PagerDuty

Intro to PagerDuty® Process Automation

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RUNDECK by PagerDuty

Agenda

1. Introduction.
2. PagerDuty Process Automation & Rundeck
3. Use Cases
4. Deployment options & Plugins
5. Wrap up/Next steps/Follow up

Origin of the Rundeck platform

Rundeck Runbook Automation founded 2010

+60.000 Community downloads

Acquired by PagerDuty Sept 2020

Rebrand Rundeck towards Process Automation March 2022

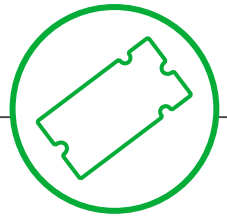
Launched Runbook Automation as SAAS April 2022

RUNDECK by PagerDuty

Digital Demand is Higher Than Ever

47%

increase in the number of daily incidents*



Up to **80%**

of IT Ops budgets are consumed by toil**

62%

of DevOps and IT responders work an extra 10+ hours per week resolving incidents***

Current state is too slow

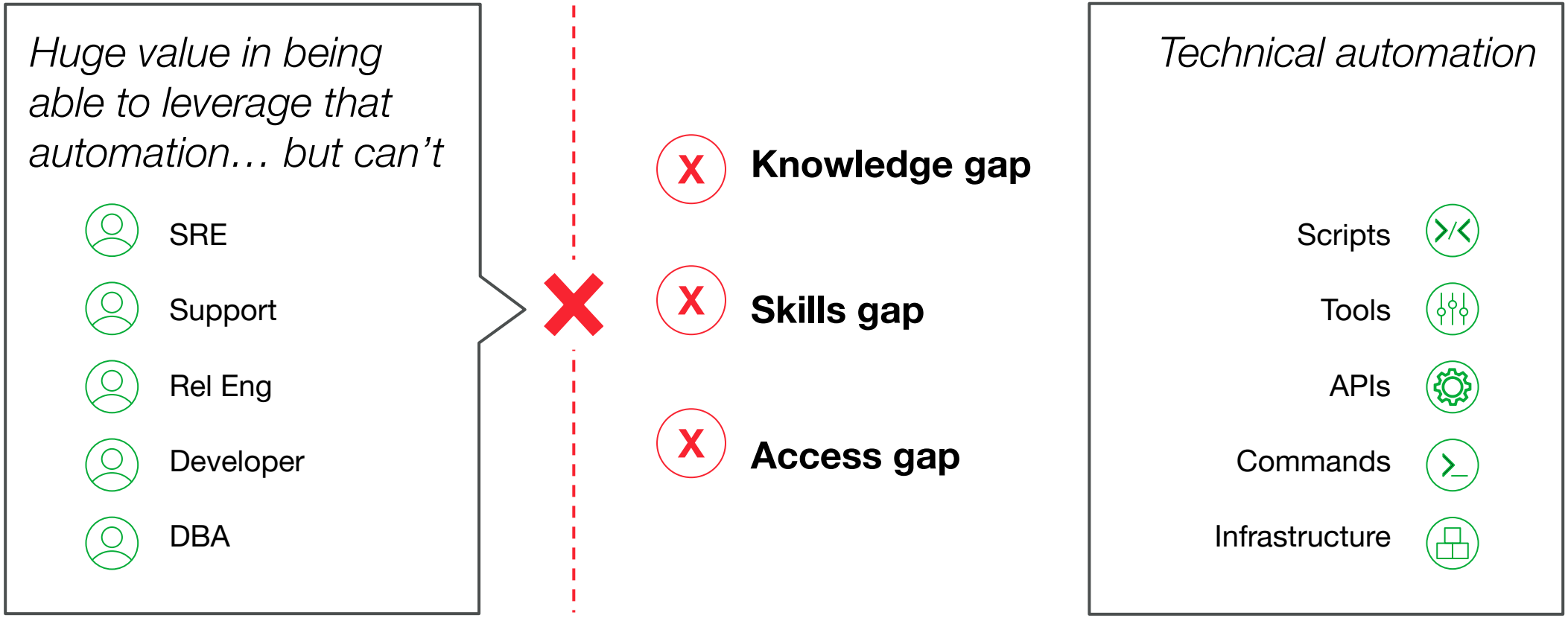
Incidents take too long and require too many people to resolve

Repetitive toil slows down innovation

Engineers are burnt out

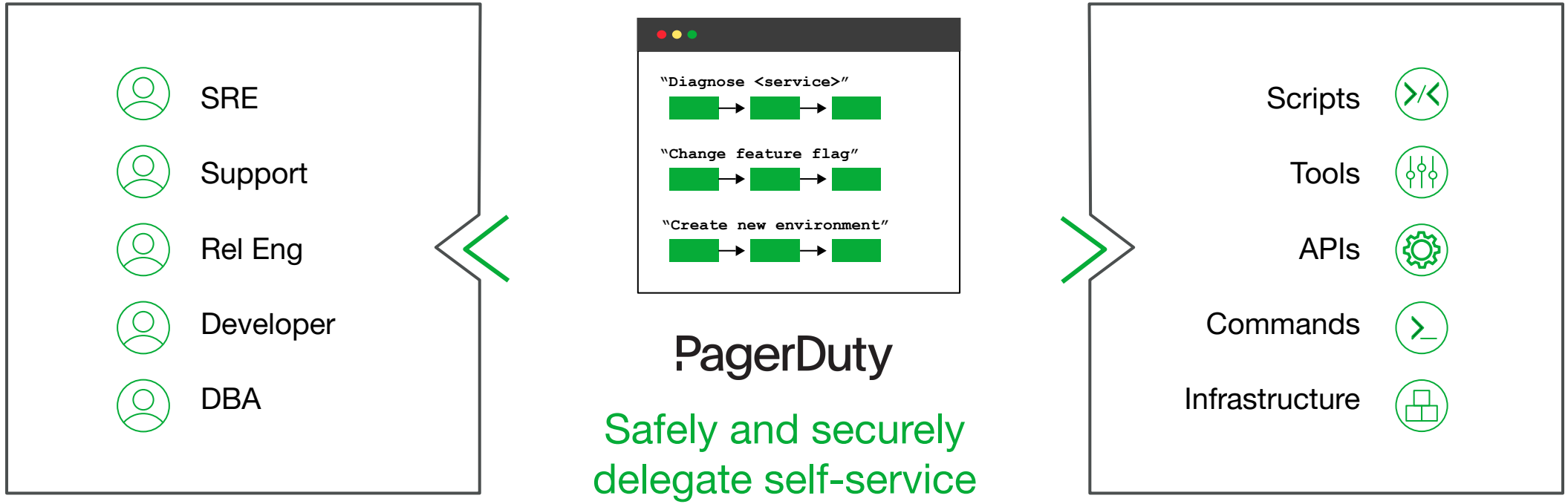
* ***https://www.pagerduty.com/blog/survey-findings-digital-pressure-2020/
** https://sre.google/sre-book/eliminating-toil/

Automation gap limits ability to share operations-level automation



PagerDuty closes the “Automation Gap”

