

PRESS RELEASE

## LEONARDO & CUBBIT: THE FIRST ULTRA-SECURE CLOUD IS BORN

**Data is protected thanks to an encrypted and distributed storage model that spreads information over the network**

**A new cloud architecture will ensure maximum data security and usability**

*Rome– Bologna (Italy), 29 September 2023* - To develop its technologies and safeguard its capabilities, Leonardo manages about 20 million billion pieces of data. Protecting this data is a matter of strategic importance for Italy as a whole.

To address this issue in an innovative way, **Leonardo**, together with **Cubbit**, is implementing a new cloud architecture capable of ensuring both maximum security and maximum usability of the data. The concept was to devise a system capable of "fragmenting" the data over multiple points in the system (nodes of the cloud network). The fragmented data is stored in many fragments so that, in the event of an attack (e.g., malware), the individual fragment becomes the first sensor of an ongoing attack. Once the attack is detected, the node is isolated, the data fragment is deleted, and the rest of the network goes into a defensive mode, increasing its counter-offensive potential by leveraging its intrinsic supercomputing capability, thus raising a barrier that is impregnable.

Leonardo will be the first company in the AD&S (Aerospace, Defense & Security) sector to use the geo-distributed cloud technology developed by Cubbit. In this solution, data is not stored in a few centralized data centers — as is the case with traditional cloud storage. Instead, each file is encrypted, fragmented, and replicated across multiple geographic locations and can always be reconstructed in its entirety. Security is therefore ensured even in situations where one or more geographic locations may be affected, such as in the case of physical and cyber attacks or in the face of natural disasters. Thanks to the granular geographic distribution of the data, digital sovereignty is also guaranteed, as each file can be distributed within a single country or region.

The agreement provides that Leonardo's sites in Genoa and Chieti will be the first to be involved in the development of the partnership. Leonardo will create a distributed *data lake* synergistic with the central one to validate protocols that significantly reduce the need to move data from the center to the edge and vice versa. This will incorporate directly onto the data itself features for resiliency (*disaster recovery*) and low latency access (*EDGE computing*). The goal is to increase support for the digital development of the Leonardo Group's business, such as in the construction of *digital twins* of flagship products. There will be significant improvements in terms of sustainability: the reduction of data traffic allows for a decrease in CO2 production and emissions. Geo-distributed storage also enables the construction of more efficient *digital twins*, which consolidate in the central archives only the strictly necessary data, without losing the ability to analyze all of the data at the edge. In the second phase of the project, the collaboration will extend in the context of research and development, exploring some next-generation projects, such as data transfer between satellites.



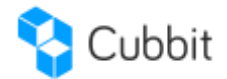
*"The agreement with Cubbit will increase the security and sustainability of our cloud services. Thanks to the adoption of granular geographic data distribution technology, we are now capable of addressing the growing trend of data to be stored — expected to triple by 2026 — which will generate a parallel increase in risks, costs, and complexities related to their management,"* explains **Carlo Cavazzoni**, Head of Computational R&D at Leonardo. *"We are among the leading companies in a sector, that of Aerospace, Defense & Security, where secure data management assumes a strategic role and has crucial geopolitical significance; for Leonardo, continuously enhancing data protection is an imperative duty. The signing of the partnership with Cubbit, aimed at jointly leveraging innovative technology, moves in this direction,"* concludes Cavazzoni.

*"The project signed with Leonardo marks an important step forward in the evolution of our technology, and it makes us proud and excited. Seeing our technology adopted by one of the major global players in the AD&S sector highlights the rapid growth of our geo-distributed cloud solution,"* says **Alessandro Cillario**, Co-Founder and Co-CEO of Cubbit. *"Thanks to the appointment of visionary leaders on our team and the addition of new important partners and customers, we are attracting increasing attention both in Italy and internationally. But we are not stopping here: we are about to launch commercially in Europe, and there will be significant news that we will announce in the coming weeks,"* adds **Stefano Onofri**, Co-Founder and Co-CEO of Cubbit.

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**Leonardo** is a leading global Aerospace, Defence and Security (AD&S) company. With 51,000 employees worldwide, it operates in the fields of Helicopters, Electronics, Aircraft, Cyber & Security and Space, and is a key partner in major international programmes including Eurofighter, NH-90, FREMM, GCAP and Eurodrone. Leonardo has significant industrial capabilities in Italy, the UK, Poland, the US and Israel and also operates through subsidiaries, joint ventures and stakes, including Leonardo DRS (80.9%), MBDA (25%), ATR (50%), Hensoldt (25.1%), Telespazio (67%), Thales Alenia Space (33%) and Avio (29.6%). Listed on the Milan Stock Exchange (LDO), Leonardo reported new orders of €17.3 billion in 2022, with an order backlog of €37.5 billion and consolidated revenues of €14.7 billion. The company is included in the MIB ESG index and has been part of the Dow Jones Sustainability Indices (DJSI) since 2010.

**Cubbit**, Europe's first geo-distributed cloud storage enabler, offers Cubbit DS3, a multi-tenant S3-compatible object store optimised for edge and multi-cloud use cases. Cubbit's distributed cloud is based on recycled and dedicated computing and storage resources, helping to optimize the infrastructure of companies and enterprises at a fraction of the cost of traditional cloud providers. Cubbit, a Gaia-X partner, is a leading European deep-tech scale-up. that has raised more than 12 million euros in investments and expanded its presence in over 70 countries, where its technology has been deployed over 5,000 active nodes. In 2022, Cubbit launched its B2B solution that now counts more than 170 corporate and enterprise customers including Aeroporto Marconi di Bologna, Amadori, Bonfiglioli, CNP Vita (UniCredit Group), Granarolo, Leonardo, and SCM Group. Cubbit is one of the three winners of the EIT Digital Challenge Award 2021 given to the best European scale-ups and was chosen by EIC Scaling Up among the top 30 European deep-tech scale-ups. For more information: <https://www.cubbit.io/>



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