How to integrate IBM UrbanCode Deploy with Instana for Pipeline Visibility

Deployment Automation for Fast Feedback and MTTR

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 IBM DevOps Community

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Develop and deliver secure and reliable software as fast as possible
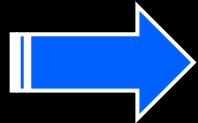
IBM DevOps: Mission

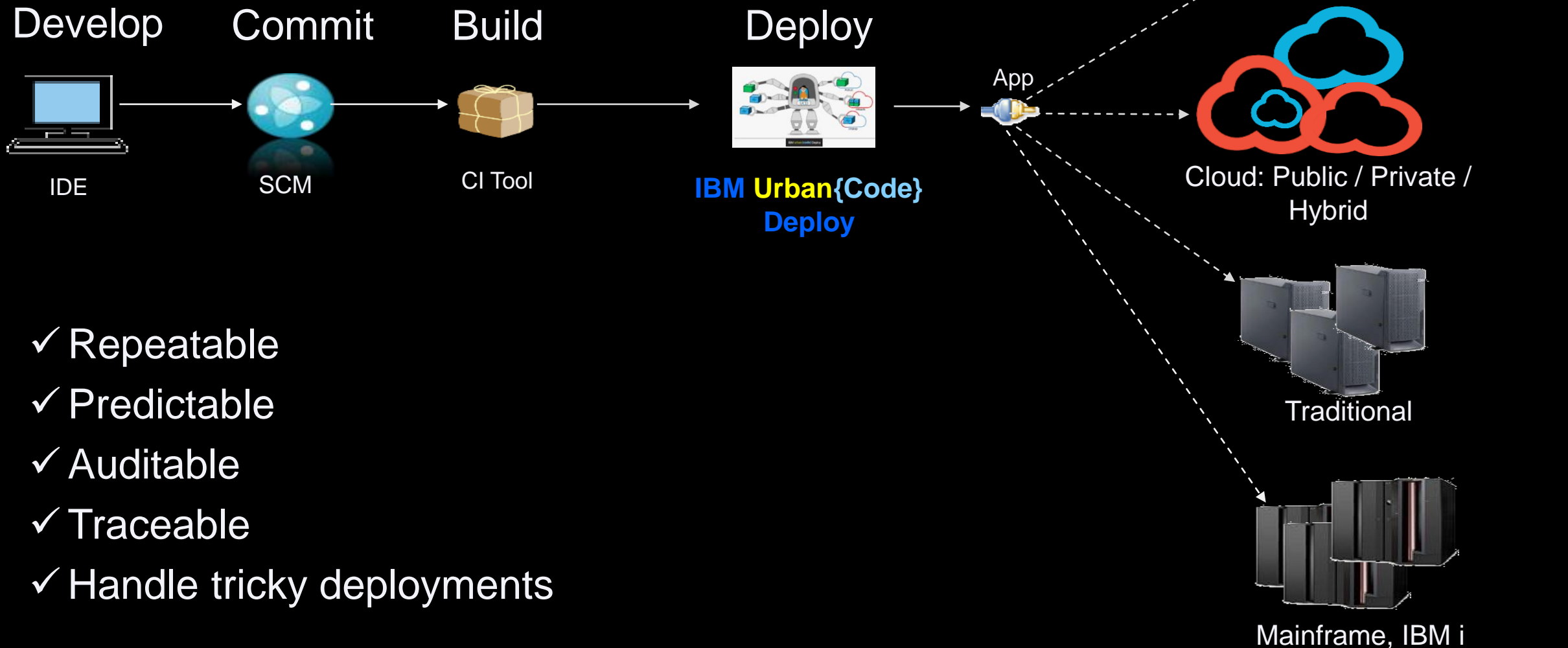⬆️ Improve development and delivery operations

