



# Recovery Roadmap: Five Essential Steps After a Cyber Attack



You understand the crucial role of cyber security measures. Ideally, you've implemented firewalls, antivirus software and multi-factor authentication, where a secondary device provides a login code. Excellent!

This proactive approach will enhance your digital resilience, ensuring your operations are safeguarded against threats.

Despite your security measures, no system is entirely foolproof. Just like the most advanced lock might deter most burglars, a determined hacker might still find a breach. This reality underlines why being prepared is as critical as preventive measures.

Dramatic as it sounds, readiness is key.

It's essential to devise a plan for potential breaches, not just prevent them. Always prepare for the worst while hoping for the best.

Wondering how to start planning for an unpredictable cyber attack? Fortunately, it's simpler than you might assume.

At Pisys, we've split the process into five manageable steps. By following these, you ensure that even in dire situations, your team is equipped to minimise damage and disruption—sparing you significant stress.

# **Step 1: Evaluate and Contain the Breach**

When a cyber attack strikes your business, it might knock the wind out of you. Instead of panicking, approach the situation methodically. First, pause and take a deep breath. Staying calm is vital, as clarity is your strongest asset in this crisis.

**Next, rally your team**—whether in a physical room or online. Inform them of the breach to ensure everyone is prepared to act together. Now, assess what's been affected. Identify compromised systems or data and any immediate threats. Document everything meticulously to understand the extent of the damage.

Finally, determine how the breach occurred. Was it a phishing scam? A software flaw? Pinpointing the attack vector is crucial for sealing the breach and safeguarding against future incidents.

## **Step 2:** Secure and Isolate the Threat

Once you've grasped the full extent of the incident, swiftly move to contain the breach. Begin by shutting down compromised systems to prevent any further unauthorised access.

Isolate infected devices from the rest of your network to stop the spread of malware or further data leakage. It's also crucial to block suspicious network traffic and update security protocols immediately.

Changing all passwords and implementing two-factor authentication where possible can further secure your systems against additional breaches.

The scope of the breach will dictate whether you need to notify external parties.

Depending on the nature of the data involved and the severity of the breach, this might include informing law enforcement, regulatory agencies or even industry watchdogs. For instance, if personal data has been compromised, you may need to comply with data protection regulations such as GDPR, which requires prompt notification of data breaches.

Don't hesitate to seek external assistance. Pisys can provide the necessary expertise to manage the breach effectively.

## **Step 3: Reactivate and Secure Systems**

Now that the immediate threat is neutralised, it's time to focus on getting your operations back up and running swiftly.

#### **Prioritise Essential Systems**

Identify and prioritise the restoration of critical systems first. These may include your customer databases, financial records and production systems. Concentrating on these vital areas ensures that your business can resume fundamental operations as quickly as possible.

#### **Implement Backups**

If you've lost data, stay calm—you have backups for this reason. Restore your systems and data from the most recent, uncompromised backup. Always verify the integrity of these backups before proceeding, as some attacks might target backup files as well.

#### **Update and Patch**

Once your systems are operational, immediately patch any vulnerabilities used in the attack. Update all software, firmware and apply the latest security patches. This is crucial to fortify your systems against any future attacks.



#### **Conduct Thorough Testing**

Before you fully return to business as usual, rigorously test the restored systems. Ensure everything operates correctly and check for any unresolved issues or security gaps.



#### **Maintain Open Communication**

Keep all stakeholders informed throughout the recovery process. Update them about the breach, the steps you're taking to address it and the expected timeline for resuming normal operations. Clear communication will help preserve their trust and confidence during this critical time.

## Step 4: Learn and Strengthen Your Defences

Congratulations on navigating through a cyber attack. Yet, there's no time to rest—learning and adapting is crucial. With cyber threats ever-looming, preparing for the next incident is key.

**Reflect on this experience:** What lessons have you learned? How will you enhance your security to safeguard your business further?

#### Conduct a security audit

Begin by evaluating your current security measures. Identify any gaps or weaknesses that could be fortified. A thorough security audit will help pinpoint vulnerabilities in your systems, processes and policies.



#### Adopt a Multi-layered Security Strategy

To robustly defend against future threats, implement a multi-layered security approach. Combine various technologies and strategies—firewalls, antivirus software, intrusion detection systems, and ongoing employee training. These layers work together to create formidable barriers against attacks.



#### **Encrypt sensitive data**

Enhancing data protection involves encrypting sensitive information, making it tougher for attackers to misuse it. Encrypt data in transit and at rest. For strong security, aim for end-to-end encryption, ensuring only intended parties can access the information.



