

Bocada Prism: The Benefits of Agentless Technology

The agentless approach to data protection management offers five fundamental advantages.

FAST, SINGLE-NODE INSTALLATION

With installation confined to a single server, an agentless application can begin to gather information and provide useful reports within hours of installation. There is little to no impact on the operation of the data protection system—this is critical given the nature of continuous operations in large data centers. With the exception of network access to the backup servers and data, no configuration is necessary. Usually a backup server account with the proper permissions already exists; therefore, additional configuration is not required.

In contrast, the installation process of agent-based technologies is much more complex: each agent must be individually installed and configured. Often the IT staff must take each server out of production during available windows of downtime, which are ever-shrinking due to 24x7 operations of high-availability applications. If the installation does not go smoothly, production windows can be affected as well.

COMPATIBILITY ACROSS APPLICATIONS AND PLATFORMS.

Standard reporting solutions automate error reporting, which saves a great deal of administrative time, particularly when multiple data protection applications are being utilized. However, if the ultimate business goal is to meet customer SLAs, the error reports only provide a piece of the big picture. What the user really needs to know is if the error will be impacting the ability to meet an SLA.

COMPATIBILITY ACROSS APPLICATIONS AND PLATFORMS.

Most enterprises consist of a broad mix of backup applications, operating systems and versions. An agentless application is designed with this kind of environment in mind. The agentless application runs only on the central server, communicating with backup servers through standard file-access methods and protocols. A plug-in at the server handles the specific requirements of each backup application.

On the other hand, agent-based applications often conflict with underlying operating systems and existing processes. Moreover, a separate agent must be coded and compiled for each operating system, application and platform and take into account for endless combinations of release versions.

CHANGE MANAGEMENT OF PATCHES AND UPGRADES.

An agentless application costs less to upgrade and maintain over time because it eliminates the need to maintain various versions of agents across individual servers. When a backup application is upgraded, the core functionality of the management platform can be retained by



installing a new interface on the platform itself. The platform automatically detects the software version running on each backup server and then selects the appropriate interface.

However, in an agent-based environment both major and minor backup application upgrades generally require a new agent version to be installed. Every upgrade to an operating system (OS) or an infrastructure component is a potential patch event. This causes a substantial change management burden—including hours of system downtime, staff time and expense and, most importantly, unnecessary risk.

IMPROVED SYSTEM PERFORMANCE AND RELIABILITY.

Agentless technology requires less resources from each backup server. Information transfers are managed through file-sharing, rather than by an application running continuously in the background. This method allows the backup server to control the frequency and depth of the dialog, which minimizes the impact on applications running concurrently.

Conversely, agent-based technology in a production environment demands considerable resources because it impacts the core function of the device or server being monitored. In fact, agents can over-consume resources and compromise server performance. A single server may even have multiple agents running simultaneously. When this scenario is multiplied by the hundreds of backup server that exist in most scaled environments, the likelihood of failure is overwhelming.

PREDICTABLE NETWORK TRAFFIC THROUGH CENTRALIZED MANAGEMENT.

Agentless technology uses an orderly “pull” method for collecting data. The data protection application centrally manages and schedules queries. Subsequently, data retrieval is continuously conducted at regular and predictable intervals.

Instead, agent-based technology “pushes” the data without centralized control, increasing the risk of system performance degradation as updates occur randomly. Scheduling for agent activities takes place at the individual server level and as the number of servers increases update management becomes an increasingly difficult and time-consuming issue for IT staff.

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