**Managing Compliance and Risk with Data Center Automation**
**December 13, 2017**

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Led by:
Darren Blumenthal and Megan Glick

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# Today's Speakers

**Today's Speakers:**

Darren Blumenthal
Alliance Solution Architect
Accenture

Megan Glick
Product Marketing Manager
Micro Focus

Joe deBalquiere
Product Manager
Micro Focus

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# Webinar Housekeeping



- This "LIVE" session is being recorded

- Recordings are available to all Vivit members

- To enlarge the presentation screen, click on the rectangle in the upper right hand corner of the Presentation pane
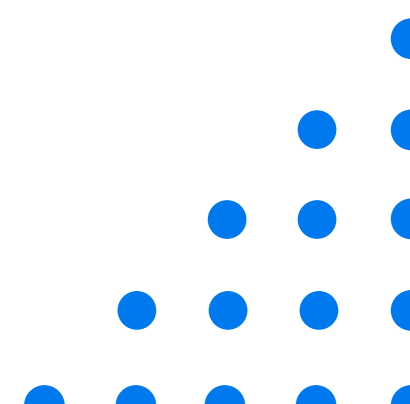
# Webinar Control Panel

- Session Q&A:

  Please type questions in the Q&A pane
  and click on "Ask"

- Choose the language in which you would like to ask your questions
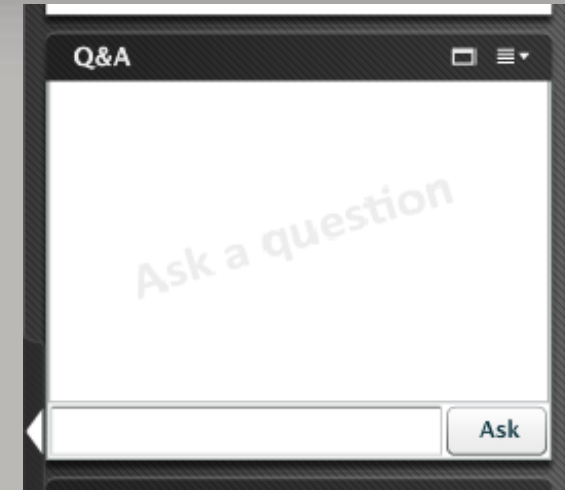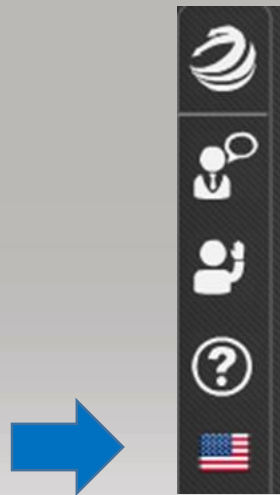
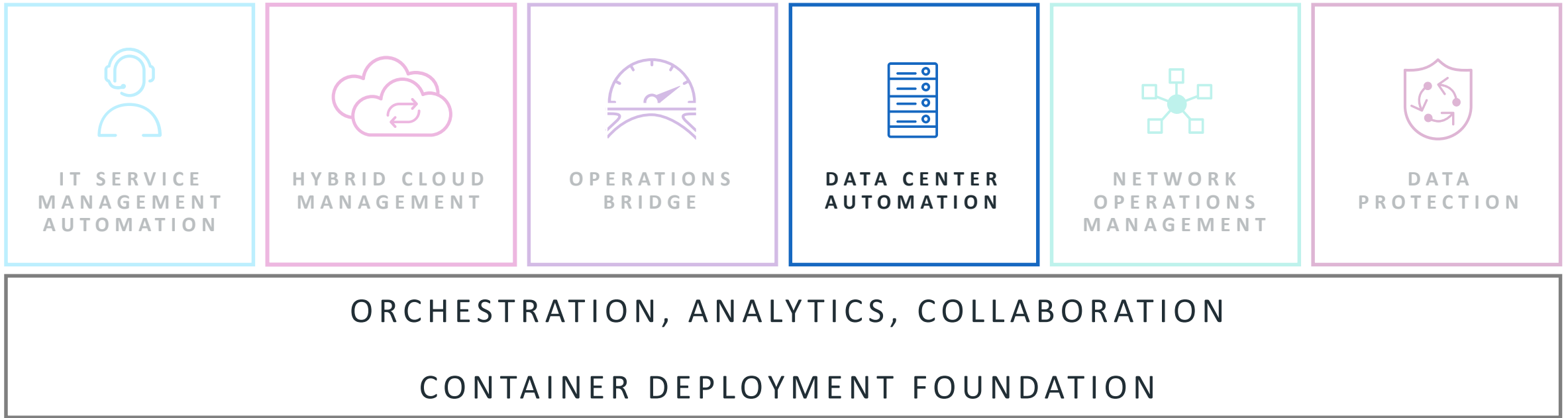# Recap: Suites and Container Deployment Foundation

