

Cacoo Enterprise Update Manual

(ver 6.0.2)

Nulab, Inc.
19th Edition
September 26th, 2023

Update History

Version	Date	Changes
1	January 06, 2016	First edition (Update to Cacoo Enterprise version 1.72)
2	May 23, 2016	Updated to the latest(1.76) version
3	January 18, 2018	Updated to the latest(2.01) version
4	November 8, 2018	Updated to the latest(2.02) version
5	April 10, 2020	Updated to the latest(3.00) version
6	March 29, 2021	Updated to the latest(4.0.0) version
7	September 02, 2021	Improved "Update Steps" section
8	September 06, 2021	Updated to the latest(4.0.1) version
9	December 13, 2021	Updated to the latest(4.0.2) version
10	December 17, 2021	Updated to the latest(4.0.3) version
11	December 20, 2021	Updated to the latest(4.0.4) version
12	June 27, 2022	Updated to the latest(5.0.0) version
13	June 29, 2022	Updated to the latest(5.0.1) version
14	July 12, 2022	Updated to the latest(5.0.2) version
15	July 22, 2022	Updated to the latest(5.0.3) version
16	September 29, 2022	Updated to the latest(5.0.8) version
17	May 22, 2023	Updated to the latest(6.0.0) version
18	August 31, 2023	Updated to the latest(6.0.1) version
19	September 26, 2023	Updated to the latest(6.0.2) version

Contents

[Contents of package](#)

[Features change with this update \(version 6.0.0\)](#)

[Improved editing features](#)

[New shape library](#)

[Redesigned sharing dialog](#)

[Improved SVG importing function](#)

[New object link function](#)

[New snapping function](#)

[Improved table functions](#)

[Update of Shapes and Templates](#)

[Update Steps \(since 2.01 or later\)](#)

[2. Update database](#)

[3. Update Cacao environment](#)

[Update Steps \(since 1.76 or old\)](#)

[1. Backup](#)

[The existing tomcat environment won't be used in Cacao after updating. Please keep backup to retain the setting information etc.](#)

[2. PostgreSQL version upgrade](#)

[3. Update database](#)

[Note: About migrate files](#)

[Apply in order all migration files that belong to your current version number or later.](#)

[4. Installing additional software](#)

[5. Building Cacao environment](#)

[6. Setup Apache HTTP Server as a reverse proxy](#)

[Changes for the user's environment \(From 1.76 or old\)](#)

[About HTML5 version editor](#)

[Supported environments](#)

[Windows \(version 7 or later\)](#)

[Mac OS X](#)

[Functional changes](#)

[Update checklist](#)

[Contact us](#)

Contents of package

cacoo-docker/setenv.sh	Cacoo environment configuration shell script
cacoo-docker/.env	Cacoo environment configuration file
cacoo-docker/docker-compose.yml	Cacoo environment Docker file
cacoo-docker/cert/*	Cacoo environment certification files
cacoo-docker/jobs/*	Cacoo environment job setting file
cacoo-docker/logging/*	Cacoo environment logger setting file
cacoo-docker/icons/*	Cacoo environment icon file
database/*.sql	SQL for creating DB table
misc/blazeds_patch.zip	Patch for BlazeDS revision file
misc/Acknowledgments.txt	OSS information which Cacoo uses
update/*.sql	SQL for updating

Example of extraction package

```
# mkdir /root/temp  
# unzip cacoo-enterprise-6.0.0.zip -d /root/temp/
```

Features change with this update (version 6.0.0)

With the version 6.0.0 update, the following features have been updated and newly added since version 5.0x.

Improved editing features

Editing features have been improved to be more user-friendly.

Unlimited Canvas

When the canvas size is exceeded by moving or scrolling figures, the area that can be drawn is automatically expanded. When a sheet size is fixed, the outside of the sheet can be used freely, and when a Free size sheet is used, figures can be added flexibly and freely in any direction without being aware of the sheet boundaries.

For more details, please refer to the release blog below.