⬇️ Reduce security and compliance risk

➡️ Deliver reliable solutions faster

urban{code} Deploy for Deployment Automation

Develop

IDE

Commit

SCM

Build

CI Tool

Deploy

IBM Urban{Code} Deploy

App

Mobile Device

Cloud: Public / Private / Hybrid

Traditional

Mainframe, IBM i

✓ Repeatable

✓ Predictable

✓ Auditable

✓ Traceable

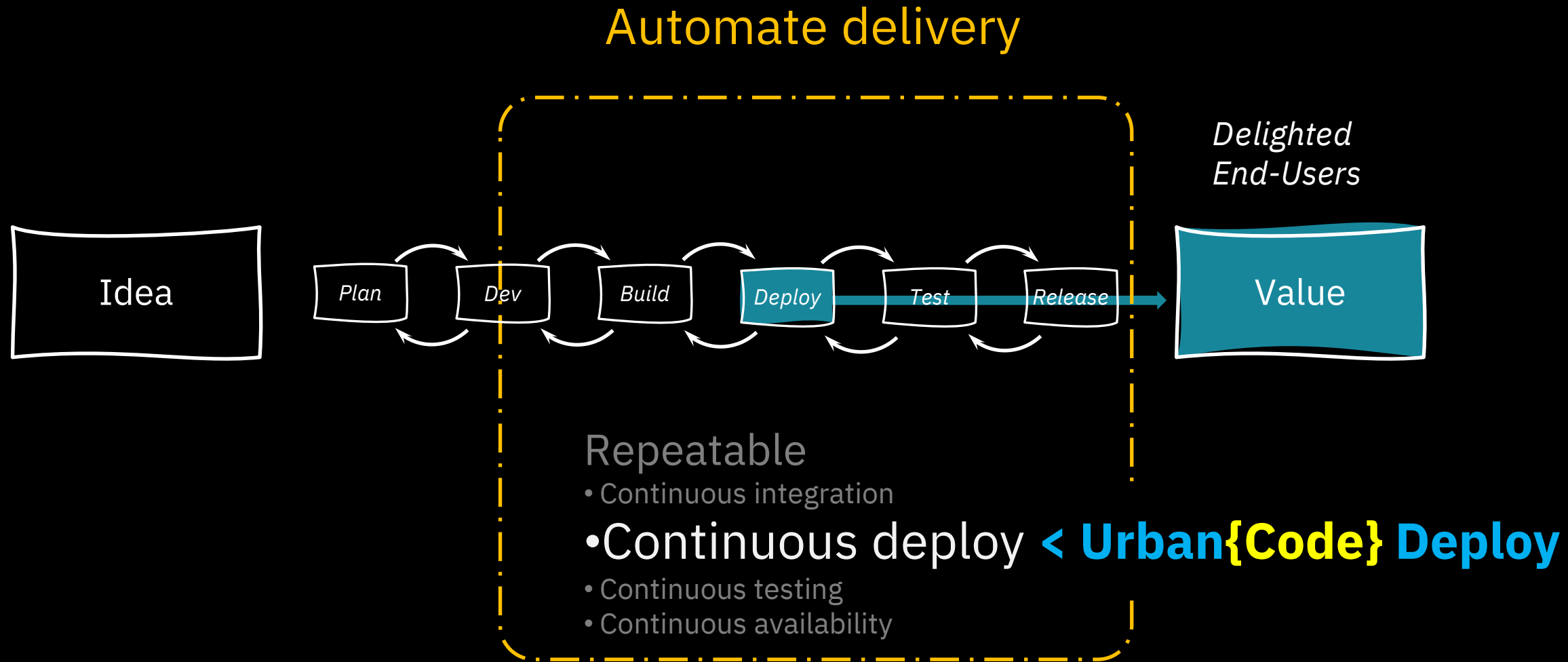✓ Handle tricky deployments

Demo of IBM urban{code} Deploy

Quick UCD overview:

