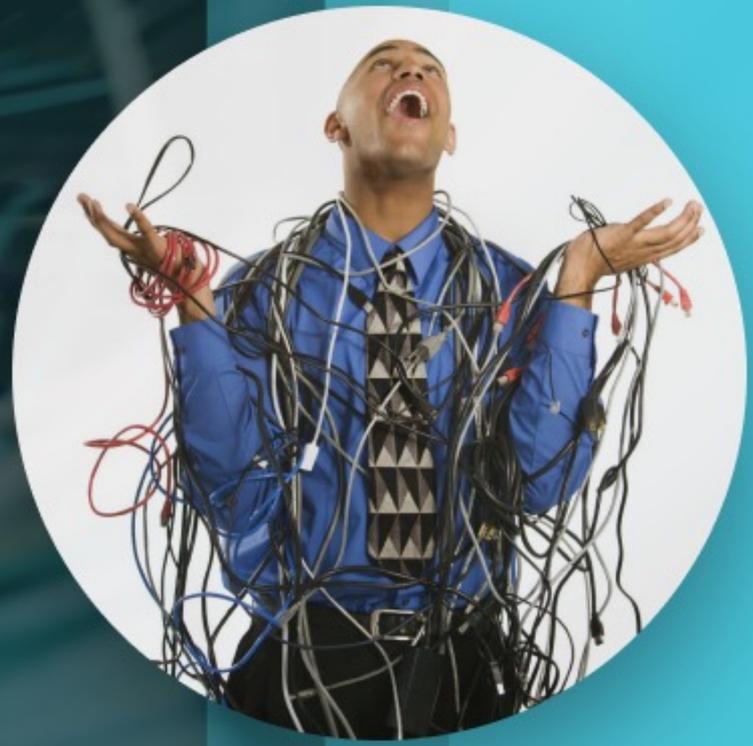
Krista

Why DevOps Stops

> 75% of DevOps initiatives will fail to meet expectations due to organizational learning and change issues.



What is Krista?

Intelligent Automation

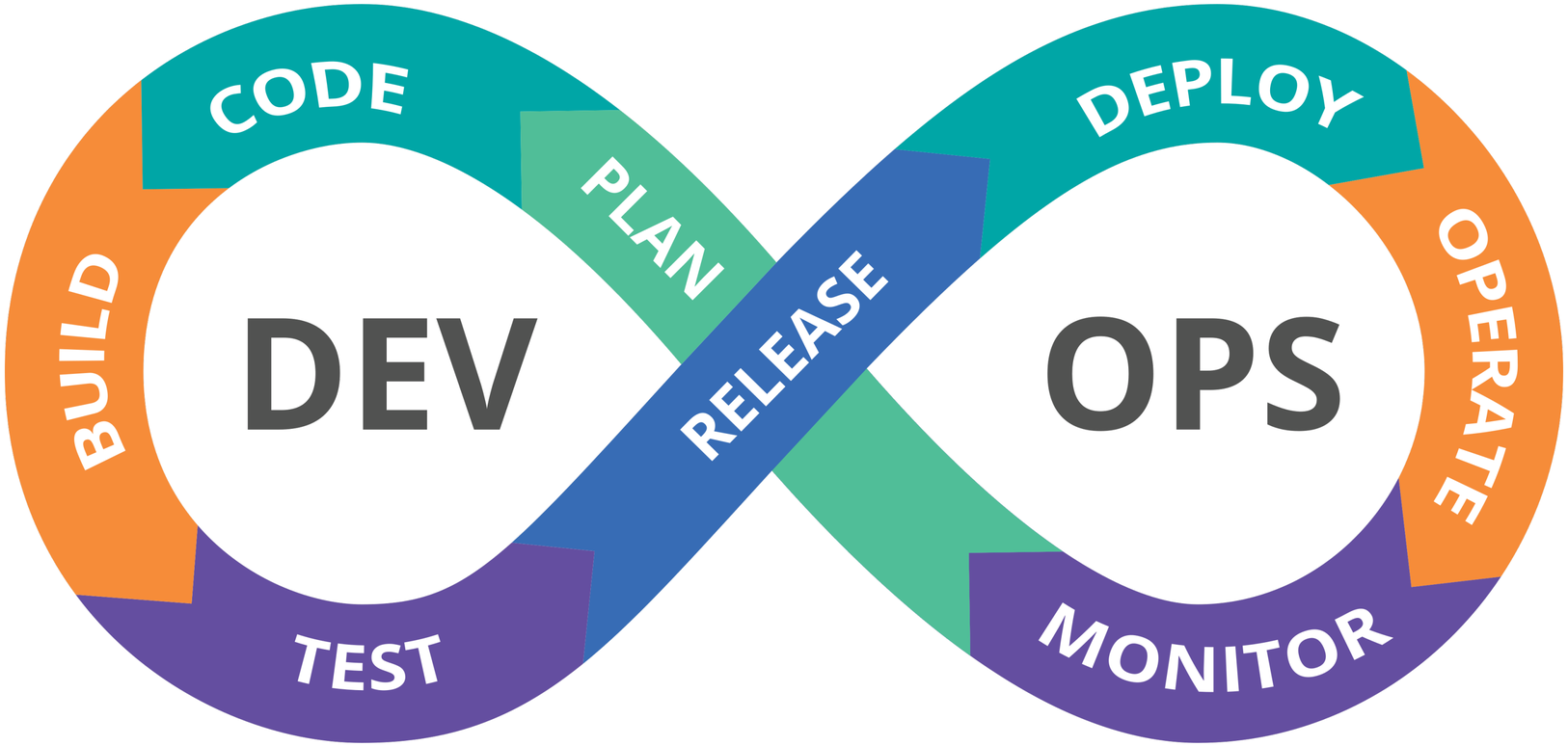
Krista is a modern conversational Intelligent Automation platform designed to easily leverage existing IT assets. Krista's unique informal approach enables business process owners to quickly build new lookup or data entry workflows without waiting in line for expensive IT or development resources. Krista uses a unique programming method similar to a text conversation between one or more people. By following the way humans already communicate, Krista enables anyone to build and create workflows around business process constraints. The conversational workflows eliminate maintenance and upkeep required from traditional record and playback automation tools. Krista's conversations are beautifully simple, with enough power, scale, and security to find any answer inside the largest enterprises.

