VERITAS

Optimizing Hybrid Multicloud Environments

Boost performance and value with NetBackup IT Analytics.

Introduction

More organizations are now contemplating the value of shifting some—or all—of their operations to the cloud. Cloud computing empowers organizations to process larger workloads and offers enhanced collaboration and improved productivity for application owners. However, many IT managers encounter challenges with cloud services utilization such as:

- Gaining a clear view of application performance
- Finding the right solution to drive analysis
- Providing support for managing and optimizing data-processing workloads
- Understand your ransomware resilience and recoverability

Many organizations rely on their cloud vendor to provide the needed insights, only to learn the information they can collect is often too limited to develop an overall view of their infrastructure needs and a comprehensive risk profile when moving to the cloud. NetBackup™ IT Analytics from Veritas provides the next-generation insights that support an organization's ability to minimize complexity and cost. These insights also ensure business continuity through the visualization and correlation of application metadata hosted in the cloud and in on-premises infrastructure. NetBackup IT Analytics is capable of reporting on backup validity, billing records, compute and storage resources procured by an organization for all major backup vendors. It features an always-on, always-updating "golden record" available to administrators, with auditing capabilities that can be aligned to address the specific needs of business units.

NetBackup IT Analytics Attributes

- **Comprehensive**—A single solution from an integrated console to identify data assets, NetBackup IT Analytics provides support for every popular server, storage, hypervisor, database and application platforms used by enterprises today
- **Scalable**—Centralized management provides an agentless data collector gathering ~50,000 unique data points from all aspects of on-premise and cloud environments, including applications, cloud, data protection, hosts, network, storage, virtualization and unstructured data
- **Innovative**—NetBackup IT Analytics's proprietary algorithms, driven by five patents around the autonomous design and updates from the cloud, analyze data points to make recommendations that improve performance, resiliency and utilization. The analysis is machine-led but governed by human policies, with data used to present actionable solutions to help improve leading efficiency measures and minimize risk, predict failures and streamline audits and compliance
- **Proven**—For over a decade, NetBackup IT Analytics has led the industry with customer-proven scalability and reliability, bringing together and analyzing data from across the organization

Key Features

- An integrated console provides insight into:
  - Local and cloud backup, compute and storage
  - Cloud and on-premises capacity, cost and usage
- Chargeback:
  - By any user-defined group, such as application, department and cost center
  - Usage across backup and cloud, compute and storage
- Capacity planning:
  - Budget based on cloud costs and use rates
  - Media/storage planning based on consumption usage
- Risk mitigation:
  - Find hosts with no cloud backup
  - Find hosts with no recent snapshot
  - Find runaway costs
  - Detect ransomware affected files
  - Identify common, data protection ransomware risks
- Cost optimization, helping answer:
  - What is my monthly cost?
  - What can be reclaimed?
  - Are there hosts with heavy network usage?

Maximize Cloud Business Value with NetBackup IT Analytics

The analytics that NetBackup IT Analytics provides will support an improved understanding of cloud resource consumption and awareness of which assets are effectively optimized and protected in a public cloud environment. Many organizations are considering using the cloud as a supplemental data center or as a way to eliminate the traditional data center. Such a shift requires new strategies to monitor this type of infrastructure. The value of NetBackup IT Analytics goes beyond simply monitoring data across different environments, however. NetBackup IT Analytics can help organizations gain clarity about the cost of cloud resource consumption and provide actionable insights into cloud-based workloads with single click cloud dashboards and alerts. (See Figure 1.) Run cost history reports by subscription or region, so you can determine which region's Azure subscriptions are costing the most.