# IT Operations Management
## Easy to consume, deploy, and integrate

| IT SERVICE MANAGEMENT AUTOMATION | HYBRID CLOUD MANAGEMENT | OPERATIONS BRIDGE | DATA CENTER AUTOMATION | NETWORK OPERATIONS MANAGEMENT | DATA PROTECTION |
|---|---|---|---|---|---|

ORCHESTRATION, ANALYTICS, COLLABORATION

CONTAINER DEPLOYMENT FOUNDATION

MICRO FOCUS

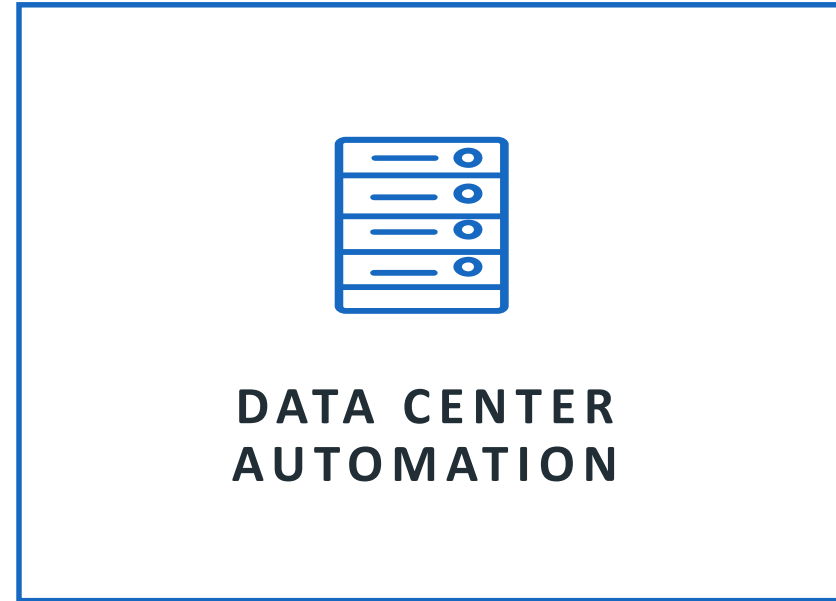# From Point Products to Suites

Server Automation

Operations Orchestration

Database and Middleware Automation
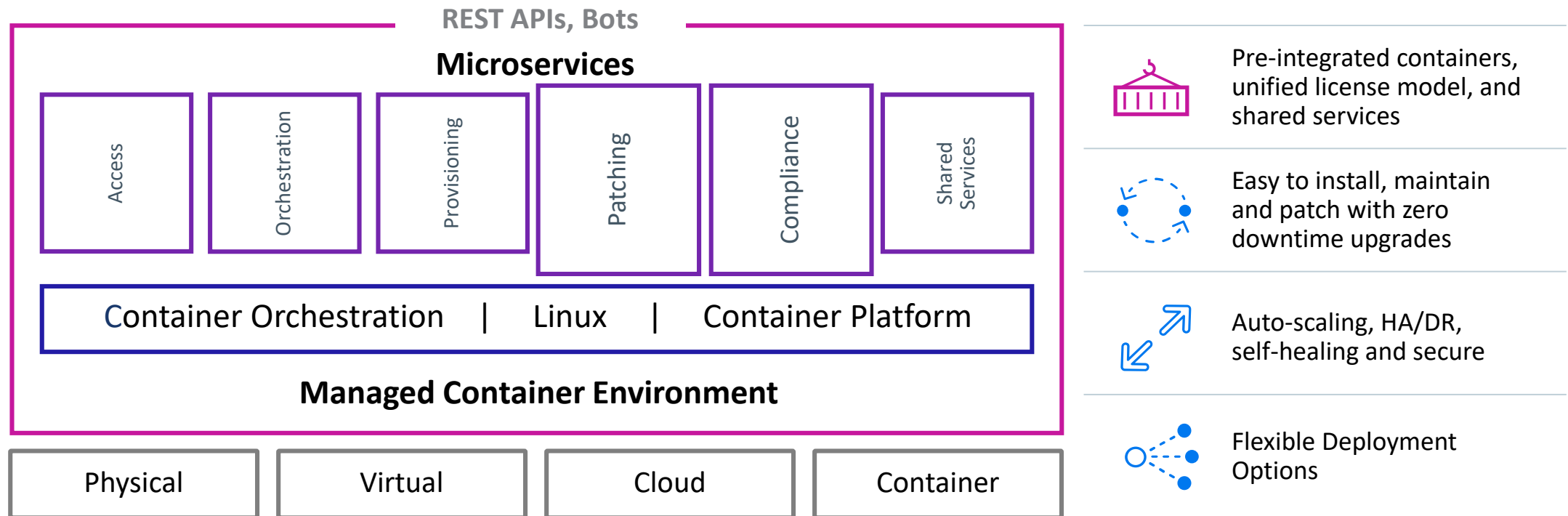
IT Operations Compliance

