MASON-OCEANA 9-1-1
DEVELOPS A PATH
TO CYBER RESILIENCE

PSAP LEVERAGES MOTOROLA'S CYBERSECURITY PROFESSIONAL SERVICES TO HELP MITIGATE CYBER THREATS
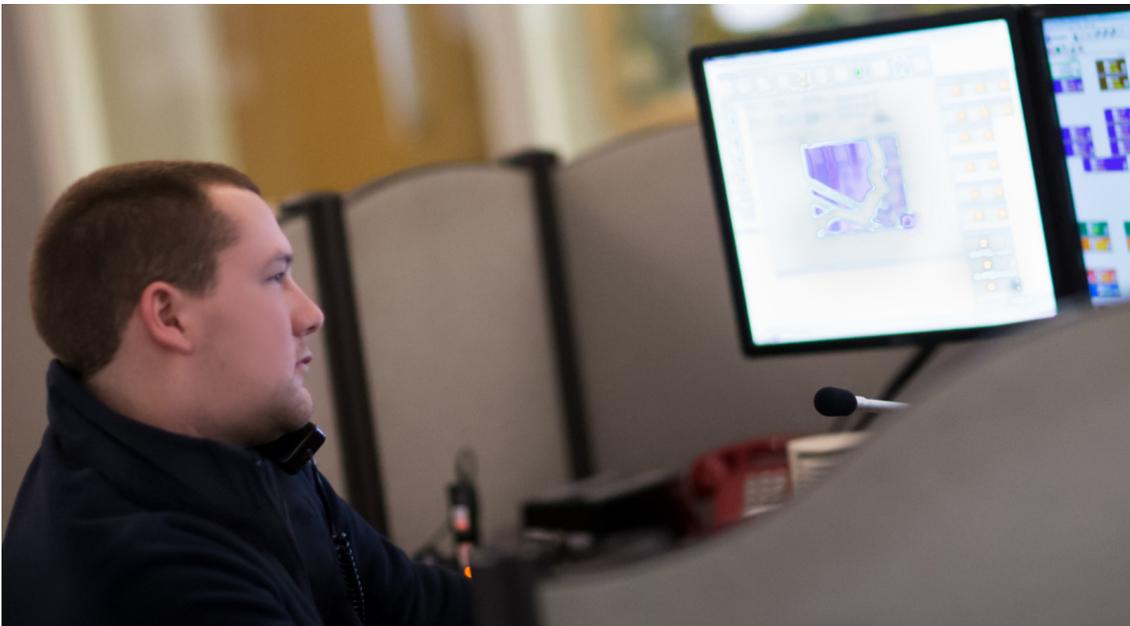
CUSTOMER PROFILE
Mason-Oceana 9-1-1
Administration Office
- Mason and Oceana Counties, Michigan
- Centralized PSAP
- Serves 60 agencies
- Covers over 2,500 square miles
- Serves a seasonal population of up to 110,000

Key Benefits of
Cybersecurity Assessment
- Comprehensive assessment outlining PSAP's cybersecurity risk posture
- Risk-priority scorecard for an executable cybersecurity strategy
- Ability to gain trust and buy-in from constituents on security concerns
- Improved understanding of the best practices for cyber resiliency

Mason and Oceana counties joined forces and combined resources in 1995 to establish a public safety answering point (PSAP) to serve its Western Michigan community. Two decades later, mission-critical systems have evolved into interconnected environments. With this evolution came more efficiency and faster transfer of knowledge between Mason-Oceana 9-1-1 and the agencies and community it serves. However, the sophisticated technologies also unveiled new challenges in detecting and responding to cyber threats.

"I think we're just as vulnerable as any business out there," says Mason-Oceana 9-1-1 Director Ray Hasil. "With all the advanced networks that we have in place, cybersecurity takes a much more important role."

"Today, it's no longer adequate to merely have antivirus scanning and a firewall in your facility and think that you're suitably prepared for cyber attacks."

