EdgeScout
REMOTE MONITORING

Plug & Play Monitoring for Remote Equipment

RRAMAC
CONNECTED SYSTEMS

EdgeScout
REMOTE MONITORING

Plug and Play Monitoring for Remote Equipment

Whether you are looking to maximize equipment performance, reduce service costs, or generate new revenue streams through remote connectivity, RRAMAC's EdgeScout remote monitoring solutions makes it easy to get started with minimal investments of time and money

For nearly a decade, RRAMAC has been dedicated to perfecting and enhancing our remote monitoring system to help customers keep essential assets online and operating more efficiently.

Our EdgeScout solutions allow you to connect to both new and existing automation equipment, including PLC's, drives, cameras, and hardwired sensors.

Benefits of the EdgeScout Solution

Predictive Maintenance

Monitor leading indicators of equipment failure such as motor current, temperature, and vibration in order to diagnose and correct issues before a failure occurs.

Enhanced User Experience

Provide customers information at their fingertips thru smartphone apps with status, history, and push notifications. Operators and maintenance personnel can track the operation of multiple automated production lines without having to be present at the machine the entire time.

Automatic Customer Feedback

Understand how your customers are using and maintaining the remote equipment and use this valuable input for product improvements, extended warrantees, or troubleshooting. Aggregate data from multiple installations can give you insights into best practices and optimal settings that can ultimately help you optimize performance settings for your customers.
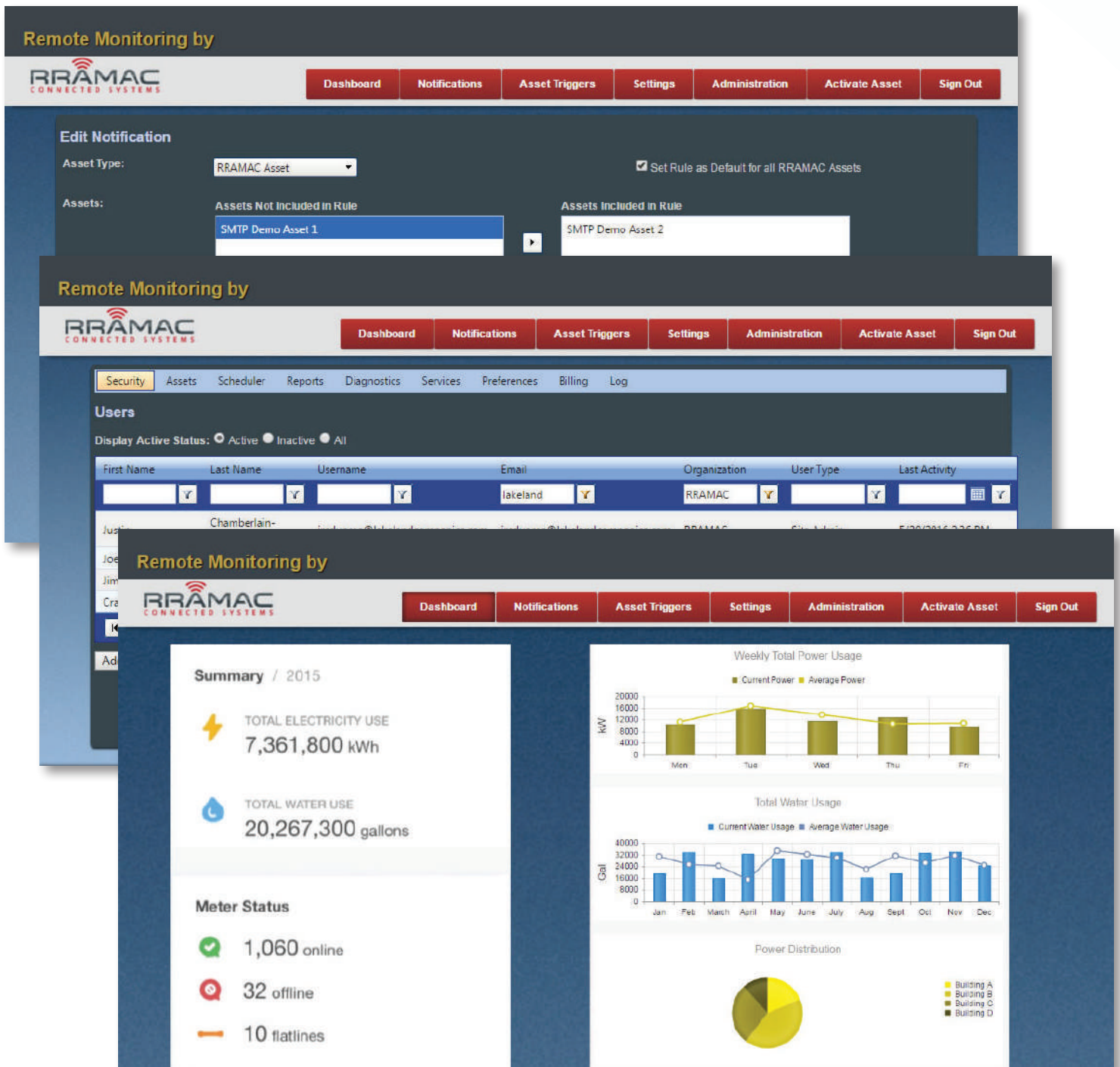
Root Cause Analysis

