





"We are close so you go far, with our cloud infrastructure solutions"







#### Part of the IONOS Group

- IONOS is an ally and European leader for the digitalization of businesses and the construction of cloud infrastructure solutions
- > Web hosting provider leader in Europe with more than 10 brands:

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IONOS	Sedo Buy, Park, Sell, Domains	■ STRATO	united adomains
We <sup>22</sup>	WORLD4YOU		

- Over 25 years of experience in the main world markets
- Present in 18 European markets and North America, with clients all over the world
- More than 6 million clients (Sept 30, 2022)
- Operations in 32 datacenters
- > More than 4,200 employees
- > 22 million registered domains
- IONOS Group SE is a company listed in the Frankfurt Stock Exchange (ISIN DE000A3E00M1)
- > More than EUR 1,000 million revenue in 2021

### **Technology Innovation**

Among Arsys' commercial partners, we can highlight: DELL, HP, IBM, NetApp, Microsoft, VMware, Red Hat, SAP, Lenovo, Cloudian, Veritas, Veeam, Citrix... which guarantee the best technical performance to the services developed by the company.

These partnerships allow our clients to use the most advanced platforms and benefit from the best technical support.

#### The best Partners































































# The most prestigious certifications

To offer our customers the best services, we count with accreditations and certifications from the most renowned international organizations:

- ISO 50001 Certificate Maintenance and improvement of an organization's energy management system
- ISO 14001 Certificate Environmental management
- UNE-EN ISO 9001 Certificate Quality
- Internacional 27001 Certificate Data management security and efficiency
- AENOR Certificate in e-commerce good practices
- > SAP Cloud and Infrastructure Operations Services Certification
- Tier III, Certification Datacenter La Portalada (Logroño, Spain)
- Conformity with the Spanish Security Scheme (ENS), medium level











### **3**(SYS | European legislation

Data sovereignty

### Data protection in the digital economy

- Data are the main asset of businesses and public administrations. Their processing requires security and high-performance.
- The EU is promoting the creation of a Single European Digital Market that guarantees the law enforcement, protects user rights, promotes competitivity and boosts Data Economy.
- It is about establishing a common framework with the rules shared by all the Member States.
- **Data Spaces** are being created. They are ecosystems based on public-private collaboration designed to share data and information in a volunteer and trusted manner.
- Arsys is part of the main initiatives working to achieve this goal:



INTERNATIONAL DATA SPACES ASSOCIATION





• Arsys ensures the compliance of any cloud deployment, regardless of its architecture (Private, Public, Hybrid, MultiCloud....), leveraging the efficiency, scalability and flexibility of the laaS model.

**Datacenters** 

# Where do you want to host your servers?

Each project has its own needs, and comply with the regulation of each country is a must. With Arsys, you can choose in which datacenter to host your project: Spain, Germany, UK, and USA. All our datacenters count with the most rigorous security measures and certifications. Because, for us, the important thing is your project.



With Arsys, you can choose where to host your project among the 8 datacenters we have in Spain, Germany, UK and USA.

### Datacenters in Spain

#### Tier III Datacenter in La Portalada (Logroño)

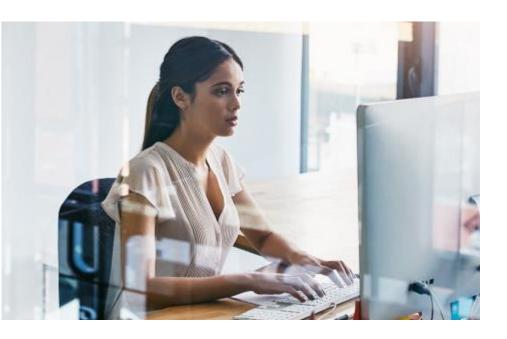
Our datacenter is certified as Tier III, guaranteeing 99,982% service availability.

A Tier III Datacenter has a main characteristic: it does not require service stops or interruptions for maintenance or equipment replacement, as it has capacity for concurrent maintenance and a redundant cooling system.

