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EMC<sup>2</sup>  
BUSINESS  
PARTNER

SELECT



# DataFrameworks

# DATAFRAMEWORKS

## Technology Connect: Select Partner Sales Kit

### SALES SUMMARY

**DataFrameworks is a Technology Connect Select Partner that works with EMC in a "Reseller Sell" model. This allows customers to buy direct from EMC.**

Use this Sales Kit to learn more about DataFrameworks, DataFrameworks products, the EMC-DataFrameworks joint solution, and how to get in touch with the DataFrameworks team.

### Overview

Many of Dell EMC's customers and prospects deploy huge, complex workflows with petabytes of technical and rich content. Because of the relentless growth of unstructured data and object files, these organizations are challenged with data management and protection on an enormous scale. The business impact includes higher IT costs, workflow inefficiencies and inability to make accurate business decisions regarding storage.

DataFrameworks file management software, ClarityNow, resolves critical file management challenges, especially in industries dependent on technical workflows. ClarityNow has an ROI-focused architecture with purpose-built features and benefits for both IT departments and business users.

The new joint solution allows EMC reps to engage clients and prospects with answers to the challenges of storage and file management in an unrelenting data environment driven by new requirements for unstructured data and object files.

Isilon and ECS customers benefit from their new ability to implement the right mix of file and object storage, on a petabyte scale. Target industries include media and entertainment, life sciences, oil and gas, EDA, software development, automotive and others with complex workflows.

### SOLUTION DESCRIPTION

ClarityNow is enterprise software that works seamlessly with Dell EMC's Isilon and ECS storage systems, providing real-time indexes of petabytes of data and ability to extend data management capabilities to their IT and business users.

This is important to IT departments overwhelmed with requests to mediate between end users and storage archives. With ClarityNow, the business user can decide what, when and where to archive.

In addition, when a company understands its data, it can make better business decisions, adapt efficiently and minimize risks. ClarityNow gives IT and business users a way to rapidly search, identify and take action on data regardless of file location. Customers benefit from a unified 'single pane of glass' view of all files and objects, plus the ability to optimize management of all data back and forth among any heterogeneous storage environments.

## WHAT DOES IT DO?

ClarityNow provides bi-directional data movement among Isilon and ECS and preserves data independence on both platforms. Data independence enables files or objects to be retrieved and consumed independently from either platform and both files and objects are stored as POSIX compliant files or native S3 objects.

The new, joint solution delivers petabyte scale archiving and high-speed scanning straight to the business user. Benefits include advanced workflow efficiencies and lower costs. The ROI-focused architecture leverages speed, scale and extensibility to find, tag and place unstructured data across any heterogeneous or public cloud storage system.

## WHAT DOES IT ADD?

ClarityNow works with ECS and Isilon storage systems to give customers a proven solution for finding, valuing and distributing petabytes of files and objects residing in their storage system(s). ClarityNow adds:

- High speed indexing of data, reducing time-to-index from hours/days to minutes
- Completely automated scans, eliminating the need for IT-generated scripts
- Near real-time scans of all data across all file systems and storage vendors
- Ability to find duplicates, identify dormant data on the system and find files with non-conforming conventions
- Showback and chargeback capabilities
- Ability to archive and move to cloud or object and back

## WHAT SHOULD I KNOW?

These are top examples of ClarityNow benefits that speak directly to a decision maker's storage and file management concerns:

- ROI-focused architecture that delivers advanced workflow efficiencies and lowers costs using speed, scale and extensibility.
- S3 interface supports Amazon S3 with a native S3 scanner/browser and a bi-directional data mover to move data from traditional systems (NFS, CIFS, local mounts) to object-based systems (S3).
- A 'single pane of glass' view showing extensive data assets simultaneously across large, heterogeneous environments and public cloud storage.
- Attribute tagging that enables high speed search of millions of files and objects across any storage system across the globe.
- High speed indexing using the fastest scanning algorithm available on the market today. Runs in 'look aside' mode with no agent.
- Data independence: ClarityNow is vendor agnostic; it does not store objects in a proprietary format.
- Real time project and user information allows people to see data in its real context and move low value data to lower cost storage.

- Patented in-memory database for optimized analytical performance.
- Data health - know where your data is and what to do with it.
- Business user enablement allows the user to determine what, when and where to archive.

