

EMC Manufacturing Industry Solutions



Mastering Today's Business Challenges

Manufacturing enterprises are becoming more and more complex. Having the fastest, least expensive, and best automated manufacturing operations within one's "four walls" is no longer sufficient to gain competitive advantage. Today, the manufacturer with a value chain that can share information easily, speed products to market and into volume production, reduce cost and unnecessary complexity, and who understands what products their customers really want will vie for market leadership. To be competitive today, manufacturing enterprises are grappling with many of the following challenges:

- Shrinking time-to-market and time-to-volume
 - Reducing manufacturing costs, warranty costs, and complexity
 - Building an infrastructure to support flexible manufacturing and the rapid integration of new acquisitions
 - Maintaining, upgrading, and rolling out mission-critical enterprise applications
 - Creating a 24x7x365 IT environment for transactions and collaboration
 - Matching service-level requirements with the right storage platform and storage cost
 - Achieving and maintaining regulatory compliance
 - Sharing critical information with manufacturing outsourcers and suppliers
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Manufacturing Solutions to Accelerate Your Business

EMC Corporation is the world's leading provider of automated networked storage solutions comprised of information storage systems, software, networks, services, and strategic alliances that enable manufacturing organizations of all sizes to better and more cost-effectively manage, protect, and share their information.

Product Lifecycle Management (PLM)

EMC Information Lifecycle Solutions for PLM environments provide storage functionality for product data that carefully matches user-information service-level requirements as created data passes through each of the four phases of the PLM data lifecycle (product design, information and sharing, fixed content/archiving, and off-line content) and automatically manages the flow of data non-disruptively from storage platform to storage platform.

- **Product Creation for PLM Environments:** This EMC solution addresses work-in-process for CAD, CAE, CAM, and simulation testing where data activity levels are volatile. EMC's industry-leading storage platforms, file servers, and storage management and replication management software, provide the highest service levels of capacity, access, reliability, and data availability that are required to support design engineers in this phase.
- **Availability and Sharing for PLM Environments:** Following product creation, the released design data and associated files, such as product designs, CAE results, test data, e-mails, and graphics become less active, possibly fixed content. The EMC solution in this phase, comprised of cost-effective CLARiiON® storage systems with ATA drives, and unique information sharing software, provides fast, frequent, and highly reliable access to data for sharing with suppliers, for reuse in new design projects, and for updating related databases. Data typically exists within this portion of the lifecycle for months.
- **Fixed Content/Archiving Online:** At the next phase of the PLM information lifecycle EMC Centera™ content addressed storage (CAS), meets the need to manage fixed content, including historical product designs, quality records, test data, and data required by law with strict revision control. Data access measured in a few seconds is very acceptable in this phase of PLM where high capacity, reliable revision control, and authenticity are important. Centera's content-addressing methodology results in a globally unique, location-independent identifier for a piece of content. An object is stored only once. Centera is highly scalable to manage fixed content on a very large scale and over a period of years.

ERP Upgrades

Upgrading ERP environments to Oracle11i or SAP R/3 4.7 is often a painful and time-consuming process, requiring hours and ultimately, months of replicating, developing, and testing. Many companies that upgrade applications experience hours, days, weeks, and even months of downtime, because they lack the infrastructure, tools, and skill sets for accelerating application upgrades. EMC Automated Networked Storage™ hardware platforms, replication management tools, and services are designed to help minimize downtime, total project time, and operational disruptions typically associated with upgrading ERP applications.

Digital Prototyping

EMC solutions help discrete manufacturing companies who are creating digital prototypes of new products and performing simulation testing using sophisticated software to dramatically reduce test cycle times. Heavy computational analyses and large data samples (e.g., crash, wind tunnel, and design simulations) are the norm in these environments. EMC hardware storage platforms, Celerra® file servers, and industry-unique software on the "front end" help manage and store both large and small files. On the "back end" CLARiiON storage with Centera manages the demand for high data throughput to support analyses and to securely protect results.

Getting Started

EMC Proven™ Solutions provide the advanced infrastructure, tools, and services for helping meet applications challenges, to accelerate the successful completion of CRM, ERP, SCM, data mining, business intelligence, and related initiatives. For more information about EMC Proven Solutions, please contact your EMC account manager, and please visit: <http://www.emc.com/solutions/manufacturing/index.jsp>



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