Billetix CNG Converter — Documentation

October 30, 2026 · Version 2 (`billetix-cng-v17 cache`)

Presentation

Billetix CNG Converter transforms a ticket file (CSV, Excel, ODS, JSON, or fixed-width text) into a pivot `.cng file` , which can be imported into the Billetix.net access control system. The application runs entirely in the browser: no files are sent to a server.

It is aimed at people who receive ticket lists from external suppliers, in a wide variety of formats, and need to upload them to Billetix. The principle It consists of three steps:

1. **Import** source file: the application detects the encoding, separator or column width, and header row.
2. **Associate** the columns of the file with the fields of the pivot format, with manual correction possible.
3. **Control and export** : statistics, warnings, preview, then download the `.cng` and, if needed, the list of rejected lines.

New features in version 2

This version remains version 2 of the application; only the offline cache version has changed: it is now `billetix-cng-v17` . It brings the following changes:

- **Lists of sorted columns.** In step 2, the columns of the file are presented in alphabetical order (ignoring uppercase and accents; "Column 2" before "Column 10"). "— Do not import —" remains at the beginning.
- **Column names with spaces (fixed width).** In "Field lengths", a name can contain spaces: `6=Date,4=Room,10=Barcode,*=Customer name` .
- **State field better controlled.** It is only automatically associated if the column contains only codes 1 to 5 (or the V/R codes of a "Sale/Refund" column); manually choosing a column without any recognized state requires authorization, stored in the profile.
- **Column "Sale/Refund" recognized** for the Status field: V (sale) gives 1, R (refund) gives 3.
- **The State column is automatically suggested** when none is associated: the one whose values all resemble states.
- **Codes 1 to 5 are verifiable.** Codes 1 to 5 in the file also go through the status panel, which is presented identically, in order to correct a code whose meaning differs from Billetix or to exclude it.
- **Status labels recognized in French and English,** with tolerance for variations and typos (paid, refunded, pending, anulé…). “Booking” and “Booked” indicate status 1.
- **Excluding rows by label.** In the status panel, the "✕ Exclude these rows" option excludes from the export all rows that have this label.
- **State correspondences stored in the profile,** including exclusions, and automatically saved when a profile is selected.

- **More robust profiles.** Profile columns are found regardless of capitalization, accents, or spaces; profiles from older versions are read; a missing column no longer clears the current association.
- **Fixed width file slicing stored in the profile** (named lengths and lines to ignore) and reapplied on import or profile selection.
- **Titles and footers are separated** in fixed-width files without headers (e.g., "Sales of … - 14 lines.").
- **Android installation issue fixed.** The manifest is now called `manifest.json , and a web.config` file declares the file types to IIS: without these, the server returned a 404 error for the manifest, and Android wouldn't offer the installation. An "Install application" button appears in the header when the browser allows installation.
- **Hourglass during long processing.** A window with an hourglass appears during file loading ("Loading "tickets.csv" (6.5 MB)…"), reading another sheet from a workbook, and creating the .cng or rejection file ("Creating the .cng file (100,000 lines)…"). It disappears at the end of the operation.
- **Large files are much faster.** The search for status labels ignores values without letters (barcodes, prices, numbers) and does not recalculate for a value already seen: a file of 100,000 tickets loads in a little over a second instead of a minute.
- **Simplified publishing. The** `incrementer-version.js` script increments the cache version, and the footer displays the active version ("Cache version v17").

Installation and launch

The application launches from https://cngconverter.billetix.net : simply open this address in a modern browser (Edge, Chrome, or Firefox), without installing anything. It can then be installed like an application and works offline.

- **Launch** : Open https://cngconverter.billetix.net in your browser. No installation required. local server is not necessary .
- **Installation (PWA)** : When the browser allows installation (Chrome or Edge, on desktop or Android), an "Install app" button appears in the header. You can also use the browser menu: "Install app" in Edge or Chrome on a desktop; on Android, tap the menu icon (⋮) then "Install app" or "Add to Home screen." After the first launch, the files are cached; the message "Offline" appears in the footer when there is no internet connection.
- **Server-side requirements** : the site must be served over HTTPS and the `manifest.json file` must be accessible. On IIS, the provided `web.config file declares the .json` and `.webmanifest types` and re-reads `service-worker.js` on each visit; it must be published along with the other files. To verify, open the site's address followed by `/manifest.json` : the manifest text should be displayed.

