Budget & Capex: how the app works

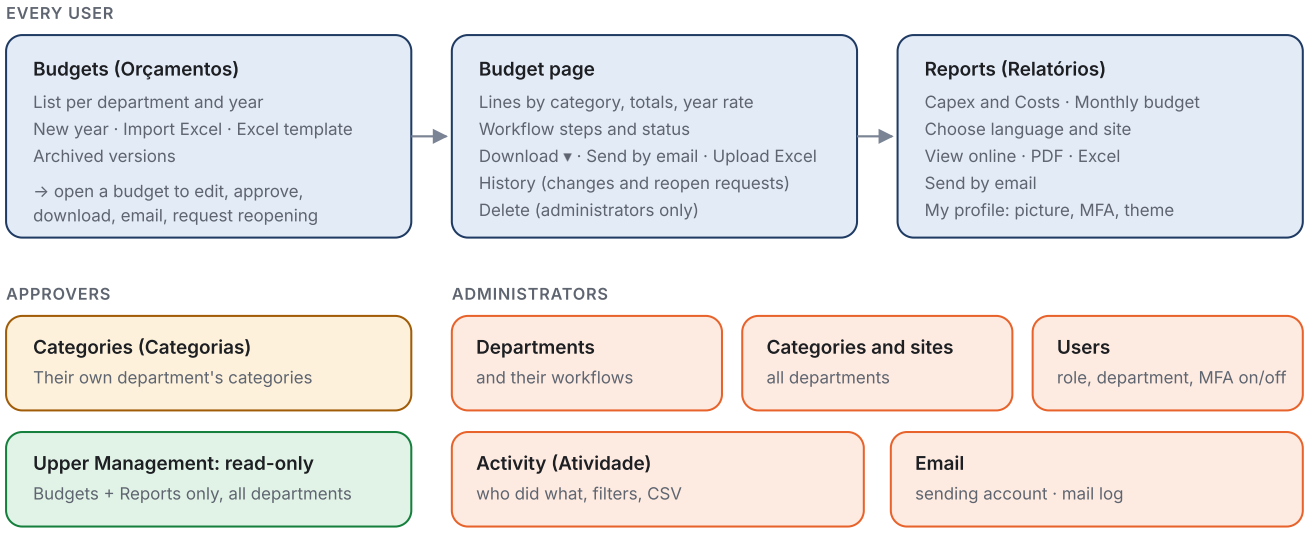
Version 7.0 · a guide to what the app does, who can do what, how a budget moves from draft to approved, and how each field you change affects the numbers in the reports.

The screens are in Portuguese or English (PT/EN switch at the top). This guide uses the English names, with the Portuguese name in *italics* where it helps.

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1. The app at a glance

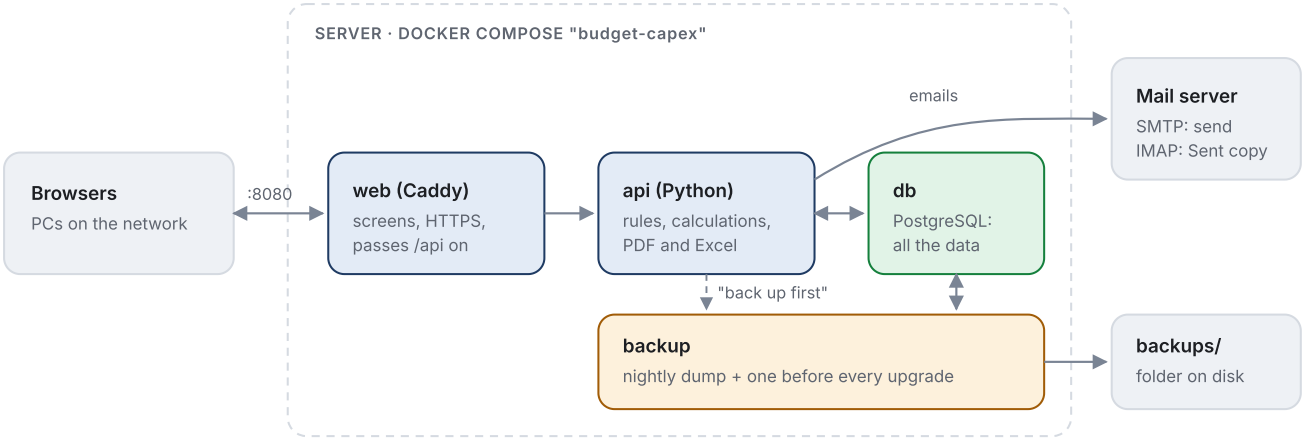
Each department prepares one budget per year. A budget is a list of cost and revenue lines grouped by category. Each line has last year's actual amount, this year's base amount and an adjustment, and it is split over the months. From those lines the app produces two documents, on screen and in PDF and Excel: the **Capex and Costs report** (*Capex e Custos*) and the **Monthly budget** (*Orçamento mensal*).



