

## CLOUDARRAY™ WITH VMWARE DATA RECOVERY (VDR)

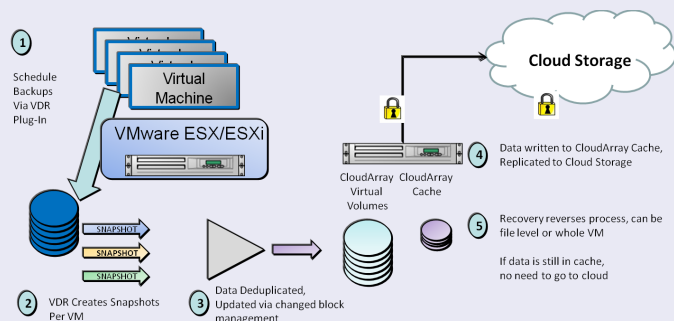
### VMware Backup made Easy using Cloud Storage with CloudArray and VDR

One of the most common headaches for VMware administrators is backup. With many VM's running on an ESX/ESXi host, you don't want them all consuming system resources to push backup data to a traditional backup server. VCB is one possible answer, but it requires a substantial investment in Backup Application software, and a Tape or local B2D (Backup to Disk) solution to manage.

With the arrival of vSphere you have the no-charge option of using VDR to backup VM images to disk using changed track updates with a native Dedupe capability.

When combined with CloudArray from TwinStrata, the B2D is actually done to a CloudArray volume and stored at a remote Cloud Service Provider (or to your own Private Cloud infrastructure). This Hybrid solution is best termed B2D2C.

After the first Deduplicated image backup completes, only Deduplicated changed track data is sent to the CloudArray device. This saves both bandwidth and remote storage requirements. VDR also supports both full and file level recovery of your VM images, adding flexibility to the restore process. Additionally, every backup in-



stance is retrievable from set points, so you have a choice of restore points to choose from just as in a traditional backup scenario.

The combined solution provides easy Backup to Disk with remote replication for DR and BC purposes.

Together, VDR and CloudArray deliver a powerful Cloud Based Remote Backup and Recovery solution for your VMware environment.

### Supported Cloud Storage Providers:

- AT&T Synaptic
- EMC Atmos
- Amazon S3
- Hosted Solutions
- Mezeo

### Key Advantages:

- Significant reduction in capital and administration for off-site VMware data storage solutions
- Significant cost savings over tape solutions, B2D backup and off-site replication infrastructure
- Enhanced data protection, fast restores without tape
- Compute Anywhere™ application access
- Downloadable virtual appliance
- Local B2D performance with Remote Replication (B2D2C)
- Can be restored to any location, even Amazon EC2

### CloudArray Feature Highlights

- Runs as a VM in vSphere with native storage integration
- Supports both VMFS and RDM volumes
- Cache storage interfaces: SAN, NAS, internal, SSD
- Thin provisioned volumes
- Cloud volumes: locally cached data volumes
- Cloud replicas: asynchronous local to cloud replication
- Cloud snapshots: space-efficient copies in the cloud
- Multiple simultaneous caches and caching policies
- Data encryption: AES-256 at rest, SSL in flight
- Full CLI and GUI interfaces

### CloudArray System Requirements

- VMware ESX/ESXi,
- 24 GB free disk space minimum
- Single CPU 1GHz or faster, 64-Bit
- 1GB RAM minimum (2 GB recommended)
- 1Gb Ethernet

