

# ABS Enterprise

*Data Protection & Disaster Recovery*

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# Company Overview

*Advanced Backup Solutions*

- ▶ **Mission:** To provide leading edge enterprise-class managed solutions enabling true business continuity
- ▶ **Founded in 2004**
- ▶ **Servicing customers across multiple industries**
  - Financial products and accounting firms, legal and insurance entities, health care practices, public education and enterprise software organizations
- ▶ **Corporate offices located at Cummings Center Office Park in Beverly, MA**
- ▶ **Datacenters located in Massachusetts and California**

# Business Continuity Planning

## *Data Protection & Disaster Recovery*

- ▶ **Business continuity is critical to your organization's success**
- ▶ **Downtime will occur – hardware & software failure, human error**
- ▶ **Backup is important, but disaster recovery is key for true operational continuity**
- ▶ **The importance of business continuity planning**
  - Human error accounts for 32% of all data loss
  - 40% of companies are unable to recover data from tape due to media unreliability
  - 66% of companies believe their backup and disaster recovery plans have significant vulnerabilities

# Business Continuity Planning

## *Essential Components*

### 1. Comprehensive Data Protection Policies

- ▶ Plans should include both local & off-site backup and recovery
  - ▶ Increased speed of backup and recovery executions with on-site integration
  - ▶ Ensures a backup execution if your Internet connection is down
- ▶ Backup and recovery scope:
  - ▶ All files, folders, applications, databases and operating systems
  - ▶ Servers and critical workstations (V and C level personnel)

### 2. Hardware Independent Bare Metal Recovery

- ▶ Recovery capabilities - flexible and hardware agnostic
  - ▶ Restore to the original server or workstation
  - ▶ Restore to replacement or temporary hardware
  - ▶ Ability to access in a virtual instance hosted off-site or via local appliance

### 3. Server Virtualization & Disaster Recovery Hosting

- ▶ Continue operations as your IT infrastructure is being addressed
  - ▶ Provisioned for a single server or your entire site

# Business Continuity Planning

*A Business Case*

## ▶ Consider the direct costs of downtime...

### 1. Downed Server (1)

- **1-5 days downtime** to procure replacement hardware, install all software and re-configure the system
- ABS Enterprise - Hybrid Data Protection®
  - Complete server restore in 2 hours without on-site IT resources
  - Recovery includes all files, folders, applications, databases, operating system and configurations

**Result: Downtime reduced from 1-5 days to 2 hours**

### 2. Complete Site Outage

- **1-2 weeks downtime** to procure hardware and re-build the IT infrastructure
- ABS Enterprise® - Site and Server Recovery Hosting
  - Data is activated in a virtual environment and users re-routed via VPN to continue normal operations

**Result: Downtime reduced from 1-2 weeks to 4-8 hours**

# Business Continuity Planning

*A Business Case*

## Cost of Recovery Comparison – Tape vs. ABS Enterprise™

### ▶ Tape Backup Recovery

1. Install new server and connect network cables
2. Install Base Operating Systems
3. Install all Service packs and hot fixes
4. Install Backup Software and Load Tape
5. Restore Windows System State
6. Restore all files and folders
7. Restore complete

**Result: 8 hours recovery time w/ manual processes**

### ▶ ABS Enterprise™ Recovery

1. Install new server and connect network cables
2. Insert ABS Recovery CD
3. An ABS technician will connect to the new system remotely and restore the image
4. Restore complete

**Result: 2 hours recovery time w/ automated processes managed by ABS**



# ABS Enterprise™

*Complete System and Data Protection*

*Solution Overview*

# ABS Enterprise™

*Complete System and Data Protection*

*A managed business continuity solution providing enterprise-class data protection and disaster recovery for servers and workstations.*

## ABS Enterprise™ - Managed Services

### ▶ Hybrid Data Protection®

- On-site and off-site bare metal backup and recovery

### ▶ Server Virtualization & Disaster Recovery Hosting

- Available for a single server or your entire site

### ▶ Enterprise Services

- ABS Technicians manage backup operations and restore data, applications, or entire servers, without IT resources

# ABS Enterprise™

## Hybrid Data Protection®

*Enterprise-class data protection: local and off-site storage powered with bare metal backup & recovery*

### Hybrid Data Protection®

#### ▶ Complete system protection - local and off-site

- Critical data – files and folders
- Applications and databases
- Windows Operating System
- Configuration and personal settings
- Hidden utility partitions

#### ▶ Fast, Reliable Bare Metal Recovery

- Complete server & workstation recovery within 2 hours – performed by ABS
  - Flexible hardware independent recovery
  - WinPE based recovery CD provides expedited recovery
- LAN speed data restoration
- Mount backups to a network drive

# ABS Enterprise™

## Backup and Storage Processes



**Customer Hardware**



- Entire Windows Operating System
- Applications & Databases – Exchange, SQL
- Windows Updates
- Critical Data
- User Settings



**ABS Appliance (On-Site)**

### Secure Off-Site Storage

- Completed backups are transferred off-site to geographically diverse datacenters



**East Coast Data Center**



**West Coast Data Center**

# ABS Enterprise™

## *System & Data Recovery Processes*

- ▶ **ABS manages the entire data recovery process**
  - ABS technician will connect remotely using a secure login session.
  - Mount Backup as Network Share
  - NTFS permissions are intact only allowing users to see what folders they originally had access to.
  - If a server has failed we can restore it to a virtualized instance locally or off-site.
  - If a hardware restore is necessary simply insert the ABS recovery CD and we take care of the rest

