BLACK MAMBA

DIGITAL RECEIVER

Installation & User Guide

Version 1.0

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Introduction

The "Black Mamba" receiver is the first worldwide, which can be managed entirely through Web Interface, to be able to manage the alarm signals receiving from most and widespread alarm system companies.

It is built so that it can be installed in a Microsoft Cluster environment and of course it is updates online, thus supporting its constant upgrade.

The "Black Mamba" receiver is constantly enriched with new communication protocols and new device vendors, to evolve in parallel with the requirements of the global security systems market.

Pre-installation Requirements

The Black Mamba digital receiver can be installed on systems meeting the following minimum requirements

- **Windows Operating System**: Windows 10, 11, and Windows Server 2016, 2019, 2022 or later. Windows Cluster Supported.
- **Processor**: Intel - Compatible processor with a speed of 1.4 GHz or faster.
- **RAM:** Minimum 512 MB. Recommended: 1 GB or more.
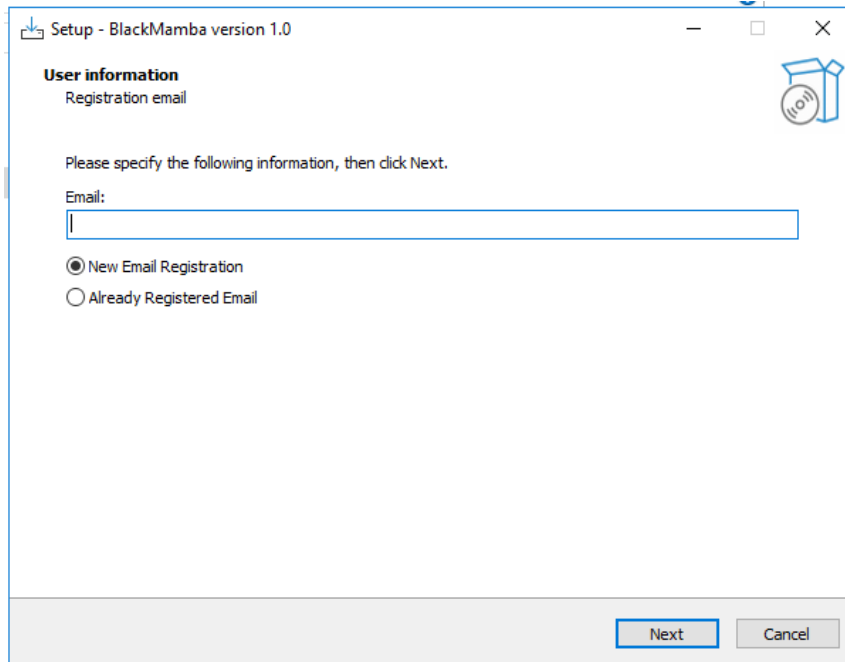- **Hard Disk Space**: 5 GB of Disk Space

During the installation process, you will be prompted to install – if not already exist – the following Microsoft products

- Microsoft Visual Studio C++ 2013
- Microsoft SQL Server 2019 LocalDB
- Microsoft ODBC Native Driver 2012 for SQL Server

Installation Steps

1. Download the Black Mamba receiver installation file directly from our website https://www.blackmamba.cloud

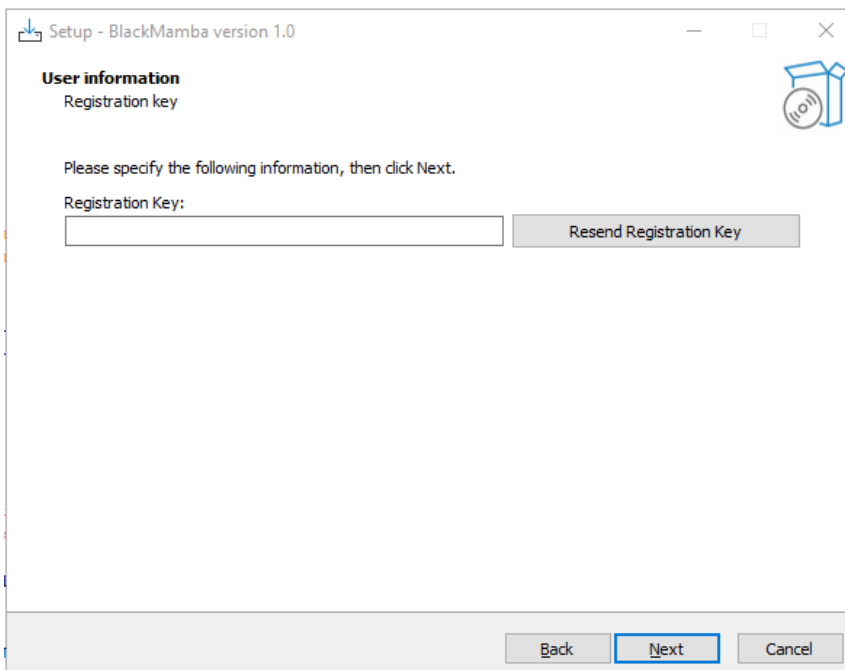2. Execute the **blackmamba_setup.exe**

3. Complete your Registration **Email Address** when prompted, select if this is a new email address or already registered and click **Next**. Note: Please provide a valid

