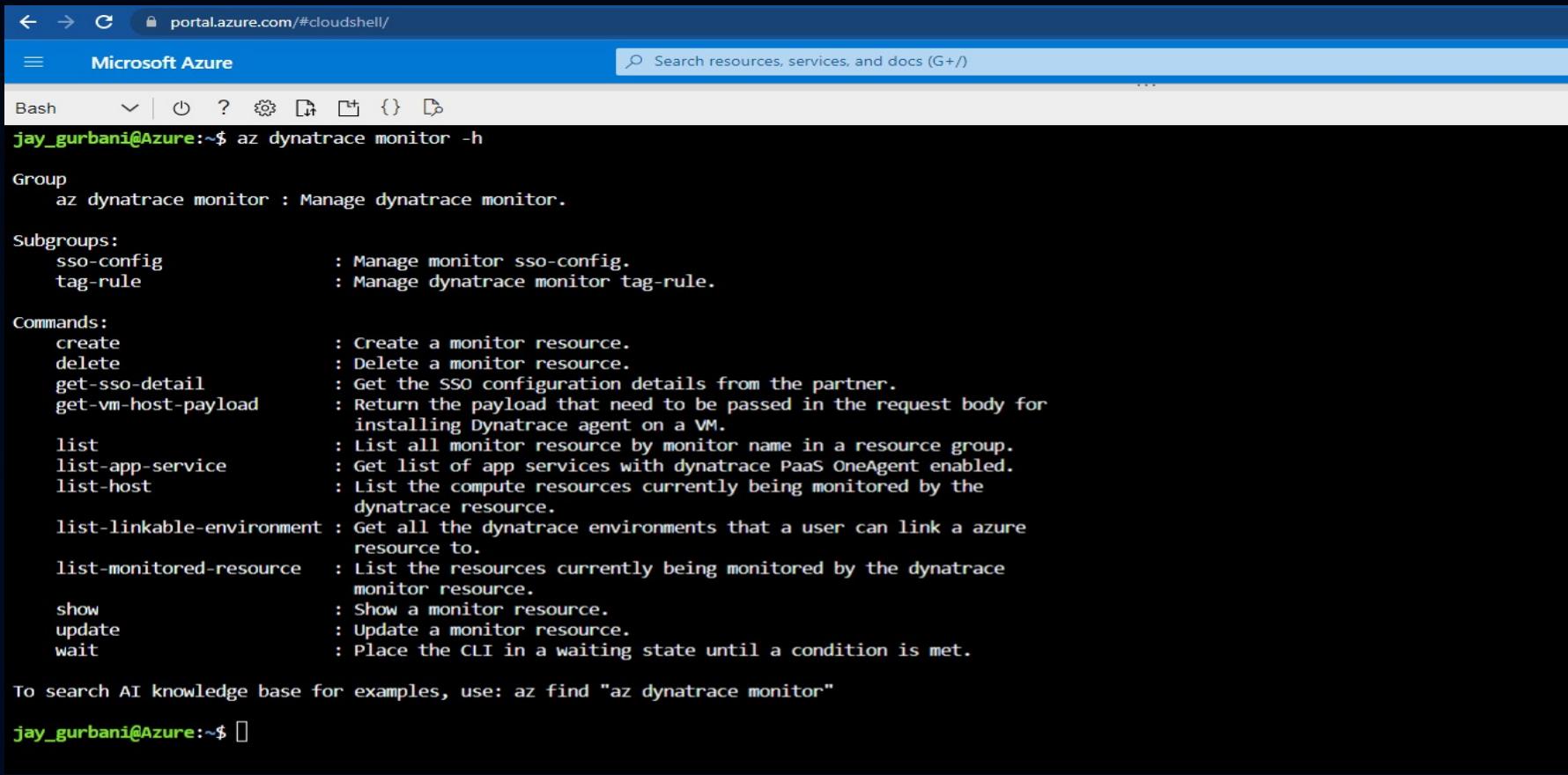
Action	Name	Value
Include	<input type="text"/>	<input type="text"/>