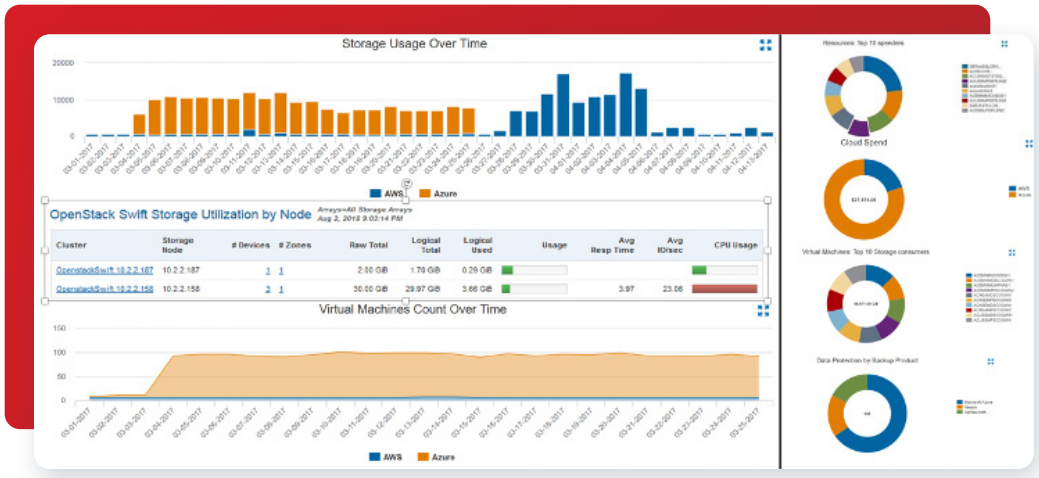

Figure 1. A sample NetBackup IT Analytics dashboard showing storage usage over time.

At Veritas, we've found organizations are moving to the cloud for several reasons: smaller organizations benefit from reducing the draw of maintaining a data center and/or disaster recovery site, midsize organizations appreciate accessible off-site data storage built on highly scalable hardware, leveraging just-in-time cloud recovery, and large organizations are identifying workloads capable of taking advantage of cloud availability and cost while freeing up expensive data center space for mission-critical workloads.

Sometimes an organization will require temporary space for a workload. Instead of ramping up a new rack of disks in a data center, it can leverage space at a cloud provider to avoid the additional cost of purchased data center hardware. Cloud subscription models work well for these projects, offering scalable, simple-to-use models.

The current megatrend of moving data to the cloud revolves around driving costs down for businesses. The cloud model is agile when it comes to requirements, enabling organizations to add a disk to a server easily and quickly versus sourcing hardware and the "rack and stack" that comes along with it.

The cloud also allows organizations to avoid the cost and time associated with replacing or upgrading hardware and software in the data center. Instead, these requirements are taken care of by the cloud service provider and are invisible to the business itself.

No matter what reason drives an organization to decide to transition to the cloud, NetBackup IT Analytics can ensure the experience is compliant and cost-effective versus an on-premises environment.

NetBackup IT Analytics Architecture

NetBackup IT Analytics provides a foundation to manage a cloud strategy, including insight into the status of all cloud-based resources so an organization can identify emerging deficits and problematic patterns to prevent minor issues from turning into significant problems.

The magic of NetBackup IT Analytics lies in its intelligent correlation engine, which allows it to collect metadata without an agent from a wide range of IT assets on-prem and in the cloud. These assets include but are not limited to Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, SAN switches, virtual environments and storage.

With NetBackup IT Analytics' correlation engine, organizations can track the end-to-end IT relationship against business requirements. They can visualize results through comprehensive, customizable reporting, including varying views based on business unit and cross-environment usage. With this improved awareness, NetBackup IT Analytics users can effectively plan and optimize capacity, mitigate risk, streamline compliance and reduce IT costs.

NetBackup IT Analytics's architecture allows organizations to:

- Plan and identify workloads to migrate to the cloud
- Map critical systems to applications running in the cloud and their locations
- Track cloud usage and spend
- Enable backup reporting in the cloud
- Set up billing records and chargeback for cloud and on-prem usage
- Ensure storage optimization in the cloud

Best Practices and Recommendations

A move to the cloud presents many potential challenges, including migration lift and shift, storage costs, ingress and egress and chargeback. NetBackup IT Analytics can help identify, address and give architects insights to mitigate costly issues quickly as organizations move to or grow their cloud infrastructure.

- Plan and identify workloads to migrate to the cloud—To start any migration, compile an inventory of the physical and virtual servers in your environment. Doing so will help identify dependencies or communication between servers so you can include all necessary application components in your cloud migration plan, helping to reduce risks and ensure a smooth migration. Since NetBackup IT Analytics is collecting all of the on-premises metrics, the solution shows details about current configuration and actual usage of the infrastructure over time. This data-driven approach to cloud migration minimizes the monthly cloud bill before you start paying, and provides the insights you need to right-size your host resources required in the cloud.

