

# Checkbox Tools Manual

Welcome to the official user manual for the Checkbox (FDM) Backend System, your essential resource for managing the Fiscal Data Module (FDM) as mandated by the Belgian government. The Checkbox (FDM) Backend System is a powerful tool designed to simplify the visualization, monitoring, and administration of your Fiscal Data Module. This system enables users to track real-time status updates, monitor transaction counters, review historical fiscal data, identify and resolve errors, and facilitate the transfer of the FDM to another company, ensuring compliance with Belgian fiscal regulations.

This manual is crafted to guide users of all levels—whether business owners, administrators, or technical staff—through the features and functionalities of the Checkbox (FDM) Backend System. Within these pages, you will find clear instructions on setup, operation, troubleshooting, and advanced features to help you maintain seamless compliance and optimize your fiscal data management processes. Our aim is to empower you to use the system efficiently, ensuring accurate and reliable handling of your Checkbox unit.

We invite you to explore this manual to unlock the full capabilities of the Checkbox (FDM) Backend System and streamline your fiscal operations in accordance with Belgian government standards. Let's get started!

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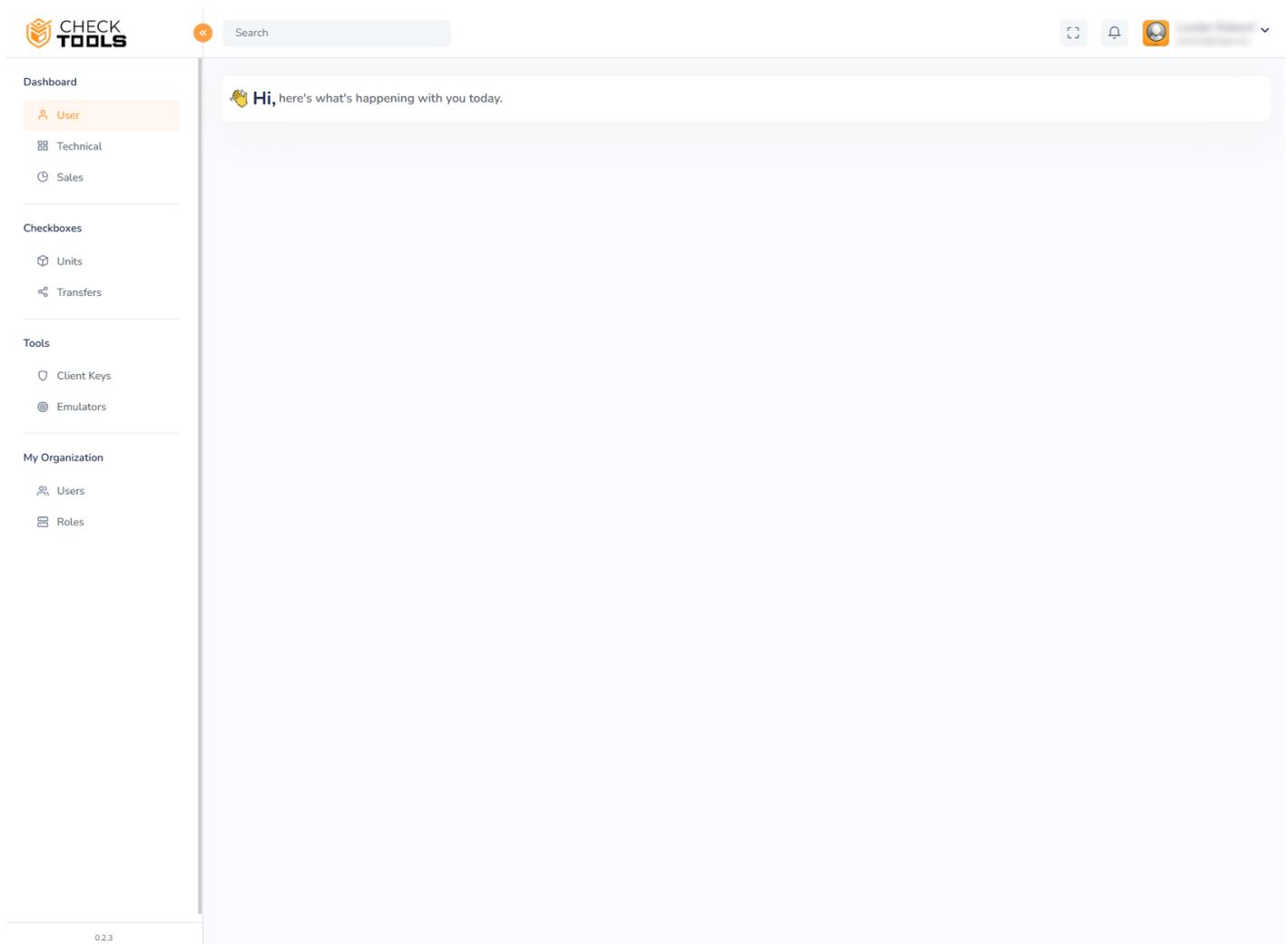
# Organization

