

## Business Continuity Server™

### When Data Loss is Simply Not an Option

#### Instantaneous Application and Data Availability

#### The Business Challenges

Losing access to key Windows data and applications can be devastating. With downtime costing even the smallest company from thousands to millions of dollars per hour in lost productivity, opportunity and hard costs, it is imperative to keep Windows-based ecosystems available at all times.

IT departments must meet the challenges of real-time business continuity, data protection, disaster recovery, compliance and governance requirements with higher service levels, fewer resources, and ever tightening budgets.

Multiple tools that deliver partial solutions and still do not meet the requirements of today's global, continuous business operations and regulatory business climates cause complexity and drive cost.

Caught between requirements and incomplete tools, IT professionals struggle — often unsuccessfully — to recover data manually, to protect business data, and to meet the requirements of the business.

#### Guaranteed Data Usability at Every Recovery

#### The Asempra Answer

The need for a complete, high performance easy-to-use solution for protecting business-critical Exchange, SQL and Windows File Server data is clear, and the answer is Asempra.

Asempra's application-aware, real-time continuous data protection technology provides guaranteed application and data availability for Windows environments. Using Asempra's patent-pending Virtual On-Demand Recovery™ technology, an application's data is available for use within minutes, even seconds, of recovery. The data recovered is guaranteed to be completely usable on the first recovery, eliminating the need for multiple, costly manual recoveries that often result from other technologies and products.

With the Business Continuity Server, simple point and click global to granular recovery provides recovery flexibility that ranges from individual objects, such as a single e-mail or file, all the way to a complete data center. Asempra dramatically reduces the cost and complexity of mid-market IT data protection by consolidating the needs of business continuity, disaster recovery, recovery management, compliance and governance into just one solution.

In order to protect data intelligently and eliminate data loss, the Business Continuity Server transparently and continuously protects application data as transaction events occur in real-time. Backup windows are eliminated and recovery point objectives (RPO) approach zero data loss.

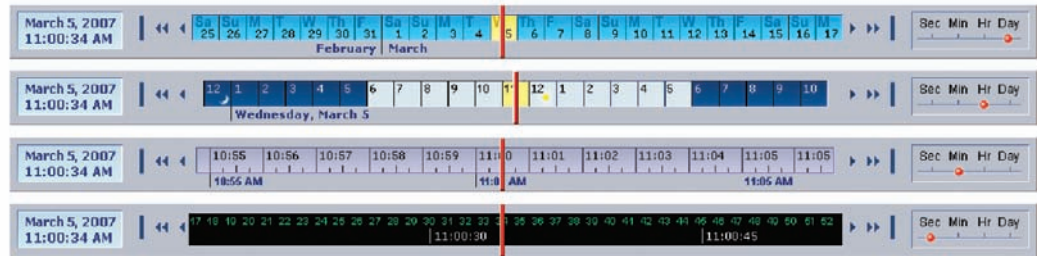


## Recover Data in Seconds

### Instantaneous Availability

Virtual On-Demand Recovery™ reduces recovery time objectives (RTO) to seconds. By making recovery times independent of the data set size and virtualizing the data set, applications can be restarted within seconds or minutes. Unlike other technologies that require a complete recovery of the data set first, the BCS allows you to recover objects instantly at a granular level — giving you the ability to recover what you want, when you want it. The Business Continuity Server recovers the data your application needs on demand, while it's running.

## Easily Recover Objects from a Single File or e-mail up to a Complete Data Center



Recovery is as easy as 1-2-3. First, set the Recovery Point Objective by dragging the indicator on the patent-pending Asempra timeline to the exact day, hour, minute, or second. Next, simply select the object to recover, from a single file or e-mail, up to an entire data center. Last, recover with a simple right click of the mouse. It's that easy.

## Simple Point and Click Global to Granular Recovery

### Guaranteed Data Useability

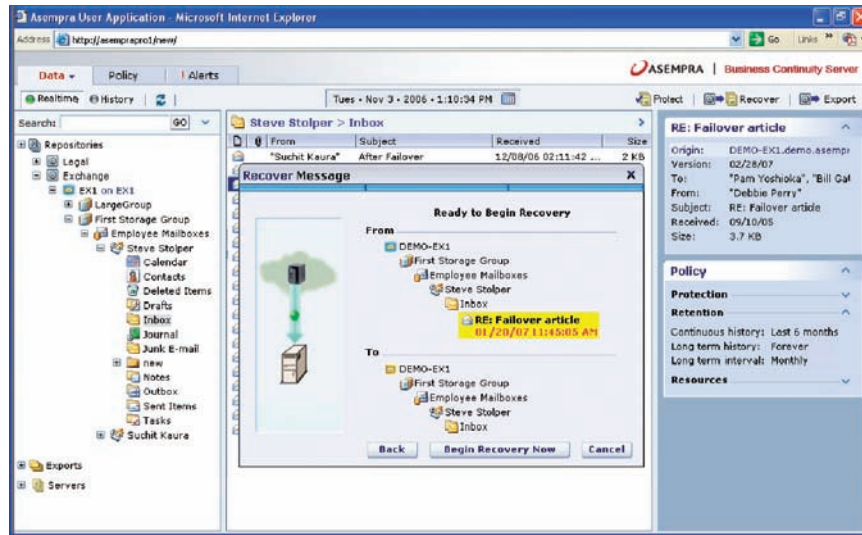
With traditional data protection products, data recovery is not only painful and time-consuming, it may deliver data that is corrupted and unusable. The Business Continuity Server's sophisticated event capture and indexing technologies guarantee data is completely usable on the first recovery.

The Business Continuity Server avoids recovering inconsistent or corrupted data through the use of its patented comprehensive Real-Time Event Journaling™ and three-dimensional continuous object store indexing techniques (real-time data, metadata, and event).