The right window shows the "Monitored resources" blade for the environment "alliances_litr_demo_jg-081122". It lists various Azure resources and their log collection status to Dynatrace:

Resource name	Resource type	Resource group	Region	Logs to Dynatrace
alliances_litr_demo_jg-vnet	Virtual network	alliances_litr_demo_jg	East US	Sending
dem03-ip	Public IP address	alliances_litr_demo_jg	East US	Sending
dh-orders-servicesNSG	Network security group	alliances_litr_demo_jg	East US	Sending
dh-orders-servicesPubIPD	Public IP address	alliances_litr_demo_jg	East US	Sending
dh-orders-servicesVNET	Virtual network	alliances_litr_demo_jg	East US	Sending
litrdemopappv02	App Service Environment	alliances_litr_demo_jg	East US	Sending
litrdemopappv02-NSG	Network security group	alliances_litr_demo_jg	East US	Sending
litrdemovm-ip	Public IP address	alliances_litr_demo_jg	East US	Sending
litrdemovm-msg	Network security group	alliances_litr_demo_jg	East US	Sending
litrtest-ppsvc-v2	App Service	alliances_litr_demo_jg	East US	Sending
test-dt-litr	App Service	alliances_litr_demo_jg	East US	Sending
testwebappforlitr	App Service	alliances_litr_demo_jg	East US	Sending
dem03-msg	Network security group	alliances_litr_demo_jg	East US	Logs not configured
dem04-msg	Network security group	alliances_litr_demo_jg	East US	Logs not configured
fab59822-f4d2-4576-b34f-58a5d4cdac49-e8bd2ef6-0f6e	Event Grid System Topic	default-eventgrid	global	N/A
alliances-litr-temb9ba	Storage account	alliances_litr_demo_jg	East US	N/A
ASP-alliances-litr-temb9j-bf03	App Service plan	alliances_litr_demo_jg	East US	N/A
ASP-alliances-litr-temb9j-b10f	App Service plan	alliances_litr_demo_jg	East US	N/A
cz21000320020424ea5f	Storage account	cloud-shell-storage-eastus	East US	N/A
DefaultWorkspace-6ab59822-f4d2-4576-b34f-58a5d4cdac49-000000000000	Log Analytics workspace	defaultresourcegroup-eus	East US	N/A
Direct	Log of monitored	alliances_litr_demo_jg	East US	N/A

Deeper Azure CLI Integration

- Deploy and configure Dynatrace resources directly within Azure CLI Shell to extend deployments via other IaaC tools.



The screenshot shows a terminal window in the Microsoft Azure Cloud Shell. The URL is `portal.azure.com/#cloudshell/`. The title bar says "Microsoft Azure". The search bar says "Search resources, services, and docs (G+/-)". The terminal prompt is `jay_gurbani@Azure:~$`. The command entered is `az dynatrace monitor -h`. The output is a detailed help message for the `az dynatrace monitor` command, listing its subgroups and commands, their descriptions, and examples. At the bottom, it says "To search AI knowledge base for examples, use: az find "az dynatrace monitor"" and ends with the prompt `jay_gurbani@Azure:~$ []`.

```
Group
  az dynatrace monitor : Manage dynatrace monitor.

Subgroups:
  sso-config           : Manage monitor sso-config.
  tag-rule             : Manage dynatrace monitor tag-rule.

Commands:
  create               : Create a monitor resource.
  delete               : Delete a monitor resource.
  get-sso-detail       : Get the SSO configuration details from the partner.
  get-vm-host-payload : Return the payload that need to be passed in the request body for
                        installing Dynatrace agent on a VM.
  list                 : List all monitor resource by monitor name in a resource group.
  list-app-service     : Get list of app services with dynatrace PaaS OneAgent enabled.
  list-host            : List the compute resources currently being monitored by the
                        dynatrace resource.
  list-linkable-environment : Get all the dynatrace environments that a user can link a azure
                             resource to.
  list-monitored-resource : List the resources currently being monitored by the dynatrace
                           monitor resource.
  show                : Show a monitor resource.
  update              : Update a monitor resource.
  wait                : Place the CLI in a waiting state until a condition is met.

To search AI knowledge base for examples, use: az find "az dynatrace monitor"
jay_gurbani@Azure:~$ []
```

