

Release Notes

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CLOUDERA

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What's New

This section lists major features and updates for the Cloudera Operational Database experience in Cloudera on cloud.

September 15, 2025

The Cloudera Operational Database 1.54 version supports enhancements to the Cloudera Operational Database UI and CDP CLI command.

Enhancements to the Cloudera Operational Database UI

When you create an operational database using the Cloudera Operational Database web interface, the options previously presented under the Settings step are integrated into the Configurations step. This optimization enhances both performance and usability.

Consequently, the process of creating an operational database now comprises four distinct steps: General Commissioning Configurations Review .

For more information, see *Creating a database using Cloudera Operational Database*.

Enhancements to the CollectDiagnostics command

The following new options are added to the CLI command, `CollectDiagnostics`.

- `--destination` (string) : Defines the destination of the created diagnostics bundle. The supported values are `UPLOAD_TO_CLOUDERA` and `DOWNLOAD`.
- `--case-number` (string) : Defines the CSH case number to be associated along with the diagnostic bundle.
- `--bundle-size-bytes` (integer) : Diagnostic bundle size limit.

The following is an example of the command using the above options.

```
collect-diagnostics --environment-name <***ENVIRONMENT NAME***> --database-name
<***DATABASE NAME***> --end-time <***END TIME***> [--start-time <***START TIME***>] [--
destination <***DESTINATION***>] [--case-number <***CSH CASE NUMBER***>] [--bundle-
size-bytes <***SIZE LIMIT***>] [--cli-input-json <***JSON STRING***>] [--generate-cli-
skeleton]
```

For more information, see *CDP CLI documentation*.

Related Information

[Creating a database using Cloudera Operational Database](#)

[CDP CLI documentation](#)

[Collecting operational database diagnostic bundle](#)

August 11, 2025

The Cloudera Operational Database 1.53 version supports vertical scaling and snapshot creation using the Cloudera Operational Database UI.

Vertical Scaling using the Cloudera Operational Database UI

The Cloudera Operational Database user interface facilitates vertical scaling based on the supported instance types for each node group separately.

A Vertical Scaling button has been incorporated into the Nodes tab within the Database Manager page. To initiate vertical scaling, an available instance type provided by a node group can be utilized. The quantity of instance types assigned to each node group is contingent upon the database's scale type, such as Micro, Light, or Heavy Duty.

To ascertain the supported instance types for a given combination of cloud platform, scale type, and storage type, the `list-supported-instance-types` CLI command can be employed. For more information, see *list-supported-instance-types*.

Enhancements to the drop database command

A new option `--force` is added to the CLI command, `drop-database`. You can use this option to forcibly drop the database.

The following is an example of the command using the `--force` option.

```
cdp opdb drop-database --environment-name [***ENVIRONMENT NAME ***] --database-name [***DATABASE NAME***] --force
```

For more information, see *drop-database*.

Snapshot creation using the Cloudera Operational Database UI

You can create a snapshot of an HBase table using the Cloudera Operational Database user interface.

Database table snapshots serve various purposes, including backup and recovery, reporting or analytical functions, and the preservation of regulatory or audit data. These snapshots can subsequently be restored from their designated location to an available target database.

To know more about the snapshot creation, see *Working with snapshots in Cloudera Operational Database*.

Enhancements to the update-hbase-configuration CLI command

The behavior of the following parameters in the `update-hbase-configuration` CLI command is modified:

- The `--configuration-value` option is now an optional parameter.
- Safety valve items can be added or updated using the `--set-safety-valve-item-name` and `--set-safety-valve-item-value` parameters.
- Safety valve items can be removed using the `--unset-safety-valve-item-name` parameter.
- Safety valve modifications do not reorder existing items; new items are appended to the end.
- The command supports XML, property file, and environment variable safety valves.

For more information, see *update-hbase-configuration*.

Related Information

[list-supported-instance-types](#)

[drop-database](#)

[Working with snapshots in Cloudera Operational Database](#)

[update-hbase-configuration](#)

May 29, 2025

The Cloudera Operational Database 1.52 version supports enhancements to the Cloudera Operational Database UI.

Enhancements to the Cloudera Operational Database UI

Within the Cloudera Operational Database user interface, a Nodes tab is integrated into the Databases Database Manager. This tab enumerates all the supported host group nodes actively executing within the Cloudera Operational Database cluster.

For each host group node, detailed information is provided, including the Interface ID, Fully Qualified Domain Name (FQDN), Instance Type, Subnet ID, Availability Zone, Public IP address, and Private IP address.

For more details, see *Nodes*.

Related Information

[Nodes](#)

May 8, 2025

The Cloudera Operational Database 1.51 version supports multiple enhancements and the removal of an entitlement.

Enhancements to the CacheAwareLoadBalancer feature

You can set the `hbase.master.scp.retain.assignments` property to `true` in Cloudera Manager when using the Cloud Storage with Caching storage type for your Cloudera Operational Database. This configuration enhances the CacheAwareLoadBalancer and persistent bucket cache features.

This enhancement takes effect automatically to Cloudera Operational Database created with version 1.51.0 or later.

Enhancements to the Cloudera Operational Database UI

In the Cloudera Operational Database UI, when you click on a database, the **Database Manager** page displays only the key parameters. The remaining parameters are collapsed under a header. Click the header to view the additional parameters.

The COD_USE_I3_INSTANCE_TYPE entitlement removal

Cloudera Operational Database has removed the `COD_USE_I3_INSTANCE_TYPE` entitlement because it is not needed anymore. You can use the `--custom-instance-types` option in the `create-database` command that allows you to choose the I3 instance types (non-default) for the Cloudera Operational Database.

For more information, see *CDP CLI documentation*.

Related Information

[CDP CLI documentation](#)

April 4, 2025

The Cloudera Operational Database 1.50 version supports AWS Graviton-based cluster creation and enhancements to the Cloudera Operational Database UI.

AWS Graviton support is generally available

Cloudera Operational Database cluster deployments on AWS Graviton environments are now generally available. AWS Graviton is a family of general-purpose, ARM-based processors designed for cloud workloads. Cloudera Operational Database supports the following Graviton versions:

- Graviton2: Used in Cloudera Operational Database deployments on I4G instances
- Graviton4: Used in Cloudera Operational Database deployments on I8G instances

AWS Graviton processors deliver exceptional price performance for workloads running on AWS EC2. With Graviton4, you can further optimize costs while achieving superior performance. For additional details, see *AWS press release*.

To help you choose the most suitable ARM processor for your performance requirements, consult the *AWS Graviton Processors documentation* for a detailed comparison between Graviton2 and Graviton4 instances.

For more information on AWS Graviton support, see *AWS Graviton instances in Cloudera Operational Database*.

Enhancements to the Cloudera Operational Database UI

Cloudera Operational Database UI is updated for better usability and performance. The following are the key enhancements.

- In the Cloudera Operational Database UI, you can view the snapshots created for a database in the `Databases ***DATABASE_NAME*** Snapshots` tab.
- The Collect Diagnostic Bundle option is moved from the Actions menu item to the Diagnostic Bundles tab on the database details page.

Related Information

[AWS press release](#)

[AWS Graviton Processors documentation](#)

[AWS Graviton instances in Cloudera Operational Database](#)

February 26, 2025

The Cloudera Operational Database 1.49 version supports modifications to the entitlements and enhancements to the Cloudera Operational Database UI.

Configure Security-Enhanced Linux (SELinux) enforcement using the Cloudera Operational Database UI

Cloudera Operational Database UI supports configuring the SELinux enforcement while creating a new operational database.

In the Cloudera Operational Database UI, go to `Create Database Settings Advanced SELinux` to configure the SELinux enforcement. You can configure the SELinux option as `Permissive` or `Enforcing`.

To use SELinux support, you must have the `CDP_SECURITY_ENFORCING_SELINUX` entitlement and the minimum runtime version of 7.2.18.700 or 7.3.1.100. Please contact Cloudera support if you do not have this entitlement.

For more information, see *Setting SELinux Mode*.

Cloudera Operational Database has removed the `COD_USE_I8G_INSTANCE_TYPE` entitlement

Cloudera Operational Database has removed the `COD_USE_I8G_INSTANCE_TYPE` entitlement because it is not needed anymore. The I8g instance types are now public, and you can use them while creating an AWS Graviton-based Cloudera Operational Database cluster.

