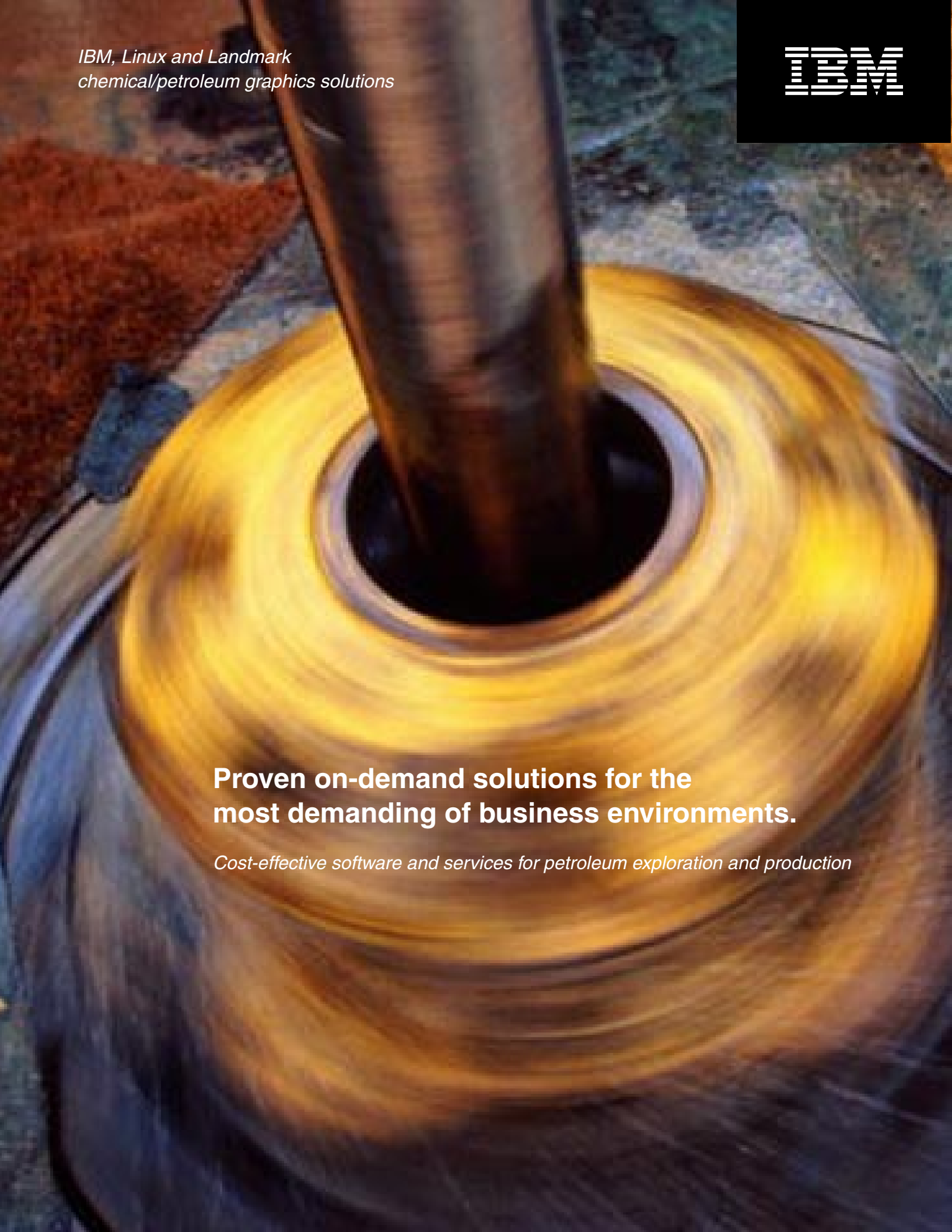
IBM, Linux and Landmark
chemical/petroleum graphics solutions



Proven on-demand solutions for the most demanding of business environments.

Cost-effective software and services for petroleum exploration and production

A solution that integrates industry-leading oil and gas exploration technology

As a petroleum industry professional, you operate in one of the most demanding business environments in the world. The exploration and production (E&P) sector is especially challenging. Competition for prime exploration acreage is intensifying, so you must increase recovery from existing fields. In addition, increasingly volatile and unpredictable oil and gas prices, coupled with regional and global economic downturn, make finding and commercially exploiting oil and gas deposits more crucial than ever.

IBM, the world's largest information technology company, with operations in 190 countries, and Landmark Graphics, the petroleum industry's leading supplier of software and services for upstream E&P, have joined forces to help you compete more effectively in this complex environment. The solution: Landmark oil and gas exploration solutions on Intel® processor-based IBM @server xSeries™ servers and IBM IntelliStation® Pro workstations running Linux®. Landmark's industry-leading oil and gas exploration technology combined with IBM advanced hardware, systems integration service and support lead to significant improvements in price and performance. What's more, they offer increased operating efficiencies in computer-driven systems for oil and gas exploration and production.

