





EDMT® SOLUTION – OVERVIEW

INDUSTRY AND THE INFORMATION EXPLOSION

More data will be created in the next 12-18 months than was created in the entire history of humans. Data growth outpaces increase in CPU speed (CPUs double their speed every 18 months according to Moore's Law). Data explosion alone is the immense challenge in data management, but corporations face the additional challenge of "data diversity" as data takes many forms - **structured** (i.e. database records) and **unstructured** (i.e. emails, documents, images etc). Unstructured data is 5 times larger than structured data and doubles every 18 months – says Gartner.

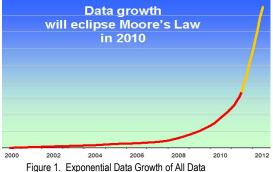


Figure 1. Exponential Data Growth of All Data

Disparate EDMT data (Email, Document, Multimedia and database Transactions) is traditionally managed by multiple, separate and isolated systems such as email archives document archives, databases, data warehouses etc. Storing, indexing and running even the simplest analysis and cross-search of EDMT data across these disparate systems is complex, costly, slow, and can't be done in real-time – in short it is virtually impossible.

THE ADVANTAGE OF EDMT® SOLUTION

EDMT[®] Solution is the first solution for real-time rapid ingest of PB's of disparate data into single, fast analytical repository. Once EDMT data is ingested, the corporation can run the analysis and cross-analysis in real-time (without burdening the primary information systems) that will allow immediate action to be taken. Real-time monitoring, instant cross-analysis of new and historical data and real-time response to market changes, product problems, customer dissatisfaction, fraud threats, competitive threats etc. are now possible.

EDMT[®] **Solution** is scalable to over a Petabyte of data and is in the Guinness Book of Records as the World's Largest Database.

EDMT[®] SOLUTION

EDMT[®] Solution with HP Proliant DL 980 servers and P2000 storage is available in multiple sizes that are per-configured in accordance with customer specifications for data volumes and ingest and processing capability. In addition, EDMT[®] Solution can be configured in Multi-Site Disaster Recovery Mode which provides active use of DR site (or sites) for improved Business Continuity and use of all resources for maximum performance and scalability for the most demanding cross-analytic tasks.

SOLUTIONS

In addition to the technical benefits, described in greater detail below, the EDMT[®] Solution is used for a number of high value applications, including:

1. <u>Security analysis and threat detection</u>. Combining real-time data with deep data history (possibly going back 10s of years), EDMT[®] Solution allows one to search any data type (emails, SMS, bank transactions, flight information, phone calls, web clicks etc) and perform high-speed real-time cross-analysis, enabling early detection of potential security problems.

2. <u>360-degree view of events and people</u>. Most information is typically stored in a structured data form (e.g. purchase orders), but critical interactions such as phone calls, emails and travel are invisible to most analytic systems. EDMT[®] Solution enables holistic, 360-degree view of events and people by grouping ("clustering") of related events, people and data, and providing opportunities to enhance customer service and increase revenue. CRM, Medical Applications, Law Enforcement would benefit from 360-degree view.

3. Money Laundering and Fraud Detection. By combining all data types relative to money transfers EDMT[®] Solution provides the full historical and geopicture of fund transfers. EDMT data can be used to discover trends that may have an impact, such as product and geographic demand trends, cross-selling or up-selling opportunities. With the inclusion of emails, documents, faxes, voicemails, surveillance videos and more into the equations, agencies are able to obtain much richer view about events, people and trends.

4. <u>Regulatory Compliance and litigation readiness</u>. Regulations and litigation are a fact of life, and it is common for litigation to require the search of millions of electronic documents and records. "Litigation





Preparedness" is the ability to assess legal claims, and to respond to legal production requirements. With the use of the EDMT® Solution, the time and cost for responses are significantly reduced. On the other hand, "Legal and Regulatory Compliance" defines complying with statutory and regulatory requirements for preserving, storing and protecting sensitive information, such as health-related and financial information and internal or external company communications. The EDMT® Solution simplifies this task and helps avoid costly fines for non-compliance.

TECHNICAL BENEFITS

1. <u>Data Retrieval Speeds</u>: EDMT[®] Solution is able to capture emails (with attachments), files and database transaction in real-time and have them available for searching in less than 1 second. Basic searches produce results in less than 0.5 second, while complex cross analysis are done in 1-100 seconds.

2. <u>Scalability and Flexibility</u>. EDMT[®] Solution can capture 10s of TB of data per day and is certified to over a Petabyte of data. Unlike other solutions which have fixed ratio disk-to-server ratio, EDMT[®] Solution can be configured with any storage (1 TB – 1,000 TB) and any number of servers (1 – 12,000) (Figure 2.). Such flexibility enables effective data management even for the largest global corporations.

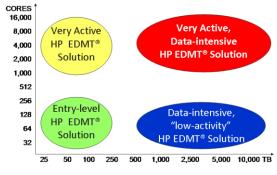


Figure 2. Configuring storage and servers meet the demand

3. <u>Storage Efficiency</u>: Independent testing show that the EDMT[®] Solution demonstrated a 91% reduction in storage size, cost and power usage when compared to conventional solutions. Such storage efficiency is achieved by combining single-instance storage (SIS), lossless data compression, deduping and highly efficient data access pattern that reduces disk I/O. For \$1, EDMT® Solution can store, search, crossanalyze and do ILM for 5,000 emails or 500,000 SMS.