Application

Components

Environments

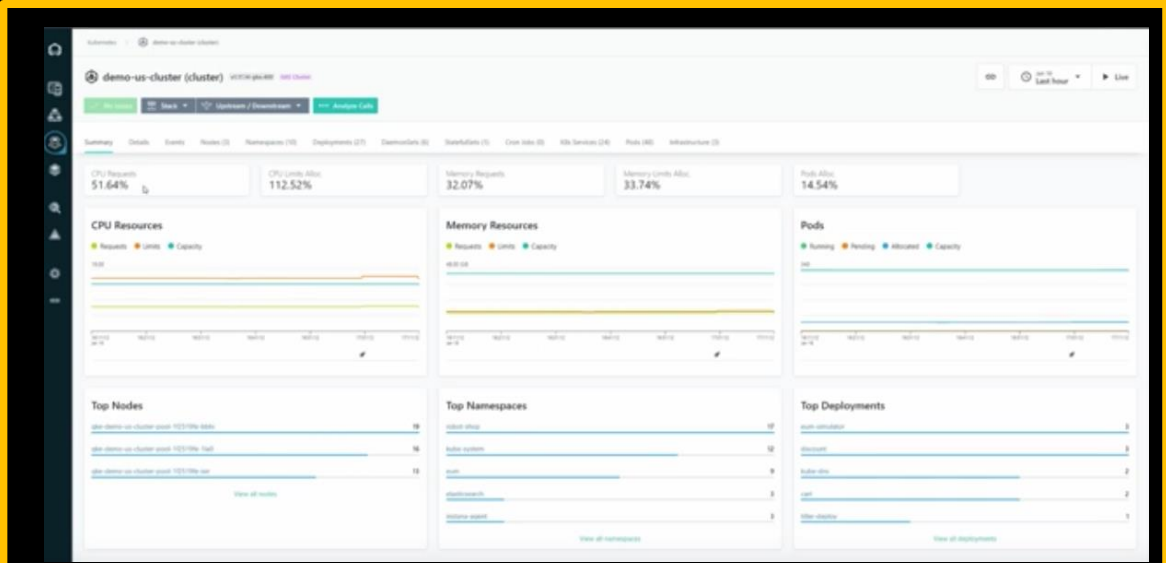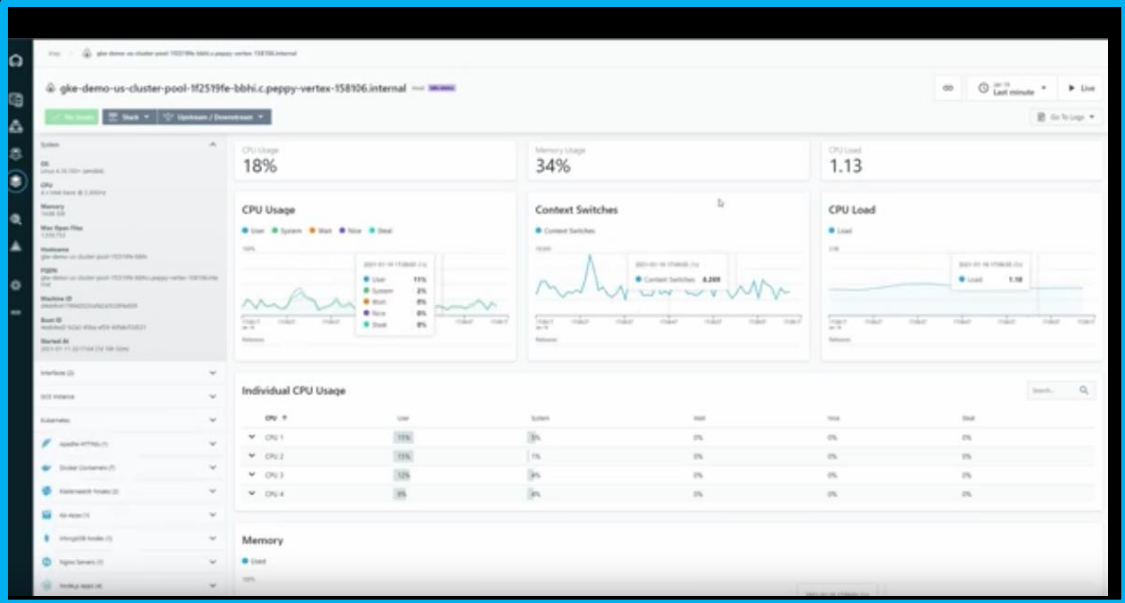Deployment Process

DevOps pipeline – Automate the repeatable

Automate delivery

Idea

Plan — Dev — Build — Deploy — Test — Release

Delighted
End-Users

Value

Repeatable
- Continuous integration
- Continuous deploy **< Urban{Code} Deploy**
- Continuous testing
- Continuous availability

MTTR

Instana and Observability

Instana helps with observability from four different perspectives:

1. Automatic Backend Tracing
2. Front-end Application (website or mobile application)
3. Infrastructure (high fidelity metrics for host, cpu, memory and down to jvms, nodejs processes, etc.)
4. Platform – Kubernetes, Cloud Foundry (now VMWare Tanzu), and VMWare ESXI

Instana Agent – Easy Install

The first challenge in adopting an observability tool is how do you deploy the solution.