Deployment is Simple

Krista's Natural Language Processing supports voice, text, and *bots to deliver automation anyone understands. By utilizing existing communication methods in conversations, you take advantage of how your employees already communicate. Krista quickly deploys to existing desktops, mobile phones, Slack, and web browsers that your employees are already using. You won't need to train employees or maintain brittle documentation since the automation follows existing voice and texting conversations similar to WhatsApp or Facebook Messenger. If your employees can text, they can interact with numerous systems to support customers, consume enterprise services, deploy IT changes, or update important KPIs.

Krista™

DevOps – It's improving.



Krista™

DevOps Evolution Model

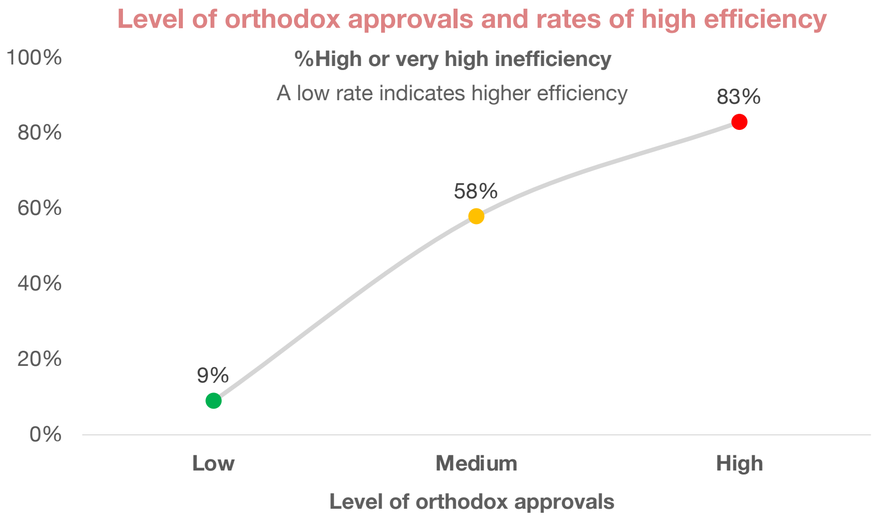
Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Normalization	Standardization	Expansion	Automated infrastructure delivery	Self-service

Many DevOps initiatives and cultures slow or stop at Stage 3 and fail to scale since organizational structures (aka people) become constraints in the Neutral Zone.

Source: State of DevOps Report, 2020

Krista™

People / Approvals in the Change Management Process



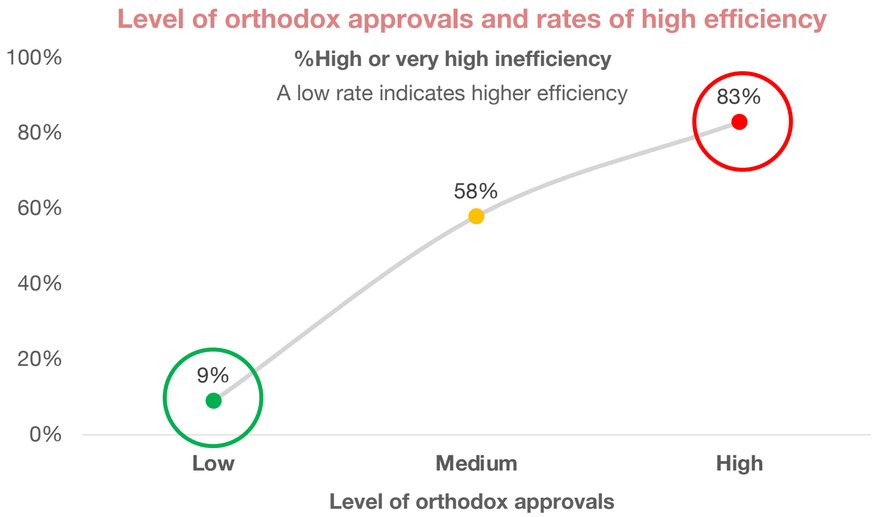
Orthodox change approval is based on strict adherence to established practices:

- Changes are approved by a committee.
- Approval is required from multiple levels of management.
- Changes can be made only in predefined windows.
- The person requesting the change cannot implement the change (separation of duties).

