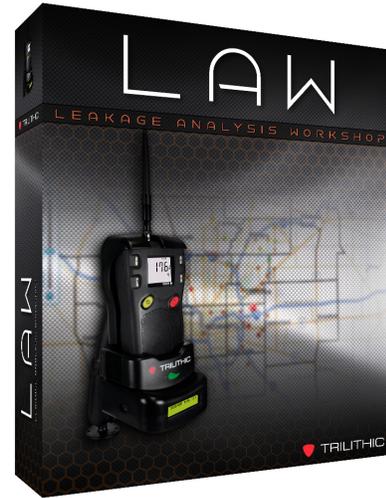


- Automated Data Collection, Leak Mapping, and Work Order Management for Improved Productivity and Efficiency
- Continuously Updated Database and Map for Analysis and Decision Making
- Automated Leak Location and Amplitude Notation to Find and Prioritize Leaks Faster
- Process Automation for Easier FCC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



### Overview

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 or connect to 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

One of LAW's most powerful new tools provides you with the ability to import custom shapefiles and display them as an overlay to the maps already provided in LAW. These custom map features can include any common plant structures, such as strand maps, aerial plant, underground plant, amplifiers, pedestals, etc.

When custom map features such as strand maps are combined with technician drive-outs, LAW highlights actual plant driven—and more importantly, plant that needs to be driven.

**innovative technology to keep you a *step ahead***

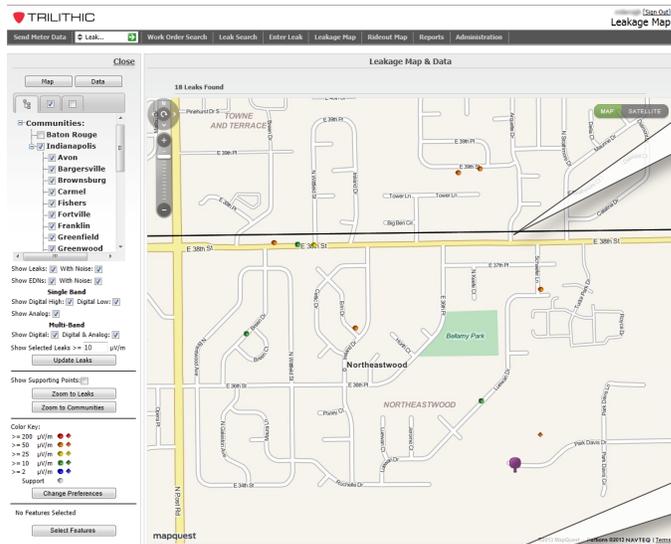
## Web-Based Program Interface

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 hybrid aerial/map option simplifies the correlation of leak information to the physical address and GPS latitude/longitude, 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 email 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.

