ARTIFACT SECURITY

QUELLSECURE

RANSOMWARE IMPACT EVALUATION

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amtso
The cybersecurity industry's testing standard community
STANDARD

Introduction

Stefan Dumitrascu

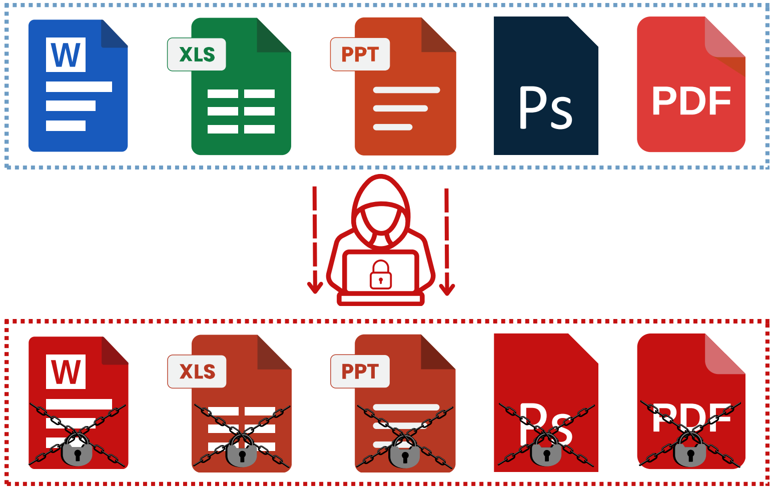
Chief Executive Officer

In the current threat landscape, ransomware dominates the news. Probably the oldest adage in cybersecurity is "It's not a matter of IF but WHEN you will get hacked".

Ransomware has been at heart of some of the most disruptive attacks in recent history. Attacks such as Wannacry affected third of NHS trusts in England. More recently the Change Health attack exposed the data of more than 50% of population of the US.

Ransomware is not just a nuisance, it's now a professionalized economic menace. While the largest organisations have the notoriety in the news, attacks in the SMB space come with great risks to business continuity and reputational damage.

Attackers find important files, encrypt them and demand payment



With so many ransomware operators around how do you deal with attacks when your traditional defences break? What happens when your EDR gets bypassed?

State of Ransomware

88%

SMB INCIDENTS ARE RANSOMWARE*

$1.47M

REMEDIATION COST**

1/5

BUSINESSES CEASE OPERATIONS DUE TO RANSOMWARE.***

According to the Verizon's 2025 DBIR*, ransomware is now present in 88% of all breach incidents involving SMBs. These are targeted by criminals they are most likely to inflict critical damage. IBM's Cost of Data Breach Report 2025** identifies the average cost to remediate an incident at $1.47 million, excluding the cost of any ransom payment. According to Mastercards 2025 Global SMB Study***, one in five business that suffer a major attack are forced to cease operations.

100%

DETECTION RATE

99%

RANSOMWARE IMPACT REDUCTION

7

AVERAGE # OF ENCRYPTED FILES

Quell detects ransomware encryption at the final moment, when files are being written. Less than **10 files are affected** before Quell intervenes to stop the ransomware attacks resulting in a **99% impact reduction.** Across all families tested, it maintained a 100% detection rate.

Executive Summary

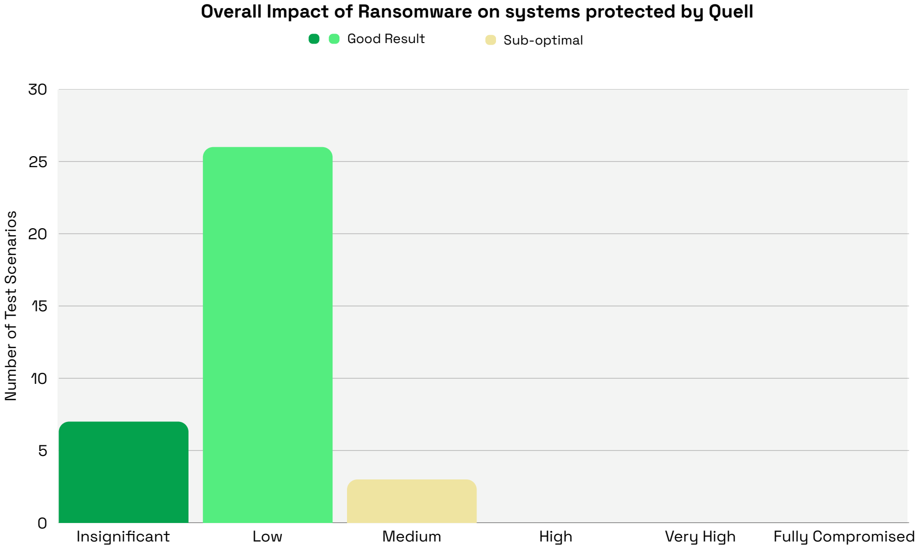
Evaluation notes

Quell's role is to add another layer of protection against Ransomware. Just as with any problem in cybersecurity, a layered approach is best to deal with this problem. The solution by Quell provides protection at the last moment, when files are being encrypted by the ransomware attack.

