Cybersecurity e soluzioni ICT

SOFTWARE DEFINED DATA CENTER

SECURITY AND CONTINUITY

Designed to guarantee flexibility, scalability and a very high level of automation, Leonardo's Software Defined Data Centre (SDDC) is based on the separation of physical, virtual and service infrastructure levels:

- The SDDC Infrastructural components such as servers, storage and networks are virtualized, allowing fully automated and centralised control by means of software with high levels of security

- This produces hyper-convergence of processing, storage and network resources thanks to evolved technologies such as Dell / Nutanix

- It is secure-by-design, by integrating innovative technologies and operating models such as micro-segmentation, F5, Citrix Airgap Administration and RSA.

The result is a software defined on-demand infrastructure, that is flexible, secure and highly reliable: currently, the most innovative architecture for providing private, public and hybrid cloud services, an ideal basis for as-a-service environment, able to guarantee segregation and security of each client's areas.

THE NEW DATACENTER

Over 900 m^2 of total floor area to guarantee our customers high levels of continuity and security by evolving towards a secure, cutting-edge software defined infrastructure, a portfolio of infrastructural, application and professional services for secure digital transformation towards cloud, as well as a competence centre made up of highly specialized, certified profiles.

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SERVICE CONTROL ROOM

The software defined data centre uses a service control room active around the clock, dedicated to integrated, infrastructural, application and process monitoring, as well as configuration, change, and activation of IT services and activities. The SDDC service control room employees operating system, network and infrastructure specialists, as well as service desk and monitoring operators.

Leonardo also deals with direct resolution of first level incidents, with the involvement, where necessary, of second level and third level structures, as well as the identification of critical issues by analysing recurring / related incidents.

SERVICES

The Software Defined Data Center is able to provide IaaS and PaaS services, with a significant reduction in the time to market for the activation of new services that can be customised by the customer:

- Infrastructural services - IaaS
- Application system services – PaaS

- IT professional services: consulting services to support digital transformation
- Security services: IT infrastructure security services.

MAIN CUSTOMERS AND PROJECTS

- **Leonardo:** within the company we offer email & collaboration services with related auxiliary services, SAP hosting, SAP consolidation and SAP Hana. We manage 35,000 mail boxes, 350 SAP instances, and 10 SAP HANA instances, throughout the company.
- **Ansaldo Energia:** we manage 60 hosted machines for Ansaldo Energia, 40 DB instances, 10 SAP instances and 1 Teamcentre.
- **Ansaldo STS:** we manage 70 hosted machines and 16 SAP instances for Ansaldo STS.
- **National Railway Safety Agency:** we support the National Railway Safety Agency in its datacentre and cloud services transformation project; we offer IaaS cloud hosting services, and manage 60 Virtual Machines.
- **Municipalities of Genoa, Naples and Bari:** we provide the municipalities of Genoa, Naples and Bari with IaaS and Paas services for managing the fines process, operating over 120 servers.
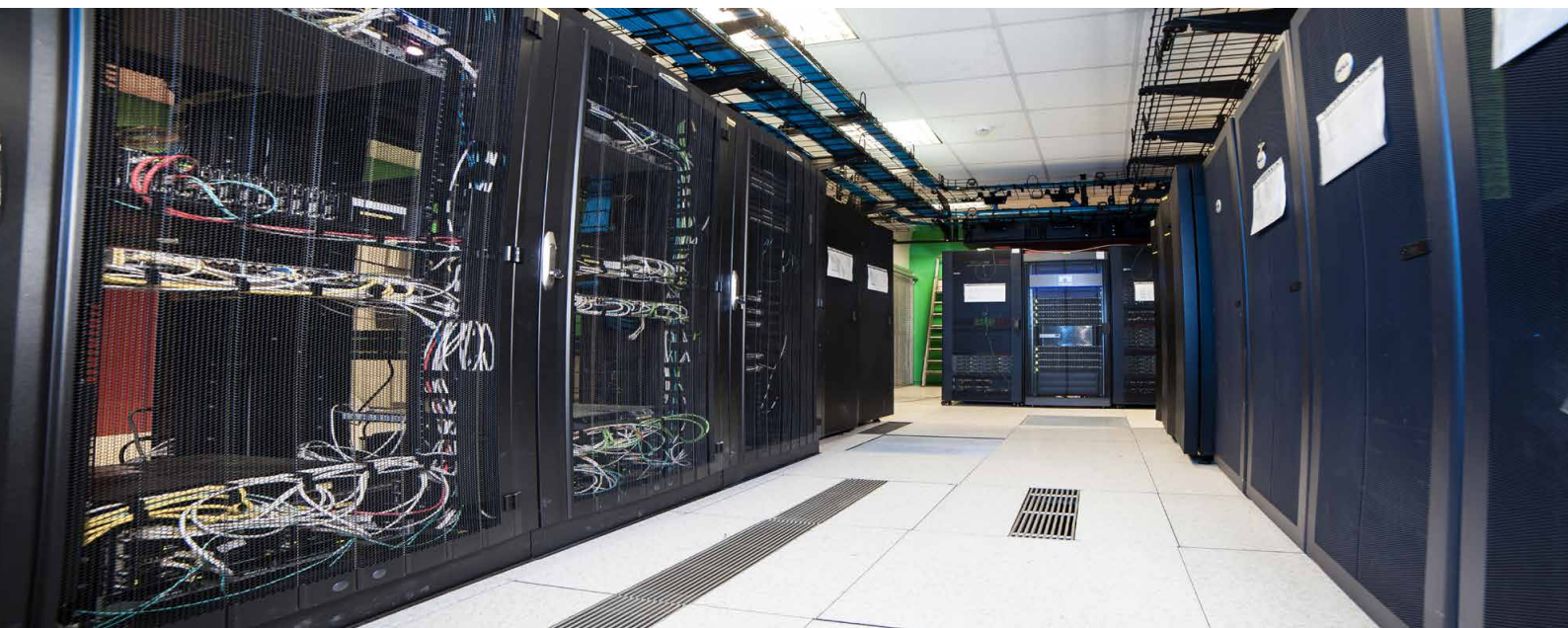
TECHNICAL SPECIFICATIONS

