

MIDDLEWARE DIGIFORT DATABASE AC

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1. WELCOME TO THE MIDDLEWARE DIGIFORT DATABASE AC MANUAL

This User's Guide provides all the necessary information to effectively implement and use the middleware Digifort Database AC.

1.1. TO WHOM THIS MANUAL IS INTENDED

This manual is intended for administrators.

1.2. PREREQUISITES

For the complete absorption of this contents of this manual, some prerequisites are required:

- Handling of computers and their peripherals.
- Handling the Microsoft Windows operating system.
- Knowledge of the client-server architecture.
- Knowledge of computer network architecture.
- Knowledge of Digifort software
- Knowledge of access control software, which you want to integrate.

1.3. LICENSING

Licensing takes place through registered events, where each event is a device/port, ticket gate, biometric reader and so on, that the software to which the middleware will communicate and will managing.

2.SERVICES MANAGER

The Middleware Digifort Database Access Control is built on client-server platform, enjoying all the features and advantage that this platform provides.

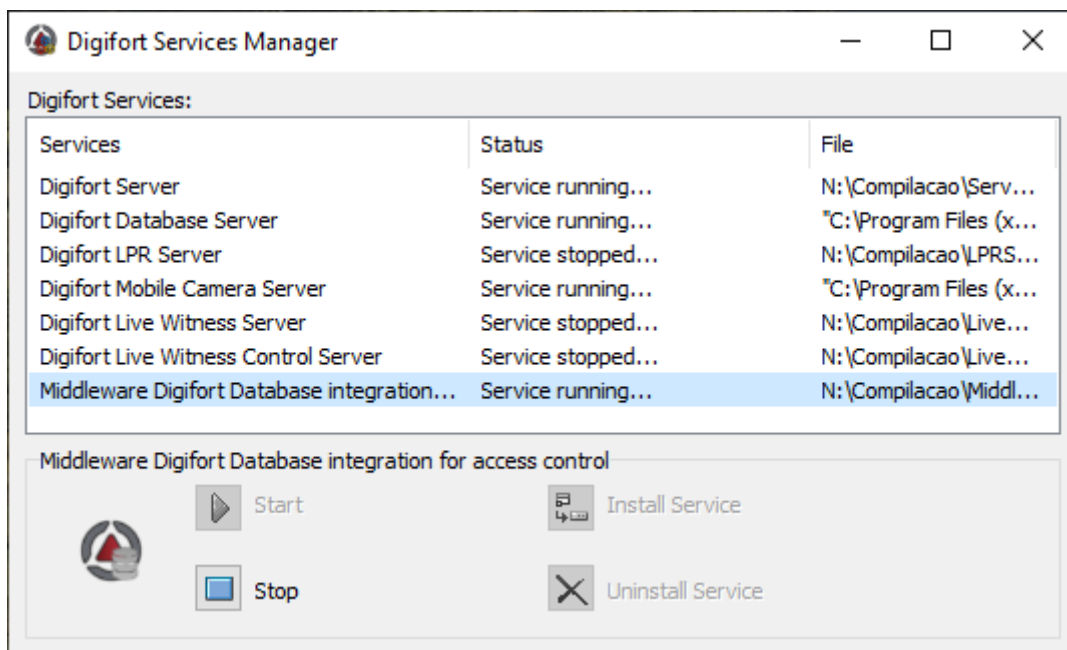
On this client-server platform, all the information is stored in one central server responsible by your management. In the middleware case it works as a bridge between Access Control Database with the Digifort server.

The Server is an application running as a Windows service, can be started together with Windows if necessary

The Services Manager is the software responsible to controlling its execution, showing information about your operating state and providing service control installation and initialization controls.

2.1. HOW TO PERFORM THE SERVICE MANAGER

To run the service manager, first locate the ServerMan.exe and run it. The Service Manager starts by opening the screen shown in the figure below:



Picture 1 - Service manager

The Service Manager provides the following features:

- **Start:** Starts the middleware service. Only available if the service is installed and stopped.
- **Stop:** Stops the middleware service. Only available if the service is installed and started.
- **Install Service:** Installs the middleware service. Only available if the service is uninstalled.
- **Uninstall Service:** Uninstalls the middleware service. Only available if the service is installed and stopped.

2.1.1. HOW TO START THE SERVICE

To start the service, firstly it is must be installed, follow the steps below to start correctly the service:

- Click Install, a confirmation window will appear, informing you that the service has been successfully installed.
- Click Start and wait while the server starts. The startup process ends when the message “Service running...” appears on the status bar.

2.1.2. HOW TO STOP THE SERVICE

At any time, the service execution may be interrupted. By executing this action, the server will no more perform any function, for example, the alarm management.

The process to stopping the service is very simple, just click on the stop button. If the service has been stopped with successfully the message “Stopped...” should appear in the status bar.