This acts as a final fail-safe when your traditional security products have been evaded. As it looks at the threat when the files are being written, it's not reliant on cloud lookups or tertiary technologies. In air-gapped environments it can prove especially useful as the product's efficacy is not influenced by network connection.

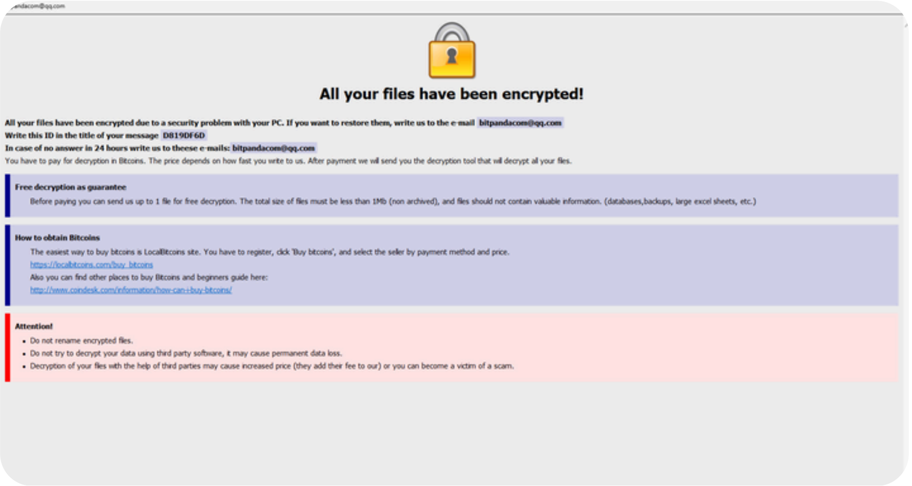
Overall Ransomware Impact Highlights

- Less than 1% of files encrypted across the whole evaluation (0.78%)
- 100% detection across all tested scenarios
- In most scenarios less than 10 files were lost to ransomware



Operational Ease and Features

Every IT team's worst nightmare is waking up to a screen like this. To limit the impact of ransomware events in the modern landscape a multi-layered approach should be implemented.



All your files have been encrypted!

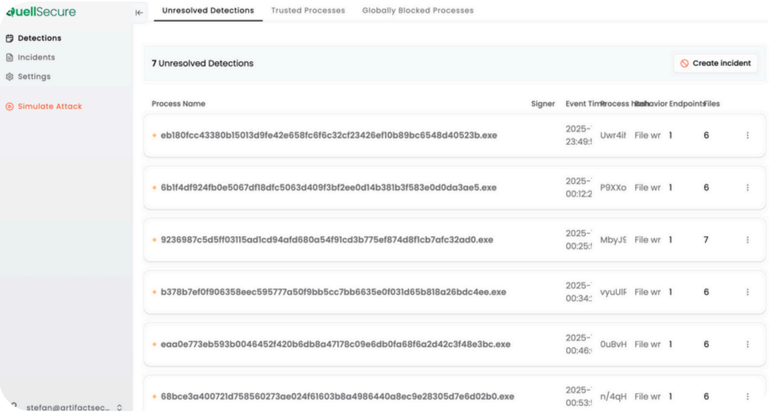
All your files have been encrypted due to a security problem with your PC. If you want to restore them, write us to the e-mail bitpandacom@qq.com
Write this ID in the title of your message D819DF6D
In case of no answer in 24 hours write us to theese e-mails: bitpandacom@qq.com
You have to pay for decryption in Bitcoins. The price depends on how fast you write to us. After payment we will send you the decryption tool that will decrypt all your files.

Free decryption as guarantee
Before paying you can send us up to 1 file for free decryption. The total size of files must be less than 1Mb (non archived), and files should not contain valuable information. (databases,backups, large excel sheets, etc.)

How to obtain Bitcoins
The easiest way to buy bitcoins is LocalBitcoins site. You have to register, click 'Buy bitcoins', and select the seller by payment method and price.
https://localbitcoins.com/buy_bitcoins
Also you can find other places to buy Bitcoins and beginners guide here:
http://www.coindesk.com/information/how-can-i-buy-bitcoins/

Attention!
- Do not rename encrypted files.
- Do not try to decrypt your data using third party software, it may cause permanent data loss.
- Decryption of your files with the help of third parties may cause increased price (they add their fee to our) or you can become a victim of a scam.

