

# Cloud. Pure and simple.

Solutions with IBM PureApplication System



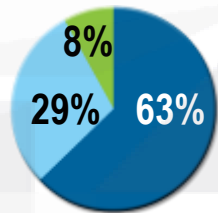
# What is driving IT demand?



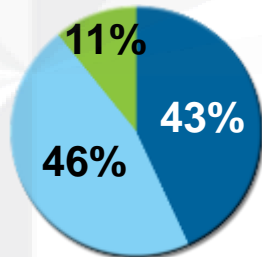
# The problem meeting those demands, is the cost spent maintaining your IT environment

## Worldwide IT Spending on servers, power, cooling and management administration

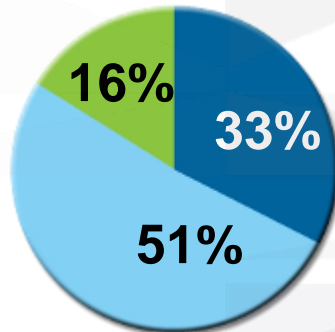
- New server spending
- Power and cooling costs
- Server management and admin costs



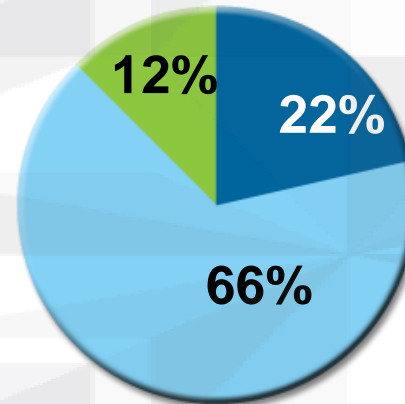
1996  
**\$100B**



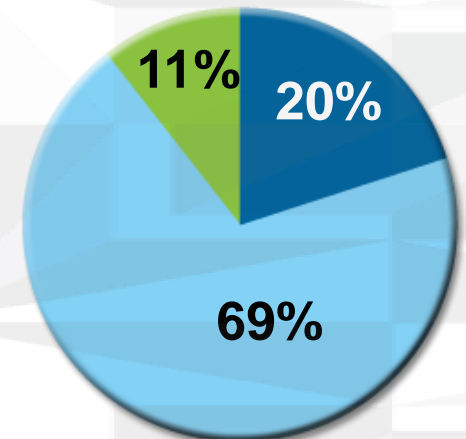
2001  
**\$130B**



2006  
**\$175B**



2011  
