



Collibra Data Governance Center  
**Platform Upgrade**

## Collibra Data Governance Center - Platform Upgrade

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You can find the most up-to-date technical documentation on our Documentation Center at

[https://productresources.collibra.com/docs/collibra/latest/Content/Installation/Upgrade/to\\_upgrade.htm](https://productresources.collibra.com/docs/collibra/latest/Content/Installation/Upgrade/to_upgrade.htm)

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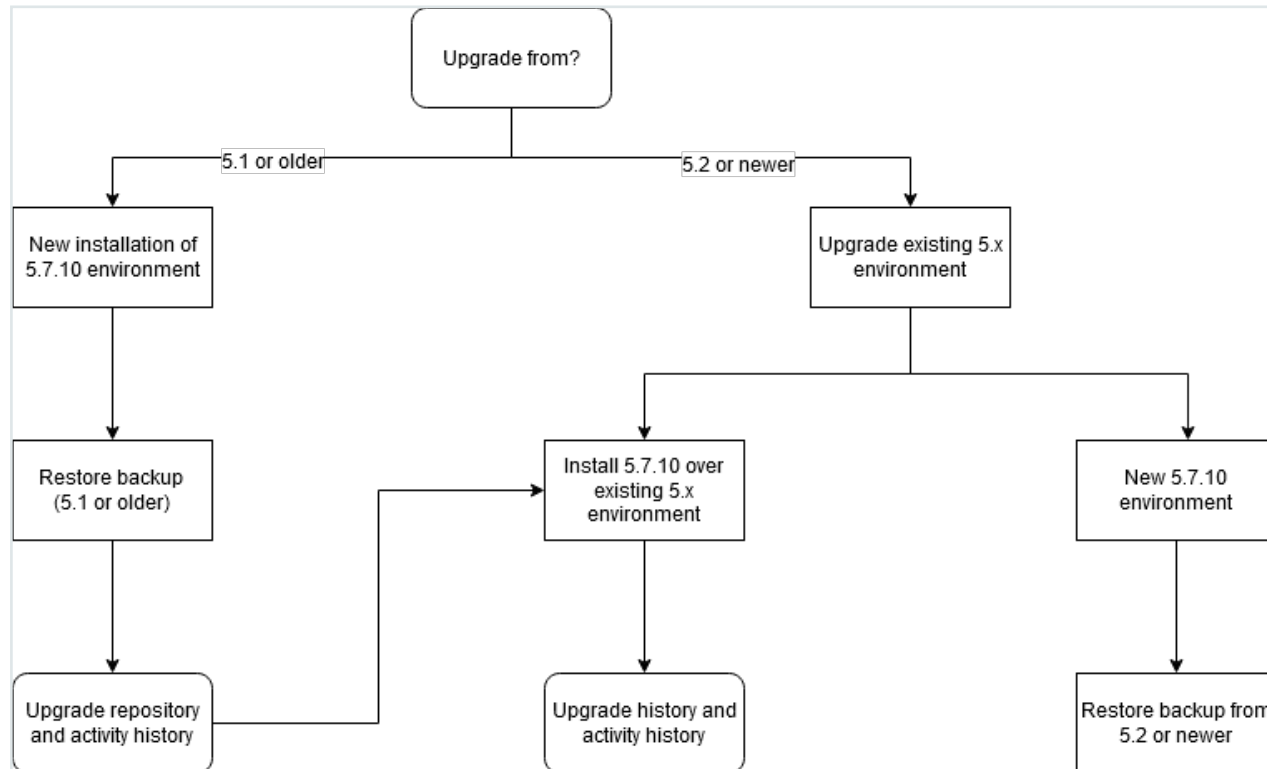
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## Upgrading to Collibra DGC 5.7.12

To upgrade to Collibra Data Governance Center 5.7.12, you need at least version 4.5 or newer. The upgrade procedure depends on the Collibra DGC version that you are upgrading from.

### Warning

- When you upgrade to 5.7 or newer, [characteristics of some Catalog-related assets](#) are converted from rich-text format to plain-text format.
- A Collibra DGC environment requires the new Search service. Make sure that you install this service and that you add it to your environment.
- Collibra Connect 1.4.x and older are not compatible with Collibra DGC 5.6 or newer. Upgrade to Collibra Connect 1.5 or 2.0.
- Due to an upgrade of our database in Collibra DGC 5.6.2, Ubuntu 12.04 is no longer supported.



There are three scenarios to upgrade to version 5.7:

1. Upgrade a 4.5.x or 4.6.x environment. See [Upgrade from 5.1 or older to 5.7.12](#).
2. Upgrade a 5.x environment by installing 5.7 over the current version. See [Install 5.7.12 over a 5.2 or newer version](#).
3. Upgrade to 5.7 by installing a new 5.7 environment and restoring a 5.x backup. See [Install 5.7 with an old 5.x backup](#).

**Note**

If you upgrade from a version earlier than 5.2, the upgrade of the repository to version 5.3 or newer consists of two steps:

1. Upgrade of the repository to 5.2.x: This upgrade step is controlled by Collibra Console.
2. Upgrade of the repository from 5.2.x to 5.3 or newer: This upgrade step is performed during the start of the DGC service. The logging of this step is not visible in Collibra Console.

This is however transparent for the user, you will only notice this in the log files.

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# Before the upgrade

**Warning** If you are upgrading from Collibra DGC 5.5 or older and you have the GDPR Solution installed, you must carry out a [post-upgrade procedure](#), in order to access your upgraded Collibra DGC environment.

## Note

- The upgrade to Collibra Data Governance Center 5.6 or newer requires the Search service.
- Upgrading a 5.1.x or older version to 5.7.12 or newer requires an intermediate upgrade to 5.7.6.
- If you upgrade a 4.5.x/4.6.x environment to 5.7, there are certain [Limitations of the upgrade from 4.5.x / 4.6.x](#).

Before you upgrade your Collibra Data Governance Center environment to 5.7.12, keep the following prerequisites in mind:

1. You have requested a 5.7 license from your Collibra Customer Success manager if you are upgrading from Collibra DGC 4.x .  
You cannot start a 5.7 environment with a license file from a 4.x environment. However, DGC 5.x licenses will still work on 5.7.
2. You have downloaded **upgrade\_checkup\_script.sql** from the [Collibra Downloads page](#), however not mandatory for the upgrade, we highly recommend to [execute this repository health-check](#).
3. You have created a backup of your environment.
  - **4.5.x or 4.6.x:** See [Create a backup in Collibra DGC 4.x](#).
  - **5.x:** See [Create a backup of Collibra Data Governance Center 2022.02](#).
4. You have [stopped](#) the complete environment if you [install](#) 5.7.12 over an existing 5.x environment.
5. The node on which you will install the Search service, must meet the [minimum system requirements](#).  
For this service, we recommend to either use a new node or to add it to the node that hosts the Data Governance Center service.  
We also recommend to look at the [recommended system requirements](#).

6. On Windows Server 2012 and 2012 R2, you have installed all the latest Windows updates and patches.

## Best practices

### Operating System upgrade

When upgrading the Operating System, keep the following in mind:

- Ensure that the used user account keeps full permissions on the Collibra DGC installation directories.
- Ensure that the SSO configuration does not change.
- Ensure that the SSL configuration does not change.

### Restoring a backup

If you restore a backup from another environment, ensure that you clear the option **Configuration**. Including the configuration when restoring a backup overwrites your existing configuration and may leave your environment unresponsive.

### Environment upgrade

When you upgrade your environment, ensure that you use the same user account that was used to install the environment.

## Check the repository before an upgrade

If you upgrade from a version 5.7.6 or older to 5.7.7 or newer, we highly recommend to check the health of your repository. To do the health check, you can download a script. This script detects any possible issues that may block the upgrade of your environment.

The script does not change any data in the Repository and has minimal impact on the performance. There is no need to stop the environment.

**Tip** This procedure is not necessary if your current version is 5.7.7 or newer.

## Steps

1. Download the script **upgrade\_checkup\_script.sql** from the [Collibra Downloads page](#).
2. Sign in to the server that hosts the Repository service.
3. Save the script in a temporary directory, for example **/tmp**.
4. From the temporary directory, run the following command:
  - Linux:

```
#set environment variable
export PGPASSFILE={path_to_collibra_data_dir}/re-
po/data/.pgpass;

#execute script
{path_to_repo_installation_dir}/pgsql/bin/psql -p 4403
-U collibra -d dgc -q -f upgrade_checkup_script.sql >>
checkup_result.txt
```

### Example

```
export PGPASSFILE=/collibra_
data/repo/data/.pgpass; collibra/pgsql/bin/psql -
p 4403 -U collibra -d dgc -q -f upgrade_checkup_
script.sql >> checkup_result.txt
```

- Windows Powershell:

```
#set environment variable
env:PGPASSFILE="{path_to_collibra_data_dir}/re-
po/data/pgpass.conf;

#execute script
{path_to_repo_installation_dir}/pgsql/bin/psql -p 4403
-U collibra -d dgc -q -f upgrade_checkup_script.sql >>
checkup_result.txt
```

- Windows command prompt:



```
#set environment variable
SET PGPASSFILE={path_to_collibra_data_dir}/re-
po/data/pgpass.conf;

#execute script
{path_to_repo_installation_dir}/pgsql/bin/psql -p 4403
-U collibra -d dgc -q -f upgrade_checkup_script.sql >>
checkup_result.txt
```

## What's next?

The file **checkup\_result.txt** is created in your temporary directory. You can open the file in a text editor.

At the end of the file, you can find the **status** of the checkup.

## Repository statuses

When you have **checked** the repository, the results file (**checkup\_result.txt**) contains the status of your repository.

Status	Description
GREEN	The health-check only contains warnings. The repository is safe to be upgraded.
ORANGE	There is information about history tables from a 4.x version but there are no errors found. The repository is safe to be upgraded.
RED	There are repository issues found that need to be resolved before you start the upgrade. Do not start the upgrade, contact Collibra Support instead.

## Examples

### GREEN

```
warnings
-----
-----
WARNING: following records will be removed:
members contains 1 values that will be removed RL for column
associated_resource_type
(2 rows)

audit_tables
-----
(0 rows)

errors
-----
(0 rows)

status
-----
GREEN
(1 row)
```

### ORANGE

```
warnings
-----
(1 row)

audit_tables
-----
WARNING: The database contains 48 audit table(s)
(1 row)

errors
-----
(0 rows)

status
-----
```

```
ORANGE  
(1 row)
```

## RED

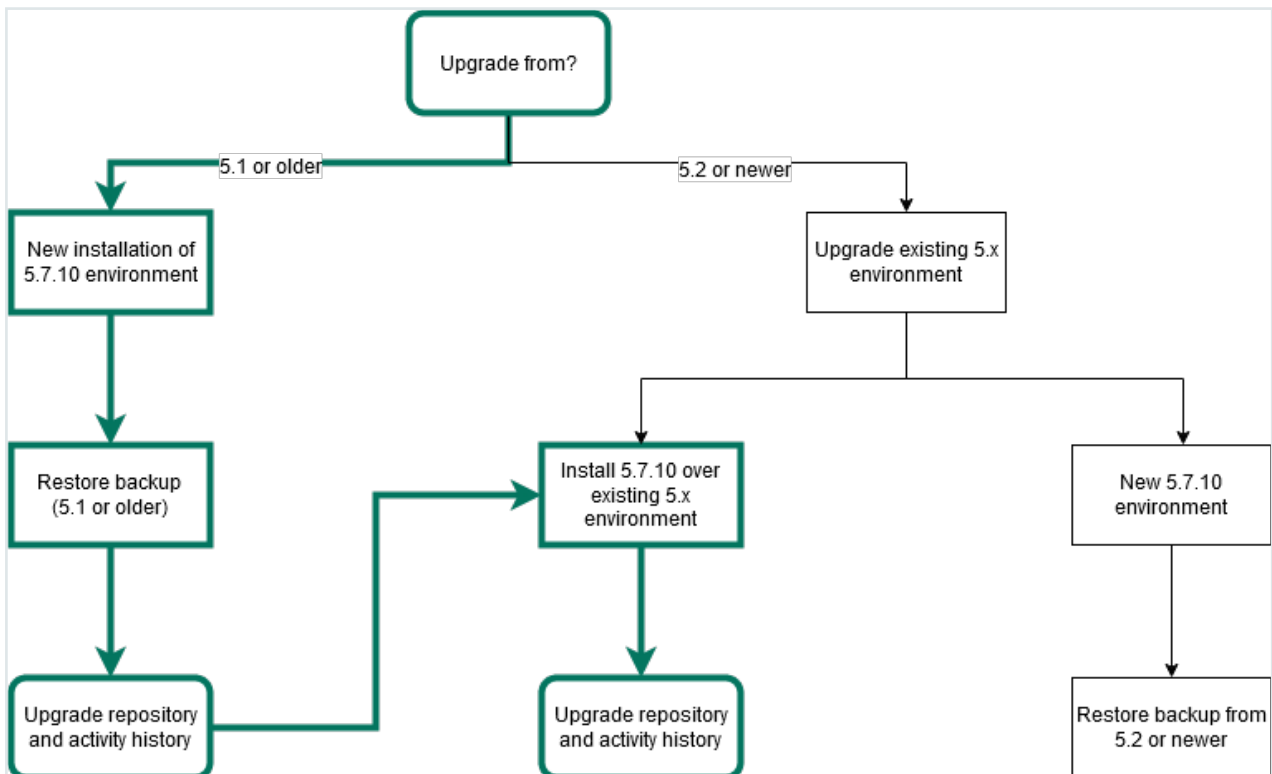
```
warnings  
-----  
(1 row)  
  
audit_tables  
-----  
WARNING: The database contains 48 audit table(s)  
(1 row)  
  
errors  
-----  
-----  
representations contains 191 invalidly formatted UUIDs for  
column modifiedby  
attachments contains 2 invalid enum values TY for column base_  
resource_type  
comments contains 1 invalid enum values CT for column base_  
resource_type  
comments contains 1 invalid enum values VT for column base_  
resource_type  
members contains 1 invalid enum values VT for column asso-  
ciated_resource_type  
members contains 2 invalid enum values CT for column asso-  
ciated_resource_type  
(6 rows)  
  
status  
-----  
RED  
(1 row)
```

## Upgrade from 5.1 or older to 5.7.12

In this upgrade scenario, you will upgrade a Collibra Data Governance Center 5.1.x or older environment to 5.7.12.

**Note** You need to at least install the Data Governance Center, Repository and Search service to have a functional environment.

**Tip** If you would use nodes on which there are already one more services installed, you have to install the new version in a [new installation directory](#), unless the node has never been added to a Collibra Console, then you can overwrite the existing installation.



## Steps

1. Create a full backup of your Collibra DGC 5.1.x or older environment:
  - [4.5.x/4.6.x](#)
  - [5.x](#)
2. Install a new multi-node **Collibra DGC 5.7.6** environment, or optionally a single-node environment.  
 Make sure that you install at least Collibra Console and the Data Governance Center, Repository, Search and Monitoring services.

**Tip** If your environment is missing a mandatory service, for example the Search service, it will be indicated and you cannot start the environment.

The screenshot shows the 'Infrastructure' page for the 'Default environment'. The environment status is 'Incomplete' with a red dot. A message states: 'To start the environment, add the following service(s): Repository, Monitoring, Search'. Below this, there are buttons for 'Stop', 'Start', 'Create a diagnostic file', 'More', 'Overview', 'SAML', and 'License'. The 'Environment services' table is as follows:

Service	Node	Status
Data Governance Center	Default node	● Stopped

### 3. Restore the backup.

This action includes the upgrade of the repository to version 5.7.6.

**Tip** If the environment ends up in Error state, it is most likely because starting the DGC service takes too much time. See [Environment in error state after during the upgrade](#).

### 4. Reindex Collibra DGC.

### 5. Upgrade the activity history.

### 6. Continue the upgrade to 5.7.12 by following the steps of [Installing 5.7.12 over a 5.2 or newer version](#).

**Note** Make sure you [check the repository](#) before this step.

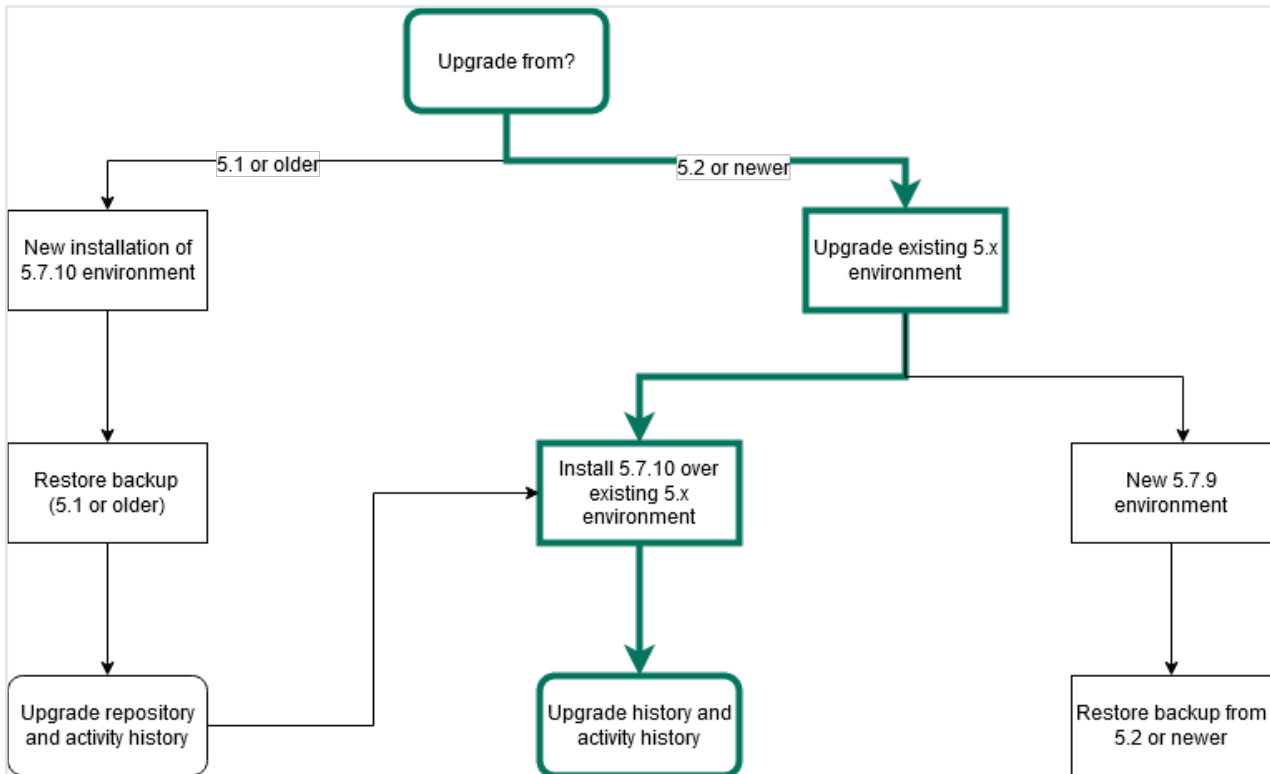
### 7. Upload a valid 5.7.12 license.

#### Tip

- If your environment is configured with SAML and it is no longer functional after the upgrade, consult the [troubleshooting section](#).
- For more information about scopes after an upgrade from version 4.x to 5.x, see [Collibra Support Portal](#).

## Install 5.7.12 over a 5.2 or newer version

In this upgrade scenario, you will upgrade a Collibra Data Governance Center 5.x environment to 5.7.12 by overwriting the current version with the 5.7.12 version:



### Note

- You must add the Search and Monitoring services during the upgrade as these are new required services in an environment.
- You must upgrade with the same user account that was used for the installation, both on Linux and Windows. If the user account is no longer active, see [Upgrade an environment with another user account](#) in the Troubleshooting section.

## Prerequisites

- You have enough free disk space in the volume that hosts the data folder, **collibra\_data**. The free disk space must be at least the size of the current data. For example, if your data in the data folder takes 5 GB, you need at least 5 GB of free disk space on that volume to upgrade.
- [Stop](#) the environment and the [agent and Console services](#).
- If you install the Search service on a Linux system, the node that will run the Search service must pass the following bootstrap checks:
  - [File descriptor](#)
  - [Maximum number of threads check](#)

- Maximum file size
- Maximum size virtual memory check
- Maximum map count check

Type	Check description	Minimum value	Applies for installation type	Setting name
User limit	Maximum number of open file descriptors	65536	<ul style="list-style-type: none"> <li>▪ Without root permissions</li> <li>▪ With root permissions, using System V init daemon</li> </ul>	nofile
	Maximum number of open threads/processes	4096		nproc
	Maximum file size	unlimited		fsize
Kernel parameter	Maximum virtual memory areas	262144	<ul style="list-style-type: none"> <li>▪ All</li> </ul>	vm.max_map_count

For more information on these settings, see the [Troubleshooting section](#).

- The [status of your repository](#) is Green or Orange.