AUTOMATED METRICS & LOGS ACQUISITION

The screenshot shows the Microsoft Azure Dynatrace Metrics and logs configuration interface. On the left, there's a sidebar with navigation links: Overview, Activity log, Access control (IAM), Tags, Dynatrace environment config (Metrics and logs, Monitored resources, Virtual machine agents), Settings (Single sign-on, Properties, Locks), Automation (Tasks (preview)), and Support + troubleshooting (New support request). The main area is titled 'Metrics and logs' and contains sections for 'Metrics' and 'Logs'. Under 'Metrics', it says 'Metrics will be collected for all Azure resources by default. Optionally, limit metrics collection for resources using include/exclude tags.' It includes a 'Enable metrics collection' checkbox (which is checked) and a 'Subscription activity logs' checkbox (which is unchecked). Under 'Logs', it says 'Logs for all defined sources will be sent to Dynatrace based on the tags inclusion/exclusion criteria.' It includes a 'Azure resource logs' checkbox (which is checked) and a section for 'Optional limit logs collection to include/exclude Azure resources with tags' with two input fields: 'Name' (Test) and 'Value' (Field value). A large green callout box on the right says 'Enable the collection of Azure Monitor metrics for your Azure subscription with one click!' with a green arrow pointing to the 'Enable metrics collection' checkbox. Another green callout box below it says 'Enable the collection of Azure resource logs for your Azure subscription with one click!' with a green arrow pointing to the 'Azure resource logs' checkbox.