**DATA CENTER AUTOMATION**

# Micro Focus Data Center Automation

Compliance micro service is offered as part of the Suite

| Provisioning & Configuration | Patching | Compliance |
|---|---|---|

**Orchestration | Analytics | Reporting**

**Heterogeneous | Scalable**

Bare metal, virtual

Database & middleware

Container server farm

**Container Deployment Foundation**

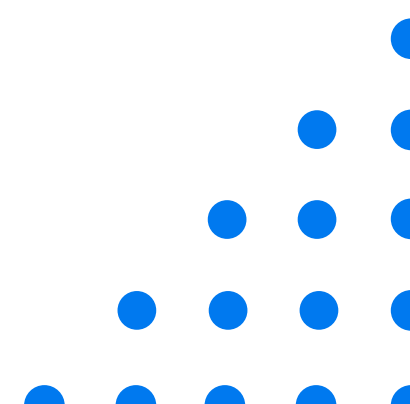| Physical | Virtual | Cloud | Container |
|---|---|---|---|
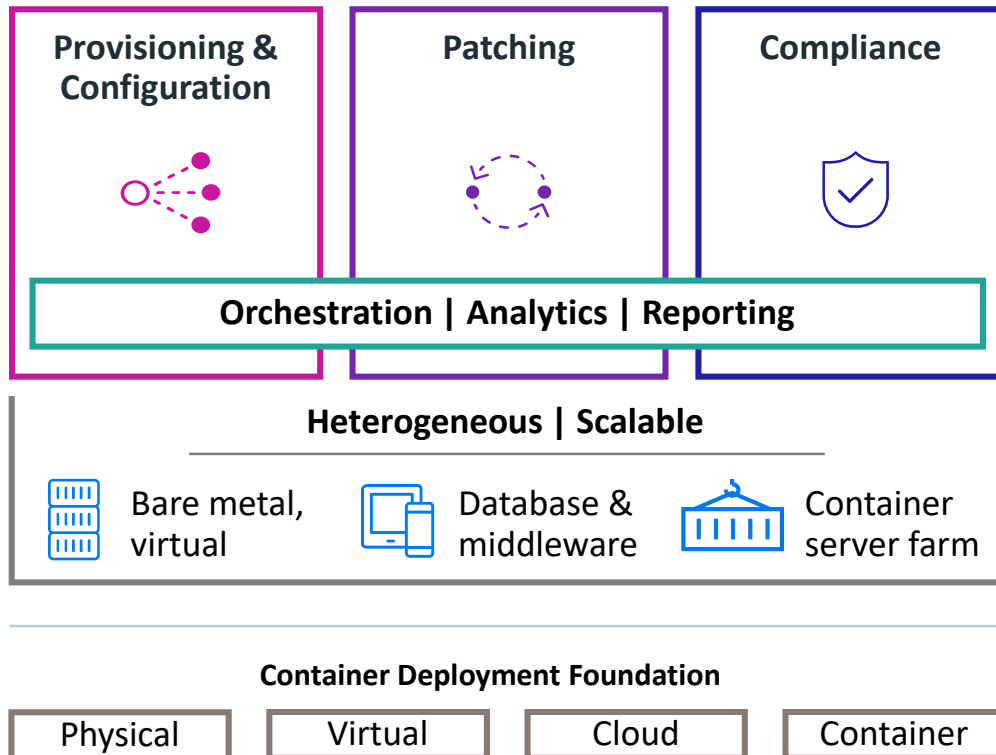
- Heterogeneous provisioning and patching at scale

