

### Oracle OS Management Hub Introduction

April 6, 2024

We're pleased to announce Oracle OS Management Hub, our next-generation operating system (OS) management service. Organizations are often faced with the challenge of keeping up to date with critical security updates and managing OS deployments across their application infrastructure, whether they're in the cloud or on-premises. Using the OS Management Hub service, you can automate, streamline, and simplify the management and monitoring of updates and patches for Oracle Linux systems through a single management console in Oracle Cloud Infrastructure (OCI).

OS Management Hub manages Oracle Linux systems across distributed environments—in private data centers, OCI, Microsoft Azure, and Amazon Web Services (AWS)—making it easy for you to view and manage your OS deployments at scale. This release includes support for managing Microsoft Windows Server instances on OCI.

## Automation helps increase security, reliability, and reduce complexity

Operating systems require constant administration and management to help ensure security compliance, high availability, and optimal performance. Manual patch management and maintaining self-supported, in-house management tools can be labor-intensive and require specialized expertise. OS patching can be error-prone and complex to manage throughout development lifecycle environments, especially for larger deployments that need to scale. OS Management Hub allows you to automate patching, which can help your organization improve productivity, operate more efficiently, and enable IT resources to focus on tasks directly related to the business.

OS Management Hub helps your systems stay compliant and reliable, while reducing your administration workload. It allows you to easily automate your patching policies and schedules with customizable configuration options and an intuitive interface. It helps reduce management complexity and human error and allows you to achieve greater operational efficiency and scalability with fleet management capabilities. Integration with Oracle Ksplice provides more management control with zero-downtime Oracle Linux kernel and userspace (glibc, openssl) updates. In addition to the console interface, a CLI and an API with software developer kits (SDKs) are available to allow you to customize the service to your organization's needs.

Let's explore OS Management Hub's features in more detail and see how they can benefit your organization.

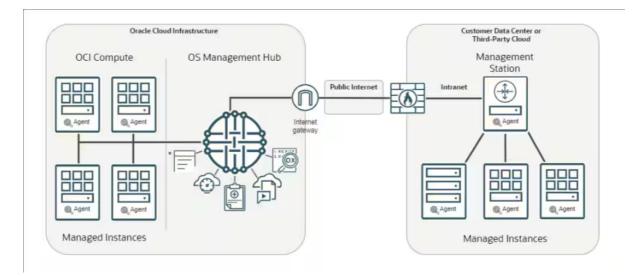
## Built on a highly available and scalable service architecture

OS Management Hub is built on OCI's highly reliable and scalable infrastructure. Key advantages of OS Management Hub as a cloud service include greater operational efficiency and an increase in administrative and capital cost savings. As your deployment scales and changes, you can easily add on-premises or cloud instances for OS Management Hub to manage. The service is backed by 24/7 expert Oracle support, helping to ensure high availability.

To manage Oracle Linux systems that are on-premises, on Azure, or on AWS, you must deploy one or more management stations. A management station serves as a proxy for the OS Management Hub service in OCI. It mirrors software repository content to your data center and distributes updates locally to instances, reducing the amount of bandwidth used for patching instances. Only management stations are required to communicate directly with the OCI service. Instances communicate directly with their local management station, receive their OS content from the management station, and don't require direct connectivity with the service. Management stations allow you to scale efficiently and manage and curate content and updates specific to each department or application deployment.

Management agents are deployed on managed instances and on the management station. The management agent interacts with the OS content on an instance as directed by OS Management Hub and reports data and results back to the service.

To manage Oracle Linux and Windows Server instances on OCI, a management station isn't required. Management agents are included by default on supported OS platform images deployed within OCI.



For instructions and videos on how to set up and configure OS Management Hub, refer to the documentation.