You'll benefit significantly from the wide range of solutions offered by these two industry leaders. Migration to open-source Linux-based servers and workstations can reduce your costs substantially compared to existing systems running on proprietary UNIX® technologies. In addition, you can implement collaborative workflows to boost productivity and deliver e-business-on-demand services for data and applications management to increase efficiency.

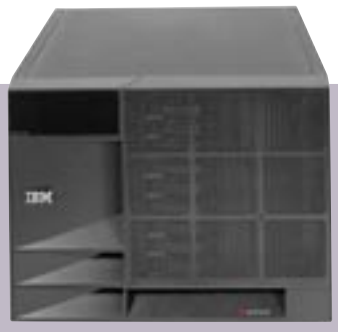
A comprehensive solution

Landmark and IBM offer Landmark's complete suite of geophysical processing, integrated interpretation and reservoir management applications to satisfy a wide range of needs in E&P. Landmark applications include Magic Earth's MagicDesk™, the industry's ultimate 3D visualization solution for detailed reservoir analysis. MagicDesk is an integrated package of Magic Earth's GeoProbe®, the industry's leading volume visualization and interpretation software.

Landmark applications are fully supported on Linux-based xSeries servers and IntelliStation Pro workstations. Landmark developers work directly with the IBM technical support team to ensure that Landmark applications take full advantage of the powerful Linux and Intel capabilities of xSeries servers and IntelliStation workstations, especially in the area of intensive 3D graphics. The result is blazingly fast performance. Landmark applications have been observed to run two to seven times faster on these Intel-Linux platforms than on existing UNIX platforms.

The applications are tightly integrated with Landmark Graphics' OpenWorks® data management environment. Deployed in over 850 sites worldwide, OpenWorks is the leading project database management system in the oil and gas industry, offering the broadest range of oil field data in one database. OpenWorks meets the needs of an entire asset team, ranging from the exploration geophysicist with limited access to well control, to production geologists and drilling engineers working with the full extent of all geological assets in a field. Based on an open software architecture and open data model, OpenWorks provides the widest range of integrated applications available in the E&P industry.

An OpenWorks project database stores all aspects of general well-related data, as well as log acquisition data, surface and fault interpretations, cultural data, seismic acquisition and navigation data, computed map data and production



IBM @server x250

A world-class partnership

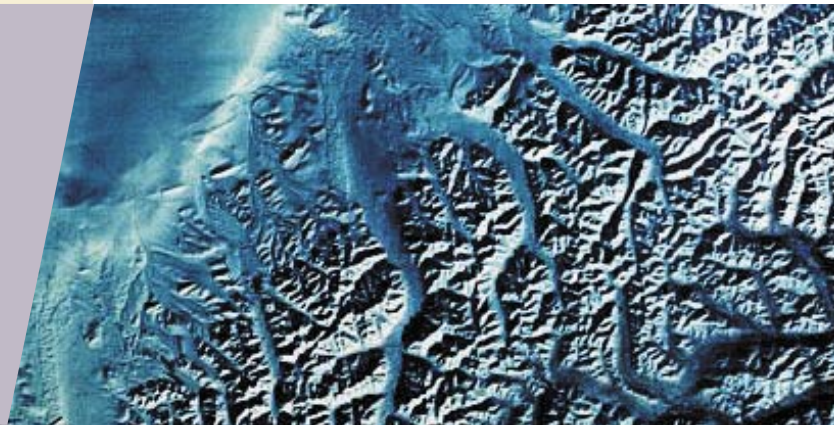
Landmark and IBM are working together to bring Landmark's world-class data management, seismic processing, interpretation and reservoir management software to IBM xSeries servers and high-performance IBM IntelliStation Pro graphics workstations. The two companies are jointly offering Linux-based server, desktop and mobile computing solutions with advanced 3D graphics, as well as advanced cluster technology for high-end supercomputing applications.

Landmark's innovative, integrated technology and services provide support for key decision points in the oil and gas lifecycle, facilitate teamwork across disciplines, and enable energy companies around the world to boost production, cut finding, develop and lift costs, and increase productivity and profitability.

IBM xSeries servers are enterprise-class platforms with the performance, rock-solid reliability and nearly limitless scalability worthy of even the most demanding E&P environments. In addition, IBM Director systems management software delivers unmatched system management support for a variety of operating environments, simplifying management and lowering costs.