For more information, see *AWS Graviton instances in Cloudera Operational Database*.

Storage type removal from the Cloudera Operational Database

The Cloudera Operational Database has removed the storage type `Cloud Storage with Caching and Data Tiering`. This type resembles cloud storage with time-based priority caching, where data within a specified time range gets a higher priority. In contrast, older data are likely to be evicted.

Now, you can use the `Cloud Storage with Caching` storage type to use the data tiering functionality.

You must have the `COD_DATATIERING` entitlement to use this functionality.

For more information, see *HBase Time-based Data Tiering using Persistent BucketCache*.

Related Information

[Setting SELinux Mode](#)

[AWS Graviton instances in Cloudera Operational Database](#)

[HBase Time-based Data Tiering using Persistent BucketCache](#)

January 15, 2025

The Cloudera Operational Database 1.48 version supports the SELinux enforcement and enhancement to the database user management.

Cloudera Operational Database supports Security-Enhanced Linux (SELinux) enforcement

Cloudera Operational Database supports creating a database with SELinux enforcement using the CDP CLI.



Note: This feature is under technical preview. To use this feature, you must have the CDP_SECURITY_ENFORCING_SELINUX entitlement in your Cloudera environment. Contact Cloudera support if you do not have this entitlement.

The SELinux allows you to set access control through policies. You can set the SELinux mode while creating a new operational database. You can define the SELinux mode using the `seLinux` parameter in the `create-database` command. The supported SELinux modes are:

- **ENFORCING:** Enables SELinux in enforced mode, actively applying security policies.
- **PERMISSIVE (default):** Sets SELinux to permissive mode, logging any security violations without enforcing policies.

If you do not define the `seLinux` parameter, by default, the **PERMISSIVE** mode is applied.

The following example shows usage of the `seLinux` parameter.

```
opdb create-database --environment-name [***ENVIRONMENT_NAME***] --database-name [***DATABASE_NAME***] --security-request '{"seLinux": string}'
```

```
opdb create-database --environment-name cod-7218-micro1 --database-name test DB --security-request '{"seLinux": "ENFORCING"}'
```

```
opdb create-database --environment-name cod-7218-micro1 --database-name test DB --security-request '{"seLinux": "PERMISSIVE"}'
```

For more information, see *CDP CLI documentation* and *Setting SELinux Mode*.

Assign OAdmin role at the database level

Cloudera Operational Database supports setting a user as an OAdmin at the database level. In earlier versions of the Cloudera Operational Database, you could set the OAdmin at the environment level only, however, for better usability and enhanced security, now you can set it at the database level too.

Related Information

[CDP CLI documentation](#)

[Setting SELinux Mode](#)

Older releases

Overview of new features, enhancements, and changed behavior introduced in earlier releases of Cloudera Operational Database.

December 11, 2024

The Cloudera Operational Database 1.47 version supports enhancements to the CDP CLI and adding a new storage type while creating a new operational database.

Cloudera Operational Database supports JDK17

Cloudera Operational Database only supports creating a database with Cloudera Runtime 7.3.1 using JDK17. If you use an earlier runtime version, only JDK8 and JDK11 are supported for database creation.

New CLI commands to list and upload certificates

Cloudera Operational Database supports two new CLI commands, `list-certificates` and `upload-certificate`.

In an Auto-TLS setup, Cloudera Runtime maintains a global certificate trust store across the cluster to ensure a mutual trust relationship between cluster nodes in secure TLS connections.

You can now upload custom certificates into the global certificate store and distribute them across all nodes, enabling secure Cloudera Operational Database connections from your infrastructure without changing the existing PKI infrastructure, certificates, or Root CA.

The feature is designed to support mTLS authentication from outside of the Cloudera Operational Database network, but it could also be useful for TLS connections from Cloudera Operational Database to other networks in general. The command details are as follows.

- `list-certificates`: This command lists SHA-1 fingerprints of certificates listed in the Global Trust Store.

Following is an example,

```
cdp opdb list-certificates --environment <environment_name> --database <database_name>
```

- `upload-certificate`: This command uploads a single, PEM-encoded certificate to the Global Trust Store and refreshes all the nodes in the cluster.

Following is an example,

```
cdp opdb upload-certificate --environment <environment_name> --database <database_name> --certificate <custom_certificate_in_PEM_format>
```

For more information, see *CDP CLI documentation*.

New storage type support during database creation

The Cloudera Operational Database UI supports a new storage type, Cloud Storage with Caching and Data Tiering while creating an operational database. This storage type is equivalent to a cloud storage that supports time-based priority caching, where data within a specified time range is given a higher priority.

You must have the `COD_DATATIERING` entitlement to be able to use this storage type.

For more information, see *Creating a database using Cloudera Operational Database* and *HBase Time-based Data Tiering using Persistent BucketCache*.

Related Information

[CDP CLI documentation](#)

[Creating a database using Cloudera Operational Database](#)

[HBase Time-based Data Tiering using Persistent BucketCache](#)

November 5, 2024

The Cloudera Operational Database 1.46 version supports updates to the supported instance types and enhancements to the Operational Database UI.

A new CLI command to get the list of supported instance types

Cloudera Operational Database adds a new CLI command, `list-supported-instance-types`, allowing you to list the supported instance types for a combination of cloud platform, scale type, and storage type. You can filter using the instance group and architecture as well.

The `--custom-instance-types` option in the `create-database` command allows you to pick and choose instance types for the Cloudera Operational Database. However, it is essential that these instance types are included in the Cloudera Operational Database allowlist. The `list-supported-instance-types` command is useful to fetch the list of supported instance types.

Following is an example of the command.

```
cdp opdb list-supported-instance-types --cloud-platform AZURE --storage-type  
CLOUD_WITH_EPHEMERAL --scale-type MICRO --instance-group WORKER --architect  
ure X86_64
```

For more information, see *CDP CLI documentation*.

Enhancements to the update-database command

A new CLI option `--switch-instance-type` is added to the `update-database` command to switch the instance types to custom instance types for the Cloudera Operational Database clusters after the database creation. You must have the `COD_USE_CUSTOM_INSTANCE_TYPES` entitlement to use this option.

If you plan to scale up the cluster vertically or change the existing instance type to any custom instance type, you can use the `--switch-instance-type` option. However, the custom instance types must be included in the allowlist by the Cloudera Operational Database. Use the `list-supported-instance-types` command to fetch the list of supported instance types.

Following is an example of the usage.

```
cdp opdb update-database --environment-name <env_name> --database-name <data  
base_name> --switch-instance-type instanceGroup=INSTANCEGROUP,instanceType=i  
nstancetype
```

For more information, see *CDP CLI documentation*.

Enhancements to the Cloudera Operational Database UI

The Cloudera Operational Database UI provides two new UI options **Configure Database** and **Configure Edge Nodes** to configure the worker and edge node properties in your existing operational database.

You can access these menu items using the **Actions** menu item inside the database details page.

For more information, see *Configuring a database*.

Related Information

[CDP CLI documentation](#)

[Configuring a database](#)

September 3, 2024

The Cloudera Operational Database 1.45 version supports updates to the HDFS instance types and enhancements to the Operational Database UI.

Enhancements to the create-database command

- The CDP CLI adds a new option `--custom-instance-types` to the `create-database` command. Using this option, you can define custom instance types; however, the instance types must be included in the allowlist by Operational Database.

Currently, the allowlist is not accessible, however, the following are the new custom instance types supported by Operational Database.

AWS, HEAVY, HDFS:

```
Worker: m6i.4xlarge, m7i.4xlarge
```

```
Master: m6i.8xlarge, m7i.8xlarge
Compute/edge/leader: m6i.2xlarge, m7i.2xlarge
Gateway: r6i.8xlarge, r7i.8xlarge
```

AWS, LIGHT, HDFS:

```
Worker: m6i.4xlarge, m7i.4xlarge
Compute/edge/leader/gateway: m6i.2xlarge, m7i.2xlarge
Master: m6i.4xlarge, m7i.4xlarge
```

The following is a sample output of the `create-database` command highlighting the usage of the `--custom-instance-types` option.

```
cdp opdb create-database
--environment-name cod_env
--database-name cod_db
--custom-instance-types masterType=m7i.4xlarge,workerType=m7i.4xlarge,leaderType=m7i.2xlarge,gatewayType=m7i.2xlarge
--storage-type=HDFS
--scale-type LIGHT
```

- The `--storage-type` option is now optional. If you do not define the `--storage-type` option, Operational Database considers the default storage type.

