

# IS A SOCAAS USEFUL TO BUSINESSES?

The advantages of a SOCaaS  
solution



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## INTRODUCTION

The fact that a company does not have cyber security as its core business does not mean that **it does not have to worry about hostile actions coming from the web.**

**The correct management of IT infrastructures** is essential to guarantee any organization's growth and evolution on the market, as well as obtaining those certifications required to have by law in the field of IT security.

**Choosing the right technology is one of the most difficult choices** faced by the corporate IT manager in the process of building a secure and resilient infrastructure resistant to cyber threats.

## SOCAAS: WHAT IS IT?

**An immediate solution** to these problems would be to equip your organization with a **SOCaaS security service based on cloud technology.** SOCaaS reflects a service-based model; in particular, **a SOC as a Service outsources parts of the SOC (Security Operation Center) functions to an external supplier.**

Moving to the cloud means that security information, such as **alerts, telemetry, logs, and network information** become accessible through different channels rather than managed through on-premises environments.

The most sophisticated and modern SOCaaS solutions base their service **on the cloud.** **Cloud computing is a constantly evolving technology and its growing popularity among IT and cyber industry stakeholders** is attracting more and more companies to adopt it as a solution for managing their IT security systems.

**The use of cloud technology enables oblique, on-demand and cost-effective network access** for a shared pool of computer resources such as servers, networks, data storage, etc., which can be quickly configured **with a minimum level of interaction required with the service provider.**

In other words, cloud computing treats IT infrastructures, software and platforms as virtual units to which **the end user of the service always has access.**

## THE 10 ADVANTAGES OF A SOCAAS SOLUTION

Having clarified what SOCaaS is and what technology it uses, we list the main advantages of adopting this solution:

1. **The customer at the center.** The service is aimed at satisfying the needs of the customer-end user. **The provider takes care of setting the line of defense, the customer chooses which are the most suitable lines of defense for his organization.**

In particular, the security manager allows users of the service **to choose** which security measures and protocols are **most suitable for their business or organization**. The security manager will take care of:

- Support the end user of the service in choosing security measures
- Support the configuration of the chosen security measures
- Provide the client with access to all the services provided in the contract

**In short, users have various solutions to choose from.** The service guarantees different lines of defense for different types of attacks (example: protection of cloud assets, data, programs and virtual machines)

2. **Flexibility.** Some SOCaaS providers offer full coverage, while others unpack their services. **The customer can choose which level of support to request and adapt the service to their needs.**
3. **Cost optimization.** SOCaaS services have a **fixed cost** and do not require additional expenses: the introduction of **SOCaaS lowers operating costs** of the organization that adopts it. The management and maintenance of a local SOC is particularly expensive, especially for small to medium-sized companies.

Furthermore, the management of your local SOC implies maintaining a relationship with your suppliers: **the SOCaaS service absolves the customer of any management burden.**



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4. **(Almost) unlimited storage.** It allows the management of **huge amounts of data** - a SOCaaS service allows the secure storage of this data and its management on a cloud.
  5. **24/7 threat monitoring and analysis.** Many companies cannot afford a SOC that runs 24 hours a day every day. **The vast majority of companies in this sector offer SOCaaS services 24/7**, so as to **always** protect the customer against cyber threats.

Monitoring allows **real-time monitoring** of the network and connected assets and the analysis tools allow **a reliable forecast of potential risks**.

In particular, the monitoring allows the early detection of threats that have passed the first line of defense, the gateway and **the real-time observation of users** of the corporate network - **both before and during the use of the service** - to collect information and discover **the most sophisticated and evasive malware** nested in the IT infrastructure.

6. **Safety and competence.** A SOCaaS provides the **ultimate technology in cybersecurity** on the market. Outsourcing your SOC means taking advantage of the expertise of the best IT security professionals at **no additional cost**.

**A SOCaaS solution offers an excellent compromise between human and technological support:** the service provides qualified and highly competent personnel who can promptly identify and resolve problems and disruptions that can interrupt or slow down company operations.

7. **Cutting-edge and instant threat management.** The use of a SOCaaS allows **significant and precious time saving** in data analysis and threat prediction.