Instana is built around idea that everything should be as automatic as possible. This includes the installation of the Instana Agent

Instana Discovery

Instana will automatically discover what is on the host configure itself based on what it finds.   It will also alert you of issues.
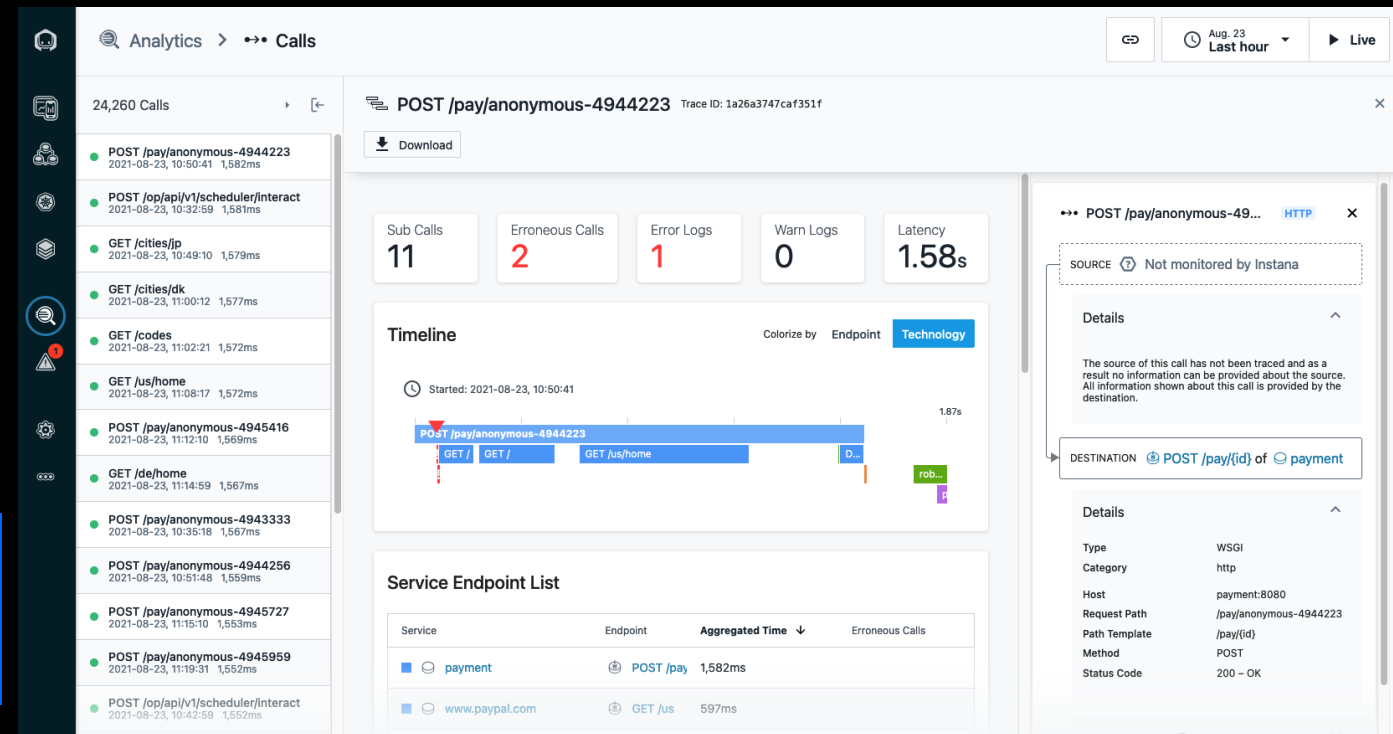
Instana Analytics

Instana is an Application Performance Management (APM) tool at heart.   The application tracing capability using Instana "AutoTrace" found in the Analytics area of the solution allows you to quickly identify issues.

