Mindtree
Welcome to possible

Testing a large cloud computing platform.

The customer is one of the largest software product vendors and has a leading cloud computing platform. Mindtree shares a 15-year-long association with the customer. Mindtree was selected as their test partner for testing several sub-components of their cloud computing platform.

Today, Mindtree is the exclusive partner, offering a wide range of testing services, in the cloud computing arena.

Business challenges
- Build test infrastructure to improve test reliability and drive efficiency
- Long running deployments and test time
- Automate manual tasks and develop solution accelerators
- Build and retain the right expertise in this knowledge-intensive and complex platform
- Continuous testing and monitoring support for long running daily tests
- Build and retain a motivated team with deep product knowledge, with constant focus on delivery and reliability improvements
- Maintain a strong knowledge-base repository

Our approach
- Set up a hybrid team model, for project delivery and management of a large distributed team
- Deployed a 45 member team at multiple locations, to deliver testing services
- On boarded high-end SDETs who can independently own and deliver customer deliverables

Key benefits
- Daily automated runs and providing continuous support triaging failures across component areas
- Regression test passes for multiple back-to-back releases on all components
- Constantly improve test reliability and efficiency, by leveraging extensive cloud platform experience
  - Automation and tool development
  - Maintains product knowledge in RunBooks leveraging Microsoft OneNote
  - Trains customer employees and other vendors
- Scaling up constantly without compromising on deliverables, despite the agile, highly intense nature of work
- Enabling inter-team collaboration and reduced dependency, by creating a strong knowledge base within the team

- Invested in a delivery manager and project managers for the distributed team to:
  - Manage project delivery of a large team and achieve desired product quality
  - Facilitate interactions with multiple customer contacts on the project
  - Drive team efficiency
  - Identify and drive process improvements
  - Maintain a good connect with the team and take care of team aspirations

Our solution

As the customer's engineering partner, we offer continuous support on various fronts. This includes critical areas such as product testing, test automation, test infrastructure development and testing hardware for Cloud datacenters. Our team of over 45 trained engineers, work on testing the customer's cloud.

Key cloud components:
- Cloud application / node manager – Testing datacenter management, application and node life cycle management
- Cloud networking services – Testing software load balancer, network virtualization solutions
- Cloud OS – Testing and validation of OS images, virus scanning
- Runtime – Testing SDK and services, which provide the interfaces to write cloud-enabled computer services. They also enable the end-user to manage the services deployed
- Cloud storage – Testing of secure, scalable and easily accessible storage services

Mindtree ensures consistent project delivery by, co-owning the project and risk management alongside customer managers and leads.
The customer test managers set goals and road maps for better efficiency.
Quality testing and adherence to customer standards, is strictly observed.

Business impact

- Ensured delivery efficiency through process adherence and infrastructure improvements
- **Cloud networking services**
  - Complete infrastructure ownership of all Cloud net offshore sub projects
  - Developed unified reporting tool, used across Cloud net projects
- **OS**
  - Reduced manual test effort by 60% for each individual test.
  - Increased test execution efficiency by developing E2E automation including alerting / notification, report generation and sending to email aliases.
- **Cloud application / node manager**
  - Several process improvements
  - 30% reduction in test pass cycle through test pass refactoring automation efforts
  - 80 person hours / month saved by accelerating setups of multiple daily BVT scenarios and reduce human errors
- **Runtime**
  - Improved test team productivity by automating manual works
  - Automated daily and weekly reports which reduce efforts by 90%
- **Storage**
  - Reduced time on recurring task execution through automation tools development
  - Developed standard reporting mechanisms for all test reports

About Mindtree

Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our team of 11,000 experts engineer meaningful technology solutions to help businesses and societies flourish. We enable our customers achieve competitive advantage through flexible and global delivery models, agile methodologies and expert frameworks.