Updates. A new version is published to the server: online, the browser first retrieves the latest version (network first) and only accesses the cache offline. After an update, reload the page; if the old version remains displayed, close and then reopen the installed application. The cache version is the `VERSION constant` in `service-worker.js` (currently `billetix-cng-v17`): it must be incremented with each publication, using the `node incrementer-version.js command` (see Maintenance). The application footer displays the active version, for example, "Cache version v17," on the first visit: this is the easiest

way to verify that the latest version is loaded. Always publish all files in the directory, including `web.config .`

User guide

A conversion takes place in three steps, displayed in order on the page; steps 2 and 3 appear once a file has been read.

1. **Import the source file. Drag** and drop the file onto the dotted area or click to select it. Settings following appear according to the format:
    - *Sheet* : for an Excel or ODS workbook with multiple sheets (the first visible sheet containing data is chosen).
    - *Separator* : Automatic, semicolon, comma, tab, vertical bar or Fixed width.
    - *Source file encoding* : Automatic, UTF-8 or Windows-1252.
    - *Header row* : the row number containing the column names; the "Detect" button restarts the detection. A value of 0 means "no header row" (fixed-width file): the columns are then named "Column 1, 2…".
    - *Field lengths* : only for a fixed-width file, with a preview of the segmentation. Lengths are separated by commas, and each length can be named; a name can contain spaces: `6=Date, 4=Room, 10=Barcode, *=Remaining` (the "_" also becomes a space: `Barcode`). A saved profile stores this segmentation.
    - *Lines to ignore at the beginning* : visible when there is no header line. Number of title or dash lines to discard at the beginning of the file; empty = automatic (the number found is displayed, for example "auto (2)").
2. **Matching columns.** Each field in the pivot format displays a list of the file's columns, sorted alphabetically; the automatic matching is already done. The `Barcode field` is mandatory. If no column is present, a *fixed value* can be entered (for example, a single `price`). The `Status field` follows specific rules (see "Status Field"): if the selected column contains labels rather than codes 1 through 5, a panel prompts for the status corresponding to each label, or its exclusion. A profile stores all the information for subsequent files.
3. **Check and export.** Four counters (source lines, exported lines, rejected lines—including excluded lines—, duplicates), messages (red = to correct, yellow = warning, green = compliant), and a preview of the first 10 lines *as they will be exported* . Two checkboxes can be configured here: *Ignore lines without barcodes* and *Eliminate duplicate barcodes* , which are checked by default. The "Download .cng file" button produces `<source file name>_Billetix.cng` ; "Download rejected lines (CSV)" produces `<name>_rejets.csv` . During file creation, an hourglass indicates that processing is in progress.

The export button remains greyed out as long as no `Barcode` is associated or no line is exportable.

Input formats

The application reads six families of files; the format is recognized by the file signature and its content, not just by the extension.

Format	Extensions	Special Features

Format	Extensions	Special Features
Delimited text	`.csv` `. tsv` `.txt` `.cng`	Semicolon, tab, comma, or vertical bar separators are automatically detected; quotation marks are supported; heading lines are accepted before the header.
Fixed - width text	`.txt` and similar files	Columns aligned without separators, with or without a header row; segmentation detected, suggested, or entered in lengths (optional names)
JSON	`.json` `.ndjson`	Array of objects, or object containing `data` , `tickets` , `items` , `rows` , `results` , or `billets` ; flattened nested objects (`client.name`); one JSON row per record accepted
Excel	`.xlsx` `.xlsm`	Sheet of your choice, hidden sheets marked "(hidden)"; dates converted to `YYYY-MM-DD` ; long integers without scientific notation
OpenDocument	`.ods`	Sheet of your choice; dates, numbers and booleans converted to text
Not read	`.xls` , `PDF`	Explicit error message: save as `.xlsx` or export as CSV

Recognized text encodings: UTF-8, UTF-16 (with BOM) and Windows-1252. Any BOM is removed before reading.