#### **Enforce strong password policies**

Weak passwords are an easy target. Implement strict password policies across your organisation, encouraging the use of long, unique passwords. A password manager can facilitate this process, adding an extra layer of security. Also, consider multi-factor authentication to bolster your defenses.

### **Keep Security Systems Updated**

As cyber threats evolve, so must your defenses. Regularly update security patches for your software, firmware and systems. Timely application of these updates is critical to close vulnerabilities and prevent exploits.



#### **Educate and train employees**

Your employees are your first line of defence against cyber attacks. It's vital to educate them about the importance of cyber security and provide ongoing training. This helps them recognise and respond to potential threats effectively. Regularly teach them how to identify phishing emails, steer clear of suspicious websites and maintain good security hygiene. These proactive measures equip your team with the knowledge and skills needed to protect your organisation.

#### Monitor and respond to threats

Implementing real-time monitoring and alerting systems is crucial for detecting and responding to security threats swiftly. Establish regular security audits and conduct penetration tests to proactively assess your defenses. This not only helps in identifying vulnerabilities but also ensures that your response strategies are always a step ahead, ready to counteract potential breaches effectively.

# **Step 5:** Develop a Proactive Incident Response Plan (BEFORE you need it)

Even with strong defenses, the risk of another cyber attack remains. That's why having a solid incident response plan is crucial. It ensures you can react swiftly and effectively if targeted again.

Initiate Your Plan
Now
Don't wait for a
breach to happen.
Start creating your
incident response
plan today,
positioning you a step
ahead of potential
cyber threats.

#### **Assemble Your Response Team**

Begin by forming a dedicated incident response team. This team should include professionals from IT, security, legal and communications, among others.

At Pisys, we help you define clear roles and responsibilities for each member, ensuring that everyone knows what to do in the event of a cyber attack. This preparation is key to managing incidents efficiently and minimising impact on operations.

With Pisys as your managed service provider, you gain access to expert guidance in developing and refining your incident response strategies. We offer continuous support to ensure your plan remains effective against evolving cyber threats.

### **Assess and Prioritise Cyber Threats**

Begin by working with Pisys to identify the specific cyber threats most likely to impact your business. We help you assess and prioritise these threats based on potential damage, allowing you to focus resources effectively on high-risk areas and develop tailored response strategies.



### **Develop Detailed Incident Procedures**

With identified threats, collaborate with Pisys to develop comprehensive response procedures. These guidelines provide step-by-step actions for detecting, containing and mitigating incidents, and include communication protocols for notifying stakeholders and coordinating responses efficiently.



## Regularly Test and Enhance Your Plan

A strong incident response plan requires regular testing to stay effective. Conduct simulations and tabletop exercises to uncover and address any weaknesses. Pisys supports full team involvement in these drills to ensure each member understands their role and can act decisively.



#### **Strengthen Communication Protocols**

Effective communication is critical during a cyber incident. Ensure that every member of your organisation understands the incident response plan. Pisys emphasises the importance of training for all employees, ensuring that anyone can recognise and report incidents promptly.

# **Bonus Step 6:** Partner with Pisys for Enhanced Cybersecurity

Developing a cybersecurity culture is crucial, yet expert help often makes a substantial difference. Partnering with Pisys is the key to elevating your cybersecurity.

We specialise in cybersecurity, equipping us with the expertise and experience necessary to safeguard your business. Our team stays updated with the latest cyber threats, trends and technologies, sparing you the need to do so. With Pisys, you gain access to excellent cybersecurity protection, saving you both time and stress.

One major advantage of working with us is our proactive approach. Through continuous monitoring, threat intelligence and regular security assessments, we identify and fortify potential vulnerabilities before cyber criminals can exploit them. This strategy not only protects your data but also prevents the financial and operational disruptions of data breaches.

While concerns about costs are valid, partnering with a provider like Pisys is cost-effective, especially for small and medium-sized businesses. Outsourcing your cyber security needs allows you to access enterprise-grade solutions without the expense of an in-house team.

Perhaps the most valuable aspect of our partnership is the peace of mind it brings. Knowing that your systems, data and reputation are under vigilant protection allows you to focus on growing your business. With Pisys by your side, rest assured that your cyber security is in expert hands, letting you operate with confidence and security.

Ready to boost your cybersecurity? Let's make it happen!

Get in touch and see how we can safeguard your business together.

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