Increasing Ransomware Resiliency
Gain complete infrastructure awareness with NetBackup IT Analytics.

Overview
Ransomware is a growing threat for enterprises, and media headlines reflect its devastating impact. Company data is being held hostage by cybercriminals, and stakeholders are forced to choose between paying the ransom or having their company's data erased or exposed. The global cost estimate for companies afflicted by ransomware will soon exceed $20 billion. Figure 1 shows the significant effect ransomware is having—or will have—on organizations and the economy.

Like many organizations, yours probably maintains an increasingly complex IT environment you must manage within the constraints of reduced resources. You want assurance your environment is safe, secure and capable of overcoming the threat of ransomware while being able to reduce the day-to-day complexity of monitoring and maintaining backup and storage configurations.

At Veritas, we recommend a three-part approach to reducing the threat of ransomware—protection, detection and recovery. There are numerous solutions on the market to help organizations detect and prevent the infiltration of ransomware, but what happens if ransomware makes its way past your organization’s frontline defenses despite your best efforts? What if you pay the ransom and don’t receive the decryption key?

You need a recovery plan that ensures you can reliably restore data to the last known good backup if and when ransomware strikes. This includes the ability to effectively visualize your organization’s entire infrastructure to focus on critical applications.

End-to-End Infrastructure Awareness
In five minutes or less, NetBackup™ IT Analytics can help your company understand the breadth and depth of a ransomware attack so you can recover strategically. With the correlated environmental insights of NetBackup IT Analytics—on-premise, in the cloud, data protection and storage—alerting and reporting is comprehensive and easy to set up. You’ll have the insights needed to make informed decisions in the face of an attack with these NetBackup IT Analytics reporting options:

- Risk Mitigation Analysis (see Figure 2)
- Sources with Consecutive Failures (see Figure 3)
- Sources with No Recent Backups (see Figure 4)
- Backup Failures by Application (see Figure 5)

In addition, NetBackup IT Analytics Ransomware Scorecard measures ransomware resilience and readiness of data protection and recoverability.
When the worst does happen, are you sure you have a good backup? If so, how do you know? As good as vendors have made their backup software, most are not 100 percent reliable for three reasons:

1. There are false positives; backups appear successful but wouldn’t result in a full restore
2. There could be hosts your backup software knows nothing about
3. Most organizations have multiple solutions comprising a data protection strategy on-premises and in the cloud; to know if a backup is successful (or not), you must query every data protection solution

**Identifying False Positives**

Just because a backup job is successful doesn’t mean you can restore the image when it’s needed. NetBackup IT Analytics creates a baseline of known successful backups and compares future backups to the discovered baseline. The analytics software automatically spots false positives like job duration variations, image size variations and policy/configuration changes. NetBackup IT Analytics then displays these anomalies in high-level summary graphs to help you assess the size of the risk or in more detailed, actionable tables to help you clean up the environment. To make the process more efficient for you, NetBackup IT Analytics automates the process of creating anomaly tickets. You can then review these tickets in order to pinpoint if, when, and where an incorrect backup occurred, reducing the likelihood of experiencing a failed restore.

**Discovering Hosts and Backups**

Backup software can’t find failures for hosts or virtual machines (VMs) that aren’t configured. NetBackup IT Analytics discovers all hosts from your infrastructure and automatically compares all discovered hosts with the hosts known by the backup software.

NetBackup IT Analytics flags hosts that are completely missing from the backup solution(s) as potential risks. It can also show any hosts with no recent backups (see Figure 4). In both scenarios, NetBackup IT Analytics can interrogate CMDB systems like ServiceNow and provide similar results.
Classifying Data by Importance

It's also important to be able to classify backups by application and importance to your business. You need to know every single host and database that encompasses each application. With NetBackup IT Analytics, your company can build dashboards to view the restorability of every single application.

Summary

Although we hope your company never experiences a ransomware attack, we want to ensure you’re ideally prepared to take on the threat with confidence in recovery in the event you do. NetBackup IT Analytics can support your recovery and detect future occurrences.

Interested in learning more about NetBackup IT Analytics? Check out www.veritas.com/netbackup-it-analytics.