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hosted by Mario Blandini @ Drobo

Data Protection and Disaster Recovery for Both Physical and Virtual Machines in One

Approaches and architectures for protecting heterogeneous environments with disk-based backup

**Special guest Jerome Boutaud
Senior Virtualization Engineer @ Acronis**



February 21, 2012

Abstract & Background



■ Session Abstract

- Trends such as virtualization and cloud are a reality, and already many SMBs have evolved their IT architecture with them
- Some aspects for SMB IT will remain best served with physical servers & on-premises storage, i.e. heterogeneous
- The best data protection strategy for SMBs is one that works across the physical, virtual, and cloud elements of their environment

■ Background on Expert Guest – Jerome Boutaud

- Acronis is a leading provider of easy-to-use DR and data protection solutions across physical, virtual and cloud environments
- Jerome is has been working in IT for the past 10 years in mixed environments covering numerous OS's and virtualization platforms, focused on Backup and migration of physical systems and virtual environments

Heterogeneous Backup for SMBs



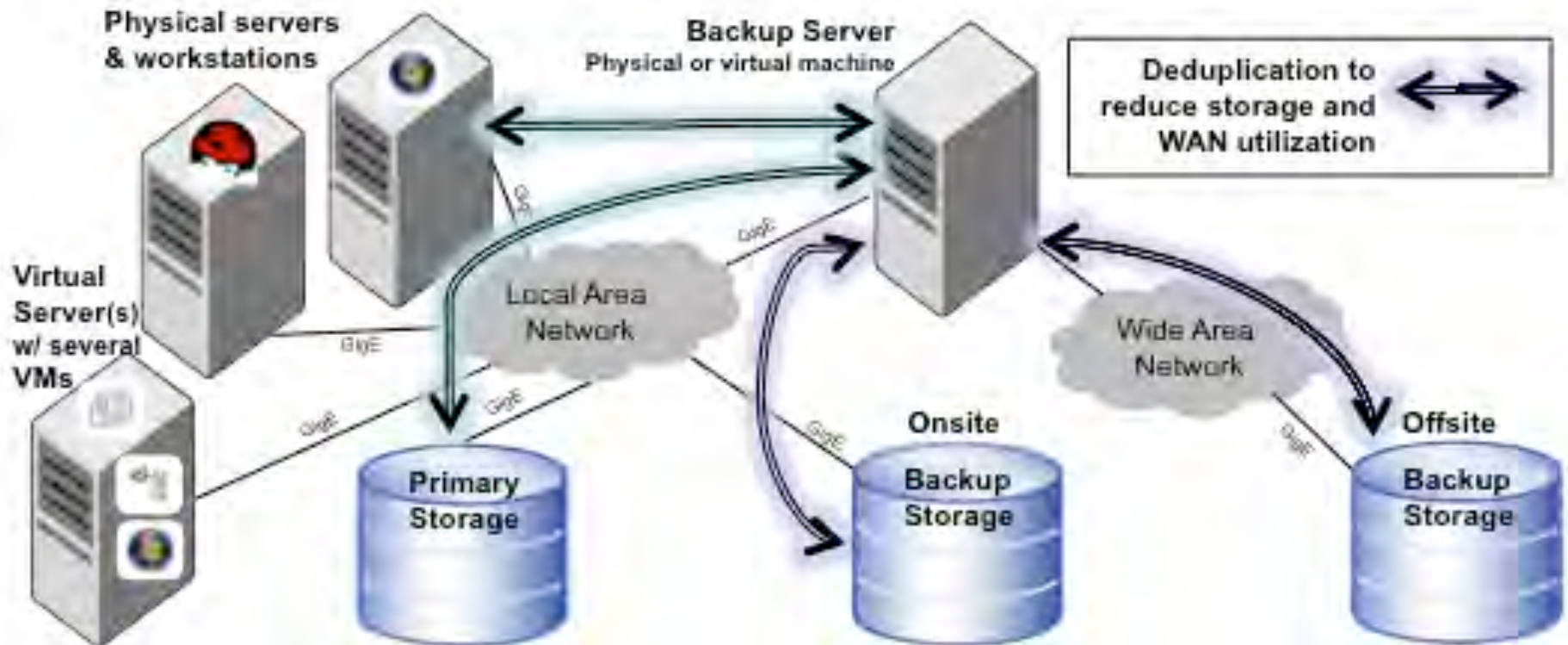
- **Managing heterogeneous environments requires a specific way of thinking**
- **Reducing backup storage utilization & storage cost requires new tiers of storage & new technology**

What do SMBs need for Heterogeneous Backup?

