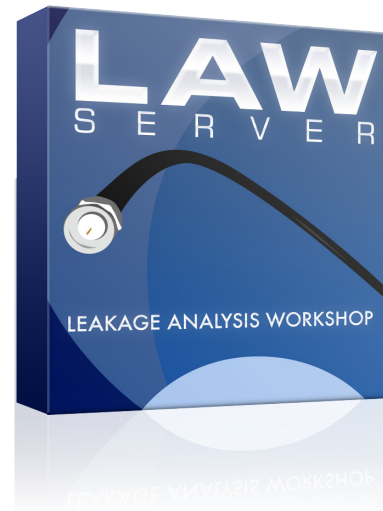


- Automated Data Collection, Leak Mapping, and Work Order Management for Improved Productivity and Efficiency
- Continuously Updated Database and Map for Analysis and Decision Making
- Automated Leak Location and Amplitude Notation to Find and Prioritize Leaks Faster
- Process Automation for Easier FCC Compliance and Improved Network Integrity



In today's competitive broadband industry, maintaining network performance for return path services is critical for success. Minimizing labor costs to mitigate ingress and ensure system integrity can be a formidable challenge.

By automating the leakage management process, Trilithic's Seeker GPS™ leakage management system and integrated LAW™ provide a unique way to minimize maintenance costs and maximize efficiency.

The integrated solution enables system operators to find and fix leaks quickly, minimize technicians' time, quickly assess network leakage integrity, and gauge the effectiveness of leakage maintenance efforts.

Automated Leakage Management

The system consists of LAW, vehicle-mounted Seeker leakage meters, GPS receivers, and mobile communications adapters (MCAs), which collect leakage location and level information without interrupting the driver's routine.

When technicians are done for the day, they can manually upload the data via USB connection, upload automatically via cellular interface, or just park in a designated Wi-Fi hotspot and the leakage location data is automatically uploaded to LAW. The server plots the data and marks the leakage source locations as push pins on a map - all automatically.

Then LAW automatically assigns and e-mails the repair work orders to the responsible technicians, they upload the pre-and post-repair snapshots, the server closes out the work orders, and the push pins disappear from the map (a patent-pending algorithm automatically corrects logged leaks to reflect the FCC-prescribed equivalent 10-foot measurement).

The system is also scalable which enables operators to increase the level of automation as the deployment of field equipment reaches an appropriate coverage of the system geography.

By making virtually the entire leakage management process automatic, the

Seeker GPS system and LAW give cable operators a cost-effective solution for maintaining mission-critical network services, simplifying FCC compliance, reducing maintenance costs, and improving technician productivity.

Custom Integration

Further enhancing LAW's work order management capability, Trilithic offers the LAW API option which integrates directly into your existing work order management system. This integration allows you to continue to use the familiar interface of your established system and to incorporate LAW's benefits of streamlined prioritization of leaks, more efficient scheduling of repairs, and automatic or manual creation of work orders. Combining the leakage recording and mapping features of LAW with your existing work order management system will enhance your repair technicians' productivity and improve the overall health of the cable plant while helping your system remain compliant with FCC leakage rules. *See the LAW API sales sheet for more details.*

Web-Based Program Interface

A familiar, intuitive interface allows users to mouse-over leaks (displayed as push-pins) to display additional data. Clicking on the push-pin will display complete details for the selected leak.

Efficient data management is accomplished through the leak list, which is displayed in a sortable table format. From this displayed leak list, a leakage containment supervisor can select specific leaks and create work orders, while the plant manager can sort leaks by field strength and logistically assign work orders to repair technicians.

The screenshot shows the 'Mapping & Data' interface. On the left is a sidebar with controls for showing leaks, zooming, and map settings. The main area features a map with several push-pins representing leaks. Below the map is a table listing 19 leaks found.