Ray Hasil, Director, Mason-Oceana 9-1-1

THE CHALLENGE
One Call for Everyone and Everything

If you are within the 2,500 square miles of land and water between the eastern shore of Lake Michigan to the middle of the Manistee National Forest and in need of help, your first call will most likely connect to Mason-Oceana 9-1-1. Its dispatchers are the first point of contact for more than 55,000 residents. In the summer, the population doubles as tourists converge to enjoy the pristine lakes and state parks dispersed throughout the region.

Close to 60 agencies depend on Mason-Oceana 9-1-1. From first responders, such as police, fire and EMS, to animal control, the road commission and emergency management, and other entities such as the U.S. Forest Service and Coast Guard, the center has become a central communications hub. It also serves as the emergency operations center for disaster management.

Mason-Oceana 9-1-1 Operations Manager Todd Myers reflects on how the center has evolved. He says, "Before, each agency was isolated. We all work together now, and everything flows through central dispatch."

Securing a Mission-Critical Network

Mason-Oceana 9-1-1 is heavily integrated with the agencies it serves over a wide area in rural Michigan and beyond. It uses the State of Michigan's ASTRO® 25 public-safety trunked radio system, one of the largest IP-based, mission-critical network infrastructures in the world.

In addition to housing 9-1-1 central command, the facility hosts servers containing vital information from the two counties. It also provides a gateway to other agencies' servers, so that field personnel can have instant access to the information they need to get the job done. "Today, we are able to literally pull up information live that may have occurred just minutes earlier in another community. The information we have at our fingertips in the field today is amazing," says Oceana County Sheriff's Deputy Ryan Schiller.

With his strong background in information technology, Hasil acknowledges that cyber intrusions have become more sophisticated. The technological gains made with mission-critical systems mandate advanced cybersecurity measures to maintain network availability and data integrity.

"Ten years ago, we were pretty comfortable with having nothing more than an antivirus scanner on all the computers in our location," he says. "Today, it's no longer adequate to merely have antivirus scanning and a firewall in your facility and think that you're suitably prepared for cyber attacks."

As a result, understanding Mason-Ocean 9-1-1's cyber risk became a top priority for Hasil. He wanted a comprehensive evaluation of what network and infrastructure elements should be protected; potential attack vectors; and guidance on how to establish an executable cybersecurity strategy over time. To have all these questions answered, Hasil determined that a cybersecurity assessment for the 9-1-1 center would be required. He sought out opportunities with certified security experts who could assist him with this effort.

THE SOLUTION

Developing a Strategy With a Trusted Advisor

Because of Motorola Solutions' experience in developing and securing mission-critical systems, our cybersecurity professional services were a natural fit to help Mason-Oceana 9-1-1 with its cybersecurity strategy.

A Motorola Cybersecurity Professional Services team conducted a comprehensive assessment of Mason-Oceana 9-1-1's risk posture. The assessment analyzed not only technical implementation, but also operational procedures and management processes. Using the National Institute of Standards and Technology (NIST) Framework and other industry-specific compliance standards, our team evaluated the center's attack-surface profile, taking into account current risk-management processes and procedures and its unique operational setting.

Cognizant of the budget consciousness that exist in most organizations and agencies, the assessment included a cost-benefit evaluation and detailed remediation recommendations. Hasil and his team received a risk scorecard that indicated low, moderate, high and critical values for each issue that was identified. A remediation or risk-acceptance recommendation was also provided for each issue.

You Don't Know What You Don't Know

Hasil found the risk scorecard helpful in communicating with his board of directors on the need for a sound cybersecurity strategy and the associated implementation cost. The recommended plan, validated by certified experts abreast of the latest cyber threats and industry compliance standards, improved his credibility with his constituents. Moreover, the prioritized initiatives framed within the scorecard laid a clear path to cyber resiliency for his board and team.

The assessment also improved the Mason-Oceana 9-1-1 team's understanding of all the elements that must be taken into consideration when developing a cybersecurity strategy. Some were straightforward; others would require more effort; and a few were eye-openers.