Source: State of DevOps Report, 2020

Krista™

People / Approvals in the Change Management Process



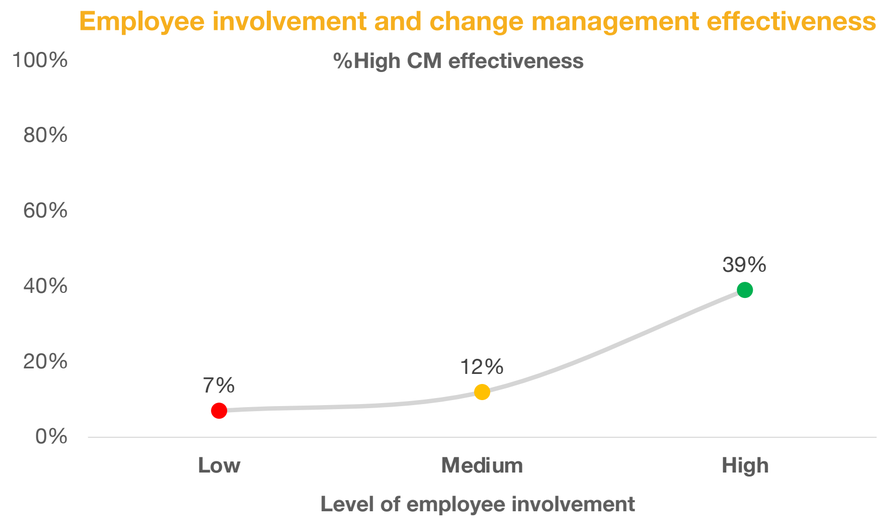
Orthodox approvals make the change management process less efficient.

Firms with low orthodox approvals are nine times more efficient than firms with high orthodox approvals.

Source: State of DevOps Report, 2020

Krista™

People / Approvals in the Change Management Process



Firms with high employee involvement in the change management process are more than five times as likely to have highly effective change management than firms with low employee involvement

Source: State of DevOps Report, 2020

Krista™

DevOps Evolution Model

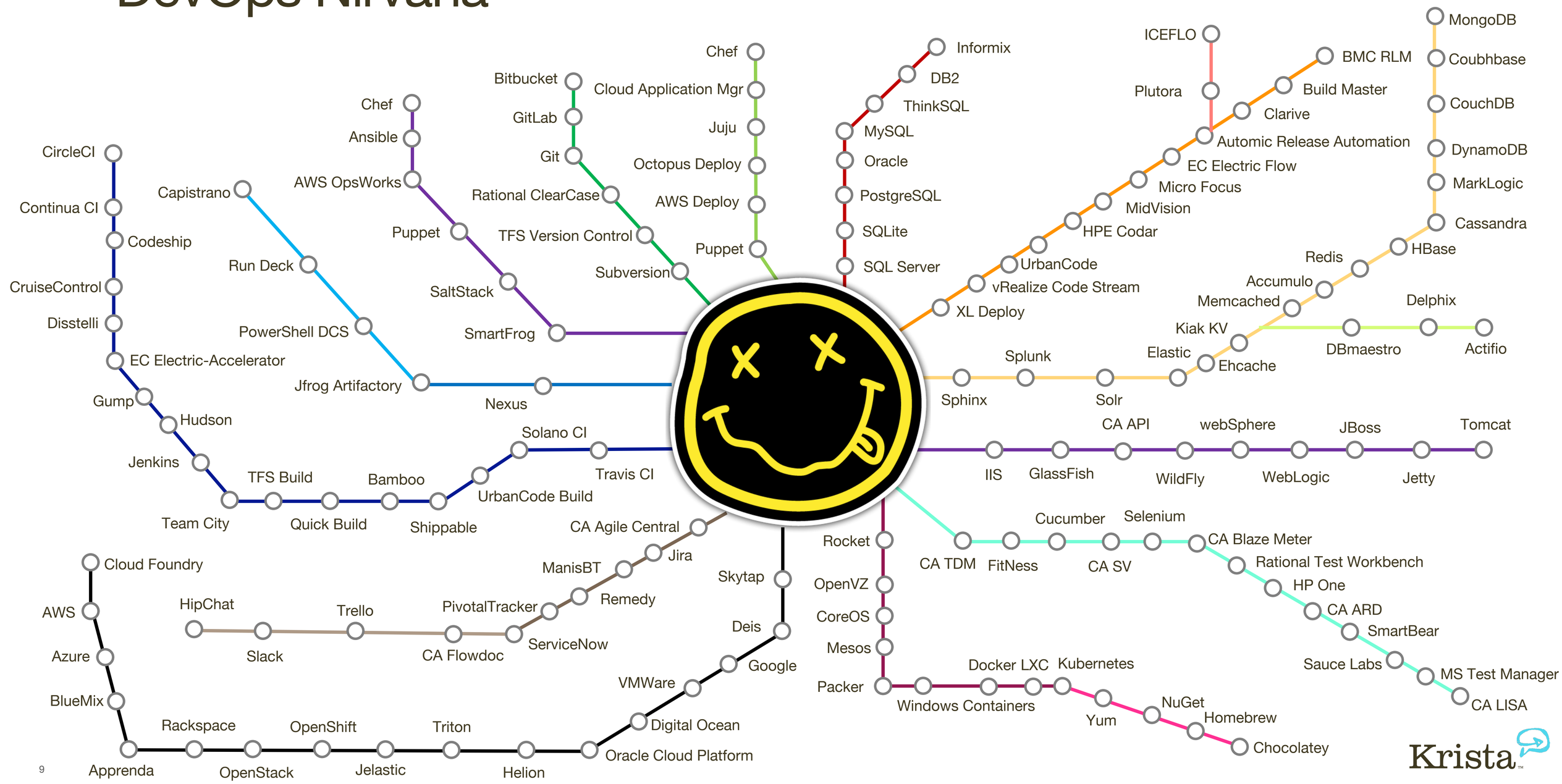
Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Normalization	Standardization	Expansion	Automated infrastructure delivery	Self-service

Krista integrates your people and existing technology and tools to help scale deployments and increase collaboration amongst your people and teams.