Capture downtime events in real-time to determine the root cause of a shutdown. Display Sequence of Event logs and waveform captures from power monitoring equipment to diagnose electrical failures.

Calculate Return on Investment

Measure power consumption to identify inefficient devices and calculate the ROI if replaced with a more efficient device. Calculate the total cost of downtime resulting from a specific failure and calculate the ROI for eliminating that failure mode. Calculate the actual ROI once an equipment upgrade has been performed.

Streamline Business Transactions

Remote connectivity can tie directly into other software systems for ordering, billing, maintenance, etc. When your customer runs low on a consumable item you can not only get a notification, but the refill order can be generated automatically.

RRAMAC CONNECTED SYSTEMS

Dashboard | Notifications | Asset Triggers | Settings | Administration | Activate Asset | Sign Out

Edit Notification

Asset Type: RRAMAC Asset

☑ Set Rule as Default for all RRAMAC Assets

Assets:

Assets Not Included in Rule
SMTP Demo Asset 1

Assets Included in Rule
SMTP Demo Asset 2

Security | Assets | Scheduler | Reports | Diagnostics | Services | Preferences | Billing | Log

Users

Display Active Status: ⦿ Active ◯ Inactive ◯ All

First Name	Last Name	Username	Email	Organization	User Type	Last Activity
			lakeland	RRAMAC		

Summary / 2015

⚡ TOTAL ELECTRICITY USE
7,361,800 kWh

💧 TOTAL WATER USE
20,267,300 gallons

Meter Status

✅ 1,060 online

🔴 32 offline

— 10 flatlines

Weekly Total Power Usage
■ Current Power ■ Average Power

Total Water Usage
■ Current Water Usage ■ Average Water Usage

Power Distribution
■ Building A
■ Building B
■ Building C
■ Building D

User Administration

Customers can easily add or remove users and control which sites or assets they have access to. User accounts can be integrated to LDAP or OATH systems to allow for a single point of configuration.

EdgeScout Notifications

Enables customers to actively monitor data streams and notify users when certain conditions exist. Notifications can be sent on a per user basis to only notify effected users.

Energy Dashboard

Allows customers to monitor energy consumption across multiple sites from a single dashboard. This setup allows users to quickly drill down data to find the most relevant and useful information

EdgeScout Reporting

EdgeScout Reports are delivered as part of your turnkey remote monitoring system. The reports are fully customized to suite your needs. Report data can be quickly downloaded as an Excel or CSV file. Additional reports or modifications can be easily added at a later date. Our hosted reports and underlying database are automatically backed up and data storage can be virtually unlimited.

GasUsageReport

Region:	Division:	Subdivision:	Gas Type:	Asset Name:	Energy Used:	Total Cost:

Northern
Montana
Glasgow

Twin Cities
KO

Wayzata

USA
MINNESOTA
Staples S

Current DateTime: 5/26/2016

MINNESOTA DEPARTMENT OF HEALTH
MONTHLY TURBIDITY AND DISINFECTION REPORT
Large Surface Water Supply

| PWSID# 4803273-31 | Facility Name West Wat |
| Month/Year June 2015 | Entry Point Location Wes |

DISINFECTANT RESIDUAL

Date	Minimum D.R. @ Entry Point (mg/l)*	Duration of low level*	Date rep to MDH*
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			

* Enter the minimum Chlorine/Disinfectant Residual (D.R.) yo
** If a low level (less than 0.2 mg/l) D.R. is measured, enter the
reported to the Minnesota Department of Health.

I certify that the above information is correct and that the water
Water Treatment Rule and the Interim Enhanced Surface Wat
Department of Health.