This topic is handling on your organization and the settings for it. How you can add users, and how you can change roles and rights

# User Interface

The overall User interface for these Tools

# Overview



According to the rights and roles this can differ a little.

## Top Bar

The top bar does contain a search bar, a notifications bell and a Logged in user widget.

## Notification Bell

The notification bell will contain the important notifications for your account,

## User Widget

You can see who is logged in, And you can navigate to the details of that user. There you can see the organization you belong to.

# Navigation Bar

The navigation bar on the left is the main navigation way to reach the desired function.

## Dashboards

We have several dashboards that can help us depending on the role we fulfill in the organization some dashboards can be useful and some won't

**The User Dashboard** will have all information concerning your user.

**The Technical Dashboard** will contain information on the Checkboxes from your organization. It will show you their status, and some technical traits. This is a useful dashboard once you have a lot of checkboxes in your pool. You will rapidly find checkboxes that are behaving badly, that have bad connections, that have a lot of errors, and so on. Also the distribution of the firmwares that are installed on the Checkboxes.

**The Sales Dashboard** will give you insights on the sales of your checkboxes, what days what products what revenue what the best selling products are, what the work hours are, and so on.

## Checkboxes

Here you will be able to see the details of your checkboxes, of the transferred checkboxes and even of checkboxes you are allowed to view outside of your pool.

You will also be able to control the transfers for your checkboxes, accept incoming transfers, see all the transfers that were completed in the past.

## Tools

Here you can find the API Keys, called Client Keys in order to access the Emulator, or if the Bridge functionality is enabled

Also if you have emulators, you can see the details of the emulators here and see all the transactions done on that emulator.

## My Organization

This is the place to maintain the roles and users of your organization.