Enables stakeholders to run automation that previously only experts could do

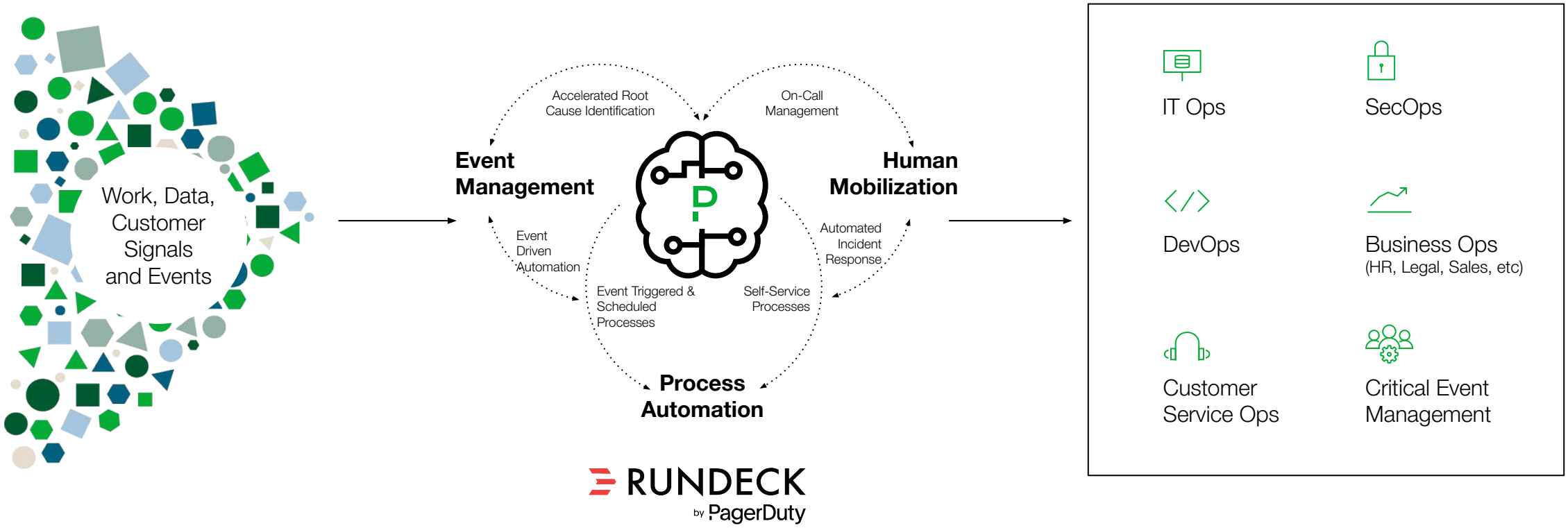


Safely and securely delegate self-service automation to other users.