Quell's approach to ransomware protection centred on resilience, accepting that breaches will inevitably occur. Its agent analysis encryption attempts, ensuring the most valuable files are protected, minimising the impact to an organisation.



7 Unresolved Detections

Process Name	Signer	Event Tim	Process H	Behavior	Endpoints	Files
eb180fcc43380b15013d9fe42e658fc6f6c32cf23426ef10b89bc6548d40523b.exe		2025- 23:49:	Uwr4it	File wr	1	6
6b1f4df924fb0e5067df18dfc5063d409f3bf2ee0d14b381b3f583e0d0da3ae5.exe		2025- 00:12:2	P9XXo	File wr	1	6
9236987c5d5ff03115ad1cd94afd680a54f91cd3b775ef874d8f1cb7afc32ad0.exe		2025- 00:25:	MbyJ	File wr	1	7
b378b7ef0f906358eec595777a50f9bb5cc7bb6635e0f031d65b818a26bdc4ee.exe		2025- 00:34:	vyuUI	File wr	1	6
eaa0e773eb593b0046452f420b6db8a47178c09e6db0fa68f6a2d42c3f48e3bc.exe		2025- 00:46:	0uBvH	File wr	1	6
68bce3a400721d758560273ae024f61603b8a4986440a8ec9e28305d7e6d02b0.exe		2025- 00:53:	n/4qH	File wr	1	6

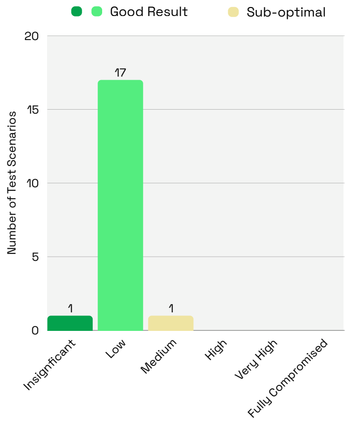
Quell's interface removes complexity so responders can focus on identifying and resolving incidents. This approach empowers a small security team to have an immediate impact on limiting the impact that ransomware has on an organisation.

Targeted Industries

Results by Industry

Organisations must move beyond general defence strategies and implement specific measures tailored to their industry. It's important to look at how the product behaves against ransomware targeting different verticals. This analysis is crucial for specific granularity when understanding and mitigating risk for your organisation.

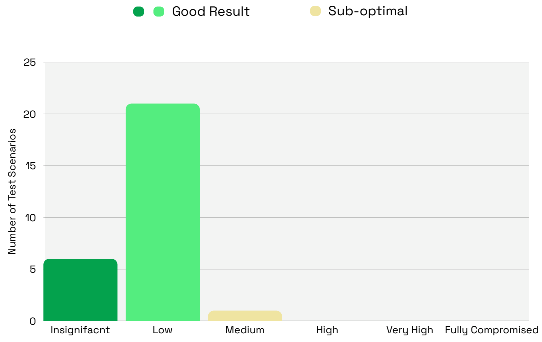
Impact of Healthcare Ransomware on systems protected by Quell



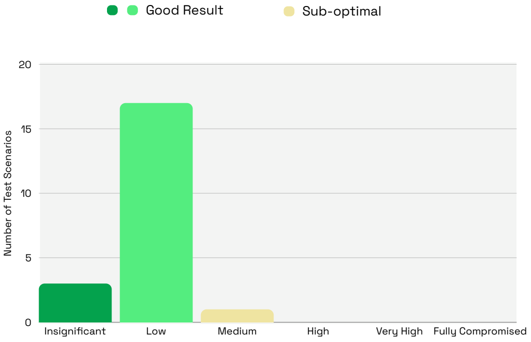
Across three critical infrastructure sectors, Quell performed consistently. The vast majority of the attacks were effectively neutralised before the impact reached Medium state. While each industry and organisation face their own regulatory hurdles and attack vectors, the results show that Quell can be part of mature security programmes to achieve predictable returns on investment.

This stability across sectors demonstrates that an industry-specific targeting does not result in a degradation of security performance.

Impact of Manufacturing industry focused Ransomware on systems protected by Quell



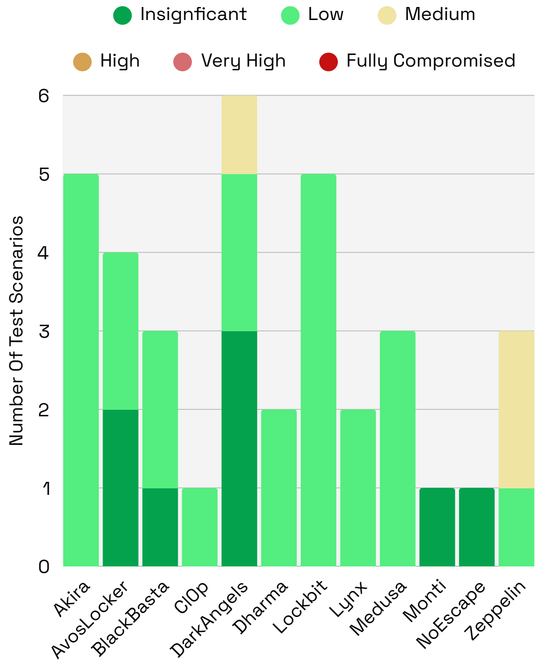
Impact of Education industry focused Ransomware on systems protected by Quell