- **Robust recovery that is simple and repeatable**
- **Choice among application agents vs. agentless**
- **Facilities for migrations of physical to virtual**
- **That solution in a cost effective model today & future**

Basic Architecture – What You Will Need

- Servers, Network, & WAN likely already in place
- Reliable storage that is lower cost than primary for backup & offsite
- Backup Software that supports unique heterogeneous requirements
 - With Deduplication in order to increase efficiency and lower cost



Requirements for SMB Heterogeneous Backup

■ Reliable recovery

- Full-scale recovery, bare-metal + files
- Store backup images on a lower-cost tier
- No dependency on a specific type of machine or hardware



■ Simple is better than Complex

- Simplified recovery that does not require lengthy procedures
- Obtain reliable backups every time
- Grows at the lowest possible cost with backup data

Leveraging Heterogeneous Backup Solution

■ Top concerns

- Cost of protecting an expanding data set
- Complexity of backup & especially recovery
- Evolving from physical to virtual of time



■ Addressing Those Concerns in a Backup Solution

- Scalable disk-based backups with deduplication
- Disk imaging technology for fast recovery of entire systems
- Catalog, search, & index of backup data for selective restore
- Migration to facilitate moving from Physical to Virtual

Disk Imaging Technology

- Take an image of the whole system with OS, applications + data
- Bare-metal restore to dissimilar hardware in minutes
- Disaster Recovery Plan explaining step-by-step how to recover



Data files



Operating System



Databases



Software Applications



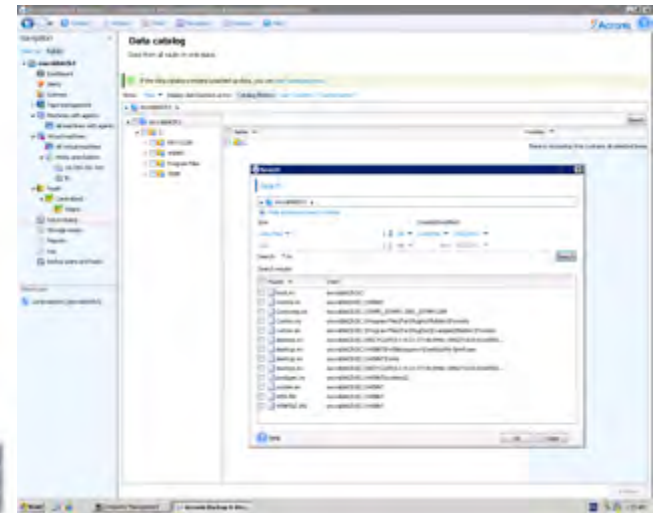
User Settings

2. Boot from Acronis Rescue Media

- To start the bootable rescue utility, click **Acronis Backup & Recovery**. 1. Skip this step, if there is no such button.
- Click **Manage this machine** button.
- Start the **Recover** action.
- Click the **Select data** button.
- Click **Browse**.
- Type `\\srv1\folder1` in the Path field and click **OK**.

