Aneka Case Study: Manjrasoft and Advanced Data Processing Research Institute(ADRIN), Department of Space, Government of India

Manjrasoft

Advanced Data Processing Research Institute (ADRIN), uses Aneka Cloud Application Development Platform for building their new generation applications

Advanced Data Processing Research Institute (ADRIN) is one of India's leading research and development centers under the Department of Space, Government of India specializing in developing software for data processing, GIS (Geographical Information System), and Image Processing applications

At ADRIN, HPCD (High Performance Computing Division), is responsible for the design and development of high performance computing software solutions. HPCD works on various research areas for delivering the software solutions such as:

• Cluster/Grid/Cloud based software applications design and development.

• GP/GPU based software development for data processing and visualization.

• Process innovation/re-engineering for improving the quality and performance of data processing applications.

• Graphics based applications leading to virtual reality.

Situation:

When processing data collected from various remote sensing satellites, which are archived on the storage repositories on a daily basis, ADRIN began by updating its customized legacy applications using Aneka Cloud application development platform from Manjrasoft for faster product generation. The processes involved in processing the satellite data have become increasingly difficult and more expensive. Given the impending growth in cloud technology, ADRIN thought, adopting cloud technology as the best solution for increasing the throughput yet protecting the cost of infrastructure as well as maintenance. Employing this new technology was essential to modernize this tool for satellite image processing.

Solution:

After much time deliberating and appraising various solutions for cloud adoption, and with the project stringent time constraints, ADRIN engineers decided to work with Manjrasoft's team using their **Aneka Cloud Application development Platform** (Aneka CAP) to significantly speed up the processing of Satellite image processing by enhancing its legacy applications to support both private and public cloud using Citrix Zen Server and Amazon cloud resources. Manjrasoft's Aneka provides seamless integration between private and public cloud infrastructures. This helped reduce integration and development effort, allowing the project team to implement the cloud based solution rapidly.

Benefits:

Increased throughput

Significant reduction in the cost of infrastructure

Low maintenance

Higher reliability

Aneka: A Cloud Application Platform:

Aneka is a market-oriented cloud development and management platform with rapid application development and workload distribution capabilities. Aneka is an integrated middleware package which allows you to seamlessly build and manage an interconnected network in addition to accelerating development, deployment and management of distributed applications using Microsoft .NET frameworks on these networks. It is market-oriented since it allows you to build, schedule, provision and monitor results using pricing, accounting, QoS/SLA services in private and/or public (leased) network environments.

Additional Information:

For further information about Manjrasoft and Aneka Cloud Application Platform, please visit: http://www.manjrasoft.com/