Pages in the top menu. Upper Management sees only Budgets and Reports, for every department, and can view, download and email but not change anything. Approvers also see everything every user sees, and administrators see everything.

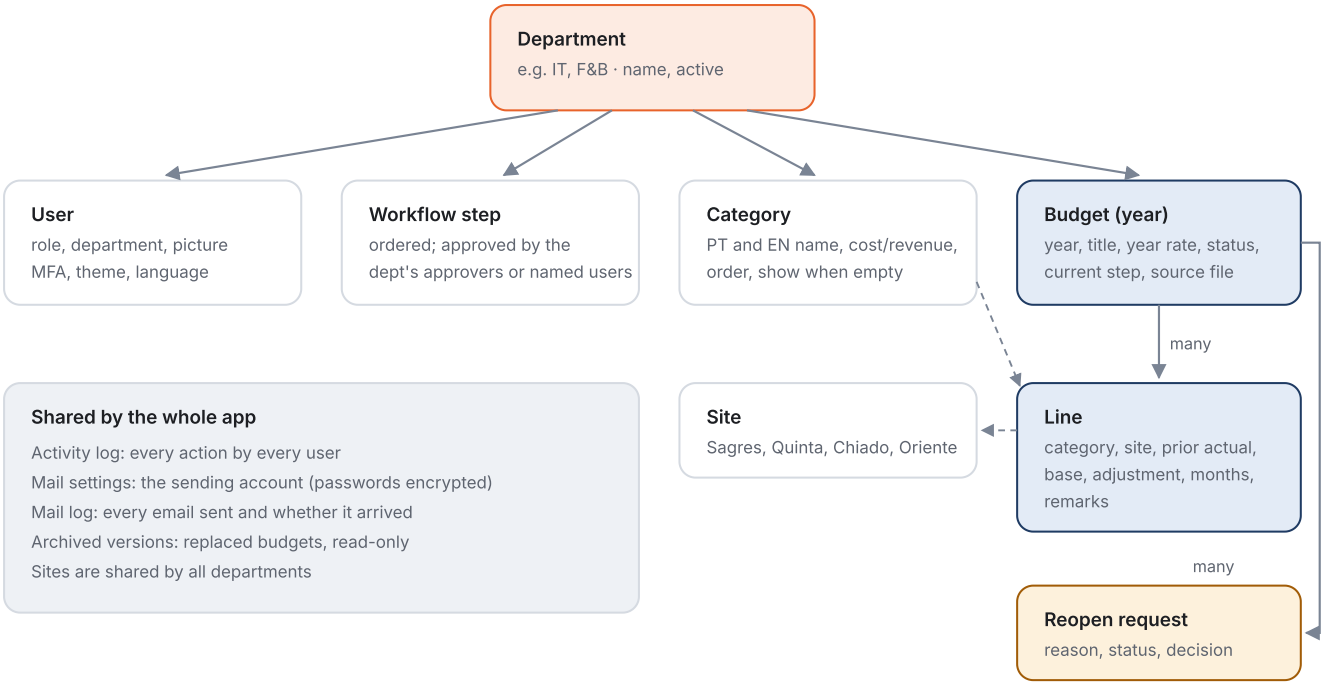
2. What runs on the server

The app runs on one server on your network with Docker. People open it in a browser at `http://<server>:8080`. Nothing needs to be installed on the PCs.