The default storage type is blob storage. If the ephemeral storage is enabled, Operational Database considers the storage type as `CLOUD_WITH_EPHEMERAL`; otherwise, `CLOUD` is considered.

For more information, see *CDP CLI documentation*.

Updates to the HDFS clusters on AWS environments to add support for m6i and m7i instance types

When you create an operational database with HDFS storage type in an AWS environment, Operational Database on HDFS clusters now also supports m6i and m7i instances for the applicable nodes. The Operational Database clusters with HDFS storage type are upgraded to enhance the operational database's performance and usability.

The following are the new custom instance types supported by Operational Database.

AWS, HEAVY, HDFS:

```
Worker: m6i.4xlarge, m7i.4xlarge
Master: m6i.8xlarge, m7i.8xlarge
Compute/edge/leader: m6i.2xlarge, m7i.2xlarge
Gateway: r6i.8xlarge, r7i.8xlarge
```

AWS, LIGHT, HDFS:

```
Worker: m6i.4xlarge, m7i.4xlarge
Compute/edge/leader/gateway: m6i.2xlarge, m7i.2xlarge
Master: m6i.4xlarge, m7i.4xlarge
```

Enhancements to the Cloudera Operational Database UI

The Cloudera Operational Database UI is updated for better usability and performance. The following are the key enhancements.

- The cloud form factor on which the database is deployed is shown as a logo under the Environment column.
- The Version column is renamed to the Runtime Version in the Databases screen.
- A new column Node Count is added to the Databases screen.
- The Date Created column name is changed to Uptime in the Databases screen.
- The SQL Editor is renamed HUE and displayed as a link under the new column Apps.

- A new action menu item Collect diagnostic bundle is added to the Databases *DATABASE_NAME* Actions . For more information, see *Collecting operational database diagnostic bundle*.

Related Information

[CDP CLI documentation](#)

[Collecting operational database diagnostic bundle](#)

May 30, 2024

Cloudera Operational Database 1.42 version supports HBase REST server scaling and CDP CLI enhancements.

The HBase REST server scaling for better performance [Technical Preview]

You can scale up the HBase REST server using the Apache HBase REST API, for better connectivity to Cloudera Operational Database. You need a minimum of two Gateway nodes to utilize this functionality. The required number of Gateway nodes can be specified using the `--gateway-nodes-count` option in the `create-database` command using CDP CLI.

This feature is under technical preview. To use this feature, you must have the `COD_RESTWORKERS` entitlement enabled in your Cloudera environment.

Following is a sample command.

```
cdp opdb create-database --environment-name ENV_NAME --database-name DATABASE_NAME --gateway-nodes-count INTEGER
```

For more information, see *Scaling the HBase REST server in Cloudera Operational Database*.

Enhancements to the describe-database command

In CDP CLI, the output of the `describe-database` command shows the JDK version of the Cloudera Operational Database cluster if the cluster was created using a specific JDK version; otherwise, the output shows the JDK version as "Not Available".

The following is a sample output of the `describe-database` command that shows the Java version used to create the cluster.

```
"dbEdgeNodeCount": 0,
"scaleType": "MICRO",
"type": "COD",
"computeNodesCount": 0,
"totalComputeNodesCount": 0,
"isJwtEnabled": true,
"cloudPlatform": "AWS",
"javaVersion": "11"
```

For more information, see *CDP CLI documentation*.

Related Information

[Scaling the HBase REST server in Cloudera Operational Database](#)

[CDP CLI documentation](#)

April 28, 2024

Cloudera Operational Database 1.41 version supports CDP CLI changes and upgrade to higher instance types for HDFS storage type and Azure deployments.

Cloudera Operational Database has updated the HDFS instance type to 16 core instances

When you create an operational database with HDFS storage type, the Cloudera Operational Database clusters now use 16 core instances on AWS, Azure, and GCP environments for worker nodes. The Cloudera Operational Database

clusters with HDFS storage type are upgraded to enhance the performance and usability of the Cloudera Operational Database.

The new worker instances for HDFS storage type are as follows:

- AWS: m5.4xlarge
- Azure: Standard_D16_v3
- GCP: n2-standard-16

Cloudera Operational Database supports configuring root volume size for available instances in a Cloudera Operational Database cluster

In CDP CLI, while creating an operational database, you can set the default root volume size with the `--root-volume-size` (integer) option in GiB for all the instances in the cluster.

Following is a sample command.

```
cdp opdb create-database --environment-name test-env --database-name test-db
--root-volume-size 300
```

For more information, see *CDP CLI documentation*.

Cloudera Operational Database has updated the instance type for Azure deployments

When you create and deploy an operational database in an Azure environment, by default, Cloudera Operational Database clusters now use Standard_D8s_v3 instance type instead of Standard_D8_v3. The instance type is upgraded to support encryption at the host level.

If you want to retain the Standard_D8_v3 instance type, you must have the COD_USE_DV3_INSTANCE_TYPE entitlement on your account.

Cloudera Operational Database supports instance group encryption in AWS environments

In CDP CLI, while creating an operational database, you can specify the encryption key to encrypt the volume for instance groups using the `--volume-encryptions` (array) option. You can specify this option only in AWS environments.

Following is a sample command.

```
opdb create-database --environment-name <environment-name> --database-name <
database-name> --disable-external-db --scale-type MICRO --attached-storage-f
or-workers '{"volumeCount":1,"volumeType":"SSD","volumeSize":100}' --endpoi
nt-url http://localhost:8988 \
--volume-encryptions '[
  {
    "encryptionKey": "<aws-key-arn>",
    "instanceGroup": "GATEWAY"
  }
]'
```

Shorthand syntax: `encryptionKey=string,instanceGroup=string ...` (separate items with spaces)

JSON syntax:

```
[
  {
    "encryptionKey": "string",
    "instanceGroup": "WORKER" | "LEADER" | "MASTER" | "GATEWAY" | "STRONG
META" | "EDGE"
  }
  ...
]
```

]

For more information, see *CDP CLI documentation*.

Related Information

[CDP CLI documentation](#)

March 28, 2024

Cloudera Operational Database 1.40 version provides enhancements to the create database UI wizard.

Cloudera Operational Database supports enhancements to the Create Database UI wizard

When you create an operational database using the Cloudera Operational Database UI, the Create Database option provides enhancements to the database creation workflow. In addition to the enhanced look and feel for better usability, the workflow also provides two additional steps called, Settings and Review. In the Settings step, you can view the default settings for your database and can also modify them. In the Review step, you can view, and finalize your changes, and also obtain a complete CLI command, in case you want to create the database using CDP CLI.

For more information, see *Creating a database using Cloudera Operational Database*.

Related Information

[Creating a database using Cloudera Operational Database](#)

[CDP CLI Beta](#)

February 28, 2024

Cloudera Operational Database 1.39 version removes a CDP CLI command and provides support for GP3 for attached storage.

Cloudera Operational Database has removed the CDP CLI command, `disengage-auto-admin`

Cloudera Operational Database has removed the support for `disengage-auto-admin` command, which allowed users to disable the autonomous functions of the database and use the underlying DataHub cluster instead.

Cloudera Operational Database supports GP3 for attached storage disks

Cloudera Operational Database now supports GP3 (SSD) volume types for attached storage. GP3 volumes allow you to increase performance (independently provisioning IOPS and throughput) without increasing storage size. GP3 volumes deliver similar performance as similar GP2 volumes at a lower cost. GP3 is now the default attached storage type for Cloudera Operational Database instances that previously used GP2 storage.

February 7, 2024

Cloudera Operational Database 1.38 version introduces a new CDP CLI command.