IBM Global Services complements the technology offering with worldwide operational support services, IT optimization consulting and strategic outsourcing for the E&P upstream computing environment. These services ensure that your mission-critical IT services are managed by the world's leading IT company, whose IBM Global Services arm operates in more than 160 countries. IBM Global Financing completes the package with a variety of financing offerings.

IBM xSeries servers, IBM IntelliStation workstations running Linux and Landmark's oil and gas exploration technology combine to enable you to consolidate and manage workflow-related information across your enterprise and facilitate teamwork across disciplines.



and drilling data, and many more. A single project database shared by an integrated application suite is unique to the OpenWorks architecture. All team members and applications share one copy of the same data, eliminating the risk of compromised data integrity often associated with multiple copies in different application-centric project stores. This is essential to accurate interpretation decisions.

Built on a strong foundation

IBM xSeries servers, clusters and IBM IntelliStation Pro workstations offer a strong foundation for Landmark applications.

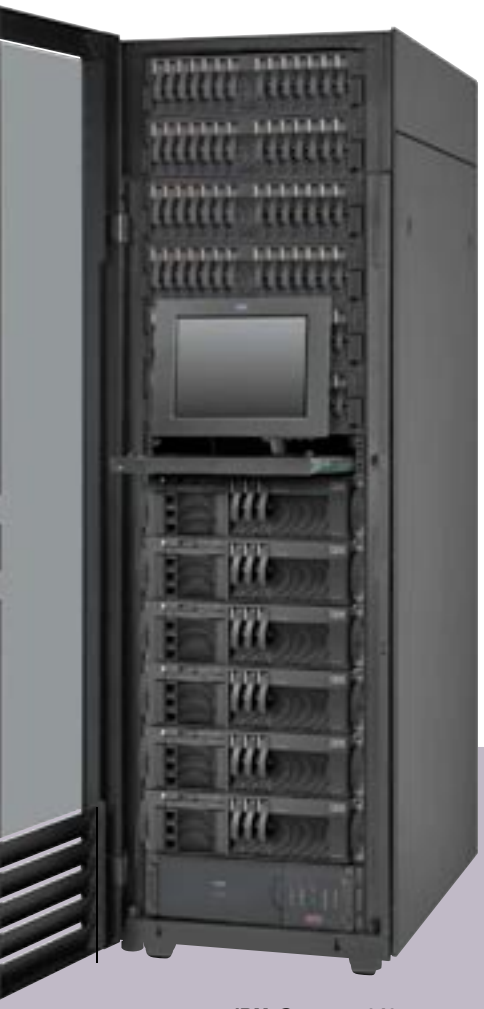
xSeries servers

Based on IBM Enterprise X-Architecture™ technology, xSeries servers bring unprecedented mainframe-class performance and availability to cost-effective Intel processor-based servers. Performance, reliability, scalability and efficiency aren't just selling points; they are built into every xSeries server.

For the more demanding applications, IBM offers up to 16-way servers, making IBM Linux-on-Intel the most highly resilient, scalable and flexible way to do more with less. (Current Linux implementations support up to 8-way servers.)

IBM Director systems management software delivers unmatched system management support for Linux environments. This support, combined with the advanced management features built into xSeries servers, helps reduce the incidence and duration of downtime. The result is greater return on availability for lower total cost of ownership.

Performance	Enterprise X-Architecture technology combines industry-standard features with IBM mainframe-inspired capabilities to produce revolutionary advances in I/O, memory and performance. Beyond just deploying the latest Intel processors, xSeries engineers balance and optimize the systems with powerful storage and memory to ensure consistently superior performance.
Availability	xSeries servers include such technologies as such as Chipkill™ memory, Light Path Diagnostics, Predictive Failure Analysis®, Software Rejuvenation, ProteXion memory mirroring and Capacity Planning. These technologies help ensure always-there availability. Moreover, every hardware and software subsystem in xSeries servers is tested for compatibility and reliability to eliminate weak links.
Scalability	With technologies such as XpandOnDemand, IBM/Linux servers and clusters are highly scalable, offering low-cost entry, low incremental cost and low-cost licensing.
Space and energy efficiency	IBM blade solutions deliver twice the density and consume less electrical power than today's 1U solutions—without sacrificing performance.



IBM @server x340

With xSeries servers, you can implement your entire solution on a single type of server, greatly simplifying management and administration.

xSeries clusters

IBM also offers Linux-based xSeries clusters that enable you to create supercomputing resources without a supercomputing budget. So you can execute compute-intensive jobs such as seismic data processing, analysis and reservoir modeling.

xSeries clusters can begin with as few as four servers and can scale to encompass massive Linux systems powerful enough to meet your most demanding requirements. IBM is already building Linux clusters with more than 1,000 nodes.

