

Catalogic® ECX[™]: Copy Data Management for Nimble Storage

Catalog. Automate. Transform

Catalogic ECX Highlights

- Automate the creation and use of copy data—snapshots and Zero-Copy Clones- on Nimble All Flash and Hybrid Arrayssystems.
- Integrate Nimble copy processes with key enterprise applications such as Oracle, SQL Server, SAP HANA and VMware.
- Modernize existing IT operations by providing automation, user self-service and API-based operations without the need for any additional hardware.
- Simplify management of critical IT functions such as data protection and recovery.
- Automate development and test infrastructure provisioning, reducing management time as much as 99%.
- Catalog and track IT objects: snapshots, virtual machines, datastores, applications, etc.
- Deliver advanced insights into copy data environments across the enterprise, including protection RPO/RTO compliance reporting.
- Integrated data masking for Oracle.
- Simple licensing based on Nimble All Flash and Hybrid Arrays storage controllers.



Catalogic ECX in-place copy data management (CDM) for Nimble Storage simplifies and automates operation of your Nimble All Flash and Hybrid Arrays infrastructure through comprehensive management of Nimble snapshots. By providing an application - and VM-aware copy management software layer, ECX reduces copy sprawl, simplifies data protection and delivers value-adding use cases such as automated infrastructure deployment for Dev-Test or DevOps.

Catalogic's in-place CDM approach has significant advantages over alternatives in that it requires no additional infrastructure for the user to purchase and manage. It leverages the existing Nimble Storage production environment rather than requiring the creation of a fully redundant environment for the copies of the production data.

Catalogic and Nimble Storage

Catalogic ECX comprehensively supports the full line of Nimble All Flash systems: AF20, AF20Q, AF40, AF60, and AF80. **In addition, the** Nimble Hybrid Arrays systems: HF20, HF20C, HF20H, HF40, HF40C, HF60, and HF60C.

Because ECX makes use of the Nimble Storage snapshot engine, it takes full advantage of the exceptional data reduction features of the Nimble Storage array. Copies created by ECX are automatically space efficient using Nimble's Zero-Copy Clones and high performance, without the need for any system tuning.

ECX Data Protection and Recovery

Using a policy-based, SLA driven model, ECX fully automates data protection and recovery for Nimble Storage systems, including snapshot scheduling and retention management.

ECX provides push-button recovery at both the data level and the system level. Data level recovery provides mounting and mapping read/write snapshots using Zero-Copy Clones to systems over iSCSI or FC. (Oracle users can drive ECX data recovery via RMAN.) System recovery spins up a full recovery stack – including storage, networking and compute – of one or more systems in a pre-defined recovery sequence. No more messy runbooks or complex recovery scripts!

Application-aware protection eliminates the need for database recovery processing. Integrated log management offers point-in-time recovery for Oracle and MS SQL Server databases.

ECX catalogs all snapshots for rapid discovery when required and alerts you if a snap job was missed or failed via automated SLA reporting that provides a comprehensive view of protection levels.

Automated Dev-Test and DevOps Infrastructure

The speed and effectiveness of development and test processes are most often limited by the time it takes to provision IT infrastructure. Typical organizations take weeks to deploy infrastructure; even the most efficient can take several days. With Catalogic ECX and Nimble Storage, Dev-Test or DevOps infrastructure can be spun up in minutes, either on an automated, scheduled basis or with push-button ease on demand.

Because all ECX functions are accessible via a documented REST API interface, developers can integrate ECX infrastructure automation with popular DevOps tools such as Pu ppet, Chef, Jenkins, etc. Pre defined integration scripts and plug-ins make it easy for developers to spin up full stack infrastructure via a few simple lines of code. In this way, DevOps teams using Nimble Storage have the same agility as those running in the cloud but can use vital system-of-record data in their development processes. ECX also provides necessary data masking functionality for Oracle and MS SQL Server databases to provide information security.

Efficient, Reusable Data Masking

Most organizations use data masking to some degree in order to obfuscate sensitive Oracle data. But the data masking process can add significant overhead to copy creation and can limit the number of copies made available. With ECX, masked copies of Oracle can be created which can then be distributed to any number of users. In this way, a single masking operation can serve the needs of multiple data consumers.

Oracle RMAN Integration

Oracle users are deeply committed to RMAN (Oracle Recovery Manager) and use it every day. ECX works with RMAN by feeding information about ECX generated copies into the RMAN catalog. This provides visibility via RMAN, and in addition users can drive Oracle data recoveries using RMAN scripts in conjunction with ECX provided copies.

Database Log Management

Nimble Storage snapshots are an excellent way to capture large data sets quickly, but database transactions will continue to take place in -between snapshots. For this reason, ECX includes SAP HANA, Oracle and SQL Server log capturing. By keeping track of logs, ECX can provide point -in-time recovery to transactional points that fall between snapshot captures.

Secure Multi-Tenancy

ECX offers secure multi-tenancy functionality to meet the needs of both managed service providers and larger enterprises that need to delegate resources internally. Individual "tenants" can be created within a single ECX instance, allowing each tenant its own set of resources and the ability to delive r administrative functionality within the tenancy (create users, define jobs, etc.).

Policy Templates for Automation and Self-Service IT

IT departments spend too much time in mundane, repetitive tasks, such as continually allocating storage resources to internal data consumers. With ECX template-based provisioning and copy management, internal customers can get easy self -service access to request the resources they need, when they need them. ECX templates are pre-defined by the IT team to all ow access to specific resources. Users can then access these templates via a self -service portal interface or through API calls.

Simple Licensing

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

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