- Integrated compliance and closed-loop remediation
  - Across heterogeneous OS, DB, and MW
  - Market leading out-of-the-box compliance and remediation content

- Industry's leading open API orchestrator for seamless data center integration

- New suite container deployment option

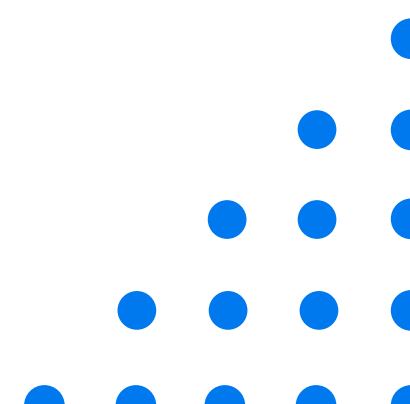# New Container Deployment Foundation accelerates time-to-value with easy installation and horizontal scale-out

## Container Deployment Foundation

REST APIs, Bots

**Microservices**

| Access | Orchestration | Provisioning | Patching | Compliance | Shared Services |
|---|---|---|---|---|---|

Container Orchestration | Linux | Container Platform

**Managed Container Environment**

| Physical | Virtual | Cloud | Container |
|---|---|---|---|

Pre-integrated containers, unified license model, and shared services

Easy to install, maintain and patch with zero downtime upgrades

Auto-scaling, HA/DR, self-healing and secure
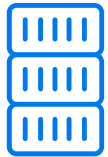
Flexible Deployment Options

# Managing Compliance and Risk with DCA: Demo

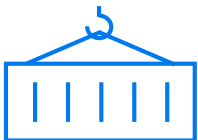# Managing Compliance and Risk with DCA

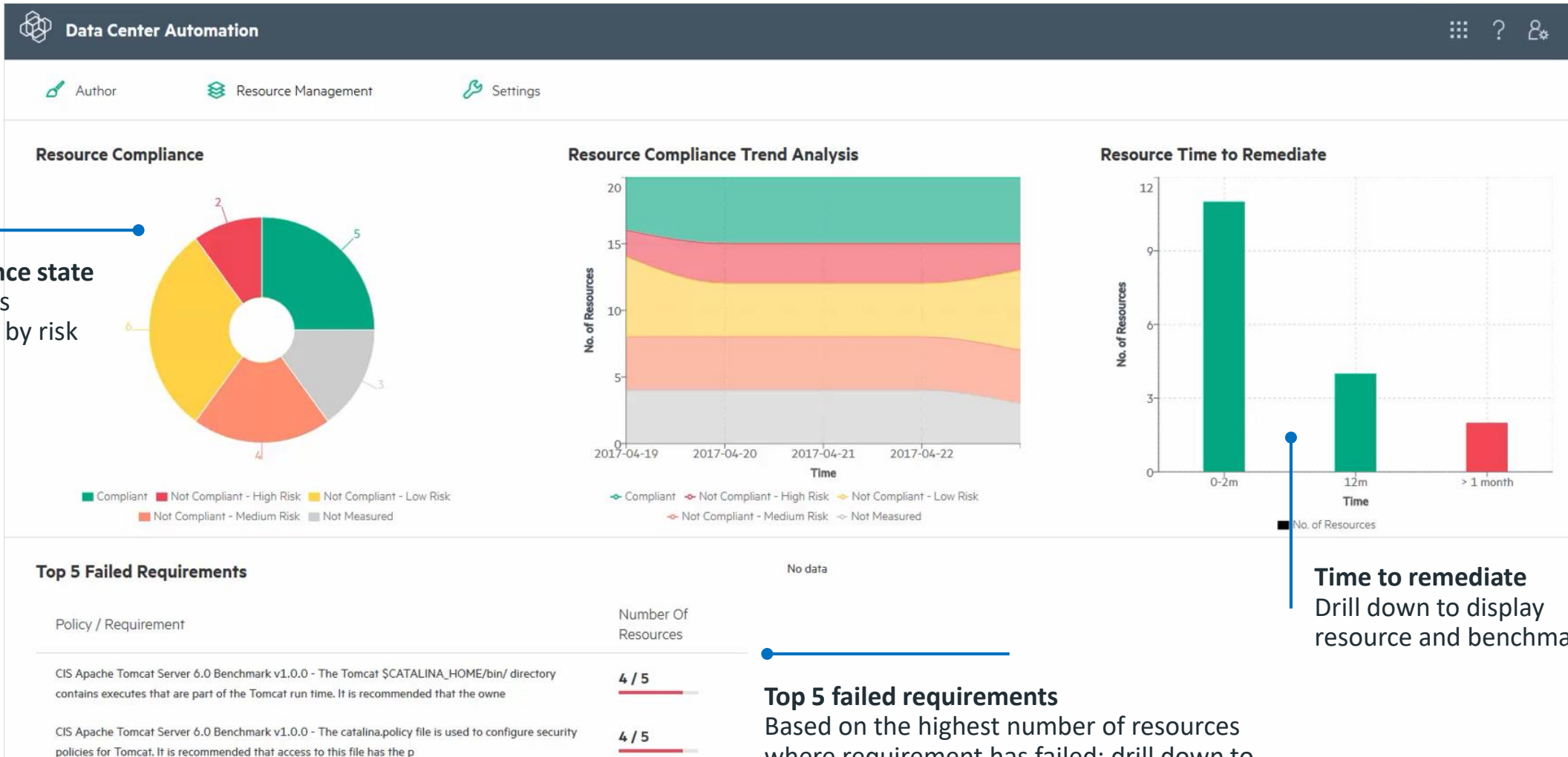# One platform for heterogeneous resources