IBM introduced the industry's first prepackaged Linux clusters, providing a quick and easy way to implement Linux-clustered solutions. Our bundled cluster solution—the IBM @server Cluster 1350—combines the power of cost-effective IBM xSeries rack-optimized servers with IBM Cluster Systems Management (CSM) for Linux software, IBM storage products and leading third-party networking components. With this combination, you can create powerful, flexible solutions for high-performance computing (HPC) environments. The Cluster 1350 is available in a wide range of configurations, including single-rack systems of up to 32 cluster nodes and large-scale systems of up to 512 cluster nodes.

IntelliStation Pro high-performance graphics workstations

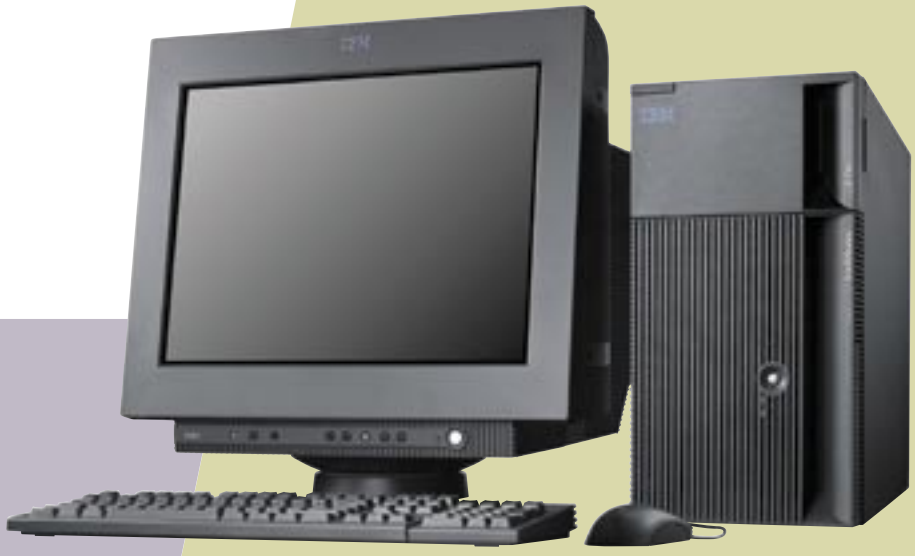
The IBM IntelliStation high-performance graphics workstation is powerful, secure and expandable, combining cost-effective PC business functionality with the robust performance typically associated with proprietary workstations. It delivers unsurpassed and affordable 32-bit speed, multitasking muscle and server-class reliability.

The IntelliStation Pro Workstations are certified for Microsoft® Windows® XP Professional, Windows 2000 Professional and select Linux distributions. In addition, leading software vendors have worked with IBM to test and certify IntelliStation workstations for compatibility and performance, supporting a portfolio of strategic technical and business applications.

The IBM IntelliStation Pro is available in three models, offering tailored solutions for a wide range of technical applications: the IntelliStation E Pro in a choice of compact desk designs; the flexible IntelliStation M Pro minitower with Extreme 3D graphics; and the multiprocessor-capable IntelliStation Z Pro. With single or dual Intel processors, up to 8GB of memory, and flexible, expandable designs, IntelliStation workstations satisfy the most demanding compute- and graphics-intensive requirements.

The new IntelliStation Z Pro delivers scalable, multiprocessor, multitasking performance with dual-capable Intel Xeon™ processors optimized for compute- and graphics-intensive applications. Choose from Advanced and Extreme 8X AGP graphics adapters for responsive 3D performance with support for dual monitors and 3D stereo glasses. The Z Pro boasts a 64-bit I/O architecture for dual-channel Ultra320 SCSI, 64-bit PCI-X slots, and full bandwidth Gigabit Ethernet to optimize the flow of data.

IBM backs IntelliStation Pro workstations with a variety of management tools and support services that help you simplify management, help lower the cost of deployment and maintenance, and maximize uptime.



IBM IntelliStation Z Pro

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Printed on recycled paper containing 10% recovered post-consumer fiber.

Find out more about how xSeries, IntelliStation and Landmark Graphics solutions can help you compete more effectively in the E&P industry.

For more information:

For information on IBM solutions for the petroleum industry, visit the following IBM Web sites:

Petroleum Industry:
ibm.com/industries/petroleum

Linux:
ibm.com/linux

IBM @server xSeries:
ibm.com/eserver/xseries

IBM @server Linux Clusters:
ibm.com/eserver/clusters

IBM IntelliStation:
ibm.com/intellistation

For information on Landmark applications, visit the Landmark Graphics Web site:

www.lgc.com