CASE STUDY: MANDIANT IR AT WORK
A multinational professional services firm with tens of thousands of computers deployed around the world engaged Mandiant to respond to a potential data breach of critical client data.

Day 1 - Mandiant consultants started to deploy cloud-based endpoint technology within four hours of notification to 18,000 systems.

• The investigation began that same day.

• Confirmed evidence of compromise was identified within four hours of the investigation starting.

Day 6 - Majority of investigative work completed. Analysis performed on over 18,000 endpoints with in-depth live response analysis of 80 systems.

Day 7 - Containment performed with no disruption to business. Mandiant experts continued to monitor the network to ensure no re-attempts at compromise from the threat actor.

Day 11 - Client was back to business as usual.

All work was conducted remotely.

Mandiant has been at the forefront of cyber security and cyber threat intelligence since 2004. Our incident responders have been on the frontlines of the most complex breaches worldwide. We have a deep understanding of both existing and emerging threat actors, as well as their rapidly changing tactics, techniques and procedures.

We combine investigative and remediation expertise gained by responding to thousands of incidents with industry-leading Mandiant threat intelligence and FireEye network and endpoint technology. Mandiant’s work on the largest and most publicized incidents uniquely qualifies our experts to assist clients with all aspects of an incident response—from technical response to crisis management. We help clients investigate and remediate faster and more efficiently, so they can get back to what matters most—their business.

Overview
The use of cloud and on-premise solutions allow investigations to begin immediately, while managing client data privacy concerns. Within hours, Mandiant incident responders can begin analyzing network traffic and information from thousands of endpoints. Unparalleled access to threat intelligence from the front lines of attack research and other intelligence sources provide Mandiant incident response teams with the latest attacker tactics, techniques and procedures (TTPs).

Mandiant experts understand that comprehensive incident and breach response extends beyond the technical investigation, containment and recovery. Therefore, we assist with executive communication and crisis management—including legal, regulatory and public relations considerations. Crisis management is critical for controlling reputational damage and legal liabilities.

<table>
<thead>
<tr>
<th>TABLE 1. Types of incidents we typically manage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual property theft</td>
</tr>
<tr>
<td>Financial crime</td>
</tr>
<tr>
<td>Personally identifiable information (PPI)</td>
</tr>
<tr>
<td>Protected Health Information (PHI)</td>
</tr>
<tr>
<td>Insider threats</td>
</tr>
<tr>
<td>Destructive attacks</td>
</tr>
</tbody>
</table>
Our approach
Mandiant investigations include host-, network- and event-based analyses for a comprehensive, holistic assessment of the environment. Our response actions are tailored to help clients respond to and recover from an incident, while managing regulatory requirements and reputational damage. During investigations, Mandiant consultants typically identify:

- Affected applications, networks, systems and user accounts
- Malicious software and exploited vulnerabilities
- Information accessed or stolen

Incident analysis
1. Technology deployment / investigation of initial leads: Deploy the technology most appropriate for a fast and comprehensive incident response. We simultaneously investigate initial client-provided leads to start building Indicators of Compromise (IOCs) that will identify attacker activity while sweeping the environment for all indicators of malicious activity.
2. Crisis management planning: Work with executives, legal teams, business leaders and senior security personnel to develop a crisis management plan.
3. Incident scoping: Monitor real-time attacker activity and search for forensic evidence of past attacker activity to determine the scope of the incident.
4. In-depth analysis: Analyze actions taken by the attacker to determine the initial attack vector, establish timeline of activity and identify extent of compromise. This can include:
   - Live response analysis
   - Forensic analysis
   - Network traffic analysis
5. Damage assessment: Identify impacted systems, facilities, applications and information exposure.
6. Remediation: Develop a custom containment and remediation strategy based on the actions of the attacker and tailored to the needs of the business in order to eliminate the attacker’s access and improve the security posture of the environment to prevent or limit the damage from future attacks.

Deliverables
Executive, investigative and remediation reports that withstand third party scrutiny.

- Executive summary. High level summary explaining the timing and investigative process, major findings and containment/eradication activities.
- Investigative report. Details on the attack timeline and critical path (how the attacker operated in the environment). Reports include a list of affected computers, locations, user accounts and information that was stolen or at risk.
- Remediation report. Details of containment/eradication measures taken, including strategic recommendations to enhance the organization’s security posture.

Learn more at www.mandiant.com/consulting