<https://nulab.com/blog/product-updates/cacoo/the-canvas-for-your-limitless-creativity/>

Redesigned Charts Functions

Twelve new types of graphs have been added. Among them, bubble charts, pyramid-shaped graphs, and timelines have been added to enable visualization of a wider range of data.

Please refer to the following document for details.

<https://support.nulab.com/hc/en-us/articles/8222211431961-Dynamic-charts>

Icon function

A new feature to use "Google Material Icons" which is an open source icon font provided by Google Inc. as a shape on Cacoo has been added.

Please refer to the following document for details.

<https://support.nulab.com/hc/en-us/articles/13428507105689-Add-icons>

Redesigned Templates (English Version Only)

Templates have been redesigned (English version only at the time of release). The templates have been redesigned to be easier to use, with new explanatory text on how to use the templates. The UI of the panel for inserting templates has also been redesigned.

Update of Shapes and Templates

Shapes and templates have been updated based on cacoo.com as of April 2023.

Update Steps (since 2.01 or later)

1. Backup

1. Go to the directory to start / stop Cacoo. (There is "docker-compose.yml" file in the directory)
2. Stop Cacoo at first
3. Take backup of database

Sample command

```
# cd cacoo-docker
# docker-compose down
# mkdir /root/temp/backup-3.00
# pg_dump -h localhost -U postgres -c cacoo > /root/temp/backup-3.00/cacoo.dump
```

2. Update database

Connect to the PostgreSQL database server then apply update/enterprise_migrate_5.0.0.sql, database/stencils.sql and database/templates.sql on the cacoo database.

Note : Updating since version 2.01

Please apply "update/enterprise_migrate_3.00.sql" and "update/enterprise_migrate_4.00.sql" before "update/enterprise_migrate_5.0.0.sql"

Sample command

```
# cp /root/temp/cacoo/update/*.sql /var/lib/pgsql/
# cp /root/temp/cacoo/database/stencils.sql /var/lib/pgsql/
# cp /root/temp/cacoo/database/templates.sql /var/lib/pgsql/
# su - postgres
$ psql cacoo
cacoo=# \i enterprise_migrate_5.0.0.sql
cacoo=# \i stencils.sql
cacoo=# \i templates.sql
cacoo=# \q
```

3. Update Cacoo environment

1. Overwrite (replace) "docker-compose.yml", "cert/*", "jobs/*", "logging/*", and "icons/*" with the updated file which is provided from Nulab and copy the "setenv.sh" file in the same directory.
2. Run the "setenv.sh" shell script to update configuration of your Cacoo. This shell script is interactive so you have to answer each question as your Cacoo environment. Existing configurations will be used as the default value. This shell script will update the .env file.

Sample command

```
# cp /root/temp/cacoo/cacoo-docker/docker-compose.yml .
# cp -r /root/temp/cacoo/cacoo-docker/cert .
# cp -r /root/temp/cacoo/cacoo-docker/jobs .
# cp -r /root/temp/cacoo/cacoo-docker/logging .
# cp -r /root/temp/cacoo/cacoo-docker/icons .
# cp /root/temp/cacoo/cacoo-docker/setenv.sh .
# ./setenv.sh
Configure your Cacoo Enterprise.
...
```

3. You need to update the .env file if you set up Cacoo with the following unusual configurations.

CACOO_CONTEXT_PATH	With "true" value, please modify the .env file as below. <ul style="list-style-type: none">• Add "/cacoo" to the end of value of "CACOO_URL" and "CACOO_SOCKET_URL"• Set "CACOO_DASHBOARD_CONTEXT_PATH" value to "/cacoo/app"
CACOO_PORT	Specify internal port number in case you run Cacoo under HTTPS through reverse proxy server
CACOO_GOOGLE_DRIVE_AUTOSEND	Set to true if you need the function to automatically send all diagrams to Google Drive. Not necessary if you use only the normal Google Drive integration.

