



SUCCESS STORY
IT Services



T-SYSTEMS | PROBLEM SOLVED

T-Systems works with the NetApp Advanced Operations Services (AOS) team to deliver cost-effective, secure, highly available cloud services to its customers.

T-Systems Sets the Standard for Zero Outages

T-Systems is one of the world's leading providers of information and communications technology. With nearly 20 years of experience in outsourcing, system integration, networking, and cloud computing, T-Systems has earned the trust of some of the world's largest organizations. A cloud-computing pioneer, T-Systems continues to innovate and has set a new industry standard for 100% uptime for its cloud services with its Zero Outage Program.

0

downtime for **14** of **20**
business units

20

minutes response time
for incidents

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“NetApp AOS serves as a glue that joins our operations and engineering teams with NetApp’s support, presales, and professional services teams. No other vendor has this kind of global setup and local presence.”

Dusan Liba
Head of Dynamic Services Operations Europe, T-Systems

Customers around the globe rely on T-Systems’ cloud services to help them change the world with data:

- An energy and petrochemicals company depends on exploration data to provide an affordable, reliable fuel supply to more than 25 million people.
- An automobile manufacturer uses real-time traffic data to help drivers reach their destinations faster and more safely.
- A medical device company uses location data to help elderly people continue to live independently.

For continued success, these customers count on T-Systems to ensure that their data is secure and available, precisely when and where they need it.

RAISING THE BAR FOR AVAILABILITY

Five-nines availability has been an industry standard for many years. With data growing in volume and importance, today’s customers are asking for 100% availability. By focusing on delivering 100% uptime—or “zero outages”—T-Systems is addressing customer demands and setting a new industry standard for enterprise availability.

Although technological advances make 100% availability achievable, delivering it is a challenge in a complex, modern infrastructure with numerous partners and interdependencies. To push uptime closer to 100%, T-Systems developed its Zero Outage Program, which establishes best practices to maximize the security and availability of its cloud services. The program includes a set of four key performance indicators (KPIs) to which vendors, including NetApp, must adhere. To keep downtime to a minimum in the event of an incident, vendors must:

- Respond within 20 minutes of an incident being reported.
- Restore service within 4 hours.
- Submit a root cause analysis within 3 working days from the date the incident was resolved and closed.
- Develop and apply any work-arounds or solutions to address the root cause of the incident within 30 days for a single issue, or 60 days for multiple issues.

GETTING TO ZERO WITH TEAMWORK

Delivering continuous availability in a complex environment requires more than processes and procedures. It also requires teamwork.

BUSINESS BENEFITS

- Enables 70% of T-Systems business units to achieve zero outages; 95% achieve 99.999% or higher availability
- Allows cost-effective delivery of secure, highly available cloud services
- Helps T-Systems share what it has learned with the broader industry, enabling continuous collaboration and development of best practices

“Thanks to NetApp’s AOS team, our operations are more productive and efficient. We spend less time dealing with support cases and escalations.”

Roman Romanec
IT Systems Storage and Backup Operations, T-Systems

Since 2010, the NetApp AOS team has collaborated with T-Systems business units around the world to deliver services in the company’s cloud and multitenant environments. When T-Systems implemented its Zero Outage Program in 2015, the NetApp AOS team became certified as a Zero Outage Vendor.

“NetApp AOS serves as a glue that joins our operations and engineering teams with NetApp’s support, presales, and professional services teams. No other vendor has this kind of global setup and local presence,” explains Dusan Liba, head of T-Systems Dynamic Services Operations Europe.

As a certified Zero Outage Vendor, the NetApp AOS team continuously streamlines management of the NetApp environment through improved technology and automation to help T-Systems achieve its goal of sustaining 100% uptime. NetApp® AutoSupport® data in Active IQ and custom AOS reporting tools help identify and assign a risk rating to each business unit. By addressing the risks and lowering the risk rating, the NetApp AOS team has been able to achieve 100% uptime in 14 of 20 business units for

the past year. The remaining business units achieved 99.999% with just one achieving 99.99%. If an incident occurs, NetApp reliably reacts within the required 20 minutes to meet the Zero Outage KPIs. This proactive approach helps T-Systems deliver highly available services while avoiding the costs of downtime and the SLA penalties associated with it.

“Thanks to NetApp’s AOS team, our operations are more productive and efficient. We spend less time dealing with support cases and escalations. Having NetApp AOS resident engineers interwoven into our operations teams allows us to enjoy insider-level expertise delivered on our doorstep,” says Roman Romanec, global head of T-Systems Storage and Backup Operations.

T-Systems relies on its NetApp residents and support account managers to have a deep and broad understanding of the entire T-Systems environment, which they use to provide guidance and help solve issues that may not be related to NetApp equipment. Through the Zero Outage Program, NetApp, and T-Systems have become trusted partners with a shared goal of

ZERO OUTAGE INDUSTRY STANDARD ASSOCIATION MEMBERS

- Brocade Communications Systems, Inc.
- Cisco Systems, Inc.
- Dell EMC
- Hitachi Vantara
- IBM Corporation
- Maincubes One GmbH
- NetApp, Inc.
- SAP SE
- SUSE PLC
- Swisscom AG
- T-Systems International GmbH

providing customers affordable, highly reliable cloud services. “We have the resources and expertise we need in the right place and at the right time. The level of integration between NetApp and T-Systems, enabled by the AOS team, is unique in our environment,” says Liba.

SETTING A NEW STANDARD

In November 2016, inspired by its own internal success, T-Systems created the Zero Outage Industry Standard Association, of which NetApp is a founding member. The association brings major technology companies together to define an industry standard for IT quality by combining knowledge and experience. Professionals from member companies, including Cisco, IBM, and SAP, work as partners, exchanging information and learning from

each other. The goal is to develop a common standard for IT processes, platforms, people, and security to ensure stable, secure IT services for all customers.

In September 2017, following the first Zero Outage Executive Summit, the association agreed to expand its membership to include global enterprises. The inclusion of customers makes it possible to address challenges and expectations on all sides. Working on principles of trust, transparency, flexibility, and agility, members continually provide best practices that enable all services providers to edge closer to delivering 100% availability.

SOLUTION COMPONENTS

NETAPP SERVICES

SupportEdge Premium

Support Account Managers (5)

Escalation Engineers (3)

Resident Engineers (5)

Project Managers for Disk Replacements (3)

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+1 877 263 8277



NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit www.netapp.com. #DataDriven

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