

Visual Factory Calibre Notifications 25

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2nd Revision: December 2024

Printed in Spain

Table of Contents

Introduction.....	1
Installing and Configuring the Windows Service	3
Minimum Installation Requirements	3
Installation	3
Configuration	3
Log file location	3
App Settings	4
Sorting Records	6
Initialize the service	8
Configuration from Visual Factory Calibre	10
Alert period configuration.....	10
Email format configuration	10
Column Configurator.....	11

Introduction

The email notification system developed to work with Visual Factory Calibre is a service that notifies the heads of each section or department if any of the equipment needs to be checked. The service consists of two parts:

- **Visual Factory Calibre Notification Configuration**, a configuration module found in the Visual Factory Calibre application (only active if licensed) where you configure the frequency with which the equipment pending calibration and email data are checked.
- **Visual Factory Calibre Notifications Service**, a Windows service that sends emails to each person in charge if there are computers pending any control (calibration, verification, ...).

Installing and Configuring the Windows Service

In this section we will explain how to install the Notification Sending service and how to configure it for its correct operation.

Minimum Installation Requirements

Before installing, verify that the computer where you are installing the application meets the following minimum requirements:

- Pentium 2-core processor or equivalent
- 4 GB RAM
- 100 Mb free on the hard drive.
- Operating system: Windows Server 2016 or higher, Windows 10 or 11 64-bit.
- MS .Net Framework 4.6.20 or superior.


When you install, you must install with machine administrator rights.

Installation

You will find the installation program in the VFCalibreNotificationsx.yy.zzzz\VFCalibre folder (x represents the main version number and yy.zzzz the subversion number) of the installation device (USB or unzipped zip file folder).

The first installation is usually carried out by Elecsoft together with the customer's IT department.

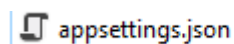
To perform the installation you must complete the following steps:

1. Select the VFCalibreNotificationsx.yy.zzzz\VFCalibre folder on the installation device.
2. Click on the installation app icon:  VisualFactoryCalibreNotificationsService.Setup.exe .

To advance in the installation click on the **Next button** and to return to previous steps of the installation click on the **Previous button**.

Configuration

Now we'll move on to setting up the service. To start the process, the first thing you should do is go to the installation folder and look for a file called appsettings.json.



Once found, we must open the file with a text editor to be able to configure the following values. We will only have to configure/modify the sections:

Log file location

By default, the log file is generated in the program's installation folder, in the Logs folder. If you want to change the location of the file, you will have to define the new path in the following parameter "path":

```

"Serilog": {
  "Using": [ "Serilog.Sinks.File", "Serilog.Sinks.Console" ],
  "MinimumLevel": "Information",
  "WriteTo": [
    {
      "Name": "File",
      "Args": {
        "path": "Logs//VFCalibreNotificationsServiceLog-.txt",
        "rollingInterval": "Month"
      }
    },
    {
      "Name": "Console"
    }
  ]
}

```

For example: "path": "C://Logs//VFCalibreNotificationsServiceLog-.txt" will generate the log file in the c:\Logs folder.

Note: It is important when defining the path of a folder to do so with double //

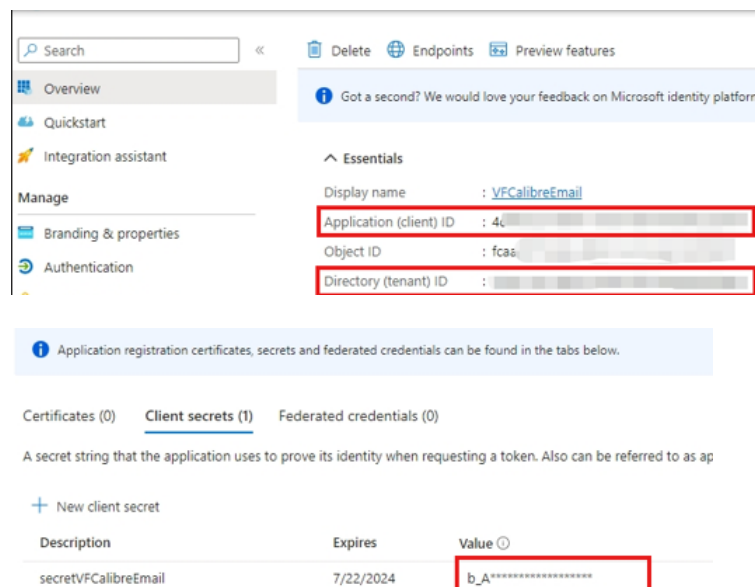
App Settings

- ConnectionString
 - Data Source: Indicate the server where the database is located.
 - Initial Catalog: here we must indicate the name of the database that contains the data (use the same database as Visual Factory Calibre).
 - User Id: the SQL user we use to connect to the database.
- Configuration
 - PasswordDb: The password of the database user to access the database. This value will have to be encrypted with the utility provided by Elecsoft.
 - TimeInterval: The time interval in seconds that you want the service to run again.
 - ServerSMTP: The address where the SMTP server is located to send mail.
 - UseDefaultCredentialsSMTP: Indicates whether the default credentials of the logged-in user will be used for SMTP sending.
 - UserSMTP: the user we will use to connect to the SMTP server.
 - PasswordSMTP: Password of the SMTP user. This value will have to be encrypted with the utility provided by Elecsoft.