4. If you are using Google Apps and Google Drive integration, please return the following files from backup.
 - Google Apps integration configuration file
{tomcat directory}/webapps/ROOT/WEB-INF/client_secrets_oauth2_apps.json
 - Google Drive integration configuration file
{tomcat directory}/webapps/ROOT/WEB-INF/client_secrets.json
5. If you run Cacoo through Apache HTTP server reverse proxy, you need to add "/graphql-event/" endpoint in the reverse proxy setting.

Sample configuration

```

...
RequestHeader set X-Forwarded-Proto "http"
ProxyRequests off
ProxyPreserveHost on
ProxyPass /editor-messaging/ ws://localhost:80/editor-messaging/
ProxyPassReverse /editor-messaging/ ws://localhost:80/editor-messaging/
ProxyPass /graphql-event/ ws://localhost:80/graphql-event/
ProxyPassReverse /graphql-event/ ws://localhost:80/graphql-event/
ProxyPass / http://localhost:80/
ProxyPassReverse / http://localhost:80/
...

```

In this sample, we assume Tomcat is running on port 80, the same server (localhost) where the mod_proxy_http module is installed.

If you run Cacoo with the "/cacoo" context path (set "CACOO_CONTEXT_PATH" as "true"), please include the "/cacoo" context for each endpoint like below.

Sample configuration

```

...
RequestHeader set X-Forwarded-Proto "http"
ProxyRequests off
ProxyPreserveHost on
ProxyPass /cacoo/editor-messaging/ ws://localhost:80/cacoo/editor-messaging/
ProxyPassReverse /cacoo/editor-messaging/ ws://localhost:80/cacoo/editor-messaging/
ProxyPass /cacoo/graphql-event/ ws://localhost:80/cacoo/graphql-event/
ProxyPassReverse /cacoo/graphql-event/ ws://localhost:80/cacoo/graphql-event/
ProxyPass /cacoo/ http://localhost:80/cacoo/
ProxyPassReverse /cacoo/ http://localhost:80/cacoo/
...

```

6. Start Cacoo again (Please specify AWS_ACCESS_KEY_ID and AWS_SECRET_ACCESS_KEY as the same value when Cacoo was installed.)

AWS CLI version 2:

```

# export AWS_ACCESS_KEY_ID=*****
# export AWS_SECRET_ACCESS_KEY=*****
# aws ecr get-login-password --region ap-northeast-1 | docker login --username AWS --password-stdin
631054961367.dkr.ecr.ap-northeast-1.amazonaws.com

```

AWS CLI version 1:

```

# export AWS_ACCESS_KEY_ID=*****
# export AWS_SECRET_ACCESS_KEY=*****
# aws ecr get-login --region ap-northeast-1 --no-include-email | sh -

```

Update Steps (since 1.76 or old)

Depending on the path the Cacoo Enterprise has been installed, the directories and files to work on will be different. In this document, we assume the Enterprise has been installed in the root (upper row).

Installed path	Directories to backup / delete	File to put
http://(host name: port)/	{tomcat's directory}/webapps/ROOT	ROOT.war
http://(host name: port)/cacoo/	{tomcat's directory}/webapps/cacoo	cacoo.war

In addition, the following software previously required is no longer needed from this version. Please uninstall them as necessary, although keeping them won't affect the operation.

- Tomcat
- Wkhtmltopdf / wkhtmltoimage
- ImageMagick
- GraphicsMagick
- pdf2ps

1. Backup

Please stop tomcat and backup the database and application. For application, please backup the files under {tomcat's directory}/webapps/ROOT/.

Sample command

```
# /opt/tomcat7/bin/shutdown.sh
# mkdir /root/temp/backup-1.76
# pg_dump -h localhost -U postgres -c cacoo > /root/temp/backup-1.76/cacoo.dump
# cp -r /opt/tomcat7/webapps/ROOT /root/temp/backup-1.76
```

The existing tomcat environment won't be used in Cacoo after updating. Please keep backup to retain the setting information etc.