**\$217B**

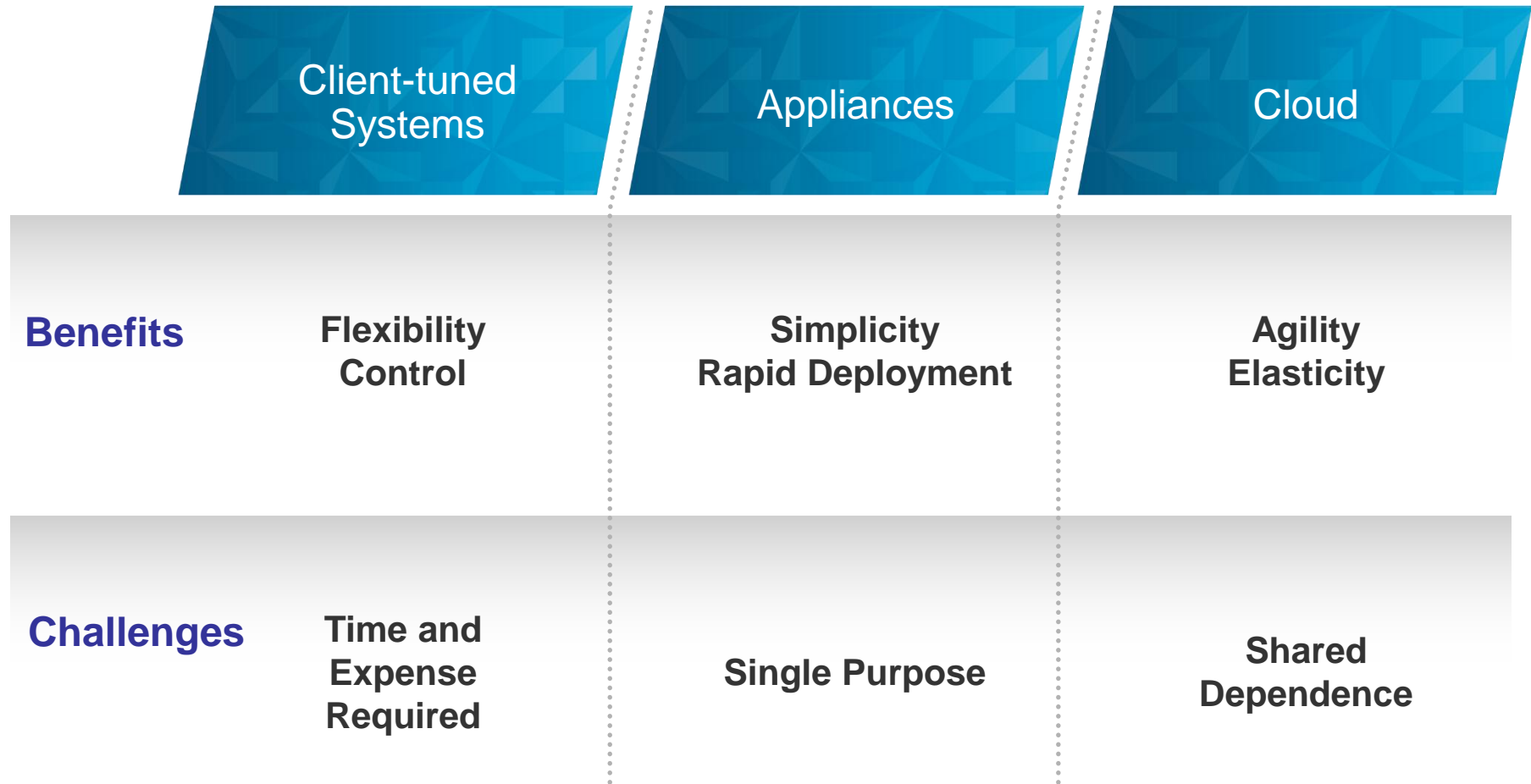


2013  
**\$247B**  
est.

**69% of IT** operating costs in 2013 will be for **management and administration**<sup>1</sup>

<sup>1</sup> IDC; Converged Systems: End-User Survey Results presentation; September 2012; Doc #236966

# Clients have tried various approaches to overcome the barriers of time, cost and risk

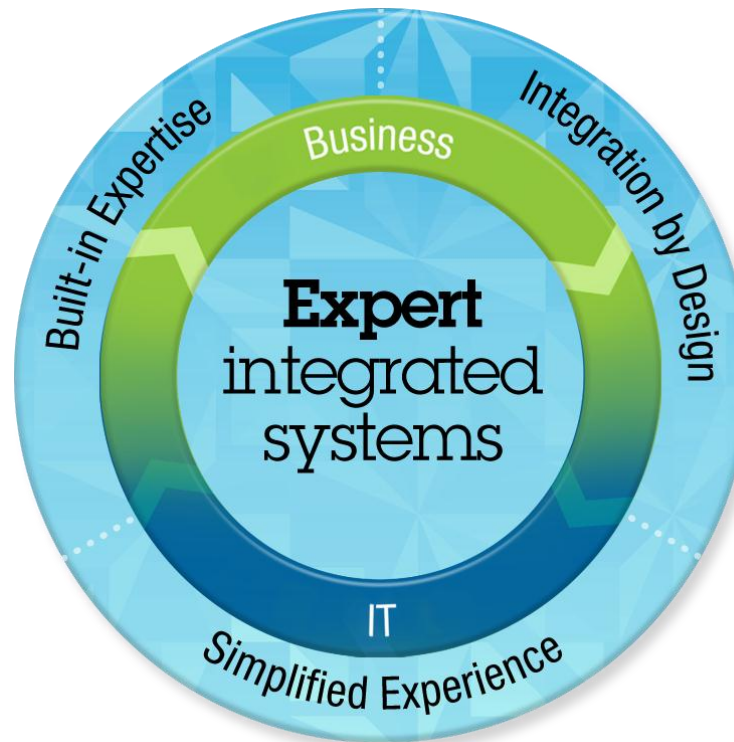


*What if you could have the best of all three?*

# To achieve this, a new breed of systems is required

## Built-in Expertise

*Capturing and automating what experts do* – from the infrastructure to the application



