



# Become a Cloud Master with the HPE Helion Cloud Suite August 23, 2016

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# **Today's Speakers**



Keri Sprinkle Sr. Product Marketing Manager Helion Cloud Suite Hewlett Packard Enterprise



Kiran Makarla Technical Marketing Manager Hewlett Packard Enterprise

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Questions

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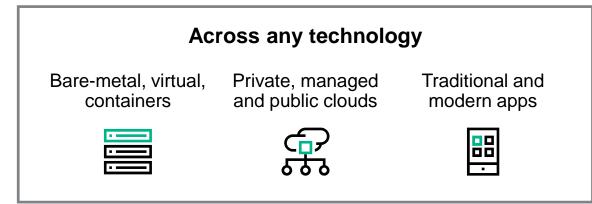
# **HPE Helion Cloud Suite**

DevOps-enabled hybrid cloud management software for service transformation

#### **HPE Helion Cloud Suite**

- Service transformation and user experience
- Cloud-native app platform
- Predictive analytics
- DevOps-driven multi-cloud management
- Infrastructure automation and orchestration

### Hybrid cloud management software and continuous delivery for traditional and cloud-native applications



Designed for organizations that want to take advantage of: any cloud, any environment and any technology for any app



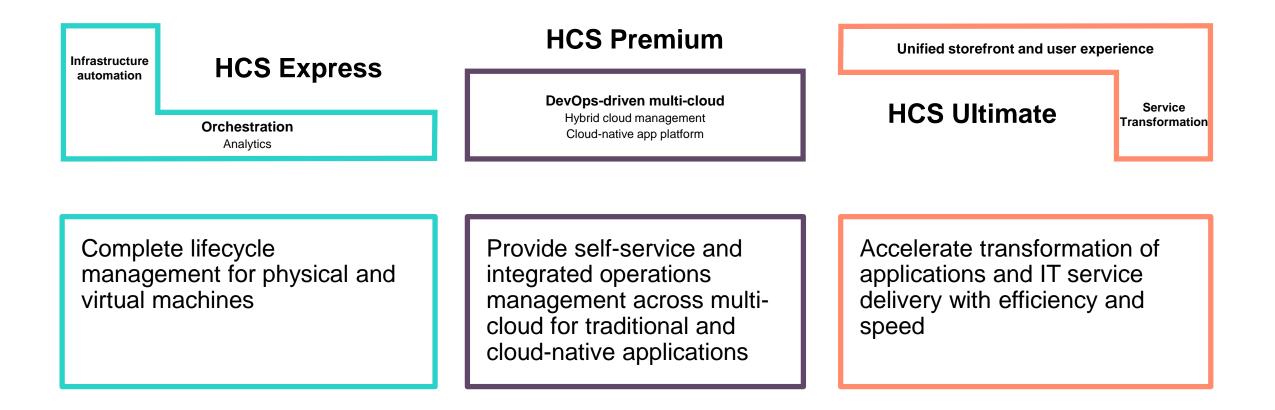
# HCS benefits by functional area

| Cloud Broker            | È              | Service transformation through user experience<br>– Service aggregation<br>– Service exchange with messaging and micro-services  |
|-------------------------|----------------|--|
| Application<br>Delivery |                | Certified cloud-native application platform<br>– Container based multi-cloud PaaS (based on Cloud Foundry™ technology)<br>– Use any technology stack to build applications |
| Analytics               |                | <b>Big-data driven, predictive, self-learning analytics</b><br>– Automatically filter to most significant messages and root cause<br>– For both IT AND business metrics    |
| Cloud<br>Management     | <del>ن</del> ه | Full stack management for all target environments<br>– Multi-cloud IaaS support with compliance automation<br>– Native container management and orchestration              |
| Orchestration           |                | Single, comprehensive orchestration platform<br>– Biggest OOTB library of orchestration flows (8000+)<br>– Enterprise-scale execution engine                               |