Technology

PagerDuty Operations Cloud

Process Automation powers human-assisting and event triggered automation

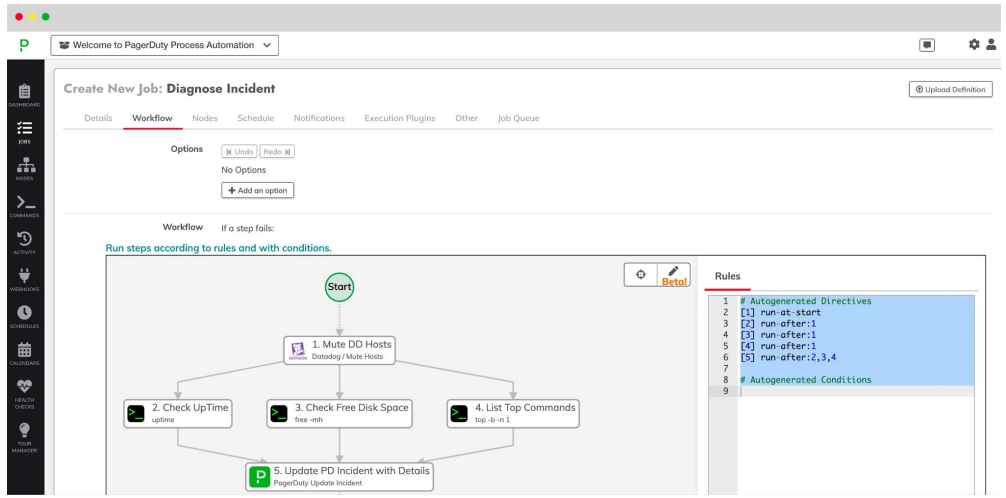


How PagerDuty® Process Automation Works

Access control, secrets management, logging

Ping Identity
okta
OpenLDAP
Active Directory
HashiCorp Vault
CYBERARK

Graphical definition of automated jobs



Delegate jobs to stakeholders

Web GUI
API
CLI

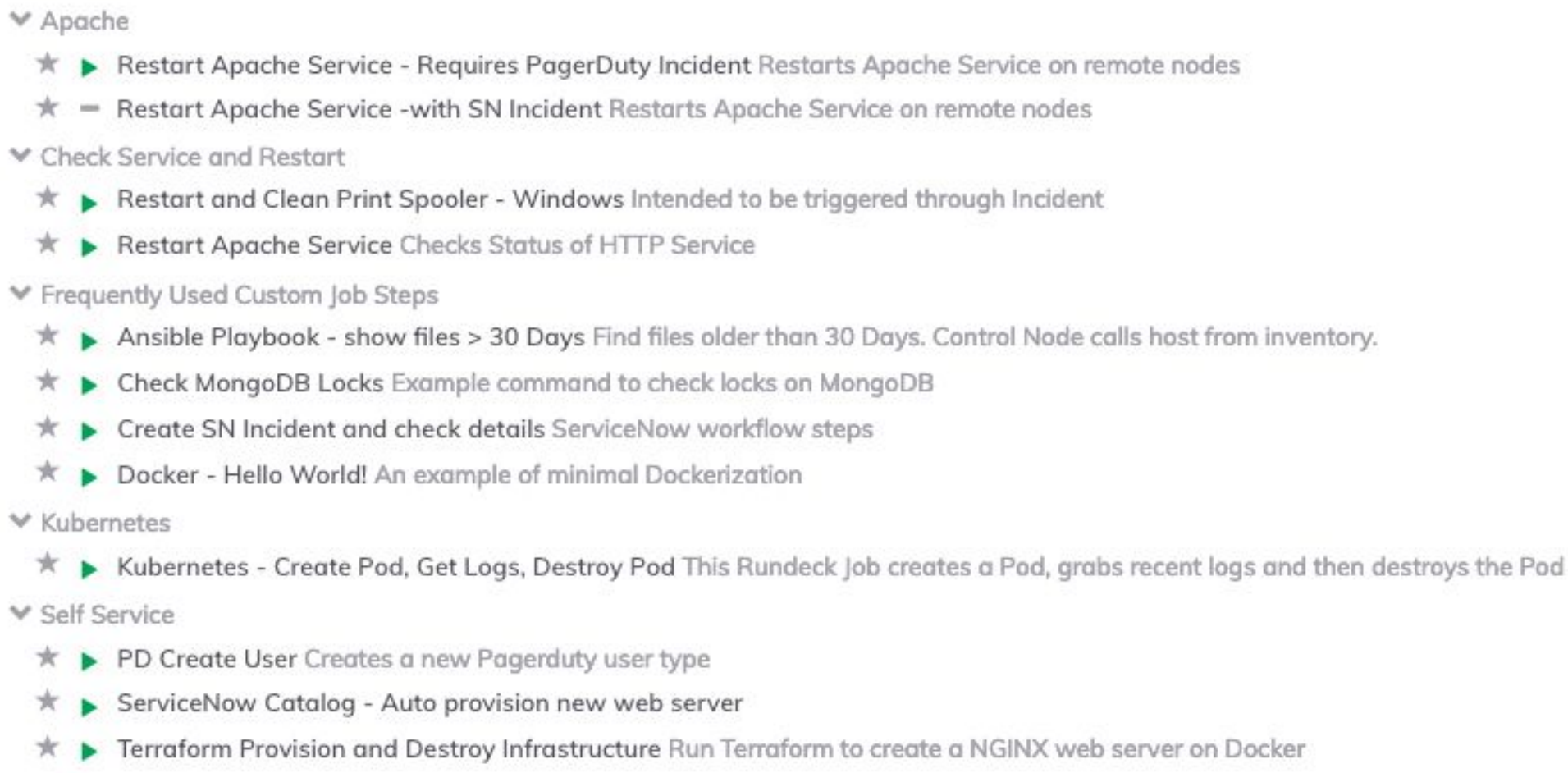
servicenow

Plugin integration to infrastructure & systems
500+ plugins

kubernetes
aws
vmware
Sensu
puppet
HashiCorp Terraform
PowerShell
BASH
Azure
ORACLE Cloud
Google Cloud Platform
DATADOG
servicenow
CHEF
Jenkins
ANSIBLE
python

Example Capabilities

- Kubernetes, Ansible, Docker, Terraform, Servicenow Basic Examples, Basic Services (Apache start based on status)



Automating Diagnostics at Gap

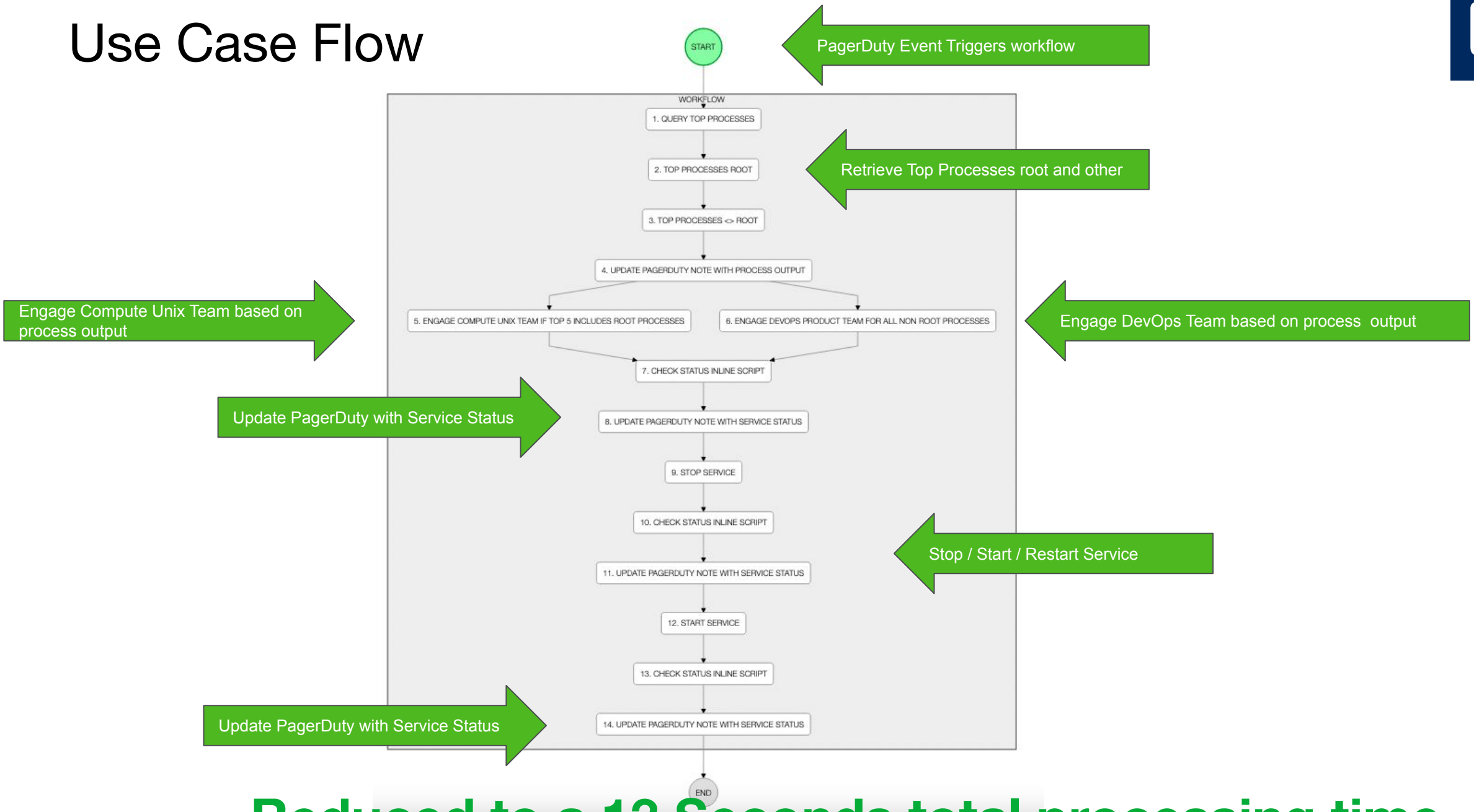
The following slides illustrate a *typical use case* as a responder is triaging an incident using basic diagnostics to determine the escalation path after initial assessment.

The manual process takes 5 -15 minutes to diagnose and escalate.

