Connect remote workers and distributed sites seamlessly in a single quantum-secure virtual environment

QUANTUM DICE | iQuila
SOFTWARE DEFINED NETWORKS

THE PROBLEM:

The widespread shift to remote working requires distributed devices to have access to systems and critical data. This rise in the use of remote network connections has led to increasingly sophisticated risks of devastating and costly cyber-attacks from criminals as they attempt to exploit weaknesses in remote IT security arrangements. According to IBM's 2022 Cost of a Data Breach Report, the average cost of a single data breach is $4.35 million, so robust security measures are essential to limit potential losses.
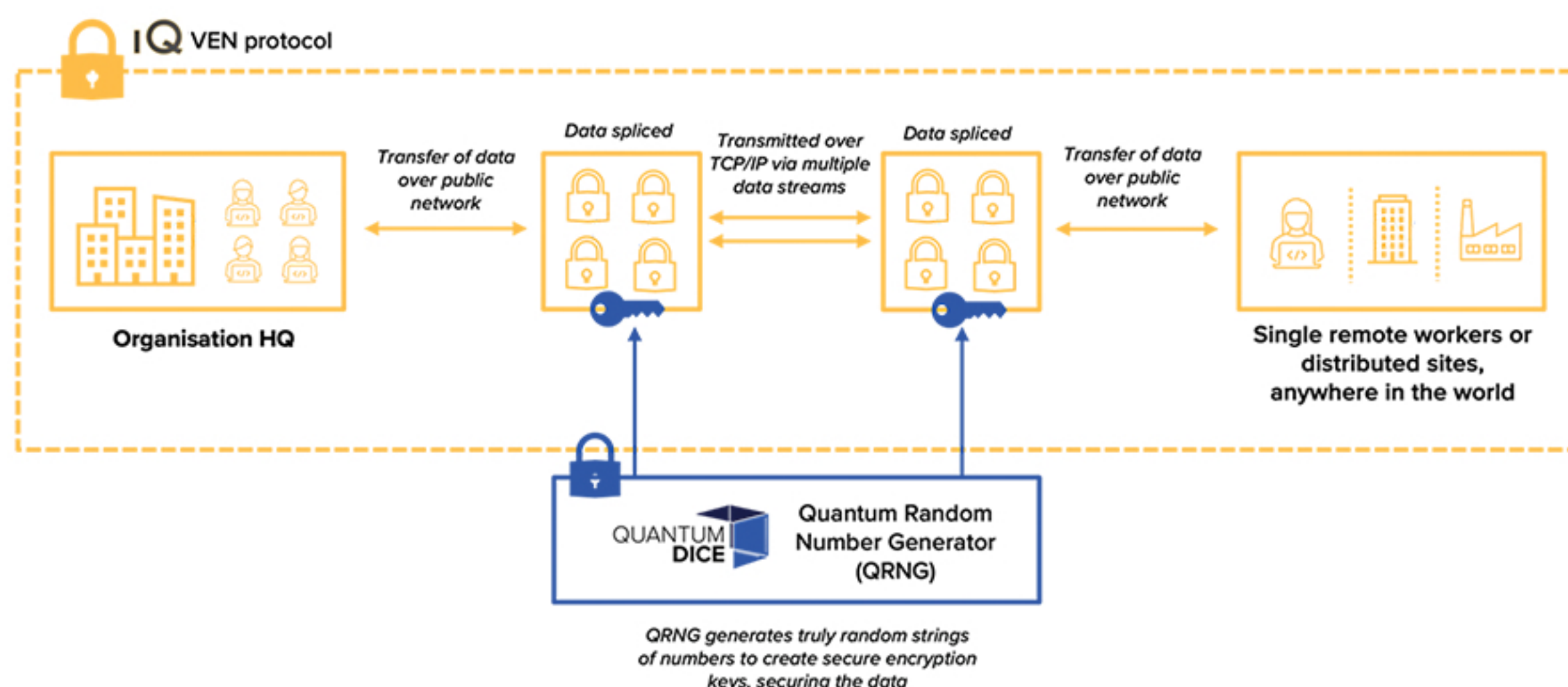
Your customers and other key stakeholders expect their data to remain safe, even in the context of a work from anywhere world, which is why iQuila and Quantum Dice have teamed up to offer a solution that delivers unrivalled encryption security over remote network connections, unlimited by distance or cumbersome hardware.

THE SOLUTION:

iQuila's Virtual Extended Network (VEN) platform (a more robust and faster alternative to a VPN), which connects all remote workers and distributed sites into one secure virtual office environment, can now be offered as a quantum-enhanced solution that encompasses Quantum Dice's self-certifying Quantum Random Number Generator (QRNG) for verifiably secure encryption keys.

This quantum-enhanced option secures single remote workers or multi-site organisations on a level that is unmatched by any other offering on the market. This solution allows companies to maintain the highest levels of security thus minimising the risk of disruption to connection and productivity and saving unexpected costs. For example, in a multisite factory, a period of manufacturing downtime could cost more than $20,000 per minute and over $2 million per incident (according to FANUC America Corporation, 2016).

HOW IT WORKS

iQ VEN protocol

Organisation HQ — Transfer of data over public network — Data spliced — Transmitted over TCP/IP via multiple data streams — Data spliced — Transfer of data over public network — Single remote workers or distributed sites, anywhere in the world

QUANTUM DICE — Quantum Random Number Generator (QRNG)

QRNG generates truly random strings of numbers to create secure encryption keys, securing the data

For a more detailed look at how the technology works, download the technical pitch deck here

THE BENEFITS:

	Ultimate security for sensitive data	Quantum enhanced encryption can give you the peace of mind that your organisation is protected against cyber attacks and silent failure.
	Connect multiple global workers or sites	Ensure that all remote workers and sites have the same seamless connection wherever they are in the world, as if they were in the same physical office.
	Maximise productivity and cost efficiency	Prevent your organisation from being hit with unexpected costs as a result of downtime or expensive data breaches.

THE CREDENTIALS

Why you can trust our solution:

QUANTUM DICE

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Quantum Dice is pioneering the development of self-certifying QRNGs, backed by the UK government through several Innovate UK-funded projects.

For example, it was selected by the UK's National Physical Laboratory to be a project partner in an Innovate UK-funded consortium to develop authoritative certification of the unique randomness produced by QRNGs.

iQuila has built a track record of successfully deploying its solution to organisations in a range of sectors.

Organisations that have implemented iQuila's solution include:

• Cultech, a contract manufacturer of nutritional supplements
• Penlon, a medical device manufacturer
• The Edenstone Group, an independent construction company

Secure your organisation's digital future – contact us at info@quantum-dice.com