

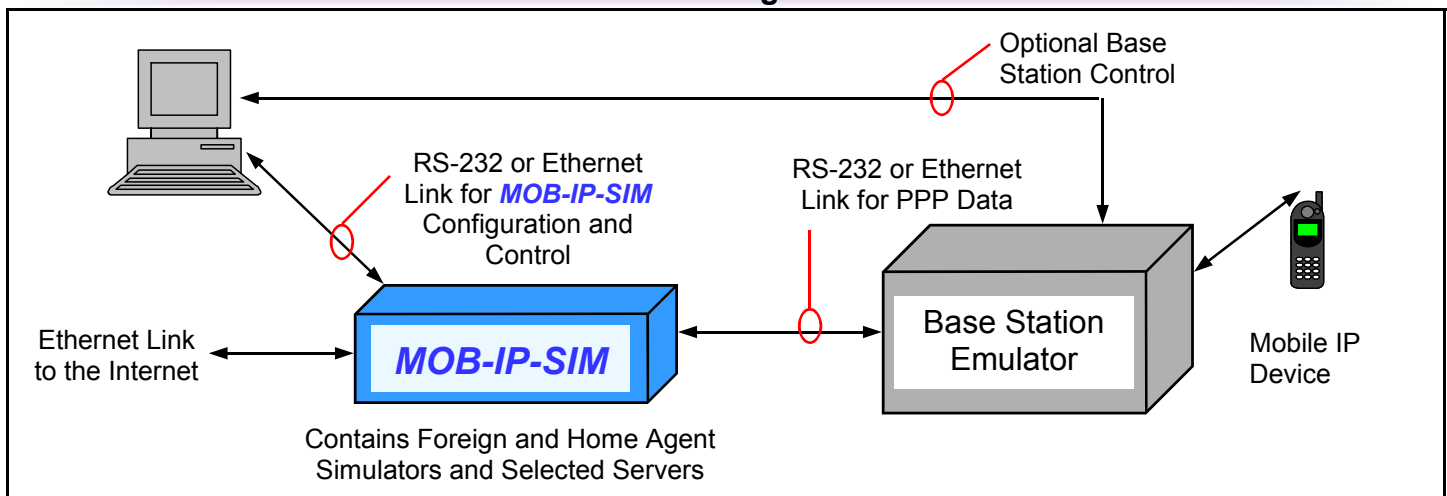
# Mobile IP Simulator

## Introduction

**MOB-IP-SIM** is a network simulator for testing wireless devices that use **Mobile IP** technology to provide seamless high speed data connections in a mobile environment. The simulator provides the necessary PDSN, Foreign Agent, Home Agent, and Radius (AAA) Server functions to allow the wireless device to complete a Mobile IP connection. All registration and security features are available. The system comes with built-in web pages for stand-alone operation or the wireless device can connect through the simulator to access the public Internet. A comprehensive set of test configuration commands combined with detailed protocol logging provides a wide range of test scenarios that include normal operation, fault recovery, and performance testing needed to verify compliance with the **TIA/IS-835** standard.

**MOB-IP-SIM** can link to a Base Station Emulator via Ethernet or RS-232. It can also be linked directly to a Mobile IP Stack simulator or other development platform to provide a test environment before RF hardware is available.

## Block Diagram



## Feature List

- Simulation of Home and Foreign Agent
- Configurable IP Addresses for all Software Components
- Data Message / Protocol Logging for Troubleshooting
- Status Logging
- Web-Based Configuration using HTML Forms
- Configurable Network Address Translation
- Flexible RS-232 and Ethernet Links for Data, Control and Configuration
- Auto Detection of Authentication Type for Registration Requests
- Internal HTTP Proxy Server for Format Translations
- Built-in HTML Content for Stand-alone Testing
- AT Command Set for Message Parsing and Control
- Configurable Error Conditions such as:
  - ◊ Missing Router Advertisement
  - ◊ PPP Link Failures
  - ◊ Delayed FA Registration Response
  - ◊ Invalid Care-of Address(es)
  - ◊ Registration Failures

This product includes software developed by the University of California, Berkeley and its contributors.  
This product includes software developed by the Australian National University and Carnegie Mellon University.

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