# **HPE Helion Cloud Suite**

Software editions to match enterprise cloud use cases

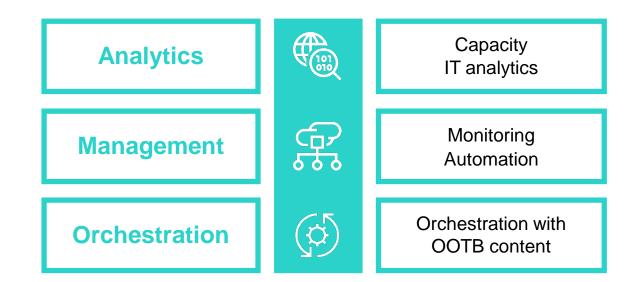




# **HCS Express: infrastructure automation**

Deliver secure and compliant infrastructure within minutes of request

#### Provision, configure, monitor and optimize

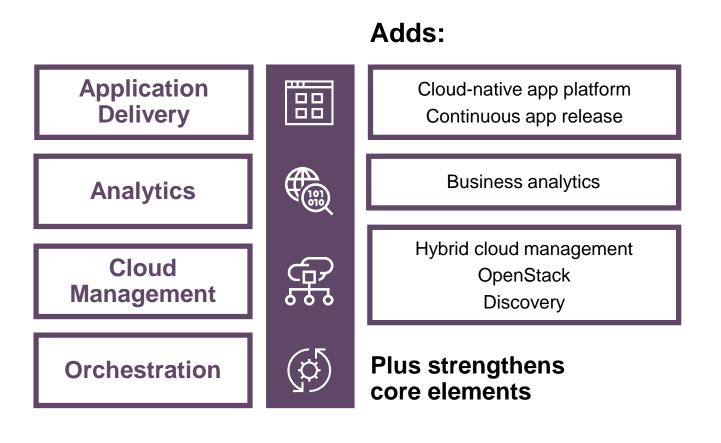




- Complete lifecycle management for physical and virtual machines
- Comprehensive orchestration platform
- IT log analytics and workload placement

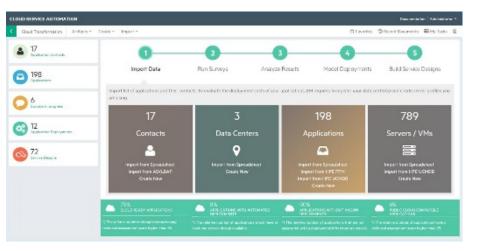
# **HCS Premium: DevOps-driven multi-cloud**

Continuous delivery and operations for any application in any environment



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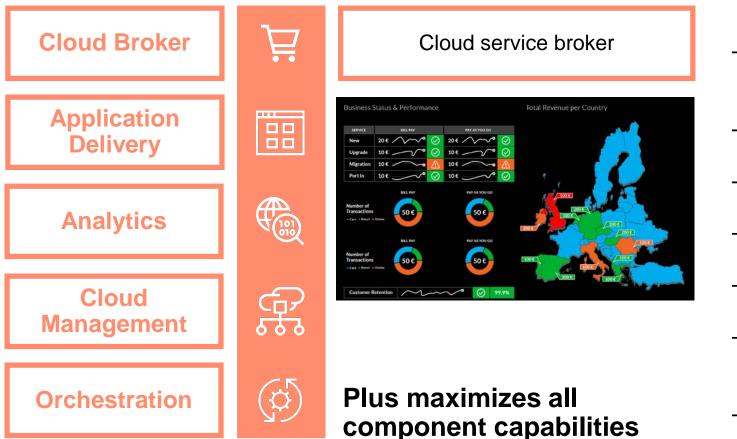
Multi-cloud management plus continuous delivery, deployment, operations and compliance

- Any environment
- Any cloud
- Any technology
- For any app

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# **HCS Ultimate: service transformation**