Note: If SMTP sending is not to be used, the value of the PasswordSMTP parameter will need to be left blank.

- Port: The port of the SMTP server.

- EnableSSL: We will indicate if the security of the SMTP protocol is by SSL
- Sender SMTP: the mail from which the emails will be sent.
- UseMicrosoftGraph: If false, SMTP sending will be used, otherwise Microsoft Graph will be used. The following parameters must be filled in:
 - ApplicationClientId: Value assigned in Azure for the registered application. This value will have to be encrypted with the utility provided by Elecsoft.
 - DirectoryId: Value assigned in Azure as a tenant directory. This value will have to be encrypted with the utility supplied by Elecsoft
 - ApplicationClientSecret – Value assigned in Azure as a secret created for the registered application. This value will have to be encrypted with the utility supplied by Elecsoft



Note: If you are not going to use Microsoft Graph sending, the settings for these parameters will need to be left blank.

```

{
  "Serilog": {
    "Using": [ "Serilog.Sinks.File", "Serilog.Sinks.Console" ],
    "MinimumLevel": "Information",
    "WriteTo": [
      {
        "Name": "File",
        "Args": {
          "path": "Logs/VFCalibreNotificationsServiceLog-.txt",
          "rollingInterval": "Month"
        }
      },
      {
        "Name": "Console"
      }
    ]
  },
  "ConnectionStrings": {
    "DefaultConnection": "Integrated Security=false;Pooling=false;Data Source=Servidor;"
  },
  "Configuracion": {
    "PasswordDb": "IqwPLwqrGjTV5Ytdmr3WgQ==",
    "TimeInterval": 10,
    "ServerSMTP": "smtp.office365.com",
    "UseDefaultCredentialsSMTP": false,
    "UserSMTP": "joseexposito@elecsoft.com",
    "PasswordSMTP": "IqwPLwqrGjTV5Ytdmr3WgQ==",
    "Port": 25,
    "EnableSSL": true,
    "SenderSMTP": "usuario@elecsoft.com",
    "ApplicationClientId": "IqwPLwqrGjTV5Ytdmr3WgQ==",
    "DirectoryId": "IqwPLwqrGjTV5Ytdmr3WgQ==",
    "ApplicationClientSecret": "IqwPLwqrGjTV5Ytdmr3WgQ==",
    "UseMicrosoftGraph": false
  }
}

```

Sorting Records

The program allows you to configure which records you want to sort the list of e-mails. By default, the program sorts it by next calibration date.

If you want to change or add the sort order, you must configure the following in the configuration file, for example, to sort by equipment code and upcoming calibration:

```

"Configuracion": {
  "PasswordDb": "talvmur8CL578DHQBUDMrw==",
  "TimeInterval": 10,
  "ServerSMTP": "localhost",
  "UseDefaultCredentialsSMTP": false,
  "UserSMTP": "joseexposito@elecsoft.com",
  "PasswordSMTP": "IqwPLwqrGjTV5Ytdmr3WgQ==",
  "Port": 25,
  "EnableSSL": false,
  "SenderSMTP": "usuario@elecsoft.com",
  "ApplicationClientId": "IqwPLwqrGjTV5Ytdmr3WgQ==",
  "DirectoryId": "IqwPLwqrGjTV5Ytdmr3WgQ==",
  "ApplicationClientSecret": "IqwPLwqrGjTV5Ytdmr3WgQ==",
  "UseMicrosoftGraph": false
},
"AvailabilityFilter": {
  "Organizations": [
    {
      "OrganizationId": 3,
      "SortProperties": [
        {
          "PropertyName": "Gauge.Code",
          "Ascending": true
        },
        {
          "PropertyName": "NextControlDate",
          "Ascending": true
        }
      ]
    }
  ]
}