Bare metal, virtual server

Database and middleware

Container server farm

# Dashboards for visibility



**Compliance state**
Resources
classified by risk

**Time to remediate**
Drill down to display
resource and benchmark

**Top 5 failed requirements**
Based on the highest number of resources
where requirement has failed; drill down to
display list of resources

# Audit readiness with pre-formatted, easy-to-tailor reports

## Benchmark Summary by Resource

Run this report to see the compliance status of Benchmark
* Select a date, and benchmarks
* Optionally, filter the results on resource group
Results show a count and percent of resources by compliance status. Results depend on daily data
and use only the last scan of the day.

| Report Executed Date | 4/11/17 |
|---|---|

| Benchmark Name | Last Scan Date | No of Resources | No of Compliant Resources |
|---|---|---|---|
| CIS Apache HTTP Server 2.4 v1.2.0 | 03-29-2017 | 1 | 0 |
| CIS Docker 1.11.0 Benchmark | 04-03-2017 | 2 | 0 |
| CIS ORACLE Database 12 Benchmark v1.2.0 | 03-30-2017 | 1 | 0 |
| CIS ORACLE Database 12 Benchmark v1.2.0 | 03-31-2017 | 1 | 0 |
| CIS Ubuntu 12.04 LTS Server Benchmark v1.0.0 | 03-29-2017 | 1 | 0 |

**Compliance summary** by benchmark (e.g. CIS) for each resource

## Compliance Job History

Run this report to see the history of actions related to all the Benchmarks.

 -Optionally, filter the result on audit job type

Results show Job Details all the Benchmarks is attached along with the Number of Resources and Job Execution Time.

| Report Executed Date | 5/24/17 |
|---|---|

| Job Start Time | Job Type | Policy Name | Benchmark Name | Job Status | Resource Name | Job Execution Time |
|---|---|---|---|---|---|---|
| 5/24/17 6:23 AM | REMEDIATE | pre-demo-pol100 | pre-demo-firewalld | Completed | dcaqatarget03.h peswlab.net | 0 Hours 2 Mins 19 Seconds |
| 5/24/17 5:54 AM | SCAN | CIS | CIS Red Hat Enterprise Linux 7 Benchmark v1.0.0 | Completed | dcaqatarget29.h peswlab.net | 0 Hours 1 Mins 1 Seconds |
| 5/24/17 5:51 AM | SCAN | CIS | CIS Red Hat Enterprise Linux 7 Benchmark v1.0.0 | Completed | dcaqatarget28.h peswlab.net | 0 Hours 1 Mins 3 Seconds |
| 5/24/17 5:41 AM | SCAN | CIS | CIS Red Hat Enterprise Linux 7 Benchmark v1.0.0 | Completed | dcaqatarget27.h peswlab.net | 0 Hours 1 Mins 3 Seconds |
| 5/24/17 4:56 AM | SCAN | PCI | Payment Card Industry (PCI) Data Security Standard version 3.2 | Completed | dcaqatarget29.h peswlab.net | 0 Hours 0 Mins 38 Seconds |
| 5/24/17 4:53 AM | SCAN | PCI | Payment Card Industry (PCI) Data Security Standard version 3.2 | Completed | dcaqatarget28.h peswlab.net | 0 Hours 0 Mins 39 Seconds |
| 5/24/17 4:50 AM | SCAN | PCI | Payment Card Industry (PCI) Data Security Standard version 3.2 | Completed | dcaqatarget27.h peswlab.net | 0 Hours 0 Mins 38 Seconds |