## SYSTEM REQUIREMENTS

### SERVER REQUIREMENTS

- Red Hat Enterprise Linux 7 x86\_64 (or compatible, such as CentOS) installed
- Minimum 16 GB of RAM
- Minimum 20 GB of local filesystem
- YUM repositories configured and accessible
- Hostname matches the license file
- Firewall allows the following open inbound ports:
  - TCP 80
  - TCP 443
  - TCP 52000

## OPPORTUNITY

### CUSTOMER PAIN POINTS

- Rapidly scaling internal demand for file and object storage driven by technical workflows and rich content
- Inability to track huge volumes of unstructured data across storage tiers, in a single pane
- Inability to provide chargeback or showback to internal users and departments
- Overloaded IT departments constantly mediating between end users and storage archives
- A current or planned shift to Amazon S3 or other public storage is obsoleting interfaces

### Examples of Customer Challenges Solved with ClarityNow

- **Deluxe** - Global C-level reporting of all in-house projects across 94 PBs of data
- **Illumina** - Self-service archive from Isilon to/from ECS for 600 research scientists
- **Pfizer** - Global multi-site search across research and clinical data

### Strategic Play

Being knowledgeable about a customer's file management challenges in a rapidly changing data world will:

- Strengthen ECS and Isilon relationships
- Add to the rep's credibility as a data expert and total solution resource
- Assist with competitive take outs

### What DataFrameworks Brings to The Table

ClarityNow delivers out-of-the-box ROI using an in-memory, object-oriented database and a fast scanning algorithm. This enables organizations to index petabytes of data in hours instead of days, to achieve:

- immediate visibility into duplicates and redundant data
- rapid and informed decisions about their data
- business user ability to decide what, when and where to archive

## POSITIONING CLARITYNOW

### Engage when:

- The prospect is managing terabytes or petabytes of unstructured data in an environment driven by technical workflows
- The prospect's storage environment is multi-platform and may include DellEMC, HGST, NetApp, GPFS, Luster or another enterprise storage solution
- The prospect's company depends on technical or rich content workflows
- Customer does not know what or when to archive
- Customer would like to implement a showback or chargeback scheme

### Ask these questions:

1. Do you currently have a way of viewing all your unstructured data across all file systems and storage vendors, in a single pane view?
2. Are you exploring object / cloud storage solutions?
3. Can you currently identify duplicate, dormant and redundant data, then move it quickly to the most appropriate cost storage tier?
4. Are you using internal scripts to run scans?
5. Can you high-speed scan and index across multiple file systems and storage vendors?
6. How much time does it take to get an index?
7. Can you see scan results (all files, all systems) in a 'single pane of glass'?

## ORDERING

ClarityNow is available via MyQuotes.

License Key Generation Times			
PRODUCT IS DELIVERED ENTIRELY ELECTRONICALLY	STANDARD LEAD TIME	DURING THE LAST WEEK OF THE QUARTER	DURING THE LAST DAY OF THE QUARTER
<b>CLARITYNOW</b>	Two days	Two days	Two days

As with all EMC Select partner products, service and support will be provided by DataFrameworks. Customers who purchase products should contact DataFrameworks directly should they have a problem.

See "EMC Select Models " (click on Sales Tools) on [Technology Connect Sales Resource Site](#) for a description of DataFrameworks products available through Technology Connect. EMC sales representatives and technical consultants should use this document when engaging with DataFrameworks on opportunities. This will ensure you have the proper model numbers when entering orders into MyQuotes.

# FREQUENTLY ASKED QUESTIONS

## GENERAL QUESTIONS

Question: What is the product name?

Answer: ClarityNow, an enterprise software file management solution.

Question: How does the EMC-DataFrameworks reference architecture work?

Answer: In the reference architecture, the ClarityNow server scans and indexes the attached file systems. The ClarityNow server software utilizes the Linux operating system to mount file systems. For NFS or CIFS file systems, no additional software is required. By running CentOS Linux, the ClarityNow system also allows broad compatibility with propriety file systems. ClarityNow can be deployed as a physical system, or as a virtual server. The ClarityNow software "walks" the file system, reading information about every file and directory. How quickly a file system can return this information determines scanning speed. Storing this metadata information in a searchable index allows users to explore the file systems. Memory dependent, ClarityNow servers are provisioned in high memory configurations. With user access control, ClarityNow allows users to explore file systems without direct access to data, ensuring compliance with data governance.

Question: What is the business value of the EMC-DataFrameworks reference architecture that really gets the customers to buy?

Answer:

- Reduces CapEx by identifying and removing redundant and/or low value data.
- Reduces OpEx by freeing the IT department from mediating between storage and the business user. Push the entire process down to the business user.
- Intelligently scales the rapidly increasing demand for file and object-based storage.
- Provides real-time project and user information to the business user, IT department and finance department.
- Brings more efficiency to each participant in a technical or rich content work flow, resulting in faster time-to-market, increased throughput and a host of other benefits.
- Enables enterprise architects and others involved in scaling/expanding storage environments.