- **Map critical systems to applications running in the cloud and their locations**—Migrating critical applications to the cloud can reduce older infrastructure and data centers that were once considered fixed costs in favor of adopting a more flexible, on-demand operating model. However, you must first be able to identify critical applications and ensure the proper planning and deployment for each specific situation. NetBackup IT Analytics allows you to identify critical applications and their optimal location in the cloud based on several criteria such as cost avoidance and risk profile and provide actionable intelligence for the migration.
- **Gain an overview of cloud costs**—The cost of the cloud will vary depending on what your organization needs. Simple use of public cloud storage can be a cost-effective solution for those sending data to an off-site location, although it may not ideal for organizations with large amounts of data due to the bandwidth constraints of the network. Also, cloud storage is limited in options based on object versus block-based storage. There is a cost to send, store and retrieve data. NetBackup IT Analytics can help make the most of cloud storage by giving your organization insights into usage, cloud billing usage and rightsizing cloud infrastructure for critical application requirements.
- **Manage storage costs**—Regional cloud storage costs often vary based on the service provider. NetBackup IT Analytics can help organizations manage costs and understand the value they derive from a cloud environment, region to region. (See Figure 2.)

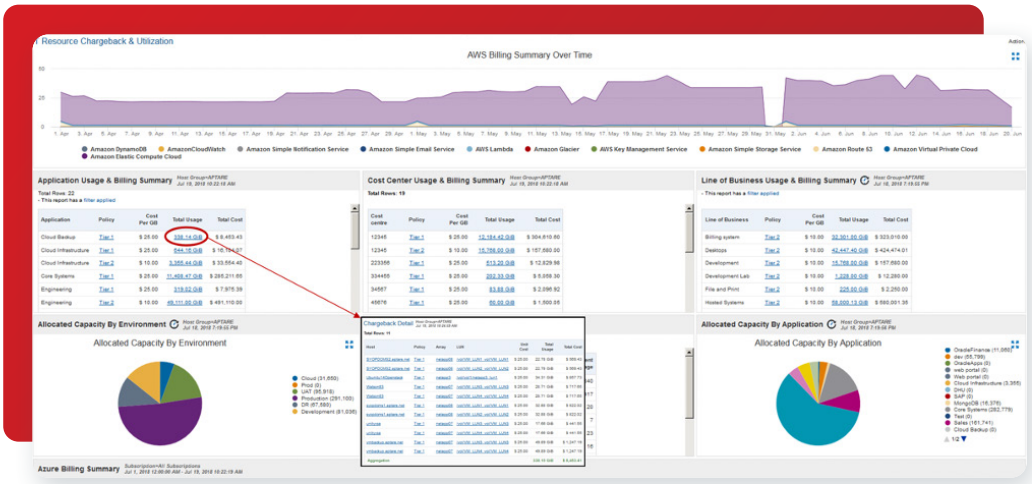

Figure 2. An NetBackup IT Analytics overview of one cloud provider's storage costs over time.

- **Understand compute costs**—Cloud environments where VMs are configured in the cloud using disk storage will incur an additional cost based on the amount of disk provisioned, the number of processors needed and RAM usage. NetBackup IT Analytics' strong analytics and reporting capabilities can help manage these details. An enterprise can incur costs based on copying data from a virtual machine (VM) to a Veritas NetBackup™ environment, for example—a cost dependent on the location of the NetBackup media server in relation to the source client or data.
- Run Cost History reports by Subscription or Region, so you can determine which region's Azure subscriptions are costing the most.

Most options in cloud-based computing come à la carte, where the organization only pays for what it uses. The cost of running workloads in the cloud is part of an organization's business analysis, and NetBackup IT Analytics can help it intelligently choose which data to maintain on-premises and which to migrate to the cloud.

Conclusion

More organizations are now contemplating the value of shifting some—or all—of their operations to the cloud. NetBackup IT Analytics features an intelligent approach to a cloud management strategy that allows administrators to monitor and gain insights into cloud-based and on-premises resources and helps with the cost optimization of their hybrid infrastructure.

NetBackup IT Analytics can help you identify risks and costs as well as patterns so you can prevent minor issues from turning into significant problems. Although cloud computing empowers organizations to process larger workloads with enhanced collaboration and improved productivity for application owners, it also presents challenges due to low visibility into performance and utilization. NetBackup IT Analytics provides visibility across the hybrid multicloud, aligning insights from cloud-based and on-premises resources so you can optimize cost and performance and reduce risk.

Note: This document contains recommendations that have been shown to work with customer deployments. Every environment is unique, however, and your deployment may require changes. In addition to these guidelines, we recommend you use product documentation and any additional educational or consultancy services necessary to ensure the best design for your unique environment and workloads.

VERITAS

2625 Augustine Drive
Santa Clara, CA 95054
+1 (866) 837 4827
veritas.com

For global contact information visit:
veritas.com/company/contact

V1088 08/22