



Nirvana
A DIVISION OF GENERAL ATOMICS



**Update: Nirvana SRB
Federating Legacy Data Environments
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General Atomics and Nirvana SRB

- **1955 – General Atomics (GA) founded San Diego Hi-tech systems development:**
 - Photonics, lasers, UltraWideBand wireless
 - Nuclear fission and fusion, Uranium
 - Predator and Warrior UAVs
 - Electromagnetic carrier launch systems
- **1985 – GA founds San Diego Supercomputer Center**
- **1995 – Storage Resource Broker developed at SDSC**
- **2000 – Nirvana chartered to commercialize SRB**
- **2002 – 100th Data grid: NASA Remote Data Store**
- **2007 – 150th Data grid: DHS ICE C3**
- **2008 – First commercial implementation: infoUSA**
- **2010 – Largest HPC federation project to date:**
 - 30PB SLM Federation across 6 major DoD Research Facilities

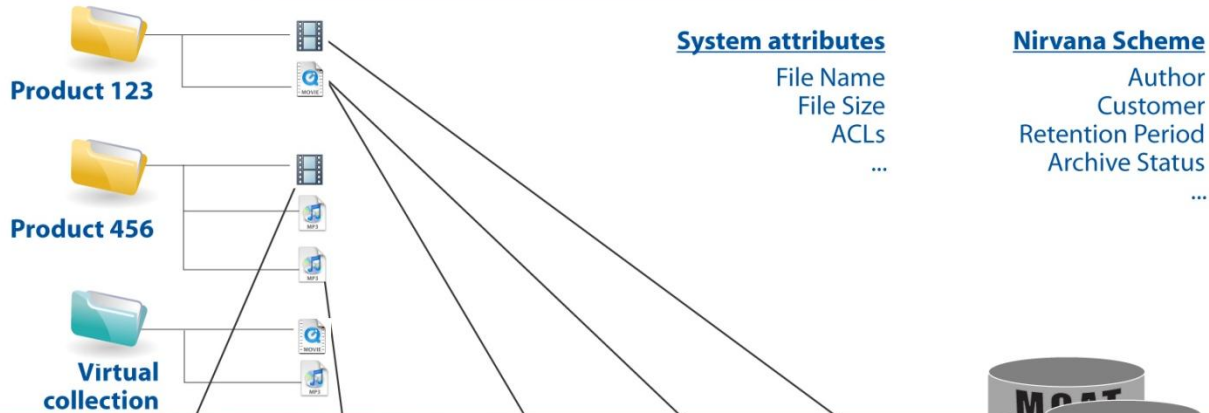


GA is a global enterprise, Nirvana is an advanced development group, SRB is in its 15th year, and is at the core of some of the most demanding data grid implementations.