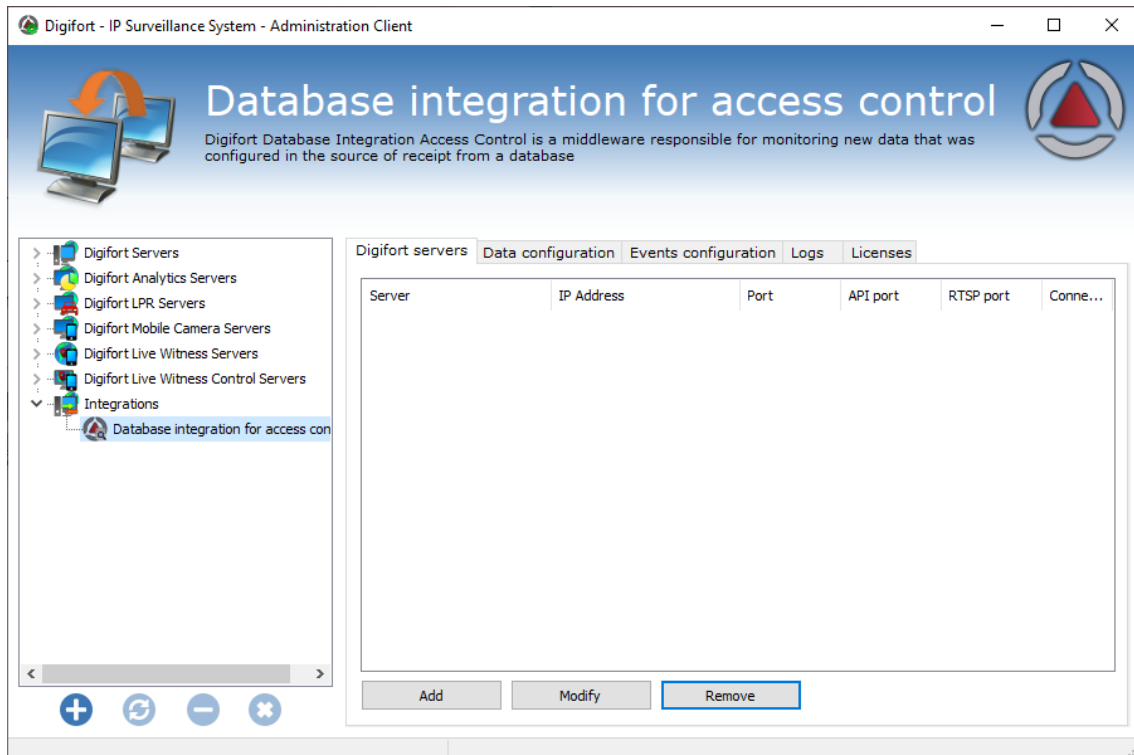
3. MIDDLEWARE INTERFACE

If there is some middleware installed, opening the Administration client will appear a new item called integrations, such as the following image:



Picture 2 –Middleware Interface

Several middleware may appear in this item, but in this case selecting Database integration for access control, the following screen will be displayed:



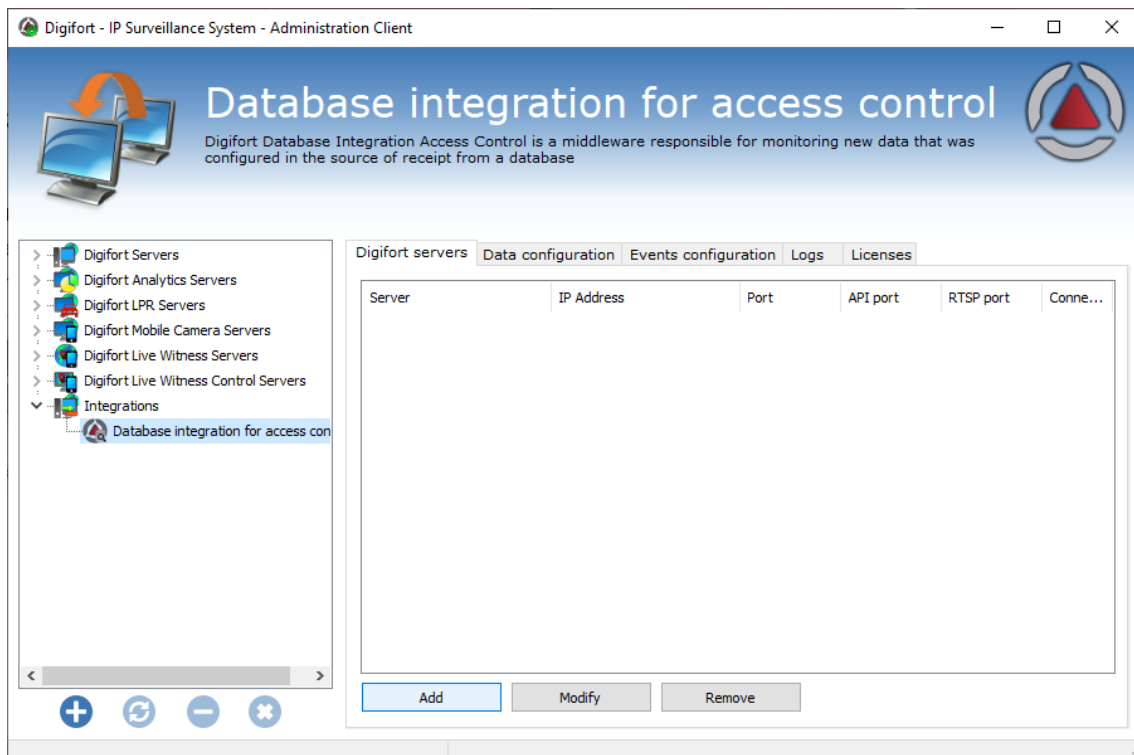
Picture 3 - Database integration for access control

In the Database Integration for access control, you have the following tabs:

- **Digifort Server:** Registering Digifort servers to configure and receive triggered events.
- **Data configuration:** In this tab you must select the data source and make its proper settings.
- **Events configuration:** Here you must associate all the events and actions to be taken, each action corresponds to a access ratchet, door, biometric reader and etc, that the external software manages.
- **Logs:** Aqui pode ser ativado os logs a serem gerados e sua visualização.
- **Licenses:** License the middleware according to the operation of the same. In the database integration for access control, it will be the registered events.

4. DIGIFORT SERVER REGISTRATION

In this screen will be listed all registered Digifort servers, which can receive the devices, configurations or events. As shown below:



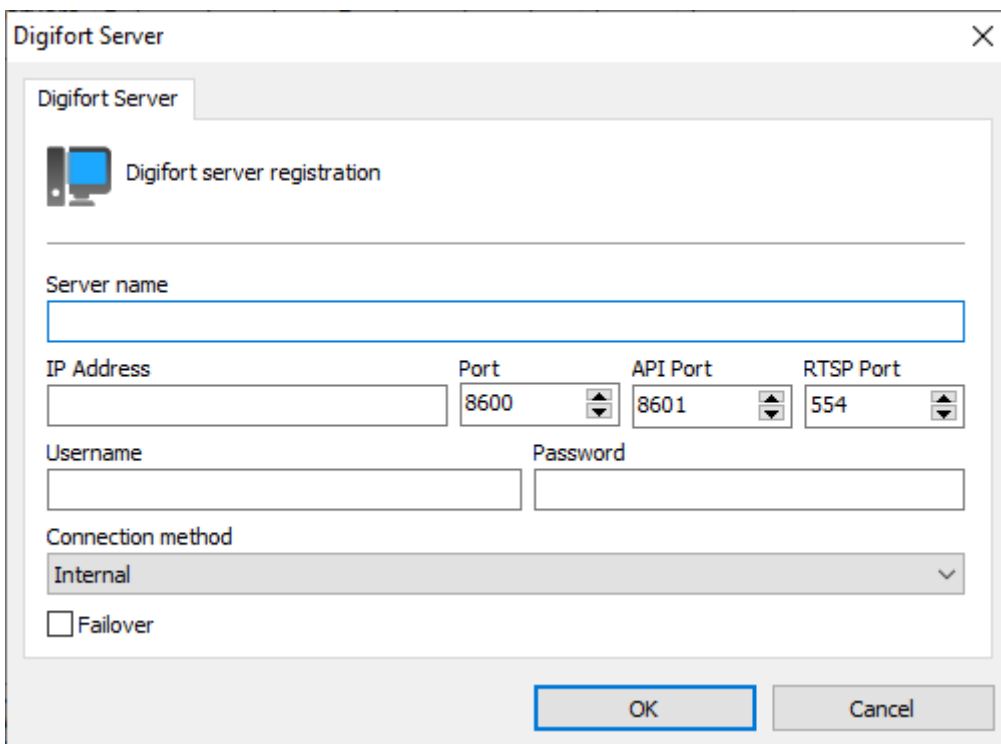
Picture 4 – Digifort server screen

This screen can be operated as follows:

- **Add:** Adds a new server.
- **Modify:** Modify the data for the selected server.
- **Remove:** Removes the selected server.