# Dashboards

User Dashboard

Technical Dashboard

Sales Dashboards

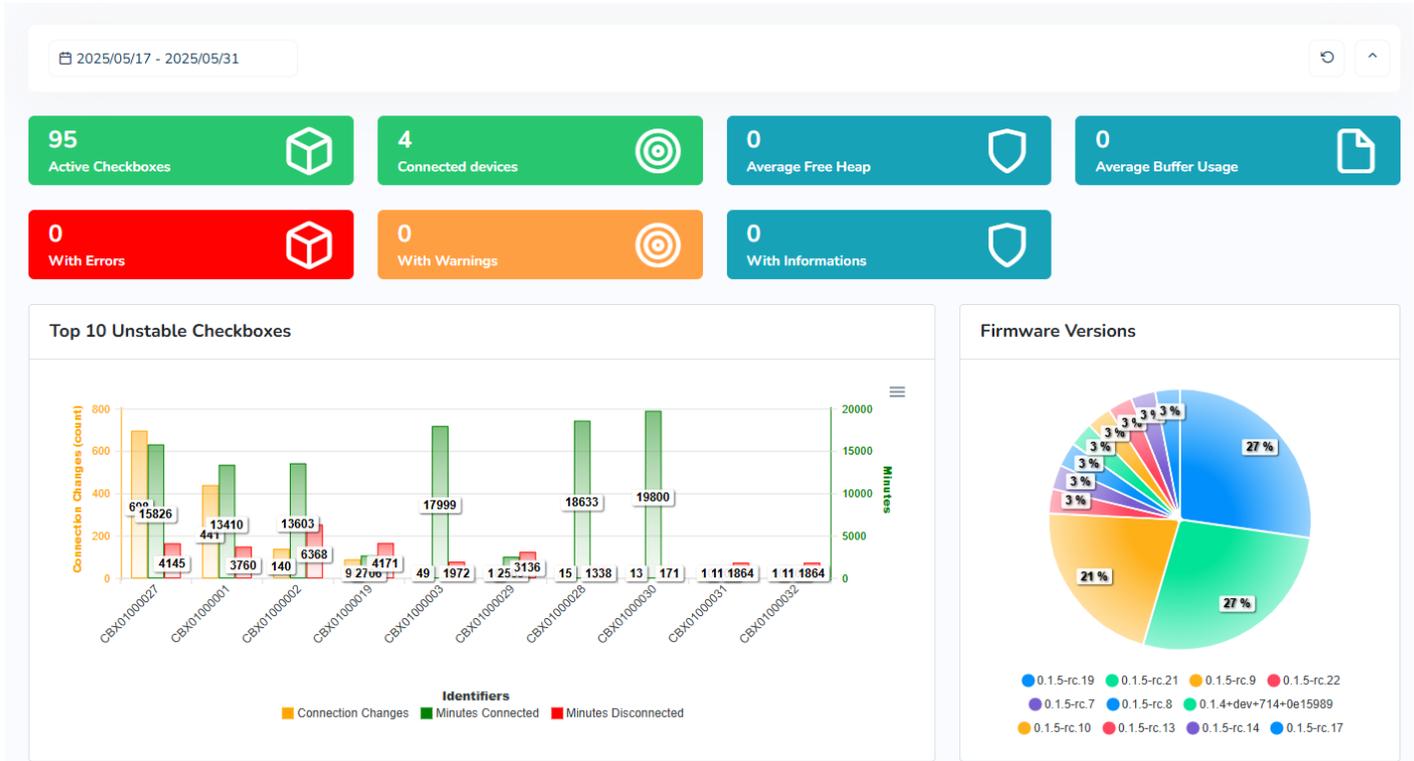
Those dashboards are important depending on the role inside the organization.

