

Monitoring as Code and Dynatrace

JL Lormeau Septembre 2021



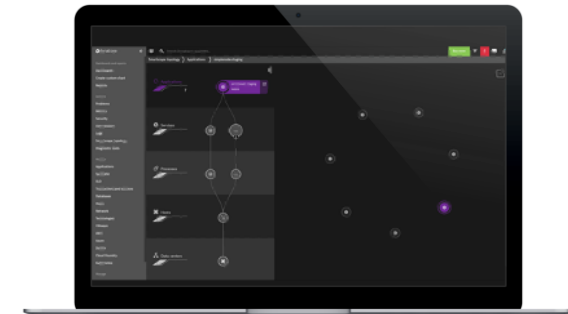
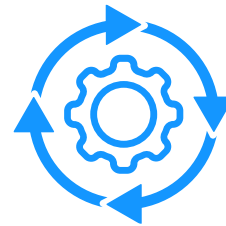
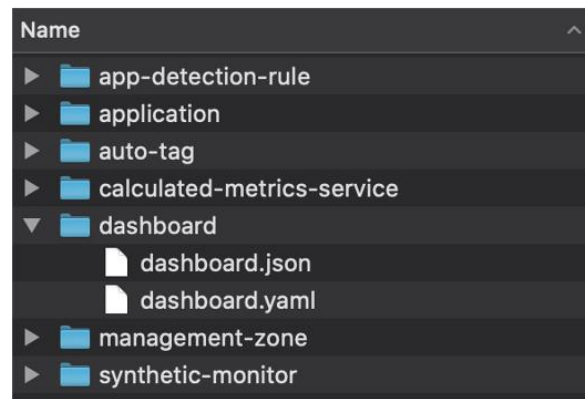
ACE
SERVICES

Main Use Cases



For Dynatrace Admin

Use Case 1 = Use Monaco to OnBoard all your applications from a generic template



1

**Use a Monaco template
for a new application onboarding**

2

**Run Monaco with the parameter
of this application**

3

**Monaco will deploy
the config based on this template**



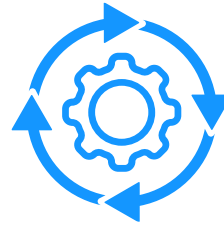
For Dynatrace Admin

Use Case 2 = Update all your tenant

- ▼ projects
 - ▼ ace
 - > app-detection-rule
 - > application
 - > auto-tag
 - > calculated-metrics-service
 - > dashboard
 - > management-zone
 - > synthetic-monitor
 - ▼ infrastructure
 - > auto-tag
 - > request-attributes
 - > synthetic-location