4.1. ADDING A DIGIFORT SERVER

When Adding by clicking on the 1st "Add" button, the Digifort server name and its correct settings (IP address, port, user, etc ...) must be registered. As shown below:



Picture 5 - Digifort Server Configuration

The Digifort server fields must be filled in as follows:

- **Server name:** Digifort server name.
- **IP Address:** Digifort server network address.
- **Port:** Digifort TCP communication port.
- **API Port:** TCP communication port for use of the Digifort server API.
- **RTSP Port:** RTSP communication port for use of Digifort server video.

- **Username:** User to be used to communicate with the Digifort Server, in this case indicates always use the user "Admin", so you have all the necessary access.
- **Password:** Password of the user registered in the previous field.
- **Connection method:** Field is only indicative, to know if this server is internal network or external network.
- **Failover:** Indicates whether this server is a failover, which will only be used if the main server crashes, just like Digifort does.

4.2. CHANGING A DIGIFORT SERVER

By selecting a server and clicking the second "Change" button, you can modify the Server settings according to the desired, as in the previous image.

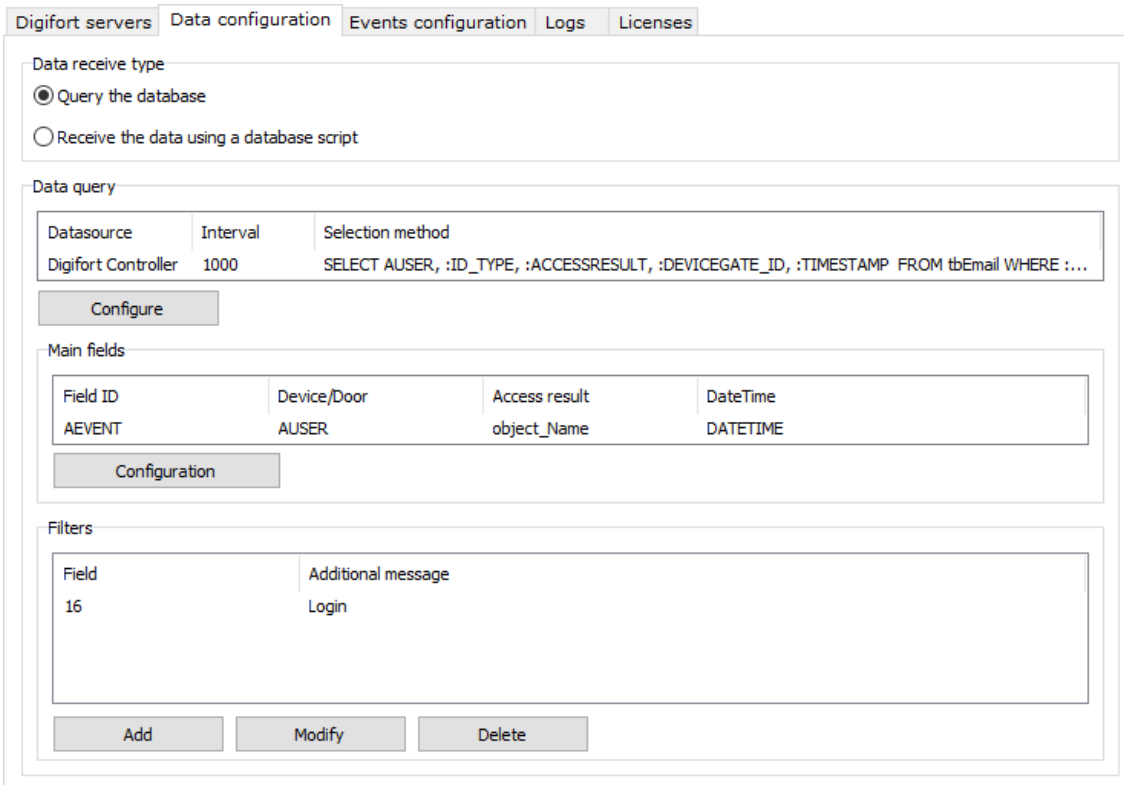
4.3. EXCLUDING A DIGIFORT SERVER

By selecting a server and clicking on the 3rd "Delete" button, you can delete the settings of the selected Server.

5. DATA CONFIGURATION

Here we can make the configuration to receive the data, there are two types of reception:

- **Query the database.**
- **Receive the data using a database script (Not yet implemented).**



The screenshot shows the 'Data configuration' tab in the Digifort interface. It is divided into several sections:

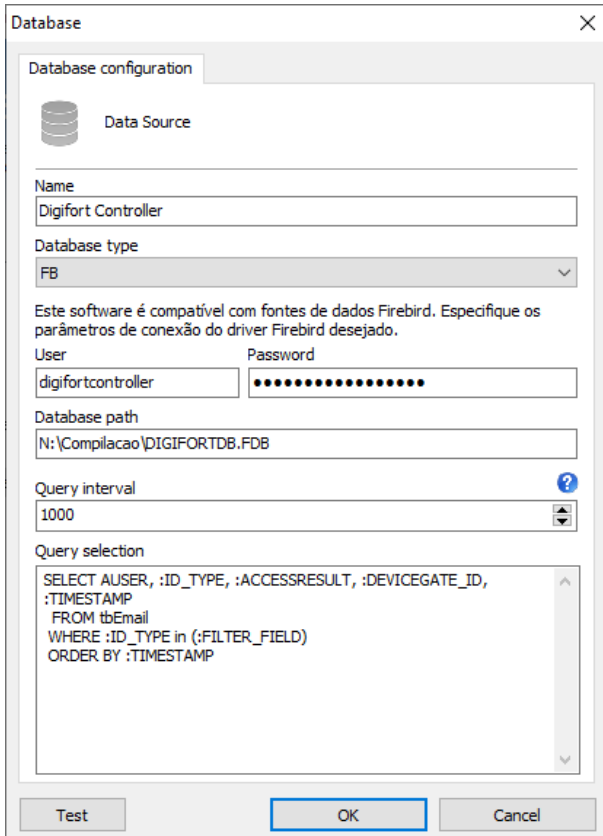
- Data receive type:** Two radio buttons are present. The first, 'Query the database', is selected. The second is 'Receive the data using a database script'.
- Data query:** A table with three columns: 'Datasource', 'Interval', and 'Selection method'. The 'Datasource' is 'Digifort Controller', 'Interval' is '1000', and 'Selection method' contains a SQL query: 'SELECT AUSER, :ID_TYPE, :ACCESSRESULT, :DEVICEGATE_ID, :TIMESTAMP FROM tbEmail WHERE :...'. Below this table is a 'Configure' button.
- Main fields:** A table with four columns: 'Field ID', 'Device/Door', 'Access result', and 'DateTime'. The 'Field ID' is 'AEVENT', 'Device/Door' is 'AUSER', 'Access result' is 'object_Name', and 'DateTime' is 'DATETIME'. Below this table is a 'Configuration' button.
- Filters:** A table with two columns: 'Field' and 'Additional message'. The 'Field' is '16' and 'Additional message' is 'Login'. Below this table are three buttons: 'Add', 'Modify', and 'Delete'.

Picture 6 - Data configuration

5.1. DATABASE CONFIGURATION

First thing to do is configure the data source, just click the "Configure" button right after the "Data Query".

The following screen will be displayed:



Database configuration

Data Source

Name
Digifort Controller

Database type
FB

Este software é compatível com fontes de dados Firebird. Especifique os parâmetros de conexão do driver Firebird desejado.

User Password
digifortcontroller

Database path
N:\Compilacao\DIGIFORTDB.FDB

Query interval
1000

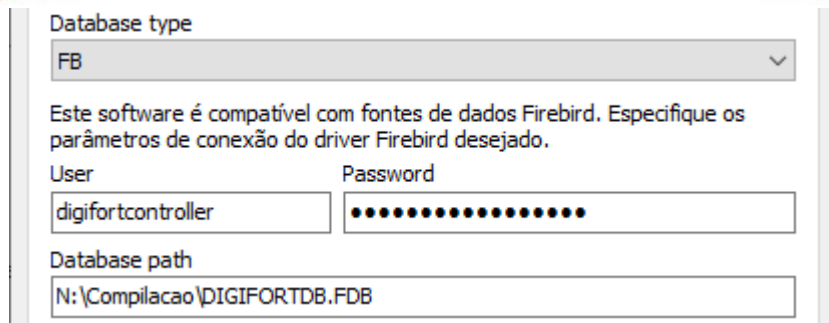
Query selection
SELECT AUUSER, :ID_TYPE, :ACCESSRESULT, :DEVICEGATE_ID,
:TIMESTAMP
FROM tbEmail
WHERE :ID_TYPE in (:FILTER_FIELD)
ORDER BY :TIMESTAMP

Test OK Cancel

Picture 7- Setting the Database Type

Where each field has the following objective:

- **Name:** Database name or ODBC configuration name.
- **Database type:** It can be configured as ODBC or FB (Firebird), if it is FB (Firebird) it will be necessary to put the user, password and the directory of the database (As figure 8).



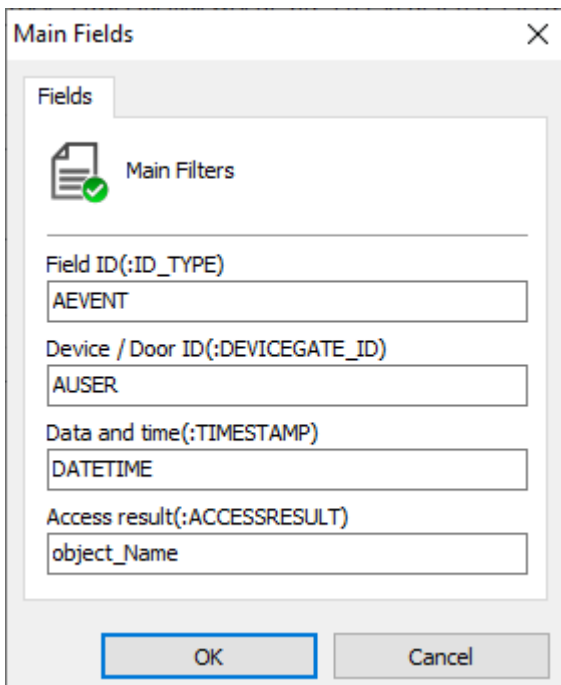
The screenshot shows a configuration window for Firebird. At the top, there is a dropdown menu labeled 'Database type' with 'FB' selected. Below this, a message in Portuguese states: 'Este software é compatível com fontes de dados Firebird. Especifique os parâmetros de conexão do driver Firebird desejado.' There are two input fields: 'User' containing 'digifortcontroller' and 'Password' which is masked with dots. At the bottom, there is a 'Database path' field containing 'N:\Compilacao\DIGIFORTDB.FDB'.

Picture 8 - Firebird Configuration

- **Query Interval:** It is the interval to perform queries to the database, the default is 1 second.
- **Query selection:** Fields that begin with ":", for example "ID_TYPE", is a parameter that must be filled in on another screen. In addition to these parameters we can add extra fields before these parameters and after the select, to be added as a message in the bookmarks and or popup messages, finally just add the name of the table to which the query will be done, after the "FROM".
- **Test:** This button tests whether the connection to these settings is working.

5.2. CONFIGURAÇÃO DOS CAMPOS PRINCIPAIS

In the "Main fields" box it is possible to fill in the parameters to be used in the "selection method" (As in picture 9).



picture 9 – Main fields

- **Field ID(:ID_TYPE):** Parameter "ID_TYPE" is the event type that will be filtered according to your code.
- **Device /Door ID(:DEVICEGATE_ID):** Parameter "DEVICEGATE_ID" is the name of the device / port, which is configured to receive the events and query the device name to try to generate an event.
- **Date and time(:TIMESTAMP):** Parameter "TIMESTAMP", field to receive the date and time of the event.
- **Access result(:ACCESSRESULT):** Parameter "ACCESSRESULT" is the description of the type of event from database.