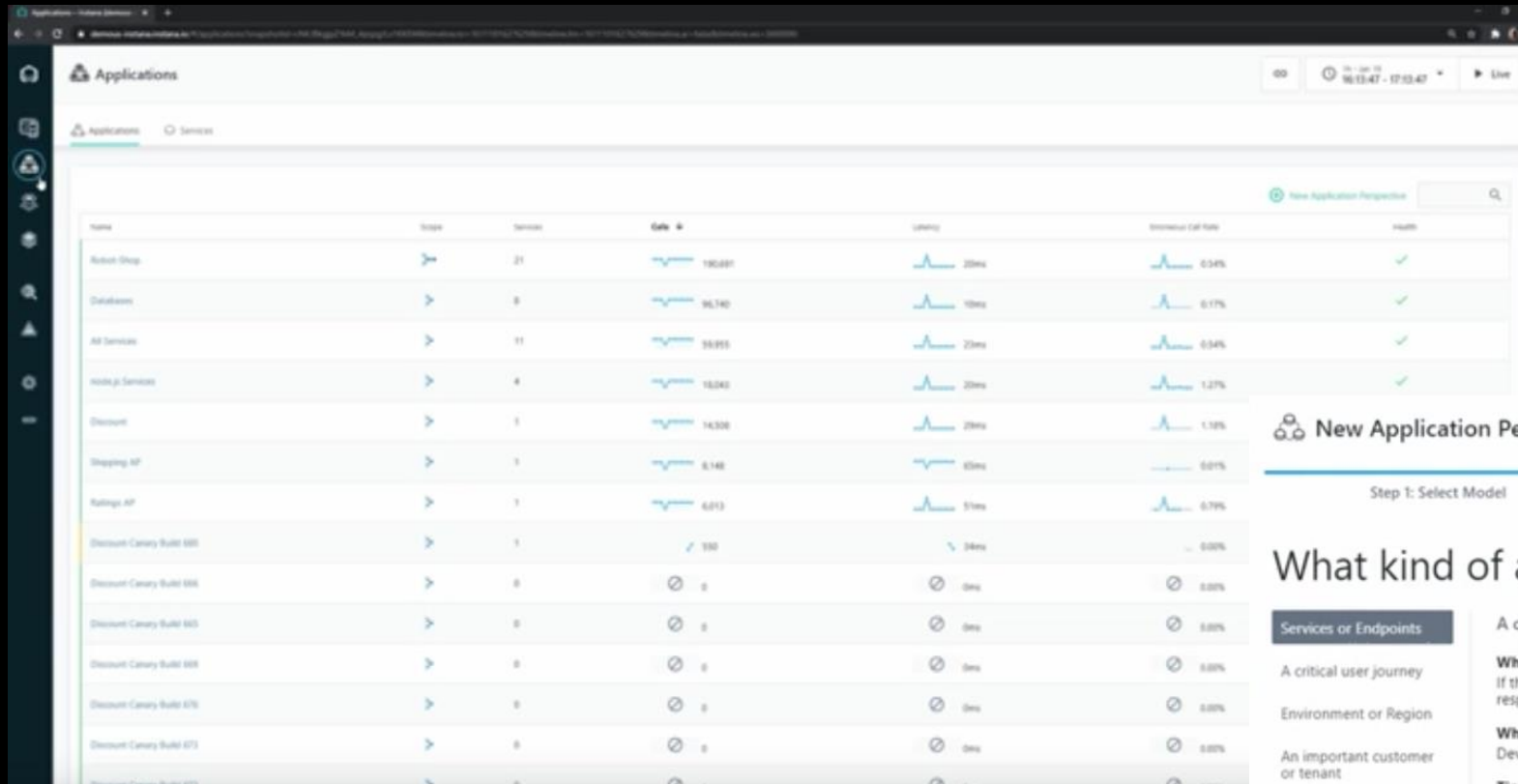Immediately understand the cause of a slow running service

Capture a trace of every single request, from the end user's browser through all microservices with Instana AutoTrace

Instana Analytics - Application Perspectives

Being able to decipher analytic details is not a trivial task. You are typically a well-seasoned operator that is very familiar with the application and what to look for. This is especially hard for a new DevOps Engineer that you bring into your team.