Prepared by _____
(Signature)

Reviewed by _____
(MDH use only)

Annual Water Consumption

West WaterTown Water Department

Year 2015

Maximum Monthly	890,506		
Minimum Monthly	402,576		
Maximum Day	402,576	Days Pumped	365
Minimum Day	402,576	Average Day	20,413

Month	Station 1	Station 2	Station 3	Station 4	Montly Totals
January	58,198	69,921	249,951	127,111	505,181
February	67,895	160,411	208,200	180,959	617,465
March	42,774	67,430	252,376	39,996	402,576
April	68,340	164,221	63,320	362,130	658,011
May	38,040	203,563	56,358	411,349	709,310
June	67,866	99,334	245,807	64,131	477,138
July	50,383	146,644	87,902	283,642	568,571
August	61,278	135,445	126,057	398,578	721,358
September	63,416	204,878	266,135	356,077	890,506
October	60,280	99,305	286,739	230,923	677,247
November	31,371	225,895	42,781	420,578	720,625
December	46,816	133,207	248,206	74,774	503,003
Year Totals:	656657	1710254	2133832	2950248	7450991

Annual Water Consumption/Station
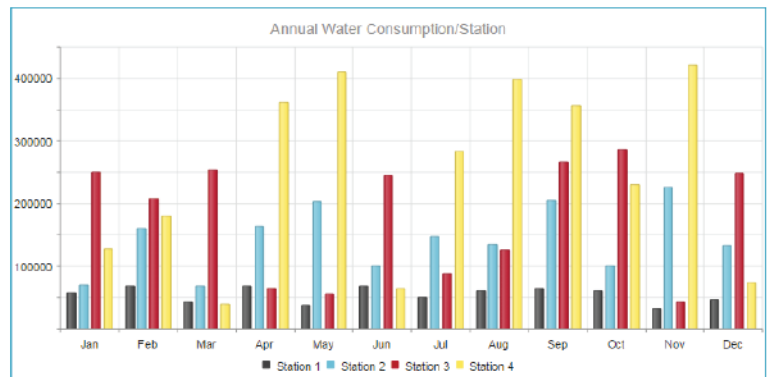
Customer Successes

RRAMAC's actionable intelligence and analytics have resulted in sustainable and significant cost savings for a wide spectrum of customers.
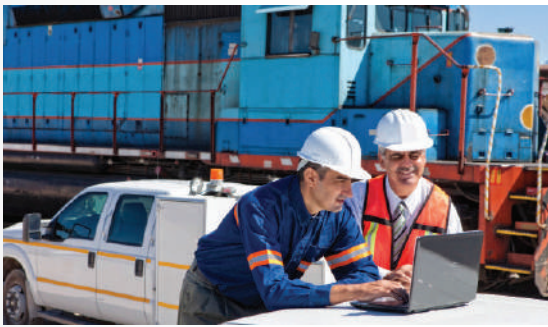

Railroads Save Big with Remote Management Software

Canadian railroads have utilized the energy reporting capabilities of the EdgeScout platform to tune the operation of their remote switch heating systems. Gas consumption at the monitored sites has dropped by 35%.

Extron Company Saves Big with Smart Fan Control

Extron Company's fan control technology coupled with EdgeScout provided data about weather conditions at the site to manage fan speed and shrink loss, offering 40-60% energy savings – plus power company rebates.
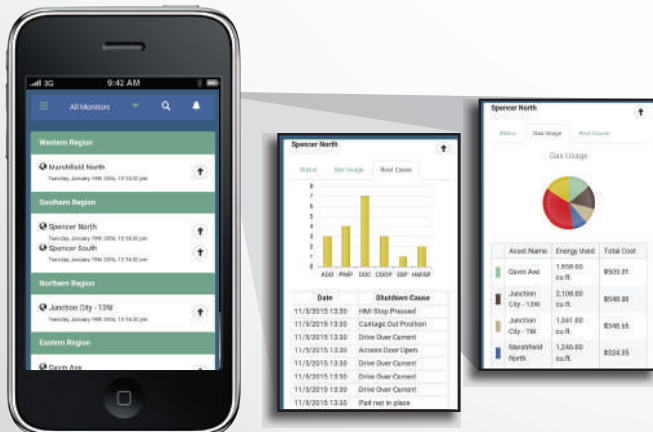
"We have an App for that"

We provide customized smartphone apps for any type of equipment.

Connectivity is Easier Than You Think

EdgeScout is a turnkey remote monitoring solution hosted by RRAMAC. Since there are no PC's to purchase, no software to install, and no code to write, you can get started quickly without a major investment. For an initial setup fee and annual subscription, your data will be stored on our tier level 3 servers with redundant power and automatic backups. You have full control of the access to your data with two factor authentication and full audit trails.

Are you ready to get connected?

EdgeScout
REMOTE MONITORING

RRAMAC
CONNECTED SYSTEMS

15400 Medina Road
Plymouth, MN 55447

(844) 4RRAMAC • 763.544.6638
www.rramac.com • info@rramac.com