Four containers. Your data lives in the db container's volume, not in the app folder, so replacing the folder with a new version keeps it. The dashed arrow is the request the api makes before it changes the database during an upgrade.

3. What is stored



Solid arrows: "has many". Dashed: a line points to one category and optionally one site. A department's categories are its own, so an IT budget never shows F&B lines.

4. Roles and permissions

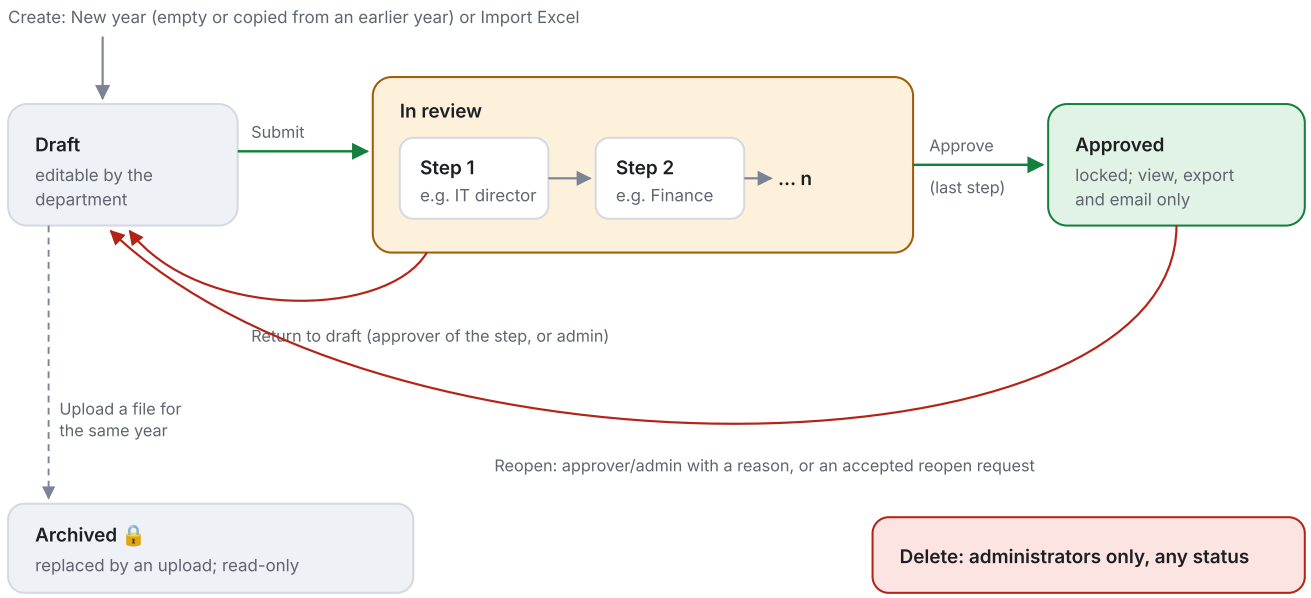
Every user has one role and belongs to one department. Everyone can **see and export every budget**, and switch between departments with the department list on the Budgets page. Only the budget's own department can change or approve it.

Upper Management (*Gestão de Topo*, new in version 6) is a read-only role for directors. These users see every department and start on *All departments*. They can open any budget and its reports, download them (the budget file, PDF and Excel) and send them by email. They cannot create, import, edit, upload, submit, approve, reopen, request reopening or delete, they never count as approvers, and their menu shows only Budgets and Reports. A department is optional for them.

