

# Data Center Automation Classic (Premium)

Software Version: 2017.11

# **Getting started**

Document Release Date: November 2017 Software Release Date: October 2017



#### Legal Notices

#### Warranty

The only warranties for Hewlett Packard Enterprise Development LP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise Development LP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

#### **Restricted Rights Legend**

Confidential computer software. Valid license from Hewlett Packard Enterprise Development LP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

#### **Copyright Notice**

© Copyright 2015 - 2017 Hewlett Packard Enterprise Development LP

#### **Trademark Notices**

Adobe™ is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

UNIX® is a registered trademark of The Open Group.

This product includes an interface of the 'zlib' general purpose compression library, which is Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.

#### Documentation Updates

To check for recent updates or to verify that you are using the most recent edition of a document, go to: https://softwaresupport.hpe.com/.

This site requires that you register for an HPE Passport and to sign in. To register for an HPE Passport ID, click **Register** on the HPE Software Support site or click **Create an Account** on the HPE Passport login page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HPE sales representative for details.

#### Support

Visit the HPE Software Support site at: https://softwaresupport.hpe.com/.

Most of the support areas require that you register as an HPE Passport user and to sign in. Many also require a support contract. To register for an HPE Passport ID, click **Register** on the HPE Support site or click **Create an Account** on the HPE Passport login page.

To find more information about access levels, go to: https://softwaresupport.hpe.com/web/softwaresupport/access-levels.

HPE Software Solutions Now accesses the HPESW Solution and Integration Portal website. This site enables you to explore HPE Product Solutions to meet your business needs, includes a full list of Integrations between HPE Products, as well as a listing of ITIL Processes. The URL for this website is https://softwaresupport.hpe.com/km/KM01702731.

## Contents

Key features and capabilities    5      Enable agile IT operations and business service delivery    5      Automated provisioning and configuration    5      Policy-based software and patch deployment    6      Continuous compliance with remediation    6      Built-in process orchestration    7      Product integration matrix    8      Server Automation    9      Database and Middleware Automation Premium    9      IT Operations Compliance    10      Operations Bridge Reporter    11      Product library    13      Send documentation feedback    14	Get started	4
Automated provisioning and configuration5Policy-based software and patch deployment6Continuous compliance with remediation6Built-in process orchestration7Product integration matrix8Server Automation8Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Key features and capabilities	5
Policy-based software and patch deployment6Continuous compliance with remediation6Built-in process orchestration7Product integration matrix8Server Automation8Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Enable agile IT operations and business service delivery	5
Continuous compliance with remediation6Built-in process orchestration7Product integration matrix8Server Automation8Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Automated provisioning and configuration	5
Built-in process orchestration7Product integration matrix8Server Automation8Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Policy-based software and patch deployment	6
Product integration matrix8Server Automation8Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Continuous compliance with remediation	6
Server Automation8Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Built-in process orchestration	7
Operations Orchestration9Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Product integration matrix	8
Database and Middleware Automation Premium9IT Operations Compliance10Operations Bridge Reporter11Product library13	Server Automation	8
IT Operations Compliance	Operations Orchestration	9
Operations Bridge Reporter	Database and Middleware Automation Premium	9
Product library	IT Operations Compliance	10
· · · · · · · · · · · · · · · · · · ·	Operations Bridge Reporter	11
Sand documentation feedback 1/	Product library	13
	Send documentation feedback	14

# Get started

The Data Center Automation (DCA) Classic 2017.11 is a complete automation solution for standardizing and automating routine data center operations.

The DCA Classic Premium edition is used to manage infrastructure lifecycle management and compliance for IT. This edition helps you to automate activities for data center management including server discovery, provisioning, configuration and virtualization management, software, database and middleware management, patching, audit, compliance and remediation, and infrastructure lifecycle actions across your data center.

It provides tools that automate:

- Critical areas of your data center's server management
- Business service compliance
- IT processes, including provisioning, configuration, compliance, and patching
- Release management for databases and applications services

# Key features and capabilities

This section provides information on the various features and capabilities of the DCA Classic Premium.

# Enable agile IT operations and business service delivery

The DCA Classic Premium is a unified, scalable, analytics-driven infrastructure management solution that automates tasks, orchestrates end-to-end processes, and enforces compliance. It reduces the cost of IT operations and accelerates service delivery.

It delivers end-to-end lifecycle management across virtual and physical servers, databases, and middleware; including discovery, provisioning, configuration, patching, compliance assessment, remediation, software deployment, upgrades, migrations and retirement.

Policy-based deployments and out-of-the-box workflows ensure proven, consistent processes are followed, enterprise standards are enforced and greatly speed up and simplify operations, either as discreet tasks or within an orchestrated multi-domain end-to-end process.