Simplicity and Automation

Extract ROI Quickly

Instana - Pipeline Feedback Release Marker

Releases

Documentation:
https://www.instana.com/docs/pipeline_feedback/configuration-and-api/

You can observe the application performance at deployment time using the markers for your telemetry data at infrastructure, service, and application perspectives

Instana - Pipeline Feedback using IBM UrbanCode Deploy

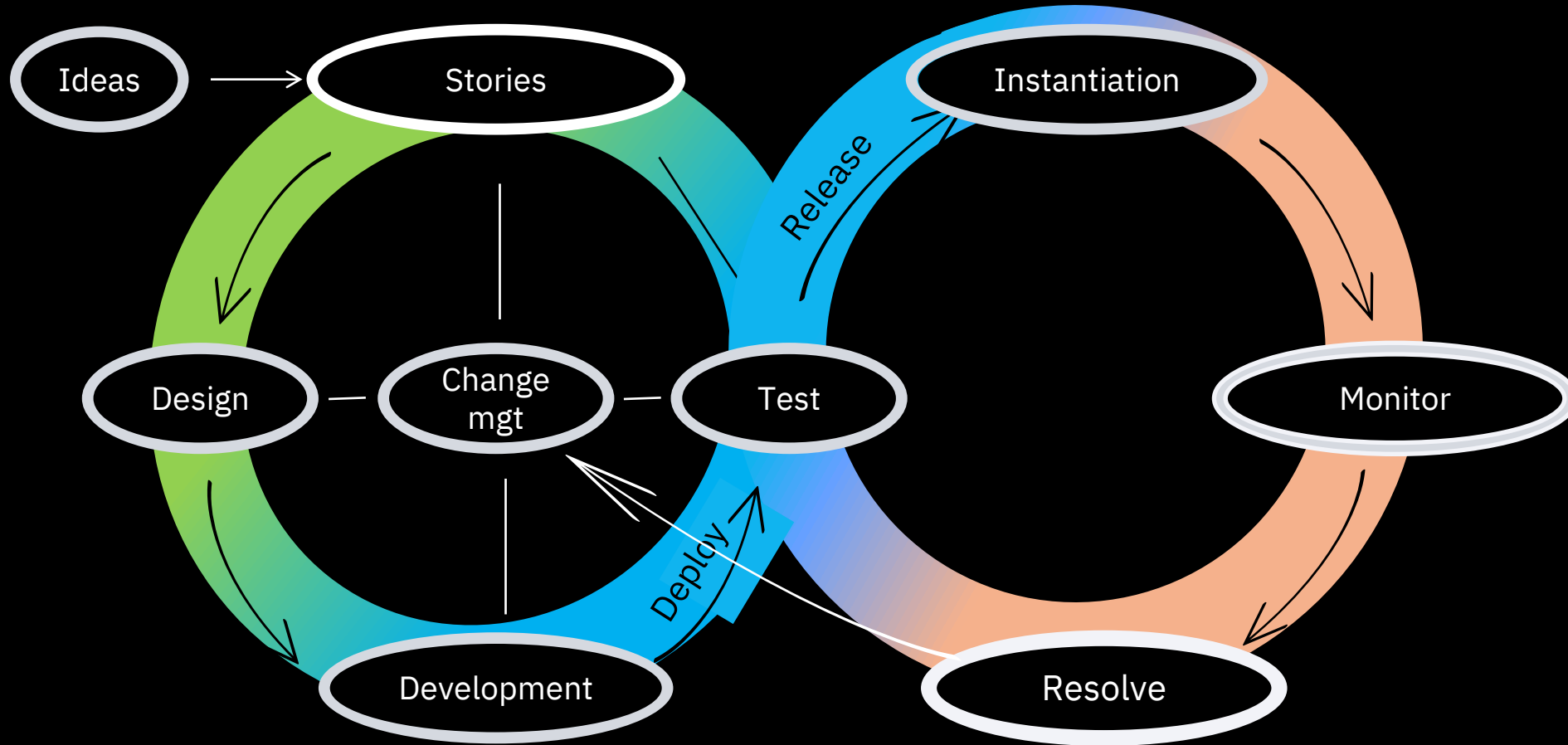An example of a "Global" scope pipeline release marker using the Instana Release API

IBM DevOps : How it fits together

Ideas → Stories

Release

Instantiation

Design — Change mgt — Test

Monitor

Deploy

Development

Resolve

Code to release

Release to change

Deliver the right solution the first time!

IBM DevOps: Innovation and AI-powered automation for software development and delivery

Improve delivery operations

Apply data driven delivery then automate and augment as much of the delivery lifecycle as possible

Reduce security and compliance risk

Automate testing as early as possible and get insights from the relationships between activities and data

Deliver reliable solutions faster

Orchestrate automatically across multiple delivery pipelines

Learn more: ibm.com/cloud/devops
ibm.com/cloud/instana

Thank you.

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