

Turkey's largest telco ensures critical top-to-bottom data protection with NetBackup.

VERITAS™

## OVERVIEW

### Telecoms giant leads sector in IT innovation

Türk Telekom, Turkey's first and largest integrated telecommunication operator is working diligently towards the goal of answering the evolving needs and expectations of its private and corporate users, while making its mark on collaborations with prominent companies in the IT sector.

An example of this is the Türk Telekom Data Protection Vision, an ongoing collaboration between Türk Telekom and Veritas. Türk Telekom's priority in fulfilling its compliance with the national and international regulations and standards, and in parallel, providing computational scalability and security on a corporate level, forms the basis of the collaboration.

Türk Telekom's history stretches back 180 years. In 2015, Türk Telekomünikasyon A.Ş. adopted a "customer-oriented" and integrated structure in order to respond to the rapidly changing communication and technology needs of customers in the most powerful and accurate way, while maintaining the legal entities of TT Mobil İletişim Hizmetleri A.Ş. and TTNET A.Ş. intact and adhering to the rules and regulations to which they are subject. Having a wide service network and product range in the fields of individual and corporate services, Türk Telekom unified its mobile, internet, phone and TV products and services under the single "Türk Telekom" brand as of January 2016.

"Turkey's Multiplay Provider" Türk Telekom has 16.4 million fixed access lines, 13.6 million broadband, 3.1 million TV and 23.3 million mobile subscribers as of March 31, 2021. Türk Telekom Group Companies provide services in all 81 cities of Turkey with 34,863 employees with the vision of introducing new technologies to Turkey and accelerating Turkey's transformation into an information society.

### REINFORCING THE IMPORTANCE OF DATA BACKUP

Veritas provides solutions for data protection, data archiving, and business continuity that serve Turkey's—and the world's—largest corporations. It follows that the primary goal of the Türk Telekom Data Protection Vision is to achieve continuous and simultaneous progress on many initiatives within a very extensive and diverse organization.



#### ORGANIZATION PROFILE

Website: [turktelekom.com.tr](http://turktelekom.com.tr)

Industry: Telecommunication

Headquarters: Ankara, Turkey

Employees: 34,863 (as of Q1'21)

#### KEY CHALLENGES

Türk Telekom needed to fulfill compliance requirements associated with national and international telecommunications regulations and standards and simultaneously provide computational scalability and security across the corporation.

#### SOLUTION

Creation of Türk Telekom Data Protection Vision, a collaboration between Veritas and Türk Telekom, including Veritas NetBackup™, 8 Veritas NetBackup 5340 Appliances with 3PB of data in total and customized Veritas Business Critical Support Remote Product Specialist (RPS) services.

#### BENEFITS

- 5-year ROI through 83% reduction in backup storage requirements, 80% reduction in OPEX, and other savings
- Increased performance due to comprehensive and end-to-end investment in backup solutions
- Virtual server restore times reduced to just hours
- Improved utilization of new technology through standards-compliant infrastructure investment
- Increased operational success rate alongside improved scope and understanding of support
- Agile and easy to manage structural transformation
- Achieved capacity and operating cost efficiency objectives while minimizing impact on live systems

The backup team, which operates within the Türk Telekom Data Storage and Backup Management function, offers data backup service to internal and external customers within the framework of the Directorate of Technology serving its landline, broadband, and mobile business units. Operations for internal customers are carried out at the data centers located in Ümitköy, Gayrettepe, Ahlatlıbel, Güneşli, Ümraniye, Esentepe, and Esenyurt. As a result, Türk Telekom has an industry-leading team able to deliver comprehensive backup services.

The concept of data backup is essentially copying the original data from its source environment to target devices, to prevent data loss. Backup procedures are designed to meet two fundamental objectives: recovery point objective (RPO) and recovery time objective (RTO), which refer to the maximum acceptable period of data loss and time to recover in the event of a possible disturbance.

In the Türk Telekom environment, approximately 1 PB of data is backed up each day in three main backup points, with more than 200 thousand tasks performed daily. This represents Turkey's largest data storage and processing environment in the field. Türk Telekom's Technology Innovation Project is an ongoing initiative supported by teams of Veritas experts. It has consistently delivered varied, significant, and measurable business benefits such as improved customer satisfaction, operational cost savings, and data loss prevention. For example, the restore success rate achieved has reached 100 percent, while the backup success rate currently stands at 99.9 per cent. This is thanks to the progressive and proactive approach adopted by the project teams combined with Veritas technology.

