





# Ransomware prevention checklist

## Preventive measures at the user level

- Conduct security awareness training and educate your end users about ransomware attacks.
- Train your end users to spot and report phishing emails containing malicious attachments.

## Preventive measures at the software level

- Ensure your firewalls are operational and up-to-date at all times.
- Logically separate your networks.
- Employ a strong email filtering system to block spam and phishing emails.
- Patch vulnerabilities and keep all your software updated.
- Set up rigorous software restriction policies to block unauthorized programs from running.
- Keep your antivirus fully operational and up-to-date.
- Conduct periodic security assessments to identify security vulnerabilities.
- Enforce the principle of least privilege.
- Disable Remote Desktop Protocol (RDP) when not in use.
- Disable macros in your Microsoft Office files.
- Use a strong, real-time intrusion detection system to spot potential ransomware attacks.

## Preventive measures at the backup level

- Back up your files using a 3-2-1 backup rule, i.e. retain at least three separate copies of data on two different storage types, with at least one of those stored offline.
- Ensure that you back up critical work data periodically.
- Enforce regular checks for data integrity and recovery on all your backups.



# Ransomware response checklist

## Time-sensitive reactive measures

- Shut down infected systems immediately.
- Disconnect and isolate infected systems from the network.
- Isolate your backups immediately.
- Disable all shared drives that hold critical information.
- Issue an organization-wide alert about the attack.
- Contact your local law enforcement agency and report the attack.

## Analysis-based reactive measures

- Determine the scope and magnitude of an infection by identifying the type and number of devices infected, as well as what kind of data was encrypted.
- Determine the type and version of the ransomware.
- Identify the threat vector used to infiltrate your network.
- Conduct root cause analysis.
- Mitigate any identified vulnerabilities.
- Check if a decryption tool is available online.

## Business continuity reactive measures

- Restore your files from a backup.

## Additional resources



**Step-by-step guide** to detect and respond to ransomware attacks.

[Know more >](#)



**8 best practices** to prevent future ransomware attacks.

[Know more >](#)



**Infographic** on HIPPA guidelines on ransomware attacks.

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**Infographic** on how to protect your organization from ransomware attacks.

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**Ebook** FBI recommendations to prevent ransomware attacks.

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## FileAudit Plus

FileAudit Plus is real-time Windows file server auditing and analysis software that monitors, audits, alerts, and reports on all file accesses and modifications made in your file server environment. Furthermore, it:

- Monitors file integrity.
- Provides detailed analysis on file storage.
- Streamlines compliance requirements.
- Generates instant, user-defined email alerts.
- Automatically executes predefined responses when security threats such as ransomware attacks occur.

### Key features of FileAudit Plus

**Audit file accesses & changes:** Obtain detailed information on the quintessential four W's—who accessed what, when, and from where—for all file and folder accesses and modifications.

**Analyze disk usage pattern:** Analyze file storage capacity with visual representation and gain insight into the storage space usage patterns using disk space trend analysis graph.

**Optimize file storage:** Identify and discard old, large, unmodified, non-business files, hidden, and orphaned files to de-clutter your storage space.

**Combat ransomware attacks:** Detect and shut down ransomware attacks right at their inception with an automated threat response mechanism and also get notified with instant, user-defined alerts.

**Monitor file permissions:** Gain visibility into your file permissions and identify who has access to do what to your sensitive files.

**File integrity monitoring:** Detect and alert on unauthorized changes to your file server environment through continuous real-time monitoring.

**Compliance reports:** Ensure compliance with multiple external regulatory standards such as PCI DSS, HIPAA, FISMA, GDPR, SOX, and GLBA.