

Insight Space

cyber insights
programme

nccgroup

Defending your
organisation in today's
ransomware landscape



The ransomware threat landscape is becoming increasingly complex. Changing ways of working and the increasing sophistication of ransomware gangs mean that ransomware is more of a threat to business resilience than ever before.

One factor contributing to this increasing threat is the way that working life has changed. At the beginning of the pandemic, many organisations quickly transformed their operating model to allow employees to work from home, often onboarding new solutions and ways of working without taking the time to consider any security gaps that would open up as a result.

The adoption of new technology has meant that we've increasingly seen threat actors taking advantage of unsecured solutions. It's common for ransomware groups to take advantage of business web applications with vulnerabilities and remote access solutions such as Virtual Private Networks (VPN) and Remote Desktop Protocols (RDP), to gain a foothold on a corporate network.

Social engineering attacks are another common route for threat actors. Highly-targeted and well-crafted phishing attacks are more likely to be successful if employees are working away from the office, and are therefore less likely to question any requests that are even slightly out-of-character.



The threat of ransomware spans borders and sectors, with the targets of ransomware gangs ranging from IT suppliers and software companies to critical national infrastructure providers, local and national government and financial institutions, where stakes and potential rewards for hackers are high.

Over the past few months alone, the world has seen several large-scale ransomware attacks, affecting organisations and individuals alike. One particularly notable example was a ransomware attack that targeted the [Colonial Pipeline](#), a 5,500 mile fuel pipeline covering the US East Coast in May 2021, severely disrupting fuel supplies across the country. The impact of the attack quickly became apparent as increased fuel demand and shortages led to panic buying and fuel price increases. When added to the \$4.4 million (£3.1 million) ransom paid by the Colonial Pipeline Company to Eastern-European based ransomware gang, Darkside, the true cost quickly becomes apparent.

The lucrative nature of ransomware attacks means that businesses are experiencing ever-more aggressive and highly-targeted approaches from threat actors. This is particularly true for the financial sector, which is frequently targeted by a banking malware family known as Gozi, characterised by an aim to cause financial losses through transactional fraud or targeted ransomware activity. NCC Group's Research and Intelligence Fusion Team (RIFT) [found](#) that 136 financial institutions had been targeted by threat groups using RM3, an advanced variant of the Gozi ransomware family, since 2017.



The evolution of ransomware

As well as an increase in targeted ransomware attacks, the last year has led to a rise in ransomware-as-a-service attacks, in which ransomware variants are sold to threat actors in a subscription model.

This means that many threat actors target victims simply by scanning for vulnerable applications or remote access ports. Often, these gangs seek to go after irreplaceable business assets as well as devices connected to a business network, which could include file servers, database services, virtual machines and cloud environments.

The determination of today's threat actors makes it much harder for organisations to recover from ransomware attacks. In many cases, attacks go undetected until the damage is done. The timeline of attacks can often span weeks from the initial breach to full control of the victim's corporate network.



Building a security strategy fit for the new normal

Prevention is better than a cure, which is why it's vital for organisations to build a proactive security strategy. As organisations step back and review their processes, people and technology for the post-COVID world, it's crucial for them to also consider the security measures they have in place.



Creating a security-aware team

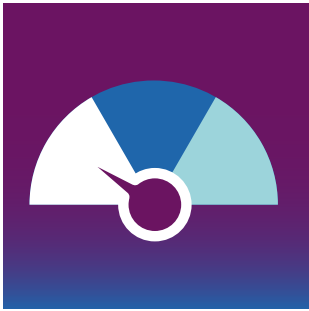
People are a critical line of defence for businesses, and the way that colleagues respond to security challenges can be the difference between ongoing resilience and a damaging cyber attack.

It's therefore crucial for organisations to provide regular security awareness training to staff members, covering best practice when it comes to dealing with phishing and scam attempts, reporting to regulatory bodies, and ensuring strong password security and storing of sensitive credentials.

In addition to this, individuals can play a key role in helping a business recover quickly after an incident – it's important for organisations to have individuals that are given the authority to make decisions during an incident as part of a robust incident management policy.



Building a security strategy fit for the new normal



Minimising risk

Having robust controls in place and limiting access to business networks wherever possible can help to reduce an attacker's chances of breaching corporate systems.

This includes only providing privileges that employees require for business functions, such as only having access to specific folders on a shared drive or server. This means that if a user's account is compromised, the attacker would be able to access a smaller amount of information, and data is less likely to be deleted or modified.

Ensuring that a process is in place for regularly updating software and solutions in line with the release of security patches or improvements is also important. This minimises the risk of vulnerabilities appearing in your system from out-of-date solutions.



Maintaining visibility over your IT estate

To ensure that any ransomware attacks can be managed and swiftly resolved, it's crucial to keep logs and backups of critical services, files and networks. This includes logging events into a Security Information and Event Management (SIEM) system, and storing this information for at least 90 days.

As well as increasing the chances of continued access to business-critical systems, this will also make investigating, tracking and remediating the damage caused by an attacker a far more streamlined process.

In today's complex and ever-shifting ransomware landscape, taking positive steps to secure your infrastructure can make a tangible difference.

To find out more about how we can strengthen your organisation's defences against the threat of ransomware, speak to our team today.

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About NCC Group

NCC Group exists to make the world safer and more secure.

As global experts in cyber security and risk mitigation, NCC Group is trusted by over 14,000 customers worldwide to protect their most critical assets from the ever-changing threat landscape.

With the company's knowledge, experience and global footprint, it is best placed to help businesses assess, develop and manage the evolving cyber risks they face.

To support its mission, NCC Group continually invests in research and innovation, and is passionate about developing the next generation of cyber scientists.

With circa 2,000 colleagues in 12 countries, NCC Group has a significant market presence in North America, Europe and the UK, and a rapidly growing footprint in Asia Pacific with offices in Australia, Japan and Singapore.

To discuss how you can reduce your ransomware risk, speak to our team today.

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