5.3. FILTER CONFIGURATION

In the last box "Filters", you can add all types of events that will be filtered in the search, every query that is performed will filter only those items selected here.

By clicking the "Add" button, the following screen will appear:

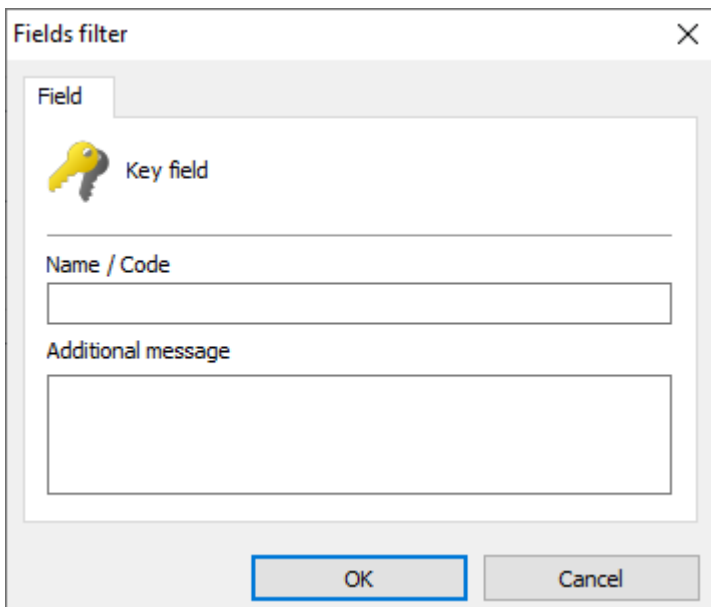


Figura 10 - Filtrar campos

Where the fields have the following function:

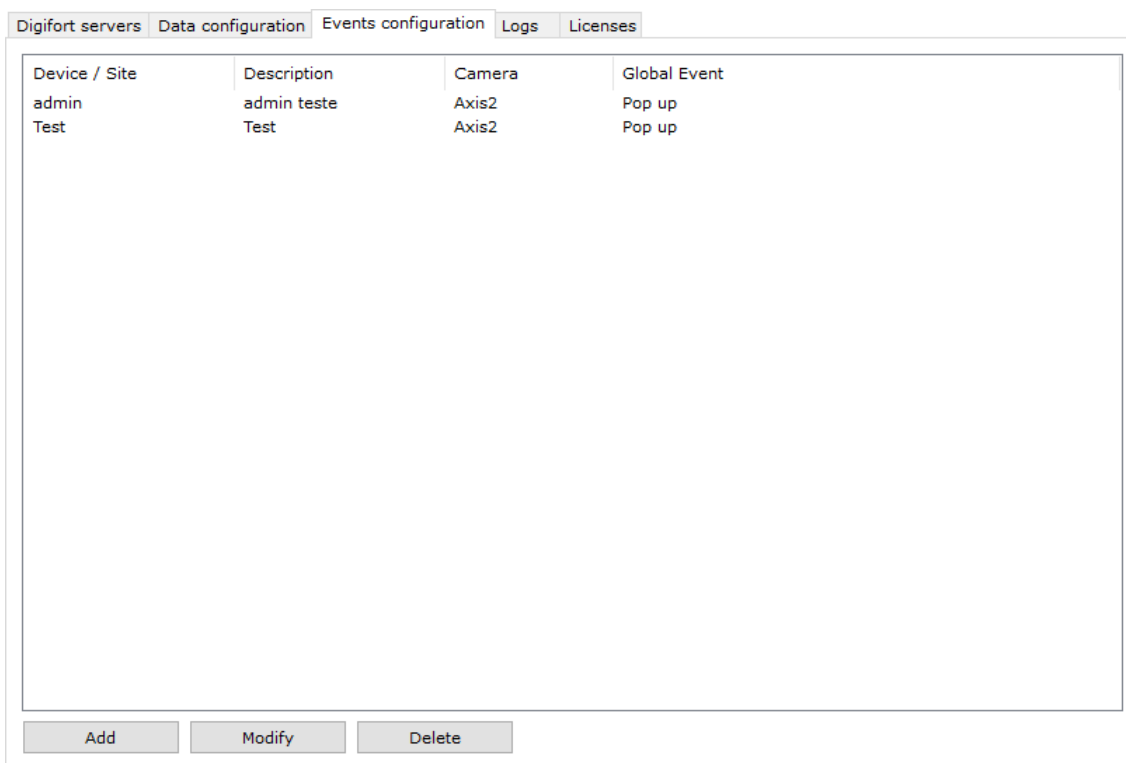
- **Name / Code:** Name or event code to be filtered.
- **Additional message:** Additional message for popup and bookmark events.

You can change this data by clicking on the "Change" button, and the "Delete" button to remove the type of the selected event.

6. EVENTS CONFIGURATION

On this page you can add the devices / port that will generate events in Digifort.

Each device / site can generate a series of actions and bookmarks, they are used when a new event of the filtered type (section 5.3) receives a new event, it will check if this event belongs to a device / port registered here, desired actions (Figure 11).



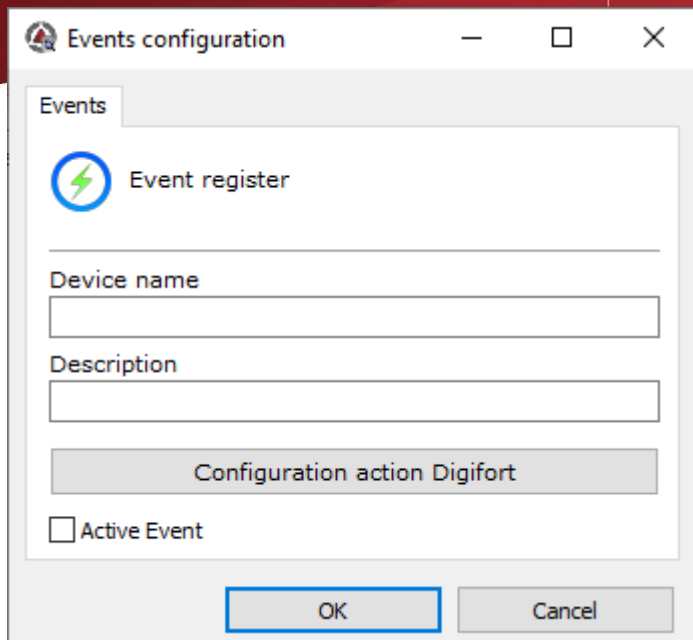
Device / Site	Description	Camera	Global Event
admin	admin teste	Axis2	Pop up
Test	Test	Axis2	Pop up

