Telecommunications Leader

Telecommunications Leader Utilizes Rocket Arkivio Intelligent Data Management to Solve Backup and Capacity Challenges While Consolidating Multiple Data Centers

Telecommunication companies integrate complex networks, telephones, mobile phones, and Internet-linked computer systems into a global system that touches every corner of the planet. These networks allow us to speak, share thoughts and do business with nearly anyone, regardless of where in the world they might be. A multi-billion dollar division of a North American based global telecommunications company looked to Rocket Arkivio software to help them intelligently solve a data management challenge they had supporting their distributed data centers. This organization covers 15 states in the U.S. with approximately 20 million customers. Operations at the organization's headquarters includes marketing, finance, engineering, human relations, customer service, fulfillment, government affairs, and information technology (IT). Network and information systems, including those related to network management, customer service operations, and service delivery, are critical to this company's business operations.

Industry
Telecommunications

Challenge / Situation
Cost effective, sustainable way to manage petabytes of data distributed across multiple data centers and users in 15 states. Managing storage costs with primary storage 95% utilized and data growing at 33% per year and causing trouble with backup quality and completion.

Solution/Products
Rocket Software Archive and Backup Solution
Rocket Arkivio Autostor

Results
Rocket Arkivio Autostor collected and assessed information about data characteristics and storage utilization without disrupting operations; identified 60% of data could be moved from primary storage to an object storage repository delaying expensive storage acquisition cost and improving backup performance; migrated data while providing transparent access to end users.

The telecommunications industry, first transformed by deregulation, is now fiercely competitive and driven by innovation. High-speed Internet access, which delivers computer-based data applications and interactive entertainment, is replacing traditional telephone services in homes and businesses around the world. Network technology advances now deliver telephony, video and broadcast services, Internet access, and information technology services, through wireline and wireless networks, to both residential customers and businesses of all sizes.

The Situation

Business growth for this telecommunications organization will come from leveraging its existing services network to provide new, expanded, and enhanced capabilities to its home and business customers.

Rocket

While success rests largely on brand name strength and implementing new services through technology, it also requires a heavy investment in efficient billing and customer service systems. Acquiring, installing, and servicing the division's customers has created 4 petabytes of data which is growing at 33% per year. File sizes that once averaged 20-30KB are no longer the norm. Typical file sizes are now starting to appear that are 2 to 3MB.

Market forces have had a tremendous impact on this industry, forcing the division to grow through technology innovation and acquisition. In addition to managing a network of IT departments brought together through multiple acquisitions, this industry is also under intense regulatory scrutiny by the FCC, and other federal and state organizations. This requires steadfast discipline to ensure that data is properly being backed up, that storage is available when needed, that data that needs to be locked down and sequestered is done so to the letter of the law, and that Disaster Recovery (DR) processes are properly implemented. There is also a strategic opportunity to mine a tremendous amount of information in the customer services systems and call center data so it can be used as an asset when correlated to business trends.

The Challenge

The IT department's goal was to find a cost-effective, sustainable way to manage petabytes of data distributed across multiple data centers and users in 15 states. The Senior Director of Enterprise Infrastructure Services described the challenge:

"Centralizing the major customer applications and databases was a necessary, clear decision and a project that we completed over the last 18 months. Less clear was the need to consolidate the hundreds of file and SharePoint servers spread across the operation. As you look at the environment as a whole, a lot of seemly smaller problems add up to a massive challenge."

"We have many EMC Data Domain storage systems that are frequently over 95% utilized. Buying more capacity is expensive and not a sustainable business model at 33% annual growth rate of data. There are departments with file and database servers that require a daily routine of finding ways to free up multiple terabytes of capacity for storage space and performance. Capacity challenges also get reflected in backup operations. We were having trouble with backup quality and completing backups because the storage systems were full. This creates a situation where core systems are potentially not being backed up properly. This creates the potential for a major disaster recovery problem if there is a risk of not completing the full and incremental backup processes throughout the week."

"There are other daily operational challenges with such a diverse operating environment. The business runs on a variety of reports from individual file systems, Access databases, Excel spreadsheets, and SharePoint data. Since they are run against file servers that are not a part of a centralized system, a financial query that ran yesterday and suddenly doesn't today generates a call to my department and must be remedied quickly. It becomes critically important to get a handle on file system data when a

legal or regulatory query comes to the IT department for action. The challenge is finding out who's accessing what data; where the person's data is located; what applications they downloaded and are they licensed to use them. Another concern relates to a third of our users that have storage quotas. We found that many employees moved files to the SharePoint server when they neared their quota limits, defeating its purpose and increasing the operations challenges I already mentioned."

Collectively, these issues can quickly spiral out of control and take a tremendous amount of resources just to maintain the status quo and not 'die a death by a thousand cuts'. "We assessed a variety of enterprise vendors' solutions to mitigate our potential risk, while looking for solutions that resulted in capex and opex benefits. The vendors were tasked to propose ways to gain control of the millions of objects in hundreds of file systems across a broad geography and make sure they were able to rebuild the file systems with proper risk, security, and quota controls."