#### **Datacenter in Madrid**

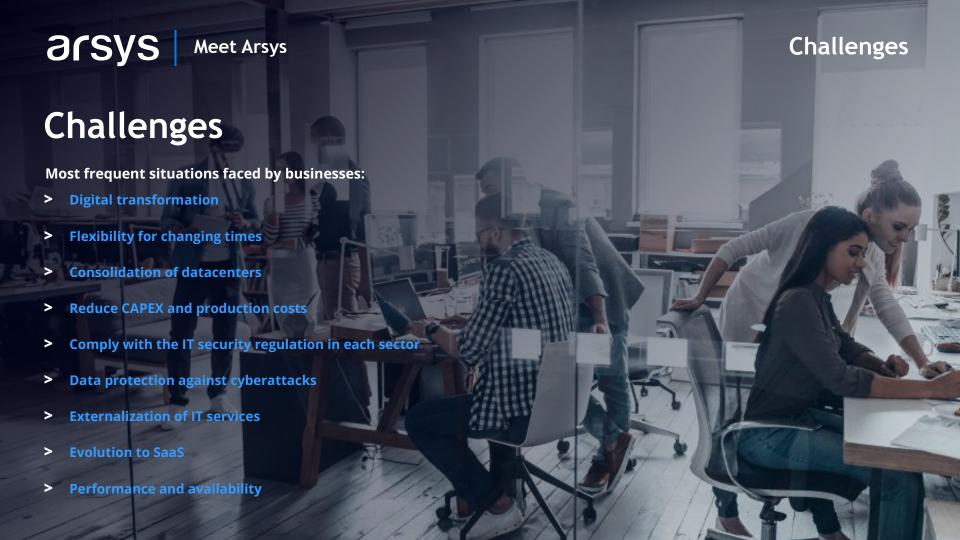
- > Neutral and accessible to the main telecommunication operators.
- > World first-class infrastructures providing a versatile environment and guaranteeing low-latency connectivity in Spain.
- > Certifications held: ISO 9001, 14001, 27001, 45001, 50001.
- > Operated according to the requirements of a Tier III datacenter.





#### Technology to the client's service

- > 8 datacenters in Spain, Germany, UK, and USA
- Redundant connectivity of 100 Gbps between the datacenter in Logroño and the neutral points, with a MetroLAN at the premises in Madrid
- > Internet connection through 3 providers and 9 neutral points
- Transoceanic redundant connectivity between Europe and USA (2x10Gbps)
- > Monitoring of more than 1,200 KPIs in La Portalada datacenter
- > Electrical supply coming from renewable energy
- Latest technologies in physical, logic and industrial security





Without initial investments or long deployment times, you will be able to create traditional physical architectures easier and cheaper than other solutions.

#### Cloudbuilder Next. Scalability and flexibility in the cloud.

This service is based on cloud solutions and fully developed by Arsys. It allows to manage all your infrastructure from an intuitive control panel. Or, if you prefer, Arsys can assume this management. Cloudbuilder Next allows your project to count on high availability, and moreover, in a pay-per-use model:

- > Snapshots and backup copies of cloud services
- > Shared storage
- > Unlimited data transfer
- > Firewall, IDS/IPS and load balancer
- > API availability for integration with external systems
- > VPN, private networks and additional IPv4/IPv6 addresses
- > Monitoring rules and alerts, and automated management
- > Backup copies of your platforms, hosted by Arsys or not
- Windows and Linux images available (Ubuntu, CentOS, Debian, CoreOS, OpenSuse)
- > Root access
- > SSD disks and state-of-the-art processors
- > User management and tools for automating tasks
- > Multiple server templates



Your virtual Software-defined Datacenter (SDDC), based on VMWare's hyperconvergence technology (vSphere, vSAN y NSX-T), allows to manage and distribute your own storage, network and computing resources.