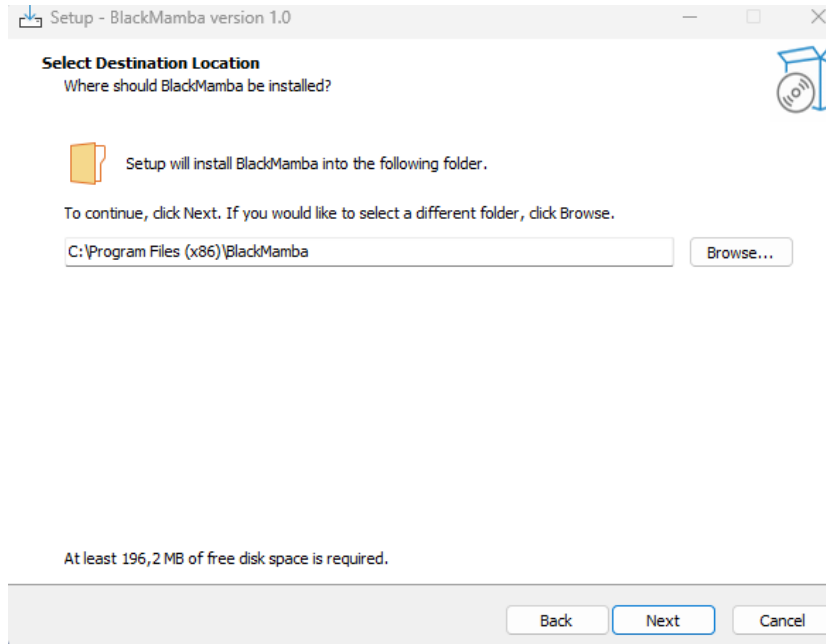email address in order to be able to receive the Registration Key.

4. You will receive a **Registration Key** in your email address provided. Copy it and paste in the next setup dialog box. If you did not receive an email with the
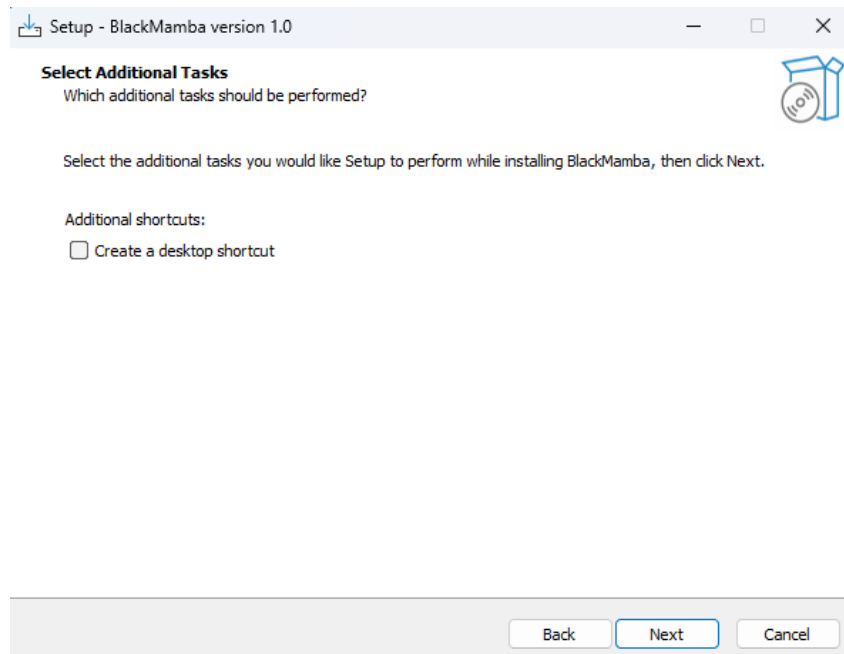

Registration Key, you may click on "Resend Registration Key" button. Click **Next** when you apply the Registration Key in the field.

5. If the Registration Key is valid, you will be prompted to select the Destination Folder for the installation. By default, Black Mamba will be installed in

> Setup - BlackMamba version 1.0
>
> **Select Destination Location**
> Where should BlackMamba be installed?
>
> Setup will install BlackMamba into the following folder.
>
> To continue, click Next. If you would like to select a different folder, click Browse.
>
> C:\Program Files (x86)\BlackMamba   Browse...
>
> At least 196,2 MB of free disk space is required.
>
> Back   Next   Cancel

"**C:\Program Files (x86)\BlackMamba**". You may choose another folder by clicking "**Browse**". Click **Next** to continue.

6. In the next dialog box, choose if you want to **create a desktop shortcut** and click **Next** to proceed.

> Setup - BlackMamba version 1.0
>
> **Select Additional Tasks**
> Which additional tasks should be performed?
>
> Select the additional tasks you would like Setup to perform while installing BlackMamba, then click Next.
>
> Additional shortcuts:
> ☐ Create a desktop shortcut
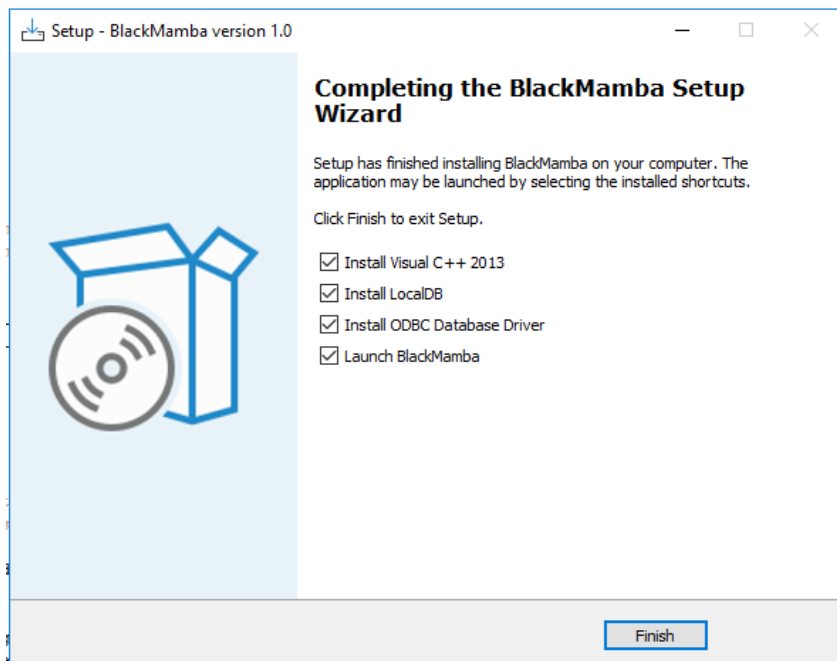>
> Back   Next   Cancel