It supports heterogeneous and multivendor automation for popular operating systems and commercial applications, including, but not limited to, Windows®, Linux®, Oracle, SQL Server, DB2, Sybase, WebSphere, WebLogic, Apache and JBoss. The most diverse and complex IT environments rely on DCA for managing day-to-day operations.

## Automated provisioning and configuration

With DCA Classic Premium, you can automate provisioning and configuration for virtual servers, physical servers, databases, and middleware. A template-based approach simplifies mass-scale deployment while enabling consistent results. Key features and capabilities include:

- Bare-metal provisioning
- Virtual machine (VM) deployment

- Database and middleware provisioning, configuration, schema updates, and migrations and upgrades for standalone or clustered instances
- Template-based provisioning and configuration
- Sequence multiple resource types (for example, update registry settings, install applications, edit user or group settings, and run scripts)
- Out-of-the-box OS build plans
  - Heterogeneous operating system (OS), BIOS setup, and RAID configurations
- Proven scalability across more than 100,000 servers, and 20,000 database instances

## Policy-based software and patch deployment

The DCA Classic Premium simplifies the management of software installations, updates, patching/rollback, and uninstalls. It identifies and automatically remediates vulnerabilities based on defined policies to maintain compliance. Customers can manage patch schedules to protect against vulnerabilities for multivendor OS, database, and middleware platforms. The capabilities include:

- Explicitly control sequence of software updates and patches
  - Manage attributes for patch severity, date, and type; or region and application tailoring
  - Capture incremental changes in policies, recreate or revise templates to maintain standards
  - Manage patches at the Group or infrastructure level
  - Rollback / remove patches
- Know when or where patches or software are deployed
- Scheduled or manually initiated remediation
- Extensible design integrates with third-party patch management systems
- · Delivers only the patches that are needed

## Continuous compliance with remediation

The DCA Classic Premium offers near continuous compliance for corporate and regulatory compliance across servers (virtual and physical), databases, and middleware. Details of the key capabilities are outlined as follows

- Automated change detection, configuration updates, patching, audit and remediation
- Service-level compliance assesses and remediates selected resources in a business service
  Focus on business services rather than individual infrastructure components
- Built-in service-level objectives (SLOs) to meet requirements for frequency of audit and time to remediate
- Out-of-the-box industry-standard compliance policies (for example PCI, CIS, HIPAA) via the HPE Live Network Content Marketplace to audit and remediate using current compliance rules

## Built-in process orchestration

A built-in process orchestration engine connect tasks and process flows to help automate data center management. The orchestration engine allows customers to tailor processes their specific needs based on out-of-the-box operations.

- Thousands of pre-built operation flows to create powerful and repeatable deployments
- Out-of-the-box content built using industry standards, vendor best practices, and real-world experience
- Workflows for many common, processes such as end-to-end provisioning (infrastructure to application), vulnerability management, and disaster recovery.
- Integration engine for open source and proprietary third-party scripts (for example Chef, Puppet, and Ansible), extending capabilities (for example software audit and tracking, user access management, and compliance)
- Easy flow creation
  - Design and debug flows with intuitive, drag-and-drop interface and integration
  - Integrate existing customer content, for example, PowerShell scripts, Web Services, REST
- SOAP APIs
- Integrated development environment (IDE) that supports hundreds of authors across geographies
  - Graphical and textual dual authoring experience

	SA 10.60	OO 10.80	ITOC 1.20	DMA Premium 10.50.001	OBR 10.20
SA 10.60		<b>Ø</b>	<b>Ø</b>	-	0
OO 10.80	0		-	<b>③</b>	-
ITOC 1.20	0	-		-	-
DMA Premium10.50.001	-	0	-		-
OBR 10.20	0	-	-	-	

## Product integration matrix

The following sections provide information about the individual products that comprise the DCA Classic Premium 2017.11 release.

## Server Automation

Server Automation (SA) is a data-center automation software that centralizes and streamlines many data center functions and automates critical areas of your data center's server management including the following:

- Server discovery
- Operating system provisioning
- Operating system patching
- Software provisioning
- Audit and compliance
- Application configuration
- Application deployment
- Software compliance
- Reporting

#### Virtual environment management

You can also manage your heterogeneous virtual environment including:

- virtualization services (VSs)
- virtual machines (VMs)
- VM templates

You can provision, patch, configure, and audit all of your virtual machines the same way that you manage your physical servers.

SA enables you to make changes more safely and consistently because you can model and validate changes before you commit them to a managed server. SA provides methods to ensure that modifications you plan for your managed servers work because they have been tested before being applied, thereby reducing downtime.