# ABS Enterprise™

## System & Data Recovery Processes



**ABS Appliance**



- Windows Operating System
- Applications & Databases – Exchange, SQL
- Updates, Settings
- Critical Data

### Flexible Recovery

- Restore to same or different hardware



**Same Hardware**



**Dissimilar Hardware**

# ABS Enterprise™

## Site & Server Recovery Hosting

***ABS leverages virtualization to provide a fully managed disaster recovery solution, without capital expenditure***

### Site & Server Recovery Hosting

Recovery hosting allows you to continue operations as your IT infrastructure is being addressed

Protection for a single server or entire location and IT infrastructure

#### ▶ On-Site Virtual Restoration

- ABS hosts your downed server(s) via advanced on-site appliance, enabling operational continuity
- Once new hardware is prepared, ABS provides a failback procedure by which the new server reflects the prior state plus new data loaded

#### ▶ Off-Site Virtual Restoration

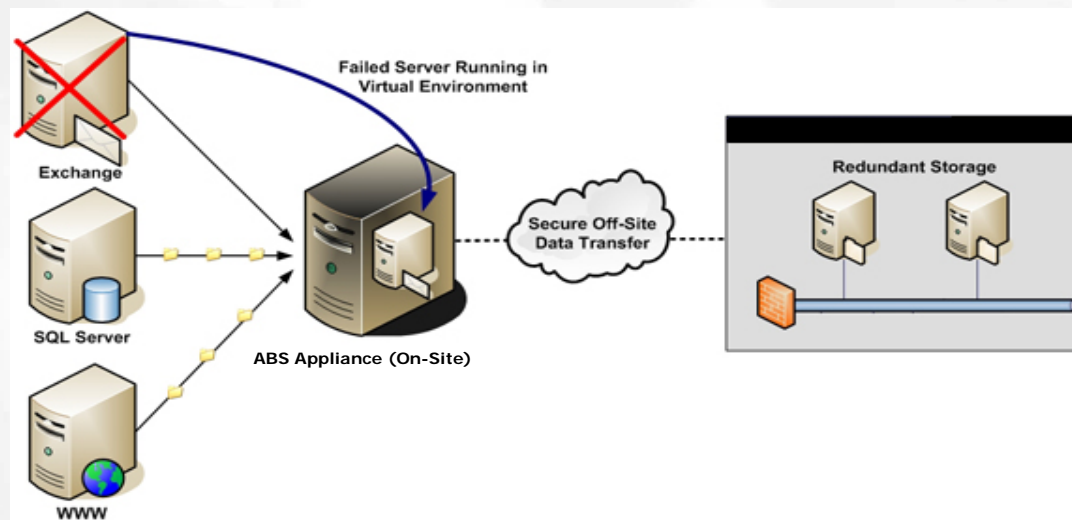
- For disaster or site-wide outage situations, users are re-routed to continue work by accessing your IT environment via the ABS recovery site – located at our primary datacenter
- Once the infrastructure is ready, failback will enable the rebuilt infrastructure with the current data environment

# ABS Enterprise™

## Site & Server Recovery Hosting

### Site & Server Recovery Hosting

- ▶ **Compliments Virtualization Solutions – Virtual Box, VMware and Microsoft Hyper-V**
  - Recover virtual machines to physical systems (V2P)
  - Migrate backup images to virtual machines (P2V)
  - Convert virtual machines to virtual machines (V2V)
- ▶ **Flexible Failback - P2P, P2V, V2P, V2V**
  - Hardware independent recovery





# ABS Enterprise™

*Complete System and Data Protection*

*Technical Features*

# ABS Enterprise™

*Complete System and Data Protection*

## ▶ Feature Review - ABS Enterprise™

- Bare Metal Backup with Open File Support
- Hardware Independent Restore (HIR)
- File and folder recovery
- Mount backup jobs as a network drive for users to retrieve files at own pace
- Hot-Backups of SQL and Exchange servers - eliminates nightly backup windows
- Hybrid Data Protection® - integrates on-site and off-site backup via two geographically diverse datacenters
- On and off-site server virtualization

# ABS Enterprise™

*Complete System and Data Protection*

## ▶ **Multiple Backups During the Business Day**

- Online and Automatic Point-In-Time Backup Images
- Schedule Incremental Backups Up To Every 15 Minutes
- I/O Performance Throttling – Does not affect your server performance

## ▶ **Efficient Backup Window**

- Unlike other solutions, ABS conducts backups at sector level, which is the smallest amount of data on the drive, enabling fast and efficient incremental backup executions.

# ABS Enterprise™

*Complete System and Data Protection*

## ▶ Volume Snapshot Manager

- Enhanced Backup Through Microsoft VSS – Exchange, SQL
- Eliminates Backup Windows - Allows for hot backup of Exchange and SQL

## ▶ Cold State Backup Images

- Create Backup Images from ABS Recovery CD - (allows for backup of non-bootable machines)
- The ability to backup machines that are non-bootable comes in very handy when there is critical data on the machine and the process to bring the machine back online may create damage to that critical data. With our unique cold backup option you can create a backup of your system in its current state.

# ABS Enterprise™

*Complete System and Data Protection*

## ▶ Backup Image Format

- Initial Full Backup then Continuous Incremental backups – After each backup is complete they are then verified and prepared for offsite replication.

## ▶ Backup Image Security

- We take security seriously. All backup images are encrypted in real-time using AES 256 -bit encryption, the encryption standard adopted by the US Government.
- Once backups are completed, they are duplicated to secure off-site datacenters using an SSL (secure socket layer) tunnel.

**Thank You!**