Automatic detection

Four detections are performed in sequence during import; each can be corrected manually without affecting the others.

Encoding. A UTF-16 BOM is recognized. Otherwise, the file is decoded in strict UTF-8; if it contains invalid bytes, it is read in Windows-1252. The "Source file encoding" list forces UTF-8 or Windows-1252.

Separator. For the first 200 non-empty lines, the application uses the separator (semicolon, tab, comma, or vertical bar) that produces the most lines of the same width with at least two columns. Therefore,

title lines without separators no longer affect the result. A file read in a single column displays the warning "Single column: check the separator".

Fixed width. A character position is considered "blank" if it is empty in almost every line (2% tolerance); lines shorter than 70% of the median length (headings) are ignored. Each set of non-empty columns defines a field. The fixed width only takes precedence if no separator results in at least 3 columns on half the lines, and if alignment results in more columns. Lengths are corrected in the "Field Lengths" field, for example, `12, 10, 22, 8, *` (`*` = rest of the line); without names, they can also be separated by spaces (`12 10 22 *`). The preview places a `|` at each boundary. Column names are entered in the same lengths, including spaces: `6=Date, 4=Room, 10=Barcode, *=Remaining` .

Fixed width without headers or spaces. When fields are contiguous (no separators, no empty columns), the application offers a rough trimming: lines of the same length are broken at each pass of numbers/letters/spaces, with punctuation remaining with the preceding text. This suggestion is indicated by "⚠ Automatically suggested trimming" and should be verified, as two adjacent numeric fields cannot be distinguished. A file without a header line is read with "Header Line" = 0: columns are named "Column N" (or bear the names entered with their lengths). Title, dash, and footer lines (which are sparsely populated) are not considered data: their number is detected or set in "Lines to ignore at the beginning" (an entered number is accepted as is; any footer is then rejected as "without a barcode").

Titles and footers. In a fixed-width file without a header line, the beginning and end lines of the file that are significantly shorter than the ticket lines (less than 80% of their usual length), such as "Sales of 08/02/2023 … - 14 lines." or "### END.", are not data: they are discarded and their number is indicated under the file name.

Header line. Three rules, in order, for the first 100 lines:

1. the line that contains the most known field names (at least 2 points; `Barcode` is worth 3);
2. otherwise , by structure: the first line filled over at least 80% of the dominant width of the table, made up of text labels all different (neither numbers nor dates), and followed by lines of comparable width;
3. otherwise , the first line with at least 2 filled cells.

Empty lines are counted: the number corresponds to the editor's or Excel's number. Lines above the header are ignored, and their number is indicated below the file name. If no header line is found in a fixed-width file, the header line count is 0 (see above).

Association of columns

The application suggests the most probable column for each of the 18 fields in the pivot format, based on the header name. The names are compared without accents, without case, and without punctuation (`REF.EXTERNE` becomes `ref extérieure`).

Billetix Field	Level	Examples of names recognized
Barcode	OBLIGATORY	barcode, barcode, external reference, ticket code, QR code, ticket ID, ticket number , EAN

Billetix Field	Level	Examples of names recognized
State	recommended	state, status, sale/refund
Price	recommended	fare , ticket type, ticket type, rate, fare
Price	optional	price , price including tax, price , amount
Method of obtaining	optional	method , operator location, operator, sales channel , sales channel
Category	optional	category , category
Area	optional	zone, area
Section	optional	section, sector
Row	optional	row , row
Bench	optional	bench, place, seat
Bench type	optional	bench type, seat type
client name	optional	name , client benefit name , last name , surname , name (exact name only)
client's first name	optional	first name , client's first name (benef) , first name, first name
Tax ID number	optional	number , tax number, tax id
Currency	optional	currency
Company	optional	company , corporate name , business
number order	optional	number order , order number , order ID, order
customer number	optional	number , customer id, client id

Allocation rule. A name identical to a synonym is worth 100 points minus its rank in the list; a synonym of 4 letters or more present as a whole word in the header is worth 70 minus its rank; the threshold is 50. The best pairs are allocated first and a column is used for only one field: `Bench type` therefore goes to the `Bench type field` and not to `Bench` .