Dashboards

# User Dashboard

# Technical Dashboard

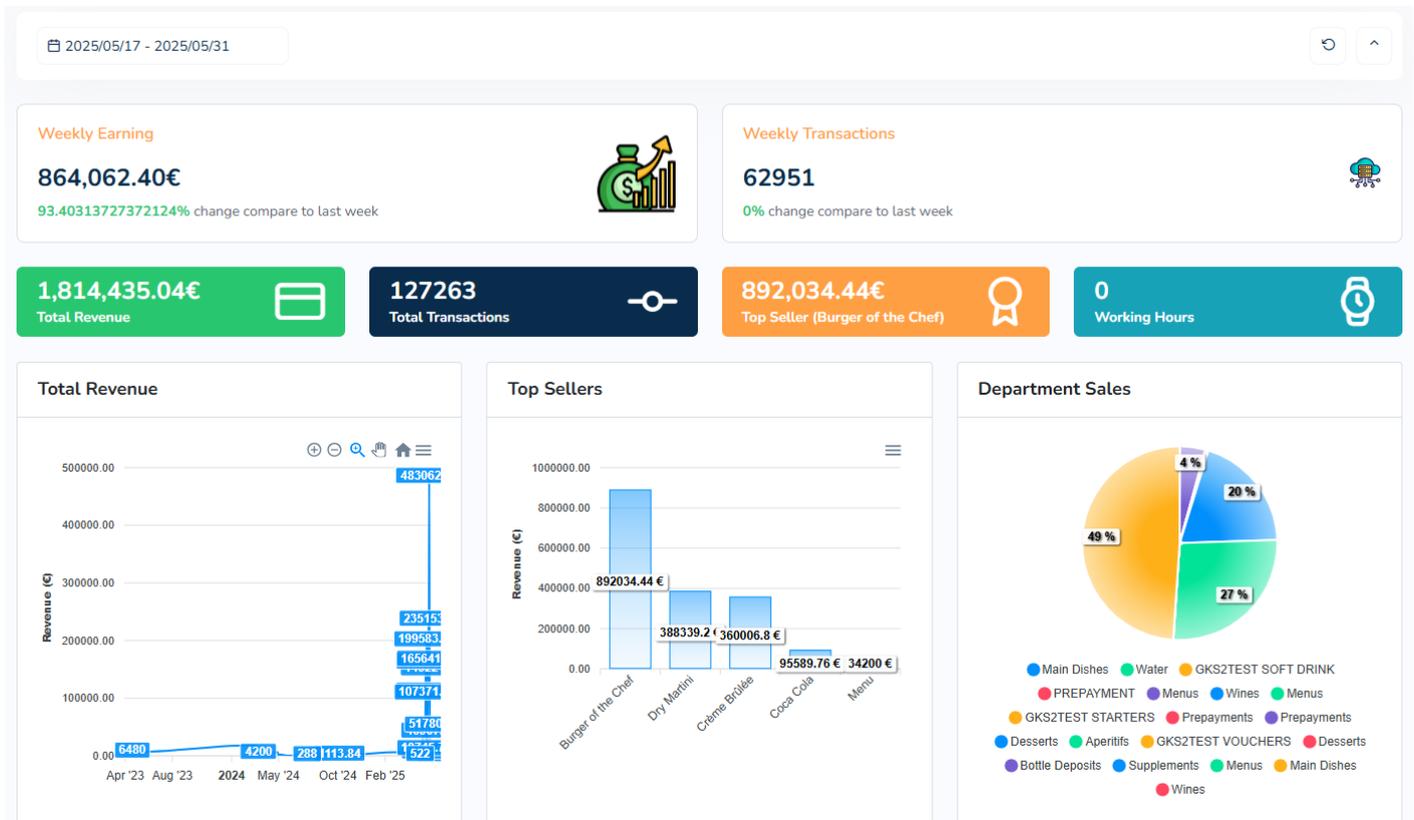
This dashboard will give you an overview on the Checkboxes of your organization.



On the top bar you can pick the date range for the boxes to see Inside that date range you will see all your checkboxes and their stats

# Sales Dashboard

The sales dashboard will show more insights on the actual sales done by your checkboxes.



Also here you can pick the date range to have all the financial information for. You can see your weekly earnings, compared to the week before. You can see the top sellers, the departments sold, and so on.

# Checkboxes

In the Checkboxes area it is possible to see all the details for your checkboxes. Transfer checkboxes to your customers.

# Units

In the Units page you will have an overview of all your checkboxes.

**Checkbox Units**  
Manage the checkbox units

Our Checkboxes **95**   Transferred **15**   Viewable **0**



Online Since 3 Hours Ago

**CBX01000001**  
0.1.4+dev+714+0e15989

Total	N	F	S	T
122352	25312	24166	12042	18165



Offline Since 3 Days Ago

**CBX01000002**  
0.1.5-rc.21

Total	N	F	S	T
414436	82800	82940	41452	62119



Online Since 3 Hours Ago

**CBX01000003**  
0.1.5-rc.22

Total	N	F	S	T
2461	886	353	259	271

You are able to see 3 Tabs

- Our Checkboxes
- Transferred Checkboxes
- Viewable

In each tab you can have multiple Checkboxes, where you can rapidly see their status. if they are online, or offline, what their most important counters are at, the current version of the Box, and most important, the box can have a colored border. That border will indicate if there are active Informations, Warnings or Errors.

In this example CBX01000003 does have a warning active.

If you click on the 3 little dots you can go to the details, the history data and the transfers for that Checkbox



Online Since 4 Hours Ago

- Details
- History
- Transfers

Total	N	F	S	T
2461	886	353	259	271

# Checkbox Unit Detail

👤 4 hours ago CBX01000003 v0.1.5-rc.22

🌐 http://192.168.68.107:80/graphql  
No Gateway

📁 CHECKBOX\_STATE\_INIT\_DONE  
0 Files  
0%

🔒 ATECC\_STATE\_LOCKED\_V1  
31/05/2025 13:06:25

Heap Free 1.35 Mb  
Last Ntp Sync 31/05/2025 18:35:10  
Current Time 31/05/2025 19:11:15  
**DUPLICATE\_REQUEST**  
31/05/2025 19:11:16