4. <u>Data Security</u>. Unlike traditional file systems used by most content management or archive applications, EDMT[®] Solution is built on a relational database backend that is inherently secure from outside hackers and malicious code attacks. The EDMT[®] Solution



"shreds" data (by distributing and encrypting it) in a manner that is undecipherable to an intruder.

5. <u>Eliminate Email & File Backup</u> EDMT[®] Solution captures emails as soon as they are received or sent by the email server, thus providing continuous real-time email backup. This eliminates the problem of potential data loss between backups. Restores of email server are fast and selective (i.e. Call Center first).

6. <u>Reactivate or Delete Data from Tape Archives</u>. EDMT[®] Solution can cost-effectively reload archived data from tapes, and in doing so reactivate records that would otherwise be inaccessible for analysis. During that process, not needed or expired data can be deleted to reduce legal and other liabilities.

DEPLOYMENT MODELS

EDMT[®] Solution can be deployed on-site or as a hosted "cloud" (SaaS) solution – or a combination ("hybrid solution"). Prepackaged EDMT[®] Solution will be functional in 2 days – not weeks and months.

IT DOES "MORE WITH LESS" WITH EDMT® SOLUTION

In today's uncertain economy and shrinking IT budgets, EDMT[®] Solution does "more with less":

- 1. <u>multiple jobs are completed with a single tool</u>, thus reducing purchase, training and support costs
- simplified and more reliable operation use of single, multi-functional and fully integrated solution (instead of using multiple products) requires smaller IT team to perform multiple tasks
- <u>flexibility to meet new, unforeseen demands</u> can be met using multiple, fully-integrated functions, while customizing multiple products would pose major integration and data exchange problems.

PROFESSIONAL SERVICES

BMMsoft and EDMT certified partners provide a full range of professional services to help deploy and customize EDMT[®] Solution to specific needs.

CONTACT INFORMATION

For more information visit hp.com or bmmsoft.com or contact authorized HP, BMMsoft or distributor (list available on http://bmmsoft.com/partners.html)

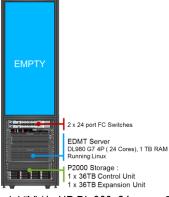




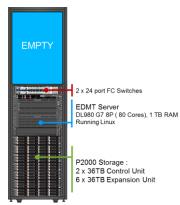


EDMT® Solution Model Lineup

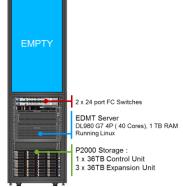
Model Description	# cores	Disk Size (TB)	# email & files (store+index) (100KB each)	# email & files (index only) (100KB each)	DB rows (150-byte)
16K (96 racks)	15,360	41,472	180 B	1,800 B	640 Trillion
4K (24 racks)	3,840	10,368	48 B	480 B	160 Trillion
1K (6 racks)	960	2,592	12 B	120 B	42 Trillion
4XL (full rack)	160	432	2 B	20 B	7 Trillion
PB (1/2 rack)	80	288	1.6 B	16 B	6 Trillion
XL (1/3 rack)	40	144	600 M	6 B	2 Trillion
L 1/4 rack)	16	72	300 M	3 B	1 Trillion



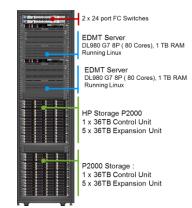
EDMT[®] Solution Model "L" (1x HP DL 980, 24 cores, 72 TB)



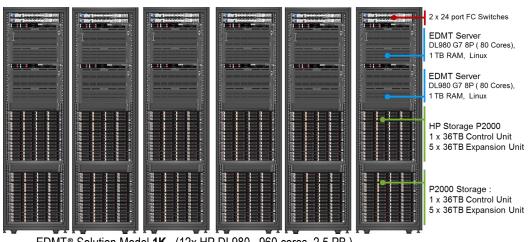
EDMT[®] Solution Model "PB" (1x HP DL 980, 80 cores, 288 TB)



EDMT[®] Solution Model "XL" (1x HP DL 980, 40 cores, 144 TB)



EDMT[®] Solution Model "4XL" (2x HP DL 980, 160 cores, 432 TB)



EDMT® Solution Model 1K (12x HP DL980, 960 cores, 2.5 PB)

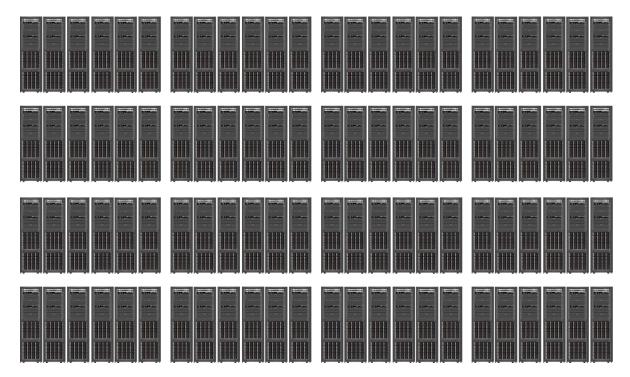








EDMT® Solution Model 4K (48x HP DL 980, 3,840 cores, 10 PB)



EDMT[®] Solution Model **16K** (192x HP DL980, 15,360, 40 PB)