**Warning** If the status of the repository is Red, do not start the upgrade procedure but contact Collibra Support.

## Steps

1. [Stop](#) the environment.
2. [Stop](#) the Collibra Agent and Collibra Console.
3. Start the installation wizard:
  - Linux as user with sudo rights: `sudo ./dgc-linux-5.7.12-0.sh`
  - Linux as root user: `./dgc-linux-5.7.12-0.sh`
  - Linux as standard user: `./dgc-linux-5.7.12-0.sh`
  - Windows Server: double-click **setup.bat**

**Important** The path of the installer file cannot contain spaces.

If you run the installation without Administrator rights, an error is shown.

**Tip** If you don't want to use the user interface even if it's available, add the following to the command:

```
-- --nox11
```

4. Click **Next**.
5. Select the installation directory of the old version and click **Update**.

**Note** If you select a different installation directory, you will [add](#) a new Collibra DGC installation next to the existing installation.

6. Click **Yes** to confirm that you have created a backup and that all the services are stopped on the node.
  - » The **Component selection** dialog box appears, indicating which services are installed on the node.
7. Select the services that you want to add to the node and click **Next**.

**Note** On a single-node installation, you have to select at least the Search and Monitoring services.

8. If you have selected new services in the previous step, you have to configure the services in the next dialog boxes. After the last configuration dialog box, click **Update**.
  - » The installed services on the node are upgraded and newly selected services are installed.
9. Click **Exit**.

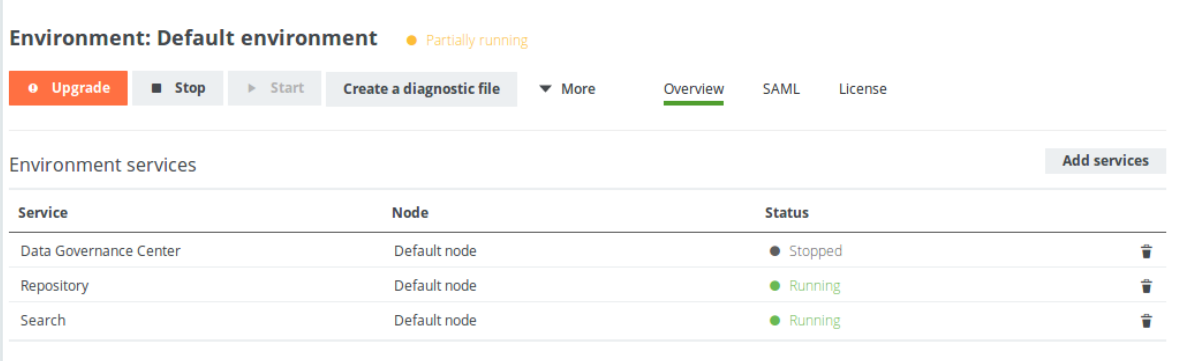
**Note**

- If you have a multinode installation, repeat the previous steps for every node of the environment until you have upgraded all nodes.
- Make sure that you have installed the Search and Monitoring services on one of the nodes.

10. Start Collibra Console.
  - » You will notice that the upgraded environment is incomplete.
11. [Add](#) the Search service to your environment.



12. [Start](#) the environment.
  - » The start of the environment will be interrupted and your environment will be partially running.
13. Click the orange **Upgrade** button to continue the upgrade.



The screenshot shows the 'Environment: Default environment' page. At the top, there is a status indicator 'Partially running' with a yellow dot. Below this is a navigation bar with buttons for 'Upgrade' (highlighted in orange), 'Stop', 'Start', 'Create a diagnostic file', and a 'More' dropdown menu. Further right are links for 'Overview', 'SAML', and 'License'. Below the navigation bar is a section for 'Environment services' with an 'Add services' button. A table lists the services and their status:

Service	Node	Status
Data Governance Center	Default node	● Stopped
Repository	Default node	● Running
Search	Default node	● Running

14. In the **Upgrade** dialog box, click **Upgrade**.
  - » Your environment is being upgraded. When all services are up and running again, the upgrade process has completed.

### Tip

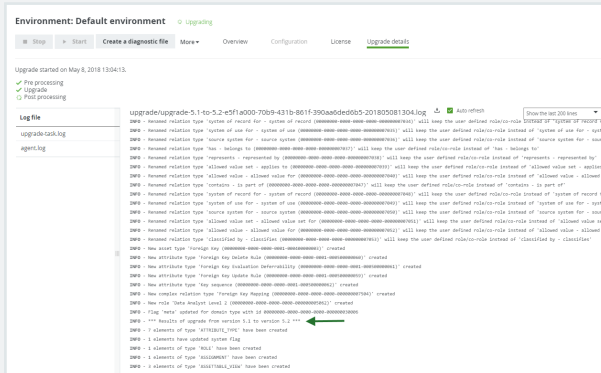
- In this phase, a backup of the current database will be created. If the creation would take too much time, it will time out and the upgrade will fail. [Increase](#) the backup timeout in that case and restart the upgrade.
- If the environment ends up in Error state, it is most likely because starting the DGC service takes too much time. See [Environment in error state after during the upgrade](#).
- If your environment is configured with SAML and it is no longer functional after the upgrade, consult the [troubleshooting section](#).

15. [Reindex](#) Collibra DGC.
16. [Upgrade the activity history](#).

**Note**

If you look in the upgrade logs (`upgrade-task.log`), you will see one of the following lines near the end:

- INFO - COMPLETED Upgrade the database version to [5.2]
- INFO - \*\*\* Results of upgrade from version 5.1 to version 5.2 \*\*\*



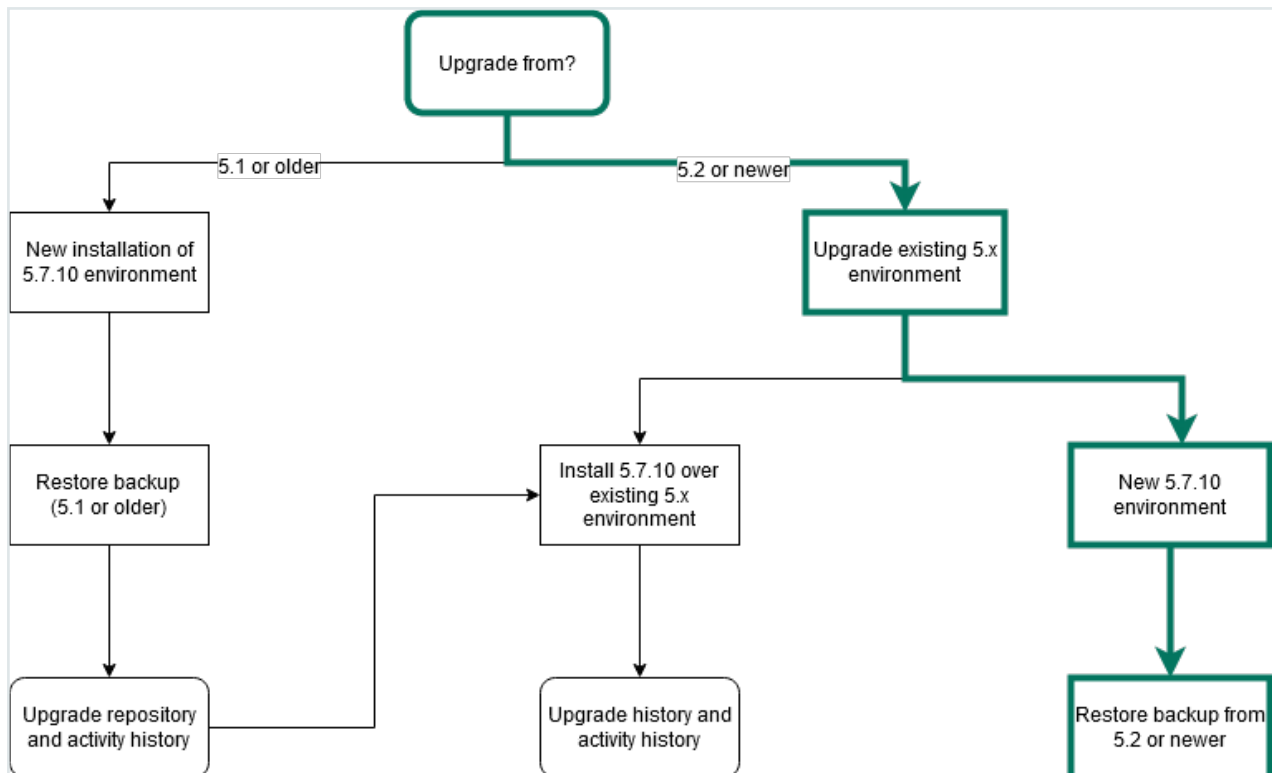
This means that the repository has upgraded to 5.2 at this point. The upgrade to a later version, for example 5.7.12, is performed during the start of the DGC service and is therefore not logged in this log file, but in `dgc.log`, which you can find in the diagnostic file.

## Install 5.7 with an old 5.x backup

In this upgrade scenario, you will upgrade a Collibra Data Governance Center 5.x environment to 5.7 by installing a new Collibra DGC 5.7 and restoring a 5.x backup.

**Note** You need to at least install the Data Governance Center, Repository and Search service to have a functional environment.

**Tip** If you use nodes on which there are already one more services installed, you have to install the new version in a [new installation directory](#), unless the node has never been added to a Collibra Console, then you can overwrite the existing installation.



## Prerequisites

- The [status of your repository](#) is Green or Orange.

**Warning** If the status of the repository is Red, do not start the upgrade procedure but contact Collibra Support.

## Steps

- [Create](#) a full backup of your Collibra DGC 5.x environment.
- Install a new [multi-node](#) Collibra DGC 5.7 environment, or optionally a [single-node](#) environment. Make sure that you install at least Collibra Console and the Data Governance Center, Repository, Search and Monitoring services.

**Tip** If your environment is missing a mandatory service, for example the Search service, it will be indicated and you cannot start the environment.

The screenshot shows the 'Infrastructure' page in the Collibra console. On the left, there is a navigation menu with 'Add / Create' at the top, followed by 'ENVIRONMENTS', 'REPOSITORY CLUSTERS', and 'NODES'. The 'Default environment' is selected. The main area shows 'Environment: Default environment' with a status of 'Incomplete'. A red message states: 'To start the environment, add the following service(s): Repository, Monitoring, Search'. Below this, there are buttons for 'Stop', 'Start', 'Create a diagnostic file', 'More', 'Overview', 'SAML', and 'License'. The 'Environment services' section contains a table:

Service	Node	Status
Data Governance Center	Default node	● Stopped

### 3. Restore a 5.x backup.

This action automatically updates the database of the backup to the new version.

**Tip** If the environment ends up in Error state, it is most likely because starting the DGC service takes too much time. See [Environment in error state during the upgrade](#).

### 4. Reindex Collibra DGC.

If your environment is configured with SAML and it is no longer functional after the upgrade, consult the [troubleshooting section](#).

## Create a backup of Collibra Data Governance Center 2022.02

If you want to take a full or partial [backup](#) of a Collibra Data Governance Center environment, follow these steps:

1. Open Collibra Console with a user profile that has at least the **ADMIN** role.
  - » Collibra Console opens with the **Infrastructure** page.
2. In the main menu, click **Backups**.
  - » The [backups page](#) appears.

3. In the upper right corner, click **Create backup**.
4. Enter the required information.

Option	Description
Environment	The Collibra Data Governance Center environment that you want to back up.
Include	<p>You can create:</p> <ul style="list-style-type: none"> <li>◦ a full backup: Includes all backup options.</li> <li>◦ a partial backup: Includes only a couple of the backup options.</li> </ul>
Data	The core (database) data contained in the Collibra DGC environment. This is all the data related to communities, domains, assets, users, operating model and so on.
History	<p>The history of the data (activity and snapshot-related). This can result in a very large file, depending on the activity in Collibra DGC.</p> <p>If you create a backup of the data and exclude the data history, you are taking a backup of a subset of the database content. This results in a much smaller backup file, but it still contains a complete picture of the current content. This is useful when attaching a backup to a technical support ticket, if support has to reproduce a problem.</p> <div style="border-left: 2px solid red; padding-left: 10px; margin-top: 10px;"> <p><b>Warning</b> If you <a href="#">restore</a> a backup that does not include history and was made from a version older than 5.7.x, the <a href="#">data quality</a> metrics will not work correctly. To solve this issue, after you restore the backup in your latest environment, upgrade the data, create a new backup and restore the new backup in the same environment.</p> </div>
Configuration	The configuration of the Collibra DGC environment.

Option	Description
Customizations	<p>The customizations such as custom modules, styling, page-definitions and email template files.</p> <p>This will add files that are located in the Collibra user home directory and files that are used to customize the Collibra DGC environment (<code>/opt/collibra_data/console/config</code>). This concerns all the files located in the following directories:</p> <ul style="list-style-type: none"> <li>◦ <b>email-templates</b></li> <li>◦ <b>groovy-lib</b></li> <li>◦ <b>images</b></li> <li>◦ <b>page-definitions</b></li> <li>◦ <b>security</b></li> <li>◦ <b>styling</b></li> <li>◦ <b>translations</b></li> <li>◦ <b>modules</b> (if available)</li> </ul>
Name	The name of the backup.
Description	The description to provide more information on the backup.

5. Click **Create backup**.

## What's next?

A dialog box with a progress bar is displayed. You can let the backup continue in the background. If you do so, you can see the progress of the backup on the [backups page](#).

## Install Collibra Console

This section describes how to install the Collibra Console software. The Collibra Console is required to configure and manage one or more Collibra DGC environments.

**Tip** For the installation on Linux without root permissions, also read the [services](#) section.

## Steps

**Note** If you want to configure the init daemon on Linux systems, you have to execute an [unattended installation](#). For more information, see also the [unattended installation configuration parameters](#).

**Note** Anti-virus and/or security software may block the installation on Windows. Make sure that these allow the installation of software and services. For more information, see also the [Collibra University course](#).

1. Run the installer:

- Linux as user with sudo rights: `sudo ./dgc-linux-5.7.12-0.sh`  
Linux as root user: `./dgc-linux-5.7.12-0.sh`
- Linux as standard user: `./dgc-linux-5.7.12-0.sh`
- Windows Server: double-click **setup.bat**

**Important** The path of the installer file cannot contain spaces.

If you run the installation without Administrator rights, an error is shown.

**Tip** If you don't want to use the user interface even if it's available, add the following to the command:

```
-- --nox11
```

2. In the wizard introduction, click **Next**.

3. Enter the **Installation directory** of the Collibra Console component.

- Default location on Linux as root or user with sudo privileges: **/opt/collibra**
- Default location on Linux as standard user: **~/collibra**
- Default location on Windows Server: **C:\collibra**

**Important** On Windows, the target installation directory cannot contain spaces.

4. Click **Next**.

5. Enter the location of the **Collibra Data Directory**.
  - Default location on Linux as root or user with sudo privileges: `/opt/collibra_data`
  - Default location on Linux as standard user: `~/collibra_data`
  - Default location on Windows Server: `C:\collibra_data`

**Important** On Windows, that target data directory cannot contain spaces.

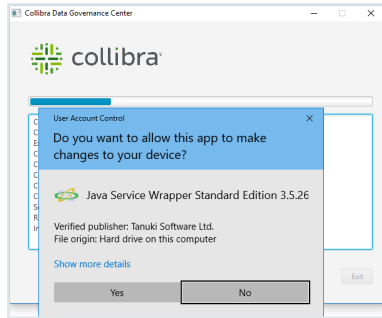
6. Click **Next**.
7. Clear all components except **Management Console**.
8. Click **Next**.
9. Enter the required information.

Setting	Description
Console port	The TCP port to access your Collibra Console via your web browser. The default port is 4402.
Console database port	The TCP port to access the Collibra Console database. This is the database where the data and configuration of Collibra Console is stored. The default port is 4420.
Console context path	The path that is added to the base URL to reach Collibra Console.  For example, if your base URL is <code>https://dgc.yourcompany.com:4402/</code> and your context path is <code>console-acceptance</code> , then your path to reach Collibra Console is <code>https://dgc.yourcompany.com:4402/console-acceptance</code> .  See also <a href="#">Set the context path of Collibra Console</a> .

If you run [multiple Collibra Console instances](#) on one node, this port must be unique for each instance.

10. Click **Install**.
  - » The installation of Collibra Console starts.
11. On Windows, you may see User Account Control warnings requesting to make changes to your device.





Click **Yes** for each of the requests, if you click **No**, the installation will fail.

12. Click **Exit**.

» Collibra Console is installed on your node.

## What's next?

The default credentials to sign in to Collibra Console are *Admin / admin*. We highly recommend that you [edit](#) the Collibra Console administrator's password after signing in for the first time.

Access to Collibra Console does not require a license.

## Install the DGC service

The DGC service contains the business logic of Collibra Data Governance Center and contains amongst others a workflow engine and various APIs (Java, REST, Search, ...).

This is a mandatory service in every Collibra DGC environment.

**Tip** For the installation on Linux without root permissions, also read the [services](#) section.

## Steps

**Note** If you want to configure the init daemon on Linux systems, you have to execute an [unattended installation](#). For more information, see also the [unattended installation configuration parameters](#).

**Note** Anti-virus and/or security software may block the installation on Windows. Make sure that these allow the installation of software and services. For more information, see also the [Collibra University course](#).

1. Run the installer:

- Linux as user with sudo rights: `sudo ./dgc-linux-5.7.12-0.sh`  
Linux as root user: `./dgc-linux-5.7.12-0.sh`
- Linux as standard user: `./dgc-linux-5.7.12-0.sh`
- Windows Server: double-click **setup.bat**

**Important** The path of the installer file cannot contain spaces.

If you run the installation without Administrator rights, an error is shown.

**Tip** If you don't want to use the user interface even if it's available, add the following to the command:

```
-- --nox11
```

2. In the wizard introduction, click **Next**.

3. Enter the **Installation directory** of the Data Governance Center service.

- Default location on Linux as root or user with sudo privileges: **/opt/collibra**
- Default location on Linux as standard user: **~/collibra**
- Default location on Windows Server: **C:\collibra**

**Important** On Windows, the target installation directory cannot contain spaces.

4. Click **Next**.

5. Enter the location of the **Collibra Data Directory**.

- Default location on Linux as root or user with sudo privileges: **/opt/collibra\_data**
- Default location on Linux as standard user: **~/collibra\_data**
- Default location on Windows Server: **C:\collibra\_data**

**Important** On Windows, that target data directory cannot contain spaces.

6. Click **Next**.

7. Clear all components except **Data Governance Center**.

8. Click **Next**.
9. Enter the required information.

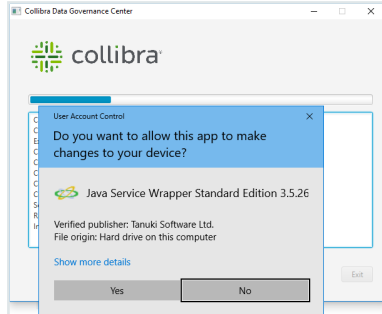
Setting	Description
DGC port	The TCP port to access your Collibra DGC environment via your web browser. The default port is 4400.
DGC Shutdown port	The TCP port to stop the DGC service. The default port is 4430.
DGC minimum memory	The minimum amount of memory in megabytes for the DGC service. This must be at least 1024 MB and no greater than 32 768 MB (32 GB).
DGC maximum memory	The maximum amount of memory in megabytes that can be assigned to the DGC service. This must be at least 2048 MB and no greater than 32 768 MB (32 GB).
DGC context path	The path that is added to the base URL to reach Collibra Data Governance Center.  For example, if your base URL is <code>https://dgc.yourcompany.com:4400/</code> and your context path is <code>acceptance</code> , then your path to reach Collibra DGC is <code>https://dgc.yourcompany.com:4400/acceptance</code> .  See also <a href="#">Set the context path of the DGC service in Collibra Console</a> .

If you run [multiple environments](#) on one node, all ports must be unique for each environment.

10. Click **Next**.
11. Enter the Agent service settings and click **Next**.

Setting	Description
Agent port	The TCP port that is used by Collibra Console to manage the services of an environment. The default port is 4401.  If you run multiple agents on one node, this port must be unique for each agent.
Node address	The hostname of the node on which the Agent service is running.

12. Click **Install**.
  - » The installation of the DGC service starts.
13. On Windows, you may see User Account Control warnings requesting to make changes to your device.



Click **Yes** for each of the requests, if you click **No**, the installation will fail.

14. Click **Exit**.
  - » The DGC service is installed on your node.

## What's next?

Add the DGC service to your environment, this service is mandatory for a functional Collibra DGC environment.

## Install the Repository service

The repository service is used to run the database of Collibra Data Governance Center.

This is a mandatory service in every Collibra DGC environment.

**Tip** For the installation on Linux without root permissions, also read the [services](#) section.

## Steps

**Note** If you want to configure the init daemon on Linux systems, you have to execute an [unattended installation](#). For more information, see also the [unattended installation configuration parameters](#).

**Note** Anti-virus and/or security software may block the installation on Windows. Make sure that these allow the installation of software and services. For more information, see also the [Collibra University course](#).