Fixed value. Each field has an input area, active as long as no column is selected. Its value is applied to all rows and the field is added to the output file (a single `Price` , a `Currency`).

Profiles. A profile stores, under a name (for example, the supplier), the associations, fixed values, label → status mappings (including excluded labels), the allowed columns for the Status field, and, for a fixed-width file, the segmentation (named lengths and lines to ignore). It is applied automatically when at least 80% of its columns are found in the imported file; names are compared without regard to uppercase letters, accents, or spaces ("BARCODE" matches "Barcode"). When a profile is selected, each mapping modified in the status panel is immediately saved there (message "Mapping saved in profile…"); without a profile selected, "Save profile" saves them with the rest (the name of the current profile is suggested). Profiles are saved in the browser (`localStorage` , key `billetixCngProfiles`); "Export profiles" and "Import profiles" (`billetix_profils.json file`) allow them to be shared between workstations, with their correspondences, their permissions and their segmentation.

- **Selecting a profile from an already imported file** : the profile associations are applied. If a profile column is not found in the file, the current association is not cleared: it is retained, and a message lists the missing columns. Profiles created by older versions are read normally.
- **Fixed-width file** : the profile clipping (`source field` of the export) is reapplied. Upon import, the profile whose clipping matches the line lengths of the file is automatically applied; upon manual selection, the file is reread with the profile clipping. A profile created before this version does not contain a clipping: enter the named lengths once, then save the profile under the same name.

State field. Four rules guide the association of this field and protect it from columns that have nothing to do with a state:

- **Automatic association** : the proposed column is only selected if all its values are codes 1 to 5 or empty cells. Exception: a column named "Sale/Refund" is selected if it contains only the codes V (sale → 1) and R (refund → 3). Otherwise, the field remains "— Do not import —" and a yellow message indicates this ("Column … has not been associated with the Status field: it contains values other than codes 1 to 5").
- **Automatic suggestion** : If no column is associated with "State" and no profile is applied, the application suggests the column that appears to be the correct one. All its values must be recognized states (labels, or V/R of a Sale/Refund column), with a maximum of 20 different values; a column containing only codes 1 to 5 is only suggested if its name evokes a state (State, Status, etc.), to avoid selecting a quantity or rank; a column with any name must provide at least two different states (a column containing only "INVITATION" is a price). A yellow message prompts the user to verify the suggested column.
- **With an** automatically applied profile, the Profile Status column is retained if all its values are codes 1 to 5, recognized labels, labels whose correspondence is recorded in the profile, or if the column has been allowed in the profile.
- **Manual selection** : In the Status field list, a column containing no value with a code from 1 to 5, a recognized label, or a label saved in the profile will display "(no recognized status)". Selecting it will display an authorization request ("Do you still want to use it for the Status field?"): Cancel restores the previous selection; OK associates the column, each value of which must then be associated with a status or excluded in the status panel. The authorization is immediately saved in the selected profile (otherwise using "Save profile"), exported with the profiles (`StateAllowed section`), and is not requested again. The lists of other fields are not affected.

Conversion rules and controls

Each line is cleaned, converted and then checked: it is only exported if it complies with the rules below, and each rejection is traced with its pattern.

All values are cleaned up. Leading and trailing spaces are removed. Quotation marks and the `=" prefix` from Excel exports are removed (`="000123"` and `"123"` become `000123` and `123`); a single quotation mark at the end of a value, such as `5"` , is retained. Semicolons, tabs, and line breaks are replaced with spaces, as the format does not allow quotation marks to protect them; a warning indicates the number of affected values.

