

Cacoo Enterprise Update Manual

(ver 3.00)

Nulab, Inc.
5th Edition
April 10, 2020

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

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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
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-3.00.zip -d /root/temp/
```

Features change with this update (version 3.00)

With the version 3.00 update, the following features have been changed since version 2.0X.

Renewed User Interface

This version has the fully renewed user interface for all screens. Accordingly, some of the features have been renamed or changed behaviour.

Renamed Features

The following names have been changed on the screen.

Up to the version 2.0X	Version 3.00
Group	Team
Project	Folder
Stencil	Shape

Folder Types

With the change from "Project" to "Folder", following types of folder have been made.

Private Folder

Private Folder is used to organize personal and not shared diagrams. All diagrams that are not in a folder are placed for each users' "Home".

Shared Folder

Shared Folder is used to organize and share diagrams. This folder type is equivalent with previous "Project"

Switching the folder type

Switch the private and shared folder types by dragging and dropping them.

Pinning a folder

Click the pin next to your favorite folders to keep them at the top of your folders list.

New Editing Features

Some new features have been added to the Editor (Editing diagram screen) .

Dynamic Chart

Dynamic charts allow you to visualize data in your Cacoo diagrams from numerical data. Please refer to the following documents for more information about the features.

<https://support.cacoo.com/hc/en-us/articles/360011481593>

Please note that importing data from Google Spreadsheets is not available.

AWS Import

AWS Import draws Cacoo diagram from Amazon Web Services (AWS) architecture. Please refer to the following documents for more information about the features.

<https://support.cacoo.com/hc/en-us/articles/360010495594>

Please note that IAM roles are not available to use.

Database Schema Importer

With the Database Schema importer function, Cacoo loads RDBMS metadata then draws a database diagram in Cacoo. Please refer to the following documents for more information about the features.

<https://support.cacoo.com/hc/en-us/articles/360045672494>

Enhanced simultaneous editing

"Live Cursor" and "Comment" features are available. Please refer to the following documents for more information about the features.

<https://support.cacoo.com/hc/en-us/articles/360001601228>

Text Enhancement

Strike-through and highlight (background color setting) have been added to the text styles. In addition, it is now possible to set up links in parts of the text instead of the whole.

Shape Finder

The Shape Panel has been enhanced so that you can choose favorite shapes with the new Shape finder. This version includes some updated or new icons like AWS or Kubernetes.

Login to Cacoo with SAML authentication

Users can login to Cacoo with SAML IdP accounts which are managed in your company. For more information about the settings, refer to "Initial Settings / SAML login setting" in the Installation Manual.

New Management API

New Management API has been added to allow organization administrators to see and register/edit/delete Cacoo users. For details on how to use it, refer to the "Initial Settings / Management API Key" in the Installation Manual.

Obsolete Features

Project Creator Role

The "Project Creator" role, which allows you to create a folder (project) without being an administrator, has been removed.

From version 3.00, anyone with a member role can create a shared folder and share diagrams.

Diagram Preview Page

From version 3.00, selected diagrams will be opened in the Editor directly.

Flash version Editor

Due to Adobe's planned stoppage of Flash support, the Flash version of the editor has been discontinued. When users open an old diagram which is created in the Flash version, it will be opened in the recent version Editor (non Flash) with converting its data.

Caution

When converting diagram data, any editing operations that were not saved in the editor will be lost and opened in the editor with the last saved data. If you have diagrams that have been edited in a Flash version and are still unsaved, please save them before updating Cacoo.

Update Steps (since 2.02)

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-2.02
# pg_dump -h localhost -U postgres -c cacoo >
/root/temp/backup-2.02/cacoo.dump
```

2. Update database

Connect to the PostgreSQL database server then apply update/enterprise_migrate_3.00.sql, database/stencils.sql and database/templates.sql on the cacoo database like following command.

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_3.00.sql
cacoo=# \i stencils.sql
cacoo=# \i templates.sql
cacoo=# \q
```

3. Update Cacoo environment

1. Overwrite (replace) "docker-compose.yml", "cert/**" and "jobs/**" 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 /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	<p>With "true" value, please modify .env file as below.</p> <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

4. 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 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/
...
```

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

Sample command

```
# cp /root/temp/cacoo/cacoo-docker/docker-compose.yml .
# export AWS_ACCESS_KEY_ID=*****
# export AWS_SECRET_ACCESS_KEY=*****
# aws ecr get-login --region ap-northeast-1 --no-include-email | sh -
# docker-compose up -d
```

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-1.61
# 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

To use Cacoo update, you need PostgreSQL version 9.5 or higher. Please upgrade if

you are using PostgreSQL below version 9.5.
For PostgreSQL upgrade, please refer to 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, 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 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 "docker-compose.enterprise.yml" 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.

- 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

Changes for the user's environment

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 (Windows 10 Creators Update or later)

* 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.

Please contact Cacoo support <support@cacoo.com> if the problem persists.

Checklist	
	Using AWS CLI 1.14 or above
	Using Docker 17.09.1 or above
	Using PostgreSQL Server 9.5 or above
	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)
	Modify .env file by hand 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