Catalogic® ECX™: Backup and Recover for SAP HANA Databases on Pure Storage

Catalog. Automate. Transform

ECX for SAP HANA Highlights

- Automate the creation and use of SAP HANA data copies — snapshots, clones, and replicas on Pure storage infrastructure

- Agentless model simplifies management while still providing application awareness.

- APIs allow integration with popular DevOps tools.

- SAP HANA log capture provides point-in-time recovery.

- Simple licensing based on Pure storage controllers.

- Supports SAP HANA running on either physical servers or VMware virtual machines.

- Create SAP HANA database snapshots, replication, and clones on Pure Storage FlashArray //X, //C, and //M systems

SAP HANA databases are a fundamental component of many organization's most critical business processes. As such, copies of SAP HANA data are needed for local and remote recovery. In the case of a disaster, it is important for the recovery of data to be seamless and efficient.

For this reason, Copy Data Management (CDM) is fast-becoming a must-have solution for any enterprise SAP HANA environment.
ECX integrates Pure Storage array copy processes (snapshots, replication, clones) with SAP HANA, allowing customers to leverage their existing storage infrastructure to improve the recovery of their data while dramatically improving their capabilities to deliver fresh copies of key databases to those functions and business units that demand them.

The copies and replicas created by ECX makes use of the Pure Storage FlashRecovery copy engine and takes full advantage of the FlashReduce data reduction features of the Pure Storage array. The SAP HANA data copies created by ECX are automatically space efficient and high performance.

Automating the Copy Process

Because of the unique characteristics of most SAP HANA environments (high I/O, need for continuous uptime, strict protection SLAs, etc.), performing copy creation and management requires knowledge of the database management system and specific points of integration to ensure that the copy process has minimal impact, completes successfully, and results in application consistent copies every time. The bi-product of proper CDM is the end of copy data sprawl, as the ad-hoc and unmanaged processes for creating copies are eliminated in favor of a centralized, holistic approach.

With ECX, users create copy policies that define key copy metrics: how often to make copies, where the copies will reside (local, remote or both), how long copies are retained and so on. Once a policy is created, it can easily be applied to any SAP HANA workload. No more complex scripting or working with multiple tools; just click-and-apply ease of use.

The ECX copy process is agentless. Rather than having to deploy and maintain agents across all SAP HANA hosts, ECX uses a run-time code injection method that gives you the benefits of an agent – true application awareness – without the maintenance headaches. It supports SAP HANA running on either physical servers or as VMware virtual machines.

The meta-data catalog at the core of ECX tracks all copies, making them searchable and reportable. ECX also handles the deletion of copies, ensuring that you only retain the data you really need.

Data Protection in the Cloud

As more organizations move away from tape backups into cloud backups, it will require managing backups on premise and in the cloud. With ECX integration with Pure CloudSnap, users can backup their SAP HANA data on the local FlashArray and a S3 target.

ECX will orchestrate the copy creation on both the local and cloud environment. All the copies will be application aware. Users can achieve rapid recovery of their SAP HANA database from the local Flasharray copy or the offloaded copy on the S3 target.

Data Protection and Disaster Recovery

Through its template-based management and orchestration of application-aware SAP HANA copies, ECX becomes a powerful solution for next generation data protection and recovery. You can skip traditional backup completely and move to a snap-and-replicate model that provides near instant protection and rapid recovery. Compared to the slow restores of traditional backup, ECX allows IT to mount and instantly access copies that are already in the production storage environment. ECX catalogs all snapshots and replicas and alerts you if a snap or replication job was missed or failed. Disaster recovery can be fully automated and tested non-disruptively.

Instant Revert

ECX allow instant recovery of SAP HANA databases using snapshot revert feature. In the case of a disaster, time is of the essence but with ECX snapshot revert, recovery can rollback data to a specified snapshot. Instead of waiting for data to be copied over to the production volume, ECX will revert the volume back using the snapshot copy. Recovery from a disaster is seamless and efficient with ECX.

Dev-Ops Tool Support via APIs

All ECX features can be controlled via the ECX RESTful API. This means that ECX offers true "infrastructure as code" to agile, DevOps environments that require copies of SAP HANA data. With a single line of code from a DevOps tool, developers can bring up SAP HANA data copies or even full working systems (storage, networking and compute, defined as needed). Catalogic supports popular DevOps tools such as Chef, Puppet, Ansible, IBM Bluemix, IBM UrbanCode and more. In addition, Catalogic offers pre-built scripts to help with DevOps integration, as well as plug-in tools.

SAP HANA Log Management

Array snapshots are an excellent way to capture large data sets quickly, but SAP HANA transactions will continue to take place in-between snapshots. For this reason, ECX includes SAP HANA log capturing. By keeping track of logs, ECX can provide point-in-time recovery to transactional points that fall between snapshot captures. This also allows rolling forward to a point more recent than the last snapshot.

Simple Licensing

Unlike other solutions that require complex licensing based on data size, CPU cores, SAP HANA instances or other metrics subject to continual change and increase, Catalogic uses a simple storage controller-based licensing system. License the storage controllers you wish to use with Catalogic copy data management, and there are no concerns about data size, number of SAP HANA instances, etc.

Support

Supported versions include:

- SAP HANA 1.0 SPS 07+
- SAP HANA 2.0 SPS 02
- SAP HANA 2.0 SPS 03
- SAP HANA 2.0 SPS 04

Supported versions include:

- Physical and Virtual environments

Supported versions include:

- SAP HANA 1.0 SPS 07+
- SAP HANA 2.0 SPS 02
- SAP HANA 2.0 SPS 03