1

**Define your config
in a Monaco project**



2

**Use Monaco to apply this config
to 1 or more environments**



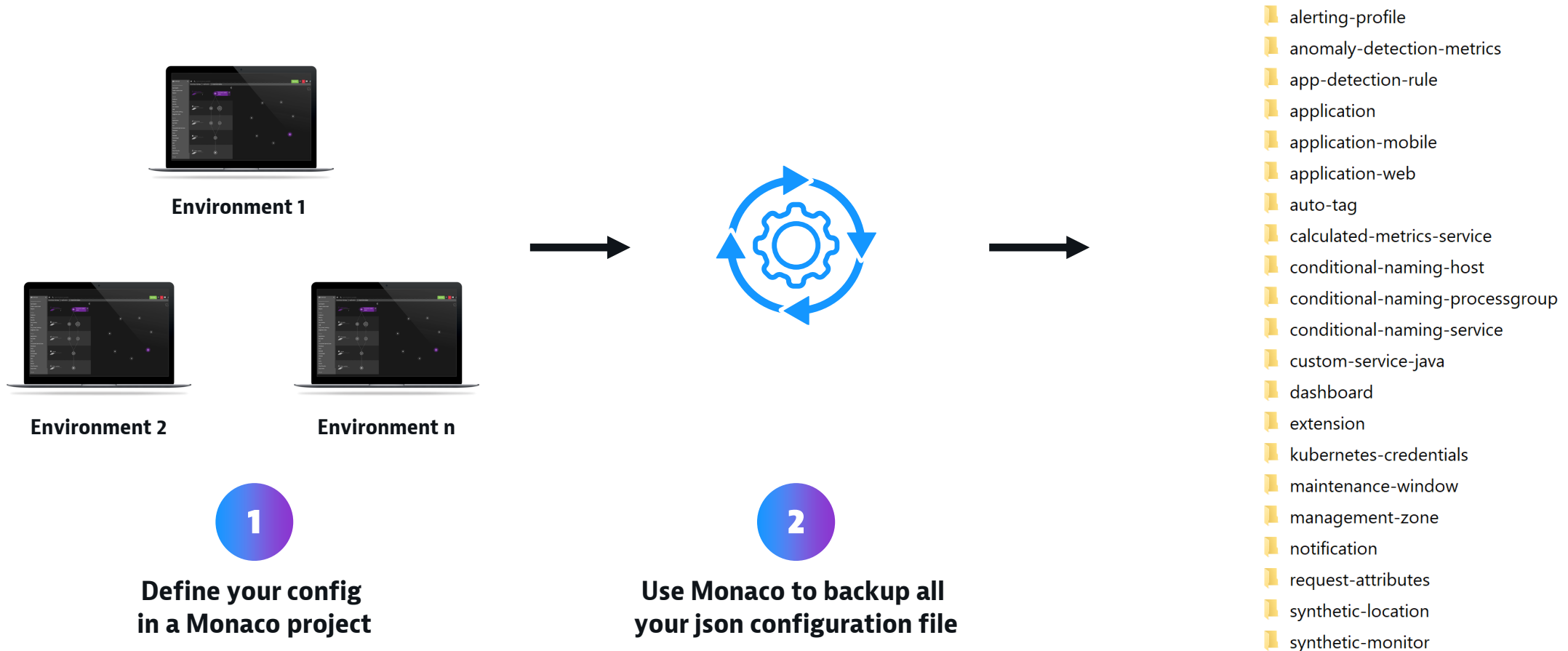
3

**Monaco will synchronize
the config to all environments**



For Dynatrace Admin

Use Case 3 – Backup all your Json configuration for all your tenants

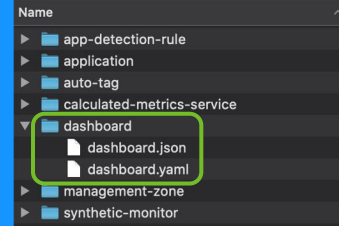




For SRE

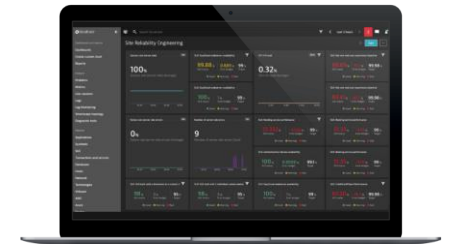
Use Case 4 =« self service » monitoring – manage your configuration from git

As an SRE, I need a dashboard to visualize my Service Level Objectives for my project!



```
config:
  - application-overview: "kubernetes-dashboard.json"

application-overview:
  - name: "My application overview"
  - time: "-6h"
  - managementZoneId: "/ace/management-zone/management-zone-prod.id"
  - managementZoneName: "/ace/management-zone/management-zone-prod.name"
```