Question: Are there some key questions that I should ask that can quickly gauge whether or not there is a real opportunity?

Answer: Yes.

1. Are you seeing increased internal demand for file and object storage?
2. Are you currently able to determine what or when to archive?
3. Are you currently able to get an accurate index? How long does it take?
4. Do you see a need to enable the business user to make decisions about what, when and where to archive?
5. Are you currently able to allocate data costs by project and end user?
6. Are you open to a joint solution between Dell EMC and our partner DataFrameworks?

Question: What's the strategic play with DataFrameworks? What's the lost opportunity if I don't engage?

Answer: File management of unstructured data is a hot topic, causing a lot of pain in data centers that support technical and rich content workflows. DataFrameworks' solution is ideal for the targeted verticals, with many current use cases to engage and nurture clients and prospects in those verticals. Reps who choose not to engage miss an opportunity to position themselves as total solution providers for their clients' data ecosystem challenges.

Question: What specific challenges or pain do customers face that EMC-DataFrameworks reference architecture solves?

Answer:

1. Rapidly scaling internal demand for file and object storage driven by technical workflows and rich content
2. Spiraling storage costs with minimal ability to track or allocate data
3. Inability to track huge volumes of assets across storage tiers
4. Overloaded IT departments constantly mediating between end users and storage archives
5. A current or planned shift to Amazon S3 or other public storage is obsoleting interfaces

## TECHNICAL QUESTIONS

Question: How much RAM does the server require?

Answer: Sizing depends on file and directory count. Some guidelines by industry are:

- Media 32 GB to 128 GB
- Research Life Science 64 GB to 256 GB
- EDA 128 GB to 512 GB

Question: Can users authenticate with MS Active directory?

Answer: Yes, ClarityNow can authenticate users against MS Active Directory using LDAP. Folder views and plugins in ClarityNow can be restricted by Active Directory Group.

Question: How fast does it scan?

Answer: Initial scan speed is dependent on file server performance. Subsequent scans only index files that have changed, increasing scan performance dramatically.

Question: What file systems can I scan?

Answer: Any file system that can be mounted on Linux can be scanned with ClarityNow.

Question: What type of object storage can I scan?

Answer: Any object storage, public or private, that has an S3 interface can be scanned with ClarityNow.

Question: Does ClarityNow index the contents of a file?

Answer: No, by default ClarityNow indexes directory names and file names, basically a high speed "find" command. Some partner plugins enable indexing of text-based files

Question: How do tags get applied?

Answer: Tags can be applied via a number of mechanisms:

- a) autotag functionality will apply tags based on a series of regular expression rules applied to directory hierarchy, directory names, file names
- b) tags can be manually applied via drag and drop or object properties
- c) tags can be "harvested" from other databases via plugins
- d) tags can be applied via sidecar, or "egg" files within a directory

Question: How are plugins invoked?

Answer:

- a) plugins can be invoked by adding custom menu items to the GUI
- b) plugins can run as a regularly scheduled cron job
- c) many plugins can be invoked directly from command line

Question: What API's are available?

Answer:

- a) command line interface
- b) python interface

Question: What is the filer performance impact when indexing?

- a) most environments have measured < 3%
- b) indexing can be throttled up or down

Question: How flexible is search?

Answer: Search supports keywords along with "and" operations on file and directory name.

## **ORDERING AND SUPPORT**

Question: When will the products be available?

Answer: DataFrameworks solutions are available today in MyQuotes.

Question: Will EMC's channel partners be able to sell the DataFrameworks offerings?

Answer: Yes, EMC channel partners can resell most Technology Connect third-party products, including DataFrameworks offerings.

Question: What DataFrameworks model numbers are available through Technology Connect for Select partner products?

Answer: For a listing of EMC model numbers for DataFrameworks products available through Technology Connect, see "EMC Select Models (click on Sales Tools) on the [Technology Connect Sales Resource Site](#).

Question: Is there any customer training available for ClarityNow?

Answer: Yes. Installation information is available at <http://docs.dev.dataframeworks.com/> and customer training is available through your DataFrameworks sales rep.

Question: Who provides service and support for DataFrameworks?

Answer: EMC does not provide service or support for any Select partner products. DataFrameworks provides support for its solutions.

Question: Can I discount Select partner products at the same rate as I would a traditional EMC-branded product?

Answer: Select partner products are at discount-class "K." Select partner product maintenance is at discount-class "F2."

Question: Where can my customer go to find information about Technology Connect for Select partners?

Answer: [emc.com](http://emc.com), [Technology Connect Sales Resource Site](#), and '[EMC Tech Connect](#)' [mobile app](#).

Question: Where can I find a list of contacts for DataFrameworks?

Answer:

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