Buttons: Add, Modify, Delete

Picture 11- Events configuration

6.1. ADDING AN EVENT CONFIGURATION

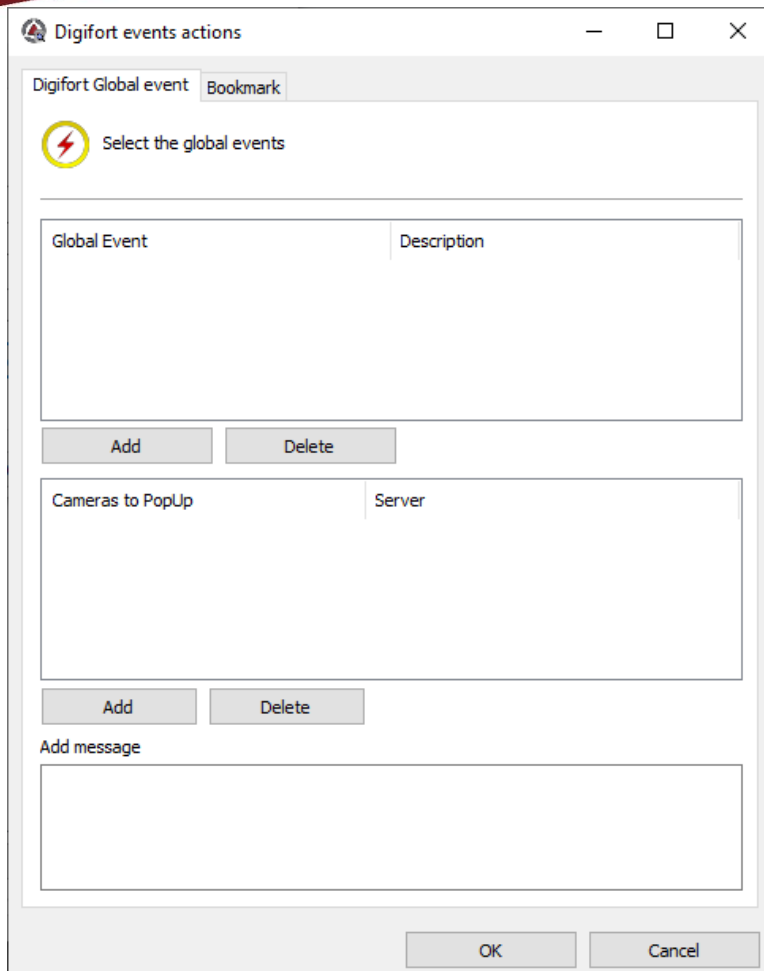
Each new device / site needs to be populated with the following fields:



Picture 12 - Event register

- **Device name:** It should be the same as the one in the access control software registry, only then the middleware can check according to the previous explanation.
- **Description:** Description inside the visual-only middleware for identification of the cadastre.
- **Active Event:** Indicates whether this event will be activated or not.

Fill in the fields it is possible to generate the actions in Digifort, just by clicking on the button "Configure actions in Digifort", the following screen will be presented:.

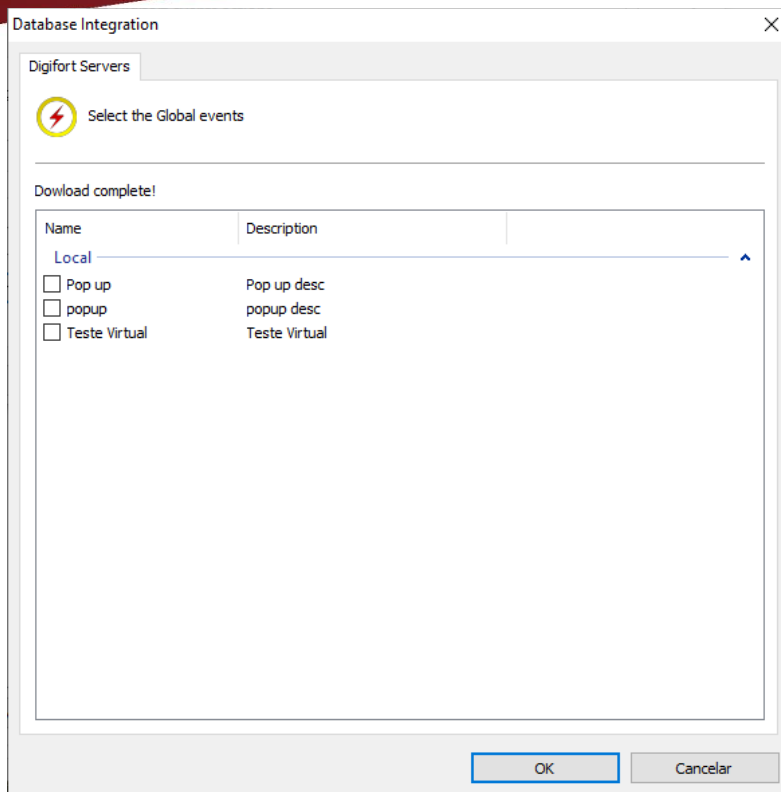


Picture 123 – Digifort events actions

In this first tab it is possible to configure the global events that will trigger on the Digifort servers the already configured popups.

6.1.1. GLOBAL EVENTS

To configure just click on "Add" and the following screen will appear:



