Automate Response

Congratulations on selecting IncidentResponse.com to retrieve your custom incident response playbook guide. This guide has been created especially for you for use in within your security response team. We hope you find it valuable and ask that you share it with the rest of your organization so you can collectively be successful in managing incidents and reducing risk throughout the business.

Your playbook overview - “Malware Outbreak”

Incident Response: A Top Priority in Security Management Programs

In the April 2014, U.S. Government Accountability Office reported (GAO-14-354) it’s noted that “major federal agencies did not consistently demonstrate that they are effectively responding to cyber incidents (a security breach of a computerized system and information).” The GAO projects that these agencies did not completely document actions taken in response to detected incidents. While the agencies identified the scope of an incident, they frequently did not demonstrate that they had determined the impact of an incident, nor did they consistently demonstrate how they had handled other key activities, such as whether preventive actions to prevent the reoccurrence of an incident were taken. The GAO notes, “without complete policies, plans, and procedures, along with appropriate oversight of response activities, agencies face reduced assurance that they can effectively respond to cyber incidents.” \(^3\)

Did you know?

1. In 2014, incidents increased by 78% since 2013.\(^1\)
2. 1,023,108,627 records were breached in 2014.\(^1\)
3. 54% of the breaches consisted of Identity Theft.\(^1\)
4. $3.5 million is the average cost of a breach for a company.\(^2\)
5. Companies experience an average of 10 unauthorized access incidents per month.\(^2\)
6. Malicious insiders and criminal attacks are the top causes for breaches.\(^2\)

1. Source: Gemalto - Breach Level Index
2. Source: Ponemon 2014 Cost of a Data Breach
3. Source: GAO-14-354, p.2

To learn more about playbooks and incident response, visit IncidentResponse.com
What is an incident response playbook? According to NIST Special Publication 800-61, an incident response process contains four main phases: preparation, detection and analysis, containment/eradication/recovery, and post-incident activity. Descriptions for each are included below:

**Prepare**
The initial phase where organizations will perform preparatory measures to ensure that they can respond effectively to incidents if and when they are uncovered.

**Detect & Analyze**
The second phase where organizations should strive to detect and validate incidents rapidly because infections can spread through an organization within a matter of minutes. Early detection can help an organization minimize the number of infected systems, which will lessen the magnitude of the recovery effort and the amount of damage the organization sustains as a result of the incident.

**Contain, Eradicate & Recover**
The third phase, containment, has two major components: stopping the spread of the attack and preventing further damage to systems. It is important for an organization to decide which methods of containment to employ early in the response. Organizations should have strategies and procedures in place for making containment-related decisions that reflect the level of risk acceptable to the organization.

**Post-Incident Handling**
Because the handling of malware incidents can be extremely expensive, it is particularly important for organizations to conduct a robust assessment of lessons learned after major malware incidents to prevent similar incidents from occurring.

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**Malware Outbreak**
You've selected the **Malware Outbreak** playbook. On the pages that follow, you will find your incident response playbook details broken down by the NIST incident handling categories.

To view your playbook online, visit [https://incidentresponse.com/playbooks/malware-outbreak](https://incidentresponse.com/playbooks/malware-outbreak)
Prepare - Malware Outbreak

1. Determine Core Ops Team & Define Roles
   - Vulnerability Manager
   - Threat Manager
   - Risk Manager

2. Determine Extended Team & Define Roles
   - Executive Lead
   - Professional Services Lead
   - Response Support (Legal, PR, etc.)

3. Define Escalation Path
   - Internal Path
   - External Path

4. Escalation Document

Next Step
Define Risk Factors

- **Standard**
  - Customers are affected by this incident
  - PII is at risk of being exposed
  - IP is at risk of being exposed
  - Public safety is affected
  - This act could be exploited for criminal activity
  - Personnel safety is not affected
  - This could have a negative affect to the public brand
  - Products/goods/services are affected by this outbreak

- **Custom**
  - Business
  - Compliance
  - Custom Factors
  - Operational
  - Industry

Next Step
Identify the system(s) that have been affected
- Servers
- Desktop
- Laptop
- Mobile
- VM
- LDAP Directory

Identify the data compromised

Identify the IT services being impacted

Identify the means through which the malware gained access

Identify the vulnerability being exploited

Identify how widespread the attack has spread

Identify the tools used to detect the incident
- Select Database
- Vulnerability Logs
- System Logs
- Incident Database
- Threat Database

Select Database
- Query Database
- Generate Report

View Report
- View Record Details
- Select Records
- Copy Record Details

SIEM
- IDS
- Firewall
- Scanners
- Antivirus
Recover Systems
- Reimage
- IDS/IPS & Firewall Updates
- Rebuild
- Remove Temporary Containment

Recover Data
- Data Restore
- Cloud Synchronization

Incident Remediation
- Wipe & Baseline System
- Scan host with updated Signature
- Scan File Share with updated Signature
- Remove Vulnerabilities & Update Routers
- Coordinate AV updates to be pushed upon release from AV Vendor
POST-INCIDENT - MALWARE OUTBREAK

- **Incident Review**
  - Electronic Personal Health Information (ePHI) Compromised?
  - Sensitive Government Information Compromised?

- **Lessons Uncovered**
  - Discovery Meeting
  - Policy Updates Defined
  - Process Updates Defined
  - Configuration Updates Defined

- **Lessons Applied**
  - Policies Implemented
  - Process Changes Implemented
  - Configurations Applied

- **Response Workflow Updated**

END
Proactive Response
An automated playbook helps security teams optimize for efficiency and productivity. Your security team has the ability to analyze, detect and prioritize when all pertinent data and multiple security tools are integrated into one system. With one-screen visibility you can identify anomalies, assign tasks, access reporting and communicate across multiple departments effectively for quick responses.

Quick Containment
Time and speed are crucial in assessing the environment and risk in the context of your business. Playbooks give a complete view of the necessary tasks to capture the data needed to support proper recovery and forensics. The efficiency a playbook brings to a security team allows for quick responses to finding the source of the attack, following lateral movement across the organization and taking the proper steps mitigate damage.

Effective Remediation
Organization and automation are key benefits that result in effective remediation. Automated playbooks help to organize security processes, mitigation plans and smooth communication between multiple departments. By optimizing data collection, analysis, and communications you improve the odds for effective eradication, recovery with integrity and forensic-quality reporting.

Action Plan
Having a view into what is possible is the first step in taking action. The next step is to bring your team together to drive it toward reality. Email this guide to your peers and managers to begin sharing your playbook with them.

With this playbook, you will be better prepared to handle the response. To help with the management and automation of this incident response playbook, consider working with CyberSponse and their partners. Come take a look at what they do.

For additional incident response playbook examples, visit https://www.incidentresponse.com/playbooks

Security Management Benefits
- Be prepared to handle any incident your team faces
- Control the situation, minimizing the impact to the business
- Efficiently manage your response across multiple departments

Useful Links:
NIST Incident Handling Guide
SANS Incident Handler’s Handbook

Risk Management Benefits
- Communicate effectively to ensure risk mitigation methods are applied
- Prioritize resources and activities where they matter most
- Report and tune based on response learning, reducing risk moving forward

Useful Links:
NIST Risk Management Framework Guide
Sample Policies and Plans