Source: State of DevOps Report, 2020

Krista™

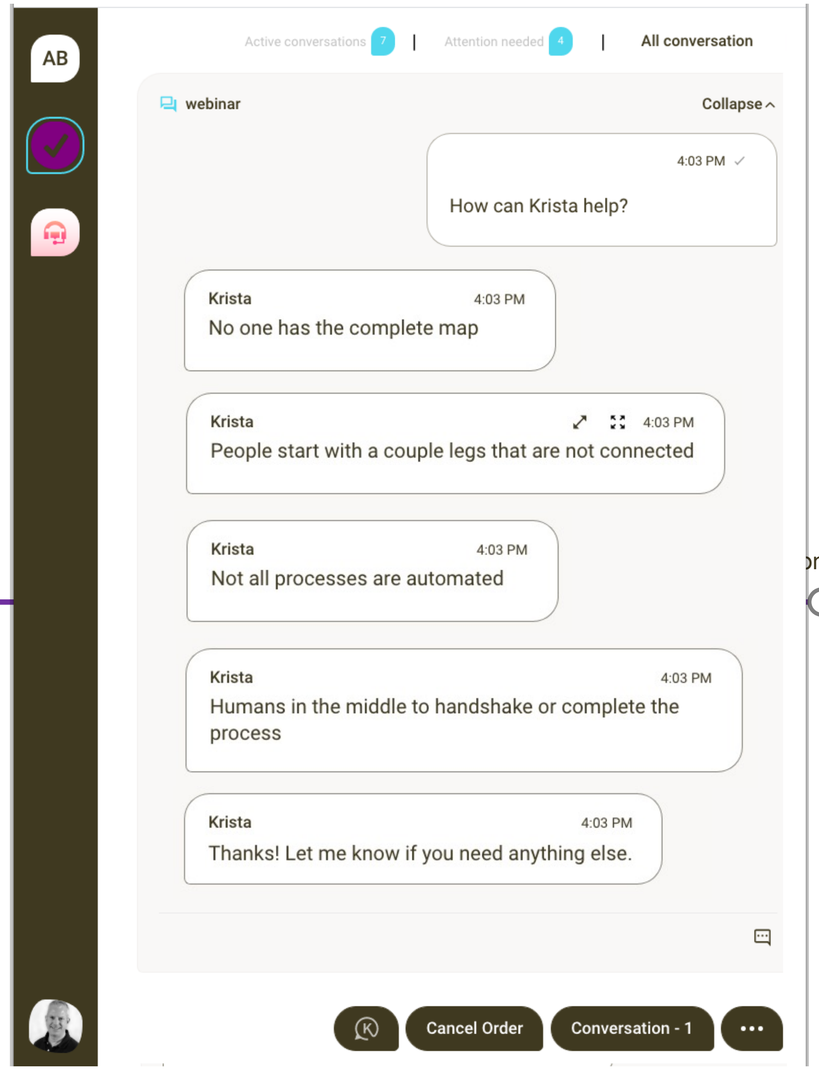
DevOps Nirvana



Krista™

Reality – disconnected tools with manual workflows

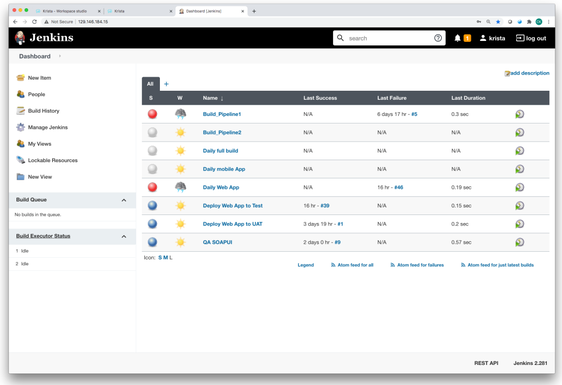
Informix
DB2
ThinkSQL
MySQL
Oracle
PostgreSQL
SQLite
SQL Server
Bitbucket
GitLab
Git
Rational ClearCase
TFS Version Control
Subversion
CircleCI
Continua CI
Codeship
CruiseControl
Disstelli
EC Electric-Accelerator
Gump
Hudson
Jenkins
TFS Build
Bamboo
Solano CI
Travis CI
UrbanCode Build
Team City
Quick Build
Shippable
Cloud Foundry
AWS
Azure
BlueMix
Rackspace
OpenShift
Triton
Digital Ocean
Oracle Cloud Platform
Apprenda
OpenStack
Jelastic
Helion
Skytap
Deis
Google
VMWare
omcat