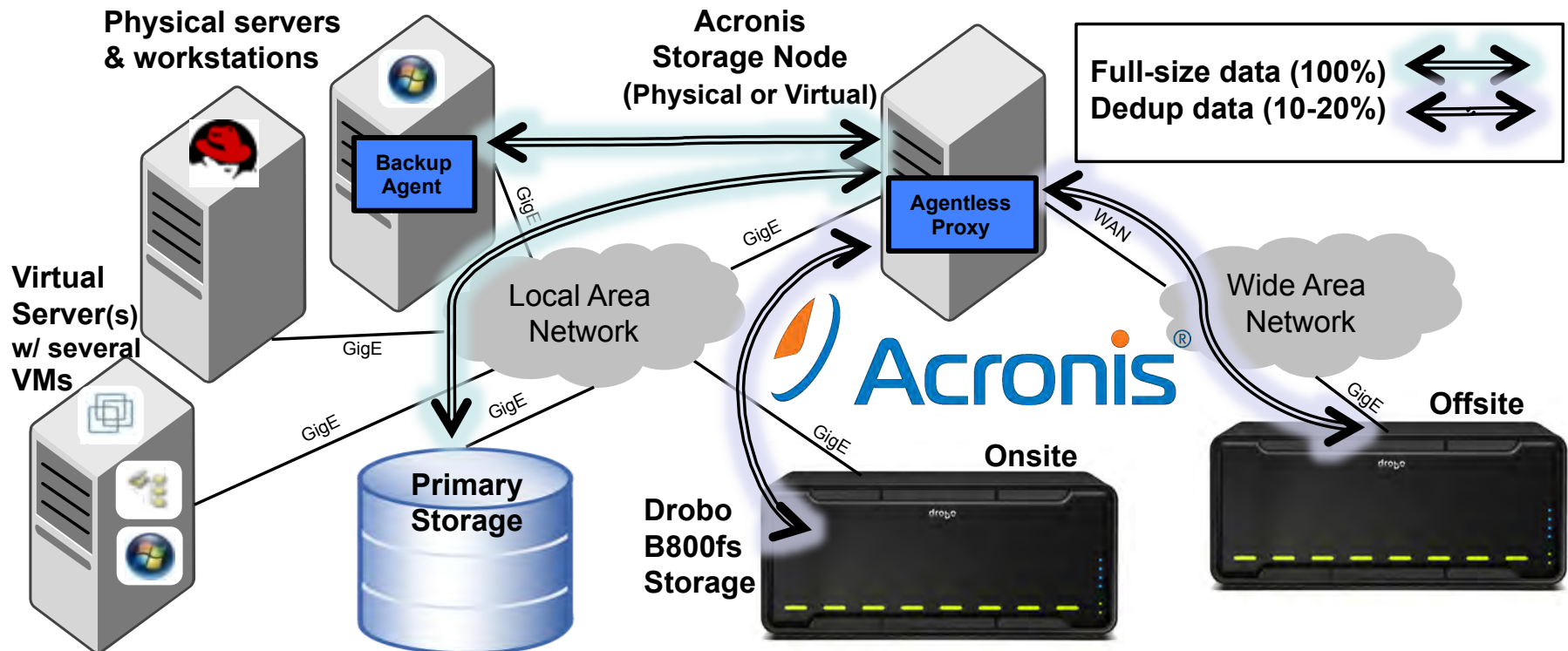
Selective Restore

- Search the catalog to find a file, folder, email or mailbox to be recovered regardless of location or age.
- Individual e-mails can be recovered from disk image or Exchange database backup
- The same disk image backup may be used for bare-metal restore



Putting It Together – Heterogeneous Backup

- Acronis® Backup & Recovery™ 11 Virtual Edition & Advanced Server
- Windows Server 2008 R2 (VM or dedicated server)
- Drobo File Sharing Storage for Business
 - iSCSI storage can also work, though file sharing makes restore easier
 - Enterprise-grade 7200RPM SATA disk drives (recommended)
 - Drobo Dashboard management software (most recent version)



Questions & Key Takeaways



■ Top Questions

- **When is it right to have an agent on a physical server?**
- **When would a dedicated virtual backup software be useful?**
- **When do you need a dedicated backup sever HW vs. a VM?**
- **Can backups be made directly to offsite storage?**

■ Key Takeaways

- **Some aspects for SMB IT will remain best served with physical servers & on-premises storage, i.e. heterogeneous**
- **The best data protection strategy for SMBs with physical and virtual servers is often a solution that works for both**
- **Drobo + Acronis is a great solution for Heterogeneous Backup**



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Thank You For Participating!

How-To Guide @ <http://www.drobo.com/acronis>

Additional information + 15-day Free Trial @

<http://www.acronis.com/enterprise/download>

+ a special **THANK YOU** to our listeners
and to expert guest Jerome Boutaud

More info @ <http://acronisinfo.com>

Twitter: [acronis_virtual](https://twitter.com/acronis_virtual)

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