**Counters Overview (2461)**

886	353	259	349	167	84	92	271
Normal	Financial	Social	Proforma	Copies	Invoices	Reports	Training

Action	Pos	Device	Terminal	Pos No	Counter	Date	
SALE	PBX01000003	1631678d-7a85-4ac3-b296-bb4565e873fe	TER-2-DIN	5004	N 886 /2461	31/05/2025 15:12:11	👁️ ⚠️
SALE	PBX01000003	1631678d-7a85-4ac3-b296-bb4565e873fe	TER-2-DIN	5004	N 885 /2460	31/05/2025 15:11:18	👁️ ⚠️
SALE	PBX01000003	1631678d-7a85-4ac3-b296-bb4565e873fe	TER-2-DIN	5004	N 884 /2459	31/05/2025 14:34:59	👁️ ⚠️

On the top you can see what time the last action was on the Checkbox, and the current version of the Checkbox.

The Box core settings, the Admin Console and the general settings can be changed here.

The left box is showing us its connection status, the address of the box and the way it is connected, in this case it is a wired connection.

On the right you can see more information of the colored border. You can also see what warning is active.

There is a card that contains the current counters for each type.

There is also a list available with each mutation that has been completed by the Checkbox. This may be a valuable asset for a developer. Since you can request the raw details for that mutation, The request, the answer the raw data, the sign result.

## Sign Result Details

## Request

```

{
  "fdmRef": null,
  "costCenter": {
    "id": "1",
    "type": "TABLE",
    "reference": "0158",
    "costCenter": null
  },
  "transaction": {
    "transactionLines": [
      {
        "lineType": "SINGLE_PRODUCT",
        "mainProduct": {
          "gtin": null,
          "productId": "20001",
          "productName": "Carpaccio Beef",
          "departmentId": "20",
          "departmentName": "Starters",
          "quantity": 2,
          "quantityType": "PIECE",
          "negQuantityReason": null,
          "unitPrice": 20,
          "vats": [
            {
              "label": "B",
              "price": 40,
              "priceChanges": [
                {
                  "groupingId": 1,
                  "id": "1",
                  "name": "DISCOUNT20P",
                  "scope": "LINE",
                  "type": "PUBLIC",
                  "amount": -8
                }
              ]
            }
          ]
        }
      }
    ]
  },
  "subProducts": null
}

```

## Result

```

{
  "posId": "PBX01000003",
  "posFiscalTicketNo": 5004,
  "posDateTime": "2025-05-31T13:08:36.125Z",
  "terminalId": "TER-2-DIN",
  "deviceId": "1631678d-7a85-4ac3-b296-bb4565e873fe",
  "eventOperation": "SALE",
  "fdmRef": {
    "fdmId": "CBX01000003",
    "fdmDateTime": "2025-05-31T13:12:11.341Z",
    "eventLabel": "N",
    "eventCounter": 886,
    "totalCounter": 2461
  },
  "fdmSwVersion": "0.1.5-rc.2",
  "digitalSignature":
"MEUCIERJsG17xF0iyE8KTry1GRRhQ51YS7zSyAMT5lBefGGSAiEAh98yVz+G0r
3qbv8zVBZYezJePi0lYq8pq3mkhorcUug=",
  "shortSignature": "806421f2eed74f28a47880364200db430c6474fb",
  "verificationUrl": "https://www.gks2-
0.be/qr5LKD9fbcJvCgSYtPE",
  "vatCalc": [
    {
      "label": "B",
      "rate": 12,
      "taxableAmount": 28.57,
      "vatAmount": 3.43,
      "totalAmount": 32,
      "outOfScope": false
    }
  ],
  "bufferCapacityUsed": 0,
  "warnings": [],
  "informations": [],
  "footer": [
    "myfootertext1",
    "myfootertext1"
  ]
}