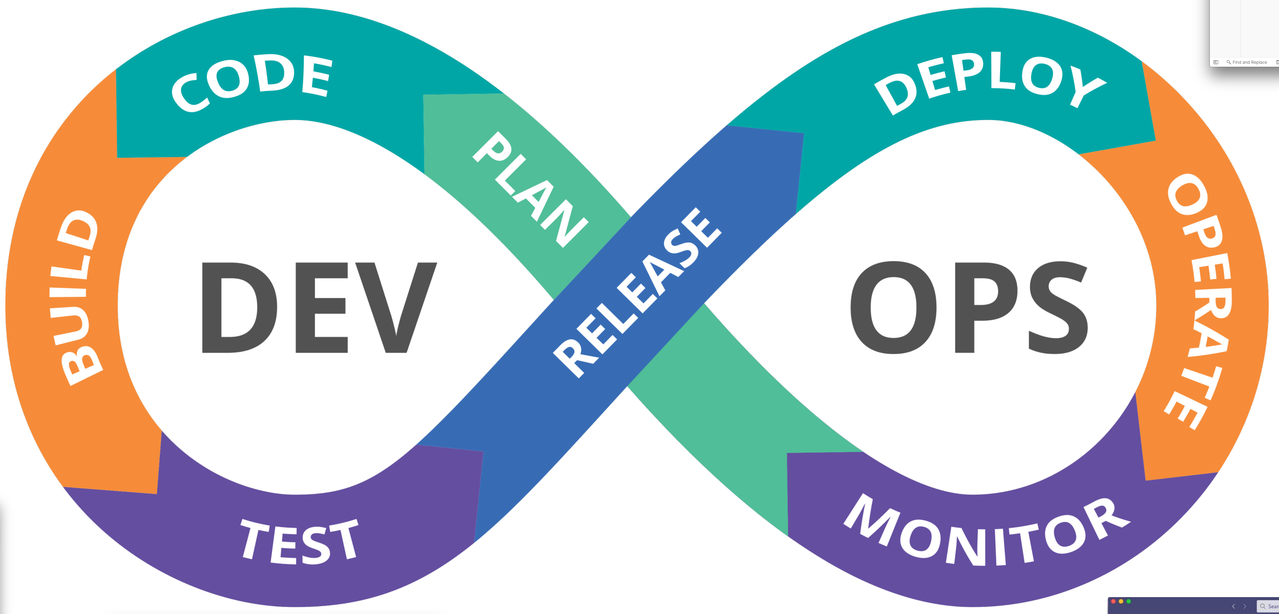


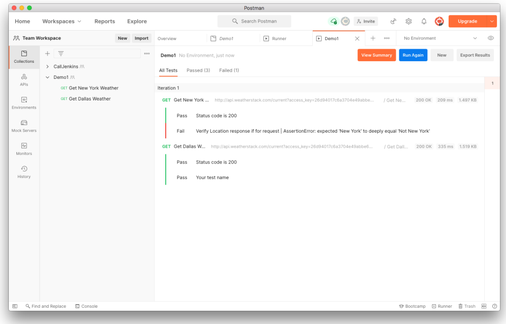
Krista™

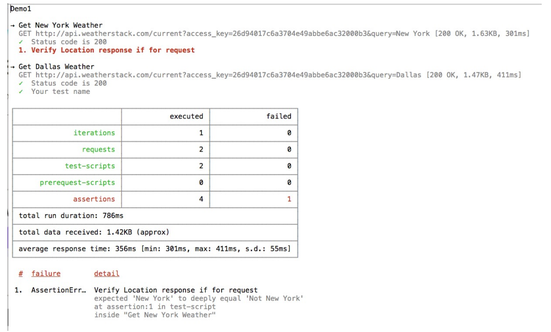
Today World - Tools implemented and integration via Alt Tab

Automation in siloed
Need Orchestration across technology and humans









Demo1

→ Get New York Weather
GET http://api.weatherstack.com/current?access_key=26d94017c6a3704e49abbe6ac32000b3&query=New York [200 OK, 1.63KB, 301ms]
✓ Status code is 200
1. Verify Location response if for request

→ Get Dallas Weather
GET http://api.weatherstack.com/current?access_key=26d94017c6a3704e49abbe6ac32000b3&query=Dallas [200 OK, 1.47KB, 411ms]
✓ Status code is 200
✓ Your test name

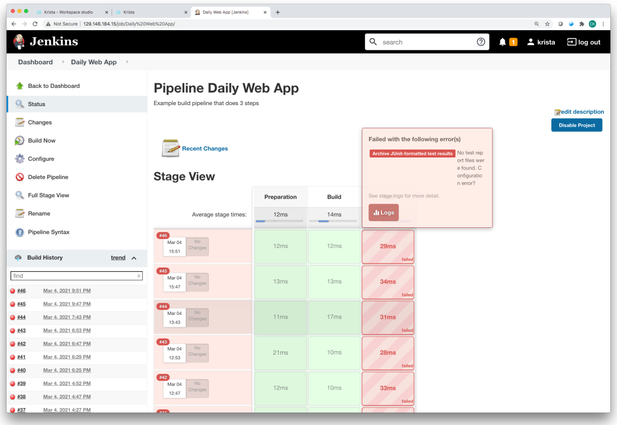
	executed	failed
iterations	1	0
requests	2	0
test-scripts	2	0
prerequest-scripts	0	0
assertions	4	1

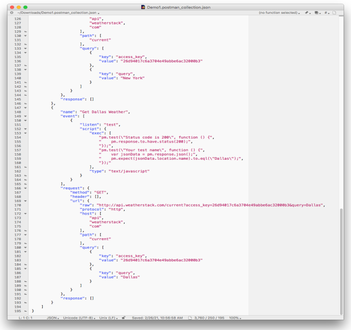
total run duration: 786ms

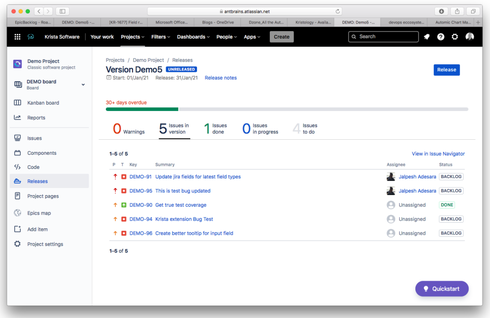
total data received: 1.42KB (approx)