1. Run the installer:

- Linux as user with sudo rights: `sudo ./dgc-linux-5.7.12-0.sh`  
Linux as root user: `./dgc-linux-5.7.12-0.sh`
- Linux as standard user: `./dgc-linux-5.7.12-0.sh`
- Windows Server: double-click **setup.bat**

**Important** The path of the installer file cannot contain spaces.

If you run the installation without Administrator rights, an error is shown.

**Tip** If you don't want to use the user interface even if it's available, add the following to the command:

```
-- --nox11
```

2. In the wizard introduction, click **Next**.
3. Enter the **Installation directory** of the Repository service.
  - Default location on Linux as root or user with sudo privileges: **/opt/collibra**
  - Default location on Linux as standard user: **~/collibra**
  - Default location on Windows Server: **C:\collibra**

**Important** On Windows, the target installation directory cannot contain spaces.

4. Click **Next**.
5. Enter the location of the **Collibra Data Directory**.
  - Default location on Linux as root or user with sudo privileges: **/opt/collibra\_data**
  - Default location on Linux as standard user: **~/collibra\_data**
  - Default location on Windows Server: **C:\collibra\_data**

**Important** On Windows, that target data directory cannot contain spaces.

6. Click **Next**.
7. Clear all components except **Repository**.

8. Click **Next**.
9. Enter the required information.

Setting	Description
Repository port	<p>The TCP port to access the repository service. It is only used by the DGC service and the Collibra agent.</p> <p>The default port is 4403.</p> <p>If you run <a href="#">multiple environments</a> on one node, all ports must be unique for each environment.</p>
Repository memory	<p>The amount of memory for the Repository service in megabytes.</p> <p>This must be at least 512 MB and no greater than 16 384 MB (16 GB).</p>
Repository admin password (*)	The password that is used by the agent to access the Repository service.
Confirm repository admin password	The password as entered in the Repository admin password field.
Repository dgc password (*)	The password that is used by the DGC service to access the repository.
Confirm repository dgc password	The password as entered in the Repository dgc password field.

**Note** (\*) These passwords can contain the following characters:

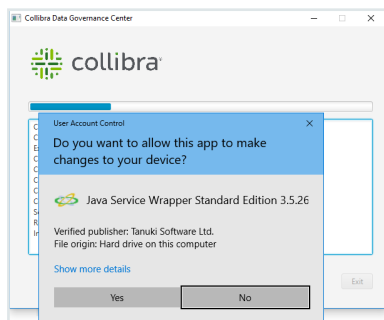
- lowercase letters
- uppercase letters
- numbers
- the following special characters: #?!@\$%&\* -

10. Click **Next**.

- Enter the Agent service settings and click **Next**.

Setting	Description
Agent port	The TCP port that is used by Collibra Console to manage the services of an environment. The default port is 4401.  If you run multiple agents on one node, this port must be unique for each agent.
Node address	The hostname of the node on which the Agent service is running.

- Click **Install**.
  - » The installation of the Repository service starts.
- On Windows, you may see User Account Control warnings requesting to make changes to your device.



Click **Yes** for each of the requests, if you click **No**, the installation will fail.

- Click **Exit**.
  - » The Repository service is installed on your node.

## What's next?

Add the Repository service to your environment, this service is mandatory for a functional Collibra DGC environment.

## Install the Jobserver

The Jobserver is used to ingest data and to execute [data profiling](#) or to create [sample data](#) on the ingested data. You can ingest data when you [register](#) a data source.

The Jobserver must be installed on a dedicated server.

**Tip**

When you install an on-premises Jobserver for use in a Collibra Data Intelligence Cloud environment, you also have to install Collibra Console, to manage and configure this Jobserver. You can install both services on the same server.

You can find the version of your Collibra Data Intelligence Cloud environment at the bottom of the sign-in window, for example 5.7.0. Always use the latest available on-premises installer to install the Jobserver.

If you don't have a Jobserver installed and [configured](#) in your environment, the **Register data source** action will be grayed out in the global create menu of Collibra Data Governance Center.

## Steps

**Tip** For the installation on Linux without root permissions, also read the [services](#) section.

**Note** If you want to configure the init daemon on Linux systems, you have to execute an [unattended installation](#). For more information, see also the [unattended installation configuration parameters](#).

**Note** Anti-virus and/or security software may block the installation on Windows. Make sure that these allow the installation of software and services. For more information, see also the [Collibra University course](#).

1. Run the installer on a dedicated server:

- Linux as user with sudo rights: `sudo ./dgc-linux-5.7.12-0.sh`
- Linux as root user: `./dgc-linux-5.7.12-0.sh`
- Linux as standard user: `./dgc-linux-5.7.12-0.sh`
- Windows Server: double-click **setup.bat**

**Important** The path of the installer file cannot contain spaces.

If you run the installation without Administrator rights, an error is shown.



**Tip** If you don't want to use the user interface even if it's available, add the following to the command:

```
-- --nox11
```

2. In the wizard introduction, click **Next**.
3. Enter the **Installation directory** of the Jobserver service.
  - Default location on Linux as root or user with sudo privileges: **/opt/collibra**
  - Default location on Linux as standard user: **~/collibra**
  - Default location on Windows Server: **C:\collibra**

**Important** On Windows, the target installation directory cannot contain spaces.

4. Click **Next**.
5. Enter the location of the **Collibra Data Directory**.
  - Default location on Linux as root or user with sudo privileges: **/opt/collibra\_data**
  - Default location on Linux as standard user: **~/collibra\_data**
  - Default location on Windows Server: **C:\collibra\_data**

**Important** On Windows, that target data directory cannot contain spaces.

6. Click **Next**.
7. Clear all components except **Jobserver**.
8. Click **Next**.
9. Enter the required information.

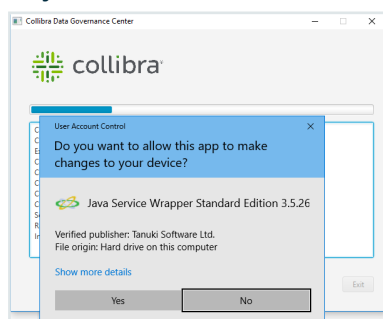
Setting	Description
Jobserver port	The TCP port to access the Jobserver service. The default port is <i>4404</i> .
Jobserver database port	The TCP port to access the Jobserver database. The default port is <i>4414</i> .
Jobserver monitoring port	The TCP port that is used by the monitoring service to monitor the Jobserver service. The default port is <i>4424</i> .

Setting	Description
Jobserver Spark monitoring port	The TCP port that is used by the monitoring service to monitor the Jobserver Spark service. The default port is 4434.

10. Click **Next**.
11. Enter the Agent service settings and click **Next**.

Setting	Description
Agent port	The TCP port that is used by Collibra Console to manage the services of an environment. The default port is 4401.  If you run multiple agents on one node, this port must be unique for each agent.
Node address	The hostname of the node on which the Agent service is running.

12. Click **Install**.
  - » The installation of the Jobserver starts.
13. On Windows, you may see User Account Control warnings requesting to make changes to your device.



Click **Yes** for each of the requests, if you click **No**, the installation will fail.

14. Click **Exit**.
  - » The Jobserver service is installed on your node.

## What's next?

Add the Jobserver service to your environment and then [add](#) the Jobserver to the Data Governance Center service in Collibra Console.

For more information about the Jobserver configuration, consult the [Jobserver memory and CPU usage](#) section.

## Complete the setup

In the previous sections, you have installed all possible Collibra DGC services on two or more nodes. To complete the setup, you have to create an environment and add the services to this environment. You need Collibra Console to do this.

### Prerequisites

You have installed at least:

- Collibra Console.
- the DGC service.
- the Repository service.
- the Search service.
- the Monitoring service.

The Jobserver service is optional.

### Steps

1. Open Collibra Console with a user profile that has the **SUPER** role.
  - » Collibra Console opens with the **Infrastructure** page.

#### Tip

- The default address to access Collibra Console is `<server hostname>:4402`, but you may have set another port during the installation of Collibra Console. Keep in mind that a firewall of your operating system can block the access to Collibra Console.
- The default credentials to sign in to Collibra Console are *Admin / admin*. We highly recommend that you [edit](#) the Collibra Console administrator's password after signing in for the first time.
- Access to Collibra Console does not require a license.

2. [Add](#) the necessary nodes to the infrastructure. Each node hosts one or more services of your Collibra DGC environment.

3. [Create](#) a new environment.
4. [Add services](#) to the environment.

A fully functional environment requires the Data Governance Center, Repository, Search and Monitoring services.

**Note** The Jobserver service is only required if you are ingesting data with Data Catalog. See [Add a Jobserver to the Data Governance Center service](#) for more information.

5. In the tab pane, click the name of the created environment.

**Tip** If your environment is missing a mandatory service, it will be indicated and you cannot start the environment.

The screenshot shows the 'Infrastructure' page with a sidebar on the left containing a tree view of environments and nodes. The main content area displays 'Environment: Default environment' with a status of 'Incomplete'. A red message indicates that to start the environment, the following services must be added: Repository, Monitoring, and Search. Below this, there are buttons for 'Stop', 'Start', 'Create a diagnostic file', and 'More'. A table titled 'Environment services' shows the 'Data Governance Center' service on the 'Default node' with a status of 'Stopped'. An 'Add services' button is located to the right of the table.

Service	Node	Status
Data Governance Center	Default node	● Stopped

6. Click ► **Start**.
  - » If all services and the environment have the **running** status, you have successfully started Collibra DGC.

## What's next?

[Upload](#) your license to start using the environment.

**Tip** If you want to register data sources in Data Catalog, you have to [configure](#) the Jobserver.

## Create a Collibra DGC environment

A Collibra Data Governance Center environment is a collection of services that are logically linked together.

**Note** With Collibra Console, you can manage many nodes, but these nodes must be on the same version as your Collibra Console.

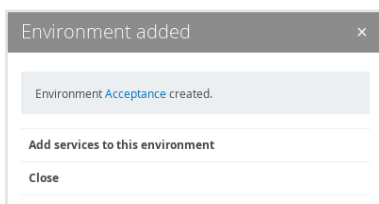
## Steps

1. Open Collibra Console with a user profile that has the **SUPER** role.
  - » Collibra Console opens with the **Infrastructure** page.

### Tip

- The default address to access Collibra Console is `<server hostname>:4402`, but you may have set another port during the installation of Collibra Console. Keep in mind that a firewall of your operating system can block the access to Collibra Console.
- The default credentials to sign in to Collibra Console are *Admin / admin*. We highly recommend that you [edit](#) the Collibra Console administrator's password after signing in for the first time.

2. In the tab pane, click **Add / Create**.
  - » The **Add / Create** dialog box appears.
3. Click **Create environment**.
  - » The **Create Environment** dialog box appears.
4. Enter a name.
5. Click **Create Environment**.



6. Do one of the following:
  - Click **Close** to end the wizard.
  - Click **Add services to this environment** to immediately [add services](#).

**Note** If the node that hosts the service you want to add is not yet available in Collibra Console, click **Add services from a new node** under the drop-down list and [add](#) the node details.

## Add a node to your infrastructure

A node is a physical server that runs one or more services of a Collibra Data Governance Center environment.

### Prerequisites

- The node that you want to add to your infrastructure must be up and running and reachable from the Console that you are using.
- The version of the node must match the version of Collibra Console.

**Tip** To add a node that was previously registered to another Collibra Console, see the knowledge base on the [Collibra Support Portal](#).

### Steps

1. Open Collibra Console with a user profile that has the **SUPER** role.
  - » Collibra Console opens with the **Infrastructure** page.

#### Tip

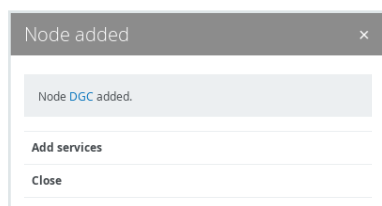
- The default address to access Collibra Console is `<server hostname>:4402`, but you may have set another port during the installation of Collibra Console. Keep in mind that a firewall of your operating system can block the access to Collibra Console.
- The default credentials to sign in to Collibra Console are *Admin / admin*. We highly recommend that you [edit](#) the Collibra Console administrator's password after signing in for the first time.

2. In the tab pane, click **Add / Create**.
  - » The **Add / Create** dialog box appears.
3. Click **Add node**.
  - » The **Add node** dialog box appears.
4. Enter the necessary information.

Field	Description
Node name	Enter a meaningful name for the node.

Field	Description
Hostname	<p>Enter the hostname or IP address of the node, for example <i>192.168.1.100</i> or <i>repository-node-A</i>.</p> <p>If you use a hostname, make sure that the Collibra Console can resolve the hostname.</p> <div style="border: 1px solid #ccc; padding: 5px; background-color: #f9f9f9;"> <p><b>Note</b> Do not reuse hostnames, every hostname must be unique. If you reuse a hostname for a node that will be used in a <a href="#">repository cluster</a>, the cluster won't synchronize.</p> </div>
Port	<p>Enter the agent port. This is the port through which Collibra Console connects to the node. The default value is 4401.</p>

5. Click **Add node**
6. Click **Close**.



## Add a service to an environment

A Collibra Data Governance Center environment consists of a collection of services, such as the DGC service and the Repository service. A service is hosted on a node. To add a service to an environment, the node must be [added](#) to the infrastructure that is managed by Collibra Console.

You can add a service to an environment in the following ways:

- Add a service via the [global Add / Create button](#).
- Add a service via the [environment details](#).
- Add services while [creating an environment](#).

**Tip** Make sure that the environment is stopped before adding services.

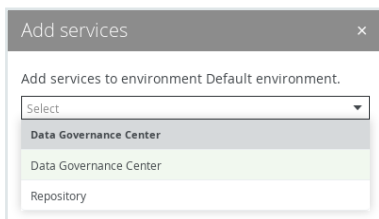
## Via global Add / Create button

1. Open Collibra Console with a user profile that has the **SUPER** role.
  - » Collibra Console opens with the **Infrastructure** page.

### Tip

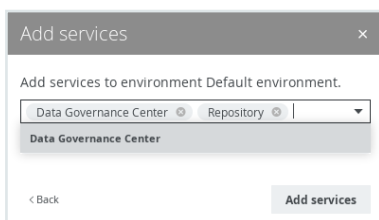
- The default address to access Collibra Console is `<server hostname>:4402`, but you may have set another port during the installation of Collibra Console. Keep in mind that a firewall of your operating system can block the access to Collibra Console.
- The default credentials to sign in to Collibra Console are *Admin / admin*. We highly recommend that you [edit](#) the Collibra Console administrator's password after signing in for the first time.

2. In the tab pane, click **Add / Create**.
  - » The **Add / Create** dialog box appears.
3. Click **Add services to environment / cluster**.
  - » The **Select environment** dialog box appears.
4. Select the **Environment** option and select an environment from the drop-down list.
5. Click **Next**.
  - » The **Add services** dialog box appears.
6. Click the relevant services in the drop-down list.



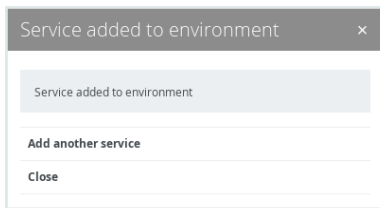
**Note** If the node that hosts the service you want to add is not yet available in Collibra Console, click **Add services from a new node** under the drop-down list and [add](#) the node details.

7. Click **Add services**.



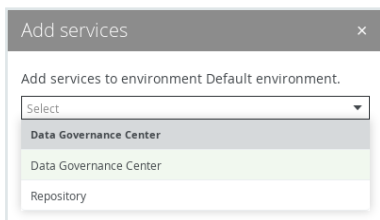


8. When you have added all services, click **Close**.



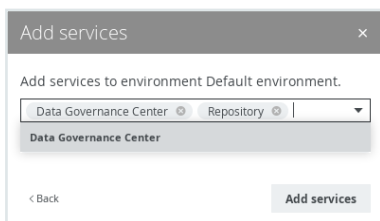
## Via environment details

1. Open Collibra Console with a user profile that has the **SUPER** role.
  - » Collibra Console opens with the **Infrastructure** page.
2. In the tab pane, click the name of your environment.
  - » The environment details appear.
3. Click **Add services**.
  - » The **Add services** dialog box appears.
4. Click the relevant services in the drop-down list.

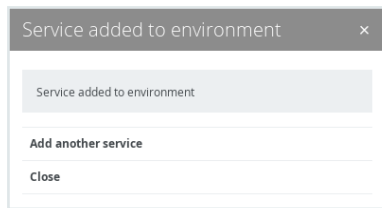


**Note** If the node that hosts the service you want to add is not yet available in Collibra Console, click **Add services from a new node** under the drop-down list and [add](#) the node details.

5. Click **Add services**.



6. When you have added all services, click **Close**.



## Add a Jobserver to the DGC service

To register a data source and create a data profile in Collibra Data Governance Center, you need the Jobserver service.

If you don't have a Jobserver installed and [configured](#) in your environment, the **Register data source** action will be grayed out in the global create menu of Collibra Data Governance Center.

### Steps

1. Open the DGC service settings for editing:
2. In the **Jobserver** section, click **Add**.

## 3. Enter the necessary information:

Setting	Description
Jobserver list	The list of registered Jobserver instances.
Name	<p>The name of the Jobserver as it will appear when you register a data source in Data Catalog.</p> <p>The name is a freely chosen name but it is recommended to only use alphanumerical characters and dashes, for example Jobserver-1.</p> <p>You will have to use this name as the <a href="#">ID of the gateway</a> and in the <a href="#">address</a> of this configuration.</p>
Protocol	<p>The protocol that is used for the communication between the Data Governance Center service and the Jobserver service.</p> <p>It is recommended to use HTTPS, especially if the services are hosted in different network segments.</p>
Address	The address (IP address, URL, hostname) of the Jobserver.
Trusted server CA certificate	<p>The certificate of the trusted CA needed to validate the server certificate. If blank, the default truststore will be used. The default truststore is defined in the <a href="#">SSL configuration section</a> of the DGC service.</p> <p>The CA certificate of the server party (Jobserver).</p>
Client certificate	The client certificate offered by the DGC service to the server. If blank, you cannot select <a href="#">mutual authentication</a> as the Jobserver service authentication level.
Client private key	The private key of the DGC service's certificate.
Table profiling data size	The approximate maximum disk size of the data in MB that will be used to profile a table. The value cannot exceed 10,000.
Test connection timeout	This timeout is a time limit (in seconds) after which the connection test is stopped and a timeout error is shown. The default value is 60 seconds.

4. Click the green **Save all** button.

**Tip** You can add as many [Jobserver services](#) as you want.

## Restore a backup from a previous version

If you want to upgrade Collibra Data Governance Center to 5.7, you can restore the backup from a previous version on a newly installed 5.7 environment.

### Warning

- If you restore a backup, you will lose all current Collibra DGC data.
- Backups from versions older than 5.5.x do not include certificates. You have to reinstall any necessary certificates, for example for secure communication with the Jobserver.
- If you restore a backup that does not include history and was made from a version older than 5.7.x, the [data quality](#) metrics will not work correctly. To solve this issue, after you restore the backup in your latest environment, upgrade the data, create a new backup and restore the new backup in the same environment.

## Steps

1. Open Collibra Console with a user profile that has at least the **ADMIN** role.
  - » Collibra Console opens with the **Infrastructure** page.
2. Click the name of an environment to show its details.
3. Click **More** → **Restore from a previous version**.
4. Click the version of the backup:

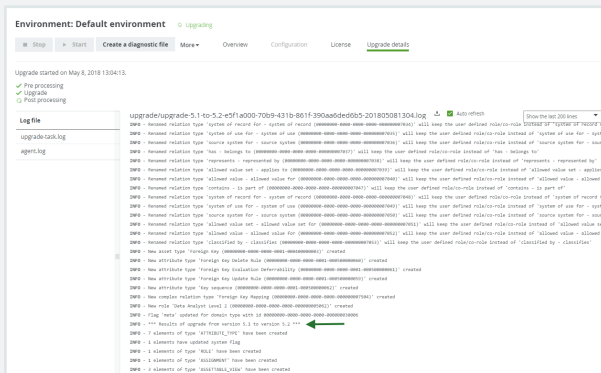
Previous version	Substeps
4.5.x or 4.6.x	<ol style="list-style-type: none"> <li>Accept the limitations for restoring this backup. See <a href="#">Limitations of the upgrade from 4.5.x / 4.6.x</a>.</li> <li>Click <b>Next</b>.</li> <li>Upload or drop the backup in the <b>Upload backup</b> box.</li> <li>Click <b>Restore backup and upgrade</b>.           <ul style="list-style-type: none"> <li>» The backup is restored and the upgrade of the repository is automatically started.</li> </ul> </li> </ol>

Previous version	Substeps
5.x	<ol style="list-style-type: none"> <li>i. Select the <b>Upload backup</b> option:                             <ul style="list-style-type: none"> <li>■ <b>Upload backup:</b> Upload or drop the backup in the <b>Upload backup</b> box.</li> <li>■ <b>Choose an existing backup:</b> Select the backup that you want to restore from the <b>Backup</b> drop-down menu.</li> </ul> </li> <li>ii. Click <b>Restore backup and upgrade</b>.</li> <li>iii. Select the options that you want to restore.</li> <li>iv. Click <b>Restore backup</b>.                             <ul style="list-style-type: none"> <li>» The backup is restored and the upgrade of the repository is automatically started.</li> </ul> </li> </ol>

**Note**

If you look in the upgrade logs (**upgrade-task.log**), you will see one of the following lines near the end:

- INFO - COMPLETED Upgrade the database version to [5.2]
- INFO - \*\*\* Results of upgrade from version 5.1 to version 5.2 \*\*\*



This means that the repository has upgraded to 5.2 at this point. The upgrade to a later version, for example 5.7.12, is performed during the start of the DGC service and is therefore not logged in this log file, but in **dgc.log**, which you can find in the diagnostic file.