Cloudera Operational Database has introduced a new CDP CLI command `prepare-upgrade-database`

The new CDP CLI command `prepare-upgrade-database` is used during the preparation phase of the runtime upgrades. This command performs all validations and downloads all required parcels for the upgrade operation. Following is a sample command.

```
cdp opdb prepare-upgrade-database --environment <ENVIRONMENT-NAME> --database  
<DATABASE-NAME> [--runtime <RUNTIME-VERSION>] [--imageId <IMAGEID>]
```

You can either use the runtime version `--runtime` or the image ID `--imageId` of the cluster while using this command.

For more information, see *CDP CLI Beta*.

Related Information

[CDP CLI Beta](#)

December 18, 2023

Cloudera Operational Database 1.37 version supports modifications to the entitlements and Multi-AZ deployment on an Azure environment.

Cloudera Operational Database has enabled the COD_ON_GCS entitlement

You can deploy Cloudera Operational Database on a Google Cloud Platform (GCP) by using Google Cloud Storage (GCS) similar to what is available for Amazon Web Services (AWS) S3 storage and Microsoft Azure blob storage. Now, Cloudera Operational Database has enabled the COD_ON_GCS entitlement, by default, for such a deployment.

Cloudera Operational Database has removed the COD_EDGE_NODE entitlement

Cloudera Operational Database has removed the COD_EDGE_NODE entitlement now because it is not needed anymore. Cloudera Operational Database edge node functionality is enabled for all Cloudera Operational Database customers now.

Cloudera Operational Database has removed the COD_STOREFILE_TRACKING entitlement

Cloudera Operational Database has removed the COD_STOREFILE_TRACKING entitlement because it is not needed anymore. The Store File Tracking (SFT) functionality is enabled on all new Cloudera Operational Database clusters created with cloud storage.

Cloudera Operational Database has removed the OPDB_USE_EPHEMERAL_STORAGE entitlement

Cloudera Operational Database has removed the OPDB_USE_EPHEMERAL_STORAGE entitlement because it is not needed anymore. The use of Cloudera Operational Database on a cloud storage with ephemeral cache is enabled without an entitlement depending on the cluster creation parameters.

Cloudera Operational Database supports Multiple Availability Zones (Multi-AZ) on Azure [Technical Preview]

Cloudera Operational Database ensures high availability and fault tolerance using Multi-AZ deployments. A Multi-AZ deployment means that compute infrastructure for HBase's master and region servers are distributed across multiple AZs ensuring that when a single availability zone has an outage, only a portion of Region Servers is impacted and clients automatically switch over to the remaining servers in the available AZs.

Multi-AZ for Cloudera Operational Database is now supported on Microsoft Azure environments as a technical preview and is considered under development. For more information, see *Multi-AZ deployment on Cloudera Operational Database*.

Cloudera Operational Database supports a new instance type I4i for Cloud With Ephemeral Storage type databases on AWS environments

When you create a new operational database with Cloud With Ephemeral Storage as the storage type on an AWS environment, Cloudera Operational Database creates the database with an I4i instance type for the worker nodes.

Cloudera Operational Database supports fast autoscaling for higher computing requirements

When you create a new operational database using CDP CLI, you can enable fast autoscaling by defining the required parameters using the `--auto-scaling-parameters` option. Cloudera Operational Database now supports a new instance group called, Compute. The nodes under this instance group are automatically scaled up or scaled down based on the CPU utilization and RPC latency.

To use fast autoscaling, you must have the COD_USE_COMPUTE_ONLY_NODES entitlement.

Following is a sample command.


```
cdp opdb create-database --environment-name <ENV_NAME> --database-name <DB_NAME>
--auto-scaling-parameters '{"minComputeNodesForDatabase":<min_compute_nodes>, "maxComputeNodesForDatabase": <max_compute_nodes>}'
```

For more information, see *The fast autoscaling in Cloudera Operational Database*.

Related Information

[Multi-AZ deployment on Cloudera Operational Database](#)

[Fast autoscaling in Cloudera Operational Database](#)

October 26, 2023

Cloudera Operational Database 1.36 version supports an UI enhancement and the enabling of multiple entitlements.

Cloudera Operational Database has enabled the OPDB_USE_EPHEMERAL_STORAGE entitlement

Cloudera Operational Database supports large ephemeral block cache while deploying on cloud storage. The entitlement OPDB_USE_EPHEMERAL_STORAGE is enabled by default while using a large ephemeral block cache on any cloud storage.

Cloudera Operational Database introduces a new storage type UI option while creating an operational database

On the Cloudera Operational Database UI, a new storage type option Cloud With Ephemeral Storage is added. This option is equivalent to using the `--storage-type CLOUD_WITH_EPHEMERAL` option on CDP CLI while creating an operational database.

For more information, see *Creating a database using Cloudera Operational Database* and *CDP CLI Beta*.

Cloudera Operational Database has enabled the COD_EDGE_NODE entitlement

Earlier, you were required to have the COD_EDGE_NODE entitlement to create an edge node on your Cloudera Operational Database cluster. Now the entitlement is enabled by default.

Cloudera Operational Database has enabled the COD_STOREFILE_TRACKING entitlement

Earlier, you were required to have the COD_STOREFILE_TRACKING entitlement to use the Store File Tracking (SFT) on your Cloudera Operational Database cluster. Now the entitlement is enabled by default.

Related Information

[Creating a database using Cloudera Operational Database](#)

[CDP CLI Beta](#)

September 28, 2023

Cloudera Operational Database 1.35 version supports rolling operating system upgrade and enhancements to the CDP CLI.

Cloudera Operational Database supports rolling operating system upgrades of a Cloudera Operational Database cluster

Cloudera Operational Database using *HDFS* and *Object Store without Ephemeral Storage*, now supports upgrading the operating system version of the database using the rolling restart mode. This ensures continuous service availability during an upgrade operation.

In CDP CLI, you need to use the `--os-upgrade-only` option along with the `--rolling-upgrade` option in the `upgrade-database` command.

Following is a sample command.

```
cdp opdb upgrade-database --environment <ENVIRONMENT-NAME> --database <DATABASE-NAME> [--runtime <RUNTIME-VERSION> | --image <IMAGEID>] --os-upgrade-only --rolling-upgrade
```

For more information, see *Rolling upgrade in Cloudera Operational Database*.

Cloudera Operational Database introduces a new CDP CLI option `--storage-type` in the `create-database` command

In CDP CLI, a new option `--storage-type` in the `create-database` command is introduced that replaces the `[-use-hdfs | --no-use-hdfs]` and `[-disable-ephemeral-storage | --no-disable-ephemeral-storage]` options.

The `--storage-type` option supports these values, `CLOUD_WITH_EPHEMERAL`, `CLOUD`, and `HDFS`.

Following is a sample command.

```
cdp opdb create-database --environment <ENVIRONMENT-NAME> --database <DATABASE-NAME> --storage-type CLOUD
```

For more information, see *CDP CLI Beta*.

Cloudera Operational Database drops support of the Cloudera Runtime versions Cloudera Runtime 7.2.12 and earlier

Cloudera Operational Database has stopped supporting the Cloudera Runtime versions Cloudera Runtime 7.2.12 and earlier because they have reached the end of life.

Related Information

[CDP CLI Beta](#)

[Rolling upgrade in Cloudera Operational Database](#)

August 30, 2023

Cloudera Operational Database 1.34 version supports different JDK versions during Cloudera Operational Database creation and deploying Cloudera Operational Database on GCS.

Cloudera Operational Database supports creating an operational database using JDK8 and JDK11

Cloudera Operational Database now added a new CLI option, `--java-version` which can be used to configure a major Java version on your Cloudera Operational Database cluster. The new CLI option can be used along with the `create-database` command to specify the Java version. The supported Java versions are JDK8 and JDK11. In case the parameter is not specified, JDK8 is used. Following is a sample command.

```
cdp opdb create-database --environment-name <ENVIRONMENT_NAME> --database-name <DATABASE_NAME> --java-version <VALUE>
```

```
cdp opdb create-database --environment-name cod7215 --database-name testenv --java-version 11
```

For more information, see *CDP CLI beta*.

Cloudera Operational Database is available as a Technical Preview feature on Google Cloud Storage (GCS)

Cloudera Operational Database on Google Cloud Platform (GCP) can now be deployed by using Google Cloud Storage (GCS) easily, similar to what is available for Amazon Web Services (AWS) S3 storage and Microsoft Azure blob storage. The use of GCS for such a setup requires the `COD_ON_GCS` entitlement.