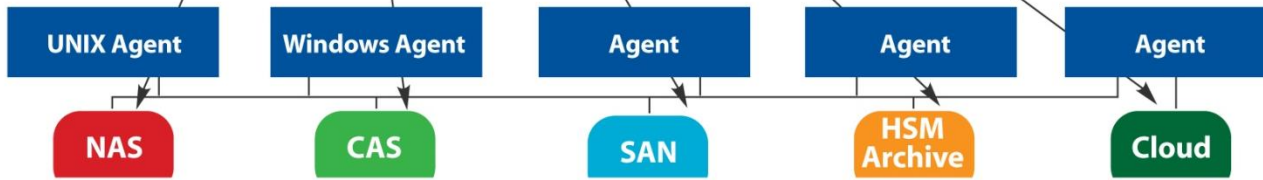
Global Namespace & Metadata



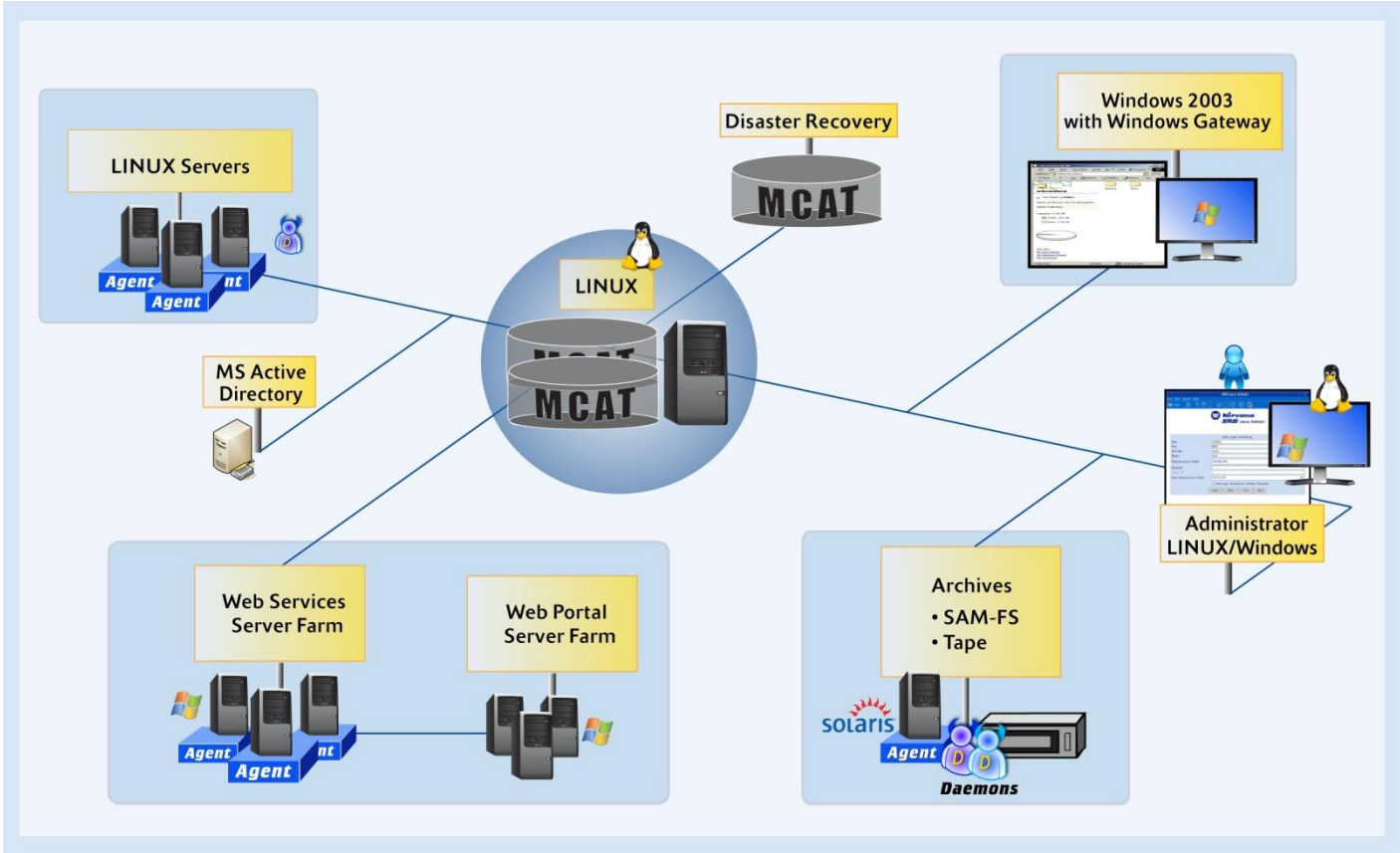
Global Namespace



Metadata Catalog



Nirvana SRB Architecture



SRB federates complex data environments, enterprise-wide, even cross-agency. It is the simplest way to provide a single, unified view.

Nirvana SRB Value

- **High-value Unstructured Data**

- Image, sensor, forensic, drawings, Surveillance feeds
- HPC, Intel/ Security, Geoseismic/ Geospatial, Digital Media, Pharma/ Genomics

- **Strategic Value in Collaboration**

- Scientists, Analysts, Researchers, Agents
- High-value result

- **Tactical Value in Unified Administrative View**

- HSM/ ILM/ SLM
- Synchronization, Replication, DR
- Migrations and Reconfigurations

- **Complex, operationally heterogeneous, multiple locations**

- **Legacy**
- **M&A, reorganization, joint projects**
- **New initiatives (Cloud Storage)**
 - **Data persistence, location certainty, access control, security...**

Information Lifecycle Management (ILM)