## At-a-glance view of security compliance

OS Management Hub provides a summary dashboard of your managed instances across your distributed environment. The dashboard helps monitor out of compliance patching statuses, displays the number of instances with available security and bug updates, and helps ensure that instances are communicating with the service. You can drill down to view a detailed security updates report, and view advisories and schedule available updates directly from the Oracle Cloud Console.



	arch resources, services, documentation, and Marketplace		US East (Ashburn) 🗸 🗊 🏦
OS Management Hub	Overview		
Overnationy Software ecuations	Welcome to OS Management Hub Use OS Management Hub to manage and morality updates and patches for instances in DCL yo	uur private data ciertei: ar supported trud-party croud through a single manugement coonce.	
Lifecycle environments metances	Dashboard		
Jobs Reports Profiles Entilisements	Security updates report 14 out of 21 instances have security updates available.	Bug updates report 8 out of 21 instances have bug updates available.	Instance activity report . 3 out of 21 instances are not communicating with the service.
Marageneet Alatione Motifored resources List scope Compartment	• 256-104. • PV-100.	• PN-lat. • PN-lat.	<ul> <li>Ni Astro-</li> <li>Other</li> <li>Ni Astro-</li> <li>Ni Astro</li></ul>
Filters	More actions		
	Select vendor software sources Use software sources to previde OS content to instances.  Recent vendor software scores Intel	Setup management station     Create a management station to distribute content to instances in your private     data control or polymorphic tarbid party (bod on encommet.     Ref magazine for COI management     Ref management effects     Hala	Create a profile Desta profile to define the context assigned to instances at registration. Distribution specific thats.
	Resources		
	Training Videos Denome I2 mini Trateiro, Taxà	Documentation Get antiod Al cocumentation	

### Manage instances and groups with ease

Managing your Oracle Linux and Windows fleet of instances across distributed environments is easy using OS Management Hub's intuitive console. To manage Oracle Linux instances, you can filter and search for available and installed updates, apply updates, install and remove packages, and configure modules.

E ORACLE Cloud	Search reso	surces, services, documental	ion, and Marketplace				US East (/	shbum)〜 🖸 🎊 ⑦	
Resources	Up	odates							
Updates Packages Modules	1	01 Available up 46 security, 55	dates bug fixes						
Software sources		lpdate						Q. Search by re	1710
Reports		Name	Available version	Installed version	Architecture	Туре	Advisory	CVE	
Iters		bind-libs	32:9.16.23-14.et9_3.4	32:9.16.23-14.el9_3	x86_64	Security	ELSA-2024-1789	CVE-2023-5517, CVE-2023 CVE-2023-50387, CVE-202 CVE-2023-4408, CVE-2023	3-50868
All Security Bug fix	<b>_</b> ] ø	bind-license	32:9.16.23-14.eb_3.4	32:9.16.23-14.el9_3	noarch	Security	ELSA-2024-1789	CVE-2023-5517, CVE-2023 CVE-2023-50387, CVE-202 CVE-2023-4408, CVE-2023	3-50868
Enhancement Other		bind-utils	32:9.16.23-14.etb_3.4	32.9.16.23-14.el9_3	x86_64	Security	ELSA-2024-1789	CVE-2023-5517, CVE-2023 CVE-2023-50387, CVE-202 CVE-2023-4408, CVE-2023	3-50868.
	Ø	bpftool	7.2.0-362.18.1.#9_3	7.2.0-362.18.0.2.eH9_3	x86_64	Security	ELSA-2024-0461	CVE-2023-2166, CVE-2023 CVE-2023-3777, CVE-2023 CVE-2023-46813, CVE-202 CVE-2023-46813, CVE-2023 CVE-2023-46813, CVE-2023 CVE-2023-42763, CVE-2023 CVE-2023-5176, CVE-2023 CVE-2022-41858, CVE-2022 CVE-2022-41858, CVE-202	1-6679, 13-4622, 1-40283, 12-3545, 1-3812, 1-4015,
	2	bpftool	7.2.0-362.24.1.0.1.019_3	7.2.0-362.18.0.2.eH9_3	x86_64	Security	ELSA-2024-12265	CVE-2024-1086	
		bpftool	7.2.0-362.24.1.eH9_3	7.2.0-362.18.0.2.eH9_3	x86_64	Security	ELSA-2024-1248	CVE-2024-0646, CVE-2023 CVE-2023-6606, CVE-2023 CVE-2023-51042, CVE-2023 CVE-2023-451042, CVE-2023 CVE-2023-6817, CVE-2024 CVE-2023-6816	-6535. 3-5717. -6610.
		buildah	1:1.31.4-1.0.1.el9_3	1:1.31.3-2.0.1.el9_3	x86_64	Security	ELSA-2024-1150	CVE-2023-48795	¢
		ouri	7.76.1-26.el9_3.3	7.76.1-26.el9_3.2	x86_64	Security	ELSA-2024-1129	CVE-2023-46218	:

Flexible update options allow you to run any of or all the available Oracle Linux security, Ksplice (kernel, userspace), bug, enhancement, and other updates. You can run update jobs immediately or on a one-time or recurring schedule.

