

APPLICATION NOTE

APNUS052 How To Recovery a Router in
Emergency mode using Recovery App

March. 2026

Table of Contents

1- Introduction.....	3
2- Prerequisites	3
Download Recovery Apps Installer	3
3- Emergency Mode Characteristics.....	3
4- Led Behaviour in Emergency Mode	4
5- Installation OverView	4
For Windows Distribution	4
For Linux Server	6
Update the System	6
Install Recovery packet.....	6
6- Recovery Apps Tool.....	7
Upload Firmware	8

1- Introduction

Emergency Mode is a recovery mechanism available for ACKSYS routers when the device firmware becomes corrupted or when a firmware upgrade fails.

In WaveManager On-Premise and Cloud version 4.6.1.1, the Emergency Upgrade feature is not integrated. Recovery operations must be carried out using the dedicated Acksys Recovery App.

This application is specifically intended to restore routers that have entered Emergency Mode. This tool is exclusively used to recover routers that are in Emergency Mode.

Common situations that can lead to Emergency Mode include:

- Interrupted firmware upgrade
- Corrupted firmware image
- Router no longer accessible via Web GUI or CLI

2- Prerequisites

Before starting the installation, ensure the following are in place:

Software Requirements:

- Customers in WaveManager 4.6.X On Premise and Cloud
- **Operating System:**
 - Windows 10 or higher
 - Ubuntu 24.4 or higher

For Product:

- **Operating System:**
 - WaveOs 4.28.1.1 or greater

Firwalling rule:

- **ACL:**
 - Allow the application default port 58400

Download Recovery Apps Installer

Visit [the WaveManager official portal](#) and download the recovery Apps package.

- For Linux: .deb file.
- For Windows: .exe file.

3- Emergency Mode Characteristics

When a router enters Emergency Mode:

- The DIAG LED blinks rapidly
- The router answers to ping
- The **web interface is unavailable**

Default recovery IP (all ACKSYS devices models):

192.168.1.253

4- Led Behaviour in Emergency Mode

ACKSYS routers provide visual diagnostics through the **DIAG LED**. The LED state helps determine the operational state of the router.

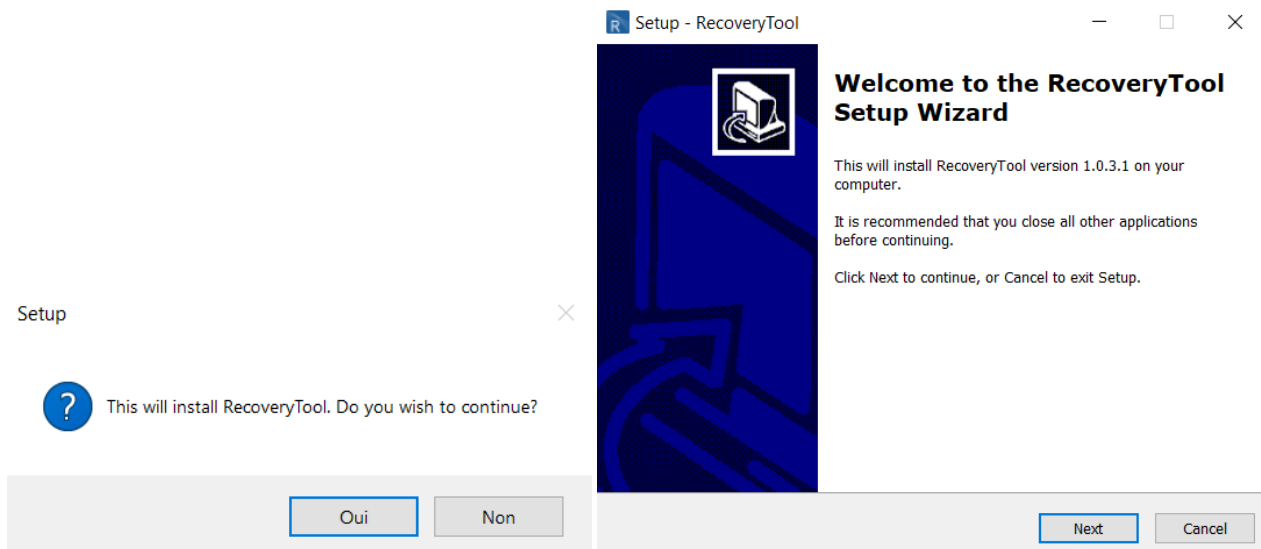
LED Status	Meaning	Action
OFF	Device powered but no diagnostic event	Normal operation
Solid Green	System booting or operating normally	No action required
Slow Blinking	System initialization in progress	Wait for boot completion
Fast Blinking	Emergency Mode activated	Use recovery procedure
Red / Continuous error	Hardware or firmware failure	Attempt recovery or contact support