Transform applications from a business service view to enable cloud moves



#### Adds:

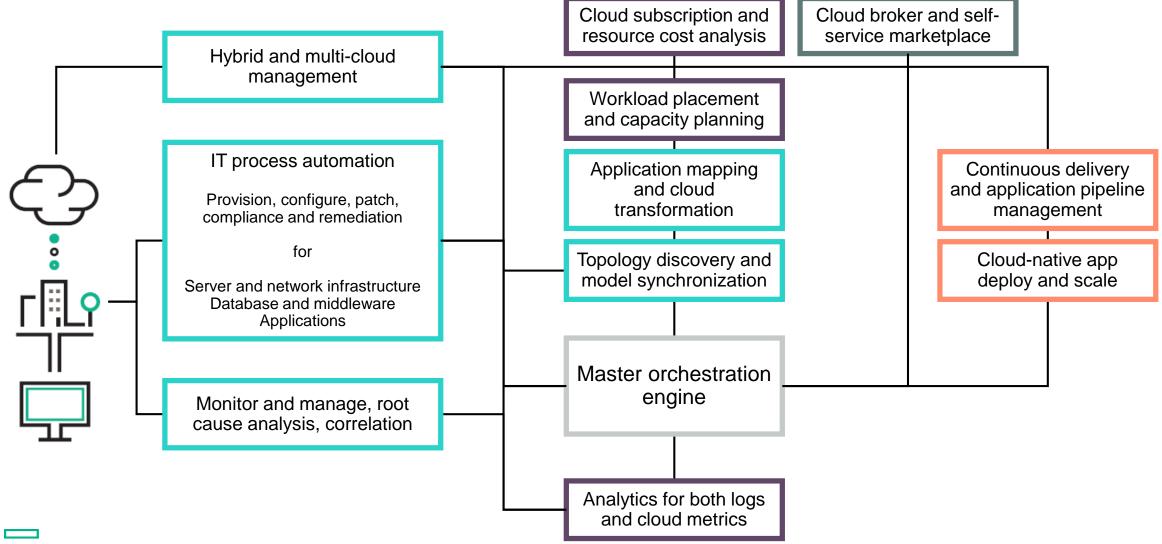
- Integrated and simplified user experience across multiple suppliers
- Catalog aggregation
- Micro-service based brokering
- Transform services and application
- Business value dashboards
- Automated planning and decision analysis
- Service design integrations

# **HCS key functional areas**

| Cloud Broker            | È | Service transformation through user experience<br>– Service aggregation<br>– Service exchange with messaging and micro-services  |
|-------------------------|---|--|
| Application<br>Delivery |   | Certified cloud-native application platform<br>– Container based multi-cloud PaaS (based on Cloud Foundry <sup>™</sup> technology)<br>– Use any technology stack to build applications |
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#### **Helion Cloud Suite logical view**



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# Hybrid Cloud and Container Management



Delivery of IaaS across Hybrid IT Integrated Cloud Mamt

## **Self Service Portal**

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#### Intuitive selfservice portal

Powerful service design

Choice of cloud providers

Single IT contro point

- World-class experience to consume infrastructure, platforms and applications with a click of a button
- Browse and navigate multitenant capable customizable self service portal
- Consumer has the ability to order, review, modify and upgrade subscriptions





Managing user subscriptions

You are now managing another user's subscriptions.



Wordpress with Chef Two Tier SiteScope (5.0.0)

 Terminated Subscription

- Wordpress with Chef Two Tier SiteScope (5.0.0)
- Ĵ developer1
- 🗴 December 16, 2015 (Auto-Renew)

| ₽<br>\$<br>■ | 90CEFA7751A925FC0151AC7CA7C83070<br>\$ 400.00 and \$ 400.00 yearly<br>Application Services |        |                       |
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| ₽            | HP Terms of Use.pdf  | 297 KB |                       |
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| ſ            | View My Linked Service   |        | View Linked Service   |
| 1+           | Transfer Subscription  |        | Transfer Subscription |
| 0            | Cancel Subscription  |        | Cancel Subscription   |



