


What if you could...



-  Simplify management, reducing labour hours by up to 73%?
-  Get faster time to value and have systems up and running in hours, instead of days or weeks?
-  Be efficient with automated responses and built in expertise to optimise your critical business applications?

Businesses are ready for a new approach

As technology moves towards more flexible, intuitive tools and designs, businesses must change the way they plan, buy and deploy IT. Expert integrated systems mark the next major shift in IT thinking to meet the challenges of this new era. Take control of your IT environment and turn your focus to innovation with IBM PureSystems.

IT infrastructure is a critical component of service delivery. But the costs – in time, money, and managing operational complexity – often prove prohibitive for even the most forward-thinking of organisations. More than 70% of IT budgets go towards operations and maintenance, with little left over for innovation.¹ Two-thirds of companies go over schedule with their project deployments. As we move towards a more agile IT driven by the cloud and service-based infrastructure, the status quo of costly iterative rollouts and systems integration needs to change.



The solution: Expert Integrated Systems. End-to-end IT designs and implementations from a single trusted systems vendor, based on open standards which allow for scalability and user-defined customisation. In each integrated system, every element – hardware, software, management and deployment– has been expertly designed and calibrated to work seamlessly with each other. The integrated system is to enterprise IT what the smartphone is to personal computing – a single unit designed to meet any and every need with scalability and simplicity.

IBM's PureSystems is the latest step in this journey. The PureSystems range combines the flexible control of client-tuned systems, the rapid deployment of appliance computing, and the elastic agility of the cloud in a single solution designed for lifetime integration. Take advantage of IBM's extensive development of PureSystems, and your business will benefit from:

- **Private-cloud flexibility:** PureSystems is optimised for virtual appliances and cloud extension, offering instantaneous scalability with any software marked "Ready for PureSystems". Scaling to demand becomes as simple as plugging in a new IBM server or rolling out a set of virtual machines. The integrated system extends to meet your changing needs with simplicity.

- **Built-in expertise:** IBM's Patterns of Expertise automate deployment processes and routines for rapid rollout to intelligently optimise workloads and anticipate dynamic demand. PureSystems Centre provides access to IBM and certified partner experts to assist with all stages of deployment. PureFlex infrastructure is self-optimising on the granular level, enabling the full potential for service delivery in your business. Every deployment involves numerous pre-defined routines and architectures. Patterns of Expertise leverages IBM's experience in systems deployment to automate many of these processes, resulting in repeatable rapid-deployment with full life-cycle management.
- **IBM PureSystems Centre:** Gain access to IBM and certified partner expertise along with optimised application patterns, latest patches, and the IBM developer community – all through a single portal.

No need to choose between flexibility, rapid deployment and cloud: IBM PureFlex for IT infrastructure gives you all three.

Your choice of IT deployment directly affects your ability to meet business requirements. Should you tune your own system for greatest flexibility and control, or opt for the simplicity and rapid deployment of ready-made appliances? Where should the cloud fit in the picture?

Each PureFlex system combines computing, storage, networking, virtualisation and management within a single infrastructure system - one which senses and predicts your business needs ahead of time. PureFlex is fully customisable to meet your choice of hardware, software and middleware, offering numerous flexible configurations which can rapidly scale to meet changing business requirements and initiatives. And with access to patterns of expertise from IBM and certified partners through PureSystems Centre, deployment and management becomes a simple process taking hours.

WITH IBM PUREFLEX, YOUR BUSINESS GAINS:



- Simplicity**
- Faster time to value**
- Efficiency**

Simplicity

- All components are configured for management through a single console for ready provisioning, deployment and monitoring – reducing management labour hours by up to 73%.ⁱⁱ
- Simplify maintenance with a single automated interface for patches and firmware - covering the entire infrastructure from storage to networking to servers. Eliminate the hassle of incompatible updates with a standardised, pre-tested stack from IBM.
- Preloaded cloud-ready virtualisation, built-in networking, and fewer cables – PureFlex systems are designed around full integration.
- PureFlex is optimised for virtual appliances and cloud extension, offering simple deployment with any software marked “Ready for PureSystems”.

Faster Time to Value

- You can reduce by months the time it takes to deploy new application projects and accelerate your industry capabilities. Your PureFlex system is born virtualised and is pre-integrated with the compute nodes and storage which best fits your organisation.
- Open - Employ solutions from a broad, open ecosystem.
- Elastic - adapt to workload spikes without overbuying.

Efficiency

- By making the most efficient use of your systems you will not only reduce costs but also make more time for investment into proactive IT projects.
- Deployment expertise can accelerate your time to value up to 20-30x times versus traditional systems.ⁱⁱⁱ
- Cut lifecycle maintenance time by as much as half with no downtime.

NO-COMPROMISE BUILDING BLOCKS – INTEGRATED BY DESIGN

The PureFlex System is built from no-compromise building blocks based on reliable IBM technology that support open standards and offer confident roadmaps. Your PureFlex System is designed for multiple generations of technology, supporting your workload today and ready for the future demands of your business.