Field or case	Ruler	If the value is not correct
Empty Barcode	Only field required	Line rejected "Barcode missing" (box checked by default); otherwise exported with an empty code and a warning
Barcode in scientific notation (`1.23E+12`)	A sign that Excel has truncated the figures	Red message; confirmation requested before export
Duplicate barcode	The first occurrence is retained.	Checked box: subsequent barcodes are rejected as "Duplicate barcode"; unchecked box: all barcodes are exported, with a warning.
State	Each value passes through the status panel: codes 1 to 5 are offered identically (and can be modified), a label is converted according to the chosen correspondence; an empty value becomes 1	Codes 1 to 5: warning prompting verification of their meaning. Empty value: warning. Label not converted: line rejected "State not converted: value". Excluded label: line not exported, reason "Excluded (State "value")".
Price	Normalized with a decimal point (table below)	Non-numeric value: exported as is, with a warning
Price	Recommended by the manual (preferential rate check)	Warning if the field is not associated or if there are empty rows

Status conversion. The status panel lists each distinct value in the Status column with its number of rows and suggests a match, which the user can validate or modify. Codes 1 to 5 are also included, presented identically (1 → 1, 2 → 2, etc.): ticketing software may assign them a different meaning than Billetix, and a yellow message reminds the user to verify this (for example, associating 3 → 1, or excluding code 2). Each label is broken down into words, compared to French and English roots: variants

(annulé, annule, annulation) and common misspellings (anulé, cancled, pendng) are recognized. Examples:

Code	Recognized labels (examples)
1 – Allocated paid	paid, settled, collected, valid, sold, sale, confirmed, issued, invitation, free · OK
2 – Awarded but not paid	unpaid, unpaid, pending, awaiting payment, reserved, on hold, due
3 – Cancelled and refunded	cancelled, refunded, invalid, revoked, deleted
4 – Cancelled duplicate	cancelled, duplicated, replaced, superseded
5 – Duplicate	duplicate, reissue, reprint, copy

A reverse negation of "paid": "not paid," "to be paid," or "without payment" all result in a value of 2. When a label combines several words, the most precise one takes precedence: "Booked - not paid" results in 2, "Booking cancelled" results in 3, "Cancelled - replaced" results in 4. Similar but unrelated words (order, balance, Adult) are not recognized. In a "Sale/Refund" column, single-letter codes are converted: V (or S) results in 1, R results in 3; elsewhere, a single letter is not interpreted.

Exclude lines. Each list in the status panel ends with "✕ Exclude these lines" (displayed in red when selected): lines with this label are not exported. They are counted among the rejected lines, appear in the rejection report with the reason "Excluded (State "value")", and a green message indicates their number. An excluded line is not included in the duplicate detection: another line with the same barcode remains exported.

A value without a match is never exported silently: the line is rejected until a state is chosen.

Price conversion. The last separator is the decimal point when both are present; the number of decimal places is not changed.

Source value	Exported value
`12.5`	`12.5`
`12.00`	`12.00`
`1,234.50`	`1234.50`
`1,234.50`	`1234.50`
`1,234.50`	`1234.50`
`1,234`	`1234`
`€12`	`12`
ABC	`abc` (reported)

Rejected lines. The "Download rejected lines" button generates a CSV file named `Source Line;Barcode;Pattern` , in UTF-8 with BOM to open correctly in Excel; lines excluded based on their status are also included. The number is the line number from the source file (including blank lines); in a CSV file, a multi-line field enclosed in quotation marks counts as a single line.

format .cng

The resulting file follows the "Pivot" manual: UTF-8 text, fields separated by semicolons, one header line and then one line per ticket.

Rule from the manual	Application in the product file
Fields and values separated by a semicolon	Respected ; no quotation marks
Headings in uppercase or lowercase, in no particular order	Exact names from the manual (`Barcode` , `customer name` …), always in the same order: Barcode, State, Rate, Price, Method of Obtaining, Category, Zone, Section, Row , Bench, Bench Type, Customer Name, Customer First Name, Tax Number, Currency, Company, Order Number, Customer Number
Only one field is required: `Barcode`	Always present; unassociated fields are omitted.
Accents: file encoded in UTF-8	Always UTF-8, without BOM, regardless of the source encoding
Extension `.cng`	`< source name >_ Billetix.cng`
All fields are strings; an empty field = an empty string	Empty cell between two semicolons
`Price` including one decimal point	View price conversion
`state` : the value 1 is assigned	Field omitted if not associated; empty value replaced by 1

