EMC Continuous Data Protection for SAP

Responding to planned and unplanned events
The reality of today’s SAP environments is that there will be both planned and unplanned situations that result in failures. Today’s SAP customers face many challenges maintaining, updating, and applying changes to their SAP environments. Unplanned events such as data corruption, or unexpected results after applying support packages or performing a system upgrade, pose risks to a SAP system, impacting time to market for go-live on new functionality along with the time and cost in applying and testing the SAP changes.

Typically, SAP administrators have depended on traditional backup and recovery methods, such as storage system *“snapshots”* or tape backups, to protect test and development landscapes. The challenge for SAP administrators is the amount of time to restore the backup and apply logs to get to the desired recovery point. Not only can time be lost, but previously completed work may need to be repeated.

To mitigate such risks, it is imperative that SAP administrators are able to recover a SAP system to any user-specified point in time. The EMC® Continuous Data Protection solution offers this capability. EMC RecoverPoint is an advanced enterprise-class data protection and recovery solution that provides continuous data protection for heterogeneous storage and server environments.

An Overview of the Projected Recovery Time by Recovery Source

To save time and effort, it is essential to understand the projected recovery time by recovery source. The table below illustrates the difference in recovery times for various methods:

<table>
<thead>
<tr>
<th>Recovery Source</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP</td>
<td>Minutes/hours</td>
</tr>
<tr>
<td>Disk/snaps*</td>
<td>Hours/day</td>
</tr>
<tr>
<td>Tape</td>
<td>Multiple hours/days</td>
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</tbody>
</table>

* Assumes full-volume snapshots that are updated twice per day

To bookmark protection based on an application-specific event, use the following methods:

- Daily backup
- Snapshots
- Any point in time
- Significant point in time

Daily recovery points—from tape or disk
More frequent disk-based recovery points
All recovery points

Any user-configurable event

RecoverPoint CDP
Snapshot
Daily backup

Yesterday 24 hours Midnight Now

How much time would you save if you could bookmark protection based on an application-specific event?
Solution Description

The EMC Continuous Data Protection for SAP solution offers unique capabilities to support SAP application development, testing, and maintenance scenarios including:

- **Planned point-in-time recovery**, which becomes necessary following a scheduled event such as maintenance, upgrade, or applying a SAP support package
- **Unplanned point-in-time recovery**, which follows an unexpected event or data corruption that renders the SAP system unable to start

RecoverPoint can be used to perform replication within the same location using CDP technology. For CDP, the data is continuously written to the journal. RecoverPoint CDP tracks changes to data at a block level and journals these changes using CDP technology. This capability is used to protect critical data from physical or logical failures such as server outages, data corruption, software errors, viruses, and common user errors.

RecoverPoint allows application data to be accessed at any point in time by selecting intelligent time- or user-specific bookmarks. Application data at the selected point in time can be recovered and immediately read and written by the host. RecoverPoint allows read/write access to replicated data without disturbing the replication process. In recovery, this enables repurposing the data at several points in time in order to determine the best point from which to recover. This capability can be used to offload backups, allow live application testing, support on-demand recovery, migrate data, and for many other valuable data processing purposes. RecoverPoint also supports multiple transaction-consistent recovery points—each indexed to a specific point in time.

This proven solution is lab-validated and supported by documented reference architectures and best practices. This solution investment and discovery helps address the uncertainty that organizations typically face regarding the time, cost, and effort required to proactively address planned and unplanned events.

Why EMC for SAP

With EMC’s proven solution approach, you can increase productivity, accelerate time to implementation, and enable knowledge transfer between your IT staff and EMC’s SAP experts with documented reference architectures and best practices. You can also ensure:

- Roll back to any point in time from planned events such as applying SAP support packages, kernels, or any changes that affect the SAP production systems
- Roll back to any point in time from unexpected events that cause the SAP production system to be unavailable
- Minimize the recovery gaps to achieve your users’ on-demand needs and eliminate the need for strict daily backup windows
- Ensure data consistency across the SAP landscape—including federated database support
- Provide continuous replication to a remote site without impacting SAP production performance

EMC has invested in the discovery and identification of the most-appropriate local and remote replication and recovery solutions to help you achieve your SAP replication availability and recovery objectives. Couple this with EMC’s proven expertise across thousands of SAP application environments and you have a confident choice to help you address your SAP data protection and recovery requirements.

EMC Proven Solutions

EMC Proven™ solutions help customers identify and overcome business challenges by reducing risk and improving time to value of their information infrastructures. EMC leverages its expertise and proven technologies with its strategic relationships with Cisco, Microsoft, Oracle, SAP, and VMware® to deliver solutions that support our customers’ business and technical requirements. All solutions are rigorously tested and documented with reference architectures and best practices designed to reduce the total cost of ownership of the infrastructure and increase IT efficiency.

Take the Next Step

To learn more about EMC’s solutions and expertise for SAP environments, visit www.EMC.com or contact your local EMC account manager.