7. Review the setup options previously selected and click **Install** to begin the
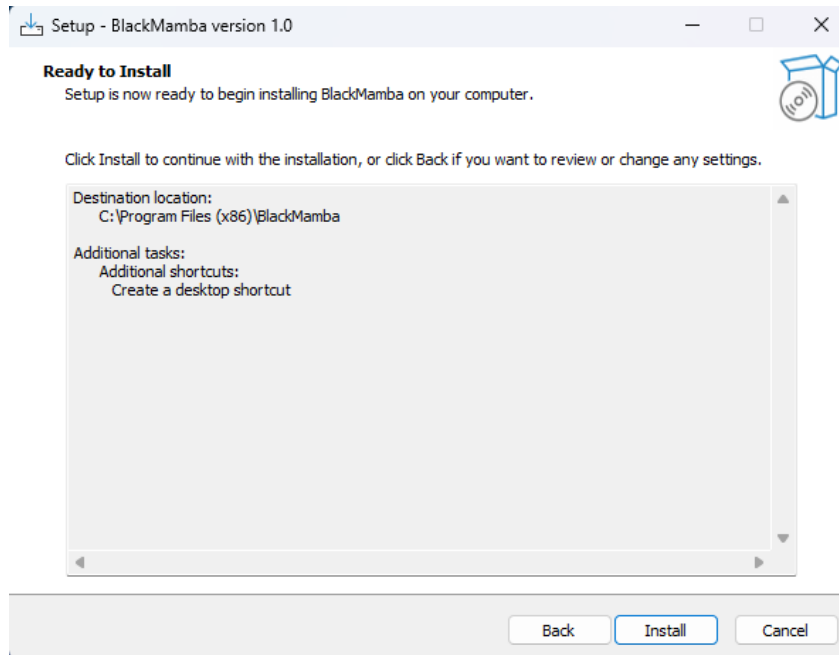

installation process. Please wait until the file copy is complete.

8. Complete the setup and proceed to the installation of Microsoft products required. Please **check all 3 packages** (Visual Studio C++ 2013, LocalDB and ODBC


Driver) and click **Finish**.

9. Microsoft Visual C++ 2013 Redistributable installation starts shortly after. Check the "I agree to the license terms and conditions" and click **Install**. Wait until the
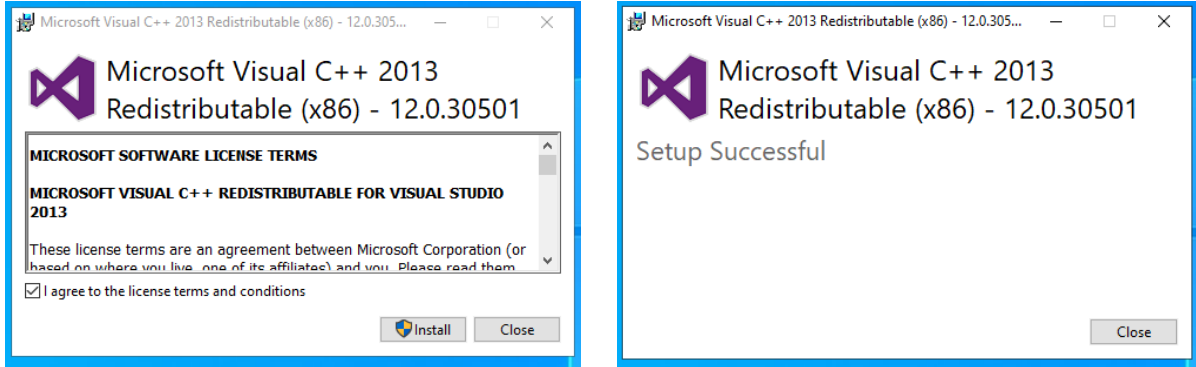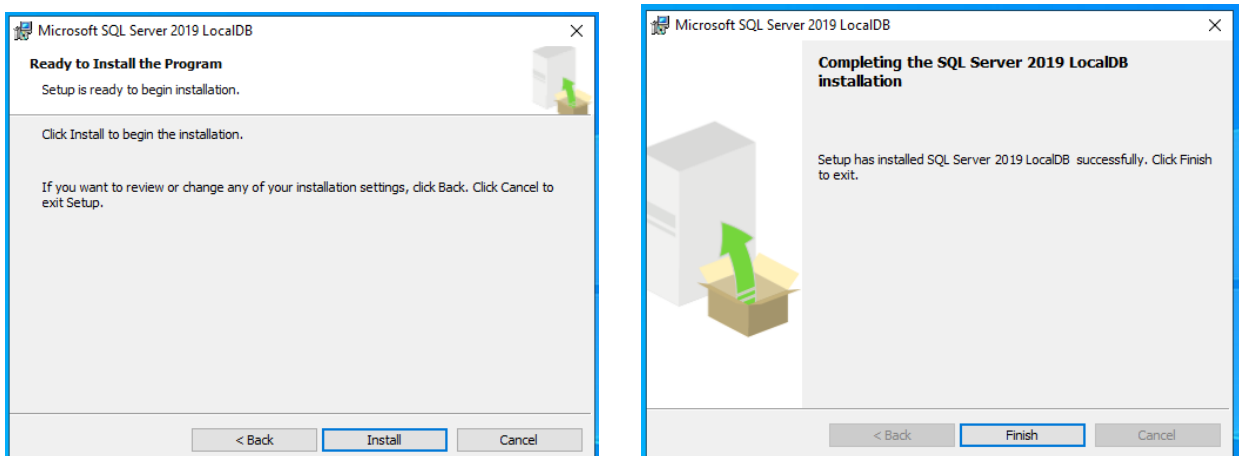

setup completes with a success message and click **Close** to terminate the process.