```

## Debug Details

## Enriched

```
{
  "enrichedEventData": {
    "costCenter": {
      "id": "1",
      "type": "TABLE",
      "reference": "0158"
    },
    "transaction": {
      "transactionLines": [
        {
          "lineType": "SINGLE_PRODUCT",
          "mainProduct": {
            "productId": "20001",
            "productName": "Carpaccio Beef",
            "departmentId": "20",
            "departmentName": "Starters",
            "quantity": 2,
            "quantityType": "PIECE",
            "unitPrice": 20,
            "vats": [
              {
                "label": "B",
                "price": 40,
                "priceChanges": [
                  {
                    "groupingId": 1,
                    "id": "1",
                    "name": "DISCOUNT200"
                  }
                ]
              }
            ]
          }
        }
      ]
    }
  }
}
```

## Admin Console

In the admin console you can change the settings for the Admin Console (Ntp server Url, and Ws Init Url)

## Fod Settings

NTP Server Url

debian.pool.ntp.org

WS Init Url

https://acc.gks2-0.be/public/init

## Admin Info

Device

Counters

Network

User Params

Cert Store

Web Service

Fdm Identifier

CBX01000003

Software Version

0.1.5-rc.2

Time

2025-05-31T18:33:53Z

Buffer Capacity Used

0

Params Version

2025-03-20T12:22:53.364Z

	Label	Rate	Out Of Scope
Vats From 2020-01-01	A	21%	false
	B	12%	false
	C	6%	false
	D	0%	false
	X	0%	true

Footers

Myfootertext1

Myfootertext1

Reboot

Sync Ntp

Run Ws Query

Admin Info

2025-05-17 - 2025-05-3

20

Failed Requests

Buffer

Sent

Submit

If the Checkbox is online, on the bottom you will see some functions appear. Those functions can query the Checkbox when it is online.

The following functions are available

- Reboot: Rebooting the device
- Sync Ntp: Synchronize the time with the NTP servers
- Run Ws Query: Try running the WS query against the Ws Url
- Admin Infos: queries all the information from the Checkbox that is available

- Failed Requests: Queries the requests between the 2 dates, and maximum that amount of requests as set.
- Buffered messages: Queries the requests between the 2 dates, and maximum that amount of requests as set.
- Sent messages: Queries the requests between the 2 dates, and maximum that amount of requests as set.

## General Settings

### Connection Settings

SSID

ssid

Password

••••••••

Token

FRidrtRbOkUbmK3

### Use DHCP



Ip Address

192.168.0.10

Mask

255.255.255.0

Gateway

192.168.68.1

### Reverse Proxy

Proxy Url

Identify

Submit

The general settings are mostly the Wifi settings and the Network settings that can be changed here.

If the Checkbox is connected there is also a function available as Identify. This will change the LED's on the physical Checkbox to a white runner, in order to identify the checkbox you are currently updating.

# Transfers

## Overview

Here you can see the status of the transfers you control

**Checkbox Unit Transfers**  
Manage the checkbox unit transfers

[Create a new Transfer](#) [Accept all](#) [Overview](#)

Checkbox Id	Direction	Organization	Initiated	Completed	Action
CBX01000033	Outgoing	Fod Finances	29 May 2025 13:57:14	Pending	
CBX01000032	Outgoing	Fod Finances	29 May 2025 13:57:14	Pending	

In this example there are some Outgoing transfers to Fod Finances, but they are not accepted yet, so at that point i can still cancel the transfer by clicking on the red Trash Bin Icon.

## Create a new Transfer

When creating a new Transfer This is the form you need to complete

When adding the Company number you will see the company name you are transferring the Checkboxes to.

Then you need to add the Checkboxes Identifiers you actually want to transfer.

- Single Identifier is inputted like this CBX01000001
- Multiple identifiers comma separated, CBX01000001, CBX01000003
- Multiple identifier range, CBX01000001-CBX01000003
- Combination of ranges and single identifiers are also possible
- You can also use the camera of your device with Scan QR in order to add the boxes by scanning their QR code

Adding a note to the transfer is optional but might be good for internal tracking or comments.

Once you are pleased with the Receiving Company and the Selected Checkboxes, you just hit the Submit button and the transfer is ready to be accepted

# Accepting Transfers

Accepting one checkbox is done by clicking the appropriate line, or accepting all incoming transfers is done by one click the **Accept All** button.

