Cisco Intelligent Automation for Cloud Compatibility & Requirements Matrix

Release 4.3.1

February 12, 2016

Cisco Systems, Inc. www.cisco.com

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Cisco Intelligent Automation for Cloud 4.3 Compatibility & RequirementsMatrix © 2016 Cisco Systems, Inc. All rights reserved.

Cisco Intelligent Automation for Cloud 4.3.1 Compatibility Matrix

Revised:

February 12, 2016

This document describes the version and compatibility requirements for installing and upgrading Cisco Intelligent Automation for Cloud. This document also provides information about hardware and software compatible with Cisco IAC. Review the product documentation for additional software prerequisites to make sure there are no conflicts when installing the prerequisites. While other possible functional combinations of technologies exist, only the items listed in this table have been tested and are supported for Cisco IAC.

NEW for this release
Fully supported
Partially supported
Not supported
Minimum for current release

Component Version Information Version Information Information Version Information Version Information Version Information Information Version Information Informat			Cisco Intelligent Automation for Cloud Release			eleases			
Amazon AWS (EC2) Amazon AWS (EC2) Application Configuration Management Servers Puppet Labs Puppet Master 42 (2015.2) Enterprise 2015.2 (Enterprise or Community) 3.2.2 (Enterprise or Community) 3.2.3 (Enterprise or Community) 3.2.4 (Enterprise or Community) 3.2.4 (Enterprise or Community) 3.2.4 (Enterprise or Community) 3.2.4 (Enterprise or Community) 3.2.5 (Enterprise or Community) 3.2.6 (Enterprise or Community) 3.2.7 (Enterprise or Community) 3.2.7 (Enterprise or Community) 3.2.8 (Enterprise or Community) 3.2.8 (Enterprise or Community) 3.2.9 (Enterprise or Community) 3.2.0 (Enterprise Or Community) 3.2.1 (Enterprise Or Community) 3.2.2 (Enterprise Or Community) 3.2.1 (Enterprise Or Community) 3.2.2 (Enterprise Or Commu			4.3.1	4.3	4.2	4.1.1	4.1	4.0.0	3.1.1
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Second Prime Network Service Catalog	Puppet Labs Puppet Master	4.2 (2015.2) Enterprise	•	0	0	0	0	0	0
Clerk Server 12.x		2015.2 (Enterprise or Community)	•						
Clitrix NetScaler 1000v		3.2.2 (Enterprise or Community)		0	•	•	•	0	0
Ciltrix NetScaler 1000∨ 10.5-55.8	Chef Server	12.x	•	•	0	0	0	0	
Citrix NetScaler VPX 10.1 Build 119.7.nc ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	Citrix								
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Cisco APIC	Citrix NetScaler VPX	10.1 Build 119.7.nc			•	•	•	•	0
Cisco APIC OpenStack Mechanism Driver 1.0.2	Cisco APIC								
State Stat	Cisco APIC	1.0(3n)	•	•	•				
Section Service Catalog	Cisco APIC OpenStack Mechanism Driver	1.0.2	•	•	•				
Signature Sign	Cisco IAC Management Appliance								
Cisco Prime Network Registrar IPAM 8.1.1	CentOS	5.7 64-bit (English)	•	•	•	•	•	•	0
Cisco Prime Network Registrar IPAM		5.11 64-bit (English)	•	•	0	0	0	0	0
Cisco Prime Network Services Controller 3.2.1 3.2.2 3.4(1b)* O O O O O O O O O O O O O O O O O O O	Cisco Prime Network					•		•	
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Cisco Prime Service Catalog 9.4.1 9.4.1 R2 10.0 10.0 Patch 1q 10.0 Patch 1q 10.1 patch v3k 10.1 patch v1i 11.0 11.1 Application Server for Cisco Prime Service Catalog Wildfly + Oracle Java (Windows) System Database for Cisco Prime Service Catalog Microsoft Windows SQL Server 2012 R2 with SP1, Standard or Enterprise Edition Wildrows SQL Server 2012 R2 with SP1, Standard or Enterprise Edition		3.4(1b)*							
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with SP1, Standard or Enterprise Edition		·		\perp	L	\perp			L
			•	•	•	•	0	0	0
		Oracle Database 11g R2 Enterprise Edition							

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NEW for this release
Fully supported
Partially supported
Not supported
Minimum for current release

