

Mobile Intelligent Routing Framework



- > Multiple WAN support and backup
- > Intelligent policy settings for automatic best WAN selection
- > Open and customizable application software for easy integration

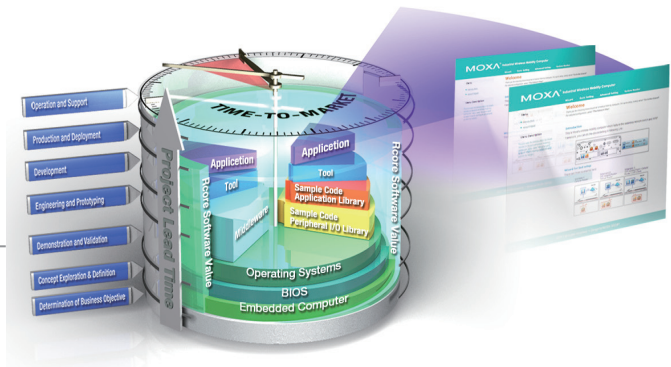
: Overview

The Mobile Intelligent Routing Framework (MIRF) is a full-stack software framework that simplifies the coding of multiple WAN routing applications for wireless computers, speeding up application development processes and significantly shortening custom development times.

Crank Up Rcore Customization with Moxa's free MIRF Software Bundle

In order to provide commercial-grade multimedia services, system integrators need to develop value-added software. Unfortunately, easily programmable development platforms may not be readily available. Moxa's Mobile Intelligent Routing Framework is here to fill part of that toolchain gap.

MIRF development software is built on Rcore software at the application layer, providing flexible and customizable APIs that are



easily implemented in existing platforms. MIRF will noticeably cut time-to-market for system integrators and end users alike.

: Key Features

Supports Heterogenous WAN Handoffs

As an open-platform tool for managing multiple WANs, MIRF will make it easy for system designers to provide passengers with seamless wireless services even when a train travels through heterogenous networks spanning wide regional areas.

When moving from one wireless region to another, outbound routers must automatically reconnect to networks composed of a variety of technologies and standards that include Wi-Fi, UMTS, HSPA, WiMax, and LTE. By supporting all these WAN technologies, MIRF helps ensure high quality, stable and reliable wireless connectivity.



Intelligent Policy Presets for Network Auto-selection

Pre-defined policies allow you to configure WAN autoselection according to bandwidth, signal, and lowest cost:

- By time: Specify a schedule for preferred WAN services
- By location: Specify a preferred WAN service according to geographic coordinates
- By vehicular speed: Roaming methods may be triggered by speed thresholds (e.g., cellular module service is activated when a train's speed exceeds 30 km/h)

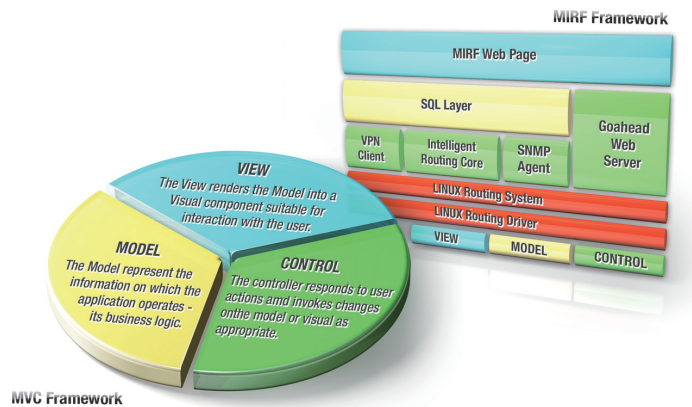
- By device connection:
 - By link up time: Module connection triggered by sustained ping requests.
 - By signal quality level: Module connection triggered by signal quality.

: An Open, Full Stack MVC Architectural Pattern

MIRF provides high flexibility for the configuration and customization of software utilities. Based on the MVC framework, MIRF allows users to configure the interface as needed. For example, the web browser, SNMP utilities, and console can all be customized for specific needs, and new functions can be easily added.

MIRF also provides an open platform for programmers to perform system development and configuration with less effort. Customization and system establishment can be easily and quickly achieved, making faster time-to-market possible.

- Ready to run with product software and component templates
- Easily leverage open source software packages
- Easily bundle customer applications
- Highly adaptable for different purposes
 - Applications
 - Visual components



: Supported Models

V2426-LX: x86 ready-to-run embedded computer with Intel Atom N270 CPU, VGA, DVI-I, audio, 2 LANs, 4 serial ports, 6 DIs, 2 DOs, 3 USB 2.0 ports, CF, 2 peripheral expansion slots, MIRF, Linux 2.6, -25 to 60°C operating temperature EN 50155 (Class T1) compliant

V2422-LX: x86 ready-to-run embedded computer with Intel Atom N270 CPU, VGA, DVI-I, audio, 2 LANs, 4 serial ports, 4 DIs, 4 DOs, 6 USB 2.0 ports, CF, 2 peripheral expansion slots, Linux 2.6

UC-8481-LX (coming soon): RISC-based industrial wireless mobile computer with 2 LANs, 2 serial ports, 4 DIs, 4 DOs, 2 USB 2.0 ports, CF, cellular, WiFi, 2 mini PCIe slots, Linux, -25 to 55°C operating temperature, EN 50155 (Class T1) compliant

EPM-3337 Expansion Module: HSDPA, GPS, WLAN (802.11a/b/g/n), -25 to 55°C operating temperature

EPM-DK02 Expansion Module: 2-slot mini PCIe, -25 to 55°C operating temperature