APPLICATION NOTE

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

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Table of Contents

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:
- Customer in WaveManager 4.6.X On Premise and Cloud
- **Operating System**:
    o Windows 10 or higher
For Product:
- **Operating System**:
    o WaveOs 4.28.1.1 or greater
Firwalling rule:
- **ACL**:
    o Allow the application default port 58400

Download Recovery Apps Installer

Visit [the WaveManager official portal](#) and download the recovery Apps installer package:
- For .exe Windows 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.
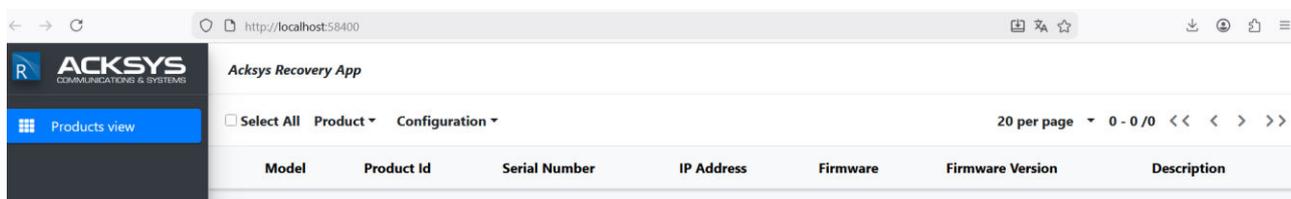
LED Status	Meaning	Action
OFF	Device powered but no diagnostic event	Normal operation
Solid Green	System booting or operating normally	No action required
Slow Blinking	System initialization in progress	Wait for boot completion
Fast Blinking	Emergency Mode activated	Use recovery procedure
Red / Continuous error	Hardware or firmware failure	Attempt recovery or contact support

5- 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

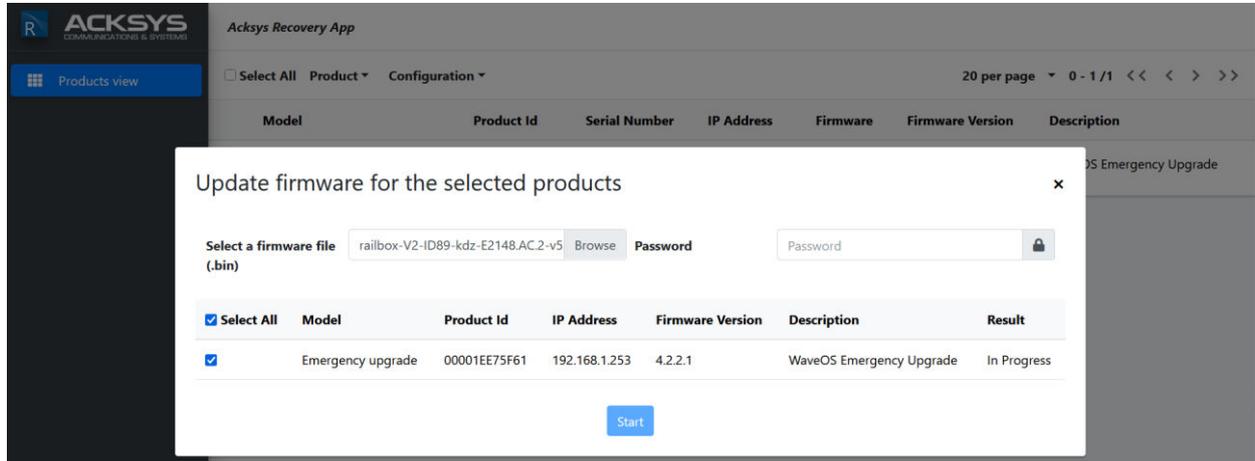Below is the interface overview of the recovery tool.

Main Interface Components

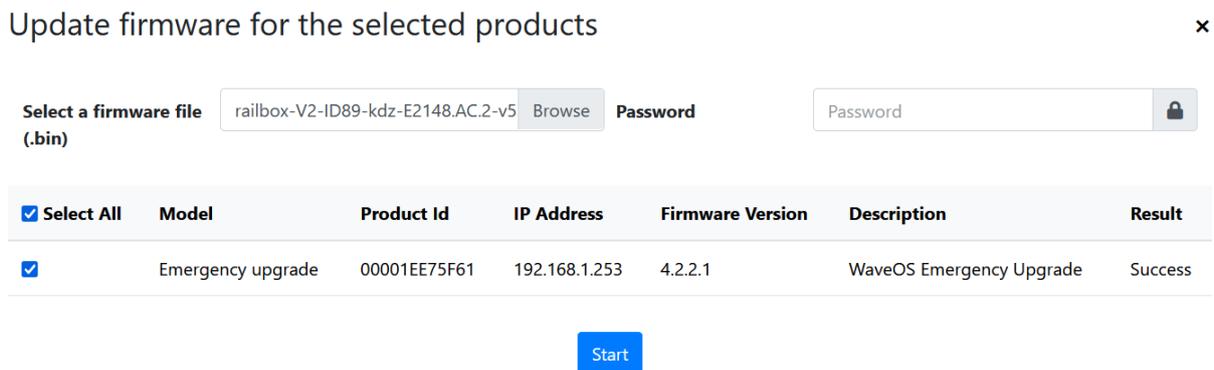| Section	Description
Products View	Displays detected devices in recovery mode
Model / Product ID	Identifies the router hardware
Serial Number	Unique device identifier
IP Address	Recovery IP address of the router
Firmware	Firmware file to be uploaded
Firmware Version	Version installed after upgrade
Configuration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