2. PostgreSQL version upgrade

Cacoo has been checked to work with PostgreSQL 12. Please upgrade if necessary. For PostgreSQL upgrade, please refer to the PostgreSQL manual.

3. Update database

Using the [Distribution] update/enterprise_migrate_2.01.sql, update/enterprise_migrate_2.02.20180425.sql, update/enterprise_migrate_2.02.20181109.sql,

update/enterprise_migrate_3.00, update/enterprise_migrate_4.0.0, update/enterprise_migrate_5.0.0, database/stencils.sql, database/templates.sql, please update the table and data.

Sample command

```
# cp /root/temp/cacoo/*.sql /var/lib/pgsql/  
# su - postgres  
$ psql cacoo  
cacoo=# \i enterprise_migrate_2.01.sql  
cacoo=# \i enterprise_migrate_2.01.20180425.sql  
cacoo=# \i enterprise_migrate_2.02.20181109.sql  
cacoo=# \i enterprise_migrate_3.00.sql  
cacoo=# \i enterprise_migrate_4.0.0.sql  
cacoo=# \i enterprise_migrate_5.0.0.sql  
cacoo=# \i stencils.sql  
cacoo=# \i templates.sql  
cacoo=# \q
```

Note: About migrate files

Apply in order all migration files that belong to your current version number or later.

4. Installing additional software

To install Cacoo update, you need to install the following software. Please refer to "Installation Manual" and install them.

- AWS CLI (Command Line Interface)
- Docker

5. Building Cacoo environment

The operating environment of this version's Cacoo will be built on Docker including other software necessary for Cacoo. Please refer to "Installation Manual" for its procedure.

Please reflect the contents set with the following files to values set by "setenv.sh" and ".env" file.

- cacoo.dicon
- cacoo.properties
- jdbc.dicon
- mail.dicon
- web.properties

In addition, if you are using Google Apps and Google Drive integration, please return the following files from backup to "/app-conf" directory when building the Cacoo environment.

- Google Apps integration configuration file
{tomcat directory}/webapps/ROOT/WEB-INF/client_secrets_oauth2_apps.json
- Google Drive integration configuration file

{tomcat directory}/webapps/ROOT/WEB-INF/client_secrets.json

6. Setup Apache HTTP Server as a reverse proxy

If you are accessing Cacoo via Apache HTTP Server as a reverse proxy, please add the following reverse proxy setting in Apache HTTP Server configuration.

Sample configuration

```
...
RequestHeader set X-Forwarded-Proto "http"
ProxyRequests off
ProxyPreserveHost on
ProxyPassMatch /editor-messaging/api/v2/diagrams/(.*)/event/ws.json
ws://localhost:80/editor-messaging/api/v2/diagrams/$1/event/ws.json
ProxyPassReverse /editor-messaging/api/v2/diagrams/(.*)/event/ws.json
ws://localhost:80/editor-messaging/api/v2/diagrams/$1/event/ws.json
ProxyPass /app/messaging ws://localhost:80/app/messaging
ProxyPassReverse /app/messaging ws://localhost:80/app/messaging
ProxyPass /graphql-event/ ws://localhost:80/graphql-event/
ProxyPassReverse /graphql-event/ ws://localhost:80/graphql-event/
ProxyPass / http://localhost:80/
ProxyPassReverse / http://localhost:80/
...
```

Please change it to the actual URL that Cacoo is running in “ProxyPass” and “ProxyPassReverse”.

If you run Cacoo with the “/cacoo” context path (set “CACOO_CONTEXT_PATH” as “true”), please include the “/cacoo” context for each endpoint like below.

