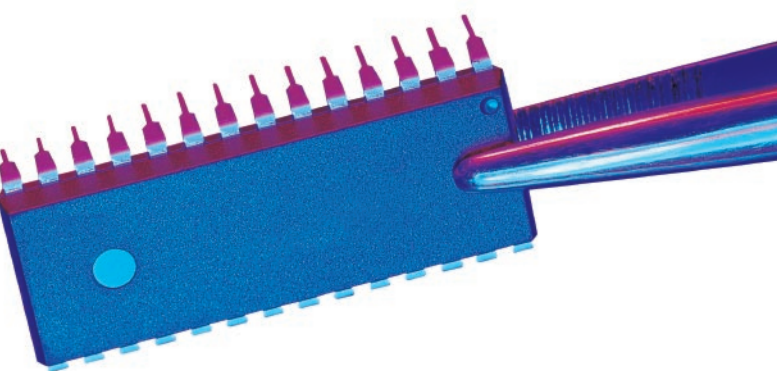


## The best hardware, worthy of the best software

The PLM applications offered by IBM – CATIA, ENOVIA, SMARTEAM – are proven performers. In some industries – aerospace and automotives, for example – CATIA is so widely used it has become the de facto standard.

The advantages of buying the best PLM software available are obvious. But great PLM software only delivers optimal performance when paired with hardware that can keep pace, allowing you to maximise the return from your investment.

Fortunately, the gold standard of hardware – IBM hardware – is more affordable than ever before, delivering speed and reliability in a wide range of configurations to fit any company's budget. IBM hardware is specifically tuned, refined and certified to run the leading CAD, CAE, CAM and PDM software packages from IBM PLM. This ensures your company benefits from every ounce of performance built into your applications, from quick response times to crystal clear graphics.



With attractive packages from IBM Finance, the hardware configurations you've only dreamed about are now within your reach. Consider:

- *IntelliStation, which delivers server performance at a workstation price and a choice of optimised 3D graphics solutions and single or dual Intel® Pentium® processors for performance and cost optimisation.*
- *pSeries servers and workstations, including the innovative new p275 that delivers twice the performance of the benchmark-setting p170 at 40 per cent less cost.*
- *TotalStorage solutions that can handle the biggest files you'll ever throw at them, with continuous copy technology that keeps data safe and accessible even during system outages and maintenance.*
- *The dazzling T221 Flat Panel Monitor that packs 9.2 million total pixels, delivering unrivalled visual precision, even on diagonal lines.*
- *ThinkPad, which makes PLM mobile with the R and T series. Both include models certified by Dassault Systemes for CATIA V5 and offer enhanced security to keep your confidential data confidential.*

Doesn't your company deserve the competitive advantages of IBM PLM running on IBM hardware? Of course it does. And now it can have them.

## ibm.com/solutions/plm

**ThinkPad:**  
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**IntelliStation:**  
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## IBM Product Lifecycle Management (PLM)



## IBM Hardware for PLM

*Because the best software deserves the best hardware and support*



## PLM: A competitive edge for small and medium enterprises

Because your company is active in the design and engineering of products, chances are you have heard about Product Lifecycle Management, commonly known as PLM.

You probably have heard that PLM is a strategic approach to creating and managing a company's product-related intellectual capital, from initial conception to retirement.

You may even know that IBM invented PLM to improve its customers' product development processes and their ability to use product-related information to make better business decisions. PLM helps deliver greater value to your customers while enabling collaboration across organisational and geographic boundaries.

But does PLM really apply to the challenges your company faces every day? Can it really help your business be more agile, more innovative and more competitive?

Absolutely. IBM has helped hundreds of small and medium enterprises just like yours make the move to PLM – affordably. Our Web site is packed with success stories of how PLM is helping these companies cut costs and cycle times, increase quality and innovation, and respond more quickly and completely to RFPs. In short, PLM is helping them win new business. If you aren't equipped to compete, the business they are taking may be yours.

IBM and its Business Partners have the skills, the products, the expertise and the experience to help you determine where your opportunities lie and how to use PLM to seize them. We craft a solution to get you started and a plan for how to grow your PLM capabilities as your business expands.