The Solution

"The major hardware and software vendors proposed centralizing the data on object storage systems," continued the Senior Director. "While centralization was consistent with our actions with the databases, we knew there was a strong potential that we were actually under-utilizing our storage resources. Simply moving data that we had on distributed file servers to centralized servers just moves the problems. It doesn't solve them."

"Hitachi Data Systems (HDS) was proposing their Hitachi Content Platform (HCP) virtualized object storage archiving system. Their sales team recognized that our telecommunications company needed data management software to implement with the HCP and brought in Rocket Software. The Rocket Arkivio team was able to analyze the data on a subset of our servers using their agentless Rocket® Arkivio Autostor. It collected and assessed information about our data characteristics and storage utilization without disrupting our operations. The Rocket Arkivio software showed that we really did have a massive, complex environment with a tremendous amount of stale data—over 60% hadn't been accessed in over a year. The software gave us the information to justify the projects and their priority based on ROI projections using our own data, not theoretical industry numbers. It was straightforward to justify the acquisition of the Rocket Arkivio software and the HCP."

"We found that object storage systems like the HCP really needed an intelligent data management system to categorize and ingest the data to properly get the most value out of the system. We used the Rocket Arkivio software to initially focus our data management process on 'stale' data because of our backup challenges. We processed and categorized data into 7 years last accessed, 5 years, 3 years, 1 year since last modified and then used Rocket® Arkivio Autostor to move data into the HCP archive by these categories. The Rocket Arkivio system allows us to logically organize these data sets in a central repository, leaving behind a small stub file or link at the original location. We now have the data categorized, properly centralized and backed up—freeing up capacity on our expensive primary storage.

The links and stubs that Rocket Arkivio implements causes the end user data to appear as it always has on the local server. It was critical that their data access model remained unchanged to minimize our support burden."

"We quickly realized that the Rocket Arkivio software was able to do much more than archive stale data. We can now use the Rocket Arkivio data management system to find, track, and isolate data as well as track users that are under investigation when the compliance officer calls us. We are also using the software to corral the creation and the storing of PST files which are very hard to search for and not very discoverable."

"Rocket is helping us to intelligently manage software application lifecycles. We use it to find and keep track of software and operating system images so that we know we are staying current on licenses and that individuals aren't downloading something they aren't licensed to use. The Rocket Arkivio solution is also used to define data types, categorize data by users and groups, and know where the data is located. For example, we can group every HR person. We know by their function that they likely have sensitive data and can pro-actively move all that data to a special server with appropriate security, retention, and DR. The Rocket Arkivio software gives us the flexibility and visibility to make sure we can effectively deploy our risk and governance tools."

"We plan to do more than just archive in the future. While that's a great use, it's only scratching the surface of what the software is capable of—how to get value out of our data. We have tens of millions of objects (files) and any one of them could be a piece of business critical information. We don't purge sensitive data currently, but we can now intelligently take action to move or consolidate the information for ongoing management, and eventually to purge stale data once it passes regulatory and corporate requirements. We will also utilize the Rocket Arkivio intelligent data management capability to analyze log files and start running queries against our servers. For example, we may be able to see that customer product equipment numbers have decreased and will be able to gather and look at the different files that may suggest why that is happening. I don't call this by a loose term like 'Big Data' which typically refers to Hadoop on Open platforms. We can now get our hands around the information we have and put it to best use rather than just letting it sit idle for a significantly lower cost than upgrading our primary storage."

"Rocket support has been excellent. The system was easy to drop in and get started. The support team was able to take into account how we needed to implement policies based on the way we operate and adjusted their policy work flow. They are a big enough company to meet our needs and were very proactive in addressing any of our requirements. They are always available and responsive when we have questions or need something, including getting through to their 'top guy'. For example, the complexity of our environment can generate a 190 page report. They worked with us to create a simplified, custom report that we can quickly scan for the information we need. I also appreciate that the sales team has come back every quarter to discuss and measure the performance of our data management system. This helps us stay on track, including having the proper training and usage models to achieve our ROI objectives."

"Rocket Arkivio's ability to help us intelligently manage these millions of file system objects in a coherent fashion, understanding what we have and where it is, and getting best use out of our HCP has been priceless. If you look at the price of upgrading, expanding, or scaling out primary storage systems versus an intelligent data management strategy – there is no comparison. I am extremely satisfied with Rocket Arkivio their performance."

Senior Director
Enterprise Infrastructure
Services

The Senior Director of Enterprise Infrastructure Services concluded, "Rocket's ability to help us intelligently manage these millions of file system objects in a coherent fashion, understanding what we have and where it is, and getting best use out of our HCP has been priceless. If you look at the price of upgrading, expanding, or scaling out primary storage systems versus an intelligent data management strategy—there is no comparison. I am extremely satisfied with the Rocket Arkivio solution and their performance."

Call the Rocket Arkivio sales hotline at +1-650-237-6246 or visit the company website at http://www.rocketsoftware.com/brand/rocket-arkivio if you would like to know more about Rocket Arkivio solutions and how you can implement a cost-effective, enterprise class, intelligent data management system.

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