1

Define your dashboard in a file

2

Store your dashboard definition along with your application code

3

Run Monaco through pipeline

4

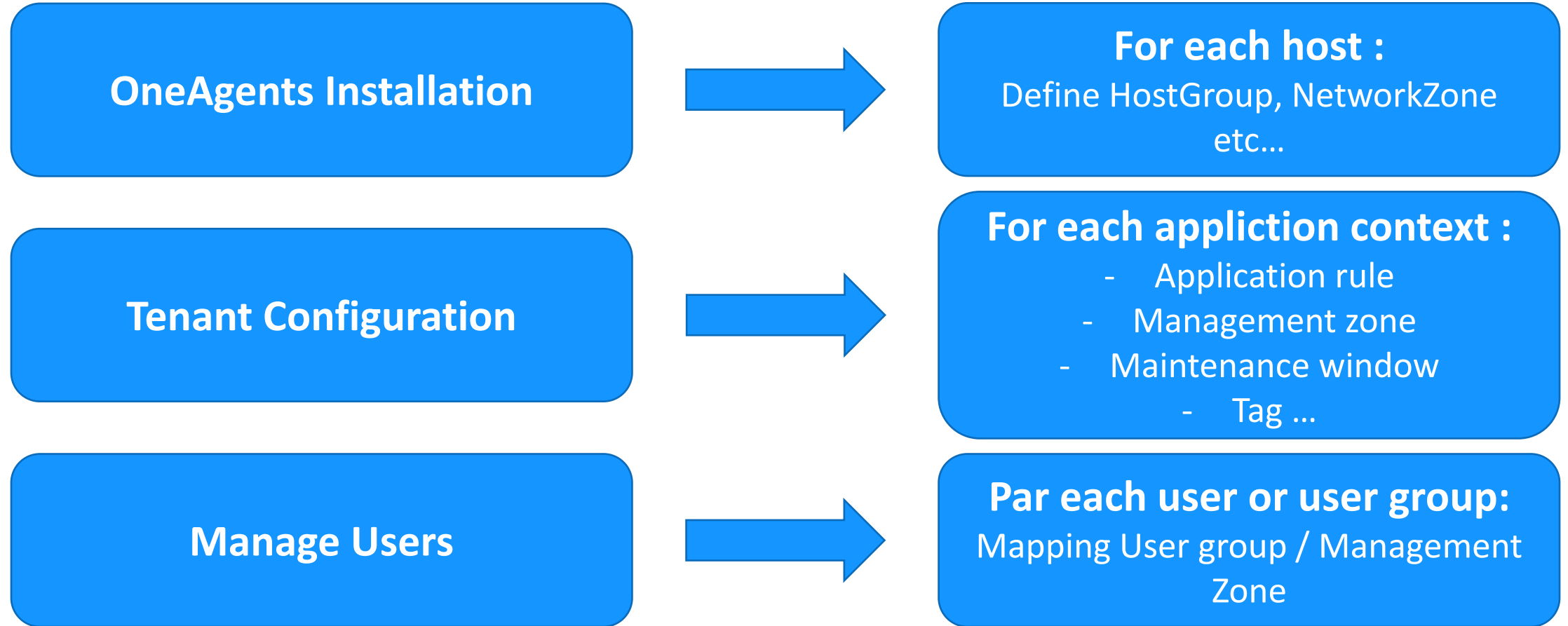
Monaco configures Dynatrace

Integrated to the pipeline

Overview

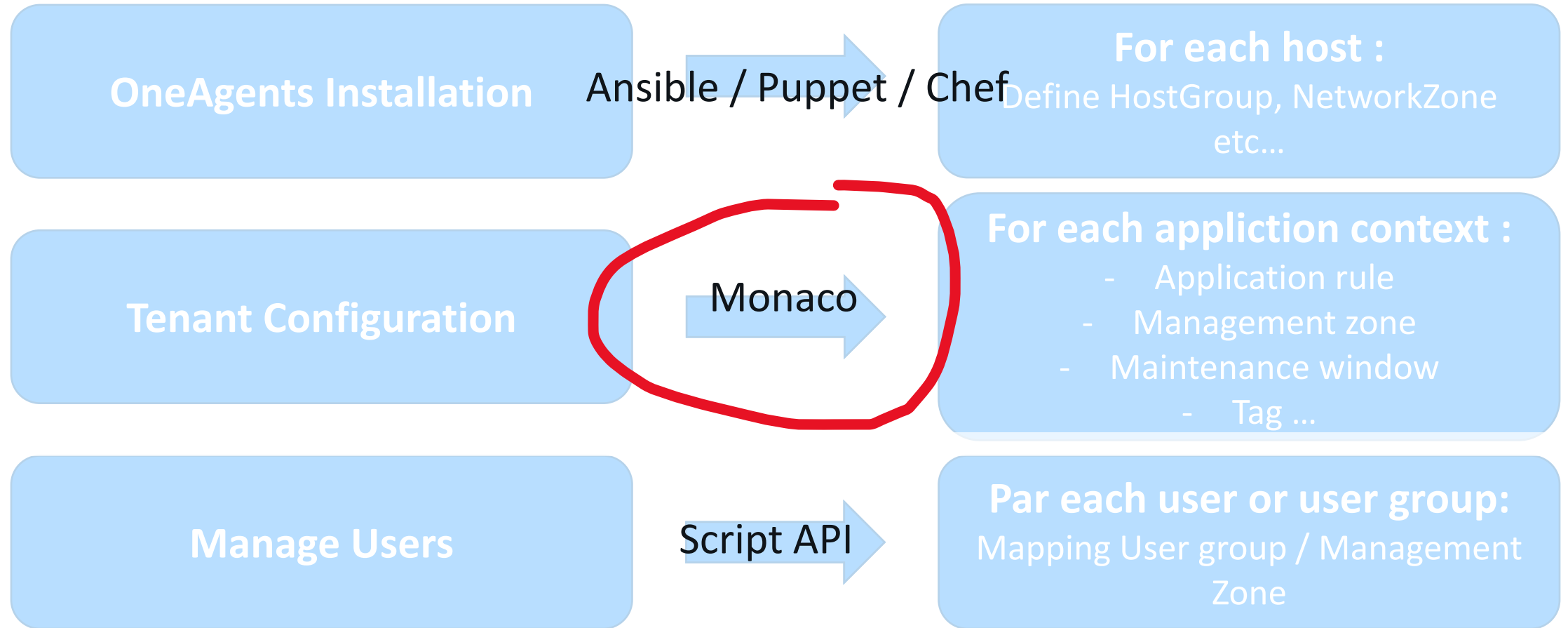


Onboarding Path





Onboarding Path





Monaco

- Access to Dynatrace API
 - ➔ Monaco allows you to deploy the configuration json on each environment.
 - ➔ Monaco replaces the long lines of code for importing these configs via API.

Advantage over API scripts

Easy to use

Idempotent

Creation

Update

Manages API request limitations

API update management (no need to rewrite the code)

Integrated ID correlation. No need to write lines of code to pass IDs as parameters.