PERFORM

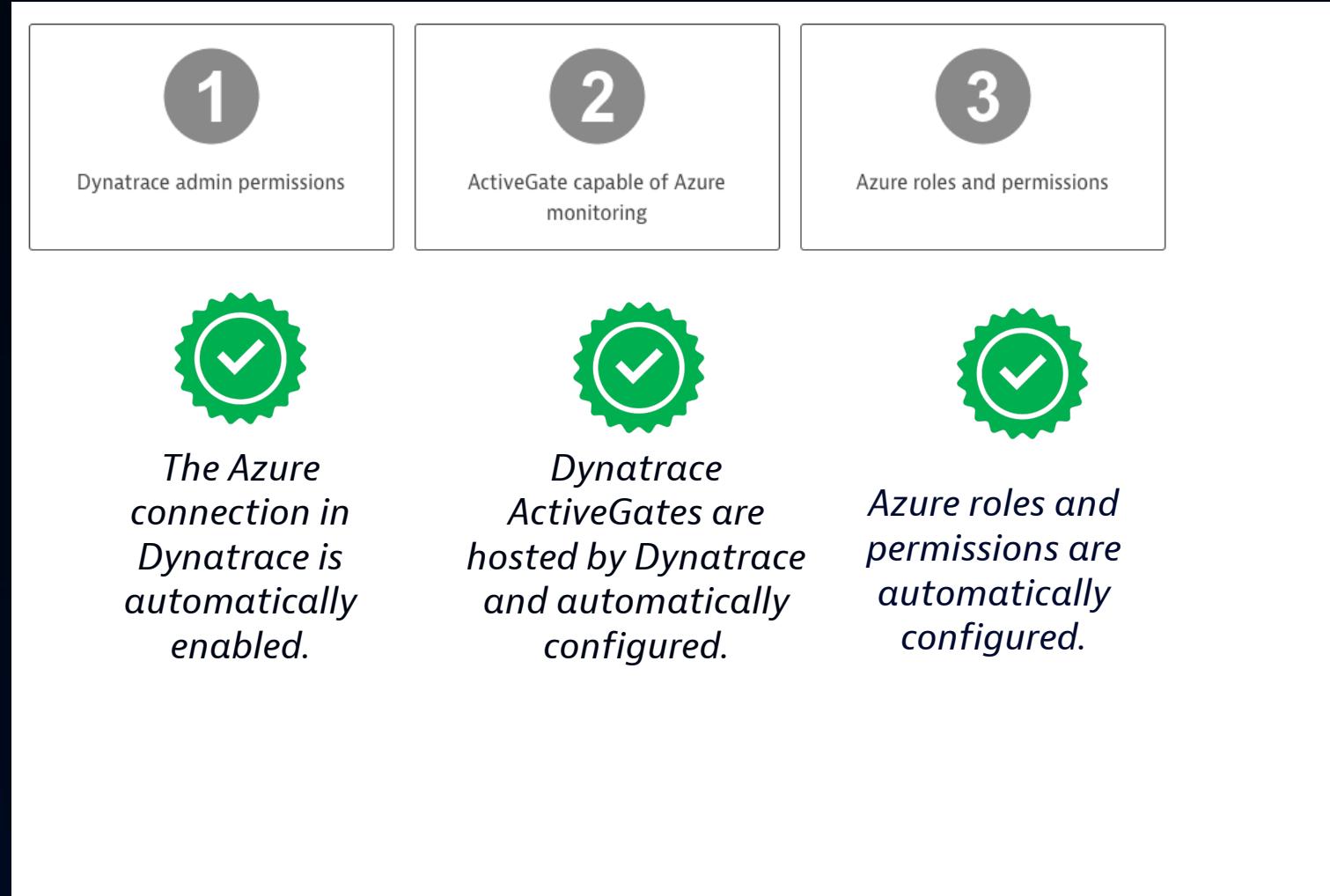
AUTOMATED LOG DATA ACQUISITION

- Enable Log streaming directly from your Azure Subscriptions
- No event hubs, no cloud functions or configuration needed

The screenshot shows the 'Diagnostic setting' configuration page in the Microsoft Azure portal. The diagnostic setting name is 'eventhub'. Under 'Category details', the 'log' category is selected, and several log types are checked: Administrative, Security, ServiceHealth, Alert, Recommendation, Policy, Autoscale, and ResourceHealth. Under 'Destination details', the 'Archive to a storage account' option is selected. A large blue arrow points from the bottom left towards the 'Send to partner solution' section. This section contains a checkbox for 'Send to partner solution', a link to documentation, and dropdown menus for 'Subscription' (set to 'Team-Product-Architects') and 'Destination' (set to 'No destination in this subscription'). A red box highlights this entire section.

AUTOMATED AZURE MONITOR METRICS ACQUISITION

- No need to configure permissions or setup an ActiveGate



Benefits of Azure Native Dynatrace integration

1

Integrate onboarding

You can provision Dynatrace and manage the integration through the Azure Marketplace and Portal

2

Unified billing

You can purchase Dynatrace via the Azure Marketplace – you can even spend your organization's Microsoft Azure consumption commitment

3

Single sign-on

Easily enable SSO through Azure Active Directory – there's no need for separate authentication to the Dynatrace portal

4

Metrics and Logs

Enable the collection of metrics and logs for VM and App Services resources

5

OneAgent deployment

Install or uninstall Dynatrace OneAgents on single or multiple VMs and Azure App Services directly from the Azure Portal

6

Manage Dynatrace within Azure Portal

Verify which resources are sending Azure metrics and logs to Dynatrace and make instant changes as needed

7

Deeper Azure CLI integration

Easily manage Dynatrace resources from the Azure CLI to further extend deployments of those resources

LOOKING TO MIGRATE TO SAAS?

- Microsoft Funding to Offset Dynatrace ACE Services Costs
- If you are a current Dynatrace customer deployed in your own environment (managed) and want to migrate to SaaS to take advantage of the benefits of Grail and Azure Native Dynatrace Service, we have access to a Microsoft program that can help you offset the ACE services costs to support a migration.
- Funding ranges from \$5K -- \$50K depending on the size of the environment migrating to SaaS.
- Requires an Azure Marketplace transaction.
- Migration must be complete within 180 days of the order.
- Reach out to your AE to learn more or stop by the Microsoft booth later this week.

PLEASE PROVIDE FEEDBACK

- Please scan to provide feedback on this session



**One Community to find them all,
one Community to solve them.**

Join other observability experts
at community.dynatrace.com

 **dynatrace**
Community

