

# ERICSSON DATA CENTRIC SECURITY

# DATA CENTRIC SECURITY

## DETECT THE UNDETECTABLE

### How can you protect your data if you don't know you're attacked?

As the industry is building data centers, industrial control systems and critical infrastructure, there is an inherent threat of the systems and data being attacked.

The traditional way of addressing business threats has been to do whatever possible to prevent them from happening, by access management, firewalls, encryption and secure communication. However, there are some shortcomings – including handling of secret keys, high costs for building perimeter defense, and once an intrusion has happened it takes a long time to detect it and to prove who did it and when.

Ericsson has teamed up with Guardtime, the inventor of the Keyless Signature Infrastructure (KSI) solution, in an exclusive partnership with a unique approach to cyber security, using continuous and real-time verification of data integrity in systems and networks in order to detect the undetectable.

### Key Benefits

- > Providing the missing link in the CIA (Confidentiality, Integrity and Availability) triad chain based on Blockchain technology.
- > A solution that integrity signs critical data and enables near-real time tamper detection when an intrusion happens.
- > The base for all solutions is the ability to amend a unique signature to any type of data allowing verification of the data integrity, even across organizational boundaries.
- > The solution is unique – no other solution has the same properties.

## ERICSSON + GUARDTIME

### A Strategic Partnership to Solve a Global Challenge

#### Ericsson

- > Global Service Provider for data signatures and verification services
- > Global Operations - Experience in addressing multi geo-regional jurisdictional compliance and audit needs
- > Global Presence - Local presence in 180+ countries to deliver and support regional certified solutions



#### Guardtime

- > Inventors of KSI, the first and only blockchain platform ensuring the integrity of systems, networks and data at industrial scale
- > World leading expertise in Cyber Security, Digital Forensics and Cryptography.
- > Government endorsed in EU and US

### Answering the Questions:

Where is my Data?

Has my data been changed?

Who is Accessing my data?

Is my System/Data Secure?

Am I legally safe?

# SOLUTION OVERVIEW

Almost all enterprise networks are challenged by security threats and have been compromised one way or the other. Today, one of the biggest concerns is to know that you have been attacked, and the time it takes to take action. Median time of attack detection is 146 days.

Ericsson's partner Guardtime has developed a blockchain technology called Keyless Signature Infrastructure (KSI). Instead of protecting from intrusion, KSI integrity signs critical data, which enables the capability of tamper detection in near-real time when the data intrusions happen. It does not prevent unauthorized acts, but it enables real-time mitigations.

This is a paradigm shift.

The KSI provides forensic proof data – the data as such is sufficient evidence in a legal process. Your company can be protected economically in case of dispute of compliance or in a copy right claim process. Other traditional security measures are still needed, but can neither provide the same level of mathematically based forensic proofs nor detect insider jobs.

Time has come to re-invent data security.  
Because how can you really know your  
data is secure, if you can't track it?

## RE-INVENTION OF DATA SECURITY Security Requires a New Focus

From: Protect Only  
100% protection is possible



To: Verify Everything  
Compromise is inevitable, integrity matters



Perimeter-centric: access, control, encryption



Hardened end points, users not devices



Data is locked down



Illusion of liability protection: third party audits, certifications



Data - centric: every data asset is tagged, tracked, located, verified



Immutable validation of end points: every user and all devices



Data is portable without breaking the law



Find the proof: independently verifiable, mathematical forensics

## About Ericsson

We are a world leader in the rapidly changing environment of communications technology – providing equipment, software and services to enable transformation through mobility. Some 40 percent of global mobile traffic runs through networks we have supplied. More than 1 billion subscribers around the world rely every day on networks that we manage. With more than 37,000 granted patents, we have one of the industry's strongest intellectual propertyrights portfolios.

Our leadership in technology and services has been a driving force behind the expansion and improvement of connectivity worldwide. We believe that through mobility, our society can be transformed for the better. New innovations and forms of expression are finding a greater audience, industries and hierarchies are being revolutionized, and we are seeing a fundamental change in the way we communicate, socialize and make decisions together. These exciting changes represent the realization of our vision: a Networked Society, where every person and every industry is empowered to reach their full potential.

The content of this document is subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.