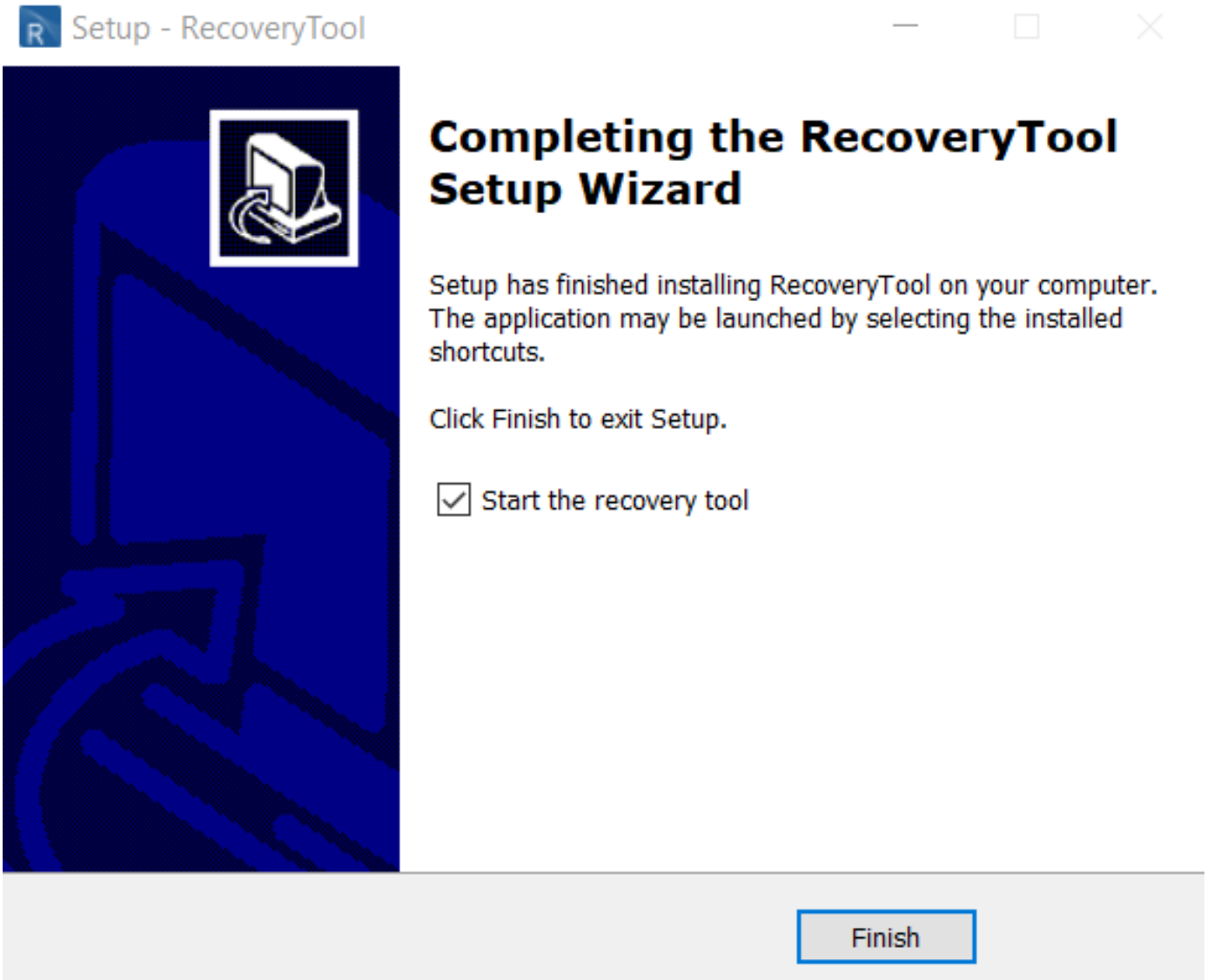