With *Process Automation/Rundeck* it can be achieved in 13 seconds

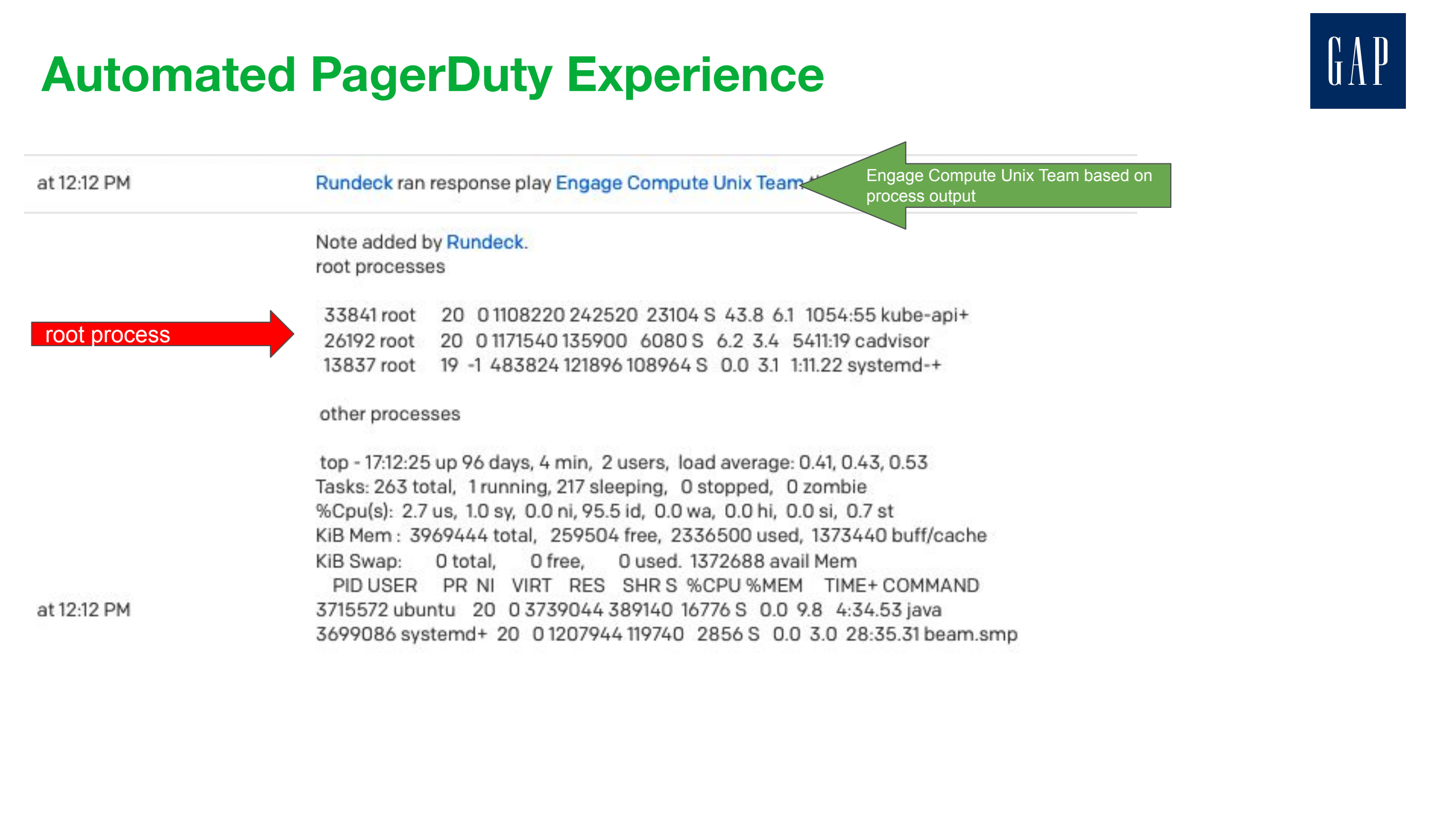
Going from **5 minutes** to **13 seconds** to triage would yield a 95% reduction per incident

Use Case Flow



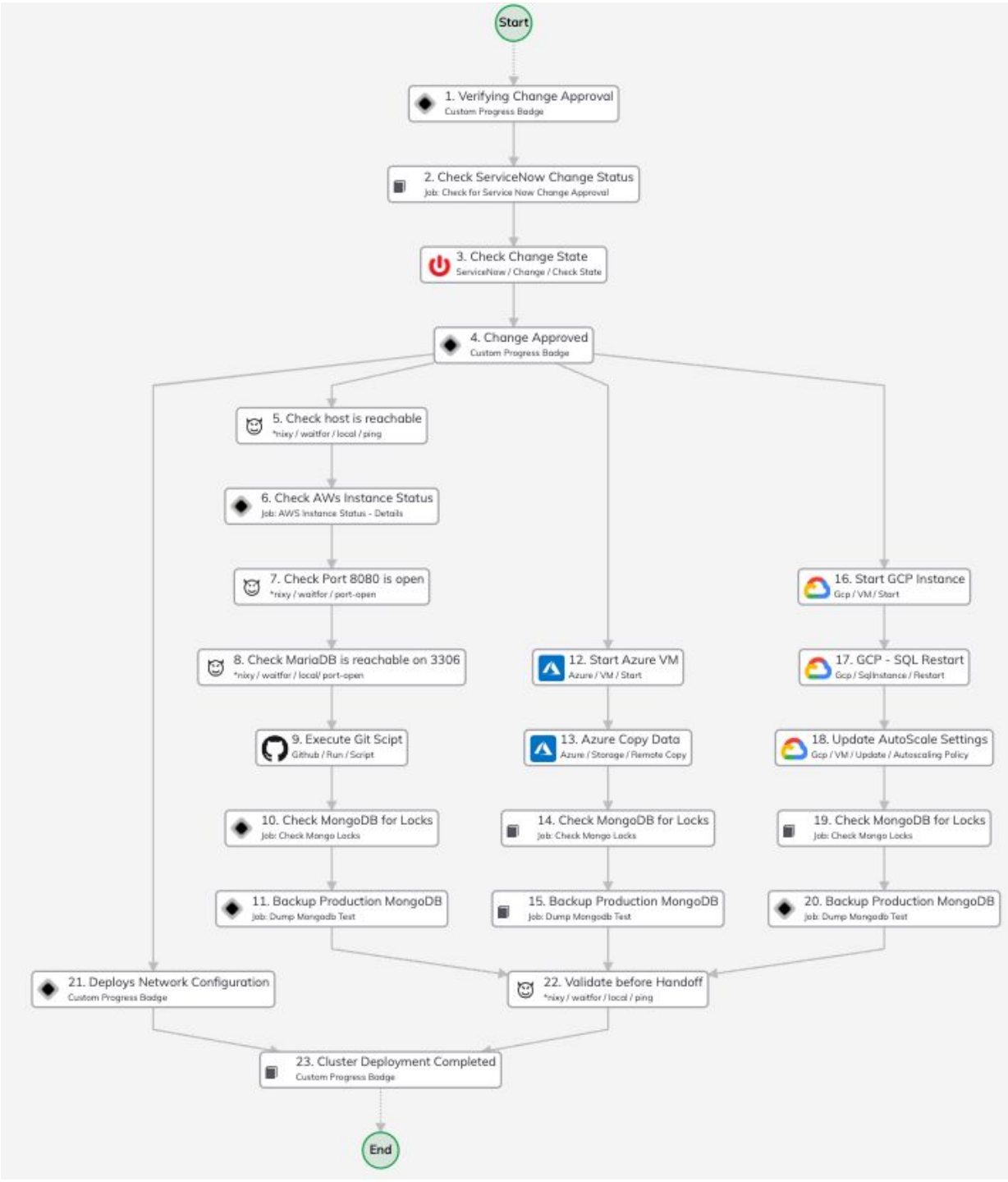
Reduced to a 13 Seconds total processing time

Automated PagerDuty Experience



Example Service Request of cloud deployment automation.

