

# RFtestpro

---

Beacon  
Consulting

40840 Spectacular Bid Place  
Leesburg, VA 20176

Phone: 703.395.4844  
[www.beaconconsultingllc.com](http://www.beaconconsultingllc.com)

“Our main goal is to provide technicians the capability of performing various maintenance tasks on remote radio devices from a centralized location using shared test sets.”

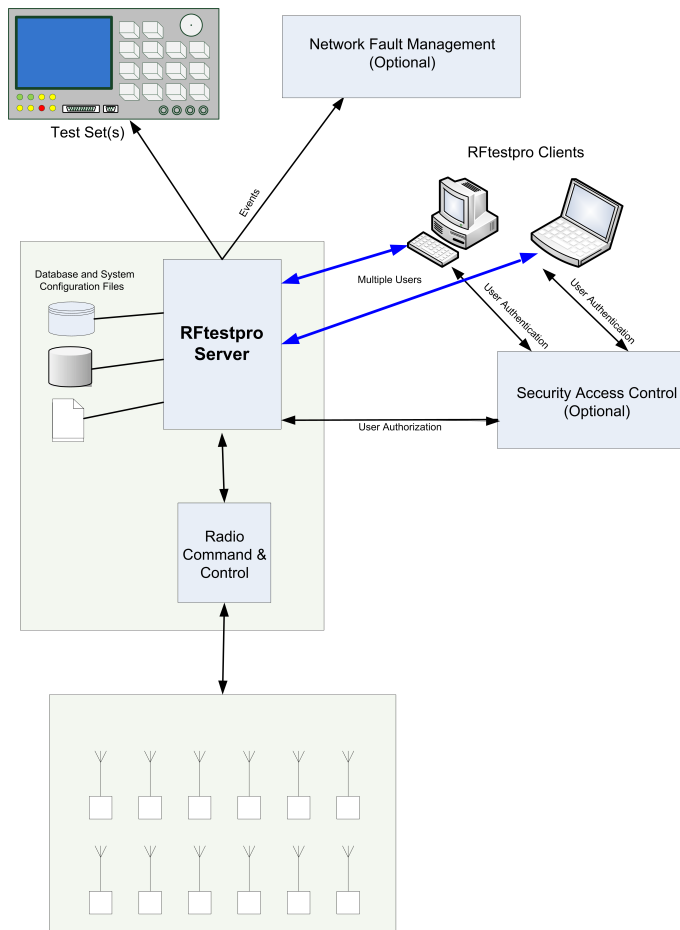
RFtestpro is a client-server based software product that manages, controls, and tests radio devices. It was designed from the ground up to be flexible. Whether you need to integrate it with your security system using its standard LDAP interface or you need it to report events to your Network Fault Management system over a standard SNMP protocol, RFtestpro is up to the task.

RFtestpro offers a rich feature set in support of its main goal - to provide technicians the capability of performing various maintenance tasks on remote radio devices from a centralized location using shared test sets. Among its features are a fully internationalized GUI, the coordination of all user activities, remote testing of radio devices, test set sharing, sharing test results with all users, reporting previous test results, performing multiple tests with a single click, scheduling device maintenance, and more.

Whether you simply need an easier way to manage your radio devices or you need the ability to