Delivery of laaS across Hybrid IT

## **Graphical Designer**

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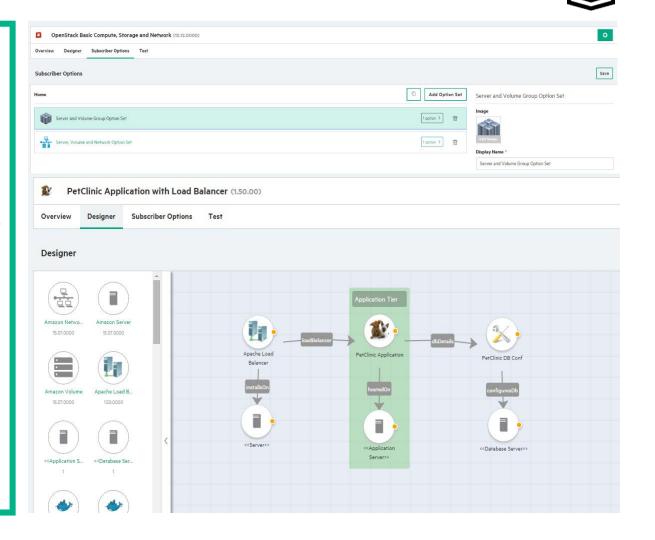
Intuitive selfservice portal

Powerful service designer

Choice of cloud providers

Single IT contro point

- Graphical service designer to build complex service designs / blueprints with dynamic options, and ability to test and manage multiple versions.
- With 8000+ workflows, 300+ application components, services can support both cloud native and traditional workloads
- Design and port full stack multitier applications for rapid time to value





Delivery of IaaS across Hybrid IT

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# Support for multiple cloud providers

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**Choice of cloud** providers

- Support for various cloud providers such as Amazon AWS, Microsoft Azure, HPE
- Built-In support for laaS and ٠ PaaS capabilities with HPE Helion OpenStack and HPE Stackato
  - Support for various CaaS platforms such as Docker UCP, Mesos, Kubernetes
- Extended resource provider support to manage servers and applications that meet security, regulatory, and operational policies.

| CLO    | UD SERVICE AUTOMATION                   |          |   |
|--------|---|----------|---|
| <      | Providers                               |          |   |
| By     | Туре                                    | •        | - All Providers   |
| •      | Amazon AWS                              | *        | Providers Components  |
| 6      | Chef                                    | £        |   |
| G      | F5 BIG-IP LTM Load Balancer             |          | HDP Application (1.60.0000)   |
| ଚ      | HPE CloudSystem 8.x                     | £        | Pushes the specified application to the Helion Development Platform system  |
| _      | HPE Database and Middleware Automation  | ₽        | HDP Node Chat Application (1.60.0000) Cloud Native Node Chat Application on Helion Development Platform                               |
| âŗ     | HPE Helion Development Platform         | £        | HDP Service (160.0000)  |
| _      | HPE Insight Control server provisioning | £        | Creates the specified service on the HPE Helion Development Platform system.  |
| _      | HPE Matrix Operating Environment        |          | HP ProLiant Server (1)<br>HP ProLiant Server is a capability component that provides required properties for physical ProLiant server |
| _      | HPE Network Automation                  | £        | HPE ICsp OS Build Plan (15.12.0000)   |
| _      | HPE OneView                             | £        | Unstalls an OS on a HPE ProLiant server using the specified build plan. Optionally, cleans up the server using                        |
| SA     | HPE Server Automation                   | ÷        | HPE OneView Managed Server (15.12.0000)<br>HPE OneView managed server hardware resource.  |
| -<br>M | HPE SiteScope                           | <b>£</b> | HPHelionOpenStackNodeType (1)   |
| _      | HPE UCMDB                               | £        | HPHelionOpenStackNodeType (1)   |
| •      | HPE Virtualization Performance Viewer   | <b>£</b> | (PAddressType (1)   |
| 8      | Microsoft SCVMM                         |          | I his type is not visible in designer   |
|        | OpenStack                               | £        | MySQL Database (1)<br>MySQL MySQL Database Server   |
| 4      | Puppet                                  | £        | Network Segment (1)   |
| F      | VMware vCenter                          | £        |   |





Delivery of laaS across Hybrid IT Integrated Cloud

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# **Single IT Control Point**

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Intuitive selfservice portal