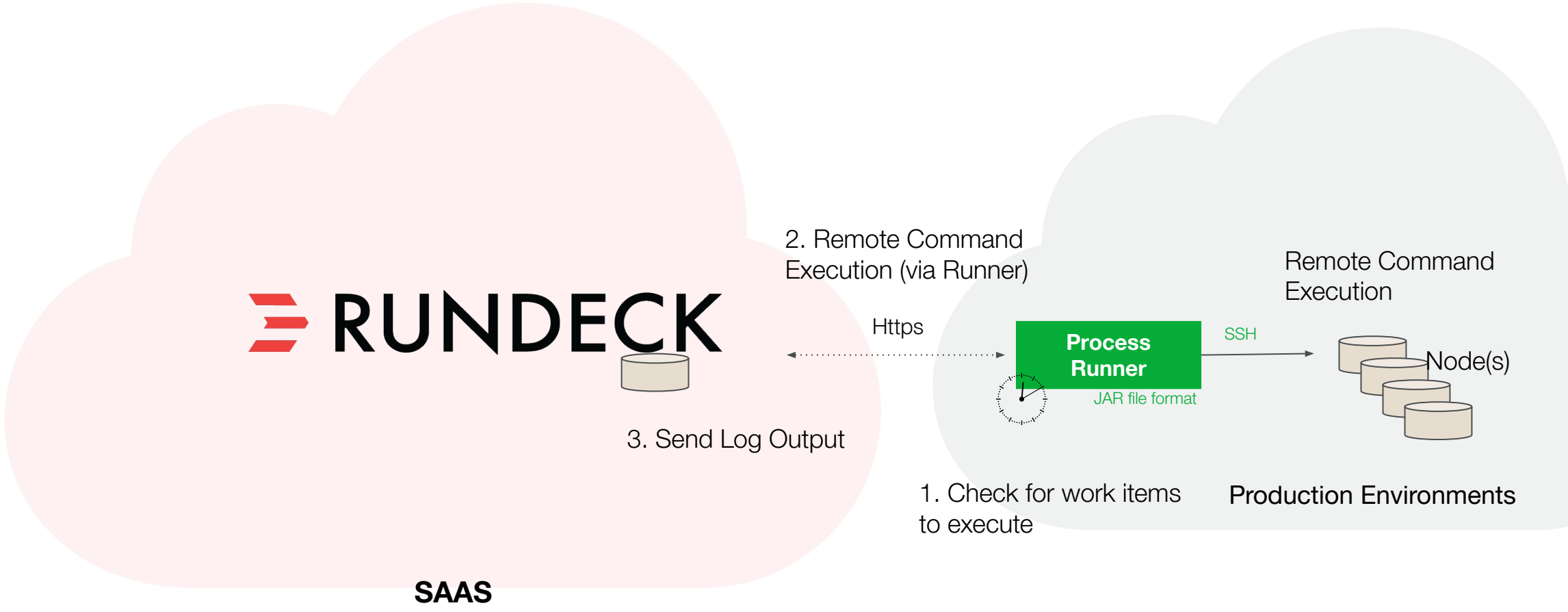
- Multi cloud
  (AWS/Azure/GCP, SNOW Driven)
- Triggered from a service catalog
  via workflow in SNOW
- Includes a number of checks for
  DB Locks and availability.



PagerDuty

New, Runbook Automation (SAAS)

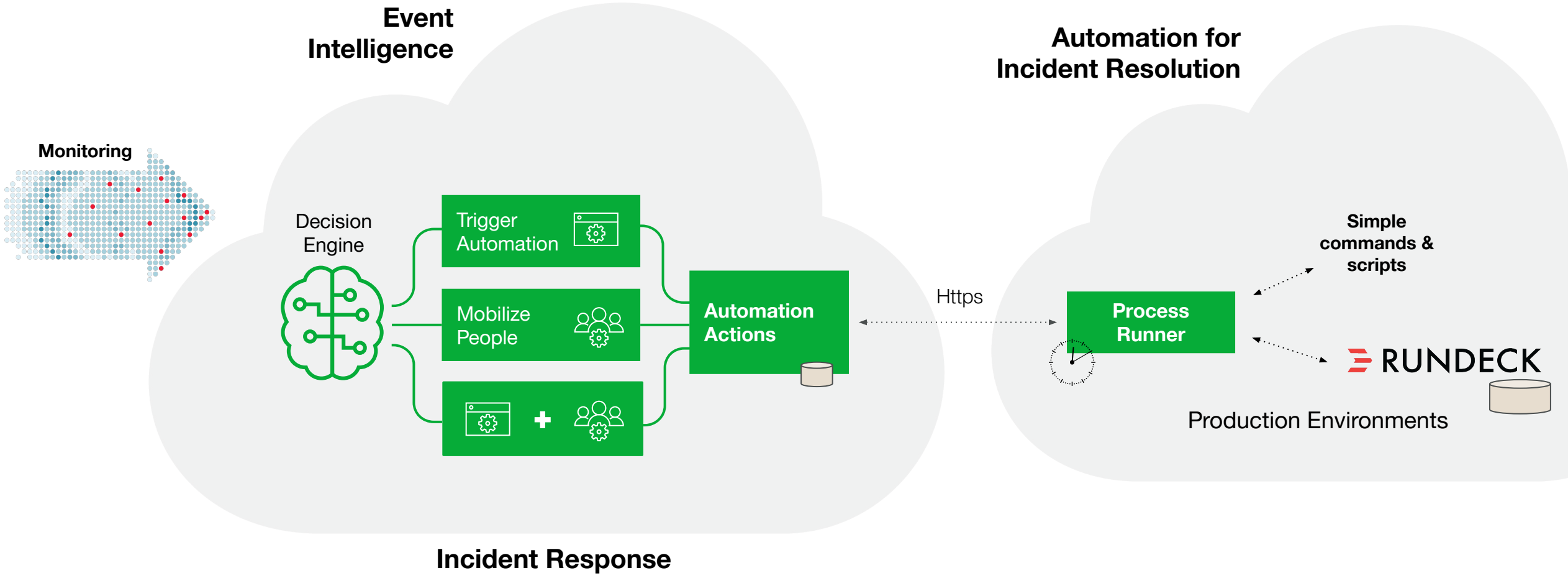
Runbook Automation (aka Rundeck Cloud)