Cloudera Operational Database also now supports a large ephemeral block cache while deploying on GCP. The use of ephemeral storage along with any cloud storage still requires the `OPDB_USE_EPHEMERAL_STORAGE` entitlement.

Cloudera Operational Database has removed the COD_ON_GCP entitlement

COD_ON_GCP entitlement has been removed from Cloudera Operational Database because it is not needed anymore. From this version onwards, customers can create Cloudera Operational Database clusters on Google Cloud Platform (GCP) without it.

Related Information

[CDP CLI Beta](#)

August 10, 2023

Cloudera Operational Database 1.33 version provides enhancements to the CDP CLI as well as on Cloudera Operational Database UI.

Cloudera Operational Database drops support of the Cloudera Runtime versions Cloudera Runtime 7.2.8 and Cloudera Runtime 7.2.9

Cloudera Operational Database has stopped supporting the Cloudera Runtime versions Cloudera Runtime 7.2.8 and Cloudera Runtime 7.2.9 because they have reached the end of life.

Cloudera Operational Database supports faster rolling restarts on Cloudera Operational Database clusters

The default value of Cloudera Manager HBase Configuration Region Mover Threads is changed to 30. This speeds up the rolling restart functionality for HBase.

For more information see *Rolling Restart*.

Cloudera Operational Database supports rolling runtime upgrades of a Cloudera Operational Database cluster

Cloudera Operational Database now supports upgrading the Cloudera Runtime version of the database using the rolling restart mode. This ensures continuous service availability during an upgrade operation. A new CLI parameter `--rolling-upgrade` | `--no-rolling-upgrade` is added to the `upgrade-database` command. Following is a sample command:

```
cdp opdb upgrade-database --environment <environment-name> --database <database-name> --runtime <runtime-version> [--rolling-upgrade | --no-rolling-upgrade]
```

For more information, see *Rolling upgrade in Cloudera Operational Database*.

Cloudera Operational Database provides enhancements to the `--scale-type` CDP CLI option in the `create-database` command

In CDP CLI, the `--scale-type` option now supports all three options `--scale-type (string) <MICRO, LIGHT, HEAVY>` for both the `--master-node-type` and `--gateway-node-type`.

- `--scale-type LIGHT` (`--master-node-type LITE`, `--gateway-node-type LITE`)
- `--scale-type HEAVY` (`--master-node-type HEAVY`, `--gateway-node-type HEAVY`)

If the `--scale-type` option is not defined, by default `--scale-type LIGHT` is considered for both the `--master-node-type` and `--gateway-node-type`. However, you can overwrite the `--scale-type` for a `--gateway-node-type` using the `--gateway-node-type <value>` option.

For more information, see *CDP CLI Beta*.

Cloudera Operational Database supports enabling a consolidated view of Cloudera Operational Database metrics using Grafana dashboards

In CDP CLI, the `create-database` command now provides a new option `--enable-grafana` which allows you to enable the Grafana URL under the `GRAFANA DASHBOARD` option inside your Cloudera Operational Database database. When you click on the Grafana URL, it takes you to the Grafana dashboard which provides a consolidated view of the Cloudera Operational Database metrics.

Following is an example of the `create-database` command.

```
cdp opdb create-database --environment <environment_name> --database <database_name> --enable-grafana
```

For more information, see *Monitoring metrics in Cloudera Operational Database with Grafana*.

Related Information

[Rolling Restart](#)

[Rolling upgrade in Cloudera Operational Database](#)

[CDP CLI Beta](#)

[Monitoring metrics in Cloudera Operational Database with Grafana](#)

June 19, 2023

Cloudera Operational Database 1.32 version provides enhancements to the CDP CLI as well as on Cloudera Operational Database UI.

Cloudera Operational Database provides UI enhancements to the Scale option on the database creation page

On the Cloudera Operational Database UI, when you create an operational database the Medium Duty is renamed to Heavy Duty under `Create Database Scale`. This ensures that the options on Cloudera Operational Database UI and CDP CLI Beta are symmetrical.

For more information, see *Creating a database using Cloudera Operational Database*.

Cloudera Operational Database provides enhancements to the CDP CLI option `--scale-type <HEAVY>`

In CDP CLI, when you select the `--scale-type` option as `HEAVY`, Cloudera Operational Database allocates larger SSD storage (for example, `gp2` on AWS, `StandardSSD_LRS` on Azure, or `pd-ssd` on GCP) for both master and leader node types. This ensures the higher loads on Zookeeper and provides a better performance for Cloudera Operational Database.

For more information, see *CDP CLI Beta*.

Cloudera Operational Database supports enabling custom recipes using CDP CLI Beta

You can now define custom recipes while creating an operational database using the `--recipes` option in CDP CLI Beta. You can register pre-created recipes during database creation based on the instance groups in your database. The recipes are executed automatically for the specified nodes based on the recipes' type.

Use the following example command to define custom recipes for your operational database.

```
cdp opdb create-database --environment-name <ENVIRONMENT_NAME> --database-name <DATABASE_NAME> --recipe names=<rec1,rec2>,instanceGroup=<MASTER> names=<rec2>,instanceGroup=WORKER names=<rec3,rec4>,instanceGroup=<GATEWAY>
```

To know more about the recipes, see *Recipes*.

To know more about the `--recipes` option, see *CDP CLI Beta*.

Related Information

[Creating a database using Cloudera Operational Database](#)

[CDP CLI Beta](#)

[Recipes](#)

May 31, 2023

Cloudera Operational Database 1.31 version provides enhancements to the CDP CLI options.

Cloudera Operational Database provides enhancements to the `--scale-type` CDP CLI option

In CDP CLI, the `--scale-type` option now supports all the three options `--scale-type (string) <MICRO, LIGHT, HEAVY>`. Cloudera Operational Database has added the support for additional parameters, `LIGHT` and `HEAVY`.

- `--scale-type LIGHT` (master-node-type `LITE`)
- `--scale-type HEAVY` (master-node-type `HEAVY`)

Additionally, Cloudera Operational Database has removed the `--master-node-type (string) <LITE,HEAVY>` CDP CLI option because this option is not needed anymore. For more information, see *CDP CLI Beta*.

Related Information

[CDP CLI Beta](#)

May 10, 2023

Cloudera Operational Database 1.30 version supports scaling up the Cloudera Operational Database clusters vertically and also provides an UI option to create smaller Cloudera Operational Database clusters.

Cloudera Operational Database supports scaling up the clusters vertically

Cloudera Operational Database now allows you to vertically scale up the Cloudera Operational Database clusters from a Light Duty to a Medium Duty instance type. You can upgrade the instance type of a Cloudera Operational Database cluster that belongs to a Master or Gateway node.

To know more about the vertical scaling, see *Scaling Cloudera Operational Database instances vertically*.

Cloudera Operational Database UI supports creating a smaller cluster using a predefined Data Lake template

Cloudera Operational Database now allows you to create a smaller cluster with one Gateway node and one Worker node using a new scale type Micro Duty while creating an operational database through Cloudera Operational Database UI. The Micro database is a two node cluster in which the Gateway node processes the activities of the Master and Leader nodes, thereby removing the need of these nodes. You can use a Micro database for testing and development purposes.

For more information, see *Creating a database using Cloudera Operational Database*.

Related Information

[Scaling Cloudera Operational Database instances vertically](#)

[Creating a database using Cloudera Operational Database](#)

March 10, 2023

Cloudera Operational Database 1.28 version provides UI enhancements that include storage type selection when you create a database and JWT configurations to connect to your HBase client.

Cloudera Operational Database UI allows storage type selection when creating an operational database

Cloudera Operational Database UI now allows you to select the storage type when creating an operational database. You can either select Cloud Storage or HDFS.

Earlier if you had to use the HDFS as the storage type, you were required to use the `--use-hdfs` option on CDP CLI while creating the operational database. Now Cloudera Operational Database UI is enhanced to let you select the storage type when you create an operational database.

For more information, see *Creating a database using Cloudera Operational Database*.