- **Lifecycle management**

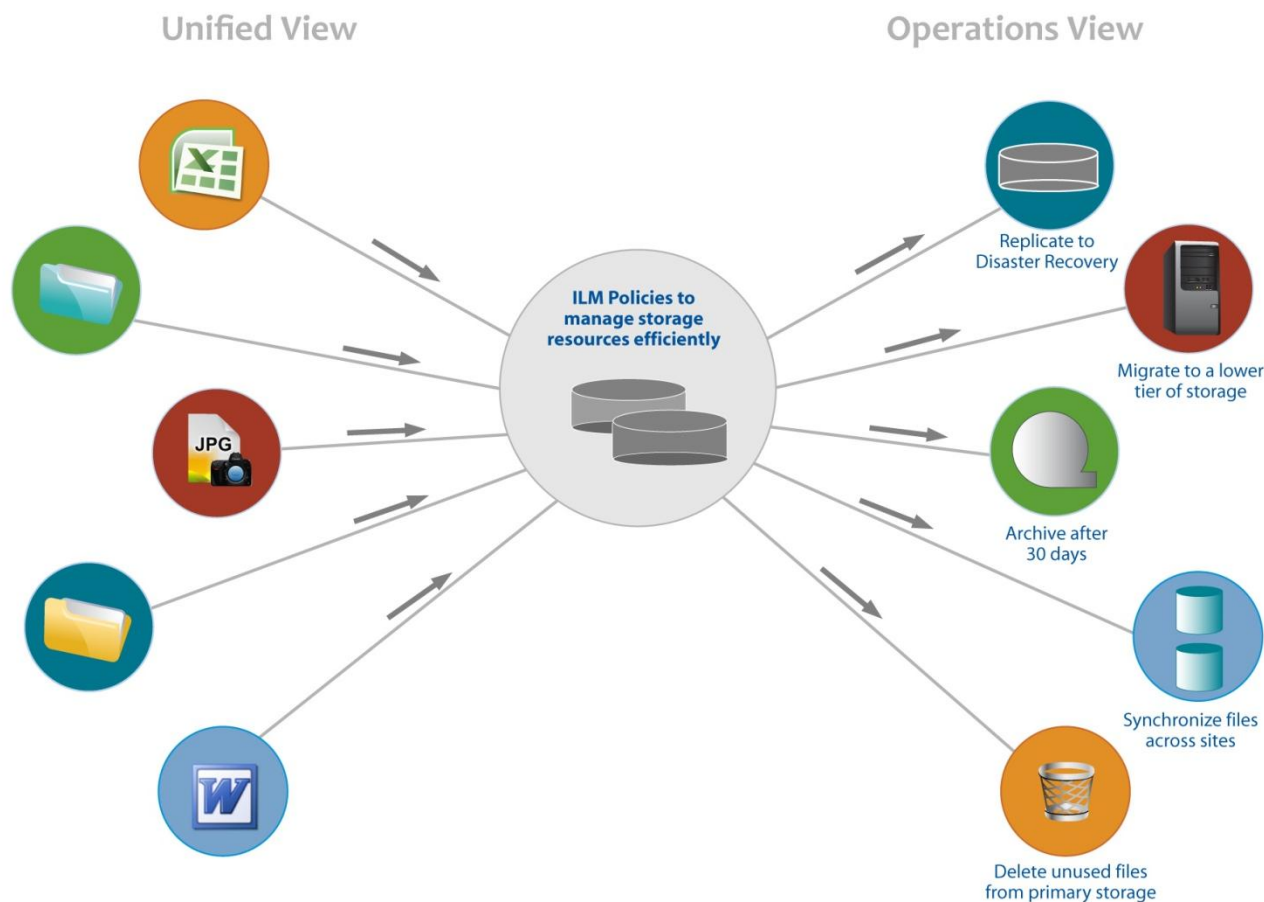
From acquisition to expiration - Both data and metadata - With or without migration - Fully automated

- **Available ILM activities**

Migration - Replication - Deletion - Backup Synchronization - Reporting - Archive - Stage - Purge

- **Additional support**

Scheduler - Residency policies - High/Low watermarks



With Nirvana SRB, difficult and complex projects such as ILM can be implemented with relative ease and without user disruption.

Inquiries



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