- Pay-per-use, including licensing, without initial costs or Pago por uso, incluyendo licenciamiento, sin costes iniciales ni ningún commitment of permanence
- > All hardware is 100% dedicated, exclusively for you
- VMWare environment to benefit from all your previous knowledge and work with this technology
- Servers are configured in a redundant fault-tolerant cluster architecture, which starts with a minimum of three physical servers or nodes, and will allow to grow or decrease at your own pace
- The most basic cluster starts with three nodes (physical servers) that you can choose from 3 different models, according to the computing, RAM and storage capacity that best suits your project
- > All our servers incorporate cutting-edge technologies such as second-generation Intel® Xeon® processors and Intel® Optane™ NVMe memory
- Arsys manages the underlying VMware software and the hardware that makes up your service. If you use VMWare's administration panels, you will have total control of the management of what happens in that underlying infrastructure, without Arsys' intervention

#### IT Solutions: Private Cloud



Solution that allows to design different architectures, according to your project needs. Everything tailored and customized:

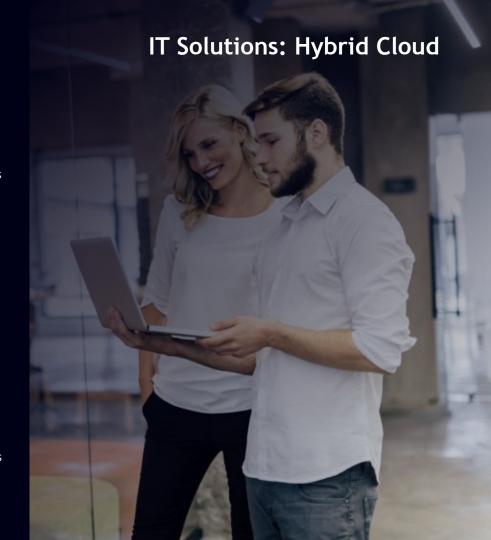
- > Infrastructure combining Public and Private Cloud.
- > Cloud architecture with physical equipment dedicated exclusively to you
- > You can host your cloud in Arsys and other services in different providers

#### **Hybrid Cloud functionalities:**

- Cloud servers with pre-configured sizes and options or in their flexible version, in with you can configure tailored resources
- > **Dedicated Servers** with resources exclusively for your project. You can choose among the many different available configurations
- > Private networks between cloud and dedicated environments
- Bandwidth up to 10 Gbps with unlimited traffic
- > Firewall policies, load balancers, shared storage, etc.
- > Advanced support and administration services

#### **Scenarios**

- > Create layered architectures with front-ends that adapt to demand peaks
- > Service test in pre-production environments to develop applications
- > Solve high-performance needs in business intelligence environments with high volumes of data



#### IT Solutions: SAP HANA



Our proposal includes both the deployment of front-end servers needed for the application layer (SAP App) and the infrastructure needed to host the databases (SAP HANA).

For the databases, we offer you two different options, always over appliances certified and optimized for SAP HANA, and connected through a fully-redundant 10 Gbps network:

- Dedicated Physical Appliances
- Virtual VMWare Servers

#### **Advantages**

- Gain flexibility with fully-customized infrastructure solutions, adapted to the needs and preferences of each project, in a pay-per-use model.
- Accelerate the deployment time with replicable turnkey solutions.
- Reduce the Total Cost of Ownership (TCO) as a result of economies of scale and a subscription model, without initial investments or commitment of permanence.



#### IT Solutions: Virtual Desktop

Desktop virtualization system that centralizes and delivers to your users workstations in the form of a service, regardless of where they are located.

This way, you can facilitate mobility or remote work to your employees, reducing the Total Cost of Ownership (TCO) and improving your data security. It is offered in two flavours:

- **Professional**. Volatile desktop which is created again at each user's connection with the applications configured in the corporate template.
- **Enterprise**. Persistent desktop which works as a PC and allows the installation of applications and user's customization.