We'll also help you get the most from your PLM applications, including CATIA, ENOVIA and SMARTEAM. As some of the most compute-intensive, graphic-intensive applications on the market, these software packages deliver the most when paired with hardware, networks, skills and methodologies designed to wring out every ounce of performance. As you'll see in the pages that follow, IBM hardware delivers on the full promise of PLM.



## Anywhere, any time

ThinkPad, mobile workstation

**"Like all ThinkPads, it is a solid performer that exudes quality."**

Walter Mossberg on the ThinkPad A31p, *The Wall Street Journal*, May 30, 2002



- ThinkPad R series for the best blend of portability and essential features.
- ThinkPad T series for the perfect balance of performance and portability.
- T40p features extended battery life and embedded wireless connections.
- Vendor-certified for CATIA and other MCAD, digital media and EDA applications.
- IBM Embedded Security Subsystem.

Increasing your mobility can increase your productivity. IBM ThinkPad technology delivers all the power and versatility of a desktop workstation within arm's reach – wherever you are.

Being mobile shouldn't mean compromising functionality or quality and with ThinkPad there's no need to. Our two ThinkPad R and T series deliver the compute-intensive, top-notch graphics capabilities that modern PLM applications demand. Both feature Intel Pentium 4 processing power coupled with ATI Mobility FireGL graphics cards and high-resolution TFT displays to handle intense graphics with ease. Intel Pentium M processor technology gives added mobility features, including battery life of up to 9 hours and embedded wireless connections.

Independent software vendors have recognised the PLM capabilities of the ThinkPad R and T series certifying these models for a variety of demanding applications. The ThinkPad mobile workstations are among the few mobile units certified by Dassault Systemes for CATIA V5.

Security is top priority for proprietary PLM data and designs. So our A31p and T40p ThinkPads feature IBM's Embedded Security Subsystem – an integrated security chip and the latest IBM Client Security software, working in concert. This industry-leading system performs encryption functions outside the main memory to ensure electronic identity information is inaccessible if the unit is lost or stolen.

Whether for brainstorming sessions, customer meetings, mobile maintenance or a variety of other uses, IBM ThinkPads keep you productive by letting you run demanding PLM applications anytime, anywhere.

## The PLM workhorse

IntelliStation Pro Series workstation and IBM @server xSeries Server

**"IBM delivered and installed a complete PLM solution that is running on powerful IBM IntelliStations. We thank IBM for supporting our mid-size business with big company technology at a small company price."** Fausto Bellamico, managing director, EMAK

- Configured for Microsoft® Windows® XP and 2000 Professional.
- Suite of IntelliStation models tuned, refined and certified for CATIA V5.
- IBM exclusive graphics tuning for optimised IntelliStation and application performance.
- Intel Pentium 4 or Intel Xeon® processors for performance and cost optimisation.
- Server-class technologies for proven performance and reliability at a workstation price.

For Microsoft Windows users, pairing IntelliStation with CATIA V5 leverages the synergy of robust software with the best in high-powered IBM hardware. IBM offers a range of IntelliStation workstations specifically engineered for CATIA, providing server performance at a workstation price.

PLM users can tailor each IntelliStation to their specific needs, optimising performance and cost by customising everything from processor power and memory to graphics adaptors. For example, choose Intel Pentium 4 or dual Xeon processors to customise IntelliStation for your specific workload.

Leveraging robust, proven xSeries server technology, the IntelliStation Pro Series achieves revolutionary application performance and reliability. Server-class ECC memory ensures the data precision and reliability required by compute-intensive PLM applications.

IBM @server xSeries servers are the perfect complement to IntelliStation workstations and support the complete suite of IBM PLM solutions, including CATIA, ENOVIA and SMARTEAM. xSeries servers deliver revolutionary advances to I/O, memory and processors and a pay-as-you-grow approach to Intel 32- and 64-bit systems.

IBM has tuned and refined the IntelliStation Pro Series for CATIA V5. Working closely with Dassault Systèmes and graphics partners, IBM software developers engineer IntelliStation for CATIA performance with exclusive graphics tuning, ensuring IntelliStation workstations will excel during the rigorous CATIA certification process and in your day-to-day environment.