10. Microsoft SQL Server 2019 LocalDB installation follows. Click Next to start the setup. Check the "I accept the terms in the license agreement" and click **Next**. In
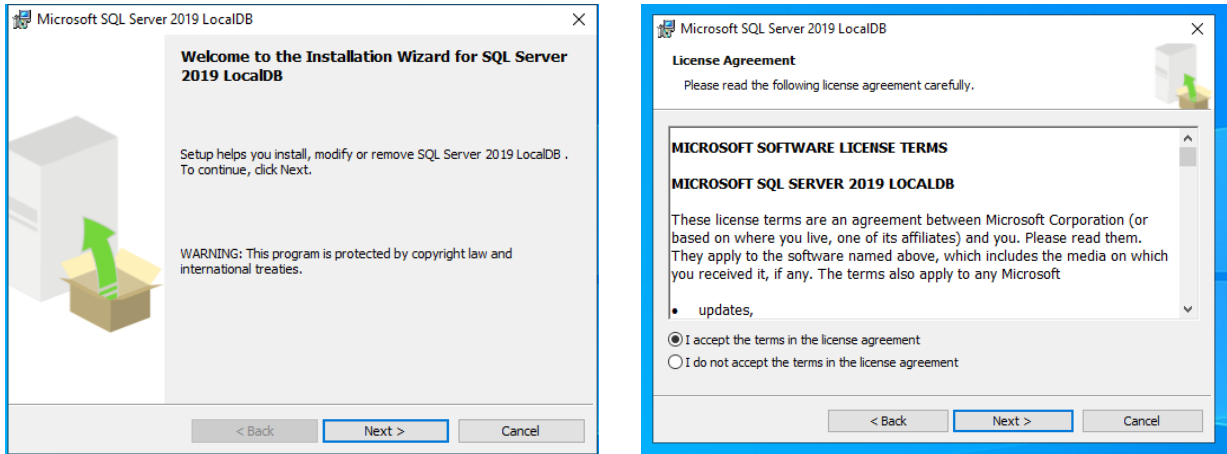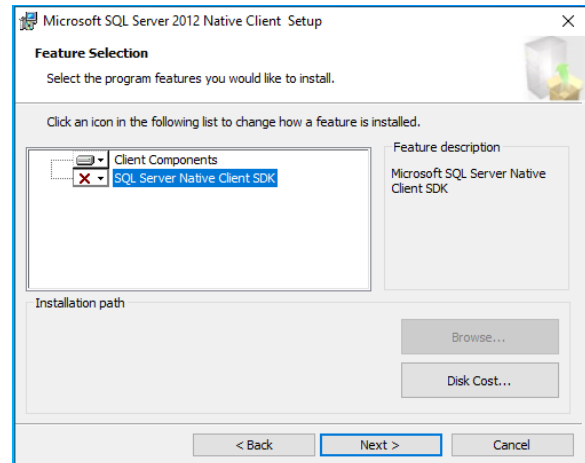

the next dialog box just click on **Install** to proceed. Wait until the setup completes
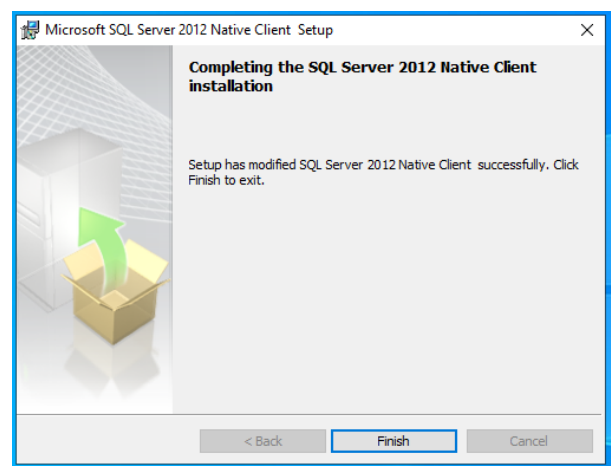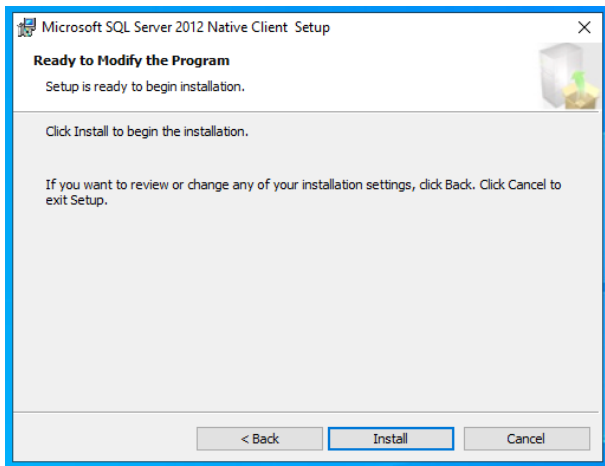

and click on **Finish** to terminate the process.

11. Microsoft SQL Server 2012 Native Client setup is the last package required. Click

Next to start the installation. In the next step just click **Next**, as it is not necessary to install the SQL Server Native Client SDK. Then click **Install** to begin the process.


Wait until the setup completes and click on **Finish** to terminate the process.

12. Upon successful installation and if you had selected "Launch BlackMamba", you should be redirected on your default web browser and see the login page of Black Mamba Administration Tool. Please refer to the next section for instructions.