Line endings are Windows type (CRLF). Example output file:

```
Barcode ; Condition ; Rate; Price; Customer Name
EXT0001; 1; Adult; 12.50; DUPONT, Jean EXT0002; 3; Child; 8; MARTIN
```

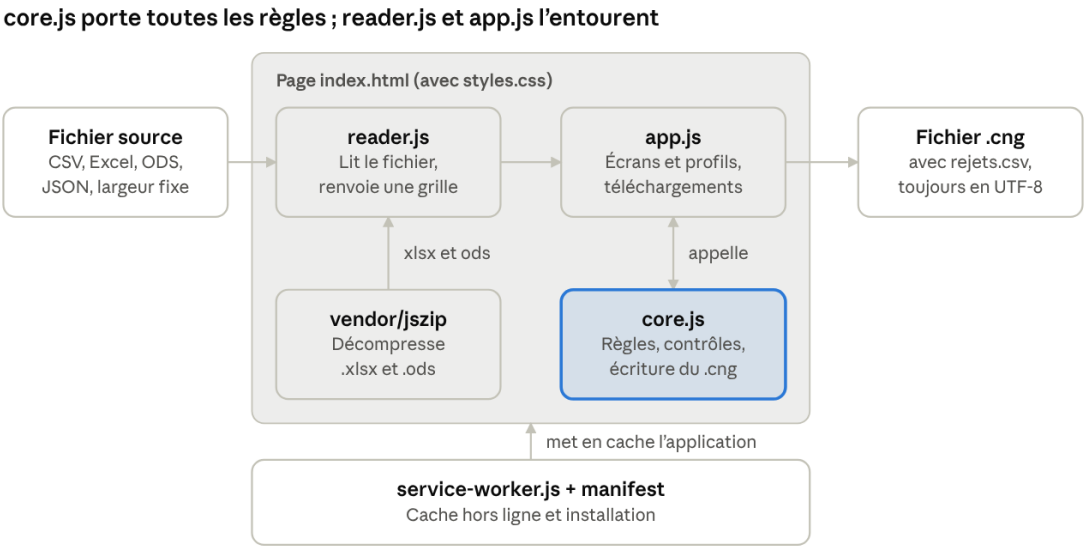
`State` field values :

Code	Meaning
1	Attributed paid
2	Awarded but not paid
3	Canceled refunded

Code	Meaning
4	Canceled duplicated
5	Duplicate

The `Fare field` is free but essential for control: it allows refusal of passage to an adult with a child fare ticket.

Technical Architecture



architecture · 3 modules, 1 library, 1 offline cache

The `core.js engine` applies all the rules independently of the browser; `reader.js` transforms each format into a text grid, and `app.js` connects the screen to the engine. These are classic scripts, without modules or compilation, which also allows `index.html to be opened directly` .

File	Role	Depends on
`index.html`	Page loads in three steps; the scripts are loaded in the following order: JSZip , `core.js` , `reader.js` , `app.js`	—
`styles.css`	Layout optimized for mobile phones	—
`app.js`	Import, association (sorted lists, status field control and authorization), status panel, control, export; profiles in localStorage (associations,	`core.js` , `reader.js`

File	Role	Depends on
	status mappings, authorizations, fixed-width file splitting); cache version in the footer; hourglass during uploads and exports; downloads	
`core.js`	Pivot format fields (FIELDS), automatic association, cleaning, status label recognition (FR/EN, typos, cached results), exclusions, pricing, header detection, conversion, writing .cng and CSV files of rejected items	Nothing
`reader.js`	Encoding, separator, fixed width (detection, suggestion, named lengths, names with spaces), JSON, Excel, ODS: returns a grid (list of text lines)	`vendor /jszip.min.js` for `.xlsx` and `.ods`
`service-worker.js`	Versioned offline cache, network first	—
`incrementer-version.js`	Publication script: increments `VERSION` in `service-worker.js` (not loaded by the page)	Node.js
`web.config`	`.json` and `.webmanifest (manifest)` file types , service worker never cached by the browser	IIS
`manifest.json` , `icon*.png` , `icon.svg`	Installation as an application (name, icons, standalone display); "Install application" button managed by app.js	—