## Integration by Design

*Deeply integrating and tuning hardware and software* – in a single, ready-to-go system

## Simplified Experience

*Making every part of the IT lifecycle easier - with integrated management of the entire system and a broad open ecosystem of optimized solutions*

# The IBM PureSystems family is optimized to accelerate and simplify business priorities

## Applications

BPM/ODM  
Commerce  
Dev/Ops  
SAP

Mobile  
Social  
Analytics  
Etc...

## Big Data

Transactions  
Operational Analytics  
Large-scale Analytics  
Big Data Exploration

**PureSystems**

## Cloud

SaaS/BPaaS  
PaaS  
IaaS

## IT Optimization

Consolidation  
VDI  
High availability  
Performance

# Expert Integrated Systems are strategic to IBM

## Strategic Marketplace Directions



- Data is becoming the world's new natural resource
- The emergence of cloud is transforming IT and business processes into digital services
- New systems of engagement are changing the client experience

## IBM is investing in PureSystems



As an accelerator to:

- Big Data
- Cloud
- Systems of Engagement

# Expert Integrated Systems are strategic to IBM - Announcement Highlights

## **Lenovo plans to acquire IBM's x86 server portfolio and related resources and operations including**

- System x, BladeCenter and Flex System blade servers and switches, x86-based Flex integrated infrastructure systems, NeXtScale and iDataPlex servers and associated software, blade networking and maintenance operations
- Development, sales and marketing, finance, legal, integrated supply chain, operations, IT and manufacturing
- Service and support (maintenance)

## **IBM will retain its enterprise systems portfolio, including System z mainframes, Power Systems, Storage Systems, Power-based Flex servers, and PureApplication and PureData appliances**

## **Lenovo and IBM plans to enter into a strategic collaboration**

- Lenovo becomes IBM's supplier of x86 server technology
- Lenovo will license, OEM and resell IBM Storwize and tape storage technologies, General Parallel File System, SmartCloud Entry, elements of the x86 system software portfolio, and the Platform Computing portfolio

## **Until the transaction is completed, the companies will continue to operate independently**

The transaction is expected to close later in 2014, subject to the satisfaction of regulatory requirements, customary closing conditions and any other needed approvals. Subsequent local closings will occur subject to similar conditions, the information and consultation process, and local agreements in applicable countries. It is expected that once completed Lenovo will assume IBM's x86 global server business including sales, development, marketing, service and support (maintenance) and related services, finance and certain parts of Integrated Supply Chain (ISC) operations



# PureSystems: Simplifying Cloud, Big Data & Analytics – tailored for your business

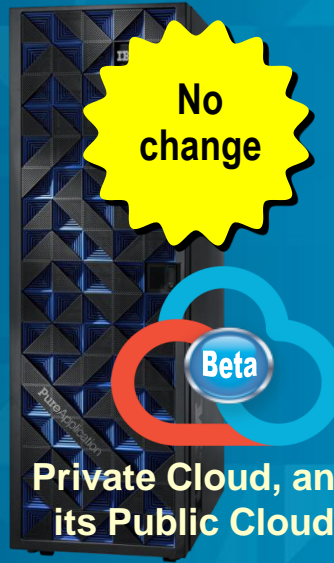
Expert  
Integrated  
Systems

*Flexible  
Infrastructure*



**POWER &  
Hybrid\***

*Optimized  
Application System*



**No  
change**

Private Cloud, and now  
its Public Cloud beta

*Dedicated  
Big Data Systems*



**No  
change**

**PureFlex**

**PureApplication**

**PureData**

Technology  
Building  
Blocks

**Flex System**



**Power &  
Hybrid\***

*Advanced Blade  
Technology*

You can build Cloud simpler, faster and with less risk with pre-integrated and optimized capabilities