Black Mamba User Guide

1. Login

The "Black Mamba" receiver is fully controlled through web interface. User the application shortcut to access it or simply open your web browser and open the following url: **http://127.0.0.1:8181** or **http://localhost:8181**
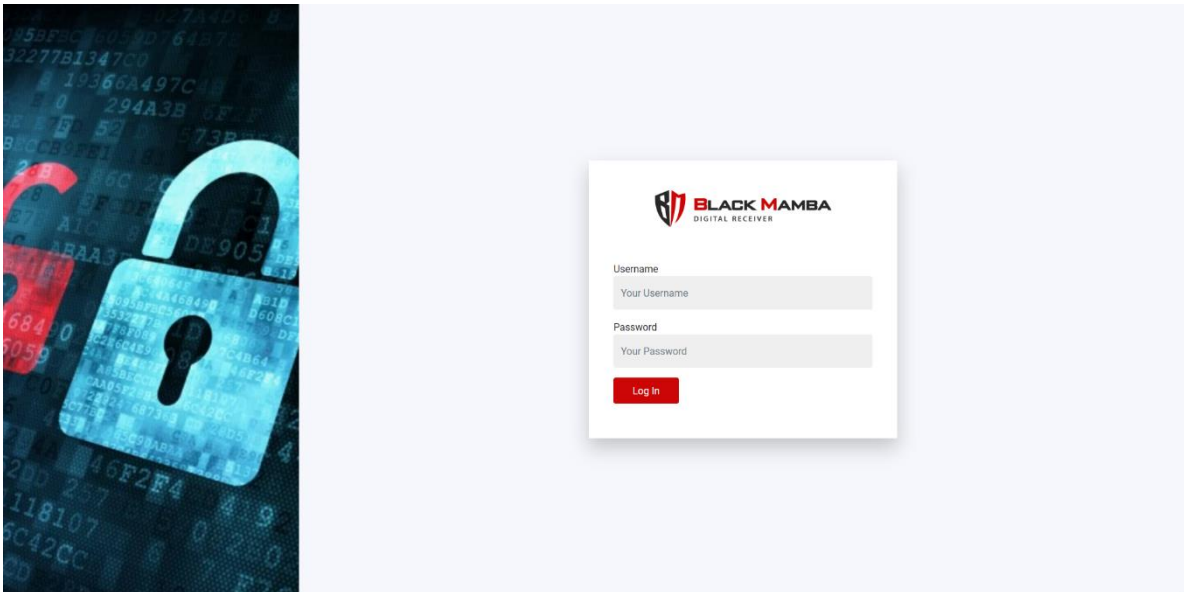
You will see the Administration Tool Login page, prompting you to enter the username and password. The default credentials are username: **admin** and password: **admin**
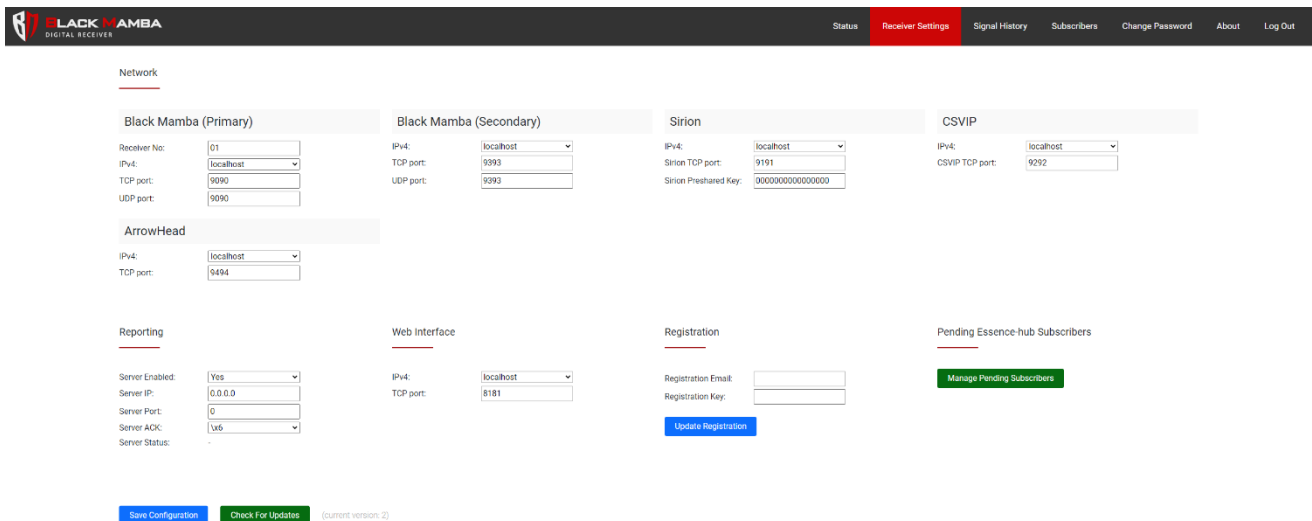
2. Status
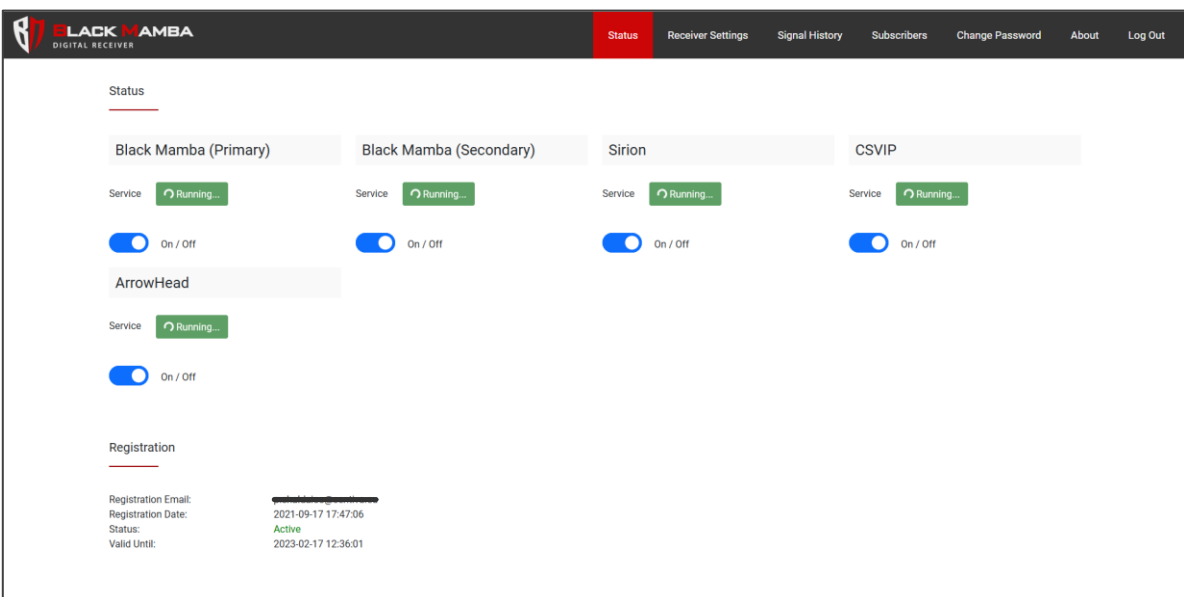
After the successful login, you will be redirected to the Status Panel of Black Mamba. There are **5 different Receiver Services** running simultaneously. The Primary and Secondary Black Mamba Receivers, the Sirion Receiver, the CSV-IP Receiver and the Arrowhead Receiver.