Cloudera Operational Database UI provides the JWT configuration details to connect to your HBase client

Now you can find the JWT configuration details On the Cloudera Operational Database UI. Click on a database and go to `Connect HBase Client Tarball JWT Configuration`. You can refer to these configurations to set up a connection to HBase with a JWT token and build your own truststore JKS file.

For more information, see *Configuring JWT authentication for HBase client*.

Related Information

[Creating a database using Cloudera Operational Database](#)

[Configuring JWT authentication for HBase client](#)

January 10, 2023

Cloudera Operational Database 1.27 version supports JWT authentication, provides Data Lake templates while creating a database, and a CLI option to enable HBase region canaries.

Cloudera Operational Database supports configuring JWT authentication for your HBase clients

Cloudera Operational Database now allows you to configure JWT (JSON Web Token)-based authentication for your HBase clients, which uses a unique identifier and is a standard way of securely transmitting signed information between two parties. To know more about the JWT authentication, see *Configuring JWT authentication for HBase client*.

Cloudera Operational Database supports creating an operational database using a predefined Data Lake template

When you create an operational database, you can now define the structure of your database based on a predefined Data Lake template. The template defines the number of gateway, master, and worker nodes to be added while creating a database.

You can select a template and accordingly the nodes are added into the Cloudera Operational Database cluster after the database is successfully created.

To know more about this, see *Creating a database using Cloudera Operational Database*.

Cloudera Operational Database provides a CLI option to enable HBase region canaries

Cloudera Operational Database now provides a CLI option, `--enable-region-canary` to enable the HBase region canaries while creating an operational database.

Use the following command to enable the HBase region canaries.

```
cdp opdb create-database --environment-name ENVIRONMENT_NAME --database-name DATABASE_NAME --enable-region-canary
```

- `hbase_region_health_canary_enabled`
- `hbase_region_health_canary_slow_run_alert_enabled`
- `hbase_canary_alert_unhealthy_region_percent_threshold`

For more information, see *Enabling HBase region canary*.

Related Information

[Configuring JWT authentication for HBase client](#)

[Creating a database using Cloudera Operational Database](#)

[Enabling HBase region canary](#)

December 10, 2022

Cloudera Operational Database 1.26 version supports managing the edge nodes using CDP CLI and disabling the Kerberos authentication while creating an operational database using CDP CLI.

Cloudera Operational Database supports creating edge nodes while creating an operational database

Cloudera Operational Database now allows you to create edge nodes while creating an operational database. You can define the number of edge nodes to be created, and Cloudera Operational Database automatically creates and configures the nodes in your Cloudera Operational Database cluster.

You can also add additional nodes into your Cloudera Operational Database cluster or delete an existing one using the edge node instance ID.

For more information, see *Managing edge nodes*.

Cloudera Operational Database supports disabling the Kerberos authentication while creating an operational database using CDP CLI

Cloudera Operational Database now allows you to disable the Kerberos authentication while creating an operational database using CDP CLI. You can use the `--disable-kerberos` option while running the `create-database` command to disable the Kerberos authentication.

```
cdp opdb create-database --environment-name ENVIRONMENT_NAME --database-name DATABASE_NAME --disable-kerberos
```

Related Information

[Managing edge nodes](#)

November 10, 2022

Cloudera Operational Database 1.25 version supports creating and updating an operational database using a custom image.

Cloudera Operational Database supports custom images for deploying Cloudera Operational Database clusters

Cloudera Operational Database now allows you to create or update a database using a custom image. Custom images can be used for various purposes, such as compliance or security requirements. An image catalog is used to hold one or more custom images. You can inherit pre-installed packages or software from the custom image while creating or updating an operational database.

You can also switch an image catalog of an existing operational database. For more information, see *Managing custom images in Cloudera Operational Database*.

Related Information

[Managing custom images in Cloudera Operational Database](#)

October 10, 2022

Cloudera Operational Database 1.24 version supports fast SSD volume types, deploys strong meta servers for multiple regions, and provides two new CDL CLI commands.

Cloudera Operational Database supports fast SSD based volume types for gateway nodes of HEAVY types

Cloudera Manager and monitoring systems require more resources than a regular deployment for big clusters with a large number of nodes. To support this, now Cloudera Operational Database supports a fast gp2 storage when you choose a gateway node of HEAVY type.

Cloudera Operational Database deploys strong meta servers for multiple regions for Multi-AZ

For Multi-AZ deployments, Cloudera Operational Database assigns the nodes to multiple regions when multiple strong meta servers exist in the deployment.

Cloudera Operational Database provides CDP CLI commands to set the HBase configuration values

Cloudera Operational Database now supports the CDP CLI commands `update-hbase-configuration` and `describe-hbase-configuration` to update and retrieve the HBase configuration values. For more information, see *describe-hbase-configuration* and *update-hbase-configuration*.

Related Information

[describe-hbase-configuration](#)

[update-hbase-configuration](#)

August 10, 2022

Cloudera Operational Database 1.23 version supports custom EBS volumes for HDFS clusters while creating a database and displays UI notifications on the Cloudera Operational Database UI.

Cloudera Operational Database supports custom EBS volumes for HDFS clusters

Cloudera Operational Database allows you to customize the attached storage worker node for an HDFS cluster using the `--attached-storage-for-workers` option while creating a database. You can define the EBS volumes for HDFS clusters.

You can also view the customized attached storage worker nodes using the `describe-database` and `list-database` commands. For more information, see [create-database](#).

Cloudera Operational Database displays notifications on the Cloudera Operational Database UI for all the major events

Cloudera Operational Database now displays notifications about all the major events on the Cloudera Operational Database UI. For example, auto-scaling events, auto-healing events, and alerting notifications.

The UI notifications is a major step in providing enough information on Cloudera Operational Database UI so that you do not need to navigate to multiple internal systems used by Cloudera Operational Database to get the required information as well as be aware of the events happening in the system on an immediate basis.

June 10, 2022

Cloudera Operational Database 1.22 version supports HBase Store File Tracking, Multiple Availability zones on AWS, and Cloudera Control Plane for multiple regions.

Cloudera Operational Database now supports the Store File Tracking (SFT) as a limited availability feature

Store File Tracking (SFT) defines a separate, pluggable layer to handle storefile life cycle, and includes the FILE based built-in implementation that avoids internal file rename or move operations while managing the storefiles. This is a critical enablement to deploy HBase over S3 object store, which is known for the lack of atomic renames. Cloudera Operational Database enables this feature by default for databases deployed on AWS with S3, to mitigate the aforementioned S3 limitation that could cause critical issues for HBase. For more information, see [HBase Store File Tracking](#).

Cloudera Operational Database supports Multiple Availability Zones (Multi-AZ) on AWS

Cloudera Operational Database ensures high availability and fault tolerance using Multi-AZ deployments. A Multi-AZ deployment means that compute infrastructure for HBase's master and region servers are distributed across multiple AZs ensuring that when a single availability zone has an outage, only a portion of Region Servers is impacted and clients automatically switch over to the remaining servers in the available AZs.

Multi-AZ for Cloudera Operational Database is currently supported only on Amazon Web Services (AWS) environments. For more information, see [Multi-AZ deployment on Cloudera Operational Database](#).

Cloudera Operational Database supports Cloudera Control Plane for multiple regions

Cloudera Operational Database now supports Cloudera Control Plane for eu-1 (Germany) and ap-1 (Australia) regions. Certain countries may have regulatory requirements that limit or forbid specific types of data from being sent or stored outside of the country or region where an organization operates. For this reason Cloudera has introduced new regions in which the Control Plane can run. By choosing a region other than us-west-1, you can ensure that sensitive metadata (such as information about Cloudera users) does not leave its region or country of origin. For more information, see [Cloudera Control Plane regions](#).

April 10, 2022

Cloudera Operational Database 1.21 version supports enabling the replications for META regions, by default.

Cloudera Operational Database now supports replications for META regions enabled by default

Cloudera Operational Database now supports replication for the META regions, which means clients can read the META replicas first before connecting to the primary region server. This reduces the load on the META table because the read META load is distributed across multiple replicas.

Cloudera Operational Database supports configuring three META replicas which can be deployed in different RegionServers. Client needs to use the Cloudera Operational Database provided configuration to get the META calls that are distributed across these replicas. This is useful when an application has multiple clients accessing spark, yarn, or phoenix-spark.