```

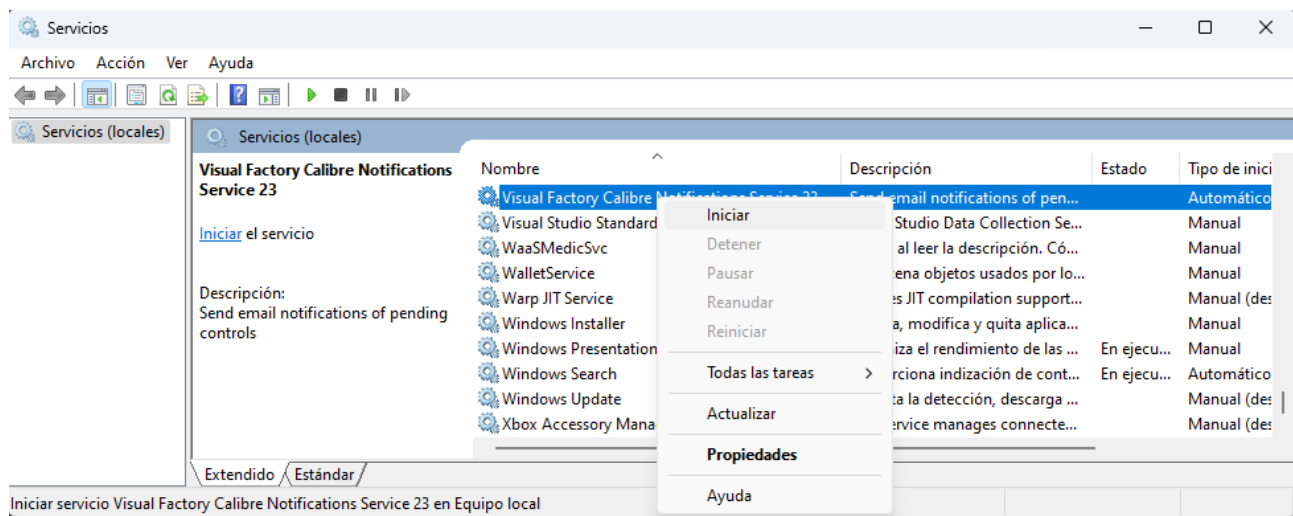
Fields to configure:

- OrganizationId: An id field of the organization configured to send e-mails.
- SortProperties: Indicates a sort collection:
 - PropertyName: Name of the field or property you want to sort by.
 - Ascending: Type order, true ascending, false descending.

Important: If you have to access Gauge fields, you will have to access through Gauge, for example, to access the Gauge Line field, you will have to indicate Gauge.Line.Code

Initialize the service

Once the json configuration file has been modified, the service must be initialized. Access the system services, locate the service, right-click on it and initialize it as shown in the image:

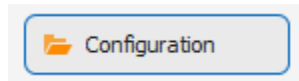


Configuration from Visual Factory Calibre

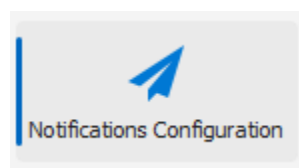
Note: This module will only be visible if you have purchased the necessary license.

First we will access the Visual Factory Caliber application.

Once we are inside the application, we must go to the settings section in the navigation bar on the left.



Within "Settings" we will see a section called "Notification Settings", where we will configure the following sections.



Alert period configuration

- **Organization:** Indicates for which organization the alerts will be made.
- **Type of alert:** indicates if we want to check the equipment pending calibration by section, department or line, the emails would be sent to the head of section, department or line respectively.
- **Period:** Indicates the period of the next check date and whether we want it to be in days or months.
- **Nº Days in advance:** Indicates the number of days in advance of the next calibration date of the equipment.
- **Next test date:** Indicates the date on which the test of equipment pending calibration will be carried out.
- **Enable email notifications:** Allows you to enable or disable the sending of email notifications.

Alerts period configuration			
Organization:*	Organization	Alert Type:	Section
Period:	30	Days	
Nº Of Days In Advance:	5	Next Check Date:	03/09/2023
<input type="checkbox"/> Activate Sending Notification By Email			

Email format configuration

- **Subject of the email:** indicates the subject that we want it to put in the sent email.
- **Email Title:** Indicates the title of the email.

- Email subtitle: indicates the subtitle of the email, it is displayed in the body of the email.

Note: If we want the email to show the section or department code, the description of these or the total number of equipment, we must put the codes indicated in the "Note" section.

Email format configuration	
Email Subject:*	List of pending calibration gauges / Lista de equipos pendientes de calibración
Email Title:*	List of pending calibration gauges / Lista de equipos pendientes de calibración
Email Subtitle:*	Pending gauges to be calibrated for section [AlertTypeCode]: [TotalRecords] / Lista de equipos pendientes de calibración para la sección [AlertTypeCode]: [TotalRecords]
Note [AlertTypeCode], Section, department, line or responsible user code. [AlertTypeDescription], section, department, line or responsible user description. [TotalRecords], Total number of gauges per section, department, line or responsible user.	

Column Configurator

Next, we will be allowed to configure the columns for the mail table with the following fields:

- Order: In what order you want the columns in the mail table to go.
- Field: Indicates which property/value is displayed in the column and where it came from.
- Title: Indicates the title that we want each of the columns to have.
- Width: indicates the width of each of the columns with respect to the total width (100%).
- Format: this is indicated if we want the data displayed to have a specific format.

Order	Field	Title	Width	Format
Click here to add a new row				
1	Gauge;Code	Gauge / Equipo	15 %	
2	Gauge;Description	Description / Descripción	55 %	
3	GaugeControl;Control	Control / Control	15 %	
4	GaugeControl;NextControlDate	Next calibration / Próxima calibración	15 %	{0:dd/MM/yyyy}