Paragon Protect & Restore is a centrally-managed scalable backup and disaster recovery solution for virtual and physical IT infrastructures of all sizes.

**New generation of data backup solutions**

- The solution combines data backup and disaster recovery for virtual and physical servers and workstations.
- Transparent backup management enables enterprises to store backups according to corporate requirements and archive them in second-tier storage or in the cloud.
- The administrator uses a central management console to manage relevant policies of all data backups, as well as their storage and archiving.

<table>
<thead>
<tr>
<th>Features</th>
<th>Business Value</th>
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<tbody>
<tr>
<td><strong>Universal system and data backup</strong></td>
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<tr>
<td>• Backup &amp; restore of virtual guest systems</td>
<td>Facilitate your operations and greatly reduce IT</td>
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<td>• Backup &amp; restore of physical Windows machines</td>
<td>overheads by employing an all-in-one solution</td>
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<td>• Non-destructive backup of Microsoft Exchange databases</td>
<td>for virtual and physical systems: less training, simple license management, single support address.</td>
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<td>• pVHD - combined data container</td>
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<td><strong>Business continuity</strong></td>
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<td>• P2V launch backup</td>
<td>Meet the strict requirements for RTO (return to operation) and RPO (recovery point objectives) in disaster recovery policies.</td>
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<td>• Recovery Media Builder</td>
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<td>• Continuous data backup (near CDP)</td>
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<td>• Migration to another ESX data storage</td>
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<td>• Support of different storage media</td>
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<td><strong>Smooth integration with production environments</strong></td>
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<td>• Backup data filtering</td>
<td>Run at maximum performance even with resource-intensive applications running. Backup processes are accelerated with intelligent data filters. Agentless backups are performed directly within the VMware infrastructure. Intelligent Load Balancing distributes the load within a data backup structure.</td>
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<td>• Leveraging Microsoft VSS</td>
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<td>• Traffic throttling</td>
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<td>• Intelligent load balancing</td>
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<td>• ESX bridge</td>
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<td><strong>Data security and consistency</strong></td>
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<td>• VM launch backup</td>
<td>Backup data validation and test failover are the central functions of the solution. Launch Backup &amp; Instant Restore reconstitute physical or virtual machines directly from the vSphere environment. Replica Test Failover checks whether the replica can seamlessly take over the job. 256-AES encryption algorithm prevents unauthorized access to backup files.</td>
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<td>• Encryption</td>
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<td>• Restore individual files</td>
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<td>• Change block tracking</td>
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<td>• Application-level backups</td>
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Easy control and monitoring

- Backup cycle planning
- Event-based reporting
- Log saver
- Remote deployment
- Scalability

User-friendly and easy backup management through the central console for administrator. Real-time statistics, event-based notifications and individual report settings. Detailed logs to detect and resolve issues on the fly.

Efficient storage utilization

- Incremental backup
- Deduplication
- Flexible archiving policies
- Wide range of storage media and locations
- Multi-layer storage infrastructure

Efficient use of available storage memory saves your IT budgets and TCO. Intelligent storage policies enable effective monitoring of backup retention time which directly affects memory reserves and storage capacity.

System Requirements

The essentials of Paragon Protect & Restore:
Administration/installation server, backup server, management consoles

Operating systems:
- Microsoft® Windows® XP SP3
- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1
- Windows Server® 2003 SP2
- Windows Server 2008 R1/R2
- Windows Server 2012 R1/R2

Architecture:
32/64 bit

Memory:
2GB RAM or higher

Processor:
x86/x64 CPU (at least 2 core / 4 core for backup server)

Hard disk space:
- Administration/ installation server: 400 MB for installation
- Backup server: 200 MB for installation
- Console: 50 MB for installation

Services:
- Active WMI (Windows Management Instrumentation) service
- File and Printer Sharing enabled in the firewall settings to allow for default system shares on the local volumes (ADMIN$, C$, D$, etc.)

PPR ESX Bridge

Operating systems:
- Windows Server® 2003 SP2
- Windows Server 2008 R1/R2
- Windows Server 2012 R1/R2

Architecture:
- 64-bit processor
- x64 CPU (min. 2 core).
Fast multicore processors boost data rates and allow a greater number of concurrent jobs.

Paragon Protect & Restore agents

Operating systems:
- Microsoft® Windows® XP SP3
- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1
- Windows Server® 2003 SP2
- Windows Server 2008 R1/R2
- Windows Server 2012 R1/R2
- Windows Hyper-V Server 2012

Architecture:
32/64 bit

Memory:
2GB RAM or higher

Hypervisors:
- VMware® vSphere® 6.x, 5.5, 5.1, 5.0, 4.1, 4.0
- VMware ESX® and VMware ESXi™ 4.x, 5.x, 6.x
- Non-commercial VMware ESX*
- Microsoft Hyper-V
- Microsoft Exchange
- Exchange Server 2007
- Exchange Server 2010
- Exchange Server 2013
- Single-copy cluster support
- Cluster continuous replication support

*Windows OS guest systems which are hosted on non-commercial VMware ESX environments can only be backed up via a local backup agent. Other guest machines are not supported.