Leak	Work Order	Street Address	Field $\mu\text{V}/\text{m}$	Latitude	Longitude	Detection Date
109923		305 E Lincoln Ave., Royal Oak, MI 48067	176	42.48346	-83.13804	11/14/2009
76449		9942 2nd St., Royal Oak, MI 48067	69	42.49828	-83.13311	10/13/2009
76459	2209	4811 N West St., Royal Oak, MI 48067	51	42.49281	-83.14911	10/07/2009
109173	7211	10813 Main St., Royal Oak, MI 48067	104	42.48082	-83.14407	11/22/2009
109178	7211	1738 E. 11 Mile Sd., Royal Oak, MI 48067	75	42.49634	-83.12421	12/01/2009
111026	7211	1296 E. 11 Mile Sd., Royal Oak, MI 48067	118	42.49048	-83.12176	12/03/2009
101718	7211	274 W. 11 Mile Sd., Royal Oak, MI 48067	70	42.48982	-83.14636	11/17/2009
107473	7211	202 N Main St., Royal Oak, MI 48067	97	42.48991	-83.14427	11/27/2009

Versatile Map Interface

Sortable Leak List

Simple Work Order Generation

- Versatile map interface
- Sortable leak list
- Simple work order generation

The hybrid aerial/map option simplifies the correlation of leak information to the physical address, all through a familiar user interface. This helps technicians efficiently and quickly repair leaks.

In addition to automatically creating and assigning work orders by severity and location, the system can e-mail the work orders to the assigned technicians with a Garmin™ POI (point of interest) file that the technician can use with a mobile Garmin navigator for turn-by-turn directions to the leak location. After the technician indicates that the leak has been repaired, LAW closes out the work orders and removes the push-pins from the map. This automated process reduces the time to repair leaks and ultimately saves you money.

The screenshot shows an aerial view of a residential area. A popup window for 'Leak 76459' is displayed, providing detailed information about the leak.

Leak 76459
 Work Order: 2209 [Print](#)
 Level: 51 $\mu\text{V}/\text{m}$
 Address: 4811 N West St, Royal Oak, MI 48067
 Date Detected: 10/7/2009
 Tech Assigned: 0000
 Community: Royal Oak 2
 Comment: No comment specified.

Additional Location Information

Gated Community Access

- Additional location information
- Gated community access

Software Server and Support Options

Trilithic offers a variety of options for implementing LAW. You can choose from pre-configured servers of various sizes, integrating powerful software and hardware or you can choose our LAW SaaS that provides a complete, managed, comprehensive solution that allows you to focus on building business – not network infrastructure – saving you time and money in up-front costs and ongoing hardware support.

Software as a Service

Offered as an alternative to installing and maintaining expensive server equipment and relying on IT personnel focused on other tasks, SaaS from Trilithic hosts all of the required hardware, software, security, and hardware support. This turn-key solution allows you to build and operate a high-quality leakage control system at a lower total cost. *See the SaaS sales sheet for more details.*

Choose from the following options:

- LAW System Server
- LAW SaaS
- LAW API

LAW SERVER HARDWARE SPECIFICATIONS

Trilithic recommends that a user-sourced LAW server meet the following specifications. Operating LAW on a server that does not meet or exceed these requirements may result in problems with the LAW application.

Processor	Quad Core Xeon® E5440 processor, 2 x 6 MB cache, 2.83 GHz, 1333 MHz FSB
Memory	4 GB, 667 MHz (4 x 1 GB), dual-ranked fully-buffered DIMMs
Hard Drive	4 x 1 TB, 7200 RPM, SATA 3 Gbps, 3.5 inch, hot-plug hard drive (RAID 5)
Operating System	Windows Server 2003® R2 Standard Edition with SP2 (40 GB OS partition)
Server Software	Microsoft SQL® Server 2005, Workgroup Edition
Network Adapter	Gigabit Ethernet NIC

Wi-Fi ACCESS REQUIREMENTS FOR LAW

A wireless access point communicating with the Wi-Fi option of the vehicle-mounted Seeker MCA module must meet these specifications:

Wi-Fi Requirements

Security	Must support WPA-PSK (TKIP) or up to 128 bit WEP
Wireless Radio	Must support 802.11b connections Support for 802.11a is preferred for future upgrades

INCLUDES THE FOLLOWING:

LAW SaaS Subscription
P/N 9980002000, or

LAW Integrated Server Package
P/N 2011190200

RELATED ITEMS:

Map Subscription for LAW Server Software
P/N 0930126001

LAW SaaS Setup
P/N 9980001000

LAW Seeker Expansion License for an Additional 25 Devices
P/N 0930126025

LAW Application Programming Interface
P/N 0930155000

TechPoint
P/N 9980004001