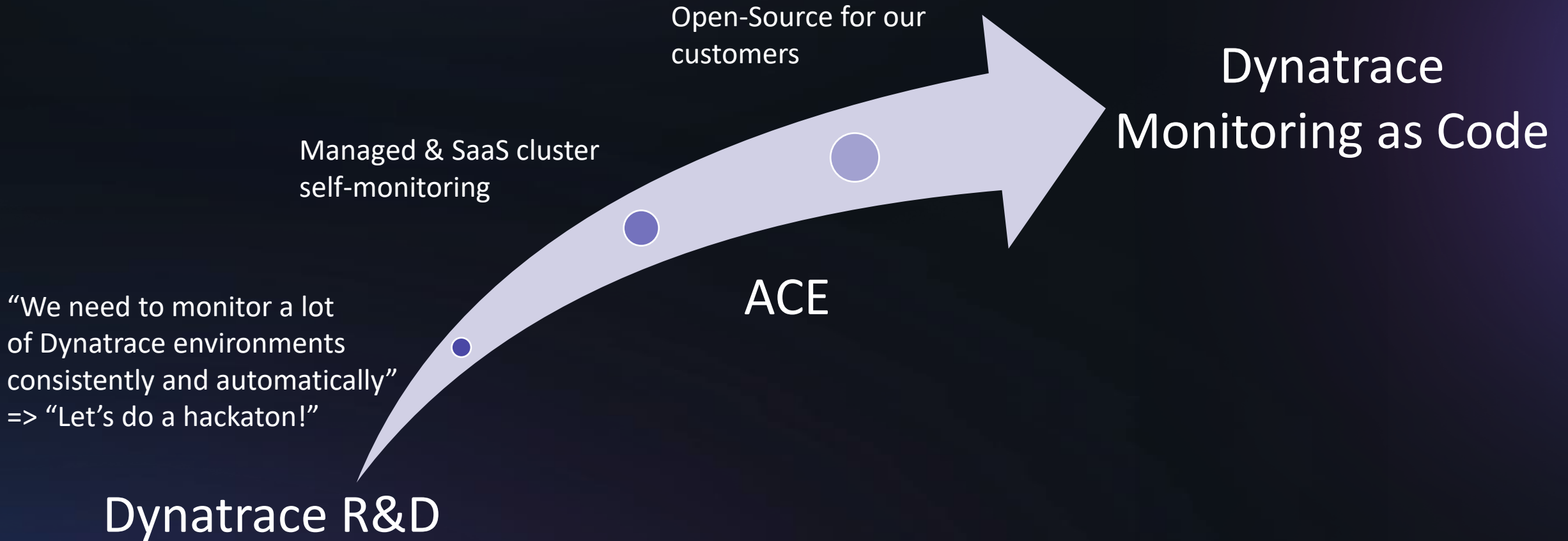
Monaco command line

- Prefer Monaco with NEW_CLI=1
 - `export NEW_CLI=1`
- Example
- Download specific tenant (prod) and specific API (dashboard)
 - `monaco download -e=environments.yaml -s=prod -p=dashboard my_backup_dashboard_directory`
- Download ALL tenants and ALL configurations
 - `monaco download -e=environments.yaml my_backup_directory`
- Deploy for specific tenant
 - `monaco deploy -e=environments.yaml -s=prod my_deploy_config_directory`

Dynatrace community





We have the same needs as you!





<https://dynatrace-oss.github.io/dynatrace-monitoring-as-code>

 **Monaco** [Docs](#)

1.6.0 ▾ GitHub 

[What is Monaco?](#)

[Install Monaco](#)

[Commands >](#)

[Configuration >](#)

[Guides >](#)

Version: 1.6.0

What is Monaco?

Monaco is CLI tool that tool automates deployment of Dynatrace Monitoring Configuration to one or multiple Dynatrace environments.

Why monaco?

Configuring monitoring and observability be both hard and time consuming to do at scale. Monaco enables Application Teams through self-service capabilities to setup and configure Monitoring and Alerting without causing manual work on the team responsible for monitoring.

With monaco, defining what to monitor and what to be alerted on is easy for developers as checking in a monitoring configuration file into version control along with the applications source code. With the next commit or Pull Request the code gets built, deployed and the automatically get the monitoring dashboards and alerting notifications. This self-service model will ensure teams can focus more time on building business services. Monaco eliminates the need of building a custom monitoring solution that fits into a team's development process and mindset.

Features

[Why monaco?](#)

[Features](#)



<https://dynatrace-oss.github.io/dynatrace-monitoring-as-code/installation>

Monaco Docs

1.6.0 GitHub

Search... [1.6.0]

What is Monaco?

Install Monaco

Commands

Configuration

Guides

Validating Configuration

Deploying Projects

Experimental New CLI

Downloading Configuration

Logging

Deploying Configuration to Dynatrace

Environments file

Configuration Structure

Configuration YAML Structure

Plugin Configuration

Delete Configuration

Configuration Types and Token Permissions

How to add a new API

Version: 1.6.0

Verify Download

Install Monaco

To use monaco you will need to install it. Monaco is distributed as a binary package.