#### **Characteristics**

- > Secure access from any device
- > Each uses accesses a dedicated and complete Windows desktop
- Monthly user subscription in a pay-per-use model, without any initial investment or commitment of permanence
- Based on Citrix technologies, with the best performance and correct device functioning
- Daily backups and ensured high availability
- Control panel for desktop and user management, monitoring, resource usage and alerts

#### IT Solutions: Cloud Backup



Service to make backup copies of your servers and devices, Windows or Linux, virtual or dedicated, regardless of where they are hosted,

- **Backup and flexible** restoration: files, folders, applications, volumes, full device... with the frequency and maintenance required by each project.
- Easy management from a control panel: it allows performing restorations and configuring a backup policy.
- > **Speed**: offer a full backup, security copies are made in an incremental manner, so the process is faster and more efficient.
- **Version control:** you can choose the most appropriate version to restore your server.
- Permanent availability: backup copies stay in the cloud until they are deleted (or until the subscription deadline) and can be recovered up to 30 days later.
- **High security standard:** AES-256-Bit encryption and personal password for the data storage (optional) and SSL encryption for data transmission.

It allow storing, archiving and create backup copies of large data volumes, guaranteeing the protection of critical, confidential or sensitive data and the most complete security measures.

#### **HCS**, high-performance cloud storage

File and object storage in a flexible and scalable architecture with lower costs than in traditional storage architectures. This service can be used independently from any other, even without nothing else contracted.

#### **EPCS y HCS, storage for services hosted by Arsys**

These storage models are the natural storage option for cloud processing services hosted by Arsys (<u>Cloudbuilder Next</u> and <u>Dedicated Servers</u>). EPCS storage is a medium-performance service, whereas HCS allows high performance.

#### ISCSI Disk, ideal for hybrid cloud environments

This cloud storage model serves as external storage accessed by block protocol for the physical component of these environments.



Each business model is different and so are the security measures it needs. Therefore, we offer solutions that range from the most basic to specialized layers:

**Secure connectivity via VPN (SSL or IPSEC)** through the establishment of tunnels that allow encrypted connectivity with the services deployed in the DPC.

**Firewall deployment** to locate the servers with external connectivity in a demilitarized zone (DMZ), preventing an intruder to access the internal network if these servers are breached.

Implementation of an intrusion detection and prevention system (IDS/IPS). Monitoring of connections and alerts for non-authorized access or protocol misuse.

**Deployment of equipment with mixed functionality** (antivirus, firewall and others), as a Unified Thread Manager (UTM) that manages most cyber threats affecting a business in a unified manner.

**Web Application Firewall (WAF)** that acts avoiding the malicious connections that arrive to the website, and therefore business losses.

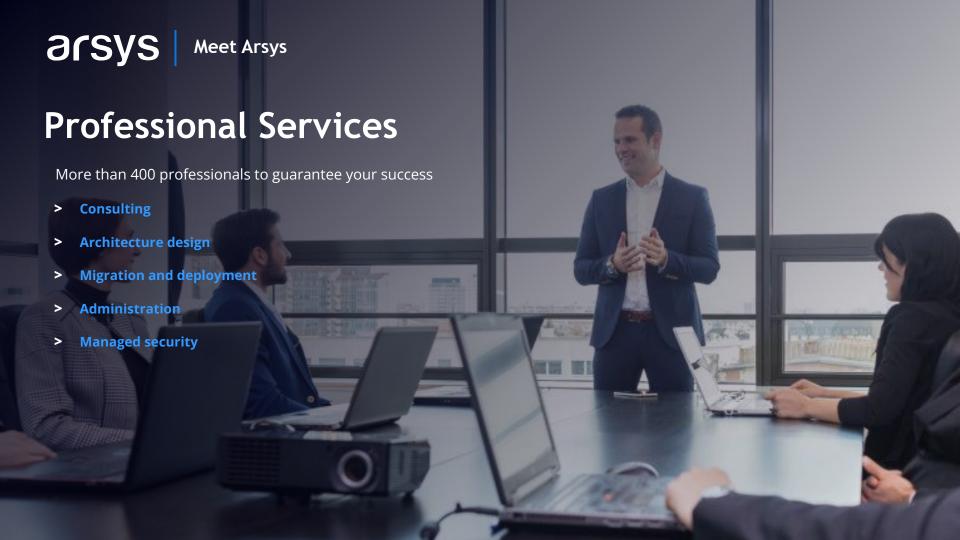
**AntiDDoS (Distributed Denial of Service),** which mitigates the effects of an attack if the implemented measures are adequate. Otherwise, the website can become inoperable.