# Upgrade the activity history after an upgrade to 2020.11/5.7.7

After an upgrade to 2020.11/5.7.7, the activity history of assets is not automatically visible in Collibra Data Governance Center. To view the activity history, you have to upgrade the history.

## Note

- The backup you restore needs to contain history data. This is one of the options when [creating](#) a backup.
- This is a one-time only action, subsequent upgrades don't require this extra step.

## Steps

1. In the main menu, click , then  **Settings**.
  - » The [Collibra DGC settings page](#) opens.
2. Click **General**.
  - » The [general settings](#) appear on the **Activities** tab page.
3. At the bottom of the page, click **Upgrade History**.

## What's next?

The history in the backup is converted to the new environment. The conversion time depends on the size of the history in the backup.

You can see the status of the history upgrade by [viewing](#) your activities.

## Post-upgrade actions

After you have successfully upgraded your Collibra Data Governance Center to version 5.7, you may have to execute several manual post-upgrade steps to bring your environment in the same state as before the upgrade.

Keep in mind that the upgrade from 4.5.x/4.6.x to 5.7 has some [limitations](#).

## Post-upgrade configuration for Jobserver

If you are upgrading the Jobserver from 2021.02 to any newer version and there is no communication between the Jobserver and the Collibra DGC environment, check [this troubleshooting article](#).

### Adjusting custom configurations

If you upgrade from 4.5.x or 4.6.x to 5.1 or newer, the configuration options from 4.5.x/4.6.x will be available in the Collibra Console user interface instead of the 4.x configuration file that was visible in the DGC 4.x Settings. During upgrade to 5.1 or newer, the 4.x configuration file is read, and, where possible, the equivalent 5.1 (or newer) configuration options are set automatically. After upgrade from 4.5.x/4.6.x, you must verify that all your custom configurations in 4.5.x/4.6.x are correctly set in 5.1 or newer.

**Tip** If you upgrade from 5.0 to 5.1 or newer, all configuration options are upgraded correctly, and no manual post-upgrade steps are needed for the configuration.

There are some configuration options from 4.5.x or 4.6.x that are no longer available in 5.1 or newer. These configuration options are listed in the following table. The second column indicates where you could find the configuration in the 4.5.x/4.6.x configuration file.

Configuration option	4.5.x/4.6.x configuration location
Hibernate cache configuration	system/core/hibernate-cache/*
Method cache configuration	system/core/method-cache/*
Cache aside configuration	system/core/cache-aside/*
Workflow job executor activate boolean	system/core/workflow/engine/job-executor-activate
gcf suppress boolean	system/ui/gcf/suppress

Configuration option	4.5.x/4.6.x configuration location
JNDI information for SSL configuration	system/core/security/ssl/jndi-name
Snapshot in memory paging and ordering boolean	system/core/snapshot/inMemoryPagingOrdering
Use http cache boolean	system/core/http-cache/use-http-cache

If you are upgrading from 4.5.x/4.6.x, the base URL may no longer be valid.

You have to verify the BaseURL configuration. This was located under system/core/base-url in the 4.5.x/4.6.x configuration file. If necessary, adjust this to the base URL of your 5.1 environment (or newer).

## Packaged workflow deployments

In general, when you start your Collibra Data Governance Center environment, all missing packaged workflows are deployed, enabled and configured with the default settings.

**Note** OOTB workflows are not automatically updated after an upgrade.

The following list of rules applies to OOTB workflow deployments in version 5.1 or newer when you (re)start an environment:

- OOTB workflows that are missing (deleted or never deployed), are deployed, enabled and configured with the default settings.
- Deployed OOTB workflows are not automatically updated, even if they are not customized. To install a new version of an OOTB workflow, do either of the following:
  - Remove the existing workflow and then restart the environment. See [Deploy updated packaged workflows](#).
  - Download the updated workflows from the [Community Downloads page](#), customize them if necessary, and [deploy](#) them to your environment.
- If you created a workflow with the name of an OOTB workflow and the actual OOTB workflow is not deployed, the actual OOTB workflow is deployed, enabled and configured with a name having an **OOTB\_** prefix, for example OOTB\_Approval Process.



**Tip** Disable the OTTB workflows you do not want to use. If you delete them, they are redeployed when the environment is restarted.




## Deploy updated packaged workflows

After the upgrade to 5.1 or newer, you have to redeploy some packaged workflows to be compatible with the installed Collibra Data Governance Center version.

### Prerequisites

You have a [global role](#) with the Workflow Administration or the System Administration [global permission](#), for example Sysadmin.

### Steps

1. Open Collibra DGC.
2. In the main menu, click , then  **Settings**.
  - » The [Collibra DGC settings page](#) opens.
3. In the tab pane, click **Workflows** → **Definitions**.
4. Click  in the row of the OOTB workflow that you want to delete.

Do this for every OOTB workflow that you want to delete.

**Note** If you delete an OOTB workflow that you have customized, you have to reapply these customizations when the new version of the workflow is deployed.

5. Restart your environment. See [Stop an environment](#) and [Start an environment](#) respectively.

Restarting the environment will deploy all deleted OOTB workflows, enable and configure them with the default settings.

## OOTB workflows to redeploy

Upgrading from 5.5 or older to 5.6 or newer, automatically [redeploys all workflows](#) of your environment.

**Tip** We recommend to upgrade to 5.7 or newer and to no longer upgrade to versions older than 5.6

If for any reason you have to upgrade to a version older than 5.6, you have to [redeploy](#) the following packaged workflows.

OOTB workflow	BPMN file name	Upgrade from 4.5.x / 4.6.x	Upgrade from 5.0
Issue Creation	IssueCreation.bpmn	Yes	Yes
Issue Management	IssueManagement	Yes	No
Propose New Business Asset	IntakeBusinessAsset.bpmn	Yes	Yes
Propose New Business Term	IntakeBusinessTerm.bpmn	Yes	Yes
Propose New Code Value	IntakeCodeValue.bpmn	Yes	Yes
Propose New Data Asset	IntakeDataAsset.bpmn	Yes	Yes
Propose New Governance Asset	IntakeGovernanceAsset.bpmn	Yes	Yes
Propose New Technology Asset	IntakeTechnologyAsset.bpmn	Yes	Yes
Request Assets Access	RequestAssetsAccessProcess.bpmn	Yes	Yes

**Note** This workflow replaces the Request Data Sets Access workflow from versions 5.4 and older.

**Tip** You can download the packaged workflows for this version from the [Community Downloads page](#).

## Edit custom workflows for API changes

If you upgrade from Collibra Data Governance Center 4.5.x/4.6.x to the most recent version, you have to test all your custom workflows due to major API changes. Custom workflows include packaged workflows that are customized and workflows created by you, by a partner or by Collibra Professional Services.

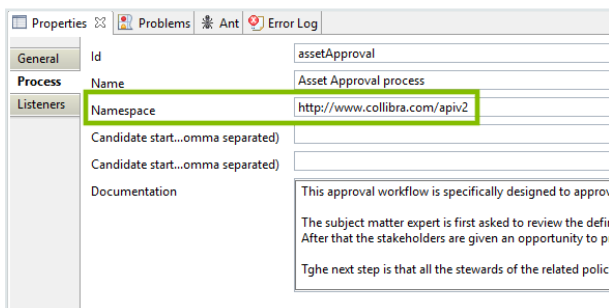
To know all the API changes, see [API changes in 5.1 or newer](#) or consult the documentation of the Java beans version 2 in your Collibra Data Governance Center 5.7 environment.

To update your workflows with the version 2 API, see [API v2 in workflows](#) and [Names and unique names in workflows](#).

## API v2 in workflows

Collibra Data Governance Center has two API versions, v1 and v2. Use API v2 methods as v1 is [deprecated](#).

To validate your code against API v2 in workflows, you have to enter the following value as **Namespace** in the **Process** section of the workflow properties: <http://www.collibra.com/apiv2>.



**Note** The value for the API v2 namespace has to be exactly as mentioned above. It is not a reachable URL.

If you use the API v2 namespace:

- You can no longer use API v1 calls in expressions and Groovy. These will be blocked and will result in failed workflows.
- All [form types](#) are API v2 compatible.
- The Java beans expose and use only UUIDs and API v2 objects.

You can find the API v2 delegates, listeners and JavaBeans documentation in the API documentation of your environment. Go to [https://<your\\_dgc\\_environment\\_url>/docs/index.html](https://<your_dgc_environment_url>/docs/index.html) and click Workflow beans.

**Tip** The direct link to this documentation is [https://<your\\_dgc\\_environment\\_url>/docs/java-workflow-api/index.html](https://<your_dgc_environment_url>/docs/java-workflow-api/index.html).

All Classes

**Packages**

- com.collibra.dgc.workflow.api.bean
- com.collibra.dgc.workflow.api.delegate
- com.collibra.dgc.workflow.api.exception
- com.collibra.dgc.workflow.api.listener

---

**All Classes**

- ActionMailSender
- CheckMandatoryFieldCombinationTaskListener
- FlushExecutionListener
- SendEscalationEventExecutionListener
- SetActivityStreamListener
- SetFormSubtitleTaskListener
- SetResponsibilitiesExecutionListener
- StartCollibraConnectFlowDelegate
- WorkflowBusinessItem
- WorkflowEvent
- WorkflowException
- WorkflowMail
- WorkflowTranslation
- WorkflowUsers
- WorkflowUtility

**Tip** You can use the [Collibra Command Line Interface](#) to test your workflows for deprecated API v1 content and get a report with v2 alternatives.

## Names and unique names in workflows

In Collibra Data Governance Center version 5.4 or newer, including Collibra Data Governance Center, there is a significant API change impacting asset names. Starting with this version, assets have names and unique full names, respectively referred to as `displayName` and `name` in the API. In older versions, you only had `name` to refer to the asset name.

Action via API	Behavior
Add asset	<p>When you add an asset via an API call, you must enter a name and you can specify a different <code>displayName</code>:</p> <ul style="list-style-type: none"> <li>• <code>name</code>: This is the mandatory unique full name of the asset and is represented by <b>Full name</b> in the UI.</li> <li>• <code>displayName</code>: This value is optional and corresponds to the asset <b>Name</b> in the UI.</li> </ul> <p><b>Note</b> If you don't specify a <code>displayName</code>, it automatically defaults to the value of <code>name</code>.</p>
Update asset	<p>You can use <code>name</code> to update the asset <b>Full name</b> and <code>displayName</code>, to update the asset <b>Name</b>.</p> <p><b>Note</b> During an update operation, the <code>displayName</code> does not change if you only update the <code>name</code>.</p>

## Example

The following example shows how you can change the asset name in Collibra Data Governance Center 5.3 or older and 5.4 or newer, both using the Java API v2.

### Note

- API v1 is deprecated.
- After an upgrade to 5.4 or newer, verify that workflows that affect asset names use the new API.

### 5.3 or older:

```
assetApi.changeAsset(builders.get("ChangeAssetRequest")
    .id(UUID assetUUID)
```

```
.name(String newAssetName)  
.build()
```

## 5.4 or newer:

```
assetApi.changeAsset(builders.get("ChangeAssetRequest")  
    .id(UUID assetUUID)  
    .name(String newAssetFullName)  
    .displayName(String newAssetDisplayName)  
    .build())
```

# Post-upgrade procedure for certain GDPR Solution users

If you are upgrading from Collibra DGC 5.5 or older and you have the GDPR Solution installed, you must carry out this procedure, in order to access your upgraded Collibra DGC environment.

## Steps

1. Open Collibra Console with a user profile that has at least the **ADMIN** role.
  - » Collibra Console opens with the **Infrastructure** page.
2. **Create** a backup of your environment that only includes customizations.
3. **Download** the backup.
  - » A ZIP file is downloaded to your hard disk.
4. Extract the ZIP file on your local computer.
  - » A folder with the name of the ZIP file is created.
5. In the created folder structure, go to **/dgc/modules** and delete any files that might be in the directory.

6. In the created folder structure, go to **/dgc/page-definitions** and delete any files that might be in the directory.
7. In your file browser, open the extracted backup folder.
8. Create a ZIP file of all the contents in this folder.

**Warning** Do not create a ZIP file from the extracted directory itself. Doing so will result in an invalid backup file.

9. Restore the new backup file:
  - a. Open Collibra Console with a user profile that has at least the **ADMIN** role.
    - » Collibra Console opens with the **Infrastructure** page.
  - b. **Upload** the new ZIP file to Collibra Console.
  - c. **Restore** the customizations of the new ZIP file.
  - d. Wait until your environment is up and running again.
- » You can now access your Collibra DGC environment.

## Limitations of the upgrade from 4.5.x / 4.6.x

The structure of Collibra Data Governance Center 5.1 or newer has changed in many ways compared to 4.5.x or 4.6.x versions. Collibra has tried to make the upgrade to 5.7 as automated as possible, but due to the difference between the 4.5.x/4.6.x and the 5.7 version, not all data can be upgraded.

### Converted data

The following list contains the data that is automatically converted during the upgrade from 4.5.x/4.6.x to 5.7.

- Binary fact types: Any (untyped) binary fact types in 4.5.x or 4.6.x are upgraded to instances of the new complex relation type 'Fact Type'.
- Categorizations: Any categorizations in 4.5.x or 4.6.x are upgraded to instances of the new relation type 'Asset categorizes/categorized by Asset'.
- Taxonomy: Any taxonomies in 4.5.x or 4.6.x are upgraded to instances of the new relation type 'Asset specializes/generalizes Asset'.

After the upgrade to 5.7, you can view these relations in asset views and diagrams without additional manual steps.

To view them on asset pages, you must add them to the assignment of the asset types for which they exist.

## Unavailable data

Some data will be lost during the upgrade from 4.5.x/4.6.x to 5.2.

- Customizations, amongst others:
  - Custom color per asset type and complex relation type. In the 4.6.x **configuration.xml** file, you could customize the color per asset type and complex relation type that traceability diagrams would use. These customizations are not automatically upgraded during the upgrade to 5.2.  
To set the color and symbol per asset type and complex relation type in 5.2, see [Change how an asset type is represented](#).
- Snapshots: Snapshot are no longer available in 5.x. During the upgrade from 4.5.x/4.6.x to 5.2, all snapshot configurations and snapshot data are removed.

## Troubleshooting the upgrade

### Installation log files

If you encounter an installation failure, you can consult the installation log files for a first investigation.

The installation log file is stored in the Collibra installation directory:

- Default location on Linux as root or user with sudo privileges: **/opt/collibra**
- Default location on Linux as standard user: **~/collibra**
- Default location on Windows Server: **C:\collibra** On Windows, the target installation directory cannot contain spaces.

The log file is **installation.log**.

Only in the event that the installer was not able to create the installation directory, there will be no installation log file.



# Diagnostic files

A diagnostic file is a ZIP file containing files that can be used by support to help solve a support ticket.

For example, it contains log files and some configuration files of the database. It does not contain any actual database content. For more information about logs, see [Logging](#).

## Content

**Tip** You can also find the log files in the `collibra_data` directory, for example `/opt/collibra_data/agent/logs`.

## Console

- `config`: The configuration files of all environments, JVM settings, log settings and server settings.
- `installation`: The installation log file and Collibra DGC installation configuration.
- `logs`:
  - `console_wrapper.log`
  - `console.log`: Registration of all actions that are done in Collibra Console, for example sign in and out, start and stop an environment, create an environment, ...
  - `database*.log`: All transactions of the Collibra Console database.

## Agent

- `config`: All configuration files of the agent.
- `installation`: The installation log file and Collibra Data Governance Center installation configuration.
- `logs`:
  - `agent_commands.log`
  - `agent_wrapper.log`
  - `agent.log`: Registration of all actions that are done by the Collibra DGC agent, for example starting jobs, database operations, ...

## DGC

- config: All configuration files of the DGC service such as the configuration, search properties, JVM configuration and so on.
- logs:
  - dgc\_jobs.log: Logging of the actual execution of a job.
  - dgc\_recommender.log: Logging of the recommendation tool to create data sets for Data Catalog.
  - dgc\_validations.log
  - dgc.log: Logging of the DGC service.

## Repo

- config: All configuration files of the PostgreSQL database.
- logs: Logging of the PostgreSQL operations.
- blockedLocksInfo.json
- componentCalls.dmp
- locksInfo.json
- customMetrics.txt: Statistics of the repository such as number of assets, assets per column, active users and number of jobs.

## Search

- config: The physical configuration of the Search service such as port configuration, host-name, keystore and JVM settings.
- logs: All log files of the Search service.
- JSON files with the Search service's cluster configuration, status, statistics and so on.

## Spark-jobserver

- config: All configuration files of the Jobserver service, including its database configuration.
- logs: All log files of the Jobserver service.

## Monitoring

- config: All configuration files of the Monitoring service.
- logs: All log files of the Monitoring service.
- snapshot: The snapshot of the monitoring database that is created when you create the diagnostics file.

## Other files

- benchmark-result.txt: This file contains the performance benchmark results if selected during the [creation](#) of the diagnostic file.
- infraReport.txt: This file contains the details of the infrastructure on which Collibra DGC is installed.
- installation.log: This file contains the logging of the installation process.
- installationConfig.json: This file contains the settings that were selected during the installation process such as TCP ports and installation directory.

## Upgrade fails on backup

One of the steps during an upgrade is the creation of a backup. If creating the backup takes too much time, the upgrade will fail.

## Resolution

[Increase](#) the timeout settings of the backup, the default value is 12 hours or 43 200 000 milliseconds.

## Error "Version mismatch"

If you upgrade a Collibra Data Governance Center 5.0 to 5.1 or newer by overwriting an existing setup, it may occur that you get an error if you start the Data Governance Center service before you have upgraded the repository.

## Error

### Version mismatch

There is a version mismatch between Data Governance Center and linked repository. Please upgrade the environment to be able to start the service.

## Resolution

Upgrade the repository as described in [Install 5.7.12 over a 5.2 or newer version](#).

## DGC does not start after an upgrade

If you upgraded a multi-node environment, it is possible that the environment doesn't start anymore.

In Collibra Console you see the following error message:

```
Multi nodes environment cannot mix loopback and public addresses.
```

To work around this issue, you can choose one of the following procedures:

- [via the Console configuration file](#).
- [via the Collibra Console user interface](#).

## Collibra Console configuration file

1. Open an SSH session to the node on which Collibra Console runs.
2. Back up **console.db**:

```
cp /collibra_data/console/console.db \  
  /collibra_data/console/console.db.bck
```

**Note** The path to the file can be different for your environment.

3. [Stop](#) Collibra Console.
4. Open the file **/collibra\_data/console/console.db** for editing.

5. In the **nodeSet** section, look up the nodes that have a key **hostName** with value `localhost`.

```
"nodeSet" : [ {
  ...
  "hostName" : "localhost",
  "port" : 8081,
  "name" : "NODE NAME",
  "registered" : true,
  ...
} ],
```

6. Replace `localhost` by the private IP address of that node and repeat this for all nodes in this **nodeSet** section.
7. Save and close the file.
8. [Start Collibra Console](#).
9. [Start the environment](#).

## Collibra Console user interface

1. Open Collibra Console with a user profile that has the **SUPER** role.
  - » Collibra Console opens with the **Infrastructure** page.
2. Remove the relevant services from the environment and optionally repository clusters. The relevant services are the services that are installed on the nodes which are configured as `localhost`.
3. [Remove](#) the node from Collibra Console.
4. [Add](#) the node again in Collibra Console using the private IP address of the node.

**Note** If you receive the following error, follow the procedure as described on [Collibra Community](#).

```
Error while trying to set up a new node. Is the node
up and address correct?
certificateRegistrationFailed Message:
javax.ws.rs.ProcessingException:
java.net.SocketException:
Unexpected end of file from server.
```

5. Add the services on that node to the [environment](#) and or [repository cluster](#).
6. [Start](#) the environment.

## Collibra DGC service management

When you install Collibra Data Governance Center, services are installed on your system (Linux as well as Windows). In this section, you learn more about these services and how you can manage them.

### In this chapter

#### Collibra services on Linux with root permissions

If you install Collibra Data Governance Center as a root user on a Linux system, the following items are also installed:

- The **Collibra Agent** service
- The **Collibra Management Console**
- An extra user: **collibra**. The extra user is necessary to run the Collibra DGC software. You cannot sign in with this user.