For example, the security experts warned that attack vectors do not always originate off-premise. Malicious actors will also attempt to access facilities to insert devices, such as a USB drive, that can provide an entry point into the network. "The physical portion was a big surprise to me," Hasil says. "We realized that there were vital improvement opportunities for limiting or controlling movement in and out of our facility."

A review of Mason-Oceana 9-1-1's policies was another revelation for Hasil. The center certainly had policies in place. However, the assessment disclosed that more policies relating to network security were necessary.

He notes, "In a 9-1-1 center, policy drives just about everything we do, from a very basic traffic stop to much more serious calls. When it comes to network security, we should also be using policy to drive how we prepare for cyber attacks on a day-to-day basis."

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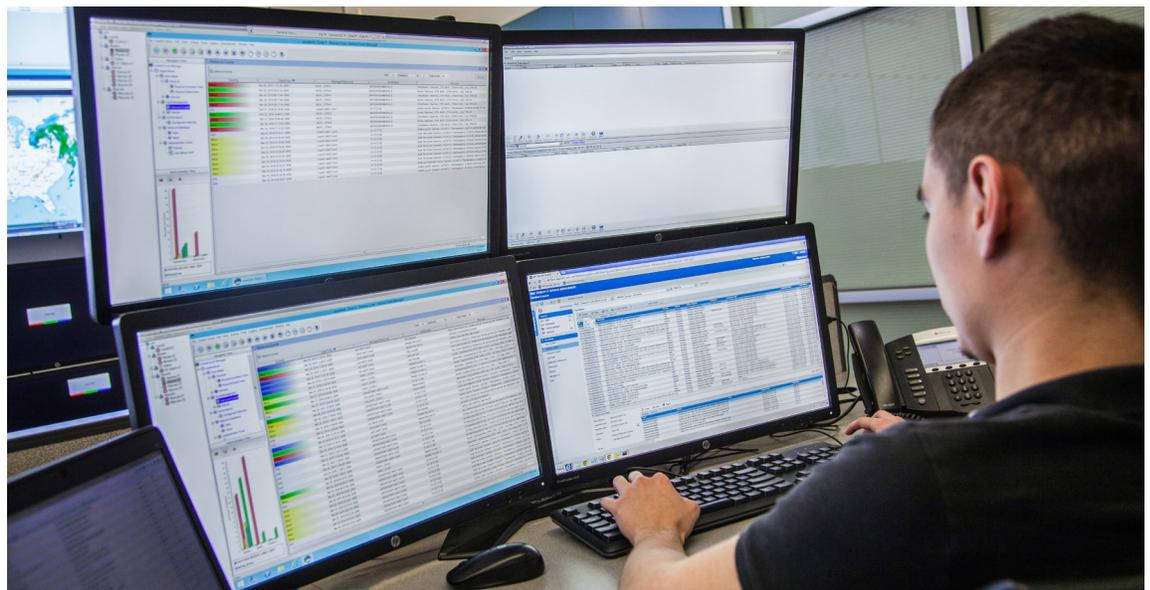
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**Ray Hasil, Director,
Mason-Oceana 9-1-1**

THE BENEFITS
A Baseline for Improvement

Mason-Oceana 9-1-1 now has a solid baseline view of its cybersecurity risk, as well as a roadmap for improvements. The scorecard — designed for near- and long-term planning — will be used as an ongoing tool to track progress. A projected cost provided for each improvement recommendation also enables Hasil to budget adequately over time.

In addition, Hasil expressed that having the support of Motorola Solutions' security experts makes him feel confident that his operation will be able to respond to existing and new threats.

"This was a great experience for us," Hasil says. "It's a dynamic world. The threats are always going to change and evolve; the technology will continue to change and evolve. You have to be able to adapt as time goes on."

To learn more about improving your cybersecurity, visit **motorolasolutions.com/cybersecurity** or contact your local Motorola representative.

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