## **DATA SECURITY IN EVERY STEP**

While boosting corporate immunity to cyber attacks, which is a fundamental problem of our day, the resilient Veritas architecture also provides reassurance against those attacks through data protection functionality. For Türk Telekom, this security shield delivers customer satisfaction and trust on a corporate and private level. The architecture minimizes the impact of human error, while offering a comprehensive disaster recovery perspective.

As required in its line of business, Türk Telekom must comply with many national and international regulations and industry standards. The collaboration with Veritas has lent additional compliance competencies to the company's own investments in meeting all these regulations and standards.

In particular, the collaboration with Veritas has enabled business processes that are compliant with regulations and legal obligations as well as a sustainable alignment among different teams. At the same time, Türk Telekom's backup data is kept encrypted. This means that the data on the backup media cannot be read outside of the backup systems, which significantly enhances data security. The solution achieved with Veritas makes it possible for Türk Telekom to generate income through these services in addition to managing the environment while generating operational savings. By backing up only changed data, the company maximizes its capacity efficiency, allowing its environment to keep growing while generating operational savings.

Veritas NetBackup has been deployed across three business units. This integrated architecture provides a structure in which cloud platforms are ready to use, as well as a central backup service to remote users, including Türk Telekom's customers and those within company.

In this architecture, the priority is always transferring the first backup copy to dedicated disc systems to ensure performance and data integrity. Offering backup services while minimizing the live system/go-live and implementation impact minimizes downtime in the event of possible errors, problems, and failures. In some environments, this time is now just seconds.

*"The investment in data backup technology improvements with NetBackup and NetBackup Appliances has enabled over 70 percent savings in maintenance, use of space, energy, effort, air conditioning, and ultimately all OPEX categories at Türk Telekom."*

— Fatih Bekin,  
Data Center and Cloud  
Services Director,  
Türk Telekom

In addition, all kinds of data deduplication and compression techniques are used within the environment at Türk Telekom. Based on the competence of Veritas, these techniques deliver unique advantages in the performance of backups and restores. They reduce the live system/go-live impact as well as capacity efficiency.

### PROVIDING PROACTIVE SUPPORT

Veritas is instrumental in ensuring Türk Telekom can proactively deliver critical services like risk analysis and health check activities. With the support of Veritas solutions, Türk Telekom shows its strength by being able to send necessary notifications to the data owner. With architecture support from Veritas and by working with a local systems integrator, Türk Telekom can resolve issues rapidly. Veritas Business Critical Services Remote Product Specialist (RPS) support is key for such an important environment.