Each Service is running independently and may be switched on or off at any time, simply using the **Switch** below each Service

The **Registration** details may be found at the bottom left side of the Status Panel, indicating the registration email address, date, status and expiration date.

3. Receiver Settings

The Receiver Setting Panel is the main controller of Black Mamba. It allows the administration of Network Settings, Reporting, Registration and Pending Subscribers.

Network

Each Receiver must be assigned a **local machine IP address and port**, either TCP or UDP, or even both, depending on the Receiver Type. Especially for **Sirion Receiver** Service, the **Pre-shared Key** must be defined for signal decoding.

The **Receiver Number** is unique (e.g. 01), since all the Receiver Services are Reported as one single Receiver.

Reporting

The received signals from the Black Mamba digital receiver may be transmitted to **over TCP-IP** your Automation Software. You need to **enable the Reporting Server** and apply the preferred **IP address** and **TCP Port**. Every signal is buffered and retransmitted until an **ACK** is received from your Automation Software. The Reporting Server Status is displayed in this panel.

Web Interface

You may change the **local IP address and TCP Port** of the Black Mamba Administration Tool.
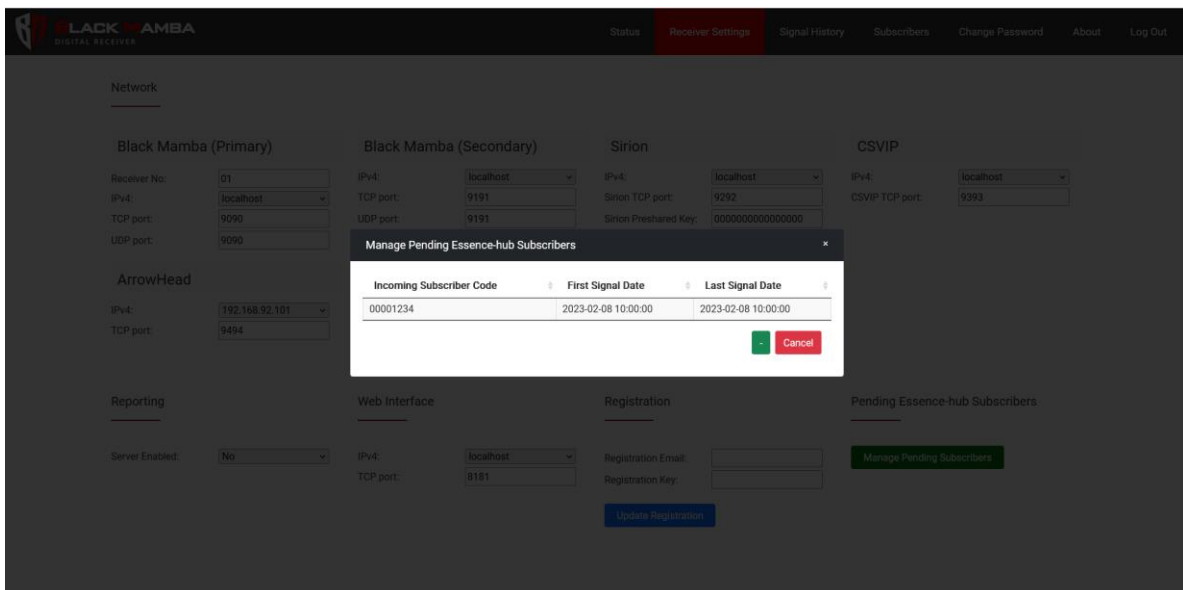
Registration

Provide the Email Address of your Black Mamba Registration, along with the valid Registration Key. In order to apply changes, you must click "**Update Registration**".

Pending Essence-hub Subscribers

Black Mamba is compatible to receive Essence-hub signals. The Subscribers are **not activated automatically** (like any other receiver) but must be manually activated. This is because Essence-hub protocol uses **8-digit subscriber codes** instead of 4 or 6 that are used by common protocols like SIA or Contact ID.

Click "**Manage Pending Subscribers**" to view the list of new Essence-hub subscribers.

Select one of the pending subscribers by clicking on it in the list. The **new subscriber code field appears,** and you may enter the desired subscriber code according to your
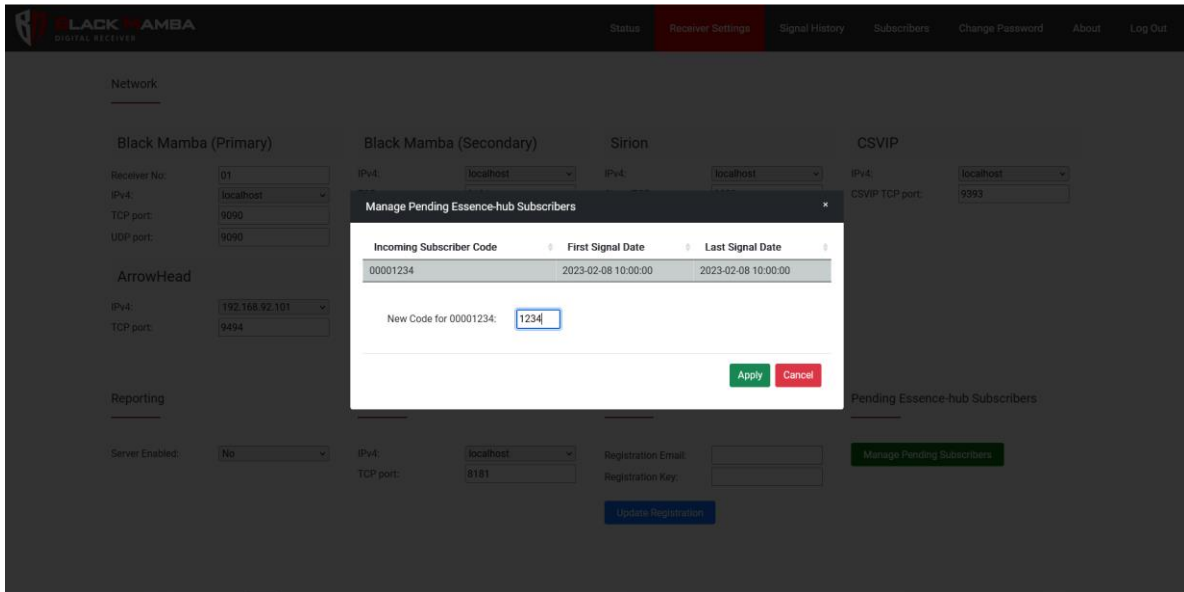
standards. Click **Apply** to save the new subscriber code and activate it.