- Up to 200 racks can be hosted within the infrastructure
- Redundant electrical distribution, 460 kW of total electric power usable, electricity autonomy granted by 2 generators
- Latest generation smoke detection and fire extinguishing systems
- Video surveillance and access control system manned around the clock
- Redundant internet infrastructure using an "autonom system", with a transmission capacity of 2 Gbps, and multi-carrier architecture, protected by anti-DDOS systems.
- Complete redundancy of technological infrastructures and system management personnel, by means of the DC located in Pomigliano D'Arco (Naples)
- SAP certified provider for Hosting Services and HANA Operations
- ISO 27001 & ISO 20000 certifications for System Management and Hosting.

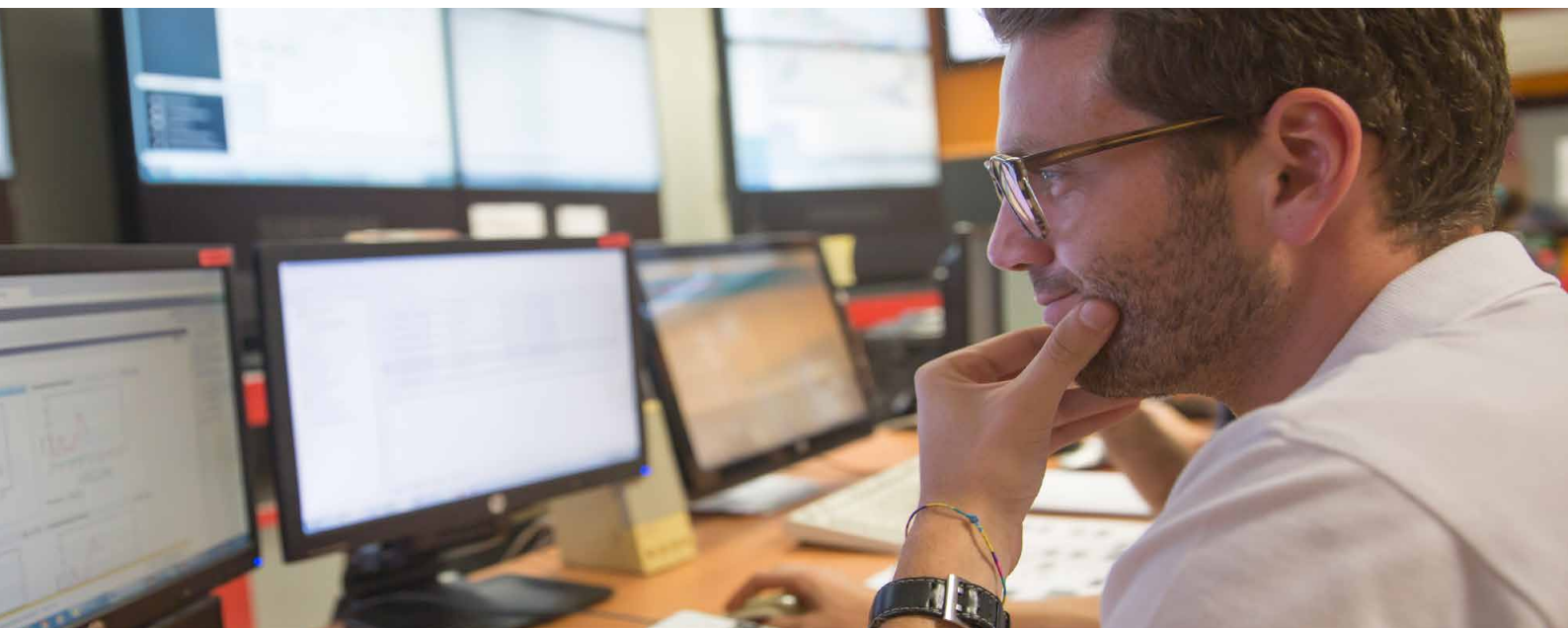## FROM "BROWN" TO "GREEN" FIELD DATA CENTER

The new datacenter is now organised into 2 areas, brown & green field, dedicated to the supply of both traditional IT services (brown) and cloud software defined services (green).

The brown field area works to support Leonardo business:

- 107 active racks
- +1,000 Physical Machines
- +5,000 Virtual Machines
- 1 Peta Byte of storage

The green field area offers advanced infrastructural and system application services to support cloud, ensuring flexibility, scalability, security and a very high level of automation:

- Among the main technologies used: hyper convergence, data storage in all flash technology, virtualisation of the network using VMware's NSX
- +2,400 Core, 25 TB RAM, + 700 TB Storage
- 30 active racks
- 120 Physical Machines
- 3,000 Virtual Machines can be hosted.

SOFTWARE DEFINED DATA CENTER

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