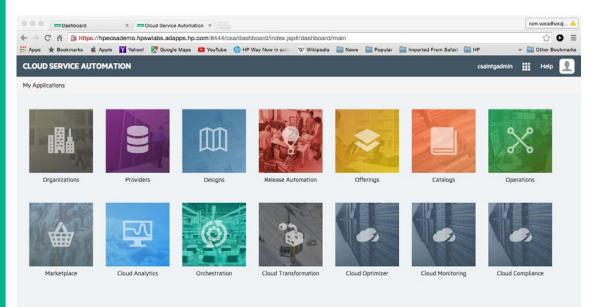
Powerful service design

Choice of cloud providers

Single IT control point

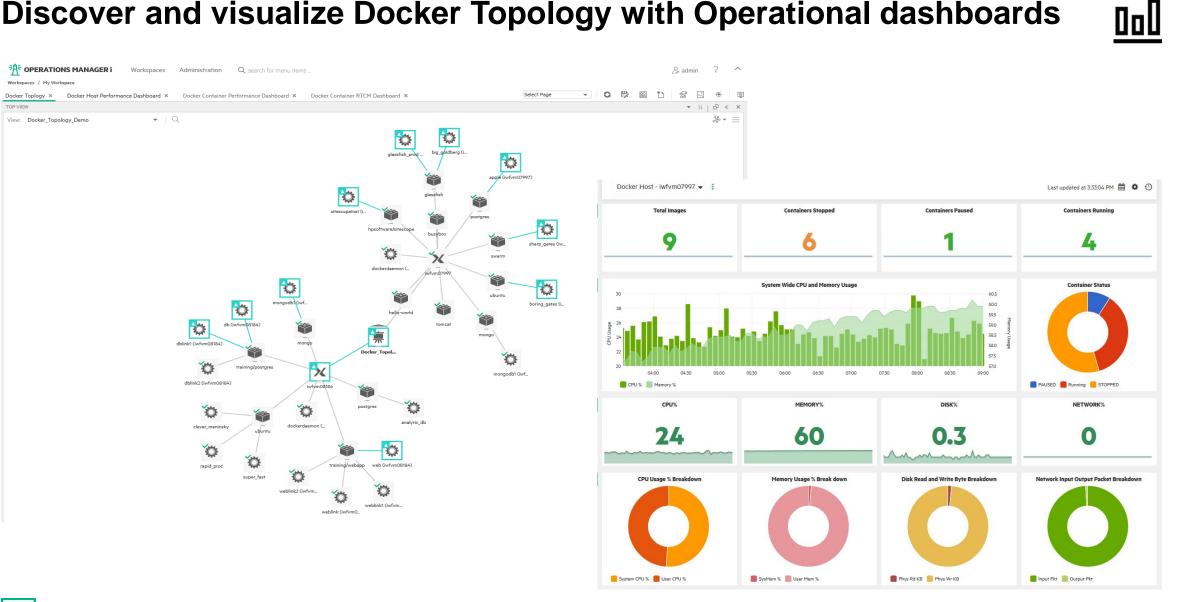
- Delegate catalog management as well as service offering creation to tenants including LOB administrator
- Offer the same agility and costs to LOB as external cloud
  - Minimize complexity and costs when bridging existing workloads to cloud native workloads







#### **Discover and visualize Docker Topology with Operational dashboards**



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# Hybrid Cloud and Container Management

Demo video: <u>https://www.youtube.com/watch?v=BNc4tpRo0o0</u>



# Develop, Deploy and Scale Cloud Native applications



# **HPE Helion Stackato**

Cloud native application platform



12-factor, CF workflow, CI/CD as a service, easy to deploy and manage

#### Open



Enterprise-grade integrated platform based on CF, Docker, OpenStack Comprehensive



Polyglot runtime which supports all major frameworks (Java, .NET, OSS); enables hybrid - multi-cloud (public, private, hybrid), multi-infra (OS, VMW, AWS, Azure), multi-stack (CF, OCI, Kubernetes, Mesos)



# **Application deployment with HPE Helion Stackato**



| Development   | Testing  | Staging  | Production  |
|---|--|--|---|
| Self-service so no<br>spending time on<br>system building &<br>plumbing | Automated<br>provisioning and<br>configuration without<br>manual labor | Mirrored<br>environments<br>throughout dev cycle | Apps that work in dev<br>work in production.<br>It's that simple. |

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# **Beyond Cloud Foundry**

HPE Helion Stackato have an administrative user interface – easy to deploy & manage apps CF is command line only

#### HPE Helion Stackato leverages Docker container technology to deploy apps

#### Additional application runtimes and services

Native .NET support, PHP, Python, Perl

#### Technical support built into pricing model

World-class, global technical support available to help with deployment & configuration.