# PureSystems

Expert Integrated Systems

**PureFlex**  
*Flexible cloud infrastructure*

**PureApplication**  
*Simplified cloud application lifecycle*

**PureData**  
*Optimized transactional and analytics data services*

**Flex System**

**Build from Components**

**Flexibility**

**Build it**

**Speed and Simplicity**

# IBM PureSystems family provides cloud options for flexibility and simplicity

## Client chooses, installs & maintains:

- Application middleware
- Cloud services into existing environment

## PureFlex

### Flexible Cloud Infrastructure

- Multi-architecture (POWER and/or X86)
- Multi-hypervisor

- Integrated server, storage, network
- Integrated systems management
- Storage and VM optimization
- Infrastructure security
- Provisioning

## PureApplication

### Simplified Cloud Application Lifecycle

- Pattern-based application deployment
- Dynamic vertical and horizontal scaling
- Application-aware optimization
- Advanced license management
- Application Security
- Usage metering
- Application lifecycle management

### Automated Infrastructure Services

- X86 or Power

- Integrated server, storage, network
- Integrated systems management
- Storage and VM optimization
- Infrastructure security
- Provisioning

Build it

# IBM PureApplication System: The fully integrated private Cloud solution

Quickly deploy cloud-ready solutions with **Patterns of Expertise** for:

- Mobile
- BPM
- Business Intelligence
- DevOps
- Commerce
- and more...

**Key Values**

- Simplicity
- Speed & Agility
- Lower TCO

Common cloud platform

Pattern-based deployment

Dynamic resource scalability

Automated IT resource provisioning

User-based self-service

Catalog of services

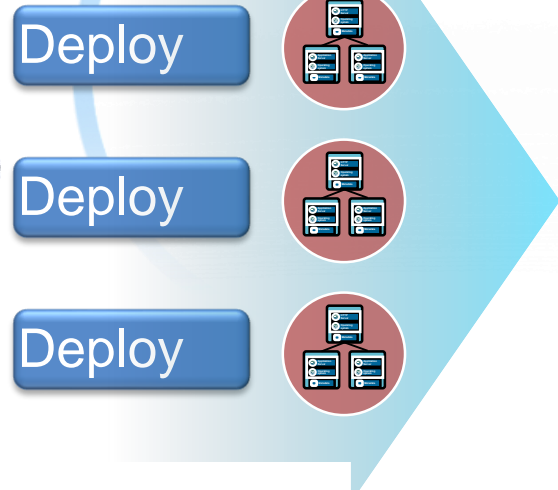
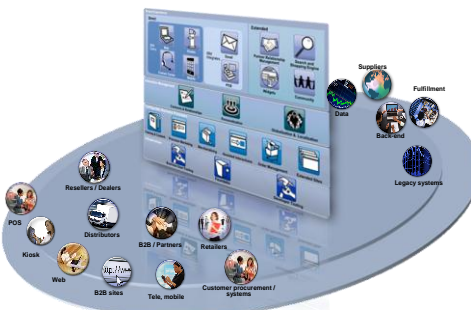
Multi-tenancy

Usage-based reporting

Virtualization

Automated IaaS

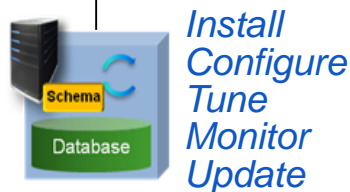
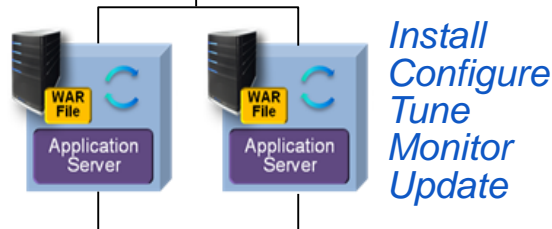
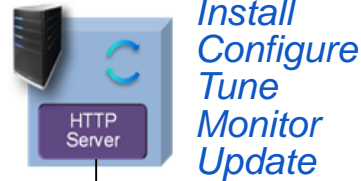
Service level management