Cisco Intelligent Automation for Cloud Releases

						t Automation for		leases
		4.3.1	4.3	4.2	4.1.1	4.1	4.0.0	3.1.1
Component	Version Information							
Operating System for Cisco Prime Service Catalog	CentOS 5.6 64-bit (English)	0	0	0	0	0	0	•
	CentOS 5.7 64-bit (English)	0	0	0	0	•	•	•
	CentOS 5.8 64-bit (English)	0	0	0	•	•	•	0
	CentOS 6.5 64-bit (English)	•	•	•	•	0	0	Ó
	MS Windows Server 2008 R2 64-bit (English) SP1	ō	Ō	•	•	•	•	•
	MS Windows Server 2012 R2 64-bit (PSC 11.0 and 11.1	•		Ö	0	0	o	Ô
	Red Hat Enterprise Linux 5.6 64-bit (English)	•	0	0	•	•	•	•
	Ubuntu12		Ō	Ō	0	lò	Ō	Ō
	Red Hat Enterprise Linux 7	•	•	•	0	0	o	Ô
Web Server for Cisco Prime Service Catalog	Microsoft IIS 8.5 (PSC 11.0 and 11.1 only)	•	•	0	0	Ō	Ō	0
	Microsoft IIS 7.5	Ō	Ō	•	•		•	•
	Apache 2.2.3 ¹	Ö	Ö	lo	0	•	•	•
	Apache 2.4.6	•	-	0	0		-	0
	•	•	•		0	•	•	_
	Apache 2.4.7 (2.4.x)	0	0	•	•	0	0	0
	IBM HTTP Server (IHS) 7.0.0.xx	0	0	0	•	•	•	•
Cisco Process Orchestrator		_						
Cisco Process Orchestrator	2.3.5	0	0	0	0	0	0	•
	3.0.0 Patch 5	0	0	0	0	0	•	0
	3.0.2 Patch + Hotfix 10	0	0	0	0	•	0	0
	3.1	0	0	0	•	0	0	0
	3.1.1, bit 3.1.0	0	0	•	0	0	0	0
	3.2	0	•	0	0	0	0	0
	3.2.1							
Application Server for Cisco Process Orchestrator	Microsoft .NET Framework 4.0	0	0	0	0	•	•	•
	Microsoft .NET Framework 4.5	0		•	•	•	•	0
	Microsoft .NET Framework 4.5.1	•	•	•	•	•	•	0
Operating System for Cisco Process Orchestrator	MS Windows Server 2012 / 2012 R2 64-bit (English)	•	•	•	•	•	•	0
	MS Windows Server 2008 R2 64-bit (English)	•	•	•	•	•	•	•
Java Runtime (JRE) for Cisco Process Orchestrator	Oracle Java SE 6 (JRE 1.6)		0	0	0	0	0	•
, , , , , , , , , , , , , , , , , , , ,	Oracle Java SE 7 (JRE 1.7)	•	•	•	•	•	•	ō
System Database for Process Orchestrator	Microsoft SQL Server 2008 Standard Edition or Enterprise							
	Edition (English). Process Orchestrator additionally supports	0	0	0	0	•	•	•
	failover clustering.							
	Microsoft SQL Server 2012 Standard Edition or Enterprise							
	Edition (English). Process Orchestrator additionally supports	•	•	•	•	0	0	0
	failover clustering.							
	Oracle Database 11g R2 Enterprise Edition (Process							
	Orchestrator can only run on Oracle Real Application	•	•	•	•	•	•	•
	Clusters "RAC" 11g R2.)		ļ					
	Oracle Client 12C 64bit required on the Process	•	•			0	0	0
	Orchestrator server for RAC support		ļ -		_	lgrup		
Web Server for Process Orchestrator	Microsoft IIS 6.0		0	•	•	•	•	•
	Microsoft IIS 7.0	•	•	•	•	•	•	•
	Microsoft IIS 7.5	•	•	•	•	•	•	•
	Microsoft IIS 8.0 (Windows Server 2012)	•		•		•	•	0

KEY

NEW for this release Fully supported Partially supported 90 Not supported 0 Minimum for current release