WHAT	VIEWER	UPPER MGMT	EDITOR	APPROVER	ADMIN
View budgets and reports, download PDF / Excel	all	all	all	all	all
Send reports by email (once email is set up)	yes	yes	yes	yes	yes
Request reopening of an approved budget (with reason)	yes	no	yes	yes	yes
Create, import, edit a draft budget; upload a changed file	no	no	own dept	own dept	any
Submit a draft for review	no	no	own dept	own dept	any
Approve or return a workflow step	no	no	no	own dept*	own dept*
Reopen directly, accept or decline reopen requests	no	no	no	own dept	any
Manage categories	no	no	no	own dept	any
Delete a budget (any status, typed confirmation)	no	no	no	no	yes
Own profile: picture, light/dark mode, language, password, turn own MFA on or off	yes	yes	yes	yes	yes
See who has MFA on; reset another user's MFA	no	no	no	no	yes
Departments, workflows, users, sites, email settings, activity and mail logs	no	no	no	no	yes

* A workflow step can instead name specific users who approve it; then only those users can approve that step, whatever their role (Upper Management users can never be named). An administrator can always return a budget in review to draft.

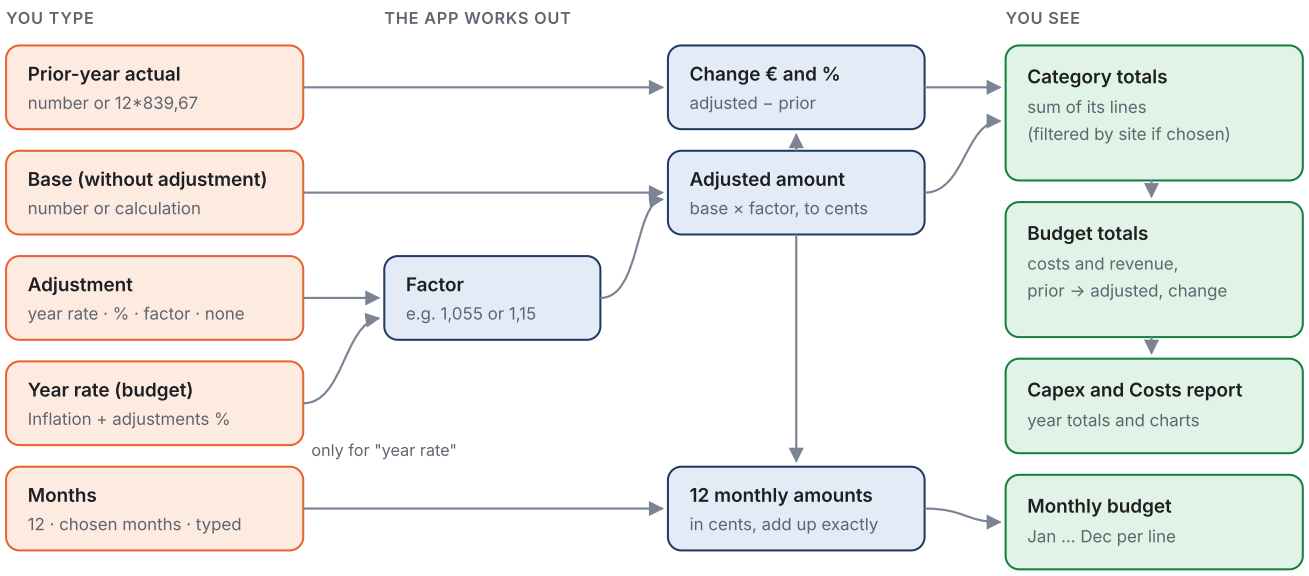
5. A budget's life cycle



Only a draft can be changed. Each approval moves the budget to the next workflow step; the last approval makes it Approved. A department with no steps configured is approved in one step by its approvers.

6. How the numbers are calculated

Every total in the app and in the reports is built from the lines, in this order. Change any input on the left, and everything to its right follows.



With **Monthly amounts** (typed months) the path is different: the year total is simply the sum of the twelve months, and Base and Adjustment are not used.