# Pattern-based deployments deliver faster time-to-value

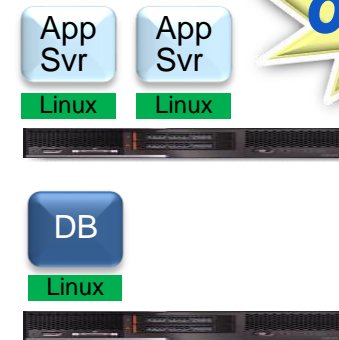
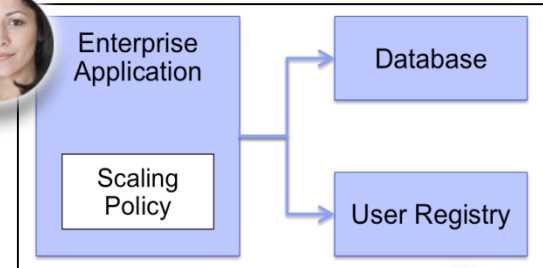
## Traditional Deployment

Deployment Administrators



- Manual, labor-intensive, error-prone
- Days/weeks for deployment

## Pattern-based Deployment



- Pre-built patterns based on proven best practices
- Automated deployment (hours)

*\* Up to 8 times faster to create and deploy a single Web and database workload compared to the Pre-integrated Web Competitor*

# European financial services firm conquers slow application development cycles

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## Hours vs. 8 months

to deploy business intelligence (BI) solution

## Less than 15 minutes

to install a fixpack compared to months over 7 servers

## Significantly reduce

ongoing operational costs



### Business Challenge

This financial services firm needed to implement a Cognos BI environment in a very short time frame to provide the marketing team with critical customer data, but internal application development process were rigid and time consuming.

### Solution components

IBM® PureApplication™ System

# Flexibility and choice that delivers performance and value

## IBM PureApplication System



- All models are integrated by design and share the same built-in expertise and simplified experience
- Available in either Intel or POWER configurations
- Models available from 32 to 608 cores
- Upgrade to larger configurations in a rack without taking an outage
- Options for less power consumption and lower priced entry point

*\* Two and a half times better price/performance with PureApplication (POWER) as compared to the Pre-integrated Web Competitor*

# IBM PureApplication System designed around complete lifecycle management

**76%** Labor reduction\*



## Procure and Design

- Pre-integrated, pre-tested, ready to run
- Optimized configurations with high availability
- Single part to order

## Develop and Deploy

- System Up and running in hours
- Easily deploy new application and data services
- Rapidly replicate environments for development and test

## Ongoing Management

- Dynamically scale to meet changing demand
- Automatic failover and high availability
- Fully integrated management

## Support and Upgrade

- Single support number
- System level updates and upgrades
- Simplified problem determination

\* Up to 76% reduction in labor hour estimates compared to do-it-yourself environments



# PureSystems continues to gain traction in the marketplace

#1 ranking in Gartner survey<sup>1</sup> of customer confidence to deliver on Integrated Systems