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Cisco Intelligent Automation for Cloud Releases 4.3.1 4.2 4.1.1 4.0.0 3.1.1 4.3 4.1 Component Version Information isco Unified Computing System (UCS) Cisco UCS Director 3.4.0.1 0 0 4.1.0.0 0 0 0 0 0 0 4.1.0.4 0 0 0 0 lacktriangle0 0 5.1 0 0 0 0 0 0 • 5.2 0 0 • 0 0 0 0 5.3 0 0 • 0 0 0 0 0 0 0 0 0 0 Cisco UCS Manager • • • • • • 2.1 • 0 2.1 (3a) • 0 0 0 • • 2.5(1a) 0 0 0 0 3.0 • 0 0 0 0 Cisco UCS Models B series • • • • • C Series (when connected to USC Manager) 0 Message Queueing Advance Message Queueing Protocol (AMQP) 0-9-1 0 • • • • • • Network Discovery Cisco Virtual Security Gateway 0 0 2.1.1 0 0 0 2.1.2* 0 0 0 0 0 0 2.1.2c 0 0 0 0 0 Network Discovery Cisco ASA 1000v 8.7.1 0 0 0 0 • 0 Cisco CSR 1000v XE 3.1.4.1.S • 0 0 0 0 Cisco CSR 1000v XE 3.12 0 0 0 • 0 0 Cisco CSR 1000v XE 3.13* • 0 • 0 0 Cisco Nexus 1000v 4.3(1)SV2(2.2) 0 0 0 0 0 • Cisco Nexus 1000v 5.2(1)SV3(1.3) • 0 0 0 Cisco ASR 1000 • • 0 Cisco ASR 9000 • • • • 0 Cisco Nexus 7000 • • • • • 0 Cisco Nexus 5000 0 VMware vSphere/vCenter 4.1 (English) 0 5.0 (English) 0 5.0 Update 1 0 5.1 (English) • • • • • • 0 5.5 (English) • • 0 • 0 6.0 (English) • • • 0 0 0 VMware vCloud Director 5.1 (API v5.1) 0 • • • • 5.5 (API v5.1) • • 0 0 0 0 VMware vCenter Server Deploying Virtual VMware ESXi 4.1 0 • • • Machines² VMware ESXi 5.0 • • • • • VMware ESXi 5.0 Update 1 VMware ESXi 5.1 • • • • • VMware ESXi 5.5 • • 0 • • 0 VMware vCenter Server Provisioning VMware ESXi 4.1 (on 4.1 Clusters) • • • • • • • VMware ESXi 5.1 • 0 0 • 0 0 1 VMware PowerCLI Powershell Plugin VMware vSphere PowerCLI 5.1 (English) • • • • (32-bit version only) VMware vSphere PowerCLI 5.5 (English)

NEW for this release
Fully supported
Partially supported
Not supported

Minimum for current release

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Cisco Intelligent Automation for Cloud Releases 4.3.1 4.1.1 4.0.0 3.1.1 4.3 4.2 4.1 Component Version Information Microsoft Active Directory 2003 (English) LDAP Server 0 Microsoft Active Directory 2008 (English) • • Microsoft Active Directory 2012 (English) Essex on Ubuntu 12.04 (Nova) OpenStack 0 0 0 0 0 • OpenStack Havana 0 0 0 0 0 OpenStack IceHouse 0 0 0 0 OpenStack Juno 0 0 0 0 0 OpenStack Kilo 0 0 0 0 0 0 OpenStack Liberty • GBP driver, v. 2.3.8 0 0 • 0 0 0 Service Assurance Prime Performance Manager (PPM) 1.5 0 0 0 0 0 1.6 0 0 0 0 0 0 1.7 (only supports OpenStack Kilo) • • 0 0 0 0 0 IAC Assurance Control (for Appliance) 1.3.7 • • • 0 0 0 0 Web Browser (Service Portal Module) Browsers Microsoft Internet Explorer (IE) 11 • 0 0 0 0 Microsoft Internet Explorer (IE) 10 0 0 4 0 Mozilla Firefox 28 (or later) 0 0 • • 0 0 0 Mozilla Firefox 38 (or later) 0 0 0 0 0 • • Google Chrome 33 (or later) 0 0 • • 0 Google Chrome 43 (or later) • 0 0 0 0 0 • Safari 7.0.x (Mac OS only) 0 0 • 0

Safari 8.0.x (Mac OS only)

Note: For other possible combinations that have not been verified as supported your Cisco IAC solution, please refer to the configuration guides and compatibility matrices for the Cisco product in question, such as Cisco Prime Service Catalog and Cisco Process Orchestrator.

¹ Virtual appliance only

² You can only add a VDC if the datacenter has a cluster. Cisco IAC does not support data centers with one host (no cluster). Therefore, when you register a compute POD with connection to Vcenter datacenter, that datacenter must have one or more clusters.