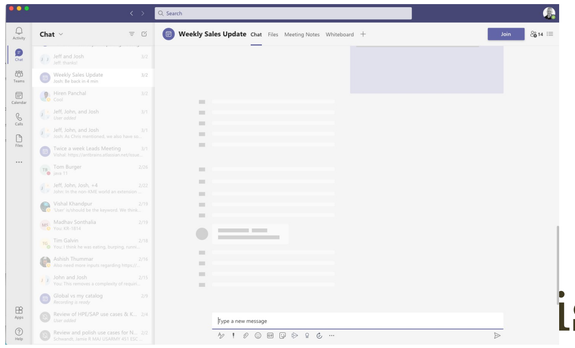
average response time: 356ms [min: 301ms, max: 411ms, s.d.: 55ms]

#	failure	detail
1.	AssertionErr…	Verify Location response if for request expected 'New York' to deeply equal 'Not New York' at assertion:1 in test-script inside "Get New York Weather"

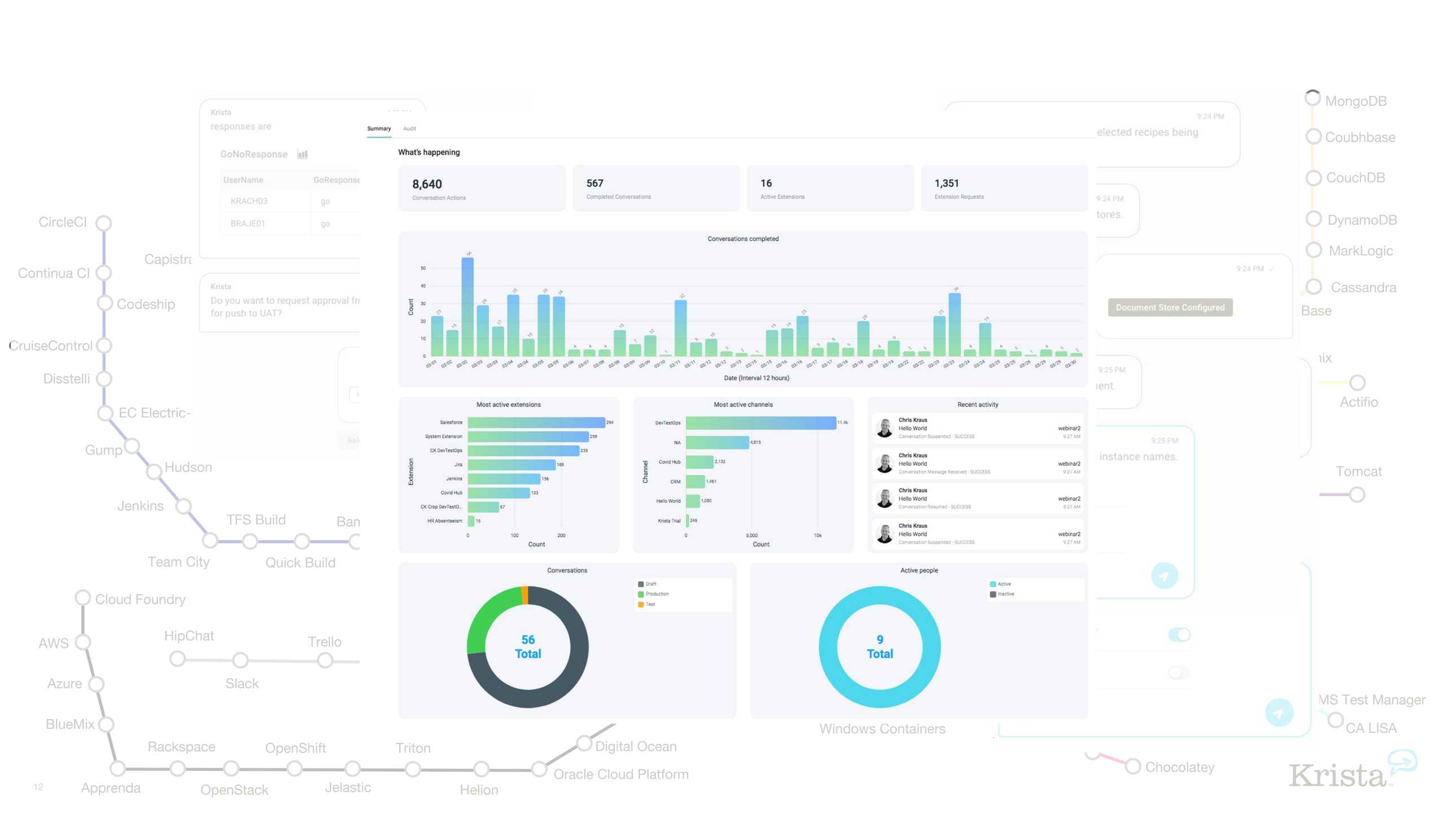








krista™


Krista
responses are
GoNoResponse
UserName
GoResponse
KRACH03
go
BRAJE01
go
Krista
Do you want to request approval fr
for push to UAT?
Summary
Audit
What's happening
8,640
Conversation Actions
567
Completed Conversations
16
Active Extensions
1,351
Extension Requests
Conversations completed
Count
Date (Interval 12 hours)
Most active extensions
Salesforce
System Extension
CK DevTestOps
Jira
Jenkins
Covid Hub
CK Crop DevTestO...
HR Absenteeism
Extension
Count
Most active channels
DevTestOps
NA
Covid Hub
CRM
Hello World
Krista Trial
Channel
Count
Recent activity
Chris Kraus
Hello World
webinar2
Conversation Suspended · SUCCESS
Conversation Message Received · SUCCESS
Conversation Resumed · SUCCESS
9:27 AM
Conversations
56
Total
Draft
Production
Test
Active people
9
Total
Active
Inactive
Document Store Configured
9:24 PM
9:25 PM
elected recipes being
tores.
ient.
instance names.
CircleCI
Capistra
Continua CI
Codeship
CruiseControl
Disstelli
EC Electric-
Gump
Hudson
Jenkins
TFS Build
Ban
Team City
Quick Build
Cloud Foundry
AWS
HipChat
Trello
Slack
Azure
BlueMix
Rackspace
OpenShift
Triton
Digital Ocean
Oracle Cloud Platform
Apprenda
OpenStack
Jelastic
Helion
Windows Containers
MongoDB
Coubhbase
CouchDB
DynamoDB
MarkLogic
Cassandra
Base
Actifio
Tomcat
MS Test Manager
CA LISA
Chocolatey
Krista