## Declaring to FOD

After a transfer is completed, the FOD should be updated that the Checkbox has moved from one company to another company. You could do that manually, but next to a completed transfer, you can download an XML file with the transfer details. That file is intended to upload into the system of FOD in order to speed up the transferring system.

Once Fod is allowing it, completing a transfer in the Checkbox Backend, that configuration will automatically be pushed to the servers of FOD if preferred.

# Tools

With these tools you can as a developer find the needed keys and see the results from the emulators you control.



# Emulators

In the emulators overview you can see what emulators you control

**Checkbox Emulators**  
Manage the checkbox emulators

Status	Emulator Id	Total Counter	Normal	Financial	Social	Proforma	Copy	Invoice	Report	Test	Action
	VCB01000100	92	39	4	24	10	2	1	2	10	
	VCB01000101	0	0	0	0	0	0	0	0	0	

If you click the **eye icon** you can see some details of that emulator.

The details for an emulator are very similar to an actual Checkbox Unit

Hello Emulator VCB01000100

Counters Overview (92)

39	4	24	10	2	1	2	10
Normal	Financial	Social	Proforma	Copies	Invoices	Reports	Training

<https://api.checkbox.be/checkboxemulator/graphql/>

Type	Pos	Terminal	Pos	Status	Reference	Quality	Date
SALE	PBX01000003	TER-2-DIN	1000		39 /92		19/05/2025 09:02:14
SALE	PBX01000003	TER-2-DIN	1000		38 /91		19/05/2025 09:02:06
SALE	CPOS0031234567	TER-2-DIN	9000		37 /90		23/04/2025 17:57:45
SALE	CPOS0031234567	TER-1-BAR	6000		36 /89		23/04/2025 17:31:46
SALE	CPOS0031234567	TER-4-HH	5002		35 /88		23/04/2025 17:21:27
ORDER	CPOS0031234567	TER-4-HH	5000		10 /87		23/04/2025 17:21:06
SALE	CPOS0031234567	TER-1-BAR	6000		34 /86		23/04/2025 17:17:59

There is an overview of the counters,

There is a card with more information of the emulator

There is a list of the transaction done with this emulator.

Clicking on a transaction will give you insight in the details of that transaction.

Sign Result Details ✕

Request	Result
<pre>{   "fdmRef": null,   "costCenter": null,   "transaction": {     "transactionLines": [       {         "lineType": "SINGLE_PRODUCT",         "mainProduct": {           "gtin": null,           "productId": "10006",           "productName": "Dry Martini",           "departmentId": "10",           "departmentName": "Aperitifs",           "quantity": 2,           "quantityType": "PIECE",           "negQuantityReason": null,           "unitPrice": 12,           "vats": [             {               "label": "A",               "price": 24,               "oriceChanges": null             }           ]         }       }     ]   } }</pre>	<pre>{   "posId": "PBX01000003",   "posFiscalTicketNo": 1000,   "posDateTime": "2024-07-29T13:00:00+02:00",   "terminalId": "TER-2-DIN",   "deviceId": "1631678d-7a85-4ac3-b296-bb4565e873fe",   "eventOperation": "SALE",   "fdmRef": {     "fdmId": "VCB01000100",     "fdmDateTime": "2025-05-19T07:02:15Z",     "eventLabel": "N",     "eventCounter": 39,     "totalCounter": 92   },   "fdmSwVersion": "0.0.1",   "digitalSignature":   "PKOUJJ0Rj3gdwFffOr/7jbp6yV2wTnF/XFjSR9cRUcrRJza1aD7WRRD0iy5rL   dmU9NCjFHaB0SzBBLDeurzrPQwEdMos5T28WQs7EcNerT78ZlyW5sMyFLg2oiOV   hRvPIMhw3nyZf9BDa9w/DQx2C+oLflrJdJIR46PEaze959kce6hS11TUXrswk3d   l6yEtQfg12mikftQXahh8YFM43DW54T3X8wiwKy6/os05n+Byp0s0/qJvOy/Xx   ewmHpLxLJQQ05f90ERj1x/6ewiOZTo5pM+aVZAFU+1Qht39iMg5dAu3AAZTROJI   XP1PRLaIKv34XYUBeRbib07a1/4g==".</pre>

You can also emulate Warnings and errors by clicking on the Cog icon on top of the Emulator details page.