Cisco Intelligent Automation for Cloud 4.3.1 Minimum Hardware Requirements

Platform Element	Component	Client	Server				
Cisco Process Orchestrator Server³ CPU		2.8 GHz or higher core (Dual core systems recommended)	64-bit 2.8 GHz or higher core (Quad core systems recommended				
	Memory Disk Space	2 GB minimum (4 GB or higher recommended) 1 GB dedicated to Process Orchestrator (2 GB or higher	2 GB minimum (8 GB or higher recommended) 8 GB of RAM (if Microsoft SQL Server is installed on same machine as Process Orchestrator) It is recommended that the database reside on a separate server. 1 GB of available hard disk space dedicated to Process Orchestrator (2 GB or higher recommended) ⁴				
		recommended)					
Cisco Prime Service	CPU	_	Intel Core 2 Dual processor or equivalent				
Catalog ⁶	Memory	_	8 GB RAM				
	Disk Space	_	40 GB free hard disk space				
Cisco Prime Service	CPU	-	Intel Core 2 Dual processor or equivalent				
Catalog Database	Memory	_	8 GB RAM				
	Disk Space	_	50 GB free hard disk space ⁵				

³ For complete installation prerequisites, see the latest *Process Orchestrator Installation and Administration Guide* on Cisco.com.

 $^{^{4} \ \ \}text{For disk space sizing formula, see the latest} \ \textit{Process Orchestrator Installation and Administration Guide} \ \ \text{on Cisco.com}.$

⁵ Disk space requirement is dependent on the projected size of your Service Portal databases over time, to account for the growth in user data, service definitional data, transactional data, and reporting data.

⁶ For more information on wildfly cluster environment, see the latest *Prime Service Catalog installation Guide* on Cisco.com.

Cisco Intelligent Automation for Cloud 4.3.1 Minimum Software Requirements

Component	Server	Requirements ⁷
Application Server Operating System	Cisco Process Orchestrator	Microsoft Windows Server, installed with US English regional language,
		date and currency settings
	Cisco Prime Service Catalog	Microsoft Windows Server, installed with US English regional language,
		date and currency settings
		Red Hat Enterprise Linux
Application Server Framework	Cisco Process Orchestrator	.NET Framework
		VMware vSphere PowerCLI
	Cisco Prime Service Catalog	WildFly
Application Software	Cisco Process Orchestrator	Process Orchestrator
	Cisco Prime Service Catalog	Cisco Prime Service Catalog
		Cisco Prime Service Catalog patch (if required)
		REX adapter
LDAP Server ⁸	Cisco Process Orchestrator	Microsoft Active Directory
	Cisco Prime Service Catalog	Microsoft Active Directory
		IBM Tivoli Directory Server
		Sun Java System Directory Server
	NOTE: For Cisco Prime Service Cat:	alog, you must create the six user groups in the directory: Cloud Provider Technical
		nization Technical Administrator, Solutions Team, Virtual Server Owner, and Virtual
	Administrator, Field Extender, Organ	ilzation recinical Administrator, Solutions ream, virtual Server Owner, and virtual
	and Physical Server Owner These	year groups will serve as containers for identifying user role assignments. The user
		user groups will serve as containers for identifying user role assignments. The user
	groups must be named according to	the role name in Cisco Prime Service Catalog. Consult the documentation that
	groups must be named according to comes with your directory software	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups.
Web Server	groups must be named according to comes with your directory software Cisco Process Orchestrator	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS)
	groups must be named according to comes with your directory software	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft Internet Information Services (IIS)
Web Server Database	groups must be named according to comes with your directory software Cisco Process Orchestrator	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS)
	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft Internet Information Services (IIS)
	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server
	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition
	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server
Database	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Prime Service Catalog	the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition
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Database	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Process Orchestrator	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox
Database	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Process Orchestrator	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Process Orchestrator Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2 Hypervisor ⁹	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox VMware ESXi
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Process Orchestrator Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2	on the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2 Hypervisor9 Hypervisor Manager	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox VMware ESXi
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2 Hypervisor ⁹ Hypervisor Manager vCenter	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox VMware ESXi
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2 Hypervisor Hypervisor Manager vCenter vCloudDirector	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox VMware ESXi
Database Web Browser	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2 Hypervisor Hypervisor Manager vCenter vCloudDirector OpenStack	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox VMware ESXi
Database Web Browser Virtualization	groups must be named according to comes with your directory software Cisco Process Orchestrator Cisco Prime Service Catalog Cisco Prime Service Catalog Cisco Process Orchestrator Cisco Process Orchestrator Cisco Process Orchestrator Cisco Prime Service Catalog Amazon EC2 Hypervisor Manager vCenter vCloudDirector OpenStack UCS Director Cisco UCS Manager	o the role name in Cisco Prime Service Catalog. Consult the documentation that for instructions on setting up user groups. Microsoft Internet Information Services (IIS) Microsoft SQL Server Oracle Database Enterprise Edition Microsoft SQL Server Oracle Database Enterprise Edition Microsoft Internet Explorer Mozilla Firefox Microsoft Internet Explorer Mozilla Firefox VMware ESXi VMware vCenter/vSphere Cisco UCS blades

 $^{7\ \ \}text{See the Cisco IAC Compatibility Matrix tab at the front of this document for the supported versions.}$

⁸ LDAP Server requirements only apply if you are using a directory service to import user and organization information.