**Note** If you installed Collibra DGC as a normal user, see [Collibra DGC services on Linux as non-root user](#).

To manage the Collibra DGC services, use the default service management tool of your operating system:

```
service collibra-agent <command>  
service collibra-console <command>
```

You can use the following commands to control the services:

- start
- stop
- restart
- status

**Note** The services are automatically started after a restart of a node.

## Collibra services on Linux as non-root user

If you have installed Collibra Data Governance Center as a non-root user on Linux, there are no services added to the Linux services list.

**Note** If you installed Collibra DGC as root, see [Collibra DGC services on Linux](#).

You have to manage the Collibra services manually or install them afterwards.

Similar to the installation with the root user, you can only manage the agent and Collibra Console services. The other services in an environment are then managed via the Collibra Console user interface.

In the installation directory, by default `~/collibra`, you find each Collibra service as a separate directory:

- agent
- console

Each of these directories has a **bin** directory, which contains the script to manage these services.

By default, you have to start these services manually after the restart of the node.

### Run the script

- agent: `./agent <command>`
- console: `./console <command>`

**Tip** If you use the install command, the service is added as daemon, which can then be configured to start with the start of your operating system.

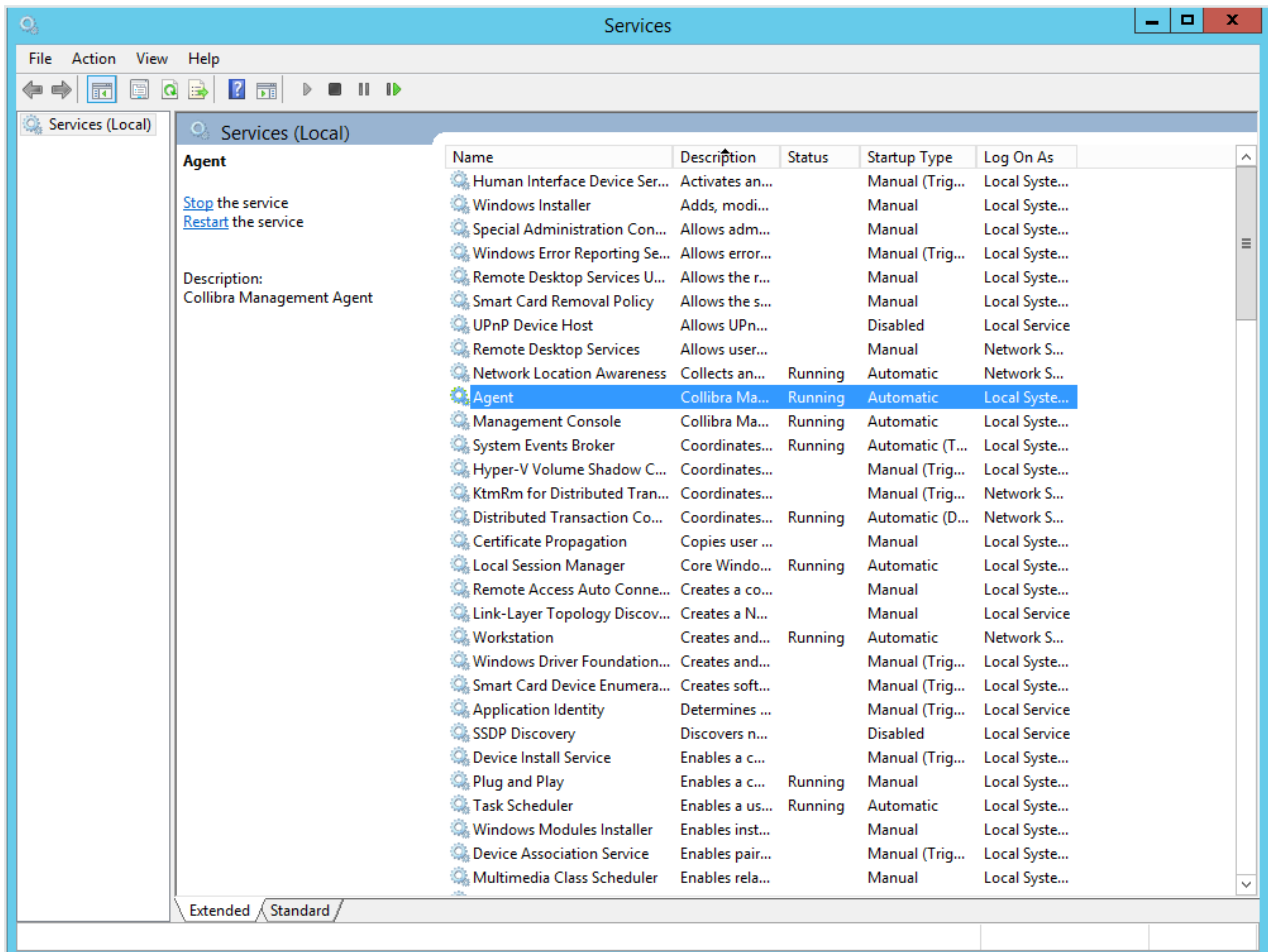
## Commands

Command	Description
console	Start in the current console.
start	Start in the background as a daemon process.
stop	Stop if running as a daemon or in another console.
restart	Stop if running and then start.
condrestart	Restart only if already running.
status	Display the current status.
install	Install the service as daemon and manage further through the operating system's service management.
remove	Remove the service from the node.
dump	Request a Java thread dump if running.

## Collibra services on Windows

When you install Collibra Data Governance Center on a Windows system, two services are installed as well, **Agent** and **Management Console**.





The **Startup Type** of both services must be *automatic* or Collibra DGC is not available when the server is restarted.

To manage these services, right-click on the service and select the operation that you want to perform.

# API changes in 5.1 or newer

Collibra Data Governance Center 5.1 and newer have had a major overhaul with many functional, architectural and infrastructural changes to improve our product. Collibra has tried to keep the API backwards compatible as much as possible, but this was not always possible.

In this section you find an overview of the API changes in 5.1 and newer.

## In this chapter

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# Deprecated API v1

In an earlier version of Collibra Data Governance Center, we introduced [Core API v2](#) next to Core API v1. From version 5.5.0 onwards, we have marked some API v1 interfaces, classes, methods, fields and enumerations as deprecated. You can open an overview of all Core API v1 deprecated content by following the **DEPRECATED** link of the Core API v1 documentation.

The screenshot shows the 'Deprecated API' overview page. The top navigation bar includes links for OVERVIEW, PACKAGE, CLASS, TREE, **DEPRECATED** (highlighted with a green arrow), INDEX, and HELP. Below the navigation bar, there are links for PREV, NEXT, FRAMES, and NO FRAMES. The main content area is titled 'Deprecated API' and contains a 'Contents' section with links to 'Deprecated Interfaces', 'Deprecated Classes', 'Deprecated Fields', 'Deprecated Methods', and 'Deprecated Enum Constants'. A section titled 'Deprecated Interfaces' lists several interfaces: 'com.collibra.dgc.core.component.activity.ActivityStreamComponent', 'com.collibra.dgc.core.component.bootstrap.BootstrapComponent', 'com.collibra.dgc.core.component.CompareComponent', and 'com.collibra.dgc.core.component.ConfigurationComponent'.

Deprecated means that you can still use the content in this version, but we recommend to migrate to Core API v2. If the deprecated content has an alternative in Core API v2, it will be clearly indicated in the documentation as shown in the following example:

The screenshot shows the 'Interface ActivityStreamComponent' page. The page is marked as 'Deprecated.' and shows the source code for the interface. A green arrow points to a method signature that is also marked as 'Deprecated.' and includes a note to 'Use com.collibra.dgc.core.api.component.activitystream.ActivityStreamApi#getActivities(FindActivitiesRequest)'.

```

@Deprecated
public interface ActivityStreamComponent

Method Summary
All Methods Instance Methods Abstract Methods Deprecated Methods
Modifier and Type Method and Description
java.util.List<com.collibra.dgc.core.model.activity.Activity> getActivities(com.collibra.dgc.core.dto.activity.ActivityParameters activityParameters)
Deprecated.
Use
com.collibra.dgc.core.api.component.activitystream.ActivityStreamApi#getActivities(FindActivitiesRequest)

```

If there is no alternative available in API v2, we recommend to file a [support ticket](#) or a feature request on the [Collibra Ideation platform](#).

## API changes in 5.1 or newer

A new API (version 2) is introduced and will replace the API version 1 in the future. Everything from API v1 should therefore be regarded as deprecated. Where possible, we recommend to replace all API v1 calls by API v2.

It is possible that not every API v1 method has a corresponding API v2 method. Keep in mind that not all API v1 methods will be replaced, because many API v1 methods were not intended to be available in a public API. API v2 is a cleaner API that can be kept backwards compatible more easily.

As a consequence of the introduction of the API v2, the REST path `/latest` should no longer be used to access the API v1. The existing path `/1.0` should be used instead.

The API documentation is still available via <https://<yourdgcinstance>.yourcompany.com/docs/index.html>, where you can find the Collibra DGC Java and REST APIs.

**Note** REST API calls and errors are stored in the database, not in the logs.

As of version 5.3, you also have an import API.

## Infrastructural changes

With the introduction of Collibra Data Governance Center 5.0, many changes have been introduced in the infrastructure to make it more robust, scalable and future proof. Due to these changes, the API that was available to maintain and configure this infrastructure has been removed or changed. Some of these changes include:

- Use of an embedded PostgreSQL database.
- Introduction of Collibra Console, which is used for configuration, logging, backup and restore, upgrade, and so on.
- Fixed use of a Tomcat application server.

## Examples

- `ApplicationComponent.isRestartNeeded()` has been removed.
- `DatabaseResource` has been removed.

# Architectural changes

## Representation and Term hierarchy

One of the main architectural changes has been applied in the hierarchy of the **Representation** class. Most of the Collibra Data Governance Center model was extended from this **Representation** and its subclass **Term**. Some model concepts have been removed from this hierarchy. As a consequence, you can no longer use these models as if they are a representation or term (asset) in the generic methods of that class hierarchy.

For example, `TermComponent.getTerm(String term)` cannot be used anymore to retrieve a status by id, use `StatusComponent.getStatus(String status)` instead.

The models that are removed from the **Representation** and **Term** hierarchy include:

- Status
- VocabularyType (DomainType)
- ConceptType (AssetType)
- AttributeType
- BinaryFactType (RelationType)
- ComplexRelationType

Because these models extended from the **Representation** and **Term** classes, some functionalities have become obsolete, for example status, attachments, comments, workflows, relations. These APIs have been removed.

Since these models are no longer represented as assets, the meta domains containing these assets are obsolete and have been removed.

These domains include:

- Statuses (00000000-0000-0000-0000-000000006004)
- Vocabulary Types (00000000-0000-0000-0000-000000006002)
- Concept Types (00000000-0000-0000-0000-000000006001)

- Attribute Types (00000000-0000-0000-0000-000000006003)
- Relation Types (00000000-0000-0000-0000-000000006009)
- ComplexRelationTypes (00000000-0000-0000-0000-000000006006)

Some meta asset types, that were used to define the removed types as if they were assets, are not needed anymore.

These meta asset types have been removed:

- Attribute type (00000000-0000-0000-0000-000000005100)
- Relation type (00000000-0000-0000-0000-000000000011)
- STATIC\_LIST Attribute Type (00000000-0000-0000-0000-000000005013)
- MULTI\_STATIC\_LIST Attribute Type (00000000-0000-0000-0000-000000005213)
- DATE Attribute Type (00000000-0000-0000-0000-000000005113)
- DATE\_TIME Attribute Type (00000000-0000-0000-0000-000000005114)
- STRING Attribute Type (00000000-0000-0000-0000-000000005115)
- BOOLEAN Attribute Type (00000000-0000-0000-0000-000000005116)
- NUMERIC Attribute Type (00000000-0000-0000-0000-000000005117)
- SCRIPT Attribute Type (00000000-0000-0000-0000-000000005214)
- USER\_TYPE Attribute Type (00000000-0000-0000-0000-000000005012)

The properties of these models have become real properties on the classes themselves and do no longer make use of the attribute system on assets to define them.

For instance a description is now a direct property of a vocabulary type and is no longer a description attribute on the vocabulary type asset. The API for calls like `getDescription()` has been kept backward compatible as much as possible, but it is no longer possible to use generic methods like

`AttributeComponent.getAttributesOfTypeForRepresentation(String representation, String label)` to retrieve this information. This has also an impact on the viewconfig that is used for exporting.

Two special asset types were used at the top level to define the hierarchy. Their purpose was more academic than needed for the working of the product, and have also been removed:

- Thing (00000000-0000-0000-0000-000000000001)
- Object Type (00000000-0000-0000-0000-000000000005)

## Examples

- VocabularyComponent.findRelationTypes() has been removed.
- RelationReference.getStatusReference() has been removed.
- GET /1.0/concept\_type/{representation}/workflows (ConceptTypeResource) has been removed.

## Complex Relation Type

The Complex Relation Type implementation made use of assignments and the assignment groups. Due to assignment and assignment group changes, the complex relation type implementation and the related API have been changed as well while at the same time the API has been improved with more useful methods.

### Examples

- ComplexRelationTypeComponent.changeRelationTypeContainers() has been removed.
- ComplexRelationType.getMandatoryAttributeTypes() has been added.

## Activity stream (history)

The Activity Stream (history) has been completely refactored. It no longer uses **Hibernate Envers** to store the history information in audit tables. Also, the model to represent the history has changed to let it return more useable information for the users.

Most related APIs have changed and some are deprecated. ActivityStreamComponent is deprecated and ActivityStreamApi should be used instead.

### Examples

- WorkflowComponent.getTaskActivityStream() returns a new model.
- RevisionComponent has been removed.

# Configuration

The Configuration functionality has been refactored completely, therefore the related APIs have also almost completely changed. You have to provide the configuration information by using the **ConfigurationComponent.getProperty()** call.

On application level, you configure Collibra Data Governance Center in Collibra Console instead of adjusting the Collibra DGC configuration file.

## Example

- `ConfigurationComponent.isMonthlyNotificationEnabled()` has been removed.

# Functional changes

Some functions have changed, others are removed. As a consequence the related APIs have been adapted to fit the new functionality or have been removed.

# Assignment

The **Assignment** functionality has been changed and as a consequence most related APIs too.

The assignment of the different aspects (statuses, attribute types, relation types, domain types, ...) now happens directly per asset type. The concepts of assignment containers and assignment groups have been removed.

Articulation rules are also created and assigned directly on the asset type. The concept of an articulation calculator has been removed.

## Examples

- `WorkflowComponent.addAssignmentRule()` requires extra input parameters and returns a modified model.
- `StatusGroupComponent` has been removed.
- `ConceptTypeContainer` has been removed.



## Snapshots

The snapshot functionality has been removed. The related APIs for snapshots, snapshot configurations and comparison of snapshots have been removed.

## License management

The licensing functionality has changed and is now managed through the Collibra Console API.

### Example

- `LicenseComponent.setLicense()` has been removed.

## Taxonomy, Categorization and Classification

The taxonomy, categorization and classification functionalities have been removed. You have to use regular relations to indicate a taxonomy or categorization between assets.

Existing taxonomies are being replaced during an upgrade with relations of the type `Asset specializes/generalizes Asset` (00000000-0000-0000-0000-000000007065).

For the categorization of new relations types like `Issue` categorized by, you can use `Issue Category` (00000000-0000-0000-0000-000000007067).

The concept of a classification does not exist anymore.

### Examples

- `ClassificationComponent` has been removed.
- `TermComponent.isCategorizationType()` has been removed.

## Naming rule

The **Naming rule** functionality has been removed. This functionality was not fully available in Collibra Data Governance Center 4.x and was not used. The related API has been removed.

## Examples

- VocabularyComponent.changeNamingRule() has been removed.
- NamingRuleReference has been removed.

## Views

The **Views** functionality has been improved and extended, for example with the concept of a working view. This has impact on its related API.

## Examples

- ViewComponent.getDefaultViewToShowForLocation() has been removed.
- View.setWorkingView() has been added.

## Tags

Tags are a new functionality introduced in 5.1. Its introduction extends some APIs and has mainly impact on the **Term** model.

## Examples

- Term.getTags() method has been added.
- FoundElement.getTags() method has been added.

## Fact type

In 4.x, the **Fact type** functionality was a functionality where a relation could be put between two assets without making use of a relation type. This functionality has been replaced by the **Fact Type** complex relation.

During the upgrade, any such existing fact types are being converted into instances of the **Fact Type** complex relation. APIs related to the **Fact type** functionality have been removed.

The Fact Type was often called 'BinaryFactType' which was mostly reusing the same API. The BinaryFactType has now become the relation type due to the representation changes and has therefore impact from the same changes.

## Global create

In Collibra Data Governance Center 5.0, the **Global create** functionality has been introduced which enables creating assets, domains and communities and starting certain workflows from a central create button that is available anywhere in the application. To support this functionality some APIs have been extended. Additionally, an extra flag was added to workflow definitions to indicate whether they can be used by the **Global create** functionality.

### Example

- `WorkflowDefinition.setGlobalCreate()` was added.

## Diagrams

The diagrams were subjected to a big overhaul in Collibra Data Governance Center 5.1/5.7 and their functionality and design have been improved extensively. However, most of the Diagram related APIs are non-public. Therefore, these changes do not have much impact on the v1 public API.

The biggest change is in the format that is being used for the configuration of the diagram views. The JSON syntax used in 5.1/5.7 is updated from the syntax used in 4.5x, 4.6.x or 5.0. The configuration of a diagram view remains in a JSON format though and has no immediate impact on the method in the public API.

## Integrations

The two packaged integrations that were included in 4.x, Trillium and IBM BG, are no longer supported as of Collibra Data Governance Center 5.0. Their related APIs have been removed.

### Examples

## Chapter 2

- 1.0/sync/ibm (SyncIBMResource) has been removed.
- 1.0/sync/trillium (SyncTrilliumResource) has been removed.