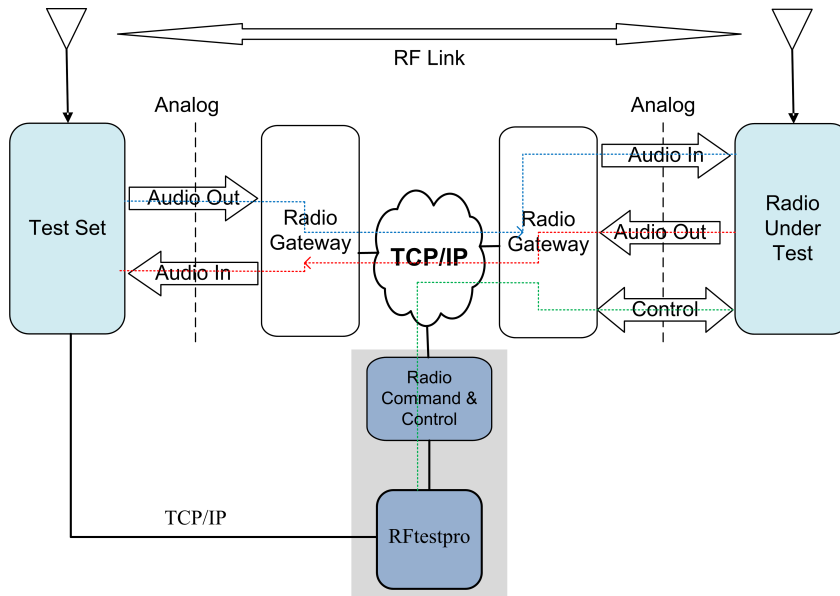
## Architecture

The following diagram shows the various components of RFtestpro and the external systems with which it interfaces.



## Connectivity

The following diagram shows the connectivity between the test set and the radio device being tested. RFtestpro's architecture allows it to perform tests on remote radio devices eliminating the



## FEATURES AND FUNCTIONALITY

RFtestpro provides the tools you need to manage, control, test and administer your devices in a secure environment.

### Device Management & Control

- Displays a topology of managed radios, controller devices, and test sets. The device's type, various attributes, serviceability status, and allocation status are displayed for each device.
- Supports dynamic topology changes. When a device is added, removed or updated, RFtestpro automatically communicates this change to all active users.
- Manages radio device and test set allocation for testing and other maintenance activities.
- Manages the maintenance schedule for radio devices and allows the customer to define the maintenance intervals for each device type. RFtestpro supports several levels of alerts to notify the technician that a radio is due for maintenance or that maintenance is overdue. When a device is successfully tested, it automatically resets the maintenance alerts and schedules the next maintenance.
- Supports the definition of default testing frequencies per device type and allows the technician to easily override these frequencies as needed.
- Supports user-defined impedance values in configurable frequencies for each managed radio.
- Supports user-defined test measurement thresholds per device type. RFtestpro uses these thresholds to determine if a measurement read from the test set is within the allowable range.
- Monitors connection to the test set and alerts the user if the connection is lost.

## FEATURES AND FUNCTIONALITY

### Commands & Testing

- Supports the testing of receivers, transmitters and transceivers. Each test is configurable and combines a set of tests and measurements to be performed. Measurement results are compared to the defined thresholds and used to calculate the overall success of the test.  
If the test indicates a problem with the radio, RFtestpro can notify the Fault Management System of the problem via an event (SNMP trap). When a device is successfully tested, it automatically resets the maintenance alerts and schedules the next maintenance.
- RFtestpro currently supports the following remote tests:

<b>Transmitter:</b>	<b>Receiver:</b>
1. Modulation Distortion	1. SINAD
2. Frequency Offset	2. Level
3. Transmission Power	3. AF Distortion
4. AM Depth / FM Deviation	4. Squelch
- RFtestpro is capable of sending any supported command to a test set and its extensible testing framework allows new tests to be quickly and easily configured using any combination of commands and test settings.
- Stores all test results in its database and displays prior testing results to the technician.
- Perform multiple tests or a single test on multiple devices in multiple frequencies at the click of a button.
- Synchronizes test set usage among multiple users.
- Coming soon: RFtestpro will have the capability to provide statistics and graphs of test results.
- Coming soon: RFtestpro will incorporate data mining technology to identify failure trends in devices.
- Coming soon: RFtestpro will provide the ability to automatically execute tests on a scheduled date.

### Security

- Supports two types of users - administrators and technicians. RFtestpro is capable of verifying a user's access permissions with a remote Security Access Control system such as Active Directory via a standard LDAP interface.

### Administration

- Includes a GUI based interface that administrators can use to change system

### Contact Us

To learn more about RFtestpro, our other products, integration services or software development services, please contact us.

Beacon Consulting, LLC

40840 Spectacular Bid Place, Leesburg, VA 20176

Phone: 703.395.4844

[www.beaconconsultingllc.com](http://www.beaconconsultingllc.com)