⁹ For specific ESXi/vCenter compatibility, refer to interoperability guidelines on VMware.com. In addition, UCS Director v5.1 is required for Hyper-V support in Cisco IAC 4.3.1

Cisco Intelligent Automation for Cloud 4.3.1 Default Ports and Protocols

Adapter	Port	Protocol
IAC Platform Elements (No	on-PO Targets)	
PPM	4440	HTTPS
AMQP	15672	HTTP/HTTPS
_	80/443 (if HTTPS is supported)	HTTP/HTTPS
_	8080/443 (if HTTPS is supported)	HTTP/HTTPS
_	8088/443 (if HTTPS is supported)	HTTP/HTTPS
	8089/443 (if HTTPS is supported)	HTTP/HTTPS
	80/443 (if HTTPS is supported)	HTTP/HTTPS
	5672	AMQP
	1443	TCP
	1521	TNS
	61527 / 61526	HTTP/HTTPS (SOAP)
	2081	HTTP/HTTPS
	61525	HTTP ¹⁰
	61525	НТТР
	80/HTTP for SP web client ¹¹	80/HTTP for SP web client
PO Targets for Outbound	Connections to IAC Platform Elements	
Windows	135 (initially, then any random port.) ¹²	WMI, Microsoft RPC, Net API, DCOM
Prime Service Catalog	6080, 8080/443 (if HTTPS is supported)	HTTP/HTTPS
Web	6080/443 (if HTTPS is supported)	HTTP/HTTPS
Web	8080/443 (if HTTPS is supported)	HTTP/HTTPS
Web	61527/ 61526	HTTP/HTTPS
AMQP	5672	AMQP
Server Provisioner	802	HTTP (no HTTPS)
Web	80/443 (if HTTPS is supported)	HTTP/HTTPS
PO Targets for Outbound	Connections to Other Elements of the Cloud En	vironment
SNMP	162	SNMP
Terminal	22	SSH
Web	8774	HTTP/HTTPS
Web	5000	HTTP/HTTPS
VMware Virtual Center	80/443 (if HTTPS is supported)	HTTP/HTTPS
Cisco UCS Manager	80/443 (if HTTPS is supported)	HTTP/HTTPS
Windows	135 initially (then any random port) ¹³	WMI, Microsoft RPC, Net API, DCOM
Other Connections from the	ne Cloud Environment Back to IAC	
AMQP	5672 / 5671 for SSL	AMQP ¹⁴

Note: Cisco Process Orchestrator requires going to need Port access to at minimum the Admin or PublicURL of Keystone/identity and the AdminURL of Nova, Neutron, Cinder, and Ceileometer. These ports and others are reflected here. (CAIC does not use Swift/Object Storage with OS). For more information, refer to:

 $\underline{http://docs.openstack.org/trunk/config-reference/content/firewalls-default-ports.html}$

 $^{{}^{11} \ \}underline{\text{Using WSHttpBinding - http://www.codeproject.com/Articles/36396/Difference-between-BasicHttpBinding-and-WsHttpBind-And-WsHttpBinding-and-WsHttpBinding-and-WsHttpBinding-and-WsHttpBind-And-WsHttpBin$

¹³ Older windows OS's such as 2000, XP, and 2003 use a low port in the range 1025-5000. Later OS's use a high port in the range 1024-65535

There will be messages coming from the target environment to this queue.

Cisco Intelligent Automation for Cloud 4.3.1 Limitations and Scalability

Entity	Limitations	Notes
Cisco Process Orchestrator Server	Local HA	Multiple application servers with database cluster; a platform element which is associated to all PODs (at a site)
Concurrent users	200 concurrent users	Based on minimum hardware requirements
VMware vCenter Server	Zero or more instances	Not Linked Mode
Cisco Service Catalog	One	
Cisco UCS Manager	Zero or more instances	Only one may be associated to a Compute POD
Cisco Prime IPAMs	Zero or more instances	
Cisco UCS Director	Zero or one instances	One may service multiple Network PODs
Cisco Nexus 1000v	Zero or more instances	Where networks will be added from Nexus 1000v networks must be pre- provisioned if no Nexus 1000v is registered.
Cisco APIC	Zero or more instances	Only required for APIC plugin-enabled OpenStack deployment