### Errors

Buffer Full	<input type="checkbox"/>	Internal Error	<input type="checkbox"/>
Checkbox Locked	<input type="checkbox"/>	Undefined Error	<input type="checkbox"/>
Too Many Memory Errors	<input type="checkbox"/>	Checkbox Not Operational	<input type="checkbox"/>
Unauthorized	<input type="checkbox"/>	Unknown Pos	<input type="checkbox"/>
Invalid Request	<input type="checkbox"/>		

### Warnings

Client Cert Near Expiration	<input type="checkbox"/>	Transaction Upload Failed	<input type="checkbox"/>
Client Cert Expired	<input type="checkbox"/>	Initialized Failed	<input type="checkbox"/>
RTC Synch Failed	<input type="checkbox"/>	Rtc Not Initialized	<input type="checkbox"/>
Update Urls Failed	<input type="checkbox"/>	Corrupt Record Encountered	<input type="checkbox"/>
Update Task List Failed	<input type="checkbox"/>	Update Params Failed	<input type="checkbox"/>
Task Feedback Failed	<input type="checkbox"/>	Update Client Cert Failed	<input type="checkbox"/>
Nop Failed	<input type="checkbox"/>	Update Vat Rates Failed	<input type="checkbox"/>
Buffer Near Full	<input type="checkbox"/>	Update Pos Allow List Failed	<input type="checkbox"/>
Server Cert Resolve Failed	<input type="checkbox"/>	Duplicate Request	<input type="checkbox"/>

### Informations

Taiger Specific

This is an emulator, so you can make combinations of errors and warnings that in a real Checkbox will never occur

# My Organization

In this area you can configure your roles and assign the users to the roles, manage the users in your organization.

# Roles

## Overview

**User Roles**  
Manage the user roles

[Add new role](#)

Role	Team	Action
Admin		

1..1 of 1 Results

[<](#) [1](#) [>](#)

By default you will see an Admin role that comes with the organization, this is a role that you are not able to remove, nor change.

You can create a new role by giving it a name, and choosing the permissions that will come with the role

## Create a new Role



Role Name

Allowed Permissions

- DashboardUserRead
- DashboardTechnicalRead
- MyOrganizationWrite
- MyOrganizationUserList
- MyOrganizationUserRead
- MyOrganizationUserRoleList
- MyOrganizationUserWrite
- MyOrganizationUserRoleRead
- MyOrganizationUserRoleWrite
- CheckboxUnitList
- CheckboxUnitRead
- CheckboxUnitWrite
- CheckboxUnitAdminConsole
- CheckboxUnitBearerToken
- CheckboxUnitTransferList
- CheckboxUnitTransferRead
- CheckboxUnitTransferWrite
- CheckboxUnitTransferAccept
- CheckboxUnitListViewing
- CheckboxUnitViewsList
- CheckboxUnitViewsRead
- CheckboxUnitViewsWrite
- EmulatorList
- EmulatorRead
- EmulatorWrite
- CheckboxClientList
- CheckboxClientRead
- CheckboxClientWrite

Cancel

Submit

You can create a new role and set what type of permissions a user will receive



# Users

## Overview

You can see an overview of all the users inside your organization

**Users**  
Manage the users

Invite a user to my company

Role	Name	Invite	Action
Admin		3 Dec 2024 01:12:11	

The green button on the user is how you assign that user to a different role.

**Change the user role** ×

The role you want to give to [blurred name]

Admin

Cancel Submit

Change the role for the organization

The roles available in the dropdown are the roles that are created in your Organization Roles

## Invite a User

It is important that the user you want to invite already has a Checkbox Account, the account can be created by the user on the Tools login page.

### Invite a user ✕

The user you want to invite

 ⓘ

*Invalid user*

The role you want to give the user

 ▼

Cancel Submit

You can invite a known user to your company. If the user is not known, the user should create its account first.

You can enter the email address of the user you want to invite. The user has to exist in the system and the user cannot be a user of another company yet.

You then choose the role you want to assign that user. and Submit the form. At that point the user is a member of your organization.