#### **Professional Services**

#### Consulting

New technologies advance at a dizzying pace and it is difficult to have sufficient knowledge of each solution, platform or tool. Arsys mitigates this issue with a specialized consulting team that provides tailored solutions for each need.

- **Experts in architectural design** who provide a professional vision to achieve efficient platforms. It is also useful to know the variety of ways that make an infrastructure work or how to migrate to the cloud.
- A specialist team that helps more than two hundred thousand clients every day is a reason for peace of mind when resolving an incident or identifying an error along with its possible solutions.

#### **Custom Architecture Design**

We work with you to design the most suitable architecture for your project. These are the steps for designing your infrastructure:

- 1. Understand your needs, both at technical and business level.
- 2. Evaluate the different architectures and/or solutions that cover the exposed needs.
- 3. Assign a project manager who takes care of all tasks and coordinates with your technical team the entire process until the completion of the deployment and migration.
- 4. Our business support team will be at your disposal to help you with any tasks you need. (Optional)





#### **Professional Services**

#### **Migration and deployment**

- These jobs include, for example: addressing the deployment or implementation of a new infrastructure, configuring all the software involved (operating system, applications, intermediate systems, databases, cache systems, single sign on, radius, etc.)
- Our team of engineers can take care of the initial deployment and configuration of your platform:
  - If we participated in the design of your solution, we already have the knowledge and the important details for its configuration and implementation would remain.
  - If we did not participate in the design of your solution, we will review the existing documentation to assess the effort required and understand the different tasks to be carried out. Once the proposal is approved, we will define a timing and the pending details.
- We will assign a project manager to manage the internal and external resources involved and a project plan will be drawn up, starting with the implementation after acceptance of the minutes.
- Once the implementation is completed, you have an acceptance period to verify that the platform meets the required specifications

#### **Professional Services**

#### **System Administration**

We offer different administration services:

- **Hours of system administration** that cover specific actions in which you need professional help to investigate a problem or resolve it on the server or platform.
- **Basic administration**. We are in charge of monitoring the managed infrastructure and managing the operating system, including patches and incidents that arise from monitoring.
- Advanced administration. In addition to the basic tasks, it includes the administration of the most critical elements such as network elements or database management systems.

#### **Managed Security**

- Our technical staff manages:
  - > The most appropriate security policies to meet all your requirements.
  - > Alerts generated from the management console.
  - > Removal of malware, with execution of previously agreed actions.
- Vulnerability Management Service: quick and complete information on your server's vulnerabilities.
- Malicious Code Control Service: detects and cleans malware, minimizing the impact on the performance of your servers.



### **Partners**

"We build, together with our partners, comprehensive solutions for our clients. The solution you need requires specific knowledge and capacities. That's why technology specialization in the IT world is key, and counting on the best in each field allows us to build the perfect solution for you."

Alberto Fernández Díaz. Director of Business Development and Alliances





Together with our most specialized partners, we accompany you throughout any digitization project, from the simplest to the most ambitious, but always offering a personalized proposal tailored to each business.

#### **Disaster Recovery Plan (DRP)**

- A DRP is a recovery process that covers critical data, hardware and software so that a business can continue operations again in the event of a natural or human-caused disaster.
- > To design a good plan it is necessary to define the RTO (Recovery Time Objective) and the RPO (Recovery Point Objective).