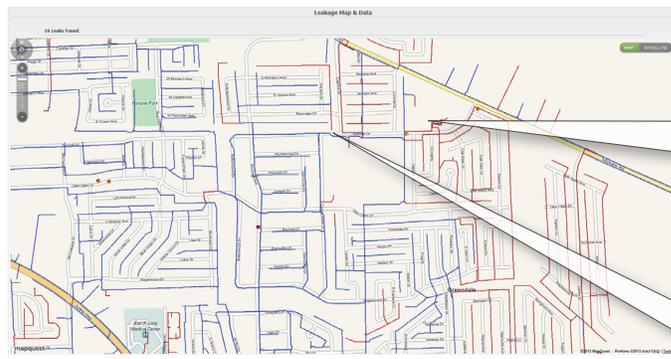


Versatile Map Interface

Sortable Leak List

Leak	Work Order	Assigned Tech	Location	Leak/UTZ	Frequency 2010	Latitude	Longitude	Detection Date
1392	538	Integrigh	2827 N. Zane St., Indianapolis, IN 46227	395	412.00000	39.82094	-86.02712	7/27/2013
1394	528	Integrigh	2822 N. Zane St., Indianapolis, IN 46227	297	412.00000	39.82094	-86.02662	7/27/2013
1398	528	Integrigh	861 E. 20th St., Indianapolis, IN 46202	147	412.00000	39.82021	-85.99919	7/27/2013
1398	542	Integrigh	2075 E. 20th St., Indianapolis, IN 46220	146	412.00000	39.82094	-85.99889	7/27/2013
1408	548	Integrigh	824 E. 20th St., Indianapolis, IN 46215	125	412.00000	39.82021	-86.04028	7/27/2013
1342	542	Integrigh	8222 Park Ave. Dr., Indianapolis, IN 46226	113	138.00000	39.82042	-85.99421	7/27/2013
1393	548	Integrigh	2111 Colburn Ln., Indianapolis, IN 46227	119	412.00000	39.82042	-85.99429	6/26/2013
1399	548	Integrigh	2842 N. Lafayette St., Indianapolis, IN 46226	102	412.00000	39.81702	-86.00806	7/27/2013
1393	542	Integrigh	2822 E. 20th St., Indianapolis, IN 46220	76	412.00000	39.82072	-86.00222	7/27/2013
1399	542	Integrigh	2824 E. 20th St., Indianapolis, IN 46220	61	412.00000	39.82044	-86.00478	7/27/2013
1399	542	Integrigh	2824 E. 20th St., Indianapolis, IN 46220	76	138.00000	39.79048	-85.91328	7/27/2013
1313	542	Integrigh	2848 E. Zane St., Indianapolis, IN 46227	27	412.00000	39.82023	-86.01712	7/27/2013
1317	542	Integrigh	3738 Greenwood St., Indianapolis, IN 46226	76	412.00000	39.82042	-86.01747	7/27/2013
1353	544	Integrigh	2822 E. 20th St., Indianapolis, IN 46220	24	412.00000	39.82024	-86.00941	7/27/2013
1396	558	Integrigh	8358 River St., Indianapolis, IN 46228	24	412.00000	39.82099	-86.02211	7/16/2013
1314	522	Integrigh	1862 Colburn St., Indianapolis, IN 46226	22	412.00000	39.81712	-86.00389	7/27/2013
1388	548	Integrigh	1888 Evans St., Indianapolis, IN 46226	22	412.00000	39.81555	-86.00712	5/16/2013
1352	548	Integrigh	2548 Leavenworth St., Indianapolis, IN 46222	20	412.00000	39.82248	-85.99848	7/27/2013

- Versatile map interface
- Sortable leak list
- Automatic or manual work order generation



Underground Plant Maps

Aerial Plant Maps

- Custom Mapping Overlay
- Import strand maps, aerial plant, underground plant, amplifiers, and pedestals

**Software Server and Support Options**

Trilithic offers a variety of options for implementing LAW. You can choose from a pre-configured server, 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.*

**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:

<b>Standard</b>	Wi-Fi (802.11 a/b/g/n)
<b>Security</b>	WPA-PSK (TKIP), WEP (128-bit) or WPA2-PSK (AES)

**AVAILABLE CONFIGURATIONS:**

LAW Integrated Server Package  
**P/N 2011190200**

LAW Stand-Alone Server Software  
**P/N 0930126000**

LAW SaaS Subscription  
**P/N 9980002000**

**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**

**INTEGRATED SERVER PACKAGE SPECIFICATIONS**

	Enterprise Edition
Hardware Manufacturer	Dell
Model	R520
Server Rack Height	2U - 3.50 in (8.89 cm)
Microsoft Windows Server Software	2012 R2 Standard Edition
Microsoft SQL Server Software	2012 Standard Edition
Microsoft SQL User Client Access Licenses (CALs)	Five (5)
Processor	Two (2) Intel Xeon E5-2420 (1.90 GHz, 15 MB Cache)
Memory	32 GB (1600 MHz)
Storage	Four (4) 1 TB SATA (7200 RPM) Two (2) 500 MB (7200 RPM)
Power Supply	Dual Redundant (750 Watt x 2)
3 Year Warranty (Provided by Dell)	Next business day, parts and labor, on-site response
Maintenance & Support	Included for first year of ownership, after first year of ownership a yearly maintenance & support fee applies.

A backup storage system is also recommended for prevention of data loss.

**PREREQUISITE SUPPORTING SOFTWARE**

- ✓ - Included
- ⊘ - Not Included

	Microsoft Windows Server Software (2012 R2 Standard)	Microsoft SQL Server Software (2012 Standard)	SQL User Licenses
Integrated Server Package	✓	✓	Five (5)
Stand-Alone Server Software	⊘	⊘	⊘
Software as a Service (SaaS)	✓	✓	Five (5)

LAW Stand-Alone Server Software does not include Windows Server and SQL Server Software. This software is required for proper operation of the LAW Server Software and must be provided by the end-user.

**STAND-ALONE SERVER SOFTWARE REQUIREMENTS**

	Minimum Requirements
Microsoft Windows Server Software	2008 Standard Edition (x86-64) or Higher
Microsoft SQL Server Software	2008 Workgroup Edition or Higher
Processor	Dual Core (1.40 GHz)
Storage	300 GB (RAID Level 5 or 10)
Memory	4 GB
Ethernet Adapter	100 Mb or higher Ethernet Port with high speed Internet connection
Other Optional Components	Optical Drive, Video Adapter, Monitor, Keyboard & Mouse

A backup storage system is also recommended for prevention of data loss.

LAW Stand-Alone Server Software does not include Windows Server and SQL Server Software. This software is required for proper operation of the LAW Server Software and must be provided by the end-user.