#### Easy setup & install

100% BOSH free, so setting up & keep running HPE Helion Stackato is easy and fast

#### HPE Helion Stackato are based on the trunk version of Cloud Foundry

HPE is committed to driving enterprise features back to the community (see our recent .NET support announcement).



## **PaaS benefits**



# Faster Time to Market

Get apps (not just VMs) deployed within minutes, not weeks. 30x improvement in apps delivered.

Scaling at Peak Performance Automatic scaling ensures optimal performance & end-user experience. No manual work, no staff overtime.



Productivity and Innovation More automation. More innovation. Higher satisfaction for developers. <sup>40x faster application prototyping.</sup>



**Flexibility** Freedom and flexibility for Developers. Within control of IT.



Cost savings Improved server utilization (more applications per machine). 90% cost reduction with lower

sys admin/application ratio.



## Greater Security

Hardened and tested for enterprise use. Control over sensitive data.

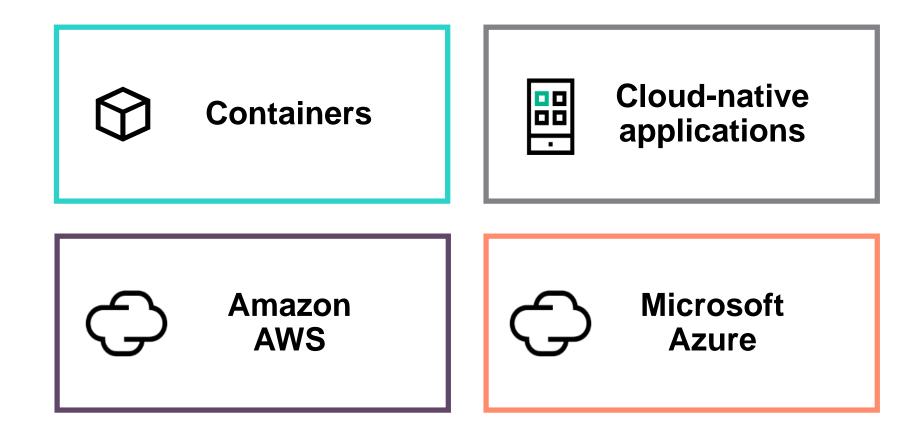
# **Develop, Deploy and Scale Cloud-native Applications**

Demo video: <a href="https://www.youtube.com/watch?v=JG3a2uvx8B4">https://www.youtube.com/watch?v=JG3a2uvx8B4</a>



# 'No Limits Cloud' with HPE Helion Cloud Suite

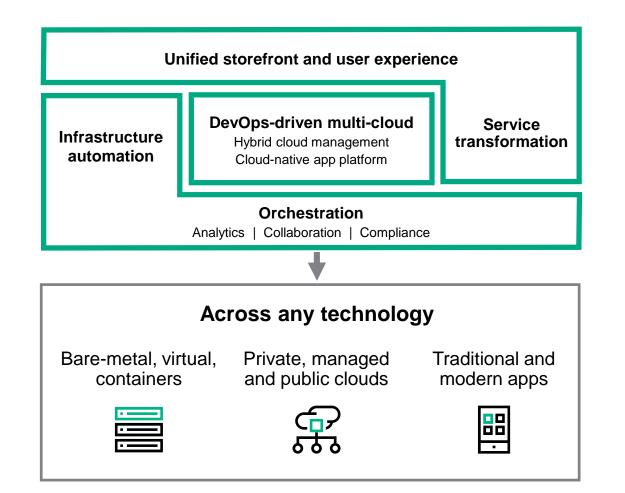
You are able to take advantage of **all** of the following...