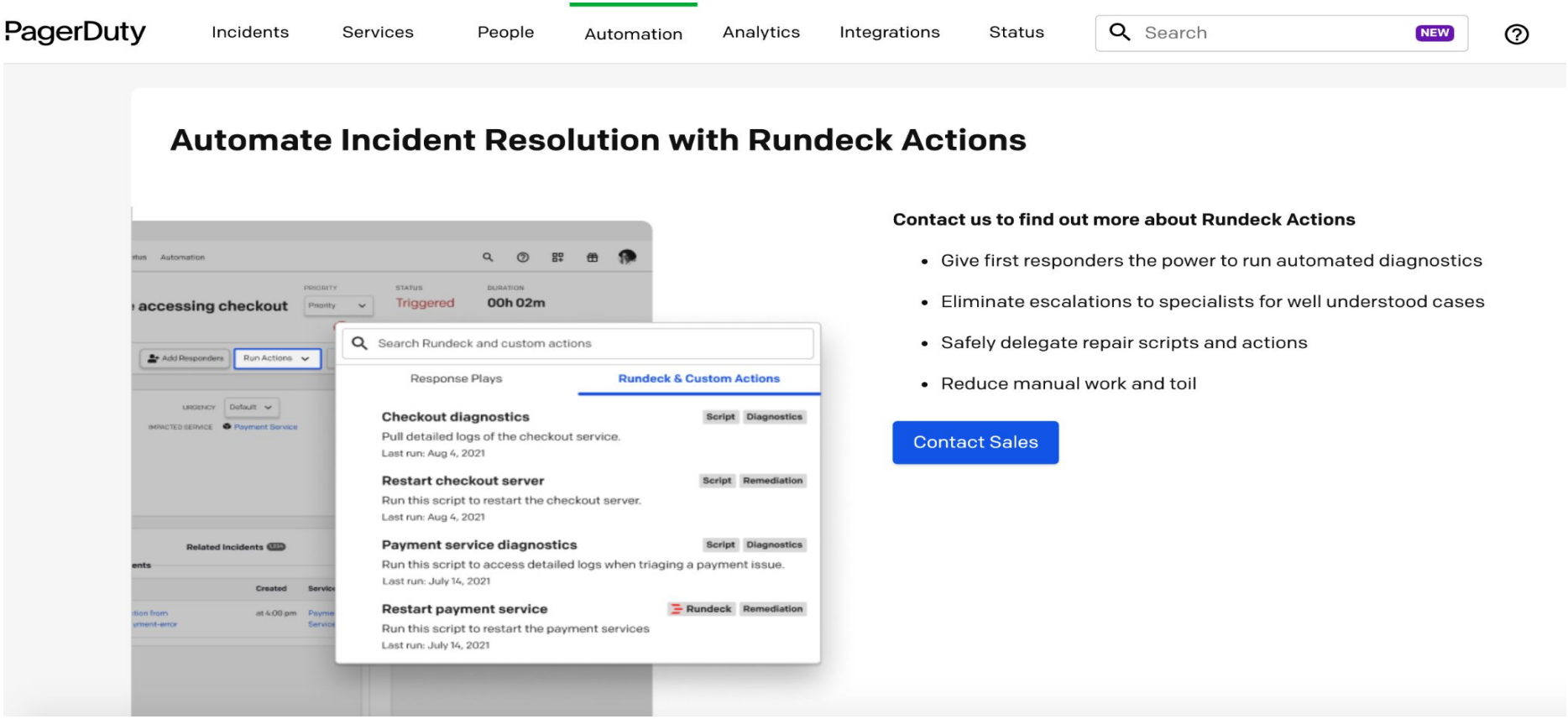
https://docs.rundeck.com/docs/about/cloud/#rundeck-cloud-and-rundeck-enterprise-differences

PagerDuty & Automation Actions

Automating incident response with PagerDuty



Process Automation



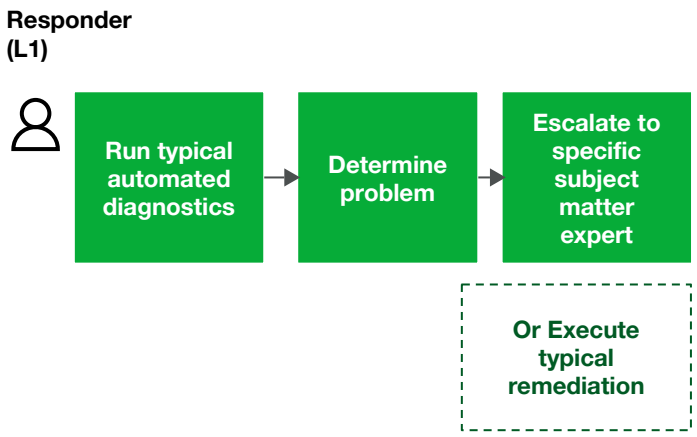
Bash Scripts

Currently available on: **Business** and **Digital Ops** Plans

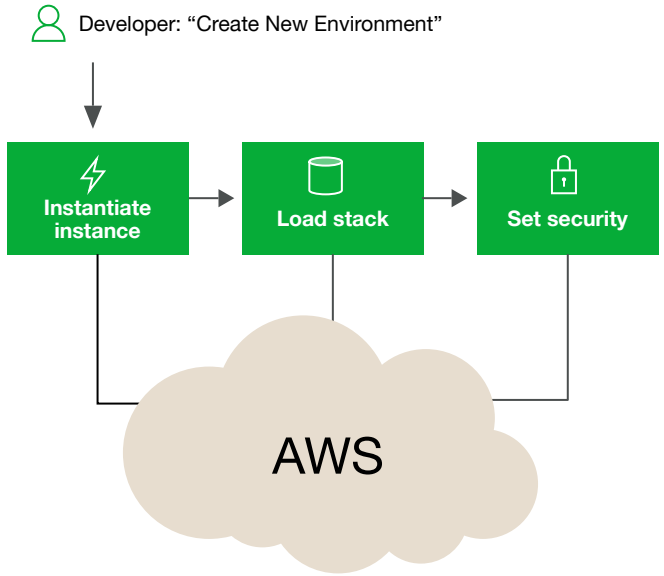
Use cases

PagerDuty Process Automation Use Cases

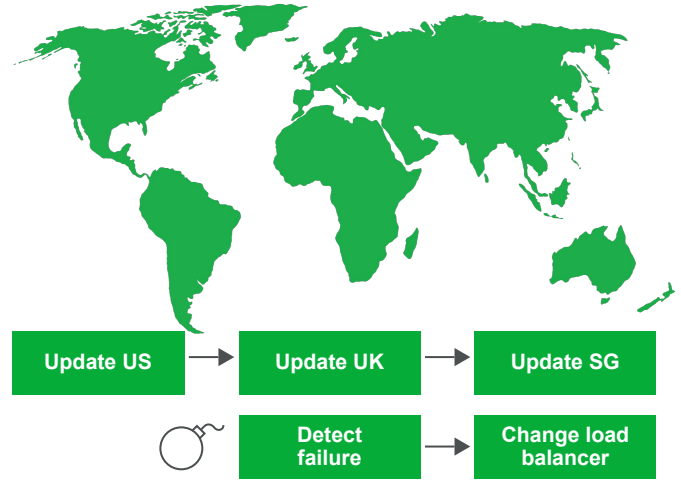
Automate diagnostics and remediation for incidents



Automate operations for cloud platforms



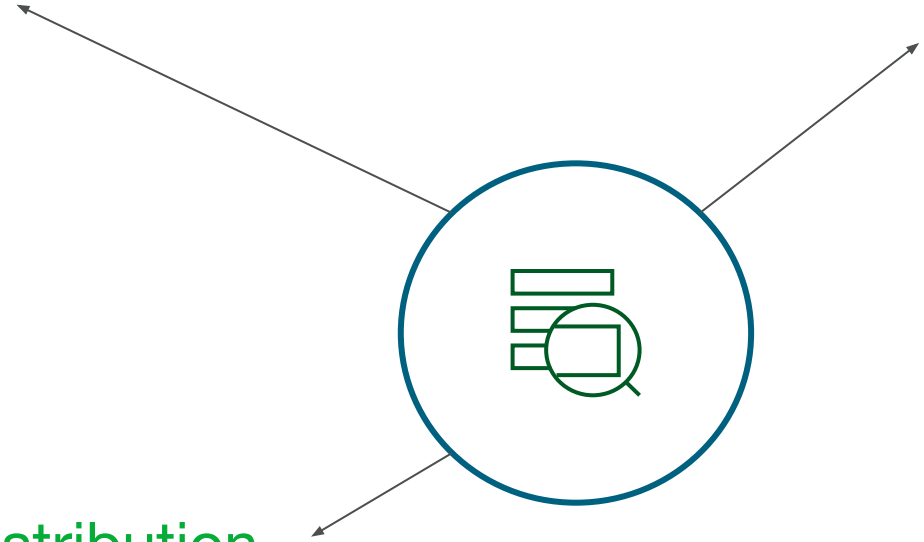
Automate business & IT operations for self-managed environments



