Quside

Product Datasheet

Quside Entropy Core Appliance v 1.0.4

The Quside Entropy Core is comprised of a turnkey appliance providing high-quality entropy and the means to establish Entropy Connections for a wide range of security use cases. The appliance is available in physical and virtual (VMWare ESXi version 7+) formats. The Quside Entropy Core technology is powered by Quside Ruby™ N1 quantum entropy source chips.

Applications

High quality entropy availability is at the foundation of any cryptographic and security application. In cryptography, you always need access to enough entropy of enough quality. Adding the Quside Entropy Core to your private network infrastructure provides the strongest cryptographic foundation in your enterprise applications and networks.

With the Quside Entropy Core available in your private infrastructure, applications can establish Entropy Connections to ensure a secure and homogeneous entropy access:

- Entropy injection for cryptographic systems and applications
- OTP & TOTP key generation
- Entropy source for virtualized and containerized services
- Entropy injection for IoT devices, Industrial IoT and OT technologies

Features

Entropy infrastructure:

- Turnkey appliance integrating Quside's QRNGs chip technology.
- Simple deployment in virtualized, on premises and cloud environments.
- High performance, supporting 10,000+ entropy requests per second.

Entropy Connections:

- Simple REST HTTP API Entropy core interface available from within your private network.
- Support to QRNG Open API framework.
- Easy integration in applications.
- Agentless solution, standard http client libraries can be used.

Entropy Management:

- Administration API and Monitoring for easy management and integration.
- Entropy monitoring capabilities enabled and easily accessible.
- Implements Quside Randomness Metrology

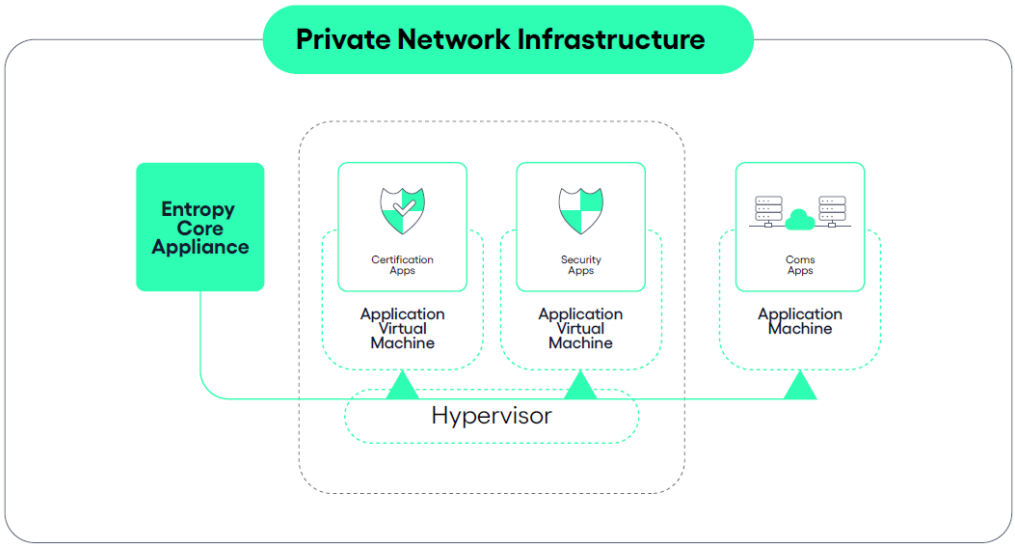


Figure 1. shows a possible deployment of how virtual machines or systems containing third party applications can obtain entropy provided by the Quside Entropy Core physical or virtual Appliance by using private high-speed networking.

Specifications

Physical Appliance	Virtual Appliance
Hardware	
Mechanical: 19'' 1 RU (Quside Garnet™ Plus A41) NICs: 2x10 GbE RJ45 Redundant Platinum 500W Power Supply	Requires a Quside Garnet™ Plus A41 installed in the virtualized server. Hypervisor supported: VMWare ESXi version 7+ vCPU: min 8 Memory: min 16GB Disk size: min 50GB vNICs: min 2 OVF format
Entropy Connection	
REST HTTP API Support to QRNG Open API framework Payload: Json or binary format Performance: 10.000 request/s for 32 B requests per appliance Max 8 MB per request	
Administration API/Web	
REST API with Json payload and Web interface	
Monitoring	
Prometheus agents	

Thanks for being part of our quantum journey!

To learn more about our products visit
www.quside.com and contact: sales@quside.com