# **7 KEY WAN SECURITY CONSIDERATIONS**

Sensitive data is big business for cyber criminals; yet it's puzzling that  $<\!30\%$ of organisations deploy encryption to secure it<sup>1</sup>, exposing them to considerable risk.

Here are 7 things you should take into consideration when choosing a WAN encryption security solution.

<sup>1</sup>2019 Thales Data Threat Report

## **1: ENCRYPT EVERYTHING**



All network traffic between sites should be encrypted

> Data in motion should be encrypted across all primary network types

**Encryption solutions** should support all topologies



Encryption should take place in a secure device, within a secure environment

## **2: KEEP THINGS RANDOM**

It's crucial that your keys aren't **vulnerable** to prediction or bias. If a pattern can be established, you can be hacked.

Make sure you use a Random Number Generator with a high source of entropy, such as True Random Number Generation (TRNG) or Quantum Random Number Generation (QRNG).



## **3: SECURE** YOUR KEYS

**Encryption keys** must be secure during their entire lifecycle.

Key management must be versatile and optimised for the task.

## **4: STAY AGILE**

Make sure you have a choice of cryptographic primitives.

Your solution should also be crypto-agile.

# **5: THINK PRESENT, AND FUTURE**

Your solution should

### be able to scale up and down with your changing requirements.



It should also be future-proof; protecting you against emerging threats.

## 6: STAY CERTIFIED

Look for a vendor with a commitment to independent security evaluations and audits.





## **7: BEWARE OF OPERATIONAL IMPACT**

Look at the latency and data overhead impacts on network performance.

Think about the impact that unscheduled network **downtime** could have. Beware of multi-tasking network routing and encryption devices requiring frequent security patches and software updates, causing unplanned downtime and business disruption.

## **DISCOVER MORE ABOUT SENETAS ENCRYPTION SOLUTIONS**







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Senetas is a leading developer of encryption security solutions; trusted to protect enterprise, government, defence, cloud and service provider data in over 40 countries. From certified high-assurance hardware, and virtualised encryption, to secure file sharing and collaboration with data sovereignty control, all are based on the same crypto-agile platform and deliver security without compromise.

Senetas encryption solutions are distributed and supported internationally (outside Australia and New Zealand) by Thales.

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