PagerDuty Process Automation real world examples

Incident Response Diagnostics

Enrich existing events with relevant data
Time, date, status & logs
Platform status
Service status
3rd party status
Kubernetes status
Restart Servers
Restart Services
DB Unlocks
Flush Storages
Clearing Files/Memory
Open/Update/Close Tickets
Healing
Escalation



Service Request Automation

Infrastructure Provisioning
Onboarding/ Deleting Users
Decommission Hardware
Adding Servers
Adding Storage
Software Updates & Deployment
De/Provisioning AWS Services
Opening Ports, Switching/Routing
Production Patching
Vulnerability Patching
Increasing Capacity
Security Settings
Validate Security
Change Configs
Adding VLANs
Creating Slack channels
Adding DNS hosts
Firewall port settings
SSL Certificates validation checks
Get next available IP from DDI
White list/ blacklisting IP/ domains

Data Distribution

Task / Job Scheduling
ETL (Extract-Transform-Load)
File Transfers
Mass data Removal
GDPR data removal
Complex Workflow / Rules
Big Data Replication
Data Remodeling
Dbase creation inside a shared SQL instance

Business value

			Outcome
Process →	**Scale/Standardize** Expandable capacity; isolate, standardize and spread workloads	**Security/Risk** SSO, Access control, encrypted secrets, audit and compliance	**Reduce MTTR by 30-70%** increase customer satisfaction by using orchestrated automation to reduce time to repair
Technology →	**Remove complexity** Minimize the complexity of automating workflows	**Self-service capabilities** Democratize access to automation technologies to multiple groups	**Engineering efficiency +40%** Provisioning config, with the use of 120+ plugins increase productivity
People →	**Support** Get help from product experts, when you need it	**Usability** Enhanced user experience for all users, delegation to L1 teams	**Reduce manual tasks by 25%** Platform empowers SME by offloading repetitional work (lower attrition)

What’s the business objective ?

- *Automating processes that are currently manual*
- *Standardizing/centralizing existing automation*
- *Securing existing automation*
- *Reconstructing existing automation for easier supportability*
- *Delegating existing automation out to more people*
- *Authoring new automation to reduce MTTR on incidents*

Community/Enterprise edition comparison

	Community	Enterprise
Support, priority-based support, SLA response and more.	⛔	✅
Enterprise Runner	⛔	✅
HA Clusters	⛔	✅
Rulesets (If-this-then-that)	⛔	✅
Failed job Resume	⛔	✅
Node Health Checks	⛔	✅
Auto Takeover (Server)	⛔	✅
Retry Failed Nodes	⛔	✅
Single Sign On Authentication	⛔	✅
Certified Enterprise Plugins	⛔	✅
Advanced Webhooks	⛔	✅
Load Balanced Workloads, job queuing	⛔	✅
GUI based ACL	⛔	✅
Job Independent Scheduling, Blackout Calendaring, Future planning	⛔	✅
Workflow Visualization	⛔	✅
Available as SAAS	⛔	✅

Enhanced Support Offerings

Install and Configuration Accelerator

Get Rundeck Enterprise up and running rapidly. Ensure configuration meets performance, scalability, security, and maintainability needs.

Use Case Accelerator

Get your initial use cases implemented quickly and take full advantage of Rundeck Enterprise capabilities.

Training

Classroom-style training for your Rundeck administrators and users.

Technical Account Manager

Dedicated, primary technical contact. They act as an extension of your team — partnering with you to help drive performance and growth so you can maximize your Rundeck investment.

Professional Services

Rundeck Install & Config Accelerator

Overview

- 1-1 sessions to review configurations and answer questions
- Provide resources on how to integrate Rundeck into customer environment
- Help you identify and navigate common roadblocks
- Assist in preparing Rundeck for the production environment

Sessions

- Capacity planning, infrastructure requirements, and identifying dependencies
- Installing and configuring Rundeck
- Implementing authentication
- Cluster policy configuration
- Overview of projects, jobs, nodes, and access control policies

Professional Services

Rundeck Use Case Accelerator

The purpose of the Use Case Accelerator is to provide an additional level of support consisting of best practices based advisement to help customers maximize their usage of Rundeck in the context of their specific business needs in order to achieve their vision of success.

Sessions

- Problem analysis
- Solution design
- Job design and implementation
- Strategies for ongoing project, job, node, and access control policy management
- Enablement training supporting designed solutions