## Ultimate power, incredible value

IBM Power series workstation and IBM @server pSeries server

**"The IntelliStation POWER 275 combines the raw horsepower of the POWER4+ processor with CATIA specific graphics optimisations in an aggressively priced package, to create an unparalleled platform for collaborative product development."**

Sarang Ghatpande, Research Analyst, DH Brown



- IBM@server pSeries sets the standard for power, performance and value
- Features POWER 4+, among the world's fastest 64-bit processors
- Workstations support CATIA V4 and V5, protecting existing UNIX® investments
- POWER 275 workstation delivers twice the performance at a 40 per cent lower price than 44p-170
- Reliable server systems for data integration and sharing.

pSeries servers and workstations offer PLM users benchmark-setting power and performance coupled with reliability and cost effectiveness. pSeries workstations and servers continue to be the customer-preferred, UNIX-based hardware solution for CATIA, ENOVIA and other PLM design and simulation applications.

The POWER 4+ architecture, one of the fastest 64-bit processors in the world, drives even the most complex, compute-intensive applications with the speed and reliability PLM users demand. In addition, pSeries hardware features industry-leading graphics accelerators for professional 3D graphics and best in server-class ECC memory for data protection and integrity. The broad pSeries line includes configurations for dedicated servers and workstations. The diverse p630 can serve both functions simultaneously.

pSeries workstations are the only single platform that can run both CATIA V4 and V5, thereby protecting existing UNIX-based investments or easing the migration to Windows-based systems. And the latest addition to the pSeries line, the IntelliStation POWER 275, delivers twice the performance of the benchmark-setting 44p-170 at a 40 per cent lower cost, demonstrating IBM's continued commitment to quality and value.

Integrating data, back-end calculations and data-sharing are critical to any organisation running PLM applications, and pSeries servers are up to the challenge. The pSeries server line is carefully tuned for CIE analysis and simulation and can be custom-configured to optimise performance and cost on a case-by-case basis.

pSeries workstations and servers offer exceptional performance and flexibility for PLM users seeking continuity in their UNIX-based hardware investments.

## You won't believe it until you see it!

IBM T221 flat monitor

**"I was astounded at the visual quality of the image. Line definition is like nothing I have seen before, with diagonal lines showing no noticeable pixilation whatsoever! Hugely impressive!"** Greg Corke, CADSERVER, May 7, 2002

- 3840 x 2400 resolution (9.2 million pixels) approaches photographic quality realism.
- Advanced digital interface attaches easily to recommended IntelliStation workstations.

The T221 Flat Panel Monitor was made with the graphic-intensive applications of PLM firmly in mind. In fact, the T221 is supported for use with CATIA on a wide range of IntelliStation workstations and makes the most of CATIA's range of capabilities.

At an astounding resolution of 3840 x 2400, the T221 offers images with fine-line accuracy, crisp contrast and the subtle detail crucial to PLM applications. It boasts a 22.2 inch/564mm viewing area with a 16:10 aspect ratio packing 204 pixels/inch and giving PLM users a design environment of unrivaled visual precision.

For realistic renderings, project reviews and all your multi-CAD design needs, set your sights on the T221. Seeing is believing.



## Reliability you expect – flexibility you need

IBM TotalStorage for a completely integrated solution

**"Remote management via the Web gives us the necessary flexibility to administer the NAS box without additional software even from remote locations."** Mr Mujkic, Technical Support at Magna Heavy Stamping

- Interoperability in today's heterogeneous environments through open storage.
- Maximum reliability with the speed, capacity and scalability to meet your needs.



With the large amounts of data generated by PLM applications, reliable, easily managed storage systems take on added importance. IBM's TotalStorage products offer a broad range of solutions focused on open standards and interoperability for today's heterogeneous environments.

The TotalStorage line is designed to be reliable and scalable, to protect existing investments with modular, open architectures that let you add capacity and performance as needed. In addition, TotalStorage solutions allow central coordination of all storage devices to reduce management costs.

The open standards of TotalStorage enable PLM users to share data files across and outside the enterprise while porting data between applications and operating systems with ease. And with continuous copy technology, that data is safe and accessible even during system outages and maintenance.

Storage for your PLM data that fits your needs today and always – IBM TotalStorage.