March 10, 2022

Cloudera Operational Database 1.20 version provides UI enhancements to download the Phoenix client jars. Refer to the following section for more details.

Cloudera Operational Database provides enhanced user interface to download the Phoenix client jar

Cloudera Operational Database now provides an enhanced user interface to download the Phoenix client jar from the Phoenix Thick and Phoenix Thin client tabs through a single click.

You can now download the Phoenix client jars with a single click directly from the Phoenix Thick client and Phoenix Thin client tabs in the UI.

February 10, 2022

Cloudera Operational Database 1.19 version supports Spark transactional tables using Apache OMID and is also bundled with the HBase version 2.4.6. Refer to the detailed section for more features.

Cloudera Operational Database through Phoenix-Spark connector supports Spark transactional tables using Apache OMID

Cloudera Operational Database supports Apache OMID transactional framework that allows Big Data applications to execute ACID transactions on top of Phoenix tables.

The transaction support in Cloudera Operational Database enables you to perform complex distributed transactions and run atomic database operations, meaning your database operations must either be completed or terminated. A transaction ensures adhering to the ACID properties.

Cloudera Operational Database is now bundled with the HBase version 2.4.6

Cloudera Operational Database is now bundled and shipped along with the HBase version 2.4.6 when the Cloudera Runtime version is 7.2.14.

For a smooth and better functionality, Cloudera Operational Database is now bundled with the HBase version 2.4.6. You need to upgrade the HBase client version for seamless connectivity.

Cloudera Operational Database supports custom table coprocessors

Cloudera Operational Database supports custom table coprocessors, which you can implement and extend from HBase coprocessors' interfaces.

You can add table coprocessors so that HBase can run custom code on the server side against the stored data and filter local minimum or maximum value during ingestion without scanning the entire table. You can use built-in table coprocessors from the upstream HBase releases. For more information, see [Custom Table Coprocessors in Cloudera Operational Database](#).

Cloudera Operational Database supports RAZ integration from the Runtime version 7.2.11.0

Cloudera Operational Database supports RAZ integration from the Runtime version 7.2.11.0. You can grant fine-grained access to directories.

The Ranger Authorization Service (RAZ) is a fine grained authorization service for cloud storage. As a regular individual user or as an HBase user, you can limit the authorization levels in the cloud storage to a directory level. For more information, see [Cloudera Operational Database integration with RAZ](#).

Storefile Tracking (SFT) is available as an optional feature delivered through the Cloudera Operational Database service

Cloudera Operational Database now supports the “Storefile Tracking” (SFT) as an optional feature in Runtime 7.2.14.0.

Storefile Tracking (SFT) changes how HBase manages its files to avoid operations which are known to be suboptimal when using object stores. Cloudera Operational Database enables this feature for Cloudera Operational Database databases deployed on AWS which use S3 for HBase storage which will address performance issues known around flushes, compactions, and other HBase operations. For more information, see [HBase Storefile Tracking](#).

Cloudera Operational Database allows to disable the Kerberos authentication temporarily for HBase clients

Cloudera Operational Database allows to disable the Kerberos authentication temporarily for HBase clients that run on Cloudera legacy products.

If your client applications are running on Cloudera legacy products, they usually do not have Kerberos authentication enabled. When you try to connect to any Cloudera Operational Database instance, the connection fails because the Cloudera Operational Database instances have Kerberos enabled, by default. Now, you can disable Kerberos authentication in your Cloudera Operational Database instances so that HBase or Phoenix clients can connect seamlessly. For more information, see [Disabling Kerberos authentication for HBase clients](#).

December 10, 2021

Cloudera Operational Database 1.18 version supports ephemeral storage on Azure.

Cloudera Operational Database supports ephemeral storage on Azure

Cloudera Operational Database now supports the configuration of instance storage to cache HBase data stored in block storage. This is only available on AMD instance types.

November 10, 2021

Cloudera Operational Database 1.17 version is now available as a technical preview on GCP (Google Cloud Platform) and with various performance improvements.

Cloudera Operational Database is available as a Technical Preview feature on GCP

You can now deploy Cloudera Operational Database on GCP easily similar to what is available for Amazon Web Services (AWS) and Microsoft Azure.

Cloudera Operational Database automatically improves the performance by 80% when you use AWS S3

Cloudera Operational Database now delivers a better performance in S3 because the data loading behaviour from S3 into cache is tuned. This improvement minimizes the cost associated with the S3's high latency to read data.

Cloudera Operational Database improves scalability when using block storage on AWS

Cloudera Operational Database now uses larger EBS volumes for the underlying master nodes to provide better scalability.

October 10, 2021

Cloudera Operational Database 1.16 version supports modified auto-scaling criteria and a built-in coprocessor *AGGREGATEIMPLEMENTATION*.

Cloudera Operational Database supports modified auto-scaling criteria

Cloudera Operational Database now supports an improved auto-scaling algorithm that considers the latency of the user operations. Cloudera Operational Database now prioritises user operations over system operations that results in a reduced cost of infrastructure with a minor increase in replication.

Cloudera Operational Database supports a built-in coprocessor *AGGREGATEIMPLEMENTATION*

Cloudera Operational Database now supports a built-in coprocessor called *AGGREGATEIMPLEMENTATION* that facilitates aggregation function computations (min, max, sum, avg, median, std) at the region level. This yields better performance because you need not get all the data to perform these calculations. Cloudera Operational Database enables *AGGREGATEIMPLEMENTATION* by default, and you can use the *AGGREGATIONCLIENT* service in HBase to perform RegionServer side aggregation. For example, row count.

September 10, 2021

Cloudera Operational Database 1.15 version provides a new option for the upgrade-database command and supports DataHub/OpDB deployment across multiple availability zones.

The upgrade-database command supports a new option to upgrade only the operating system

Cloudera Operational Database provides a new option `--os-upgrade-only` for the upgrade-database command, which you can use to upgrade only the operating system to the latest supported version addressing any CVEs that were patched in the operating system. Running the upgrade-database command with this option does not have an effect on the Cloudera runtime version running on the given cluster.

Cloudera Operational Database supports DataHub/OpDB deployment across multiple availability zones (Multi-AZ) to ensure high availability

- Cloudera Operational Database introduces a technical preview version of Multi-AZ deployment capability and is available by special request through your account team.
- When you enable Cloudera Operational Database, by default it deploys all the databases across three availability zones identified in the Cloudera Shared Data Experience by the provided network subnets. CDP CLI beta provides a new `--disable-multi-az` to limit deployments to a single availability zone.

Cloudera Operational Database can disable ephemeral storage in CLI

Cloudera Operational Database provides the ability to disable the ephemeral storage using a new command `--disable-ephemeral-storage`.

Cloudera Operational Database provides the ability to list all the HBase snapshots using different filters

Cloudera Operational Database supports listing all the HBase snapshots created within a database of an environment using these filters, time range, snapshot name, and command ID. For example, you can use the time range filter to obtain the snapshots created within a particular time, the command ID filter to know the status of a snapshot operation.

August 10, 2021

Cloudera Operational Database 1.14 version offers multiple new features that includes disengaging autoadmin database function, runtime upgrade, copy tables between Cloudera Operational Database environments and many more.

Disengage autoadmin database function

Cloudera Operational Database can disable the autonomous database functions thereby stops managing a database. When Cloudera Operational Database disables the autonomous functions, the database cannot leverage it; however the functions are available and accessible as a datahub cluster. Once you disable the autonomous database functions, it is irreversible.

Cloudera Runtime upgrade with downtime

You can upgrade the Cloudera Runtime installed on the cluster running Cloudera Operational Database to an advanced one with downtime.

Copy tables between two Cloudera Operational Database environments

Cloudera Operational Database provides a CopyTable utility to copy tables from one Cloudera Operational Database cluster to another.

Cloudera Operational Database supports ephemeral storage on AWS

Cloudera Operational Database now supports ephemeral storage on AWS for HBase buckets.

Cloudera Operational Database provides HDFS as a storage option

Cloudera Operational Database now provides HDFS as a storage option for Cloudera Operational Database deployment instead of cloud storage.