Krista's client interactions

People

Krista

SMS

REST API

Conversations / Processes

Inform People

Ask People

Ask Systems

Make Decisions

Business Process Catalog

Extensions / Information

Read Data

Analize Data

Update Data

Take Actions

Java

REST API

API

System A

System B

System C

UI

Krista

Human in the Middle

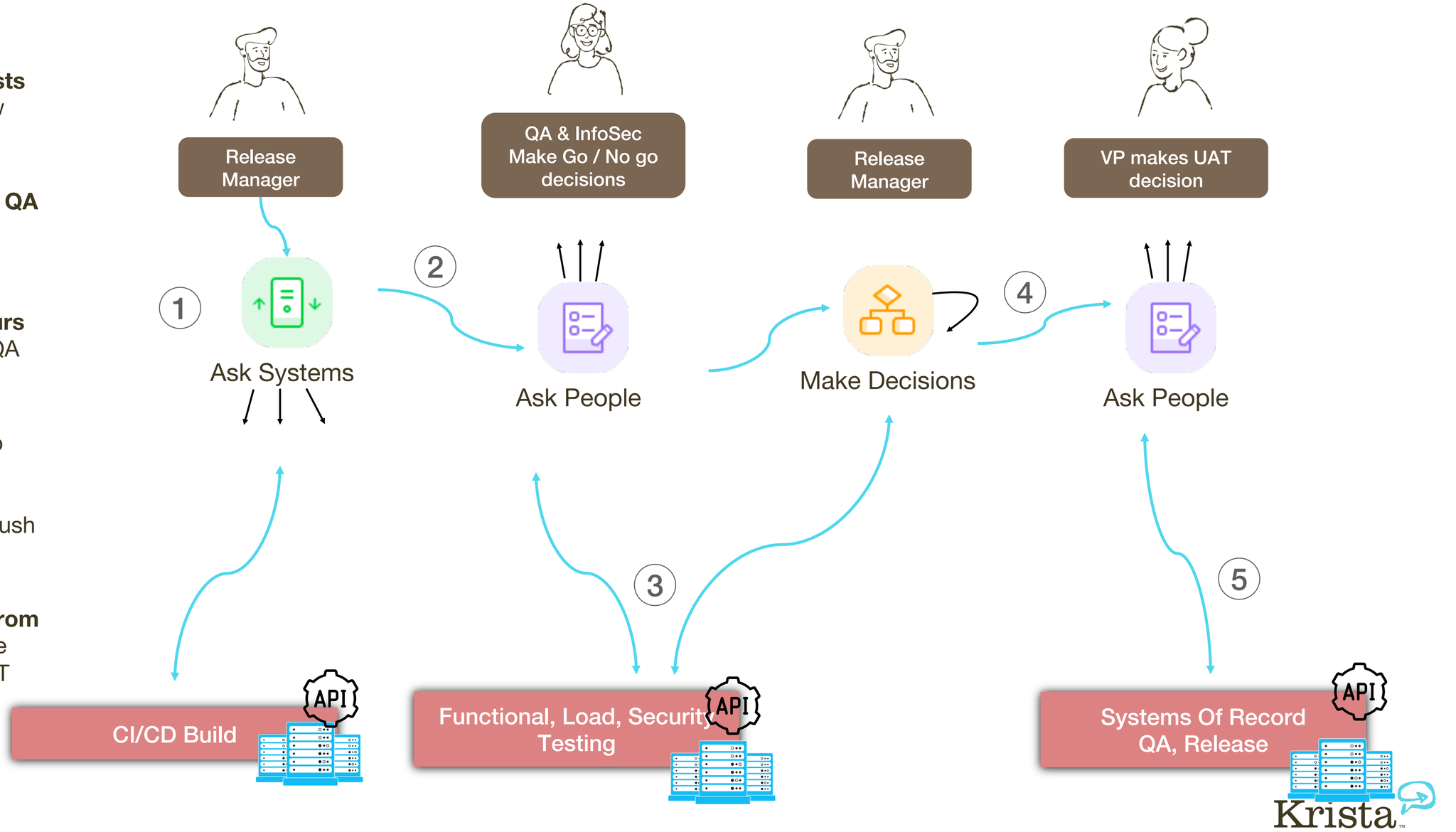
- While we learn to trust the automation
- Work through stability – Trust but Verify
- Change control needs to see history success
- Automate People in manual review, signoff, etc.