The adjustment and the factor

ADJUSTMENT (*AJUSTE*)	FACTOR USED	EXAMPLE, BASE 96 532,00 €
Year rate (*Taxa do ano*)	1 + the budget's year rate	rate 5,5 % → × 1,055 = **101 841,26 €**
Percent (*%*)	1 + adjustment value ÷ 100	value 15 → × 1,15 = **111 011,80 €**
Factor (*Fator ×*)	the adjustment value	value 2,055 (hardware price rise) → **198 373,26 €**
None (*Sem ajuste*)	1	**96 532,00 €**

Worked example (IT 2027, "Mobile phone subscriptions")

```
Prior-year actual   96 532,00 €
Base                96 532,00 €
Adjustment          Factor × 1,15
Adjusted            96 532,00 × 1,15 = 111 011,80 €
Change              111 011,80 − 96 532,00 = +14 479,80 €   (+15,00 %)
Months              chosen: Jan–Apr → 27 752,95 € each, May–Dec 0
```

Rounding rules

- Each line's adjusted amount is rounded to cents before it is added up, as the finance reports do. Totals are therefore exact sums of the lines you see.
- Monthly amounts are in cents. The rounding difference goes to the last month (December, or the last chosen month), so the twelve months always add up to the adjusted amount.
- Change % is blank when the prior-year actual is zero.

Typing amounts

Amount fields work like Excel: `12*839,67+3292,56` or `=5512*12`. Both `1 234,56` and `1,234.56` are understood. The calculation is kept, so you can see later how a figure was built.

7. Every field and what it changes

On a budget

FIELD	WHAT IT DOES	WHAT CHANGES WHEN YOU EDIT IT
Year	The budget year; one current budget per department and year.	Column headings ("2026 actual", "2027 adjusted"), report titles, file names.
Title	Name shown in lists and reports.	Budget list, report headers, email subject suggestion.
Inflation + adjustments (%) *(Taxa do ano)*	The year rate.	Every line whose adjustment is "Year rate": their factor, adjusted amount, months, and so all category and budget totals and both reports. Lines with %, factor or none are not affected.
Copy from an earlier year (when creating)	Starts the new year from another year's lines.	Each copied line's prior actual and base both start at last year's adjusted amount; adjustment type, months and site are kept. Replace the actual with the real figure.