Cloudera Operational Database uses instance storage for HBase bucket cache

Cloudera Operational Database now deploys clusters with large block cache on ephemeral storage thereby enhancing the performance of the clusters. This is available only for AWS-based clusters with S3 blob storage.

July 10, 2021

Cloudera Operational Database 1.13 version offers multiple new features that includes disengaging autoadmin database function, runtime upgrade, copy tables between Cloudera Operational Database environments and many more.

Cloudera Operational Database supports HDFS for storage on Cloud Block Storage in addition to Cloud Object Storage on AWS & Azure

1. Cloudera Operational Database now supports HDFS for fast and consistent performance.
2. Cloud Object Storage has a high variance in latency, and sometimes the delay in accessing the data is high. The operational cost in managing such an operational database is expensive, as it reads millions of data per second. Cloudera Operational Database now deploys HDFS on Cloud Block Storage, which ensures that the performance characteristics are similar to on-prem. This feature simplifies the lift-and-shift efforts to the cloud.
3. This capability includes an updated `update-database` command in CDP CLI Beta to enable tuning of auto-scaling based on HDFS utilization.

Cloudera Operational Database promotes custom user tags to CDP CLI Beta

When you create a Cloudera Operational Database database, Cloudera Operational Database enables you to supply custom tags for launched hardware while using CDP CLI Beta.

Cloudera Operational Database delivers utility to manually copy tables across Kerberos realms without cross-realm Kerberos trust

Cloudera Operational Database introduces a `CldrCopyTable` utility, which is Cloudera's version of the upstream [CopyTable](#) utility. This utility is an extension of the [Cloudera Operational Database replication plugin](#) that enables you to copy data cross-realm. This utility enables you to close any replication gaps that might arise depending on how you start or stop replication.

Cloudera Operational Database streamlines on-prem replication plugins

When you create a Cloudera Operational Database database, Cloudera Operational Database automatically sets configuration properties for the Cloudera replication plugin so that on-prem clusters can replicate into Cloudera Operational Database databases. Cloudera Operational Database now automatically configures the OpDB replication plugin and reduces the time needed to move the application into production.

May 10, 2021

Cloudera Operational Database 1.11 version now supports Phoenix through Hue web UI.

Cloudera supports Phoenix when using Hue web UI

Cloudera now supports Phoenix access through the Apache Hue SQL assistant. You can now access Phoenix and query the data from the Hue web UI out of the box and leverage Hue's rich SQL support (for example, type ahead) to query Phoenix for operational insights or developer testing of SQL statements.

February 10, 2021

Cloudera Operational Database now supports deploying a Cloudera Data Hub cluster as an edge node.

Cloudera Operational Database now supports deploying a Cloudera Data Hub cluster as an edge node

You can deploy a Cloudera Data Hub cluster that works as an edge node to access your Cloudera Operational Database instance. Use the cluster template `***RUNTIME VERSION***` Cloudera Operational Database Edge Node cluster template. For example, 7.2.7 COD Edge Node. For more information see [Configure Cloudera Data Hub edge node](#).

November 10, 2020

Cloudera Operational Database is now available as a technical preview.

Cloudera Operational Database is available as a technical preview

Cloudera Operational Database is now available as a technical preview and is considered under development. For an overview about this service, see [Cloudera Operational Database service in the public cloud](#).



Important: Do not use this in your production systems. If you have feedback, contact Support by logging a case on the Cloudera Support Portal at <https://my.cloudera.com/support.html>. Technical preview services and features are not guaranteed troubleshooting and fixes.

Fixed issues

Learn about the fixed issues and the enhancements in Cloudera Operational Database.

COD-4463 (Cloudera Operational Database 1.49) : Cloudera Operational Database autoscaling removes all nodes at once if workers are resized on the DataHub screen

The Cloudera Operational Database autoscaling functionality is updated to limit the removal of nodes to a maximum of two at a time during cluster downscaling in specific scenarios. This change ensures that HDFS has sufficient time to relocate blocks, thereby preventing accidental data loss.

COD-3836 (Cloudera Operational Database 1.41) : Cloudera Operational Database supports deployments to specific subnets in Azure and GCP environments

When you create an operational database using the CDP CLI, the subnet-id parameter in the create-database command is fixed and can be used to deploy the cluster into specific subnets in Azure and GCP environments.

Following is an example of subnet-id.

```
cdp opdb create-database --environment-name <env> --database-name <db> --subnet-id DataLakeHubSubnet1
```

For more information, see *CDP CLI documentation*.

ODX-2928 (Cloudera Operational Database 1.31) : Minor upgrade is not available

Minor upgrades are available now while using the describe-upgrade-database CDP CLI command. You can now list the available hotfix versions using the describe-upgrade-database CDP CLI command.

ODX-1716 (Cloudera Operational Database 1.21) : Increase storage density for HDFS form factor

Storage density for HDFS form factor is increased. Now, Cloudera Operational Database deploys 8 TB of disks for each worker instead of 6 TB during any new HDFS deployment.

ODX-1811 (Cloudera Operational Database 1.21) : Increase handler count

The number of RegionServer handlers is increased to process 50% more read or write requests.

Related Information

[CDP CLI documentation](#)

Known issues

Learn about the known issues in the Cloudera Operational Database, the impact or changes to the functionality, and the workaround.

Cloudera Operational Database is deployed as a multi-AZ environment, even when the underlying data lake is not multi-AZ

Problem: When a Cloudera Operational Database is created through its user interface, it is deployed as a multi-AZ configuration by default, irrespective of whether the underlying data lake possesses a multi-AZ architecture.

Workaround: To have Cloudera Operational Database in a single AZ, deploy it using CDP CLI.

For example,

```
cdp opdb create-database --environment-name [***ENV_NAME***] --database [***DATABASE_NAME***] --storage-type [***STRING***] --disable-multi-az --scale-type [***STRING***]
```

COD-3987 (Cloudera Operational Database 1.46): LB based client configs and tarball URLs in the describe-client-connectivity command output fails intermittently

Problem: Due to a known Cloudbreak issue, CB-26030, downloading an HBase client configuration intermittently fails when using multiple Gateway nodes

Workaround: Retry the download operation until it succeeds.

COD-3611 (Cloudera Operational Database 1.38): [Azure] Import TSV job during AZ outage fails to write data to the HBase table

Problem: Cloudera Operational Database is unable to write data on an HBase table and also fails to import a TSV file during a Multi-AZ outage on an Azure environment.

Workaround: None

ODX-1603 (Cloudera Operational Database 1.22) : Cloudera Operational Database throws a "Node Failure" issue

Problem: Cloudera Operational Database reports "Node Failure" state whenever OMID service goes down and retains the state until the OMID service is restarted from Cloudera Manager (CM).

Workaround:

- If you are using OMID, restart the OMID service through CM and wait for a few minutes until Cloudera Operational Database starts displaying Available again.
- If you are not using OMID service and your Cloudera Operational Database status is not affected by the OMID service status, you can suppress the OMID alerts directly in the CM.

COD-2656: Issue with HBase meta table replication after Cloudera Operational Database creation

Problem: This issue arises when you create a Cloudera Operational Database using the exact storage location and environment for HBase that was previously in use. Even if you delete the Cloudera Operational Database from the specified location, the data on S3 may persist, leading to replication problems.

Workaround: To resolve this issue, you can either delete the existing data on S3 or use a different database or environment name.

Technical Service Bulletins

TSB 2022-568: HBase normalizer must be disabled for Salted Phoenix tables

When Apache Phoenix (“Phoenix”) creates a salted table, it pre-splits the table according to the number of salt regions. These regions must always be kept separate, otherwise Phoenix does not work correctly.

The HBase normalizer is not aware of this requirement, and in some cases the pre-split regions are merged automatically. This causes failure in Phoenix.

The same requirement applies when merging regions of salted tables manually: regions containing different salt keys (the first byte of the rowkey) must never be merged.

Note that either automatic or manual splitting of the regions for a salted table does not cause a problem. The problem only occurs when adjacent regions containing different salt keys are merged.

Upstream JIRA

[PHOENIX-4906](#)

Knowledge article

For the latest update on this issue, see the corresponding Knowledge article: [TSB 2022-568: Hbase normalizer must be disabled for Salted Phoenix tables](#)