# **HPE Helion Cloud Suite**

DevOps enabled hybrid cloud management software for the digital enterprise



- Unique full-stack, multi-cloud management with IaaS and PaaS
- Continuous delivery and ops for traditional and cloud-native apps
- Unified HPE cloud offering
- Simplified packaging and ordering
- Accelerate delivery of business services
- Support your dev pipeline/software factory
- Optimize your right mix

# **Drive business performance with Analytics**



## Analyze to predict and solve

Connect



Learn

Use service topologies across logical and physical layers for **analysis** 

Learn normal behaviors and patterns (e.g. seasonally adjusted baselines)

Correlate events. logs and metrics for automated rootcause analysis

Correlate

**Predict** 



Predict issues before services and customers are impacted

Guide



**Rich visualizations** and smart workflows guide operators for efficient troubleshooting

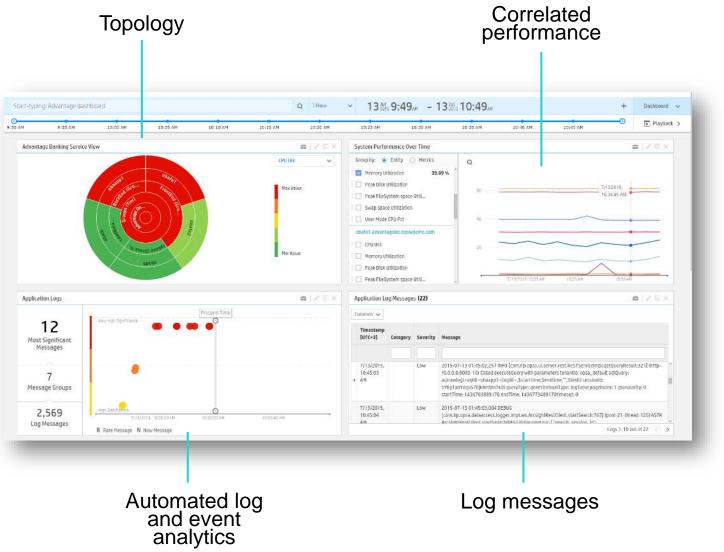
#### **Operations Analytics predicts and solves:**

- At massive scale
- Using machine learning analytics
- Across business and machine data



# **Solve critical problems with HPE Operations Analytics**

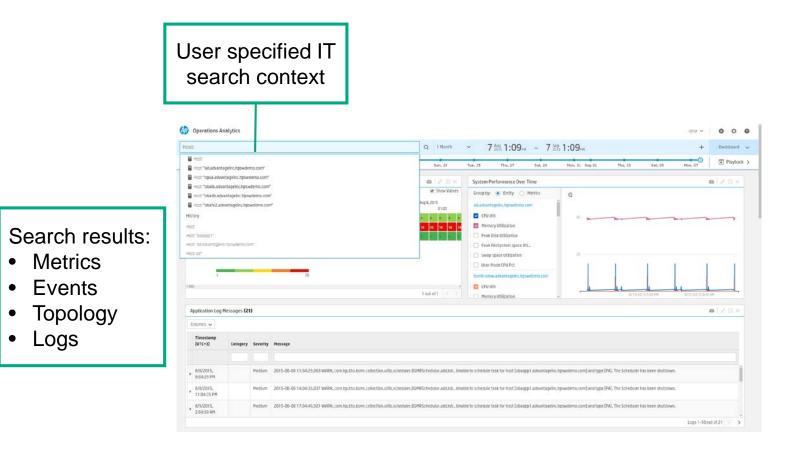
- Gain insights from **all data sources**, including end-user, applications and infrastructure
- See all data **at any point in time** to troubleshoot quickly
- Pinpoint root cause in minutes with automated log and event analytics and metric pairing
- Brought together with an intuitive dashboard





# IT search

#### Search for metrics, events, topology, and logs



#### **Customer problem**

IT Ops data is so large and varied that Operations teams have difficulty searching through it to find information they need