Save Settings & Update

At the bottom left corner of the Settings Panel, the **Save Configuration** button applies all the preferred settings of Black Mamba. Please remember to click on it before exiting the panel, otherwise all changes will be discarded.
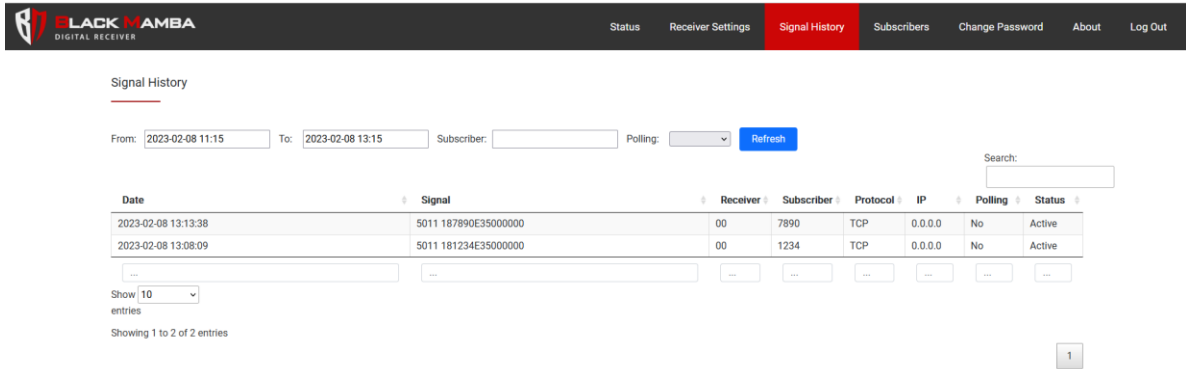
The "**Check For Updates**" button allows online checking for new release of the Black Mamba receiver and informs you accordingly. You may check for updates frequently so you keep your receiver up to date.

4. Signal History

The Signal History Panel offers a search tool for the received alarm signals of Black Mamba.

The results grid loads automatically with the most recent signals according to the date and time. The available filters for more specific search are the signal **Date and Time** period (From, To), the **Subscriber Code** and the **Polling flag** which allows to include or exclude polling signals from the request.

The more filters completed the more specific result will be returned. Click **Refresh** to apply the filters and load the results into the grid.
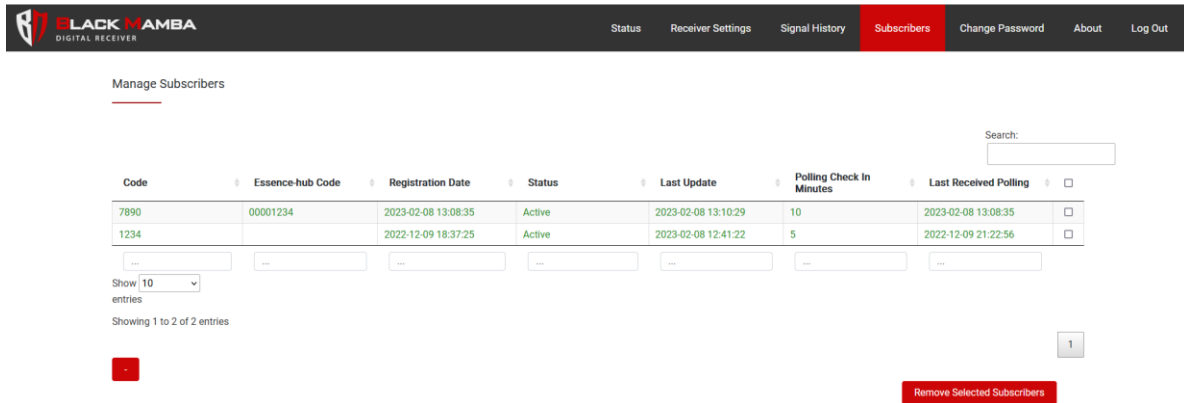

The Results Grid may be searched for more detailed findings. You may search each **Grid Column** by typing into the relevant text field at the bottom of the grid column, or type in the **General Grid Search** field at the right top of the results grid. In both cases, the results rows are instantly changed to meet the requested criteria.

At the bottom of the results grid, the pagination options allow the result rows splitting into pages for more convenient lookup.

5. Subscribers

The Subscribers Panel is used for monitoring and controlling all the registered subscribers of Black Mamba. The Subscribers are automatically loaded into the results grid when accessing this panel.
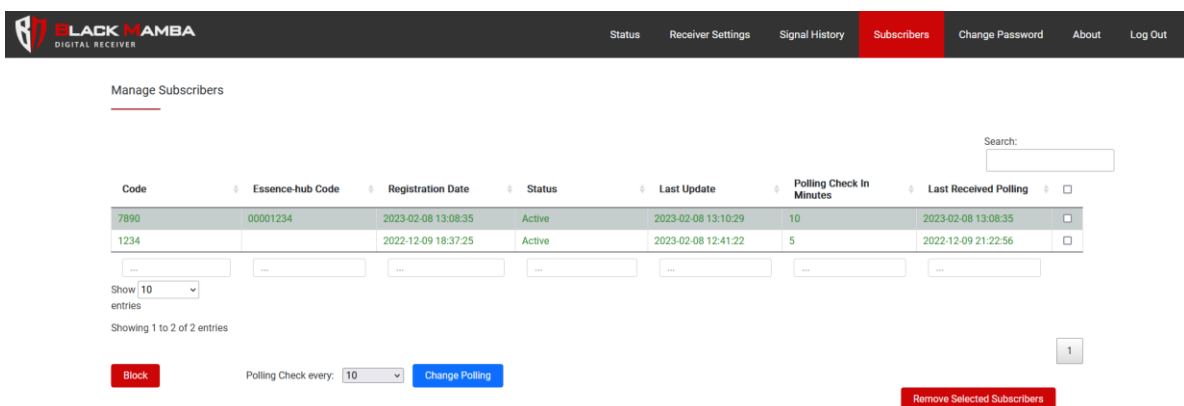
List Details

For each Subscriber in the results grid you may see the Code, the Essence-hub Code when applicable, the Registration Date and time, the current Status, the Last Update date and time, the Polling Check interval in minutes and the last Polling signal date and time. The results grid functionality is similar with the one described previously in section 4 (Signal History).