10,750+

Systems shipped to  
117 countries



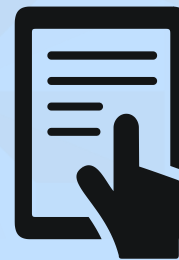
180%

Growth YtY for IBM  
share in IDC 3Q  
Integrated Systems  
Tracker



550+

Published systems  
and applications  
patterns and solutions

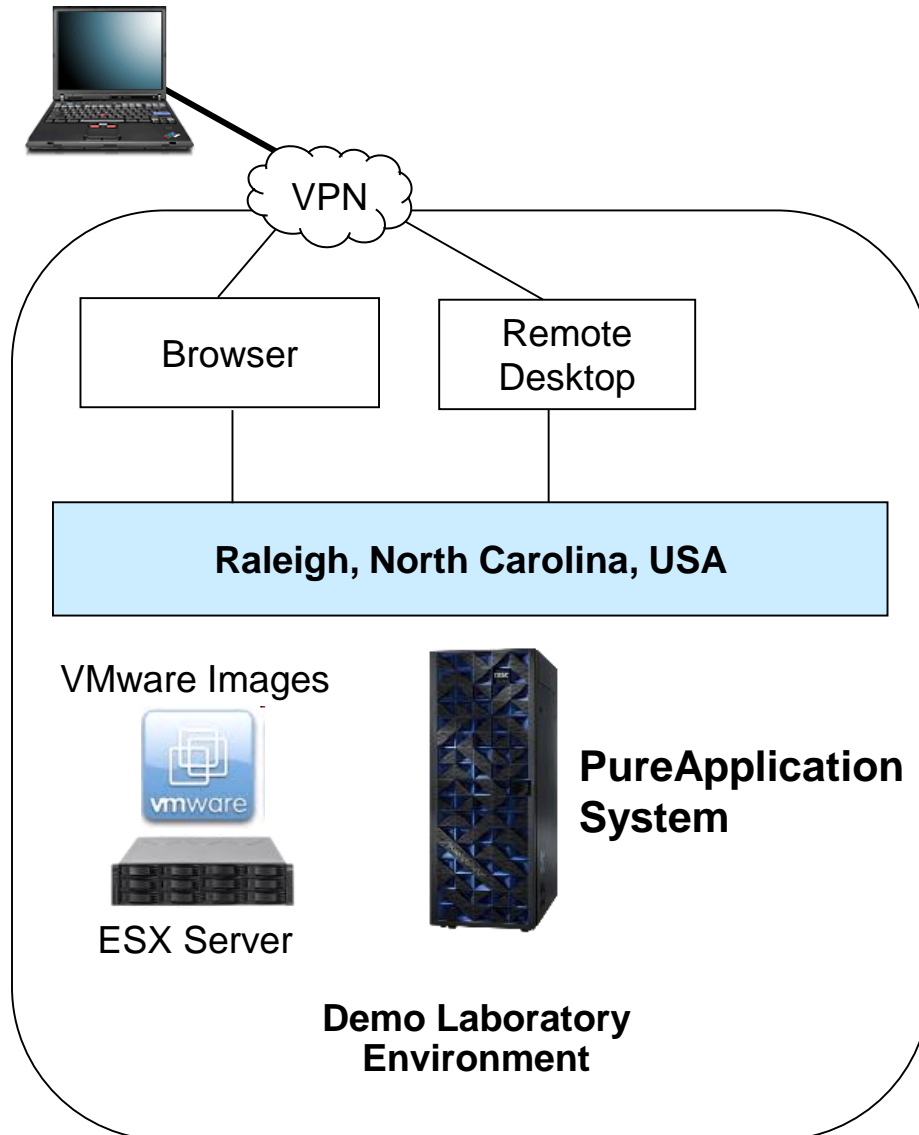


400+

PureSystems client  
references



# We will prove the value of IBM's solutions with LIVE demonstrations



## Demo subjects include:

- Deploying a pattern
- Automatic scaling per workload policy
- Showcase the integrated console
- Demonstrate resource isolation and security management
- And more...

# How do competitor solutions compare to IBM PureApplication System?

## VCE Vblock



Optimized for virtualized infrastructure

Bring your own application middleware and workload management

Cloud management requires separate purchase and install

## Oracle Exalogic



Optimized for WebLogic middleware

Full management support not yet delivered

Deployment of solutions not mature

## IBM PureApplication™ System

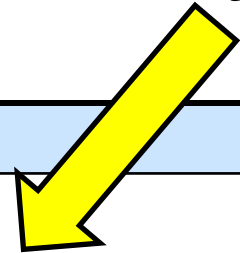


- Open platform<sup>1</sup>
- Pre-built “patterns of expertise” with an ecosystem of 200+ patterns
- Faster solution deployments with patterns
- Optimized stack for Enterprise applications
- Lower cost per workload
- Integrated hardware and software cloud management
- Lower labor costs

# We will show you how PureApplication is the Cloud application platform of choice

- PureApplication has “Patterns of expertise”, system performance and value, and has integrated management to help keep labor and costs down
- We will cover all that today

**Next  
topic**



14:00 – 14:15		PureSystems deliver IT economics
14:15 – 15:15		Accelerating application deployment: Patterns of expertise
15:15 – 15:45		PureApplication: a closer look at performance and value
15:45 – 16:00		-- BREAK --
16:00 – 16:45		Lowering costs through integrated management
16:45 – 17:00		Summary and action