The conversion process follows four steps:

1. `Reader.readFile` reads the file and returns a grid of strings.
2. `Core.detectHeaderRow` and `Core.autoMap` choose the header row and starting association.
3. `Core.convert` produces records, rejects, and control counters with each user change.
4. `Core.toCNG` writes the final text, which `app.js` downloads in UTF-8.

Maintenance

The usual changes (new synonym, new field, new status label, new format) are made in three files, without a compilation tool: we modify the files, then we run `node incrementer-version.js` to increment `VERSION` in `service-worker.js` .

Need	Or	How
Recognize a new column name	`core.js` , `FIELDS array`	Add the label to the field's `aliases list` , written without accents, in lowercase, with punctuation replaced by spaces; the order of the list determines the priority.
Recognize a new status label	`core.js` , `STATE_WORDS`	Add the root (without accents, in lowercase) to the desired category: `paid` (1), `unpaid` (2), `cancel` (3), `replaced` (4), `duplicate` (5). A short root that should only be recognized as an exact match also goes in `EXACT_ONLY.`
Add a field in pivot format	`core.js` , `FIELDS`	Add an element `{ name , level , aliases }` with the exact name of the manual; the association screen and exit order follow the table
Read a new input format	`reader.js` , `readFile`	Return a grid of strings (list of lines); the rest of the application remains unchanged.
Modify a rule or control	`core.js` , `convert`	Each control feeds into the `issues` counter ; the displayed message is in the `update function` of `app.js.`
Publish a version	`service-worker.js`	Launch `node incrementer-version.js` in the application folder (`billetix-cng-v17` → `v18` …); add any new files to the `ASSETS list` ; publish all files in the folder, including `web.config`

Tests. `core.js` is browser-independent and can be tested under Node:

`node -e "const C= require ('./core.js'); console.log( C.normalizePrice ('1,234.50'))"`
This command displays `{ value: '1234.50', ok: true }`. During development, the conversion was verified by unit tests (price, association, states, header detection) and by tests in a real browser on a Windows-1252 CSV, a TSV with title rows, a nested JSON, an ODS, an Excel workbook and a fixed-width file. For version 2: list sorting, column names with spaces, Status field rules, recognition of 102 status labels (101 correct, only "pyé" is not guessed), row exclusion, saving correspondences in a profile after reloading, applying a profile to an already imported file (column names in different cases, old profile format), clipping saved on a fixed-width Ticketnet file, Sale/Refund column from an Aparté export (2,997 lines), authorization of a Status column (refusal, agreement, export and import of the profile), re-association and exclusion of codes 1 to 5 saved in a profile, offering the Status column on eight type files (English labels, column with any name, quantity and number rank, INVITATION, Aparté, Ticketnet columns), and installability verified with Chromium diagnostic tools (manifest read without error, no installation blocking). For cache version v17: volume test on a file of 100,000 tickets (all different barcodes, fare, category, row, seat, name, and surname): loading in 1.3 seconds instead of 60 seconds, creation of the .cng file in 0.4 seconds, approximately 80 MB of memory, 100,000 lines exported and 8 columns automatically associated; same statuses recognized as before optimization on about forty labels. These test scripts are not included in the application folder.

Dependence. JSZip 3.10.1 (`MIT license`) , in `vendor / , is only used to read .xlsx` , `.xlsm` and `.ods` files `.`

Limitations and troubleshooting

Most problems arise from automatic detection errors; each one is corrected manually in step 1.