**Compliance history**—scan or remediation by benchmark (e.g. CIS) by resource, and job status

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# Out-of-the-box compliance content. By the time resources are deployed, they're already in desired compliance
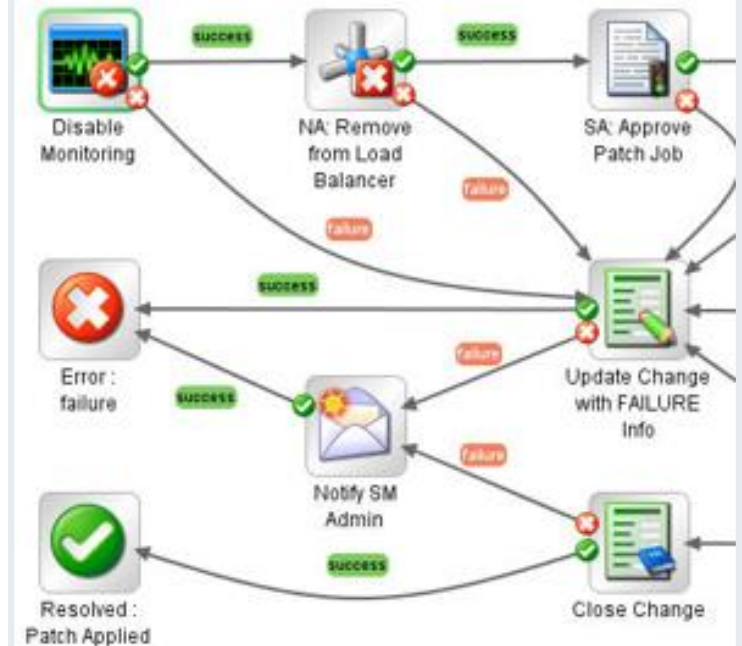
## Benchmarks

### Regulatory



### Security



## Compliant templates

- CIS-Compliant Docker Host
  0 Deployments
- CIS-Compliant Docker Image
  0 Deployments
- CIS-Compliant Oracle 11.2.0.4.0 on existing RHEL 6.7 server
  0 Deployments
- CIS-Compliant Oracle 11.2.0.4.0 with patch Id 24006111 on existing RHEL 6.4
  0 Deployments
- CIS-Compliant Oracle 12.1.0.2.0 on existing RHEL 7.1, with multiple databases
  0 Deployments
- CIS-Compliant Oracle 12.1.0.2.0 on existing RHEL 7.1, with single database
  0 Deployments
- FISMA Compliant Docker Image
  0 Deployments
- FISMA Compliant Linux OS
  0 Deployments
- HIPAA Compliant Linux OS
  0 Deployments
- Linux OS
  0 Deployments
- MSSQL 2008R2 on existing Windows 2008R2 with multiple databases
  0 Deployments
- MSSQL 2012 on existing Windows 2012 with multiple databases
  0 Deployments
- MSSQL 2014 on existing Windows 2012R2
  0 Deployments
- MSSQL 2014 with latest patch on existing Windows 2012R2
  0 Deployments
- PCI Compliant Linux OS
  0 Deployments
- Windows OS
  0 Deployments

## Remediation actions

# Closed-loop remediation with Service Level Objective (SLO) enforcement



With OOTB remediation actions:

- Get it done right, each and every time
- Ensure consistency of remediation actions
- Run during maintenance windows

With SLO enforcement, remediate against objectives and prevent long lapses in compliance

