# THE TYPICAL DATA BREACH TAKES **AN AVERAGE OF 212 DAYS TO BE** DETECTED.1 YOU CAN DO BETTER.



While hackers can lurk in systems for a long time, Managed Detection and Response solutions can work quickly to protect your systems and information. This timeline shows a real-world example of an incident and response by MDR experts. Learn how we can help.

# Compromise, Investigation, and Response

## **Timeline**

#### **Healthcare Attack Breakdown**

Solarmarker Jupyter infoStealer Yellow Cockatoo

Persistence -Run Key Added by Reg.exe

#### Severity High

**Alert Priority:** 

Medium

**Event Source Process Start Activity** 

### **Attacker Activity**

- [User1] searches "employee handbook of pharmaceutical employees" on Edge browser, unknowingly downloads document with malicious payload.
- Payload executes on [Host1], creating hundreds of decoy files in the same directory as executable to act as persistence mechanism and hide the malicious file.
- Executable file attempts to communicate with unknown Command and Control (C2) to post information about the asset and exfiltrate more data.

## 00:01:43

#### **ALERT: ATTACKER ACTIVITY DETECTED**

Rapid7 MDR detects run keys being added to the registry on machine in the customer's environment, triggering investigation.

#### **Investigation Begins** 00:06:47

Rapid7 SOC analyzes attacker activity (including all decoy files) using available forensic data. Confirms attack contains advanced deception techniques associated with Solarmarker/Jupyter infoStealer/Yellow Cockatoo family of malware.

#### **Active Response and Initial Notification**

MDR Analyst kicks off Active Response automation workflows to quarantine [Host1] and disable [User1]'s compromised account. Containment actions initiate after customer's 10:00 acknowledgment grace period.

MDR notifies customer of the incident and suggests additional actions to block the Indicators of Compromise (IOCs).

#### 00:10:00 ATTACKER CONTAINED

#### **Customer Takes Action**

Customer takes additional remediation and mitigation recommendations.

#### **Customer Advisor Reaches Out**

Rapid7 Customer Advisor calls to follow up, ensure initial remediation actions are taken, and answer questions while Final Incident Report is developed.

#### **BUILDING RESILIENCE**

#### Forensic Investigation

SOC Analyst begins Digital Forensics and Incident Response (DFIR) analysis to determine full attacker timeline and actions for Final Incident Report.

### **Final Report Delivered**

Detailed analysis, investigation synopsis, and evidence with additional recommendations.

### **REMEDIATION:**

- Rebuild affected systems
- Block malicious domains Block malicious IP addresses
- Change passwords for affected accounts

#### MITIGATION:

- · Implement least-privilege
- for all users
- · User awareness training Review firewall and proxy policies
- · Disable ingress access to remote administration solutions from
  - non-VPN addresses

## CA FOLLOW UP

Customer Advisor reviews incident, response recommendations, and security posture improvements.

Image Source: https://www.rapid7.com/info/mdr/MDR-timelines-tick-tocks/

Hackers operate around the clock and across time zones and so should your security team. Establishing a Security Operations Center (SOC) demands highly skilled, specialized security experts, but few organizations can achieve this, even with unlimited resources. See how quickly a Managed Detection and Response solution can get to the who-what-when-where-why quickly with the work of Customer Advisors, practitioners with strong technical expertise.



CYBERSECURITY

Canon U.S.A.'s Five Pillars of Security presents a portfolio of security products and services in a comprehensive way that groups solutions in functional areas. Cybersecurity is a key component of our Five Pillar approach.

<sup>1</sup> IBM Cost of a Data Breach Report, 2023.



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