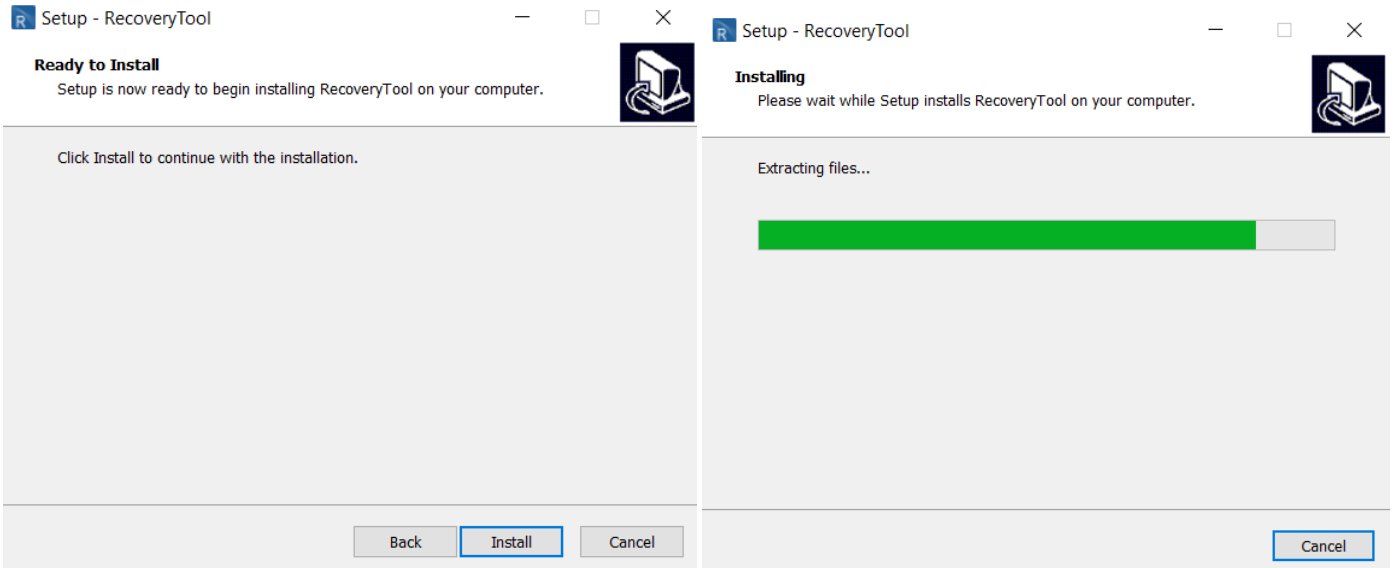
5- Installation OverView