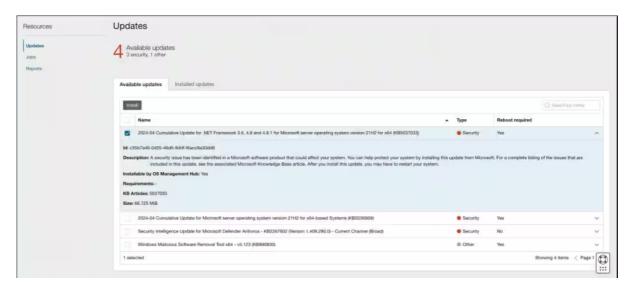
	auch resourcest, services, disbummtation, and Managano	US East (Ashburn) 🗸 🕡 🗘	0	9
OB Management Huids Intersect + Inte	ol9-managed-instance Creations of Instance Information Compartment gool/ Locations On premises Betweeker gools: 0	Create update job I retarce will be updated. Job mans Apply updates to olif-managed-instance Descriptor /Descript Updates to apply A		
Resources	Management station: (0584: Uno segment, Daire Registration profile: Oppile: Uno 5. Profile Updates	Kapito karnel     Kapito karnel     Kapito vesnapace Bug Ix Ethnacament Other		
Opdates Peccepes Modulas Software sciences	101 Available updates 46 security: 50 bug files	Schedule Pean immediately Date and time Units ago 4000 UTC	-	
John Pagoita -	Name Av	Frequency Once Hour Day Week Month		
Filters Type Al C	NetworkManager-adal 1:1 NetworkManager-adal 1:1 NetworkManager-adal	3 Store atomical colorin	0	
		Create Cancil		

To help reduce management complexity while increasing efficiency and scalability, you can create a group of instances that are managed together to run standard tasks. Groups of instances must be of the same OS type, release, and architecture.

	aren resources, services, discussentario, and Makinglane			US East (Ashburn) 🗸		: 0	••
Create group							
Add Insec. cluthin     Select address Sources     Add Instances     Electore     Electore	Available instances match the OB vendor, version, and architecture of the Skip this step to crease a group without instances. You can attach or detach instance Compariment     Available instances in compartment	group, instances stalgred to another group or Mocycle environment aren't listed. ces after the group is created.					0
	Select instances to attach				C that	ti) name	
	Name Name	- Status					
	ol8-managed-instance-1	Active					
	ol8-managed-instance-2	Active	ctive				
	2 selected			Sh	owing 2 items	Pa	091-5
	Instances selected for attachment				Q lines	bly asserts	
	Name	Compartment No items found.		Status			
	(Australia)	No items found.		~	C. Diwas		
	0 selected			5	howing 0 iten	ns < 1	of 1 - 2
							0
Previous Next Cancel							

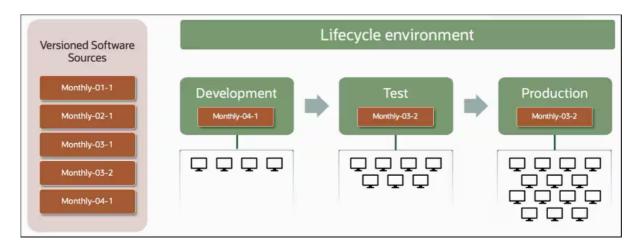
To manage Windows Server instances on OCI, you can filter and search for available and installed updates and apply updates. You can also run jobs to

update groups of instances with the option to apply updates immediately or at a one-time or recurring schedule.



# Simplified control of Oracle Linux updates across the lifecycle

OS Management Hub simplifies the management of Oracle Linux instances and helps ensure the consistency and integrity of systems across a lifecycle environment, which is a user-defined pipeline to deliver curated, versioned content in a prescribed, methodical manner. Typical Oracle Linux environments implement an application and system software lifecycle approach known as development, test, acceptance, and production (DTAP). To support this approach, you can define your lifecycle environment and stages for managing your Oracle Linux deployments. You can move content from one stage to another by promoting a curated set of updates across the lifecycle stages.