#### **Outsourcing**

- The emergence of Cloud platforms has caused company infrastructures to be outsourced to external providers such as Arsys, to connect local networks with the infrastructure deployed through VPN or through an MPLS line.
- Service outsourcing brings multiple advantages: lower costs thanks to a pay-per-use model, faster deployment of services, reduced investment, automatic updates, ease of management from a control panel, and security. that your data is in a secure and redundant system.

#### **Web Platform**

- Our shared hosting platform is the ideal option for presence websites, for small businesses or for larger projects in need of a tailored platform with dedicated resources.
- Our technicians take care of the setup, deployment and configuration of your service. If you want, we also take care of your server management with monitoring and maintenance tasks.
- Our platform outstands for its high availability, security, flexibility and scalability, load balancing, monitoring and log control services, etc.

#### **Internet of Things (IoT)**

- We accompany you to create an IoT cloud environment from the design to deployment, production readiness and further operation.
- > We facilitate an agnostic platform easily adaptable to any protocol so it fits your needs. Once the databases are deployed in our cloud solution, we can automatically adjust the platform resources.
- > Thanks to the exhaustive monitoring, we can tailor your solution to your particular needs: from resource increases to deployment in hybrid platforms. Furthermore, you can also host your Business Intelligence and Machine Learning tools.





#### **DevOps-Kubernetes**

- This cloud solution allows an easy container management through an orchestrator. This way, you can manage applications in an easy and secure way.
- Orchestration allows for centralized host management, ease of scaling and self-scaling, container high-availability and load balancing among the different nodes. It can be managed by your DevOps team or by Arsys in a KaaS model.
- > Kubernetes allows for continuous integration, when combined with other tools such as Jenkins, GIT or Sonar Qube. All of it with the benefits of the cloud (flexibility and pay-per-use) and the guarantee that Arsys will take care of the platform management.

#### **MultiCloud Environments**

- Adopting a multicloud environment allows for the most appropriate solution for your project.
- The advantages of deploying your infrastructure in different cloud solutions are: flexibility, increase in data security and reduction in the number of vulnerabilities.
- Arsys Hybrid Cloud solution comes with combined public and private environments to safely host your project's "core". In parallel, we offer you the possibility of connecting with any public cloud provider with the support of our experts.

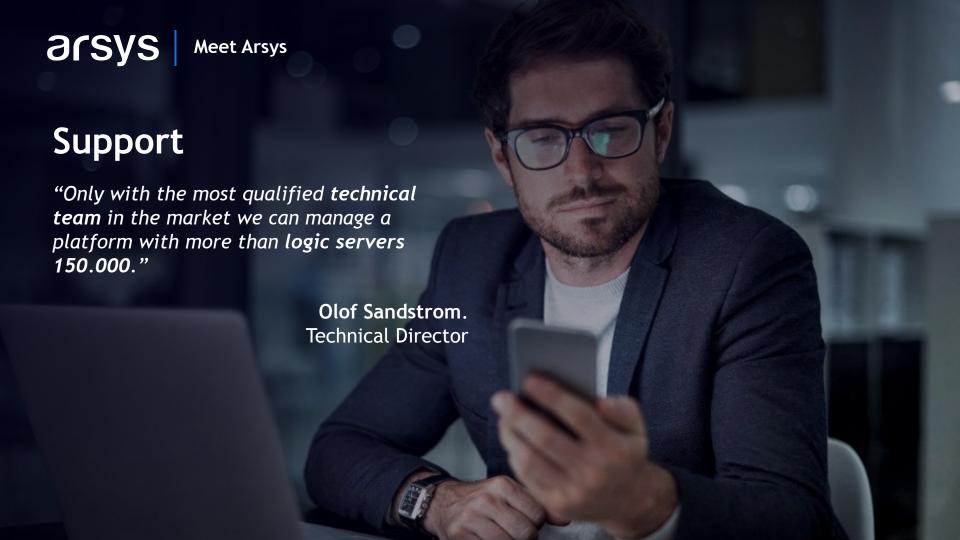
#### **Business Intelligence**

- Experts in provisioning infrastructure to host the tools needed to analyze data in an efficient way and acquire the knowledge to make better business decisions.
- Hybrid platform ideal to host data: reliable, with a scalable cost model and easy to manage. With a wide range of equipment that incorporates local SSD disks or express Non-Volatile Memory (NVMe).
- Deploy data analytics solutions with a rapid growth of resources, both in scale in and scale out architectures. We provide hyperconvergence solutions, block and object storage services to choose the most appropriate architecture for your application.