Picture 134-Global events

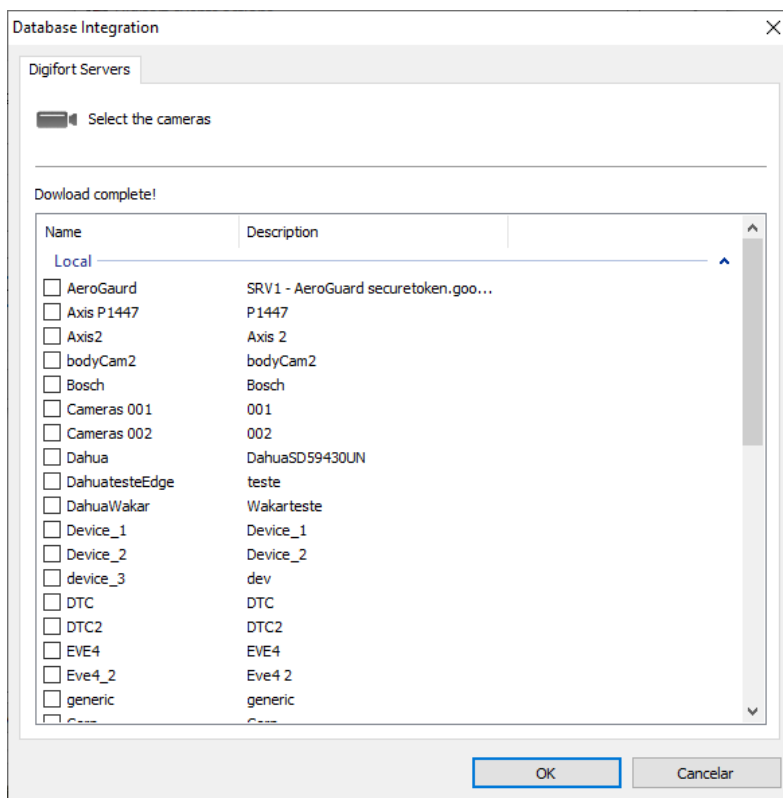
Here you will see the global events of all the servers registered in chapter 4, being filtered by server according to the server name and their respective global events, just click the box next to select one of the global events.

The Ideal in this case is that the selected global event has the Popup and message items selected in the register, so that the middleware can fill with the necessary data.

6.1.2. CAMERAS

To add the cameras that will appear in the popups, just click the Add shortly after popup cameras.

Here will appear the cameras of all the servers registered in chapter 4, being filtered by server according to the name of the server and their respective cameras, to appear in the popup.

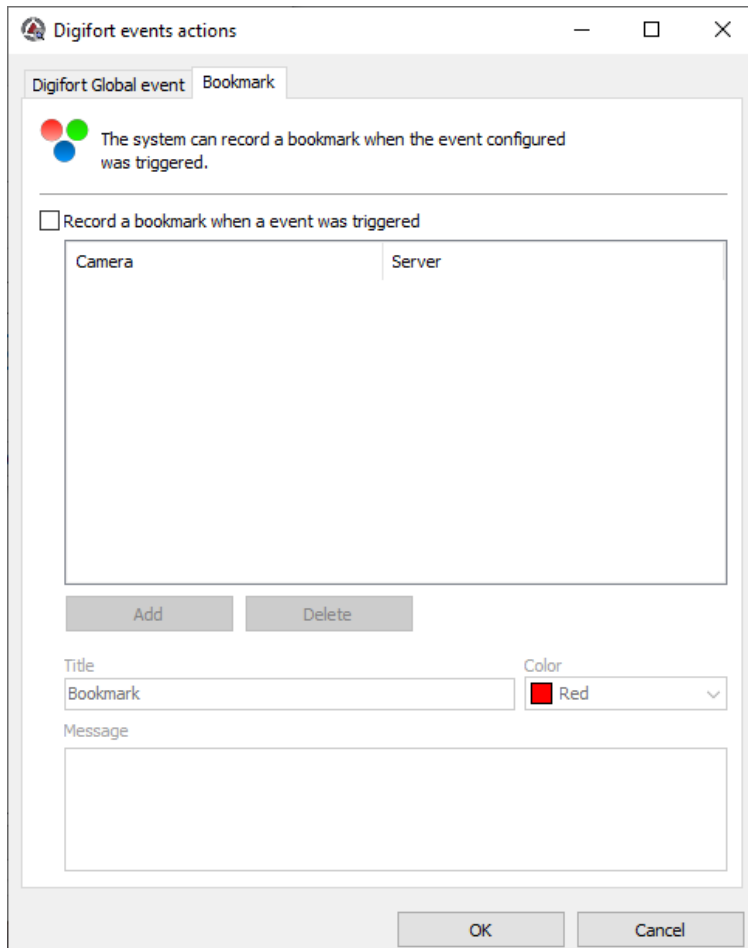


Picture 145 – Global Event Cameras

The additional message is to add to popups, a default message.

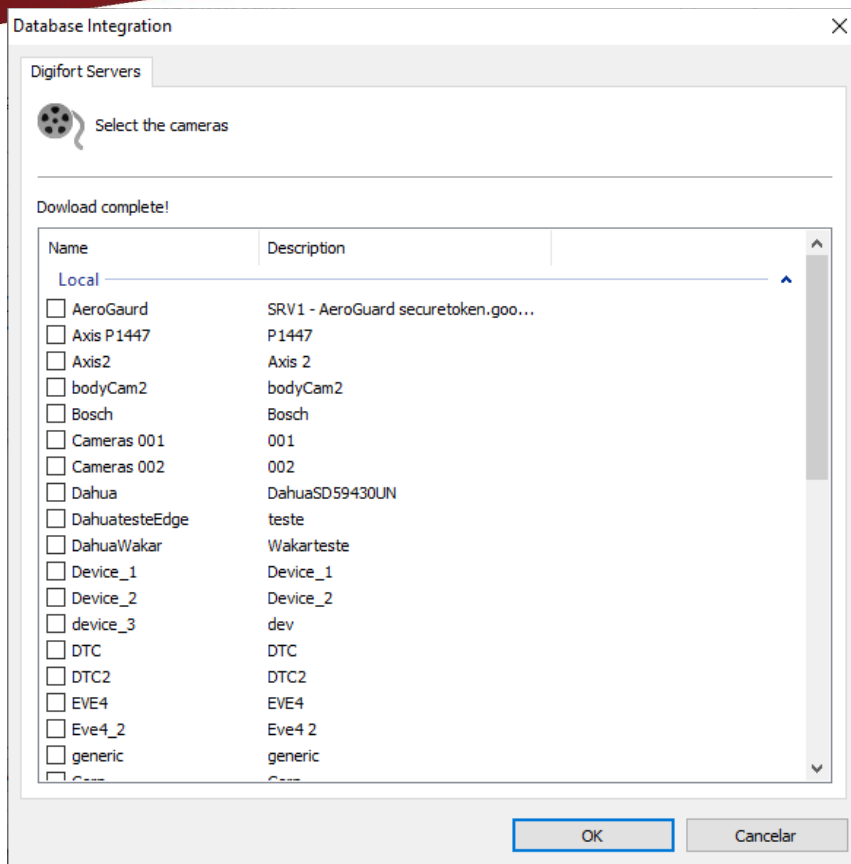
6.1.3. BOOKMARK

It is possible to enable to save the bookmark or not, clicking on the item "Save bookmark when generating event".