To complete this process using OS Management Hub, you define your lifecycle stages, assign instances to each stage, and create versioned custom software sources. A versioned custom software source is a software repository that you create with curated content that's assigned a version designator. It's immutable and can only be used to manage content for lifecycle environments.

	with southings, any local strategistics, and black studies:			US Eint (Annaŭn) 🗸 🗇 🌐 🧕
OS Management Halls 1 the publishment	meetia Uleryjk endovimet dotato			
	DTP_Lifecycle_Environment			
	Edit Greate profile			
LC	Lifecycle information Tags			
	Compartment:		OS werston: Ditatis Linux 8	
	Description: Likelytie envelopment		Architecture: x86_64	
	Stager: 3 Instances: 3		OCID: Stame Carte	
Resources	Stages			
Bhages	Promissa corecut: Edit stage norme			Q. timeth \$y on the
110001000	Ringe number	Sloge name	Versilanad autom influenciauros	Reddations
Haperts	E 1	Development	pH-vescont 2.1	1
	C 2	fest	off-versional Liu	
	<b>3</b>	Production	off-concessed 1.0	1
	1 aniocted			Showing & terms - C. 7 of 1. (

You can then promote content by associating a versioned custom software source to a lifecycle stage. Only the instances assigned to that stage have access to the content in the versioned custom software source.

To promote the OS content, you can run the update job immediately or on a schedule.

	arch remaines, services, documentation, and Macketpurce		US East (Ashbum) 🗸	0	1 0	۲	0
06 Management Hub + Lifecycle environ	shants + Lifecyste anneonmatt datass	Promote content					
	DTP_Lifecycle_Environmer						
	Edit Create profile	The Production stage has a prediccessor in the lifecycle environment. Content will be promoted from its prediccessor.					
LC	Lifecycle information Tags	Promoting oi8-versioned from Test to Production Job name					
	Compartment: (roof)	Promote ol8-varianced to DTP_Lifeoyole_Environment Production					
	Description: Lifecycle environment	Description Optional					
	Stages: 3 Instances: 3						-
	HISTORY 2	Schedule					
Resources	Stages	Run investianely Schedule					
Stages	Excepter control Edit stage name	Date and time Jun 3. 2024 06:00 UTC				Ē	3
lestances	Stage number	< June 2024 > Time					-
John		Su Mo Te We Th Fr Sa 04:30 UTC					
Reports	2	1 06:00 UTC					
	3	2 3 4 5 6 7 8 06:30 UTC 9 10 11 12 13 14 15 06:00 UTC					
	1 selected	16 17 18 19 20 21 22 06:30 UTC					
		23 24 25 26 27 28 29 07:00 UTC					
		30 07:30 UTC					
						0	Ð
						1	
		Promote Cancel					
		A REAL PROPERTY AND A REAL					

## Stay compliant with security vulnerability reports

The OS Management Hub vulnerability report helps ensure that your systems are compliant and up to date with security updates. The Oracle Linux vulnerability report displays details about security advisories and their associated common vulnerabilities and exposures (CVEs). It lets you know which packages are affected by the advisory, and you can install the critical packages directly from the Console.

Resources	Reports						
Updates	Vulnerability report Change his	story					
Packages Modules	Irestati-lepetatie	Inc				Q. Sealt it by advisory	
Software sources	Advisory	CVE	Descript	lion	Issue date	Affected packages	
Jobs	ELSA-2024-12208	CVE-2024-1085	Unbreaka update	able Enterprise kernel security	Mon, Mar 11, 2024, 00:00:00 UTC	5	$\sim$
	ELSA-2024-0897	-			-	9	$\sim$
	ELSA-2024-12187					9	$\sim$
	ELSA-2022-9243	CVE-2022-0778	openssi s	ecurity update	Wed, Mar 23, 2022, 00.00.00 UTC	3	
	Package		Version				
	openssi		2:1.1.1k-5.0.1.ks	plice1 el8_5			4
	openssi-devel		2:1.1.1k-5.0.1.ks	plice1.el8_5			
	openssi-libs		2:1.1.1k-5.0.1.ks	plice1 el8_6			

The Windows vulnerability report provides details of the available updates and reboot requirements. From this report, you can install available Windows updates immediately or on a schedule.