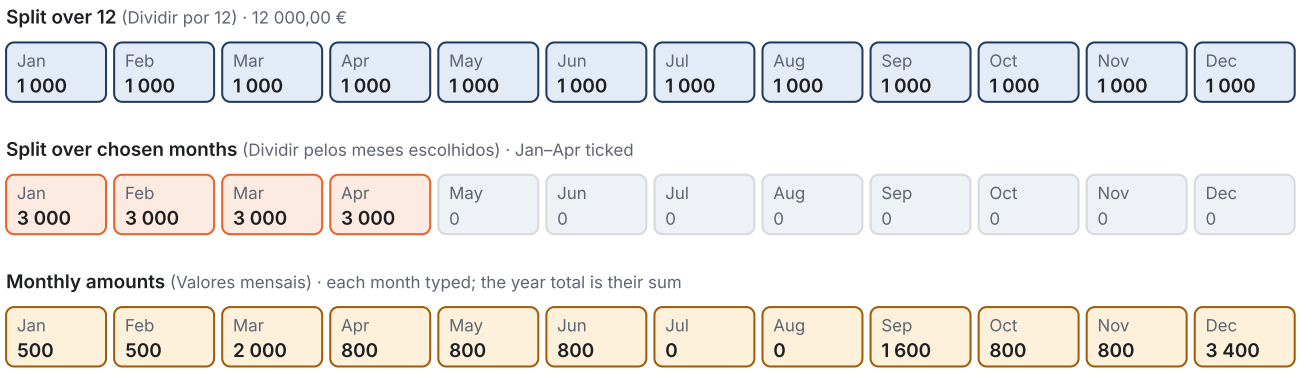
On a line

FIELD	WHAT IT DOES	WHAT CHANGES WHEN YOU EDIT IT
Line (name) and **Description**	Labels.	Text in the budget and the reports only.
Category	Which group the line belongs to (your department's categories).	Moves the amounts from one category total to another: category pages and charts in Capex and Costs, grouping in the Monthly budget. Budget totals stay the same, unless the category is a revenue category, in which case the amount counts as revenue instead of cost.
Site *(Unidade)*	Sagres, Quinta, Chiado, Oriente, or Group.	What appears when a page or report is filtered by site. "Group" lines appear only in the all-sites view.
Prior-year actual	What was spent last year.	The "prior" column, change € and change %, category and budget prior totals, and the comparison charts. Does *not* change the new year's amount.
Base *(sem ajuste)*	The new year's amount before the adjustment.	Adjusted amount → months → every total for the new year → both reports.
Adjustment and its **value**	How the base becomes the adjusted amount (see the table above).	Factor → adjusted amount → months → totals → reports.
Reason for adjustment	Why it went up or down.	Shown under the line and in the reports.
Months	How the year amount is spread: split over 12, split over chosen months, or typed monthly amounts.	Only the Monthly budget's month columns and the monthly totals. The year total does not change (except with typed amounts, where the year total *is* the sum of the months).
Remarks	Free notes.	Shown on the line; no effect on numbers.

On a category

FIELD	WHAT CHANGES
Name (PT / EN)	The heading in the language of the screen or the report.
Section: cost or revenue	Whether its lines count in the cost totals or the revenue totals.
Order	The order of categories on screen and in the reports.
Show when empty	Whether a category with no lines still appears (with zero) in the budget and reports.
Active	Inactive categories can't be chosen for new lines. Existing lines keep them. A category with lines can be deactivated, but not deleted.

8. Splitting a year into months



The first two keep the year total (base × adjustment) and only decide *when* it is spent. Quick buttons on the line pick a quarter (Q1–Q4) or a half-year (H1, H2). Switching a line from typed months to a split keeps its year total as the base.

9. Reports, downloads and email

Capex and Costs Capex e Custos

- Totals: prior-year actual vs adjusted, change € and %
- Chart of each category, last year vs this year
- Chart of the change by category
- One page per category with its lines and reasons
- Summary table

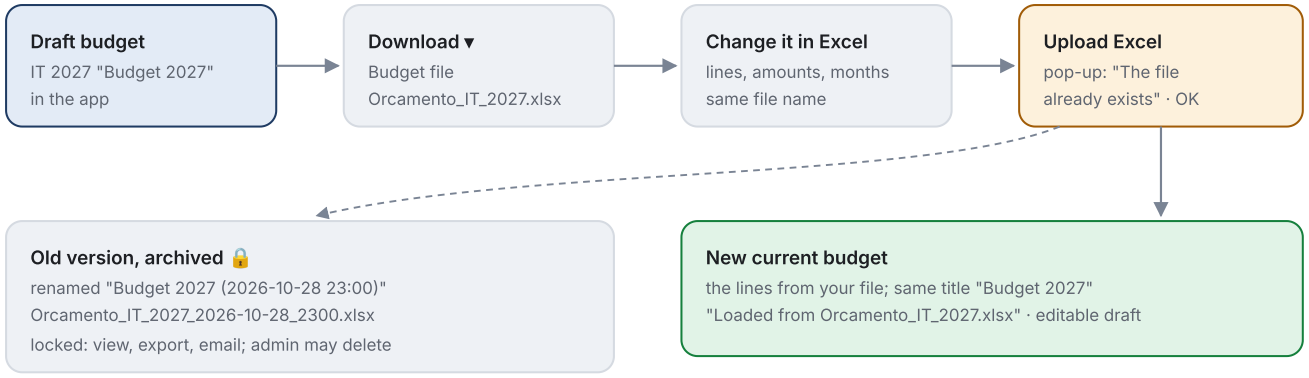
Monthly budget Orçamento mensal

- Every line with its twelve months and year total
- Category subtotals and monthly totals
- Option: include empty categories
- Excel version keeps live formulas

On the **Reports** page you pick the budget, the **language** (Portuguese or English) and the **site**; the same choice applies to viewing online, PDF, Excel and email. On a **budget page**, **Download ▾** offers the editable budget file and both reports, and **Send by email** lets you attach any of them. That works in every status, including draft and approved.