Group Breakdown

Results by Group

When it came to designing this test one of our core goals was group diversity. There is no single silver bullet solution that will 100% protect against all types of ransomware no matter what other tests or marketing claims may say.



We tested Quell against a diverse range of ransomware families. Each family has their unique techniques employed for encryption, whether it was the speed-focused Akira family or sophisticated evasion techniques of AvosLocker, the results showed consistent performance. The negligible instance of Medium severity scenarios means further reinforce the resilience of the detection and protection technology from Quell.

Ransomware Family	Operational Profile	Enterprise Risk
Akira	Highly active, known for rapid encryption.	Represents the new wave of RaaS focused on speed.
AvosLocker	Established, often uses complex internal obfuscation.	Benchmark for defense against established tactics, techniques, and procedures (TTPs).
BlackBasta	High-profile, frequent targeting of large enterprises.	Key indicator of resilience against financially motivated, mature RaaS operations.
ClOP, DarkAngels, Dharma	Mid-tier/evolving threat actors.	Ensures broad coverage across diverse behavioral profiles.
Lockbit	Historically the most prolific RaaS operation.	Essential benchmark for preventing large-scale organizational compromise.
Lynx, Medusa, Monti, NoEscape, Zeppelin	Diverse and geographically dispersed groups.	Validates efficacy against varied TTPs and encryption methodologies.

How we tested

It's essential for any test to reflect the real world. While everything happens in our controlled environment, we endeavour and take great pride in a real-world approach to our test framework. This ensures our findings offer an authentic representation of how the product acts against the threats when they are faced in the real world. This test was focused on fully updated Windows 11 workstations.

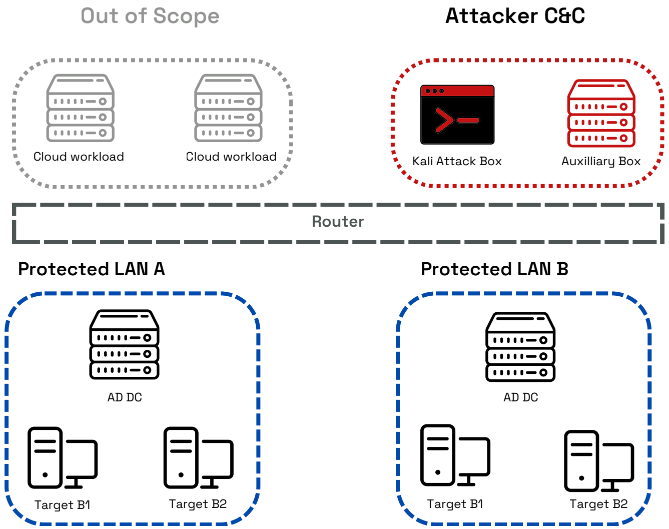
Rating Impact

We evaluated the effectiveness of Quell's agent post initial intrusion. As the attackers make their way through the network and identify key targets to deploy ransomware on we measured the number of files that were encrypted by the ransomware when Quell's agent was deployed.

Severity	Insignificant	Low	Medium	High	Very High	Fully Compromised
Encrypted # of files	1 ≤ 4	5 ≤ 15	16 ≤ 50	51 ≤ 100	100 <	Complete

The thresholds we established range from Insignificant to Fully Compromised aren't just random thresholds. It's impossible for our results to say which files are more than others. Our rating aims to showcase the product performance against ransomware, depending on how sensitive your organisation may be to ransomware you may want to create your own thresholds and reproduce the tables for your organisation.

Infrastructure



Conclusion

Ana M. Pricop

Chief Commercial Officer

We believe in empowering security vendors with transparent, actionable insights while giving an accurate representation of the product's performance against the threats for customers.

Through collaboration and continuous refinement we aim to constantly push security forward. If you have any questions regarding the testing, results or interested in more detailed view please don't hesitate to reach out to us. This test was executed under the AMTSO Standard. Link to the testing page can be found here.

Quell's agent is a lightweight solution to the most prevalent threat targeting organisations worldwide.

It's ease-of-use, quick deployment and low TCO make it a valuable reinforcement in a multi layered approach to security.

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