Resources	Reports			
Updates	Vulnerability report Change history-			
Jobs Reports	transit Cp Download report			C Binato By support
	Name	- Type	Reboot required	
	2024-04 Cumulative Update for .NET Framework 3.5. 4.8 and 4.8.1 for Microsoft server operating system version 21H2 for x64 (KB5037033)	Security	Yes	^
	ld: c35b7a46-0455-46d6-9idd1-f6acc9x30dd8			
	Description: A security issue has been identified in a Microsoft software product that could affect your system. You can help protect your system by install included in this update, see the associated Microsoft Knowledge Base article. After you install this update, you may have to restart your system		aott. For a complete listi	ing of the issues that are
			soft. For a complete listi	ing of the issues that are
	included in this update, see the associated Microsoft Knowledge Base article. After you install this update, you may have to restart your system		aott. For a complete listi	ing of the issues that are
	included in this update, see the associated Microsoft Knowledge Base article. After you install this update, you may have to restart your system Installable by OS Management Hub: Yos		aott. For a complete liati	ing of the insules that are
	included in this update, see the associated Microsoft Knowledge Base article. After you install this update, you may have to restart your system Installable by OS Management Hub: Yes Requirements: -		aott. For a complete liati	ing of the secure that are
	included in this update, see the associated Microsoft Knowledge Base article. After you install this update, you may have to restart your system Installable by OS Management Hub: Yis Requirements. KB Articles: 5037033		Yes	ing of the insues that are
	included in this update, see the associated Microsoft Knowledge Ease article. After you install this update, you may have to restart your system Installable by OS Management Hule: Yos Requirements. KB Articles: 5037033 Size: 61.755 Mill	π.		
	Included in this update, see the associated Microsoft Knowledge Base article. After you install this update, you may have to restart your system Installable by OS Management Hule: Yos Requirements: KB Articles: 5037033 Size: 61.755 Mill 2024-04 Cumulative Update for Microsoft server operating system version 21H2 for x84-based Systems (KBS036009)	m. Security	Yes No	v

Vulnerability reports can be downloaded in CSV, JSON, or XML formats.

Value added with your OCI and Oracle Linux Support subscription

OCI subscriptions include the use of OS Management Hub to manage Oracle Linux and Windows instances in OCI at no extra cost. Oracle Linux

🛻 Cloudsway

Support (Basic and Premier) includes support for managing Oracle Linux systems on-premises, and in Azure and AWS. Oracle Linux Support customers can use their existing OCI account or contact Oracle Linux Sales to register for one to access OS Management Hub. Note that OS Management Hub is not available with OCI Free Tier accounts and compute instances.

#### Getting started with OS Management Hub

You can access the OS Management Hub service by logging in to your OCI account, navigating to the Oracle Cloud Console main menu, selecting **Observability & Management**, then selecting **OS Management Hub**. For more information on how to configure and use OS Management Hub, refer to the documentation.

Current users of the first generation OS Management Service can take advantage of the new interface and features including Oracle Linux lifecycle management by migrating their Oracle Linux and Windows instances in OCI to OS Management Hub. You can also migrate Autonomous Linux instances from OS Management Service, which you can then manage from the Oracle Cloud Console by navigating to the main menu, selecting **Observability & Management** and then **Autonomous Linux**. Visit the instructions on how to migrate from OS Management Service to OS Management Hub. Note that effective April 23, 2025, OS Management Service reaches end of life and is replaced by OS Management Hub.

#### Resources

For more information on OS Management Hub and related resources, visit:

- OS Management Hub
- OS Management Hub documentation
- OS Management Hub training
- Oracle Linux
- Oracle Linux documentation and training
- Oracle Linux Support

Get the latest news, tech tips, and more by <u>subscribing to the Oracle Linux</u> and <u>Virtualization monthly newsletter</u>.

#### **About Cloudsway**

Cloudsway is a subsidiary of Wangsu Science and Technology (stock code: 300017), established in March 2023. Wangsu Science and Technology is a global leading provider of information infrastructure platform services, with business spread across more than 70 countries and regions worldwide.

Cloudsway is one of the three innovation engines in Wangsu's "2+3" strategy, providing enterprises with integrated products and solutions, such as cloud strategy consulting, modernized application construction, generative AI, and enterprise-grade cloud hosting services. solutions based on AWS.

Cloudsway is committed to become a leading provider of hybrid cloud solutions, offering secure, efficient, and convenient cloud services to enterprises, helping them with digital and intelligent transformation, and boosting their operational efficiency.