Sample configuration

```
...
RequestHeader set X-Forwarded-Proto "http"
ProxyRequests off
ProxyPreserveHost on
ProxyPassMatch /cacoo/editor-messaging/api/v2/diagrams/(.*)/event/ws.json
ws://localhost:80/cacoo/editor-messaging/api/v2/diagrams/$1/event/ws.json
ProxyPassReverse /cacoo/editor-messaging/api/v2/diagrams/(.*)/event/ws.json
ws://localhost:80/cacoo/editor-messaging/api/v2/diagrams/$1/event/ws.json
ProxyPass /cacoo/app/messaging ws://localhost:80/cacoo/app/messaging
ProxyPassReverse /cacoo/app/messaging ws://localhost:80/cacoo/app/messaging
ProxyPass /cacoo/graphql-event/ ws://localhost:80/cacoo/graphql-event/
ProxyPassReverse /cacoo/graphql-event/ ws://localhost:80/cacoo/graphql-event/
ProxyPass /cacoo/ http://localhost:80/cacoo/
ProxyPassReverse /cacoo/ http://localhost:80/cacoo/
...
```

If you use 443 port (HTTPS), set X-Forwarded-Proto “https”.

Changes for the user's environment (From 1.76 or old)

About HTML5 version editor

From this version, our editor (diagram editing page) has changed from Flash version to HTML 5 version without Flash.

For any diagrams created before the migration, you need to convert data before editing them with the HTML5 version. You can do data conversion when editing an unconverted diagram.

Diagram data conversion involves the following changes.

- Once converted, you can't edit the diagrams again with the Flash version or restore them to the previous version.
- For shared diagrams, all sharing members will need to use the HTML5 version.

Supported environments

The HTML5 version does not require installing Flash Player, but operating system and browser versions are different from the previous version. The HTML5 version supports the following browsers.

Windows (version 7 or later)

- Google Chrome
- Mozilla Firefox
- Microsoft Edge (Chromium)

* Internet Explorer is not supported for operation in any versions.

Mac OS X

- Google Chrome
- Mozilla Firefox
- Safari 10.1 or later

Functional changes

With the HTML5 version, some functions differ from Flash in the following points.

- Cacao Ninja integration is no longer provided and some functions such as PDF export are available with OS and browser alternative functions.
- In an environment where Flash doesn't work, the fonts installed on your PC are not automatically detected, so you will need to update them manually.
- If you are using characters smaller than the minimum character size set for the browser, those characters won't be displayed in the size you have set.

For more details, please refer to the following page.

<https://cacao.com/blog/cacao-html5-editor-released/>

Update checklist

If you encounter a problem while updating Cacoo Enterprise, please make sure you meet the requirements.

When you need any technical support, please check Contact us [Contact us](#).

Checklist	
	Using AWS CLI 1.14 or above, or using AWS CLI 2.x
	Using Docker 17.09.1 or above
	Using PostgreSQL Server 12
	Make sure PostgreSQL database accepts connections from Cacoo Docker environment. Even if you run both in the same server machine, PostgreSQL should be configured to accept connections from Docker virtual network.
	Copy {Tomcat Directory}/webapps/ROOT/WEB-INF/client_secrets_oauth2_apps.json file into the /app-conf directory (in case using Google Apps integration)
	Copy {Tomcat Directory}/webapps/ROOT/WEB-INF/client_secrets.json file into the /app-conf directory (in case using Google Drive integration)
	Set necessary settings in .env file in case using /cacoo context
	Make sure to modify Cacoo's internal port number in the .env file and reverse proxy setting in case running Cacoo with Apache HTTP Server reverse proxy
	All migration SQL files have been applied to the database

Contact us

If you have any questions, please contact us from the inquiry form on <https://cacoo.com/contact> .
If your Cacoo server is not running as expected, it may be possible to identify the cause by checking the logs.

When you need any technical support, please contact us with the following files and information for the investigation:

- Log files
- Setting details of your .env file (*without your security information)
- Setting details of Apache reverse proxy (*only when you access the Cacoo via Apache server as a reverse proxy)

[Default settings of log files]

*Please refer to the installation manual for further details.

- [The log output directory] The “log” directory on the same level as the directory containing docker-compose.yml (./log)
- [The number of days to keep the logs] 7 days