Symptom	Probable cause	Action
" Single column: check the separator"	Unrecognized separator, or fixed-width file	Choose the separator, or "Fixed Width" and then enter the lengths.
Bad line header	Ambiguous structure (a title as broad as the painting)	Enter the number in the "Header line"
Distorted accents (e.g. Ã©)	Incorrect encoding	Choose UTF-8 or Windows-1252 in "Source file encoding"
Barcode of type `1.23E+12`	Excel converted column to number	Format the column as text in the source file and then export it again; leading zeros that have already been lost cannot be recovered.
Rejected lines "Unconverted state"	State label unknown	Choose the match in the status panel, or "✕ Exclude these lines"; with a profile selected, the choice is saved there.

Symptom	Probable cause	Action
The message "… has not been associated with the Status field"	The column contains values other than codes 1 to 5	Select the column manually in the Status field, then complete the status panel.
Message "column(s) not found" when applying a profile	The file does not have the profile columns (different provider, renamed columns)	Check the saved associations; correct them and then save the profile.
Profile has no effect on a fixed-width file	Profile created without clipping (columns named in "Field Lengths")	Enter the named lengths once, then save the profile under the same name
Error 500 across the entire site after publication	The IIS server prohibits adjustments to the `web.config` file.	Remove `web.config` : IIS 10 normally serves `manifest.json` without it; otherwise, ask the administrator to add the `.json` type.
Installation impossible on Android (no "Install" button or menu)	Manifest inaccessible: `manifest.json` returns a 404 error (IIS without `web.config`), or the site is not published via HTTPS.	Publish `web.config` with the other files; verify that the website address followed by `/manifest.json` is displayed; reload the page on the phone
Message: "The Status column contains codes 1 to 5"	Reminder: the meaning of codes may differ between software programs	Check in the status panel; correct the match or exclude a code; save the profile
Message: "The column ... is suggested for the Status field"	No associated State column; this column only contains values recognized as states.	Check the status column and panel; choose "— Do not import —" if it is not a status
Request for authorization by selecting a column for Status	The column is marked "(no recognized state)": no value is a code 1 to 5 or a recognized state label	Verify that this is the correct column; click OK to use it, then associate each value in the status panel. The permission is saved in the profile.
Export button greyed	`Barcode` not associated, or no exportable line	Associate the field; check both export boxes
Profile not applied	Less than 80% of its columns were recovered, or another browser	Select the profile manually; export and then import the profiles
Previous version displayed	Browser cache	Check the version number in the footer ("Cache version

Symptom	Probable cause	Action
		v17"); reload the page (Ctrl + F5); close and then reopen the installed application.
File `.xls` denied	Old binary format	Save as `.xlsx`
Columns named " Column 1, 2…"	File without header line (fixed width)	Normal: enter the names with their lengths (`6=Date, 10=Barcode, *`), or manually associate the columns
« ⚠ cutting proposed automatically "	Glued fields: rough cut-out numbers/letters	Check the preview "|" and correct the lengths
Title or footer imported as a post	Lines to be ignored were incorrectly counted (header line = 0)	Enter the number in "Lines to ignore at the beginning"
Hourglass displayed for a long time, or tab that reloads during import	A very large file on a device with limited memory (older phone), or a large Excel/ODS workbook	Convert the file on a computer; save the workbook as a CSV file; split the file into several parts.

Known limitations. Files are read from memory in the browser: the application does not impose a maximum size, but it depends on the device's memory. A file of 100,000 tickets (6.5 MB) loads in approximately 1.3 seconds and uses about 80 MB of memory on a computer; on an older or entry-level phone, a very large file may be slow, or even cause the tab to reload. Excel and ODS files require more memory than CSV files. PDFs and databases are not read. For a fixed-width file with contiguous fields, automatic cropping is approximate: check it and enter the lengths (with their names) if necessary; a profile then saves the associations.

Privacy and security

No ticket data leaves the browser.

- **Local processing.** Reading, conversion, and downloading take place within the browser. The application does not send any data; the service worker only caches application files from the same source.
- **Storage.** Only profiles (column names, fixed values, label-to-state mappings and excluded labels, columns allowed for State, fixed-width file splitting) are stored in this browser's `localStorage` ; no post content is saved. Clearing site data deletes profiles.
- **Display.** The file values are displayed as text and never interpreted as HTML.
- **Network.** The application is served from cngconverter.billetix.net, which only provides its own files.