Picture 156 – Bookmark

If you are tagged to generate bookmark, you can add the camera that will receive this bookmark by clicking the add button the following screen will appear:



Picture 167 Bookmark cameras

As with global events, it is possible to add the cameras that received the bookmark just by clicking the box next to it.

The following fields can be filled in:

- **Title:** Title that will always appear in the bookmark, leaving blank to receive only the extra fields as in chapter 5.1.
- **Color:** Color you want to generate the bookmarks
- **Message:** Message that goes in the observation body of the bookmark.

7. LICENSE REGISTRATION

We can view all licenses already installed and a new Database Integration for access control license can be registered. Just as it is done in Digifort the machine will have a password, where it can be done the licensing.

If the software is not licensed the events will not be processed.

There are two methods of licensing Digifort, licensing through the internet and through license files.

Internet licensing is the most secure and recommended, but if your server can not access the internet, use licensing through license files.

When clicking on the licensing tab will appear the figure below:

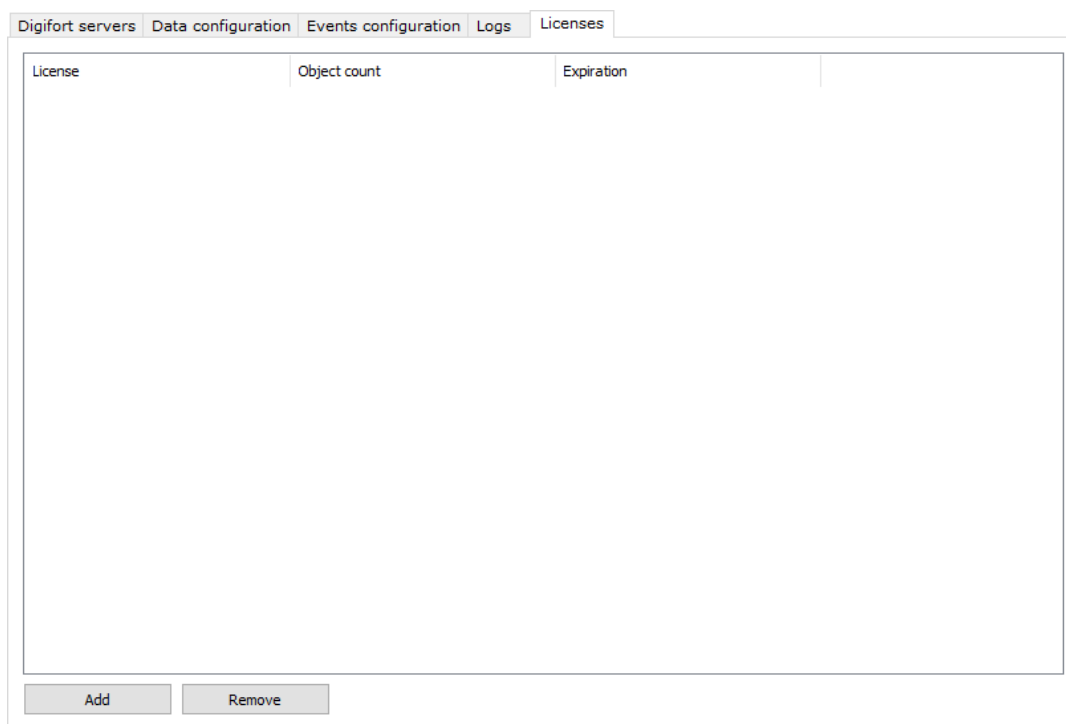


Figura 178 - Licenciamento

7.1. LICENSING

Clicking on the 1st Add button will display the following screen:

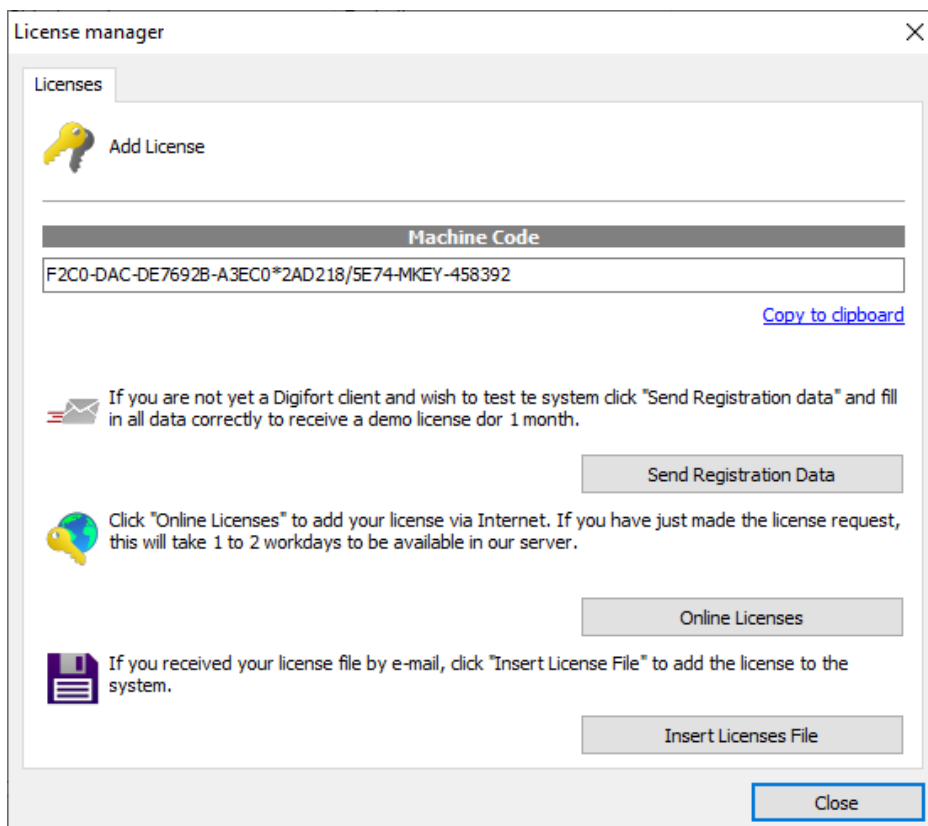


Figura 189 - Gerenciamento de licenças

The following actions can be performed::

- **Send registration Data:** Opens a form to request a new license.
- **Online licenses:** Shows all licenses available to the server.
- **Insert licenses file:** Allows the installation of the license from a license file.

7.2. LICENSE CONSUMPTION

Each device / site consumes a license, this configuration can generate multiple actions within Digifort and generate multiple bookmarks, as long as configured properly, as seen in item 6 event settings.