Sending by email asks for recipients (To, Cc, "send me a copy"), a subject and a message, and which files to attach. The email goes out from the account the administrator set up, a copy is saved in that mailbox's Sent folder, and the mail log records it.

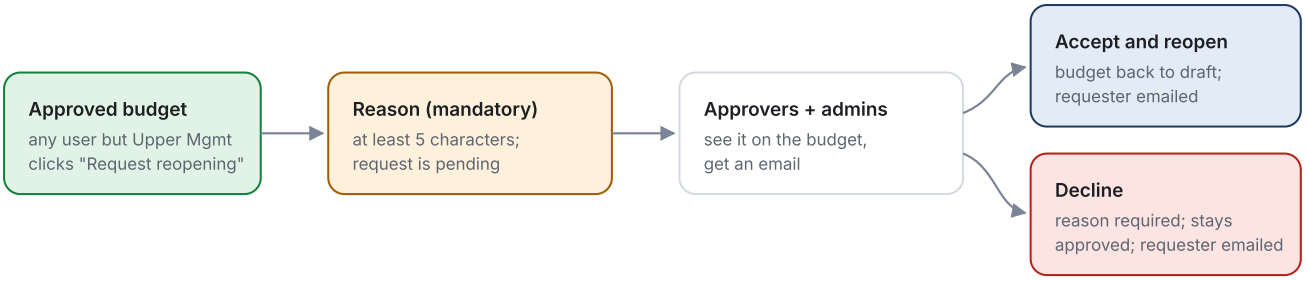
10. Excel: template, download, re-upload



Nothing is lost: the version you replace is kept, renamed with the date and time, and locked. Only a draft can be replaced. An approved or in-review budget must be reopened first. Archived versions are listed under Budgets → "Show archived versions".

Excel template (Budgets → *Modelo Excel*) gives a workbook for a department and year, blank or pre-filled from an existing budget, in PT or EN. It has an Instructions sheet and a Lines sheet with drop-down lists for category, site and adjustment, twelve month columns, and a last column *Split over months* where you can write `1-4` or `Jan, Fev, Mar, Abr`. Unknown categories are created on import; anything skipped is listed. The original "Budget para 2027" workbook layout can also be imported.

11. Reopening an approved budget



An approver or administrator of the department can also reopen directly with **Reopen**, giving a reason; that also answers an open request. One request can be pending at a time. All requests, decisions and reasons stay in the budget's History.

12. Admin: email, logs, backups, upgrades

Email → Sending account

- SMTP server, port, security (STARTTLS 587 / SSL 465 / none), username and password
- Sender address and name, reply-to, signature
- Copy in the Sent folder over IMAP (found automatically, or named)
- **Test connection** signs in only; **Send test email** sends one
- Turning email on adds "Send by email" for everyone, Upper Management included

Gmail already keeps its own copy, so turn the Sent-folder option off there.

Logs

- **Activity**: sign-ins (and failed ones), every change to budgets and lines, imports, approvals, reopen requests, archiving, deletions, report views, downloads and emails, admin changes. Filter and export to CSV.
- **Email → Mail log**: who sent what to whom, attachments, delivered or failed, Sent-folder copy saved or not. Export to CSV.