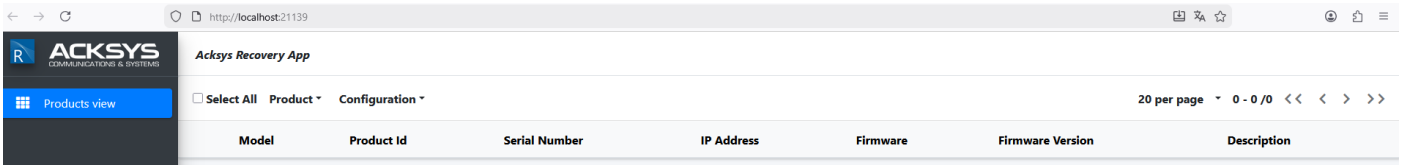
Let saying finally, the downloading part of our Recovery Apps process is done.

For Windows Distribution

So, we can now begin Acksys Recovery Apps installation from the setup Wizard. Simply follow the on-screen wizard and allow the installation to complete.

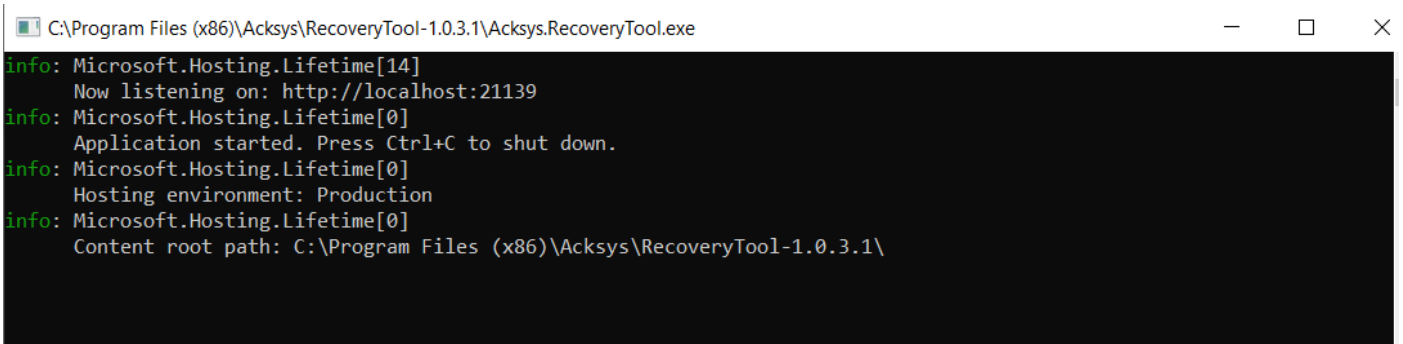






Congratulations! You have successfully installed ACKSYS Recovery Tool.

By default the application is install on this path: `C:\Program Files (x86)\Acksys\RecoveryTool-1.0.3.1\`



For Linux Server

Update the System

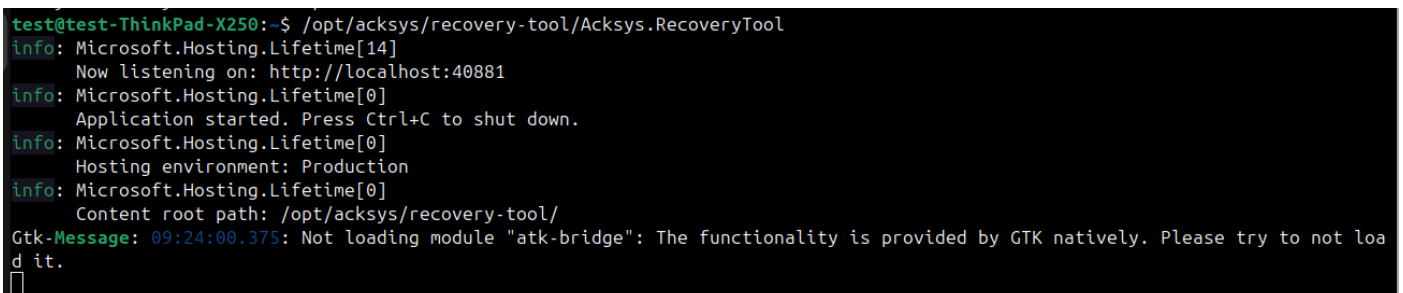
```
sudo apt update && sudo apt upgrade
```

Install Recovery packet

After downloading the Linux Recovery App packet `acksys-recovery-tool_1.0.3.1_amd64.deb`, type the following command to install the packet:

```
sudo apt-get install -f acksys-recovery-tool_1.0.3.1_amd64.deb
```

Command to launch the apps.

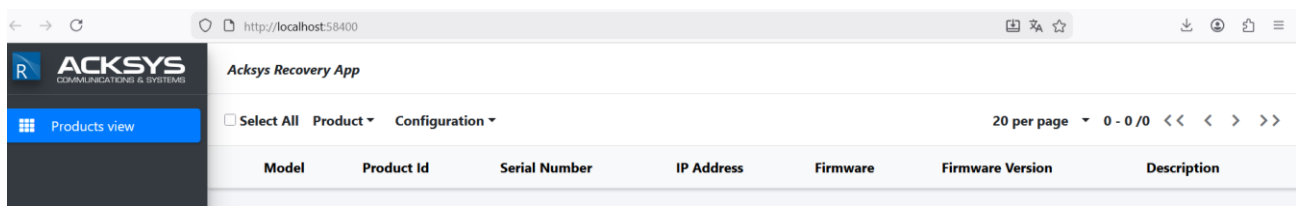


6- Recovery Apps Tool

The Acksys Recovery App is a web-based utility running locally and is typically accessed via: <http://localhost:58400> :

- Detect routers in **Emergency Mode**
- Upload firmware images
- Restore router operation
- Manage recovery configuration

Below is the interface overview of the recovery tool.