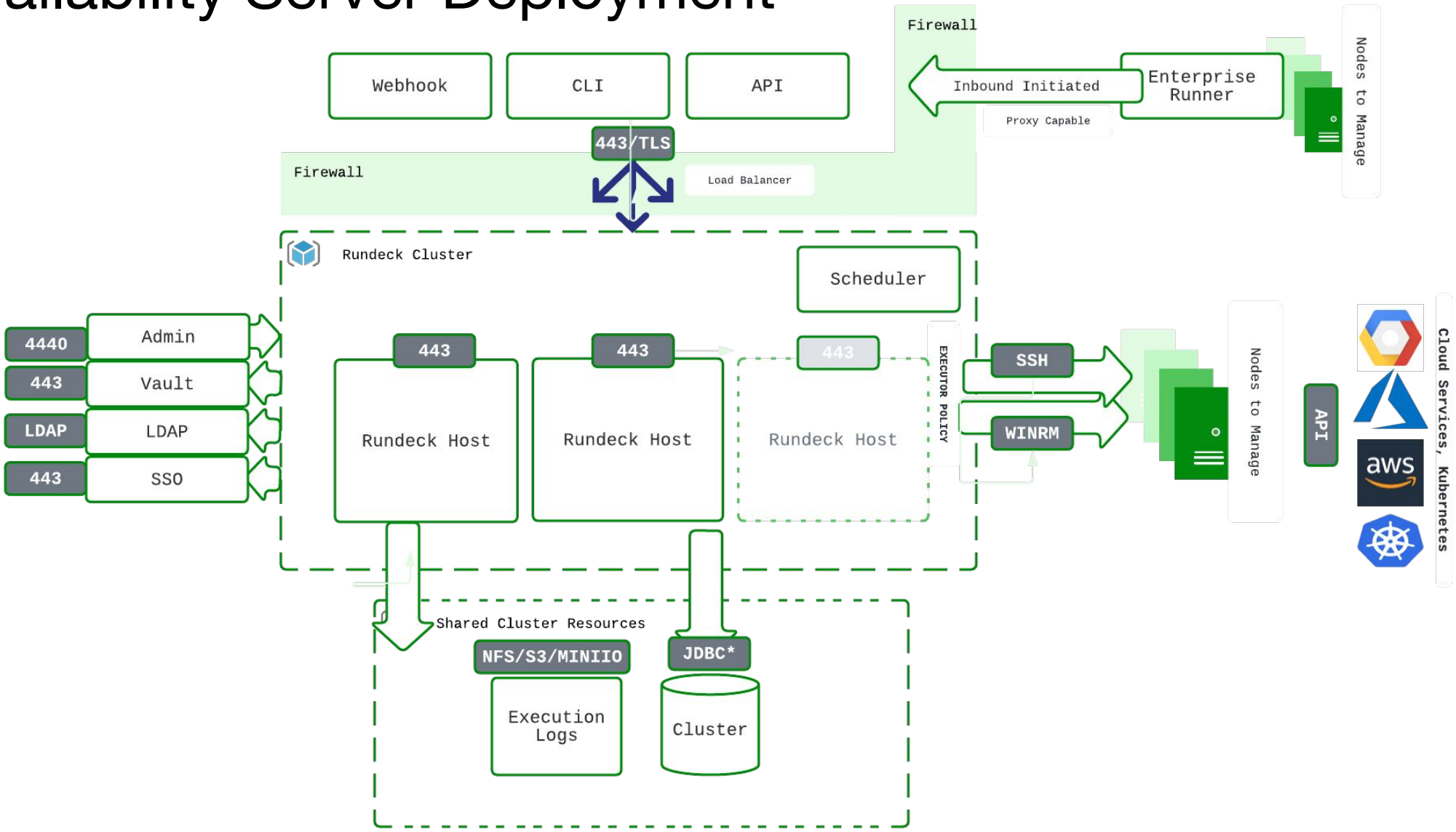
Support Services

Rundeck Technical Account Management

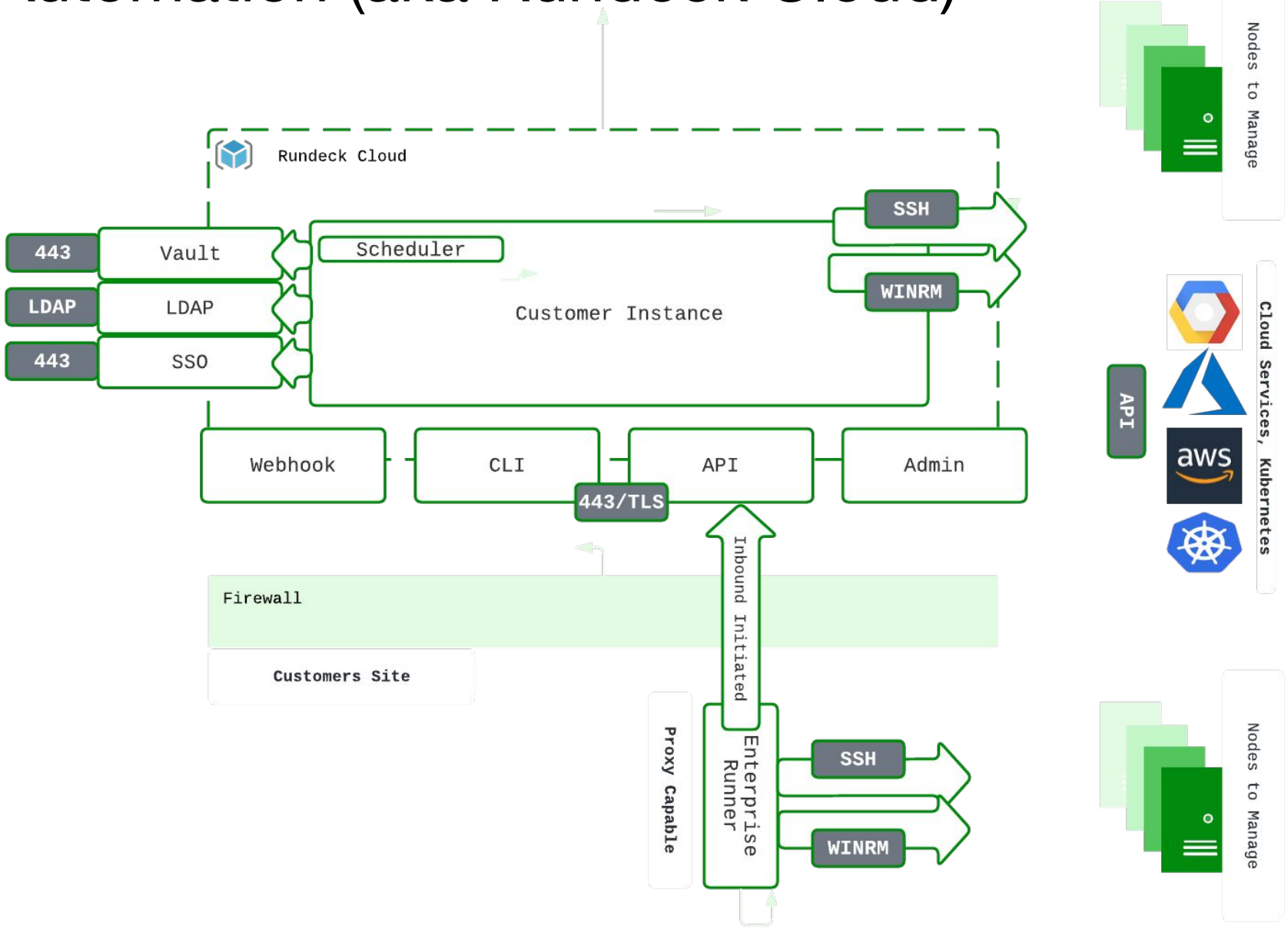
The Rundeck TAM is a dedicated technical resource up to 20 hours per month to help maximize and accelerate solution adoption, minimize issues, and resolve challenges faster.

- Weekly 1-1 meetings which cover the following types of topics
  - Best practices for job writing, customizations, and other integrations
  - Review of support cases
  - Workshops, feature review, Rundeck updates
  - Guidance on upgrades, architecture, migration, procedures, plugins

High Availability Server Deployment



Runbook Automation (aka Rundeck Cloud)



Thank you

Rundeck Technical Validation Options

RUNDECK

Self Evaluation

Designed to test Rundeck's in our environments (Cloud). This is an engagement is led by Solution Consulting. The goal of the Self Evaluation is to test Rundeck's ability to run automation in a simulated environment to provide quick time to value. Initial login technical support with templates.

2 Meetings (30 mins)
Email/slack support

Environment: Cloud
Term: 14 Days
Cost: Free

Rundeck OSS Upgrade

Provide customer with Rundeck Enterprise license. This is a fully self guided trial with limited Solution Consulting Support.

2 Meetings (2 hours)
Email/slack support

Environment: Customers
Term: 14 Days
Cost: Free

Prescriptive Proof of Value

Designed for testing Rundeck's automated workflow capabilities. This scoped 2-week engagement is led by a Solution Consultant. The goal of the PoV is to test Rundeck's ability to run customers automation in the form of Rundeck jobs.

4 Meetings (2 hours)
Email/slack support

Environment:1 Instance (non-H/A)
2-3 Scoped workflows
Term: 14-days
Cost: Free

Rundeck Prod Pilot

Designed to test Rundeck's ability to run in production environments. This 3-month engagement is led by Rundeck Field Engineer and supporting engineering teams. The goal of the Prod Pilot is to test Rundeck's ability to run automation in production environments for an extended period of time.

Environment: Up to 3 Clusters OR Cloud
Term: 91 Days
Cost: $60,000
Includes:

- Up to 3 Clusters OR Cloud
- Up to 50 users
- TAM Support
- Install and Config Services