# Java API changes

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ApplicationComponent	Modified	isUpgradePostActionsNeeded	Removed	5.0	Infrastructure
ApplicationComponent	Modified	isRestartNeeded	Removed	5.0	Infrastructure
ApplicationComponent	Modified	isRestoreInProgress	Removed	5.0	Infrastructure
CompareComponent	Modified	compareSnapshots	Removed	5.1	Snapshots
CompareComponent	Modified	compareSnapshotWithCurrent	Removed	5.1	Snapshots
CompareComponent	Modified	compareCurrentWithSnapshot	Removed	5.1	Snapshots

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConfigurationComponent	Modified	Almost all methods removed, configuration was refactored completely. Methods that remained: - getString(String) - clear(String) - setProperty(String, Object) - getProperty(String, Class<T>) - getInteger(String) - getBoolean(String)	Remained	5.0	Configuration
LicenseComponent	Modified	setLicense	Removed	5.0	License
LoggerComponent	Unchanged				
SearchComponent	Modified	search(String search, final List<String> types, int max) - use {@link #search(SearchParameters)}	Removed	5.0	
SearchComponent	Modified	search(String search, int max) - use {@link #search(SearchParameters)}	Removed	5.0	
UserComponent	Unchanged				

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VerbaliserComponent	Modified	verbalise(AssetType)	Modified	5.1	Representation
VerbaliserComponent	Modified	verbalise(RelationType)	Modified	5.1	Representation
VerbaliserComponent	Modified	verbalise(AttributeType)	Modified	5.1	Representation
WorkflowComponent	Modified	getTaskActivityStream	Modified	5.1	History
WorkflowComponent	Modified	getTaskActivityFilter	Modified	5.1	History
WorkflowComponent	Modified	addAssignmentRule	Modified	5.1	Assignment
WorkflowComponent	Modified	changeAssignmentRule	Modified	5.1	Assignment
ActivityStreamComponent	Modified			5.0	History
RevisionComponent	Removed				History
ArticulationComponent	Modified	removeArticulationCalculator	Removed	5.1	Assignment
ArticulationComponent	Modified	getAllArticulationCalculators	Removed	5.1	Assignment

## Chapter 2

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ArticulationComponent	Modified	getArticulationCalculator	Removed	5.1	Assignment
ArticulationComponent	Modified	getArticulationCalculatorByName	Removed	5.1	Assignment
ArticulationComponent	Modified	changeArticulationCalculator	Removed	5.1	Assignment
ArticulationComponent	Modified	addArticulationCalculator	Removed	5.1	Assignment
ArticulationComponent	Modified	addArticulationCalculator	Removed	5.1	Assignment
ArticulationComponent	Modified	addAssignmentRule	Removed	5.1	Assignment
ArticulationComponent	Modified	changeAssignmentRule	Removed	5.1	Assignment
ArticulationComponent	Modified	changeAssignmentRules	Removed	5.1	Assignment
ArticulationComponent	Modified	removeAssignmentRule	Removed	5.1	Assignment
ArticulationComponent	Modified	getAssignmentRule	Removed	5.1	Assignment
ArticulationComponent	Modified	addArticulationRule	Removed	5.1	Assignment



v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ArticulationComponent	Modified	changeArticulationRule	Removed	5.1	Assignment
ArticulationComponent	Modified	changeArticulationRules	Removed	5.1	Assignment
ArticulationComponent	Modified	removeArticulationRule	Removed	5.1	Assignment
AssignmentGroupComponent	Removed			5.1	Assignment
AttributeTypeGroupComponent	Removed			5.1	Assignment
ComplexRelationTypeComponent	Modified	addAttributeTypeContainer	Removed	5.1	Assignment
ComplexRelationTypeComponent	Modified	addRelationTypeContainer	Removed	5.1	Assignment
ComplexRelationTypeComponent	Modified	changeAttributeTypeContainers	Removed	5.1	Assignment
ComplexRelationTypeComponent	Modified	changeRelationTypeContainers	Removed	5.1	Assignment
ComplexRelationTypeComponent	Modified	findComplexRelationTypesContainingSignifiers	Removed	5.1	Complex Relation Type
ComplexRelationTypeComponent	Modified	getAttributeTypeContainers	Removed	5.1	Assignment

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ComplexRelationTypeComponent	Modified	getAttributeTypes(complexRelationType)	Removed	5.1	Complex Relation Type
ComplexRelationTypeComponent	Modified	getAttributeTypes(complexRelationType, required)	Removed	5.1	Complex Relation Type
ComplexRelationTypeComponent	Modified	getRelationTypeContainters	Removed	5.1	Complex Relation Type
ComplexRelationTypeComponent	Modified	getRelationTypes(complexRelationType)	Removed	5.1	Complex Relation Type
ComplexRelationTypeComponent	Modified	getRelationTypes(complexRelationType, identifying)	Removed	5.1	Complex Relation Type
ComplexRelationTypeComponent	Modified	removeContainter	Removed	5.1	Assignment
ConceptTypeGroupComponent	Removed			5.1	Assignment
MetricGroupComponent	Removed			5.1	Assignment
StatusGroupComponent	Removed			5.1	Assignment

## Chapter 2

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TraceabilityGroupComponent	Removed			5.1	Assignment
ValidationGroupComponent	Removed			5.1	Assignment
AttachmentComponent	Unchanged				
AttributeComponent	Modified	getAttributesInGroupForRepresentation	Removed	5.1	Representation
AttributeTypeComponent	Modified	getAttributeTypesInGroup	Removed	5.1	Representation
BackupComponent	Removed			5.0	Infrastructure
BootstrapComponent	Modified	initialize	Removed	5.0	Infrastructure
BootstrapComponent	Modified	bootstrap	Removed	5.0	Infrastructure
BootstrapComponent	Modified	createBootstrapScript	Removed	5.0	Infrastructure
BootstrapComponent	Modified	getAvailableBootstrapScripts	Removed	5.0	Infrastructure
CommentComponent	Unchanged				

## Chapter 2

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
CommunityComponent	Unchanged				
FileComponent	Unchanged				
HyperlinkComponent	Unchanged				
I18nComponent	Modified	cleanCache	Removed	5.0	Infrastructure
ImpactComponent	Unchanged				
InputViewComponent	Modified	getColumnNames	Modified	5.0	
IOComponent	Unchanged				
OutputViewComponent	Modified	getTaxonomyJSONDataTable	Removed	5.0	
OutputViewComponent	Modified	getTreeJSONDataTable	Removed	5.0	
IssueComponent	Unchanged				
JobComponent	Unchanged				

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
LogComponent	Unchanged				
NounExtractorComponent	Unchanged				
RelationComponent	Modified	changeStatus	Removed	5.1	Representation
RelationComponent	Modified	findPossibleStatuses	Removed	5.1	Representation
RelationTypeComponent	Modified	addRelationType	Modified	5.1	Representation
RelationTypeComponent	Modified	findPossibleRelationTypesForSourceTerm	Modified	5.1	Representation
RelationTypeComponent	Modified	findPossibleRelationTypesForTargetTerm	Modified	5.1	Representation
RelationTypeComponent	Modified	findPossibleRelationTypesForSourceType	Modified	5.1	Representation
RelationTypeComponent	Modified	findPossibleRelationTypesForTargetType	Modified	5.1	Representation
RelationTypeComponent	Modified	findRelationTypesContainingRole	Modified	5.1	Representation
RelationTypeComponent	Modified	findRelationTypesContainingRoleAndHeadOrTail	Modified	5.1	Representation

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RelationTypeComponent	Modified	findRelationTypesContainingRoleOrSignifier	Modified	5.1	Representation
RelationTypeComponent	Modified	getAllRelationTypes	Modified	5.1	Representation
RelationTypeComponent	Modified	getCodeRelationType	Modified	5.1	Representation
RelationTypeComponent	Modified	getRelationType	Modified	5.1	Representation
BinaryFactTypeComponent	Removed			5.1	Representation
ClassificationComponent	Removed			5.1	Categorization
ComplexRelationComponent	Modified	getRelations	Removed	5.1	Complex Relation Type
ConceptTypeComponent	Modified	ConceptType addConceptType(String signifier, String parent);	Modified	5.1	Representation
ConceptTypeComponent	Modified	ConceptType addConceptType(String signifier)	Modified	5.1	Representation

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeComponent	Modified	Term addConceptTypeWithCustomUUID(String signifier, String uuid)	Modified	5.1	Representation
ConceptTypeComponent	Modified	Term addConceptTypeWithCustomUUID(String signifier, String parent, String uuid)	Modified	5.1	Representation
ConceptTypeComponent	Modified	List<ConceptType> find- ConceptTypesContainingSignifier(String searchSignifier, boolean includeSystem, int offset, int limit)	Modified	5.1	Representation
ConceptTypeComponent	Modified	List<ConceptType> find- ConceptTypesContainingSignifier(String searchSignifier, int offset, int limit)	Modified	5.1	Representation

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeComponent	Modified	List<ConceptType> find- ConceptTypesContainingSignifier(String searchSig- nifier, boolean includeSystem, String resourceType, int offset, int limit)	Removed	5.1	Representation
ConceptTypeComponent	Modified	ConceptType getConceptType(String conceptType)	Modified	5.1	Representation
ConceptTypeComponent	Modified	List<ConceptType> getConceptTypes()	Modified	5.1	Representation
ConceptTypeComponent	Modified	ConceptType getBusinessTermType()	Modified	5.1	Representation
ConceptTypeComponent	Modified	ConceptType getCodeTermType()	Modified	5.1	Representation
ConceptTypeComponent	Modified	Map<ConceptType, Object> getCon- ceptTypeHierarchy()	Modified	5.1	Representation



v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeComponent	Modified	List<Representation> findPossibleAttributeOrRelationTypes(String conceptType)	Removed	5.1	Representation
RepresentationComponent	Modified	boolean isSpecializedConceptOf(String toTest, String parent)	Removed	5.1	Representation
RepresentationComponent	Modified	Collection<Representation> getSpecializedConcepts(String representation, int limit)	Removed	5.1	Representation
RepresentationComponent	Modified	List<AttributeTypeGroup> getAttributeAndRelationGroups(String representation)	Removed	5.1	Assignment
RepresentationComponent	Modified	List<StatusGroup> getStatusGroups(String representation)	Removed	5.1	Assignment
RepresentationComponent	Modified	List<ConceptTypeGroup> getConceptGroups(String representation)	Removed	5.1	Assignment

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RepresentationComponent	Modified	Representation changeGeneralConcept(String specializedRepresentation, String generalRepresentation)	Removed	5.1	Representation
RepresentationComponent	Modified	Job changeGeneralConceptsAsync(List<String> specializedRepresentations, String generalRepresentation)	Removed	5.1	Representation
RepresentationComponent	Modified	Representation removeGeneralConcept(String representation)	Removed	5.1	Representation
RepresentationComponent	Modified	List<Representation> getAllGeneralConcepts(String representation)	Removed	5.1	Representation
RepresentationComponent	Modified	boolean hasGeneralConcept(String representation, String generalConcept)	Removed	5.1	Representation
RepresentationComponent	Modified	List<Representation> getAllSpecializedConcepts (String representation)	Removed	5.1	Representation
StatusComponent	Unchanged				

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TermComponent	Modified	Term getRootType(String term)	Modified	5.1	Representation
TermComponent	Modified	boolean isCategorizationType(String term)	Removed	5.1	Categorization
TermComponent	Modified	Term removeCategorizationType(String generalConcept, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	Term removeCategory(String category)	Removed	5.1	Categorization
TermComponent	Modified	List<Term> addCategories(String vocabulary, Collection<String> signifiers, String generalConcept, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	Term addCategory(String vocabulary, String signifier, String generalConcept, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	List<Term> changeCategorizationType(Collection<String> categories, String categorizationType)	Removed	5.1	Categorization

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TermComponent	Modified	List<Term> changeCategorizationType(Collection<String> categories, String generalConcept, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	Term changeCategorizationType(String category, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	Term changeCategorizationType(String category, String generalConcept, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	List<Term> findCategories(String generalConcept, String categorizationType)	Removed	5.1	Categorization
TermComponent	Modified	List<Term> findCategorizationTypes(String generalConcept) findCategorizationTypes(String generalConcept)	Removed	5.1	Categorization
TermComponent	Modified	List<Term> findPossibleObjectTypes(String term)	Removed	5.1	Representation
LdapComponent	Unchanged				

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RightsComponent	Unchanged				
MetadataComponent	Modified	String moveDPMetadata(String file)	Removed	5.0	
SnapshotComponent	Removed			5.1	Snapshots
StatisticComponent	Unchanged				
MappingComponent	Unchanged				
UpgradeComponent	Removed			5.0	Infrastructure
ViewComponent	Modified	View getDefaultViewToShowForLocation( String location, View.EType type)	Removed	5.0	Views
ViewComponent	Modified	void setLastSeenView(String view, String resource)	Modified	5.1	Views
ViewComponent	Modified	List<View> getPossibleViewsForResource(String location, boolean startsWith, String resource, String type)	Removed	5.0	Views
ViewComponent	Modified	View getDefaultViewToShowForResource(String location, String resource, String type)	Removed	5.0	Views

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ViewRightComponent					
VocabularyComponent	Modified	Vocabulary changeNamingRule(String vocabulary, String newNamingRule)	Removed	5.0	Naming Rule
VocabularyComponent	Modified	List<Resource> find- PossibleAttributeOrRelationTypes( String vocabulary)	Modified	5.1	Representation
VocabularyComponent	Modified	List<RelationType> findPossibleFactTypes( String vocabulary)	Modified	5.1	Representation
VocabularyComponent	Modified	List<Term> findPossibleObjectTypes(String vocab- ulary)	Modified	5.1	Representation
VocabularyComponent	Modified	List<BinaryFactType> findPossibleRelationTypes (String vocabulary)	Modified	5.1	Representation
VocabularyComponent	Modified	List<BinaryFactType> findRelationTypes(String vocabulary)	Removed	5.1	Representation
VocabularyTypeComponent	Modified	addVocabularyType(java.lang.String signifier)	Modified	5.1	Representation

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeComponent	Modified	DomainType addVocabularyType(java.lang.String signifier, java.lang.String parent)	Modified	5.1	Representation
VocabularyTypeComponent	Modified	DomainType addVocabularyTypeWithCustomUUID (java.lang.String signifier, java.lang.String uuid)	Modified	5.1	Representation
VocabularyTypeComponent	Modified	DomainType addVocabularyTypeWithCustomUUID (java.lang.String signifier, java.lang.String parent, java.lang.String uuid)	Modified	5.1	Representation
VocabularyTypeComponent	Modified	DomainType findVocabularyTypeByName (java.lang.String domainTypeName)	Modified	5.1	Representation
VocabularyTypeComponent	Modified	java.util.List<DomainType> findVocabularyTypesContainingSignifier(java.lang.String searchSignifier)	Modified	5.1	Representation
VocabularyTypeComponent	Modified	java.util.List<DomainType> getAllSpecializedVocabularyTypes(java.lang.String domainType)	Modified	5.1	Representation

v4.6 Component Class	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeComponent	Modified	DomainType getCodeVocabularyType()	Modified	5.1	Representation
VocabularyTypeComponent	Modified	DomainType getGlossaryVocabularyType()	Modified	5.1	Representation
VocabularyTypeComponent	Modified	DomainType getVocabularyType(java.lang.String vocabularyType)	Modified	5.1	Representation
VocabularyTypeComponent	Modified	java.util.Map<DomainType,java.lang.Object> getVocabularyTypeHierarchy()	Modified	5.1	Representation
VocabularyTypeComponent	Modified	java.util.List<DomainType> getVocabularyTypes()	Modified	5.1	Representation



# Java Model changes

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
EntityWithId	Unchanged				
Resource	Modified	checkConstraint()	Removed	5.0	
Resource	Modified	getNaturalIdentifier()	Added	5.0	
Resource	Modified	getParent()	Added	5.0	
Resource	Modified	updateLastModified()	Modified	5.0	
ResourceI18n	Unchanged				
Verbalisable	Unchanged				
ArticulationCalculator	Removed			5.1	Assignment
ArticulationRule	Modified	getAttributeTypeId()	Added	5.1	

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ArticulationRule	Modified	getAttributeValue()	Removed	5.1	
ArticulationRule	Modified	getStatusId()	Added	5.1	
ArticulationRule	Modified	setAttributeValue()	Removed	5.1	
AssignmentGroup	Removed			5.1	Assignment
AssignmentRule	Modified	deepCopy(View)	Added	5.0	Assignment
AssignmentRule	Modified	getView()	Added	5.0	Assignment
AssignmentRule	Modified	getVocabularyType()	Added	5.1	Assignment
AttributeTypeContainer	Removed			5.1	Assignment
AttributeTypeGroup	Removed			5.1	Assignment
ComplexRelationTypeGroup	Removed			5.1	Assignment
ConceptTypeContainer	Removed			5.1	Assignment

## Chapter 2

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeGroup	Removed			5.1	Assignment
MetricGroup	Removed			5.1	Assignment
RepresentationContainer	Removed			5.1	Assignment
StatusContainer	Removed			5.1	Assignment
StatusGroup	Removed			5.1	Assignment
TraceabilityGroup	Removed			5.1	Assignment
ValidationGroup	Removed			5.1	Assignment
ValidationRuleContainer	Removed			5.1	Assignment
Attachment	Unchanged				
AttachmentFactory	Unchanged				
ResourceWithAttachment	Unchanged				

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Attribute	Modified	getLabel()	Removed	5.1	Representation
Attribute	Modified	getType()	Added	5.1	Representation
Attribute	Modified	getValues()	Added	5.1	Representation
BooleanAttribute	Unchanged				
DateAttribute	Unchanged				
DateTimeAttribute	Unchanged				
MultiValueListAttribute	Unchanged				
NumericAttribute	Unchanged				
ScriptAttribute	Unchanged				
SingleValueListAttribute	Modified	setValue(String value)	Removed	5.0	
StringAttribute	Unchanged				

## Chapter 2

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Comment	Unchanged				
CommentFactory	Unchanged				
ResourceWithComment	Unchanged				
Community	Unchanged				
CommunityFactory	Unchanged				
DatabaseConstants	Removed			5.0	Infrastructure
Hyperlink	Unchanged				
Job	Unchanged				
ConstraintNamingRule	Removed			5.0	Naming Rule
GeneratorNamingRule	Removed			5.0	Naming Rule
NamingRule	Removed			5.0	Naming Rule

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
NamingRuleFactory	Removed			5.0	Naming Rule
DatabaseProperty	Unchanged				
Relation	Modified	getRelationTypeId()	Added	5.1	Representation
Relation	Modified	getTargetId()	Added	5.1	
Relation	Modified	isInComplexRelation()	Added	5.1	Complex Relation Type
Relation	Modified	setStatus()	Removed	5.1	Representation
RelationFactory	Modified	Relation: makeRelation(Term, Term, BinaryFactType, Long, Long)	Modified	5.1	Representation
RelationFactory	Modified	Relation: makeRelation(Vocabulary, String, Vocabulary, String, BinaryFactType, Long, Long)	Modified	5.1	Representation
RelationFactory	Modified	BinaryFactType: makeRelationType(Term, String, String, Term)	Modified	5.1	Representation

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RelationFactory	Modified	BinaryFactType: makeRelationType(Term, String, String, Term , String)	Modified	5.1	Representation
RelationTrace	Modified	addRelationTraceEntry	Modified	5.1	Representation
RelationTrace	Modified	hasEntries()	Added	5.1	Representation
RelationTraceEntry	Modified	getEndingConceptType()	Modified	5.1	Representation
AttributeType	Modified	getAllowedValues()	Added	5.1	Representation
AttributeType	Modified	getAttributeKind()	Added	5.1	Representation
AttributeType	Modified	getDescription()	Added	5.1	Representation
AttributeType	Modified	getIsInteger()	Added	5.1	Representation
AttributeType	Modified	getLanguage()	Added	5.1	Representation
AttributeType	Modified	getName()	Added	5.1	Representation
AttributeType	Modified	getStatisticsenabled()	Added	5.1	Representation

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
AttributeType	Modified	setAllowedValues()	Added	5.1	Representation
AttributeType	Modified	setAttributeKind()	Added	5.1	Representation
AttributeType	Modified	setDescription()	Added	5.1	Representation
AttributeType	Modified	setIsInteger()	Added	5.1	Representation
AttributeType	Modified	setLanguage()	Added	5.1	Representation
AttributeType	Modified	setName()	Added	5.1	Representation
AttributeType	Modified	setStatisticsEnabled()	Added	5.1	Representation
ComplexRelation	Modified	getAssetsFromLegs()	Added	5.1	Complex Relation Type
ComplexRelation	Modified	getComplexRelationType()	Added	5.1	Complex Relation Type
ComplexRelation	Modified	getIdentifyingAssets()	Added	5.1	Complex Relation Type



v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ComplexRelation	Modified	getLegs()	Added	5.1	Complex Relation Type
ComplexRelation	Modified	setLegs()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getAssetTypeIdsOfIdentifyingLegs()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getAttributeTypes()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getAttributeTypesAssigned()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getIdentifyingLegTypes()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getLegTypes()	Added	5.1	Complex Relation Type

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ComplexRelationType	Modified	getMandatoryAttributeTypes()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getMandatoryAttributeTypesIds()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getMaximumCardinalityForAttribute()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getMaximumCardinalityForLegType()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getNonIdentifyingLegTypes()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getOptionalAttributeTypes()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getRelationTypeById()	Added	5.1	Complex Relation Type

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ComplexRelationType	Modified	getRelationTypeForLegTypeId()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getRelationTypeIdsOfIdentifyingLegs()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getRelationTypeIdsOfNonIdentifyingLegs()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	getRelationTypesFromLegs()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	hasAttributes()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	hasAttributeTypeAssigned()	Added	5.1	Complex Relation Type
ComplexRelationType	Modified	hasRelationTypeAssigned()	Added	5.1	Complex Relation Type

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptType	Removed			5.1	Representation
Representation	Modified	getGeneralConcept()	Removed	5.1	Representation
Representation	Modified	getDescriptions()	Removed	5.1	Representation
Representation	Modified	Term: getType()	Modified	5.1	Representation
Representation	Modified	setAttributes()	Added	5.1	Representation
Representation	Modified	setGeneralConcept()	Removed	5.1	Representation
Representation	Modified	setType(Term)	Modified	5.1	Representation
RepresentationFactory	Modified	makeAttributeType()	Removed	5.1	Representation
RepresentationFactory	Modified	makeBinaryFactType()	Removed	5.1	Representation
RepresentationFactory	Modified	makeBooleanAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeConceptType()	Removed	5.1	Representation

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RepresentationFactory	Modified	makeDateAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeDateTimeAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeMultiValueListAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeNumericAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeScriptAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeSingleValueListAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	makeStatus()	Removed	5.1	Representation
RepresentationFactory	Modified	makeStringAttribute()	Removed	5.1	Representation
RepresentationFactory	Modified	Term: makeTerm(String, Vocabulary, String, AssetType)	Modified	5.1	Representation
RepresentationFactory	Modified	Term: makeTerm(Vocabulary, String)	Removed	5.1	Representation
RepresentationFactory	Modified	Term: makeTerm(Vocabulary, String, Term)	Modified	5.1	Representation

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RepresentationFactory	Modified	Vocabulary: makeVocabulary(Community, String, String, Term)	Modified	5.1	Representation
RepresentationFactory	Modified	Vocabulary: makeVocabulary(Community, String, String, Term, NamingRule, String)	Removed	5.1	Representation
RepresentationFactory	Modified	Vocabulary: makeVocabulary(Community, String, String, Term, String)	Modified	5.1	Representation
RepresentationFactory	Modified	makeVocabularyType()	Removed	5.1	Representation
ResourceIDConstants	Modified			5.1	
Snapshot	Unchanged				
SnapshotConfiguration	Modified	ProductModule: getProductModule()	Modified	5.0	Snapshots
Status	Modified	getSignifier()	Added	5.0	Representation
Status	Modified	setSignifier()	Added	5.0	Representation
Status	Modified	getDescription()	Added	5.0	Representation