#### **HPE** solution

Search language and other search tools to provide search across metrics, events, topology and log data

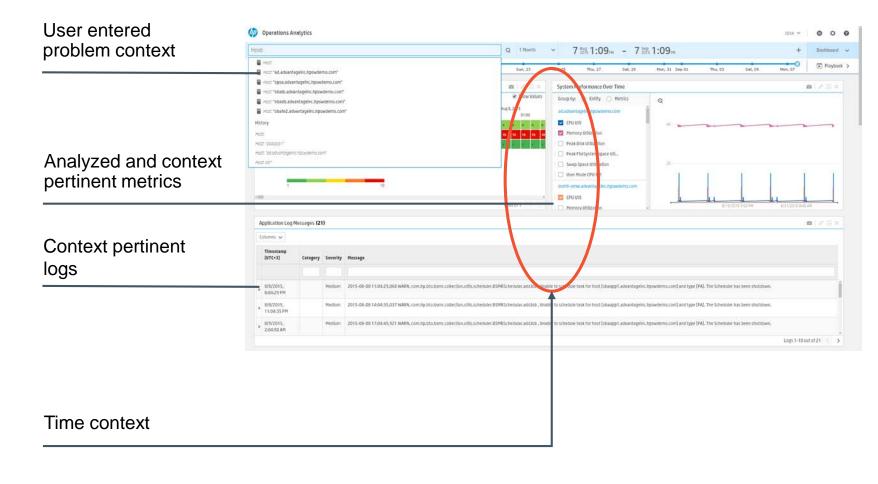
#### **HPE differentiation**

Powerful and simple analytics query language to simplify search across all IT Ops Data (metrics, events, topology, and logs)



# **Guided troubleshooting**

Guiding user to relevant data for effective troubleshooting of complex problems



#### **Customer problem**

Operator has an unknown problem and doesn't know where to start, what exactly to search.

#### **HPE solution**

Guided troubleshooting experience that provides the operator with pertinent metrics, event, topology, and log data based on context.

#### **HPE differentiation**

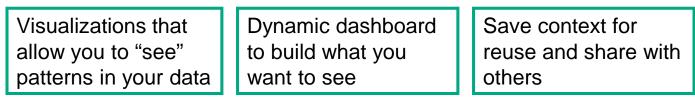
Context driven guided search, tag-based, time-machine interactive analytics of all your data, dynamic dashboards that populate automatically based on problem context.

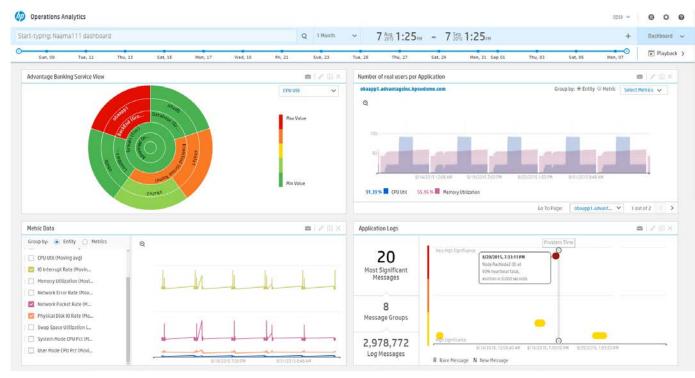
# **Visual analytics**

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#### Visual insights to understand data patterns and relationships





#### **Customer problem**

Data volumes and complexity mean actionable insight is hard to find.

#### **HPE** solution

Visual analytics that leverage human Visual Perception for deriving patterns and trends from images, and providing actionable insight.

#### **HPE differentiation**

Compelling visual presentation of IT Ops Big Data to rapidly create actionable insight. Dynamic on demand dashboards. Savable and shareable contexts.

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## **Drive Business Performance with Analytics**

Demo video: <u>https://www.youtube.com/watch?v=in8iMgrSSGc</u>



# **Q & A** hpe.com/software/hybridcloud



# Thank you

• Complete the short survey and opt-in for more information from Hewlett Packard Enterprise.

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