Higher Levels of Automation

- Notifications from automation per role
- Inclusion of humans for specific decisions
- DevOps tooling need to be included in orchestration and strategically people

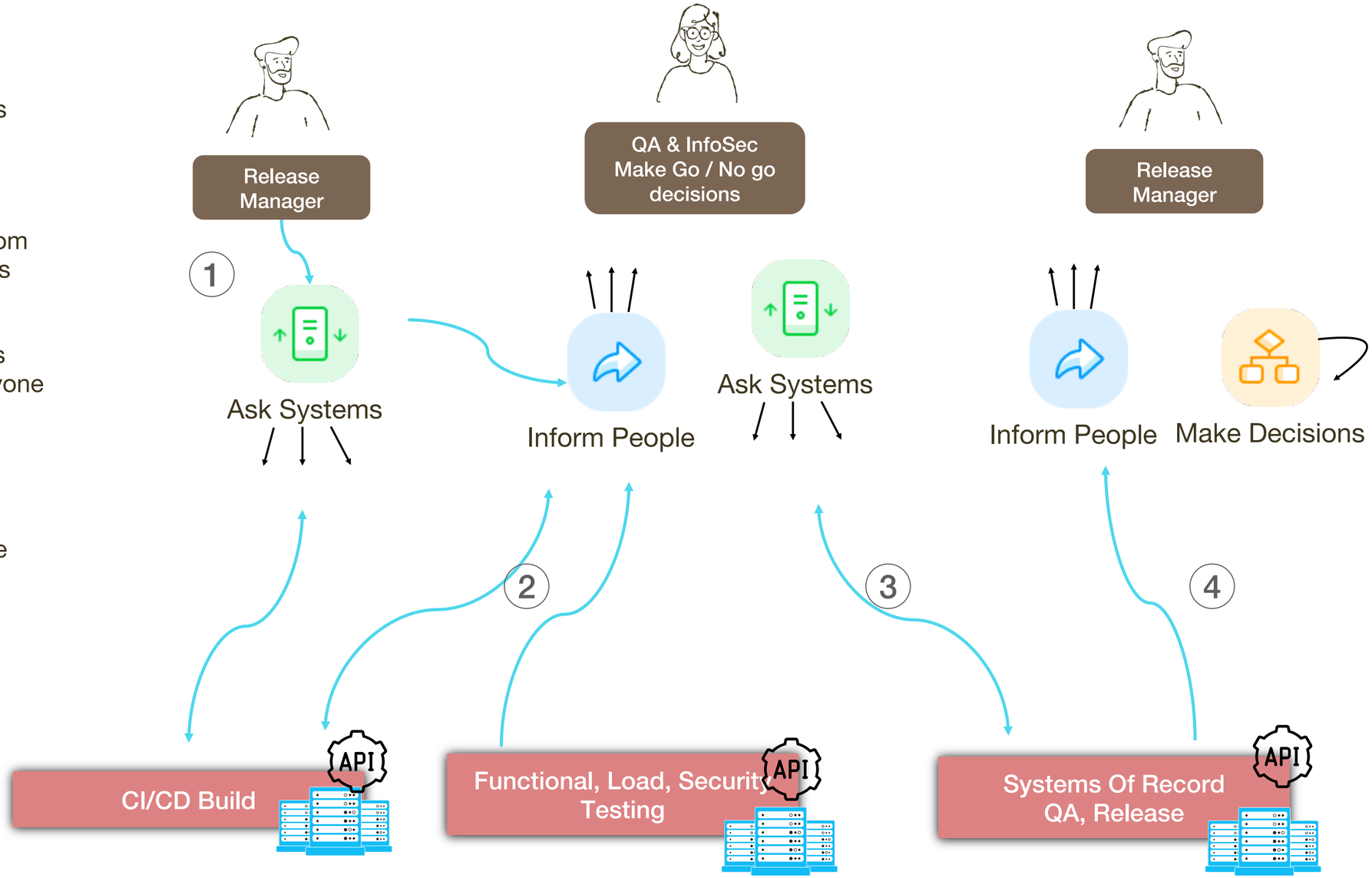
Krista Orchestrating your DevOps workflow with humans

1. **Release Manager requests build** via Krista and review build status
2. Release Manager **notifies QA and Infosec** to perform testing
3. **QA & InfoSec have 2 hours** to perform validations in QA labs
4. QA & InfoSec Go or No go **decision is made.** Release manager then notifies VP of request to push to UAT
5. VP reviews **dashboards from multiple systems** to make decision on publish to UAT



Krista watching and providing notifications
Higher levels of automation with Krista

1. Release Manager requests build via Krista
2. **Krista provides status** from build steps to stakeholders
3. As the pipeline progresses through automation, everyone is informed
4. **Final go / no go to UAT decision** based on release status



Human in the Middle

Value of orchestration is the key to higher levels of maturity

- Release manager did not have to understand and go into Jenkins (just make it so)
- Humans are included in the workflow with timers and escalation, so nothing get left out or stalls
- Aggregation of release information from multiple systems. No need for VP to know where and how to use & log into multiple devOps systems for information
- The Release Manager can write this conversation without code or asking development to put on backlog
- Each actor can have a conversation with Krista vs. being trained on different systems

Higher Levels of Automation

- Orchestration is key to moving past maturity 3
- Messaging platforms get you to level 2 and 3
  - But work against you the more people you add
  - Firehose of messages & spending hours keeping up with the threads
- Best of both worlds is Messaging + Krista plugin (ie. Slack) together to cross and attain levels 4 -5
  - Have conversations between specific parties who are stakeholders in a topic
  - Conversations can provide notifications and provide orchestrated actions across multiple systems and roles
    - Business can use Krista client for reporting and conversations
    - Developers stay in Messaging platforms they are used to

Krista

Krista Software is in an unrelenting pursuit to help businesses find the right answers. Krista Software produces Krista, a modern Intelligent Automation platform. Krista empowers businesses to leverage existing IT assets by building low-cost automation applications.

Web: KristaSoft.com Twitter: @KristaSoft LinkedIn: /Krista-Software