Block a Subscriber

By default, every subscriber is registered with status Active upon the reception of the first signal. The Active Subscribers appear with green font row in the results grid and Blocked Subscribers with red font row. Click on an Active Subscriber and see the row selected.
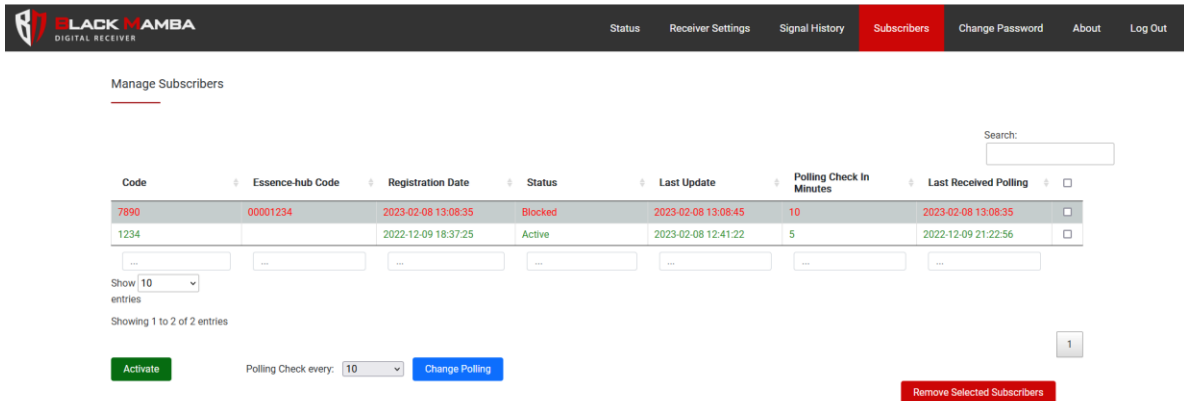
The "**Block**" button appears on the bottom left of the grid, allowing to click it. After approval, the selected subscriber is blocked, the signals are received but no longer reported to the Automation Software.

Activate a Blocked Subscriber

By selecting a blocked subscriber row in the grid, the bottom left button is turned into "**Activate**", allowing the activation of the selected blocked subscriber after your confirmation.

Alter Polling Interval

By selecting a subscriber row in the grid, you may change the **Polling Check interval in minutes**. Depending on the subscriber GPRS module setting the interval between two polling signals may differ. Adjust the Polling Check interval respectively and click the "**Change Polling**" button to apply the new value and to be informed accurately in case of communication loss. The polling failure signal is triggered as soon as this interval is reached without receiving at least one polling event.
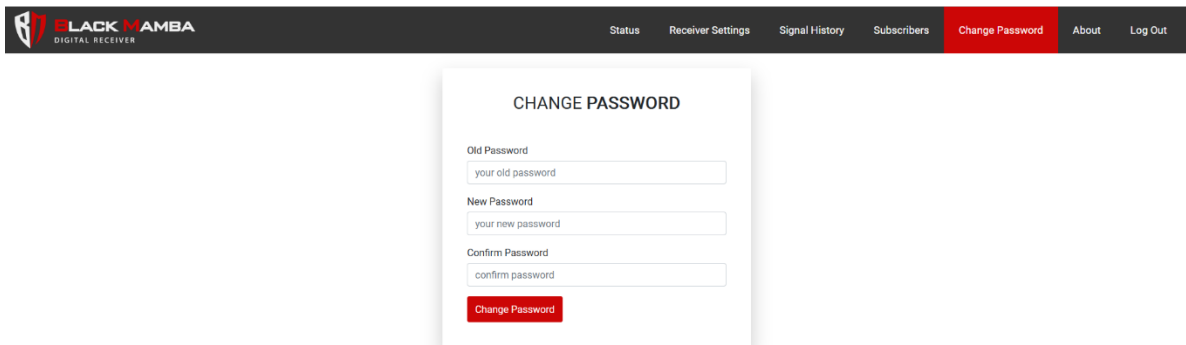
Remove Subscriber(s)

You may permanently remove one or more subscribers from Black Mamba by using the **check box** at the right side of each row in the subscriber results grid. Check as many rows of subscribers required or all of them (using the check box on the top of the last column) and click the "**Remove Selected Subscribers**" button. Approve the deletion and all the selected subscribers will be permanently deleted from the Black Mamba Receiver.

Note: If a subscriber retransmits a signal after removal, it will be automatically added to the subscribers list again with status "Active". In this case you need to Block the subscriber to prevent the signal transmission.

6. Change Password

The default administrator password (**admin**) may be changed using this panel. Provide the existing one (Old Password) and type the new password twice for

confirmation. Finally click the "**Change Password**" button to apply and login again with your new credentials.

7. Log Out

Simply click on this menu item to log ff the Black Mamba Administration Tool and return to the login page.

Post-installation Information

The Black Mamba Digital Receiver is installed in the default path "**C:\Program Files (x86)\BlackMamba**" except you have selected differently during the installation process.

You may find all the application error logging in the installation path and specifically in the "**ERRORS.ilf**" file.

Contact Us

You may contact us by email at info@blackmamba.cloud

Information about the Black Mamba Digital Receiver and our **Subscription Plans** may be found by visiting our website at https://www.blackmamba.cloud