Backups

- A database dump every night at `BACKUP_TIME` into `backups/`, kept `BACKUP_KEEP_DAYS` days
- An extra one, `…_before_upgrade.sql.gz`, before every upgrade that changes the database
- Restore: `docker compose exec backup restore.sh /backups/<file>`
- Copy `backups/` to another disk or NAS regularly

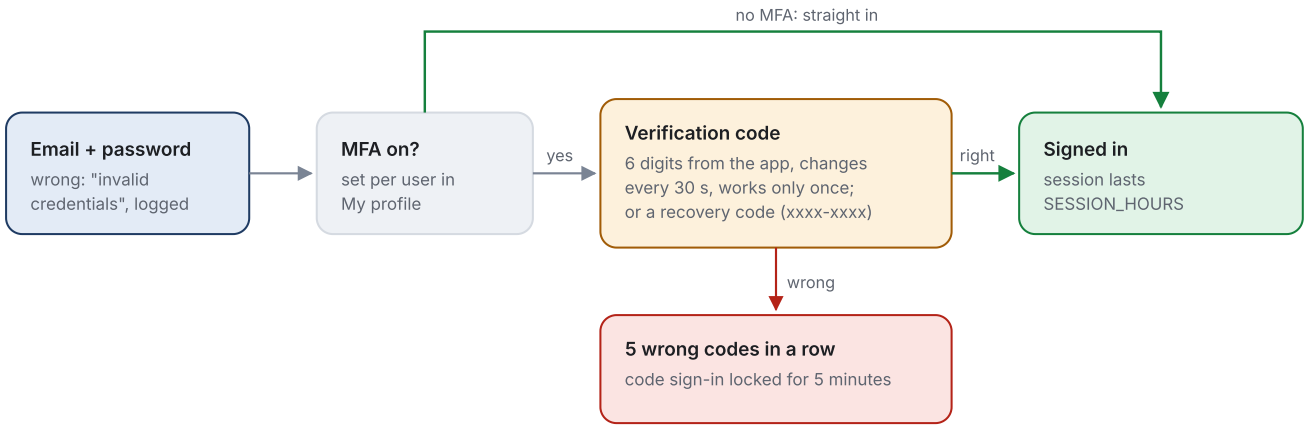
Upgrading to a new version

1. Unzip the new version over the app folder, keeping `.env` and `backups/`
2. Run `docker compose up -d --build`

The api asks for a backup, waits for it, then updates the database. If the backup fails, it does not upgrade. Never run `docker compose down -v`: `-v` deletes the data.

13. Signing in, MFA, appearance and picture

MFA (two-step sign-in, *autenticação em dois passos*) is optional and each user turns it on for themselves. With MFA on, someone who learns a password still cannot sign in without the user's phone.



The code step appears only for users who turned MFA on. A code is accepted if it is the current one or the one just before or after, so a phone clock that is slightly off still works.

Turning MFA on (My profile)

1. Install an authenticator app on the phone: Microsoft Authenticator, Google Authenticator, Authy, 1Password...
2. In **My profile**, press **Turn on MFA** and scan the QR code (or type the key shown).
3. Type the 6-digit code the app shows and press **Confirm and turn on**. MFA is only on after this step.
4. Save the 8 **recovery codes**. Each one works once, for when the phone is not at hand. They are not shown again; *New recovery codes* replaces them.

Turning MFA off needs the password and a code.

For administrators

- **Users** has an MFA column: *On* or *Off* for each user.
- Someone lost their phone and recovery codes: **Users → Edit → Reset MFA**. They sign in with the password and can turn MFA on again.
- MFA secrets are stored encrypted with `SECRET_KEY`. Keep the same `.env` when upgrading, or everyone's MFA has to be reset.
- The Activity log records MFA turned on or off, resets, wrong codes and recovery codes used.

Light and dark mode

The round button in the top bar (and on the sign-in page) cycles **Automatic → Light → Dark**. Automatic follows the computer's setting. The same choice is in **My profile → Appearance**, and it is saved with the user, so it follows them to other computers. Reports in PDF and Excel are not affected.

Profile picture

In **My profile**, **Choose picture** takes a JPG, PNG, GIF or WebP of up to 5 MB. It is cropped to a square from the centre and reduced to 256 px. It shows in the top bar and in the users list; without one, the user's initials are shown. Pictures are stored in the database, so they are in the backups. **Remove** deletes it.