InT|Trust
Information Technology Trust

BUSINESS CONTINUITY
Migrating to the IBM Cloud in a new era of operation and cloud-based business processes.

About InTTrust

InTTrust was founded in 2006 as an IT Consulting, Technology and Digital solutions provider. During these 15 years, InTTrust has built a significant track record of Implementation and Support services, IT Managed Services, Cloud Infrastructure Managed Services, MSaaS (Monitoring and Support as a Service), BaaS (Backup as a Service), DSaaS (Databases Services as a Service), SAPaaS (SAP as a Service) Design and Implementation of Private/Public/Hybrid Cloud services.

'We make advanced IT solutions simple & deliver what we promise'

It is part of InTTrust's capabilities to provide Application services that include Information Management, Application Development, Engineering, Data and AI, Dynamic Infrastructure services to deploy and support customers' infrastructure onsite, on the Cloud or on Hybrid models, DBA services, Digital Transformation Solutions, Custom Applications Development, Multi-Cloud Integration, Cloud Governance & Security, IoT and ML/AI solutions.

IBM
Platinum Partner

THE CUSTOMER

The headquarters of TRAINOSE is in Athens, but the company maintains offices and operates across the geographic territory near its network. Trains of TRAINOSE serve thousands of citizens who wish to travel all over Greece, as well as in urban centres daily. The company profile is indissolubly linked to the professionalism of its employees and its specialized staff is trained to promote and improve our services for its customers. For TRAINOSE the main priority is its excellent relationship with the passengers and the shielding of values, such as respect, mutual trust, and credibility.

THE NEED

- TRAINOSE had to adopt a solution for running their business more efficiently. During the last years, their internal business processes and the market landscape changed a lot
- TRAINOSE IT business unit had to map all these business requirements to IT solutions that would provide faster time to market for new passenger services, increate their IT resiliency so as to offer their services to passengers 24×7 and at the same time perform a cost-efficient technology refresh

THE SOLUTION COMPONENTS

IBM Cloud
- VMware solutions on the IBM Cloud (dedicated bare metal servers running VMware ESXi, VMware vCenter and VMware Site Recovery Manager)
- IBM Cloud File and Block Storage
- IBM Cloud Network Services

MS SQL Database
- Used to host database workloads and use features such as Always On availability groups for Database availability between sites

Check Point NGFW
- Used to secure infrastructure's communications

Citrix ADC (NetScaler)
- Used for Load balancing and Web Application Firewall (WAF) features for extra protection and service availability

Dell EMC NetWorker & DataDomain technologies
- Used as the backup and recovery solution for all application and server workloads

InTTrust Monitoring & Helpdesk solution
- 24/7 Monitoring, alerting and Helpdesk solution (MSP)

InTTrust is using an advanced support and monitoring practice including ITIL methodologies, applications and an experienced team of support practitioners to address and resolve in a very short time any incidents, which may arise during the project establishment and stabilization.

MEETING THE CHALLENGES OF TRANSFORMATION THROUGH THE CLOUD

SOLUTION DESCRIPTION

TRAINOSE is operating high critical business systems in the context of rails management control, passenger information and online ticketing system, Web portal with real-time feeds etc. It is operating an on-prem primary data centre and IBM cloud secondary data centre with real-time data synchronization. TRAINOSE has been recently privatized and has decided to relocate and re-establish its data centre operating under a new building.

- There are many critical applications in the railway business in almost near real-time. The business is running continuously even during weekends with a significant impact on transportation since the client is operating the peripheral rails in a 5m people megacity (Athens, Greece) and the long railway across the country
- The relocation itself should have minimal non-service time since the client has a high impact on society (passengers) and commercial transportation (goods)
- There are real-time applications such as online ticketing (web and mobile) and control railway systems
- There are online telephone and support services including a hot-line agency system
- The client is using IBM Cloud infrastructure and technology components with customized advanced monitoring and supporting mechanisms to provide the continuous operation for critical mission applications
- The services are designed, implemented, and operate as 3 tier applications, using WEB front, application, and a database tier. All critical databases on-premises primary and in DR site are in active-active failover mode
- Critical mission applications are Tickets, Goods transport, the organization's main site, and the Hercules service that collects the income from the tickets sold from the organization's agent representatives
- Tickets: Sold at the organization ticket booths and Online (Site, Mobile App)
- Goods transport: A service provided to Internet customers, an Internet browser from a customer's device, is used to access the Goods Transport service through the load balancers
- The organization's main site: Is public and offered from the WEB front organization servers. The same WEB front servers are for used tickets for online selling
- Hercules: Service accessed from special organization offices using Vodafone MPLS network
- Similar infrastructure is used in DR, using single instances. When operating in a disaster recovery site TRAINOSE critical services (application and database servers) must be re-configured by TRAINOSE IT application owners to have network access to the appropriate DR servers
- Our solution also is using the best practices in the context of business continuity operation, facilitation, monitoring for switching from/to Primary and DR system

THE BENEFITS

- Confidence in the public transportation industry shows robustness in IT operation capabilities
- Confidence among the employees showing transparency and commitment
- Compliance with the European transportation standards
- Cultivation of a resilient organizational culture where employees are applying business continuity concepts automatically, whenever they develop a new product or service; or they are quicker to adapt when a process goes awry
- The accepted RTO and RPO have been clarified with the customer for a max of 30 min, which is the longest time bucket without a rail route for no transportation during low volume hours
- In terms of business metrics during the assessment phase, there was an evaluation of different scenarios related to the business impact of the switch over to DR
- Taking into consideration the current business metrics, the average passenger rate is 18,000 people per hour and an estimated financial loss is about 200,000 EURO per hour without taking into account the multiplying factors of expanding losses in other business domains and the non-quantifiable loss of trust in the public

THE RESULTS

- Business continuity operation
- Positive impact on the society (passengers) and commercial transportation (goods)
- Compliance with the European transportation standards
- Strict DTO and DPO metrics

"For many years, InTTrust has been an outsourcing partner of TRAINOSE in the field of IT solutions with excellent results. Therefore, the selection of them for our cloud adoption project was easy. The development and implementation run smoothly and the outcome was as defined. TRAINOSE's decision to partner with InTTrust was critical and has helped us achieve our business continuity and reach 99.99% availability of our critical services, especially during the relocation to our newly rented HQ building".
Panagiotis Tsiakas, Director of Technology, Information Systems and Networks Department, TRAINOSE

*This case is for informational purposes only.