Management

IBM Flex System Manager will optimise the physical and virtual resources of your IBM PureFlex System while simplifying and automating repetitive tasks. From easy system set-up procedures with wizards and built-in expertise, to consolidated monitoring for all of your resources—compute, storage, networking, virtualisation and energy—Flex System Manager provides core management functionality along with automation. It’s an ideal solution that helps you to reduce administrative expense and focus your efforts on business innovation. From a single user interface you get:

- Intelligent automation
- Resource pooling
- Improved resource utilisation
- Complete management integration
- Simplified setup

Compute nodes

Taking advantage of the full capabilities of POWER7 or Intel based PureFlex System compute nodes - designed to offer the performance you need for your critical applications. With support for a range of hypervisors, operating systems and virtualisation environments, the compute nodes provide the foundation for a wide range of business requirements.

Storage

The storage capabilities of a PureFlex System are based on IBM’s well recognised Storwize® V7000 storage system. Gain advanced functionality with storage nodes in your system while taking advantage of your existing storage infrastructure through advanced virtualisation. Storwize V7000 systems support extraordinary performance and flexibility through built-in solid state drive (SSD) optimization and thin provisioning technologies.

Your PureFlex System simplifies storage administration with a single user interface for all your storage with a management console that is integrated with the comprehensive PureFlex management system. This allows you to virtualise third-party storage with non-disruptive migration of the current storage infrastructure. You can also take advantage of intelligent tiering so you can balance performance and cost for your storage needs.

Networking

The networking resources in the PureFlex System are standards-based, flexible and virtualised and managed by workload. And these capabilities are automated and optimised to make your network more reliable and simpler to manage.

PureFlex Systems are built for current and future needs with the capability of delivering up to 60Gb of throughput per node and 40Gb uplinks in to your network. For maximum performance, InfiniBand is also available for those workloads requiring no-compromise performance.

A family of expert integrated systems

| Traditional Infrastructure Challenges | PureSystems | Value Delivered |
|--|--|---|
| "Up and running" in months | Full infrastructure stack, operational in hours | Faster time to value |
| Overpurchased and overprovisioned | Built-in workload elasticity | Automated workload scalability |
| Requires multiple tools per component | Single point of management | Integrated services and software management |
| You receive "piecemeal" order and support of hardware and software | Full, preintegrated software and hardware | Simplified acquisition and support |
| Customised, so that they can work with what you have | Easier integration using open-standards computing | Integration into current environment |
| Hard-to-maintain, complex and "brittle" customer solutions | Well-managed flexibility and simpler extensibility | Easy adaption to address current needs |

BUILT TO SIZE

With IBM PureSystems you can choose one of three pre-integrated, optimised configurations as your starting point. Your solution ships to you as a complete, tested package of computer, storage and resources on which you and IBM Business Partners can customise a solution. With built-in patterns of expertise for deployment, management and optimisation – including cloud capabilities - your system is designed to deploy quickly and be easy to manage. You select the capabilities you need based on your target workload and environment—each configuration is available with any mix of POWER7-based and Intel processor-based compute nodes.

Express - Designed for small and medium businesses and is the most affordable entry point.

Standard - The Standard configuration is optimised for application servers with supporting storage and networking and is designed to support your key Independent Software Vendor (ISV) solutions.

Enterprise - The Enterprise configuration is optimised for scalable cloud deployments and has additional built-in redundancy for highly reliable and resilient operation to support your critical applications and cloud services.

| | Express | Standard | Enterprise |
|---|-------------------------------------|------------------------------|------------------------------|
| Flex Chassis with Redundant Chassis Management Module | Included | | |
| Power 7 and Intel Based Compute Nodes | Configured to Customer Requirements | | |
| Power Supplies / Fans | 4 / 6 | 4 / 6 | 6 / 8 |
| Integrated 10Gb Networking Switch | 1 | 2 | 2 |
| Integrated 8Gb Fibre Channel Switch | 1 | 2 | 2 |
| Integrated Management Node (FSM) | 1 | 1 | 2 (Redundant) |
| IBM Storwize V7000 Disk System Controller | Included | | |
| IBM Storwize V7000 Software | Base | Base | Base + Realtime Compression |
| Flex System Manager Edition | Flex System Manager | Flex System Manager Advanced | Flex System Manager Advanced |

For more information

Help IT make the shift to the strategic centre of your business. Leverage expertise to take the lead. To learn more about IBM PureSystems, PureFlex System and PureApplication System, contact your IBM representative or IBM Business Partner, or visit the following website:
<http://www.ibm.com/au/puresystems>



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ⁱ IBM Market Intelligence Time to Value Study, National Analysts, Nov 2011
ⁱⁱ IBM PureApplication System Life Cycle Labor Savings Case Study, 2012
ⁱⁱⁱ IBM PureApplication System Life Cycle Labor Savings Case Study, 2012

WAB12350-USEN-00