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Status	Modified	setDescription()	Added	5.0	Representation
Term	Modified	getCategorizationType()	Removed	5.1	Categorization
Term	Modified	isCategory()	Removed	5.1	Categorization
Term	Modified	getTags()	Added	5.1	Tags
Term	Modified	setCategorizationType()	Removed	5.1	Categorization
ValidationRule	Unchanged				
Vocabulary	Modified	addBinaryFactType()	Removed	5.1	Fact Type
Vocabulary	Modified	getBinaryFactTypes()	Removed	5.1	Fact Type
Vocabulary	Modified	getNamingRule()	Removed	5.1	Naming Rule
Vocabulary	Modified	Term: getType(String)	Modified	5.1	Representation
Vocabulary	Modified	setNamingRule()	Removed	5.1	Naming Rule

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyType	Removed			5.1	Representation
WorkflowDefinition	Modified	getAssetAssignmentRules()	Added	5.1	Assignment
WorkflowDefinition	Modified	getDomainAssignmentRules()	Added	5.1	Assignment
WorkflowDefinition	Modified	isGlobalCreate()	Added	5.0	Global Create
WorkflowDefinition	Modified	setGlobalCreate()	Added	5.0	Global Create
BinaryFactType	Removed			5.1	Representation
SnapshotEntry	Unchanged				
RealTimeStatisticEntry	Unchanged				
StatisticEntry	Unchanged				
Mapping	Unchanged				
Address	Unchanged				



## Chapter 2

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Email	Unchanged				
Group	Unchanged				
InstantMessagingAccount	Unchanged				
Member	Modified	getOwnerType()	Added	5.0	
Member	Modified	getPeople()	Added	5.0	
Member	Modified	getUserIds()	Added	5.0	
Member	Modified	isGlobal()	Added	5.0	
PhoneNumber	Unchanged				
Role	Unchanged				
User	Unchanged				
UserAuthenticationEvent	Modified	getDgcVersion()	Added	5.0	

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
UserAuthenticationEvent	Modified	getLicenseType()	Added	5.0	
UserAuthenticationEvent	Modified	getProductPermissions()	Added	5.0	
UserAuthenticationEvent	Modified	getSessionId()	Added	5.0	
UserAuthenticationEvent	Modified	getSessionTimeout()	Added	5.0	
UserAuthenticationEvent	Modified	getUserAgent()	Added	5.0	
UserAuthenticationEvent	Modified	getUserAgentVersion()	Added	5.0	
UserFactory	Unchanged				
Website	Unchanged				
TermValidationResult	Unchanged				
View	Modified	EType	Added	5.0	Views
View	Modified	copyFrom()	Added	5.0	Views

## Chapter 2

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
View	Modified	deepCopy()	Added	5.0	Views
View	Modified	getOriginalView()	Added	5.0	Views
View	Modified	getType()	Added	5.0	Views
View	Modified	isFallback()	Added	5.1	Views
View	Modified	setFallback()	Added	5.1	Views
View	Modified	setOriginalView()	Added	5.0	Views
View	Modified	setType()	Added	5.0	Views
View	Modified	setWorkingView()	Added	5.0	Views
ViewRight	Unchanged				
ViewRule	Modified	deepCopy()	Added	5.0	Views
WorkflowInstanceInfo	Modified	isGlobal()	Added	5.0	Global Create

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
WorkflowTaskInfo	Unchanged				
ModelRevision	Removed			5.0	History
ResourceIdentifier	Modified	isCommunity()	Added	5.0	
ResourceIdentifier	Modified	isTerm()	Added	5.0	
ResourceIdentifier	Modified	isVocabulary()	Added	5.0	
ResourceIdentifier	Modified	toString()	Added	5.0	
RelationTraceFactory	Unchanged				
ComplexRelationImpl	Modified	ComplexRelationImpl(Builder)	Added	5.1	Complex Relation Type
ComplexRelationImpl	Modified	getAssetsFromLegs()	Added	5.1	Complex Relation Type
ComplexRelationImpl	Modified	getComplexRelationType()	Added	5.1	Complex Relation Type

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ComplexRelationImpl	Modified	getIdentifyingAssets()	Added	5.1	Complex Relation Type
ComplexRelationImpl	Modified	getLegs()	Added	5.1	Complex Relation Type
ComplexRelationImpl	Modified	getNaturalIdentifier()	Added	5.1	Complex Relation Type
ComplexRelationImpl	Modified	newBuilderForComplexRelation()	Added	5.1	Complex Relation Type
ComplexRelationImpl	Modified	setLegs()	Added	5.1	Complex Relation Type
ResourceIDUtils	Unchanged				
ProductModule	Removed			5.0	License
ResourceType	Modified	getByInterfaceClass()	Added	5.0	
ArticulationRule.EOperation	Unchanged				

## Chapter 2

v4.6 Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
HyperlinkType	Unchanged				
Job.EState	Unchanged				
SyncAction	Unchanged				
AddressType	Unchanged				
Gender	Unchanged				
InstantMessagingAccountType	Unchanged				
PhoneType	Unchanged				
UserAuthenticationAction	Unchanged				
WebsiteType	Unchanged				

# Java DTO changes

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TimeRange	Modified	isEndSet()	Added	5.0	
TimeRange	Modified	isStartSet()	Added	5.0	
TimeRange	Modified	setEnd()	Added	5.0	
TimeRange	Modified	setStart()	Added	5.0	
Activity	Removed			5.0	History
ActivityFilter	Modified	getMaxResults()	Removed	5.0	History
ActivityFilter	Modified	setMaxResults()	Removed	5.0	History
Change	Removed			5.0	History
ChangeType	Removed			5.0	History

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RelationChange	Removed			5.0	History
BackupRestoreFilter	Removed			5.0	Infrastructure
ParentResourceElement	Unchanged				
CompareResult	Unchanged				
Difference	Unchanged				
DifferenceType	Unchanged				
PropertyDifference	Unchanged				
ResourceDifference	Unchanged				
ResultDiagram	Modified	moved to model package		5.1	Diagrams
ResultEdge	Modified	moved to model package		5.1	Diagrams
ResultNode	Modified	moved to model package		5.1	Diagrams



## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VisitDirection	Modified	moved to model package		5.1	Diagrams
VisitedTemplateEdge	Modified	moved to model package		5.1	Diagrams
TemplateDiagram	Modified	moved to model package		5.1	Diagrams
TemplateEdge	Modified	moved to model package		5.1	Diagrams
TemplateNode	Modified	moved to model package		5.1	Diagrams
PagedFilter	Unchanged				
PropertyFilter	Unchanged				
MatchMode	Unchanged				
AssetImpact	Unchanged				
AssetImpactBuilder	Unchanged				
GroupImpact	Unchanged				

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ImpactRelationType	Unchanged				
PeopleImpact	Unchanged				
RelationTrace	Unchanged				
UserImpact	Unchanged				
ResourceChange	Unchanged				
ResourcePropertyChange	Unchanged				
CSVInputConnectorFactory	Unchanged				
CSVOutputConnectorFactory	Unchanged				
ExcelInputConnectorFactory	Unchanged				
ExcelOutputConnectorFactory	Unchanged				
GraphvizOutputConnectorFactory	Unchanged				

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
JSONDataTableOutputConnectorFactory	Unchanged				
JSONOutputConnectorFactory	Unchanged				
SqlOutputConnectorFactory	Unchanged				
XMLOutputConnectorFactory	Unchanged				
XssfRowContainer	Unchanged				
XssfStreamingExcelInputConnectorFactory	Unchanged				
IssueFilter	Unchanged				
JobFilter	Modified	getMaxVisibility()	Added	5.0	
JobFilter	Modified	setMaxVisibility()	Added	5.0	
LdapGroup	Unchanged				
LdapMappingConfig	Unchanged				

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
LdapUser	Unchanged				
JobMailItem	Unchanged				
MemberFilter	Modified	getOwnerIds()	Added	5.0	
MemberFilter	Modified	getResourceId()	Removed	5.0	
MemberFilter	Modified	getResourceIds()	Added	5.0	
MemberFilter	Modified	getRoleId()	Removed	5.0	
MemberFilter	Modified	getRoleIds()	Added	5.0	
MemberFilter	Modified	getUser()	Removed	5.0	
MemberFilter	Modified	getSortField()	Added	5.0	
MemberFilter	Modified	isGlobalOnly()	Added	5.0	
MemberFilter	Modified	isIncludeInherited()	Added	5.0	

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
MemberFilter	Modified	isResourceRole()	Removed	5.0	
MemberFilter	Modified	isSortAscending()	Added	5.0	
MemberFilter	Modified	setGlobalOnly()	Added	5.0	
MemberFilter	Modified	setIncludeInherited()	Added	5.0	
MemberFilter	Modified	setResourceRole()	Removed	5.0	
MemberFilter	Modified	setResourceRoles()	Added	5.0	
MemberFilter	Modified	setRoleId()	Removed	5.0	
MemberFilter	Modified	setRoleIds()	Added	5.0	
MemberFilter	Modified	setSortAscending()	Added	5.0	
MemberFilter	Modified	setSortField()	Added	5.0	
MemberFilter	Modified	setUser()	Removed	5.0	

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Noun	Unchanged				
RelationFilter	Modified	forAllWithSource()	Added	5.1	
RelationFilter	Modified	forAllWithTarget()	Added	5.1	
RelationFilter	Modified	getFormula()	Added	5.0	
RelationFilter	Modified	newBuilder()	Added	5.1	
RelationFilter	Modified	setFormula()	Added	5.0	
ComplexRelationFilter	Modified	isConsiderViewPermissions	Added	5.1	
ComplexRelationFilter	Modified	setConsiderViewPermissions	Added	5.1	
PagedResult	Unchanged				
FoundAttribute	Unchanged				
FoundAttributeBuilder	Unchanged				

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
FoundComment	Unchanged				
FoundCommentBuiler	Unchanged				
FoundElement	Unchanged				
FoundElementBuilder	Unchanged				
FoundPart	Unchanged				
FoundPartBuilder	Unchanged				
FoundPartWithUrl	Unchanged				
SearchContext	Unchanged				
SearchFilter	Unchanged				
SearchFilterOnType	Unchanged				
SearchFilterOnTypeBuilder	Unchanged				

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
SearchOrder	Unchanged				
SearchParameters	Unchanged				
SearchParametersBuilder	Unchanged				
SearchResult	Unchanged				
SearchResultItem	Removed			5.0	
SearchResultItemBuilder	Removed			5.0	
FoundSimpleElement	Unchanged				
SearchForHyperlinksParameters	Unchanged				
SearchForHyperlinksParametersBuilder	Unchanged				
SearchForHyperlinksResult	Unchanged				
PropertyOrder	Unchanged				



## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
CountOperation	Unchanged				
MetricFilter	Unchanged				
RealtimeCountConfig	Unchanged				
RealtimeCountDimension	Unchanged				
RealtimeCountFieldFilter	Unchanged				
RealtimeCountFilter	Unchanged				
RealtimeCountOrderBy	Unchanged				
RealtimeCountResource	Unchanged				
RealtimeCountResult	Unchanged				
StatisticDimension	Unchanged				
StatisticFilter	Unchanged				

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RepresentationStatsEntry	Unchanged				
MappingInfo	Unchanged				
UserFilter	Unchanged				
UserInfo	Unchanged				
UserInfoBuilder	Unchanged				
Users	Unchanged				
AbstractModel	Unchanged				
AssetModel	Unchanged				
BasicAssetModel	Unchanged				
CommunityModel	Unchanged				
TermValidationInfo	Unchanged				

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TermValidationResultFilter	Unchanged				
VocabularyModel	Unchanged				
ViewFilter	Modified	getDefaultView()	Added	5.0	Views
ViewFilter	Modified	getLimit()	Added	5.0	Views
ViewFilter	Modified	getOffset()	Added	5.0	Views
ViewFilter	Modified	getSortField()	Added	5.0	Views
ViewFilter	Modified	getSortOrder()	Added	5.0	Views
ViewFilter	Modified	getType()	Added	5.0	Views
ViewFilter	Modified	setDefaultView()	Added	5.0	Views
ViewFilter	Modified	setLimit()	Added	5.0	Views
ViewFilter	Modified	setOffset()	Added	5.0	Views

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ViewFilter	Modified	setSortField()	Added	5.0	Views
ViewFilter	Modified	setSortOrder()	Added	5.0	Views
ViewFilter	Modified	setType()	Added	5.0	Views
ViewRightFilter	Unchanged				
DropDownValue	Unchanged				
FormData	Unchanged				
FormProperty	Unchanged				
ProcessInstance	Unchanged				
ProcessInstanceFilter	Unchanged				
StartFormData	Unchanged				
Task	Unchanged				

## Chapter 2

v4.6 DTO	Unchanged / Removed / Modified	Method	Added / Removed / Modi- fied	Modified in 5.0 or 5.1	Impacted by
TaskFilter	Unchanged				
TaskFormData	Unchanged				
WorkflowEventType	Unchanged				
WorkflowExclusivity	Unchanged				
WorkflowStart	Unchanged				

## Rest API changes

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ActivityStreamResource	Removed			5.0	History
ApplicationResource	Unchanged				
ArticulationResource	Modified	DELETE, GET, POST /1.0/articulation_calculator	Removed	5.1	Assignment
ArticulationResource	Modified	GET /1.0/articulation_calculator/all	Removed	5.1	Assignment
ArticulationResource	Modified	DELETE, GET, POST /1.0/articulation_calculator/{calculator}	Removed	5.1	Assignment
ArticulationResource	Modified	POST /1.0/articulation_calculator/{calculator}/articulation_rule	Removed	5.1	Assignment
ArticulationResource	Modified	POST /1.0/articulation_calculator/{calculator}/articulation_rules	Removed	5.1	Assignment

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ArticulationResource	Modified	POST /1.0/articulation_calculator/{calculator}/assignment_rule	Removed	5.1	Assignment
ArticulationResource	Modified	POST /1.0/articulation_calculator/{calculator}/assignment_rules	Removed	5.1	Assignment
ArticulationResource	Modified	DELETE, POST /1.0/articulation_calculator/{calculator}/articulation_rule/{rule}	Removed	5.1	Assignment
ArticulationResource	Modified	DELETE, POST /1.0/articulation_calculator/{calculator}/assignment_rule/{rule}	Removed	5.1	Assignment
AssignmentGroupResource	Removed			5.1	Assignment
AttachmentResource	Unchanged				
AttributeResource	Unchanged				
AttributeTypeGroupResource	Removed			5.1	Assignment
AttributeTypeResource	Modified	POST /1.0/attribute_type/workflows	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
AttributeTypeResource	Modified	DELETE, GET, POST /1.0/attribute_type/{attributeType}	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/concept_type/async	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/general_concept/async	Removed	5.1	Representation
AttributeTypeResource	Modified	DELETE /1.0/attribute_type/remove/async	Removed	5.1	Representation
AttributeTypeResource	Modified	DELETE /1.0/attribute_type/remove/job	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/status/async	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/vocabulary/async	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/{baseResource}/attachment	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{baseResource}/attachments	Removed	5.1	Representation



v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
AttributeTypeResource	Modified	GET /1.0/attribute_type/{baseResource}/comments	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/all_specialized_concepts	Removed	5.1	Representation
AttributeTypeResource	Modified	GET, POST /1.0/attribute_type/{representation}/attributes	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/{representation}/change_excluded_from_hyperlinking	Removed	5.1	Representation
AttributeTypeResource	Modified	GET, POST /1.0/attribute_type/{representation}/concept_type	Removed	5.1	Representation
AttributeTypeResource	Modified	DELETE, POST /1.0/attribute_type/{representation}/general_concept	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/general_concepts	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/group_attributes	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/groups	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/has_general_concept	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/possible_attribute_relation_types	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/possible_attribute_types	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/possible_statuses	Removed	5.1	Representation
AttributeTypeResource	Modified	GET, POST /1.0/attribute_type/{representation}/status	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/vocabulary	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{representation}/workflows	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/{resource}/comment	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/binary_fact_type_forms	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/derived_facts	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/general_concept	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/possible_object_types	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/{term}/relations	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/source_relations	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/specialized_concepts	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/target_relations	Removed	5.1	Representation
AttributeTypeResource	Modified	POST /1.0/attribute_type/{baseResource}/attachment/url	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/binary_fact_type_forms/full	Removed	5.1	Representation
AttributeTypeResource	Modified	GET /1.0/attribute_type/{term}/derived_facts/-full	Removed	5.1	Representation
BackupResource	Removed			5.0	Infrastructure
BinaryFactTypeResource	Removed			5.1	Representation
ClassificationResource	Removed			5.1	Categorization
CommentResource	Unchanged				

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
CommunityResource	Unchanged				
ComplexRelationResource	Unchanged				
ComplexRelationTypeResource	Modified	POST /1.0/complex_relation_type/{complexRelationType}/attribute_type_container	Removed	5.1	Complex Relation Type
ComplexRelationTypeResource	Modified	GET, POST /1.0/complex_relation_type/{complexRelationType}/attribute_type_containers	Removed	5.1	Complex Relation Type
ComplexRelationTypeResource	Modified	DELETE /1.0/complex_relation_type/{complexRelationType}/container	Removed	5.1	Complex Relation Type
ComplexRelationTypeResource	Modified	POST /1.0/complex_relation_type/{complexRelationType}/relation_type_container	Removed	5.1	Complex Relation Type
ComplexRelationTypeResource	Modified	GET, POST /1.0/complex_relation_type/{complexRelationType}/relation_type_containers	Removed	5.1	Complex Relation Type
ConceptTypeGroupResource	Removed			5.1	Assignment
ConceptTypeResource	Modified	GET /1.0/concept_type/vocabulary	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeResource	Modified	POST /1.0/concept_type/workflows	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{assetType}/general_concepts	Added	5.1	Representation
ConceptTypeResource	Modified	DELETE /1.0/concept_type/{representation}	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/concept_type/async	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/general_concept/async	Removed	5.1	Representation
ConceptTypeResource	Modified	DELETE /1.0/concept_type/remove/async	Removed	5.1	Representation
ConceptTypeResource	Modified	DELETE /1.0/concept_type/remove/job	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/status/async	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/vocabulary/async	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/{baseResource}/attachment	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeResource	Modified	GET /1.0/concept_type/{baseResource}/attachments	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{baseResource}/comments	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/all_specialized_concepts	Removed	5.1	Representation
ConceptTypeResource	Modified	GET, POST /1.0/concept_type/{representation}/attributes	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/{representation}/change_excluded_from_hyperlinking	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/{representation}/concept_type	Removed	5.1	Representation
ConceptTypeResource	Modified	DELETE, POST /1.0/concept_type/{representation}/general_concept	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/general_concepts	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/group_attributes	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/groups	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/has_general_concept	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/possible_attribute_relation_types	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/possible_attribute_types	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/possible_statuses	Removed	5.1	Representation



v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeResource	Modified	POST, GET /1.0/concept_type/{representation}/status	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/vocabulary	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{representation}/workflows	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/{resource}/comment	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/binary_fact_type_forms	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/derived_facts	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/general_concept	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/possible_object_types	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/{term}/relations	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/source_relations	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/specialized_concepts	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/target_relations	Removed	5.1	Representation
ConceptTypeResource	Modified	POST /1.0/concept_type/{baseResource}/attachment/url	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/binary_fact_type_forms/full	Removed	5.1	Representation
ConceptTypeResource	Modified	GET /1.0/concept_type/{term}/derived_facts/full	Removed	5.1	Representation
ConfigurationResource	Removed			5.0	Configuration
DatabaseResource	Removed			5.0	Infrastructure
FileTransferResource	Unchanged				
GroupResource	Unchanged				

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
HyperlinkResource	Unchanged				
I18NResource	Unchanged				
ImpactResource	Unchanged				
InitializeResource	Modified	POST /1.0/initialize/bootstrap	Removed	5.0	Infrastructure
InitializeResource	Modified	POST /1.0/initialize/init	Removed	5.0	Infrastructure
InitializeResource	Modified	POST /1.0/initialize/bootstrap/create	Removed	5.0	Infrastructure
InputViewResource	Unchanged				
IssueResource	Unchanged				
JobResource	Unchanged				
LdapResource	Unchanged				
LicenseResource	Removed			5.1	License

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
LogResource	Unchanged				
MappingResource	Unchanged				
MemberResource	Unchanged				
MetricGroupResource	Removed			5.1	Assignment
NounExtractorResource	Unchanged				
OfficeResearchResource	Unchanged				
OutputViewResource	Unchanged				
RelationResource	Modified	POST /1.0/relation/{relation}/status	Removed	5.1	Representation
RelationResource	Modified	GET /1.0/relation/{relation}/possible_statuses	Removed	5.1	Representation
RelationTypeResource	Unchanged				
RoleResource	Unchanged				