These elements are combined by the Business Continuity Server to preserve a true data history of the application with consistency marking to ensure application recoverability across multiple dimensions of time (second, minutes, hours, and days), object granularity, and application events.

Additionally, the Business Continuity Server's extensive searching and versioning capabilities can be used to locate and recover an individual object, such as a file, to help meet the needs of compliance and governance.

## Clustering Support for Microsoft and Multiple BCS Nodes



## Single, Easy-to-Use Solution for Real-time Data Protection, Backup, and Replication

### Disaster Recovery

The BCS provides disaster recovery (DR) by protecting data over existing IP LAN and WAN networks. It applies patent pending delta reduction, temp file reduction, and database stream prioritization techniques to minimize both network bandwidth and storage resource utilization.

The BCS also manages application server failover by updating the Active Directory (AD) and Domain Name Service (DNS) entries so that users are routed to the standby Exchange server, getting them back online in minutes or even seconds.

### Backup Windows Eliminated

BCS 2.5 provides seamless integration with tape backup infrastructures, such as Tivoli, Symantec, Veritas, or Legato/EMC. Using the Common Internet File System (CIFS) protocol, the BCS can eliminate or substantially reduce backup windows on protected servers by using the CIFS function to export a mountable CIFS volume. This eliminates the backup window on the protected servers, and offers savings on the deployment of new servers by removing the need to obtain licenses for new servers.

## Seamless integration with tape backup infrastructures

### Scalable Continuous Real-time Data Protection

The combination of Microsoft cluster support, clustering capability for up to four BCS nodes and our 64-bit Linux based file system give the BCS solution the scalability to handle hundreds of data sources and petabytes of protected storage with no single point of failure. VMware support means the BCS can protect virtualized machines, leveraging hardware investments and protecting vital business data.

The BCS enables instantaneous application availability and data recovery for Windows-based data in minutes or seconds, from any location, at any point-in-time with guaranteed data usability and reliability and dramatically reduces the cost and complexity of mid-market IT data protection by consolidating the needs of real-time data protection with history, replication snapshot backup, into just one solution.

## Features and Benefits Summary

Feature	Benefit
Virtual On-Demand Recovery™ (VODR)	<ul style="list-style-type: none"> <li>Any object is available immediately while the data set recovers in the background.</li> <li>Instantaneous application data recovery — in seconds or minutes.</li> <li>Recovery Time Objectives (RTO) in seconds or minutes.</li> </ul>
Real-Time Event Journaling	<ul style="list-style-type: none"> <li>Instantaneous application data recovery.</li> <li>Recovery point objectives (RPO) approach zero.</li> </ul>
Single easy-to-use Solution	<ul style="list-style-type: none"> <li>Simplifies the business challenges of disaster recovery, business continuity, regulatory compliance and governance.</li> <li>Combines the best features of real-time CDP, near CDP, snapshot and replication technologies.</li> </ul>
File-based, Application-aware, Real-time Data Protection	<ul style="list-style-type: none"> <li>Guarantees recovered data is completely usable on first recovery.</li> <li>Eliminates costly multiple manual recoveries.</li> </ul>
Scalable BCS Store	<ul style="list-style-type: none"> <li>Each BCS cluster supports up to 4 computational nodes, 100 protected data sets, and 32PB of storage.</li> </ul>
Support for Clustered Applications	<ul style="list-style-type: none"> <li>Supports protection of Microsoft clusters in both Active/Passive and Active/Active configurations.</li> </ul>
VMware® Support	<ul style="list-style-type: none"> <li>Protects Windows applications running under VMware.</li> </ul>
Seamless Backup Integration	<ul style="list-style-type: none"> <li>Dramatically reduces the cost and time of backup.</li> <li>Transparent integration with tape backup and archival products.</li> <li>Eliminates backup windows.</li> <li>Creates test environments with real data sets.</li> </ul>
Continuous Two Tier Protection Policy Engine	<ul style="list-style-type: none"> <li>Variable data retention policies according to corporate service level agreements (SLAs) and compliance regulations.</li> <li>Allows for storing long term history with minimal storage resource.</li> </ul>
Byte-level Data Delta Reduction	<ul style="list-style-type: none"> <li>Significantly reduces network and storage usage.</li> </ul>
Continuous, Transaction Oriented Object Store	<ul style="list-style-type: none"> <li>Simple Point and click global to granular recovery — from a complete data center to an individual email or file.</li> <li>Instant access to consistent data from any point-in-time.</li> <li>Recovery time measured in seconds.</li> </ul>
Web-based Management Console	<ul style="list-style-type: none"> <li>1-click, Wizard-based protection and recovery.</li> <li>Supports Microsoft Internet Explorer 6.0 and 7.0.</li> </ul>
Extensive Search and Versioning	<ul style="list-style-type: none"> <li>Helps meet governance and compliance requirements.</li> </ul>
IP LAN and WAN Support	<ul style="list-style-type: none"> <li>Reduces costs by leveraging existing infrastructure.</li> <li>Single solution for disaster recovery (remote recovery) and real-time business continuity (local recovery).</li> </ul>

## Technical Summary

System Requirements/Specifications	Storage/Network Requirements/Specifications
<b>Operating System Support:</b> Windows 2000, 2003	<b>Heterogeneous Storage Support:</b> iSCSI or Fibre-Channel attached storage Direct Attached Storage (DAS) Storage Area Network (SAN)
<b>Database Support:</b> Microsoft SQL Server 2000, 2005	<b>Network Support:</b> IP LAN or WAN - Standard TCP/IP
<b>Messaging Server Support:</b> Microsoft Exchange Server 2003	

Compliments of:  **ASEMPRA**



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