To install Monaco, find the appropriate executable for your system and download it.

Ensure that the monaco binary is available on your PATH. This process will differ depending on your operating system. This process will differ depending on your operating system.

Executables are available in the [release page](#).

Operating System

Linux / macOS

Windows

This is an example using `curl`. If you don't have `curl`, install it, or use `wget`.

```
# Linux
# x64
$ curl -L https://github.com/dynatrace-oss/dynatrace-monitoring-as-code/releases/download/v1.6.0/monaco-linux-3

# x86
$ curl -L https://github.com/dynatrace-oss/dynatrace-monitoring-as-code/releases/download/v1.6.0/monaco-linux-3

# macOS
$ curl -L https://github.com/dynatrace-oss/dynatrace-monitoring-as-code/releases/download/v1.6.0/monaco-darwin-
```

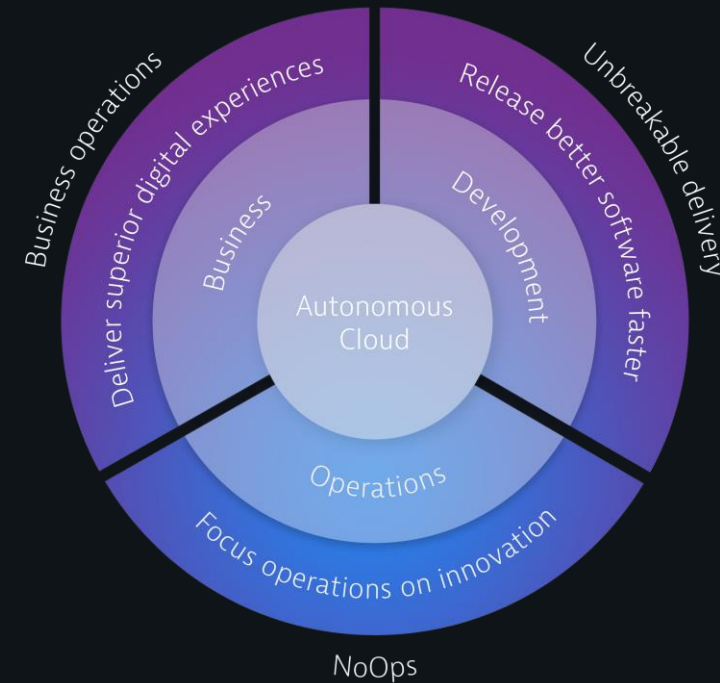


Installation

- Linux or windows - no particular prerequisite
- Can be installed on an activegate or on your laptop 😊
- Monaco must have access to the cluster API
 - Monaco => port 443 of the Cluster OR to the Activegate (depends to your architecture : tcp9999 or 443)

Autonomous Cloud Enablement Automation Services

- ✓ Monitoring as a Service
- ✓ Automated Quality Gates
- ✓ Automated Incident Management
- ✓ Automated Problem Remediation



Like what you saw today?
Get in touch with us and let's talk! ACEServices@dynatrace.com



Useful links

- [What is Monaco? | Monaco \(dynatrace-oss.github.io\)](https://dynatrace-oss.github.io)
- [Monitoring-as-code through Dynatrace's Open-Source Initiative | Dynatrace news](#)
- [dynatrace-oss/dynatrace-monitoring-as-code: This tool automates deployment of Dynatrace Monitoring Configuration to one or multiple Dynatrace environments. \(github.com\)](#)
- [dynatrace-ace-services/easy-dynatrace-with-monaco: LAB - Getting Started with dynatrace : easy configuration with Monaco \(github.com\)](#)
- [dynatrace-ace-services/quickstart-ace-configurator: Package - Getting Started your automatic configuration with QuickStart-Ace-Configurator \(github.com\)](#)