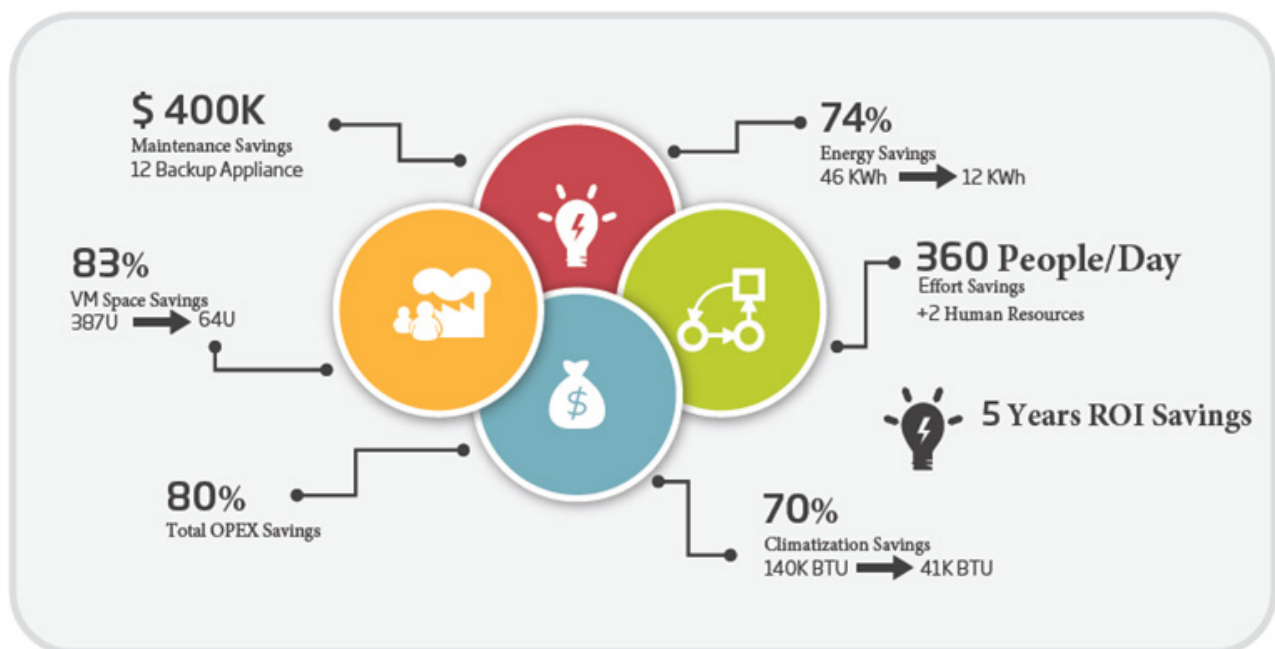
Rapidly providing backup support for new workloads enables agility in company decisions, and Türk Telekom has made it a priority to leverage the benefits of various disk-based or tape products to generate business benefit. This comprehensive and resilient architecture provides the opportunity to expand vertically or horizontally. The environment is specific to Türk Telekom and can grow rapidly under the guidance of Veritas, enabling the implementation of flexible solutions.

### CLEAR GOALS, SUBSTANTIAL OUTCOMES

With a goal of pioneering and leading technology management infrastructure within the industry, Türk Telekom has defined increasing infrastructure backup performance and capability as a priority — to realize its goal of ensuring a 99.9% backup completion rate and a 100% restore success rate.

Ensuring reporting and capacity management efficiency within this framework was as important as enabling proactive environment improvements. This roadmap makes it possible to offer backup management as a service while also reducing operational expenditures (OPEX).

### TECHNICAL OVERVIEW





*"By leveraging dedicated Veritas technical support services (RPS), Türk Telekom is able to provide the right level of information and awareness to its data and environment owners, including proactive services such as risk analyses and health checks."*

— Fatih Bekin,  
Data Center and Cloud  
Services Director,  
Türk Telekom

The investment in data backup technology improvements with NetBackup and NetBackup Appliances has enabled over 70 percent savings across maintenance, use of space, energy, effort, air conditioning, and ultimately all OPEX categories at Türk Telekom. In terms of technology benefits, backup/restore performance increased by 32 percent, on average. In addition to SLA compliance, improvements in RTO and instant virtual machine (VM) restores were realized; in fact virtual machine restore time was reduced to zero.

Reductions in of go-live/live system impacts were achieved through the use of deduplication technology in the client's data backup and data restore operations. Conducting data protection operations by using an isolated network infrastructure has also reinforced speed and security. Automation, monitoring, reporting, and L1 rotations have also delivered benefits. Türk Telekom now has system compatibility and benefits from 80% OPEX savings.

All these investment benefits entailed an increase in service quality as well. Restore and backup success rates reached targeted levels. Considerable improvements in error, problem, and failure response times were also achieved through this investment.

## FOR MORE INFORMATION

Please contact your local Veritas Sales Representative or Business Partner, or visit:

[Veritas NetBackup](#)

[Veritas NetBackup Appliances](#)

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## ABOUT VERITAS

Veritas Technologies is a global leader in data protection and availability. Over 50,000 enterprises—including 87 percent of the Fortune Global 500—rely on us to abstract IT complexity and simplify data management. The Veritas Enterprise Data Services Platform automates the protection and orchestrates the recovery of data everywhere it lives, ensures 24/7 availability of business-critical applications, and provides enterprises with the insights they need to comply with evolving data regulations. With a reputation for reliability at scale and a deployment model to fit any need, Veritas Enterprise Data Services Platform supports more than 800 different data sources, over 100 different operating systems, more than 1,400 storage targets, and more than 60 different cloud platforms. Learn more at [www.veritas.com](http://www.veritas.com). Follow us on Twitter at [@veritastechllc](https://twitter.com/veritastechllc).

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