## **Operations Orchestration**

Operations Orchestration (OO) is the industry-leading solution for IT process automation and runbook automation.

OO is a system for creating and using actions in structured sequences (called flows) which maintain, troubleshoot, repair, and provision your IT resources by performing the following actions:

- checking the health, diagnosing, and repairing, networks, servers, services, software applications, and individual workstations.
- deploying applications, patching, and maintaining them by checking client, server, and virtual machines for required software and updates, and, if needed, performing the necessary installations, updates, and distributions.
- performing repetitive tasks, such as checking status on internal or external web site pages.

## Database and Middleware Automation Premium

Database and Middleware Automation (DMA) Premium software automates administrative tasks like:

- Provisioning and configuration
- Compliance
- Patching
- Release management for databases and application servers

When performed manually, these day-to-day software administration operations are error-prone, time consuming, and difficult to scale.

DMA automates these administration tasks that take up 60-70% of a database or application server administrator's day. Automating these tasks enables greater efficiency and faster change delivery with higher quality and better predictability.

DMA provides role-based access to automation content. This enables you to better utilize resources at every level:

- End users can deliver routine, yet complex, DBA and middleware tasks.
- Operators can execute expert level tasks across multiple servers including provisioning, patching, configuration, and compliance checking.
- Subject matter experts can define, enforce, and audit full stack automation across network, storage, server, database, and middleware.

#### **DMA workflows**

Use a DMA workflow to perform a specific automated task, such as:

- Provisioning databases or application servers
- Patching databases or application servers
- Checking a database or application server for compliance with a specific standard

You specify environment-specific information that the workflow requires by configuring DMA parameters. You can also group related DMA workflows into a solution pack.

## **IT** Operations Compliance

IT Operations Compliance (ITOC) allows IT Operations users to track business service compliance against corporate and regulatory policies, making their environment compliant and therefore secure.

With ITOC, you can:

- Scan compliance of business services against policies in a repeatable and reliable manner
- Remediate non-compliance
- Provide an overall view of compliance status across policies and business services
- Track exceptions of resources to requirements in the Statement of Applicability (SoA)
- Track the life cycle and revisions of policies, business services, controls, and SoAs

## **Operations Bridge Reporter**

Operations Bridge Reporter (OBR) is a cross-domain historical infrastructure performance reporting solution. It leverages the topology information to show how the underlying infrastructure's health, performance, and availability are affecting your business services and business applications in the long term. OBR manages the relationship of infrastructure elements to the business services at run-time by using the same topology services that are used by the products that collect the performance data from the managed nodes.

OBR collects data from different data sources, processes the data, and generates top-down and bottoms-up reports with the processed data. The SAP BusinessObjects, HP Vertica database, and PostgreSQL database are embedded software component of OBR.

You can use the interactive reports in OBR to:

- Report and analyze the pattern of problems in your IT environment.
- Forecast IT resource performance based on historical data.
- Drill down across time boundaries for the available data. For example, you can drill down from yearly level reports to monthly and daily level reports and vice versa to analyze the pattern of problems in a specific period of time.
- Perform a custom analysis of the data using report filters.

You can use OBR to determine the changes that you can make in your IT environment to improve the performance of your business services.

OBR has high data retention capability. This makes it possible to maintain high performance data over a long period of time and aid in decision making.

OBR provides Content Pack which is a data mart—a repository of data collected from various sources—that pertains to a particular domain, such as system performance or virtual environment performance, and meets the specific demands of a particular group of knowledge users in terms of analysis, content presentation, and ease of use.

Content Packs contain the rules that define how the metrics will be collected, transformed, and aggregated in the reports. A typical Content Pack defines the metrics for a specific domain along with the necessary rules for analysis required in that domain.

OBR allows you to perform the following functions:

- Create your own Content Packs. OBR provides Content Development Environment (CDE) to create new Content Packs and customize existing Content Packs.
- Customize and extend the out-of-the-box Content Packs provided in the product.
- Create your own groups for reporting. For example, you can create groups based on the business management chain or business functions.

# **Product library**

Product	Version	Documentation library link
Server Automation (SA)	10.60	go
Operations Orchestration (OO)	10.80	go
Databases and Middleware Automation (DMA) Premium	10.50.001	go
Operations Bridge Reporter (OBR)	10.20	go
IT Operations Compliance (ITOC)	1.20	go

# Send documentation feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

#### Feedback on Getting started (Data Center Automation Classic Premium 2017.11)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to hpedca-docs@hpe.com.

We appreciate your feedback!