

IBM Tivoli Storage Resource Manager Automates Storage Management

By Joyce Tompsett Becknell

Grappling with complexity in the IT environment can lead to upheaval in the data centre, leaving IT managers frustrated. One of the tools they are bringing to their arsenal in the battle for control and efficiency is storage resource management (SRM). IBM's Tivoli SRM, part of the IBM TotalStorage Productivity Centre, offers gains through automation capabilities for heterogeneous environments.

Making Change Into an Opportunity

IT managers are no strangers to change. The need for IT to demonstrate business value drives managers to lower costs and improve efficiency. For storage, the response has usually translated into storage area network (SAN) or network attached storage (NAS). Unfortunately, like everything else, both SANs and NAS tend to grow and develop their own complexity, requiring another set of specialised administrators, which drives costs back up. SANs are also easier to maintain if they do not change frequently, which is unlikely in a dynamic business environment. In addition, when data priorities change, it can be difficult for managers to change quickly enough. The good news is that SRM products can help. SRM facilitates better management of the use, growth, and control of storage devices in complex environments. IBM's Tivoli SRM product, a part of the IBM TotalStorage Productivity Centre, is an offering designed to allow users to identify, organise, and manage resources better through automation.

Rich Options for Management

At its core, the IBM Tivoli SRM (ITSRM) product focuses on automating around policies for easier management with less administration. It combines this with automated capacity provisioning for SAN and NAS as well as traditional disk-attached storage (DAS). The product monitors storage usage across a heterogeneous SAN, with tracking by file type, or by user, as well as by the more traditional disk or application. Alerts can be programmed based on capacity exceptions, by file type violations or other policies, and automated responses can be programmed into the system. Reports can be generated by the software to provide in-depth information on various aspects of the SAN. The product also has optional database and chargeback options that offer users additional functionality. The database option helps with capacity planning and resource management for database applications. The chargeback option lets users invoice for storage used at various levels, including by computer or by user, with roll-up. IBM have spent significant resources on making the product relatively easy to install and implement, with diagnostic storage demographics provided as a starting point for new environments. It also offers ideas on how to make storage more effective including suggesting which files should be moved to a SAN-based file system for optimised performance and determining whether block-based or file-based virtualisation systems are better for the environment. Data can be categorised then broken into tiers based on business value for policy-based administration and appropriate placement in a tiered storage hardware environment.

Who Benefits

Storage Resource Management is a relatively new type of product but one that companies are increasingly turning to. Having the ability to manage storage capacity in addition to other hardware infrastructure is beneficial, but it requires that IT departments develop processes for their data so they can better react to changing business demands. Managers with fluctuating environments, including mergers and acquisitions or infrastructure consolidation, or those struggling with requirements from new industry regulations with data retention and compliance needs, will appreciate the ability to automate their storage processes. IBM's TotalStorage Productivity Centre offering and the Tivoli SRM product offer the capabilities to manage complex, heterogeneous environments through their automation tools and make better use of existing storage resources.