#### **Business applications**

- High-scalable platform for your business applications, so you can increase the resources of your machines or the number of deployed servers even occasionally, paying only for the use you make of them.
- > We ensure the performance of all your application layers with the latest technologies: from load balancers to ultra-low-latency cabins, including backup systems to guarantee a high rate of data recovery.

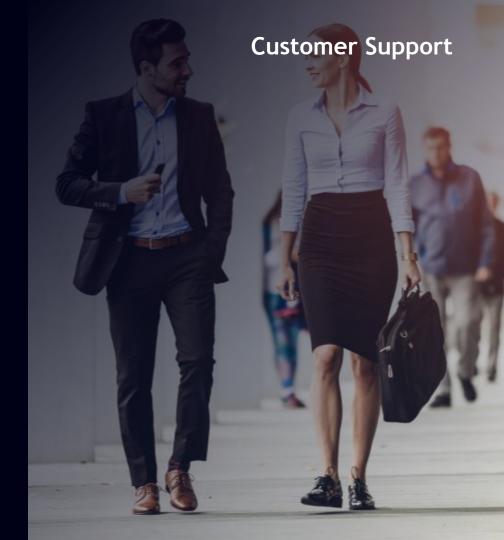




### Support levels

To meet the specific requirements of our business customers, we offer three professional support levels:

- **Advanced Support.** Solve your questions by contacting directly and without intermediaries to our level-two technicians, who monitor and manage our platforms 24/7 and have direct access to the infrastructure.
- >Premium Support. Enjoy the advantages of counting 24/7 access to the Technical Account Manager (TAM) assigned to your project as the single technical contact within Arsys. The TAM es ideal for complex and critical solutions, as he is a highly-qualified expert involved with your IT team in daily routines, becoming part of it. He also streamlines communication between both organizations, escalates an issue, prioritizes your requests, etc.
- > Service Manager. Count with a tailored service in which an IT manager works exclusively to ensuring compliance with the commitments agreed between you and Arsys, the objectives and the quality of service. You can review with him:
  - > Integral service management
  - > Crisis management
  - > Service provisioning and optimization
  - Quality of service assurance





# Our team, always in service to the customer

- Tailored projects
- Pre-sales team
- > 1,700 contacts solved daily: more than 620,000/year
- > More than 400 high-qualified professionals
- Own Contact Center, 24x7 and multi-channel
- 33% of Arsys' employees are devoted to Customer Service and Technical Support
- Certified training
- > Experts in migration, management, consolidation and optimization
- > Innovation: 24% of the staff involved and more than 100 projects executed per year

#### arsys Contact us

### Sara Madariaga

Head of Arsys Lab



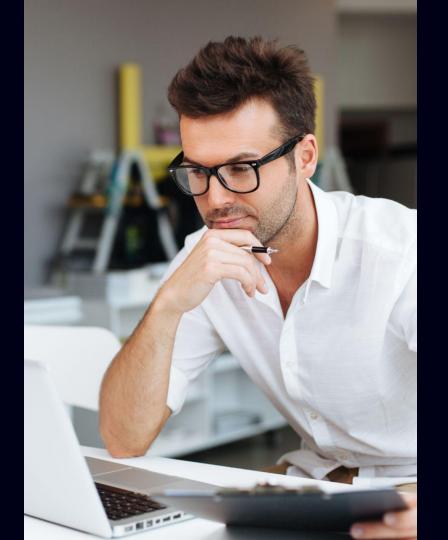












## arsys La tecnología cercana