**The AI software** used by SOCaaS solutions allow intelligent **management of security alerts** and select the most relevant ones to conduct a threat analysis. Data selection prevents the security team from being flooded with information that could **delay the organization's response to a critical event**.

8. **End-point detection and protection.** Analytical tools based on **AI** monitor and record all the activities of the corporate network in real time, carrying out an assessment of potential threats **to discover its origin, objective and level of risk**.
  9. **Reporting.** Many SOCaaS provide a reporting service on a regular basis to ensure **complete and constant monitoring**.
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10. **Professional updating. Cybersecurity is a complex and vast subject** that requires **constant updating**. In the near future, technologies and associated technologies will increase exponentially.

This will inevitably result in the need for **continuous professional updates** and a more specific training process to acquire the skills necessary to update and configure the components of your IT infrastructure. The majority of SOCaaS services meet this need, **offering the service to train the IT staff of contracting organizations**.

## GOOGLE CHRONICLE AS A SOCAAS SERVICE

**Google Chronicle Security** is a cybersecurity company part of the Google Cloud Platform and born from an offshoot of **Google X**; it intends to offer a **SOCaaS service to its customers in the near future**.

As a partner of Chronicle, **Telsy uses YARA-L rules-based security** for its security protocols, **ready to be integrated into solutions aimed at searching and identifying threats**.

### *Data upload and management*

**Google Chronicle allows easy and highly secure uploading of telemetry data**. Among its main features, Chronicle forwards data from any **sylog source, existing log aggregators, SIEM systems to its cloud platform**, allowing **immediate traffic analysis**.

**Uploading telemetry data includes normalization, indexing and association with hostile events in progress in just a few seconds**. Each time a user of an organization that uses Google Chronicle accesses a domain through a browser, **the DNS data is forwarded to Chronicle itself, which inserts, normalizes and indexes them and makes them available in the GUI with equal speed and automatically**. Therefore, analysts will always have at their disposal **the most up-to-date information on network activity in real time**.

Thanks to its dashboard, Chronicle allows **an almost instant understanding of a huge amount of data and activity** in progress on the network, facilitating the management of

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threats and reducing the time spent on security activities. **Chronicle saves a significant amount of precious time:** for example, if the Chronicle analysis classifies a domain as a threat, the platform will immediately identify all accesses to that domain.

### ***Threat detection***

To detect threats, Chronicle follows a process that begins with **the application of the UDM (United Data Model)**, a functioning and extensible scheme for any telemetry used for data security. The data processed through the UDM model are classified according to the context (example: type of asset and vulnerability).

**Chronicle's engine allows analysts to easily build advanced and complex threat detection networks on the collected UDM data.** Operators also have at their disposal a set of pre-established schemes that allow coverage **for numerous variants of malware, ransomware, trojans, suspicious activities, MITER ATT & CK techniques, lolbin attacks, etc.** Chronicle customers can also take advantage of the detection rules and threat indicators of **Uppercase, Chronicle's research team dedicated to threats.**

**Chronicle aims to make it easier to analyze malware and bugs through new advanced tools that also include machine learning.** Thousands of potential clues to hacker activity are ignored or discarded every day on average. Security teams usually filter out a few thousand that they think are worth investigating, but in a day's work they are lucky if they can go through a few hundred..

### ***Storage capacity***

As far as storage capacity is concerned, **Chronicle is designed to handle data up to over 100 petabytes, resulting in significant savings in economics and storage space.** Chronicle is, in fact, equipped with an unparalleled and state-of-the-art data infrastructure: it automatically resizes factors such as **calculation, memory, I / O** to ensure **optimal performance** regardless of the workload to which it is subjected.

## BIBLIOGRAPHY

Alruwaili, Fahad F., and T. Aaron Gulliver. "SOCaaS: security operations center as a Service for Cloud Computing Environments." *International Journal of cloud computing and services science* 3.2 (2014): 87.

Furfaro, Angelo, Alfredo Garro, and Andrea Tundis. "Towards security as a service (secaas): On the modeling of security services for cloud computing." *2014 International Carnahan Conference on Security Technology (ICCST)*. IEEE, 2014.

Hussain, Mohammed, and Hanady Abdulsalam. "SECaaS: security as a service for cloud-based applications." *Proceedings of the Second Kuwait Conference on e-Services and e-Systems*. 2011.