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RootResource	Removed			5.0	
SamlMetadataResource	Modified	POST /1.0/saml/metadata	Removed	5.0	
SearchResource	Modified	GET /1.0/search	Removed	5.0	
SnapshotConfigurationResource	Removed			5.1	Snapshots
SnapshotResource	Removed			5.1	Snapshots
StatisticResource	Unchanged				
StatusGroupResource	Removed				
StatusResource	Modified	GET /1.0/status/signifier	Added	5.0	Representation
StatusResource	Modified	GET /1.0/status/vocabulary	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/workflows	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/concept_type/async	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
StatusResource	Modified	POST /1.0/status/general_concept/async	Removed	5.1	Representation
StatusResource	Modified	DELETE /1.0/status/remove/async	Removed	5.1	Representation
StatusResource	Modified	DELETE /1.0/status/remove/job	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/status/async	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/vocabulary/async	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/{baseResource}/attachment	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{baseResource}/attachments	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{baseResource}/comments	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/all_specialized_concepts	Removed	5.1	Representation
StatusResource	Modified	GET, POST /1.0/status/{representation}/attributes	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
StatusResource	Modified	POST /1.0/status/{representation}/change_excluded_from_hyperlinking	Removed	5.1	Representation
StatusResource	Modified	GET, POST /1.0/status/{representation}/concept_type	Removed	5.1	Representation
StatusResource	Modified	DELETE, POST /1.0/status/{representation}/general_concept	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/general_concepts	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/group_attributes	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/groups	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/has_general_concept	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
StatusResource	Modified	GET /1.0/status/{representation}/possible_attribute_relation_types	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/possible_attribute_types	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/possible_statuses	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/{representation}/status	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/vocabulary	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{representation}/workflows	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/{resource}/comment	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/binary_fact_type_forms	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/derived_facts	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/general_concept	Removed	5.1	Representation



v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
StatusResource	Modified	GET /1.0/status/{term}/possible_object_types	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/{term}/relations	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/{term}/signifier	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/source_relations	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/specialized_concepts	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/target_relations	Removed	5.1	Representation
StatusResource	Modified	POST /1.0/status/{baseResource}/attachment/url	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/binary_fact_type_forms/full	Removed	5.1	Representation
StatusResource	Modified	GET /1.0/status/{term}/derived_facts/full	Removed	5.1	Representation
SyncIBMResource	Removed			5.0	Integrations

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
SyncTrilliumResource	Removed			5.0	Integrations
TermResource	Modified	POST /1.0/term/categorization_type	Removed	5.1	Categorization
TermResource	Modified	POST /1.0/term/category	Removed	5.1	Categorization
TermResource	Modified	GET /1.0/{generalConcept}/category	Removed	5.1	Categorization
TermResource	Modified	GET /1.0/{generalConcept}/category/full	Removed	5.1	Categorization
TermResource	Modified	GET /1.0/{generalConcept}/categorization_type	Removed	5.1	Categorization
TermResource	Modified	GET /1.0/{generalConcept}/categorization_type/full	Removed	5.1	Categorization
TermResource	Modified	GET /1.0/{term}/is_categorization_type	Removed	5.1	Categorization
TermResource	Modified	POST /1.0/{category}/categorization_type	Removed	5.1	Categorization
TermResource	Modified	POST /1.0/categorization_type	Removed	5.1	Categorization
TermResource	Modified	DELETE /1.0/category/{category}	Removed	5.1	Categorization

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TermResource	Modified	DELETE /1.0/{generalconcept}/categorization_type/{categorizationtype}	Removed	5.1	Categorization
TraceabilityGroupResource	Removed			5.0	Assignment
UserResource	Unchanged				
ValidationGroupResource	Removed			5.1	Assignment
ValidationResource	Unchanged				
ViewResource	Unchanged				
ViewRightResource	Unchanged				
VocabularyResource	Modified	GET /1.0/{vocabulary}/groups	Removed	5.0	Assignment
VocabularyResource	Modified	GET /1.0/{vocabulary}/possible_relation_types	Modified	5.1	Representation
VocabularyResource	Modified	GET /1.0/{vocabulary}/relation_types	Removed	5.1	Representation
VocabularyResource	Modified	GET /1.0/{vocabulary}/possible_attribute_types	Modified	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyResource	Modified	GET /1.0/{vocabulary}/possible_fact_types	Removed	5.1	Representation
VocabularyResource	Modified	GET /1.0/{vocabulary}/binary_fact_types	Removed	5.1	Representation
VocabularyResource	Modified	GET /1.0/{vocabulary}/binary_fact_types/full	Removed	5.1	Representation
VocabularyResource	Modified	POST /1.0/{vocabulary}/naming_rule	Removed	5.0	Naming Rule
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/vocabulary	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/workflows	Removed	5.1	Representation
VocabularyTypeResource	Modified	DELETE /1.0/vocabulary_type/{representation}	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/concept_type/a- sync	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/general_con- cept/async	Removed	5.1	Representation
VocabularyTypeResource	Modified	DELETE /1.0/vocabulary_type/remove/async	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeResource	Modified	DELETE /1.0/vocabulary_type/remove/job	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/status/async	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/vocabulary/async	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/{baseResource}/attachment	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{baseResource}/attachments	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{baseResource}/comments	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/all_specialized_concepts	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET, POST /1.0/vocabulary_type/{representation}/attributes	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/{representation}/change_excluded_from_hyperlinking	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET, POST /1.0/vocabulary_type/{representation}/concept_type	Removed	5.1	Representation
VocabularyTypeResource	Modified	DELETE, POST /1.0/vocabulary_type/{representation}/general_concept	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/general_concepts	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/group_attributes	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/groups	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/has_general_concept	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/possible_attribute_relation_types	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/possible_attribute_types	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/possible_statuses	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET, POST /1.0/vocabulary_type/{representation}/status	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/vocabulary	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{representation}/workflows	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/{resource}/-comment	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/binary_fact_type_forms	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/derived_facts	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/general_concept	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/{term}/relations	Removed	5.1	Representation
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/{term}/signifier	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/source_relations	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/specialized_concepts	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/target_relations	Removed	5.1	Representation



v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyTypeResource	Modified	POST /1.0/vocabulary_type/{baseResource}/attachment/url	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/binary_fact_type_forms/full	Removed	5.1	Representation
VocabularyTypeResource	Modified	GET /1.0/vocabulary_type/{term}/derived_facts/full	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/general_concept/async	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{representation}/all_specialized_concepts	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{representation}/general_concept	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{representation}/general_concepts	Removed	5.1	Representation

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
WorkflowResource	Modified	GET /1.0/workflow/{representation}/group_attributes	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{representation}/groups	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{representation}/has_general_concept	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{term}/binary_fact_type_forms	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{term}/derived_facts	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{term}/general_concept	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{term}/possible_object_types	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{term}/specialized_concepts	Removed	5.1	Representation
WorkflowResource	Modified	GET /1.0/workflow/{term}/binary_fact_type_forms/full	Removed	5.1	Representation

## Chapter 2

v4.6 Rest API	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
WorkflowResource	Modified	GET /1.0/workflow/{term}/derived_facts/full	Removed	5.1	Representation

## Rest Model changes

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Activity	Unchanged				
ActivityStream	Unchanged				
Adapter1	Unchanged				
Address	Unchanged				
AddressCollection	Unchanged				
AddressType	Unchanged				
ArticulationCalculator	Removed			5.1	Assignment
ArticulationCalculatorReference	Removed			5.1	Assignment
ArticulationCalculators	Removed			5.1	Assignment

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v4.6 Rest Model	Unchanged / Removed / Modi- fied	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ArticulationOperator	Removed			5.1	Assignment
ArticulationRule	Removed			5.1	Assignment
ArticulationRuleCollection	Removed			5.1	Assignment
AssetImpact	Unchanged				
AssetImpacts	Unchanged				
AssignmentGroup	Removed			5.1	Assignment
AssignmentGroupReference	Removed			5.1	Assignment
AssignmentGroups	Removed			5.1	Assignment
AssignmentRule	Unchanged				
AssignmentRules	Unchanged				
Attachment	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
Attachments	Unchanged				
Attribute	Unchanged				
AttributeReference	Unchanged				
AttributeReferences	Unchanged				
Attributes	Unchanged				
AttributeType	Unchanged				
AttributeTypeContainer	Removed			5.1	Assignment
AttributeTypeGroup	Removed			5.1	Assignment
AttributeTypes	Unchanged				
AuthorizationException	Unchanged				
BinaryFactType	Modified	withAttributeReferences()	Added	5.0	Representation

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
BinaryFactType	Modified	withConceptType	Added	5.0	Representation
BinaryFactType	Modified	withGeneralConceptReference	Removed	5.1	Representation
BinaryFactType	Modified	withSpecializedConceptReferences	Removed	5.1	Representation
BinaryFactType	Modified	withStatusReference	Removed	5.1	Representation
BinaryFactType	Modified	withVocabularyReference	Removed	5.1	Representation
BinaryFactTypeReference	Removed			5.1	Representation
BinaryFactTypeReferences	Removed			5.1	Representation
BinaryFactTypes	Unchanged				
BooleanAttribute	Unchanged				
BooleanAttributeReference	Unchanged				
BooleanResponse	Unchanged				

## Chapter 2

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
CancelProcessResponse	Unchanged				
CancelProcessResponseEntry	Unchanged				
CancelTaskResponse	Unchanged				
Change	Unchanged				
Comment	Unchanged				
Comments	Unchanged				
Communities	Unchanged				
Community	Unchanged				
CommunityCachedElementResource	Unchanged				
CommunityCachedElementsCollection	Unchanged				
CommunityReference	Unchanged				



v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
CommunityReferences	Unchanged				
CompleteTaskResponse	Unchanged				
ComplexRelationTypeGroup	Removed			5.1	Assignment
ConceptTypeContainer	Removed			5.1	Assignment
ConceptTypeGroup	Removed			5.1	Assignment
ConfigProperty	Unchanged				
Configuration	Unchanged				
DateAttribute	Unchanged				
DateAttributeReference	Unchanged				
DateTimeAttribute	Unchanged				
DateTimeAttributeReference	Unchanged				

## Chapter 2

v4.6 Rest Model	Unchanged / Removed / Modi- fied	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
DgcException	Unchanged				
DropDownValue	Unchanged				
EntityNotFoundException	Unchanged				
Entry	Unchanged				
ErrorParams	Unchanged				
Exception	Unchanged				
Files	Unchanged				
FormData	Unchanged				
FormProperty	Unchanged				
FormPropertyFilters	Unchanged				
FoundAttribute	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
FoundComment	Unchanged				
FoundElement	Modified	getTags()	Added	5.1	Tags
FoundElement	Modified	withTags()	Added	5.1	Tags
FoundPart	Unchanged				
Gender	Unchanged				
Group	Unchanged				
GroupCollection	Unchanged				
GroupReference	Unchanged				
IllegalArgumentException	Unchanged				
ImpactRelationType	Unchanged				
InstantMessagingAccount	Unchanged				

## Chapter 2

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
InstantMessagingAccountCollection	Unchanged				
InstantMessagingAccountType	Unchanged				
Job	Unchanged				
JobPagedResult	Unchanged				
Jobs	Unchanged				
LdapUserMappingConfig	Unchanged				
LicenseKeyException	Unchanged				
MapEntries	Unchanged				
Mapping	Unchanged				
Mappings	Unchanged				
MemberCompleteReference	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
MemberCompleteReferences	Unchanged				
MemberReference	Unchanged				
MemberReferences	Unchanged				
MetricGroup	Removed			5.1	Assignment
MetricGroups	Removed			5.1	Assignment
MultiDropdownValue	Unchanged				
MultiValueListAttribute	Unchanged				
MultiValueListAttributeReference	Unchanged				
NamingRule	Removed			5.1	Naming Rule
NamingRuleReference	Removed			5.1	Naming Rule
NamingRules	Removed			5.1	Naming Rule

## Chapter 2

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
NotFoundException	Removed			5.0	
Noun	Unchanged				
Nouns	Unchanged				
NumericAttribute	Unchanged				
NumericAttributeReference	Unchanged				
ObjectFactory	Modified	createAssignmentGroup()	Removed	5.1	Assignment
ObjectFactory	Modified	createAssignmentGroupReference()	Removed	5.1	Assignment
ObjectFactory	Modified	createAssignmentGroups	Removed	5.1	Assignment
ObjectFactory	Modified	createAttributeTypeContainer	Removed	5.1	Assignment
ObjectFactory	Modified	createAttributeTypeGroup	Removed	5.1	Assignment
ObjectFactory	Modified	createBinaryFactTypeReference	Removed	5.1	Representation

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ObjectFactory	Modified	createBinaryFactTypeReferences	Removed	5.1	Representation
ObjectFactory	Modified	createConceptTypeContainer	Removed	5.1	Assignment
ObjectFactory	Modified	createConceptTypeGroup	Removed	5.1	Assignment
PagedResult	Unchanged				
PagingProperties	Unchanged				
Permissions	Unchanged				
Phone	Unchanged				
PhoneCollection	Unchanged				
PhoneType	Unchanged				
ProcessInstance	Unchanged				
ProcessInstancePagedResult	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ProcessInstnaces	Unchanged				
ProductModuleType	Unchanged				
Relation	Unchanged				
RelationReference	Modified	getStatusReference	Removed	5.1	Representation
RelationReference	Modified	setStatusReference	Removed	5.1	Representation
RelationReferences	Unchanged				
Relations	Unchanged				
RelationTrace	Unchanged				
RelationTraceEntry	Unchanged				
RelationTraceResource	Unchanged				
RelationTraceResourceEntries	Unchanged				



v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
RelationTraceResourceEntry	Unchanged				
RelationTraceResources	Unchanged				
RelChange	Unchanged				
Representation	Unchanged				
RepresentationContainer	Removed			5.1	Assignment
RepresentationContainerSet	Removed			5.1	Assignment
RepresentationReference	Unchanged				
RepresentationReferences	Unchanged				
Representations	Unchanged				
Resource	Unchanged				
Resources	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ResourceTypeType	Modified	AC	Removed	5.1	Assignment
ResourceTypeType	Modified	AG	Removed	5.1	Assignment
ResourceTypeType	Modified	ARC	Removed	5.1	Assignment
ResourceTypeType	Modified	CC	Removed	5.1	Assignment
ResourceTypeType	Modified	CG	Removed	5.1	Assignment
ResourceTypeType	Modified	CRTG	Removed	5.1	Assignment
ResourceTypeType	Modified	MG	Removed	5.1	Assignment
ResourceTypeType	Modified	SC	Removed	5.1	Assignment
ResourceTypeType	Modified	SG	Removed	5.1	Assignment
ResourceTypeType	Modified	SS	Removed	5.1	Snapshots
ResourceTypeType	Modified	SSC	Removed	5.1	Snapshots

## Chapter 2

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ResourceTypeType	Modified	VG	Removed	5.1	Assignment
Role	Unchanged				
RoleReference	Unchanged				
RoleReferences	Unchanged				
ScriptAttribute	Unchanged				
ScriptAttributeReference	Unchanged				
SearchResult	Unchanged				
SearchResultItem	Removed			5.0	
SearchResultItems	Removed			5.0	
SimpleTerm	Unchanged				
SimpleTerms	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
SingleValueListAttribute	Unchanged				
SingleValueListAttributeReference	Unchanged				
Snapshot	Removed			5.1	Snapshots
SnapshotConfiguration	Removed			5.1	Snapshots
SnapshotConfigurationReference	Removed			5.1	Snapshots
SnapshotConfigurationReferences	Removed			5.1	Snapshots
SnapshotReference	Removed			5.1	Snapshots
SnapshotReferences	Removed			5.1	Snapshots
Snapshots	Removed			5.1	Snapshots
StartFormData	Unchanged				
StartWorkflowResponse	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modi- fied	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
StartWorkflowResponseEntry	Unchanged				
StatisticConfiguration	Unchanged				
StatisticConfigurations	Unchanged				
StatusContainer	Removed			5.1	Assignment
StatusGroup	Removed			5.1	Assignment
StringAttribute	Unchanged				
StringAttributeReference	Unchanged				
StringCollection	Unchanged				
SyncActionType	Unchanged				
Task	Unchanged				
TaskFormData	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TaskPagedResult	Unchanged				
TaskResponseEntry	Unchanged				
Tasks	Unchanged				
Term	Modified	getBinaryFactTypeReferences()	Removed	5.1	Fact Type
Term	Modified	setBinaryFactTypeReferences	Removed	5.1	Fact Type
Term	Modified	withBinaryFactTypeReferences	Removed	5.1	Fact Type
TermPagedResult	Unchanged				
TermReference	Modified	getDescription()	Added	5.1	
TermReference	Modified	setDescription()	Added	5.1	
TermReferences	Unchanged				
Terms	Unchanged				

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
TermValidationInfo	Unchanged				
TermValidationResultReference	Unchanged				
TermValidationResultReferences	Unchanged				
TraceabilityGroup	Removed			5.1	Assignment
TraceabilityGroups	Removed			5.1	Assignment
User	Unchanged				
UserCollection	Unchanged				
UserReference	Unchanged				
UserSmallReference	Unchanged				
ValidationGroup	Removed			5.1	Assignment
ValidationGroups	Removed			5.1	Assignment

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ValidationRuleContainer	Removed			5.1	Assignment
View	Unchanged				
ViewConflict	Unchanged				
ViewConflicts	Unchanged				
ViewReference	Modified	getType()	Added	5.0	Views
ViewReference	Modified	isIsWorkingView()	Added	5.0	Views
ViewReference	Modified	setIsWorkingView	Added	5.0	Views
ViewReference	Modified	setType()	Added	5.0	Views
ViewReference	Modified	withIsWorkingView	Added	5.0	Views
ViewReference	Modified	withType()	Added	5.0	Views
ViewReferences	Unchanged				



v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
ViewRightReference	Unchanged				
ViewRightReferences	Unchanged				
ViewRule	Unchanged				
ViewRuleSet	Unchanged				
ViewTypeType	Added			5.0	Views
Vocabularies	Unchanged				
Vocabulary	Modified	getBinaryFactTypeReferences()	Removed	5.1	Fact Type
Vocabulary	Modified	setBinrayFactTypeReferences()	Removed	5.1	Fact Type
Vocabulary	Modified	withBinrayFactTypeReferences	Removed	5.1	Fact Type
Vocabulary	Modified	withNamingRuleReference()	Removed	5.0	Naming Rule
VocabularyReference	Modified	setNamingRuleReference()	Removed	5.0	Naming Rule

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
VocabularyReference	Modified	getNamingRuleReference()	Removed	5.0	Naming Rule
VocabularyReference	Modified	withNamingRuleReference()	Removed	5.0	Naming Rule
VocabularyReferences	Unchanged				
Website	Unchanged				
WebsiteCollection	Unchanged				
WebsiteType	Unchanged				
WorkflowDefinition	Modified	isGlobalCreate()	Added	5.0	Global Create
WorkflowDefinition	Modified	setGlobalCreate()	Added	5.0	Global Create
WorkflowDefinition	Modified	withBinaryFactTypeReferences()	Removed	5.1	Fact Type
WorkflowDefinition	Modified	withGlobalCreate()	Added	5.0	Global Create
WorkflowDefinitionReference	Unchanged				

## Chapter 2

v4.6 Rest Model	Unchanged / Removed / Modified	Method	Added / Removed / Modified	Modified in 5.0 or 5.1	Impacted by
WorkflowDefinitionReferences	Unchanged				
WorkflowDefinitions	Unchanged				
WorkflowEventTypes	Unchanged				
WorkflowEventTypeType	Unchanged				
WorkflowExclusivity	Unchanged				

# Appendix A - Plain-text attributes

When you upgrade to 5.7 or newer, characteristics of some Catalog-related assets are converted from rich-text format to plain-text format.

The following table contains the list of characteristics with their corresponding unique identifiers:

Name	Unique identifier
Original name	00000000-0000-0000-0001-000500000032
Location	00000000-0000-0000-0000-000000000203
Technical Data Type	00000000-0000-0000-0000-000000000219
Schema name	00000000-0000-0000-0000-000000000226
File location	00000000-0000-0000-0001-000500000004
Table Type	00000000-0000-0000-0001-000500000008
Primary Key Name	00000000-0000-0000-0001-000500000016
Minimum Value	00000000-0000-0000-0001-000500000040
Maximum Value	00000000-0000-0000-0001-000500000041
Date and/or Time Pattern	00000000-0000-0000-0001-000500000044
Mode	00000000-0000-0000-0001-000500000048
1st Percentile	00000000-0000-0000-0001-000500000049
5th Percentile	00000000-0000-0000-0001-000500000050
1st Decile	00000000-0000-0000-0001-000500000051
1st Quartile	00000000-0000-0000-0001-000500000052
Median	00000000-0000-0000-0001-000500000053

## Appendix A

Name	Unique identifier
3rd Quartile	00000000-0000-0000-0001-000500000054
Category	00000000-0000-0000-0001-000500000046
9th Decile	00000000-0000-0000-0001-000500000055
95th Percentile	00000000-0000-0000-0001-000500000056
99th Percentile	00000000-0000-0000-0001-000500000057
Empty values definition override	00000000-0000-0000-0001-000500000063
File Type	00000000-0000-0000-0001-002500000012
Glue database name	00000000-0000-0000-0001-000500000066
Glue table name	00000000-0000-0000-0001-000500000067