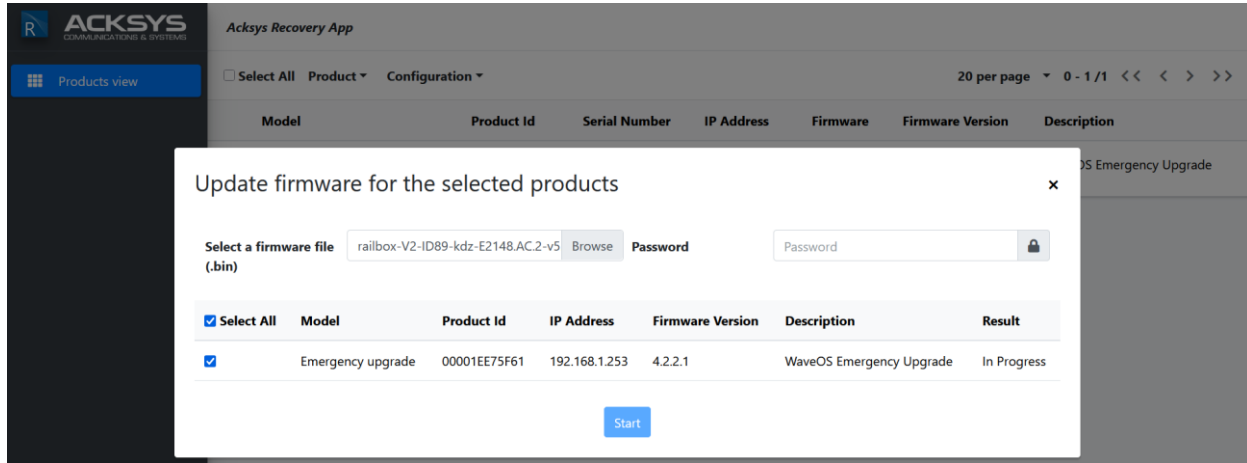


Main Interface Components

Section	Description
Products View	Displays detected devices in recovery mode
Model / Product ID	Identifies the router hardware
Serial Number	Unique device identifier
IP Address	Recovery IP address of the router
Firmware	Firmware file to be uploaded
Firmware Version	Version installed after upgrade
Configuration Menu	Recovery configuration options

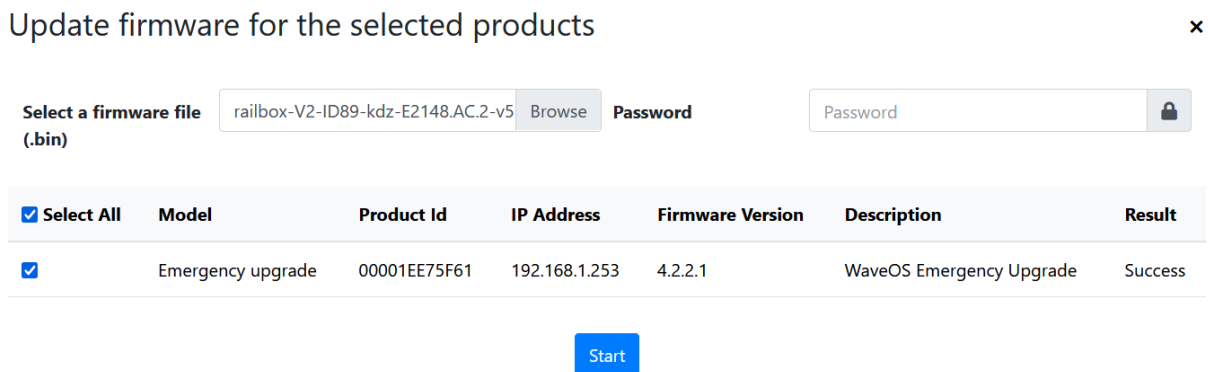
Upload Firmware

1. Select the detected router in emergency mode
2. Choose the correct firmware file
3. Start the upgrade process by clicking on **Start**



After firmware upload:

- The router installs the firmware
- The device reboots automatically
- The router returns to normal operation



NOTE: Your current settings will be preserved after recovery when the router leaves Emergency Mode.

Support : <https://support.acksys.fr>