**Measure and remediate against objectives**
e.g. Scan and compliance must occur within defined time period

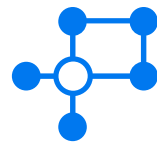# Integrated, role-based access, exception management, auditable change history
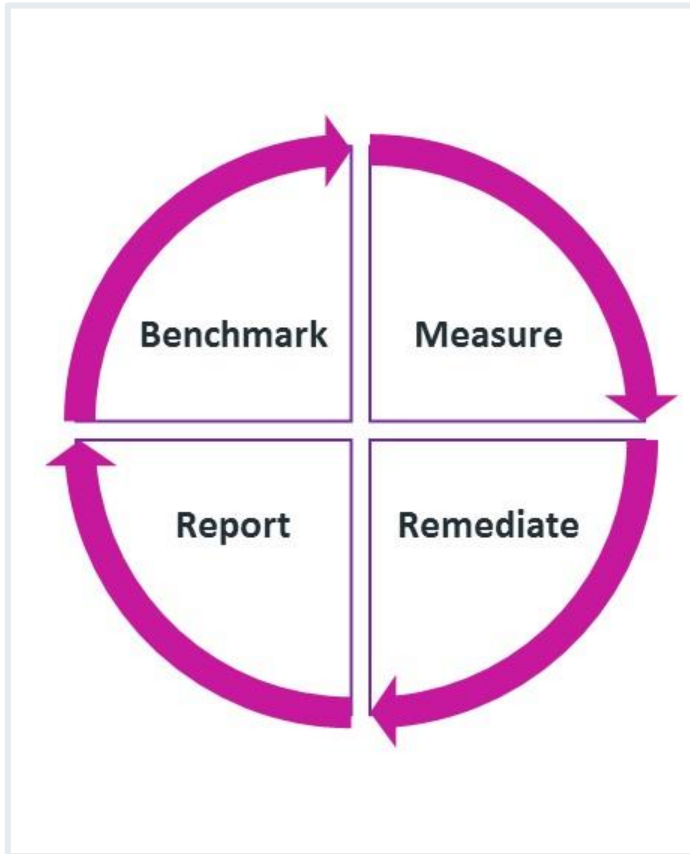


Ongoing, integrated compliance

Role-based access control

Authors
Operators
Access control by resource

Document and approve exceptions; expiration date, approver, by resource, by benchmark

Track all change history

Micro Focus

# Collaboratively monitor compliance state and receive alerts via chatbot with ChatOps

**Team notified,** incident is reported to the sys_monitoring channel

**Team collaborates** in a conversational manner, across silos to solve issues real-time

**Is it a compliance issue?**

**Dcabot retrieves compliance state,** compliance is OK

**Dcabot will watch compliance,** and alert if compliance drops

# Let's summarize—5 things to know about DCA compliance

**1**

**One platform**

Compliance in one place—across heterogeneous servers and apps, single-view reporting

**2**

**OOTB market-leading content**

Regulatory and security benchmarks, compliant templates, remediation actions

**3**

**Auto-remediation**

Closed-loop remediation with Service Level Objective (SLO) enforcement

**4**

**Ongoing, process-integrated**

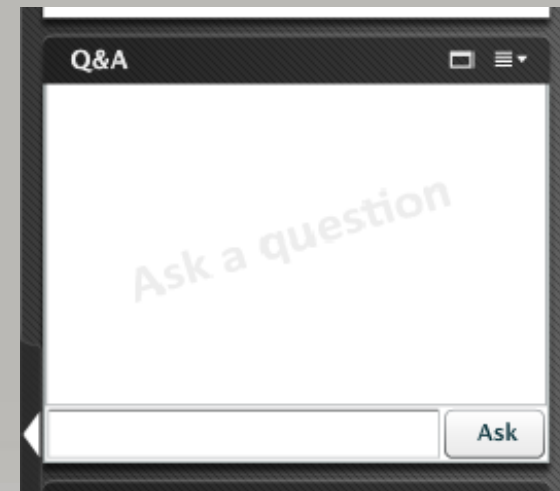RBAC, exception management, auditable change history

**5**

**ChatOps collaboration**

Compliance monitoring and alerts

# Questions?

Q & A

Type your questions in the Q&A pane

# Poll Question

What other topics would you like to see in future webinars?

Please type your suggestions in the Q&A pane.

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**Thank You**

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