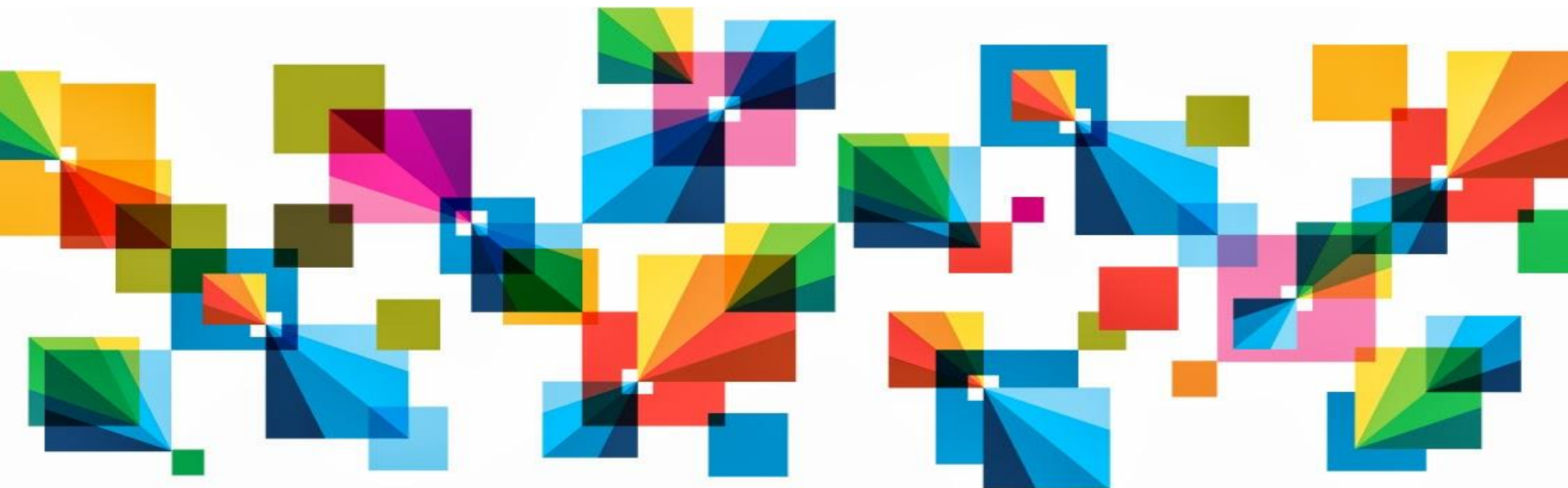


Accelerate Time to Value with the Right Deployment Model

Simplify Deployment and Get Results Faster with Systems Optimized for Your Workloads



Choose An Appropriate Deployment Model

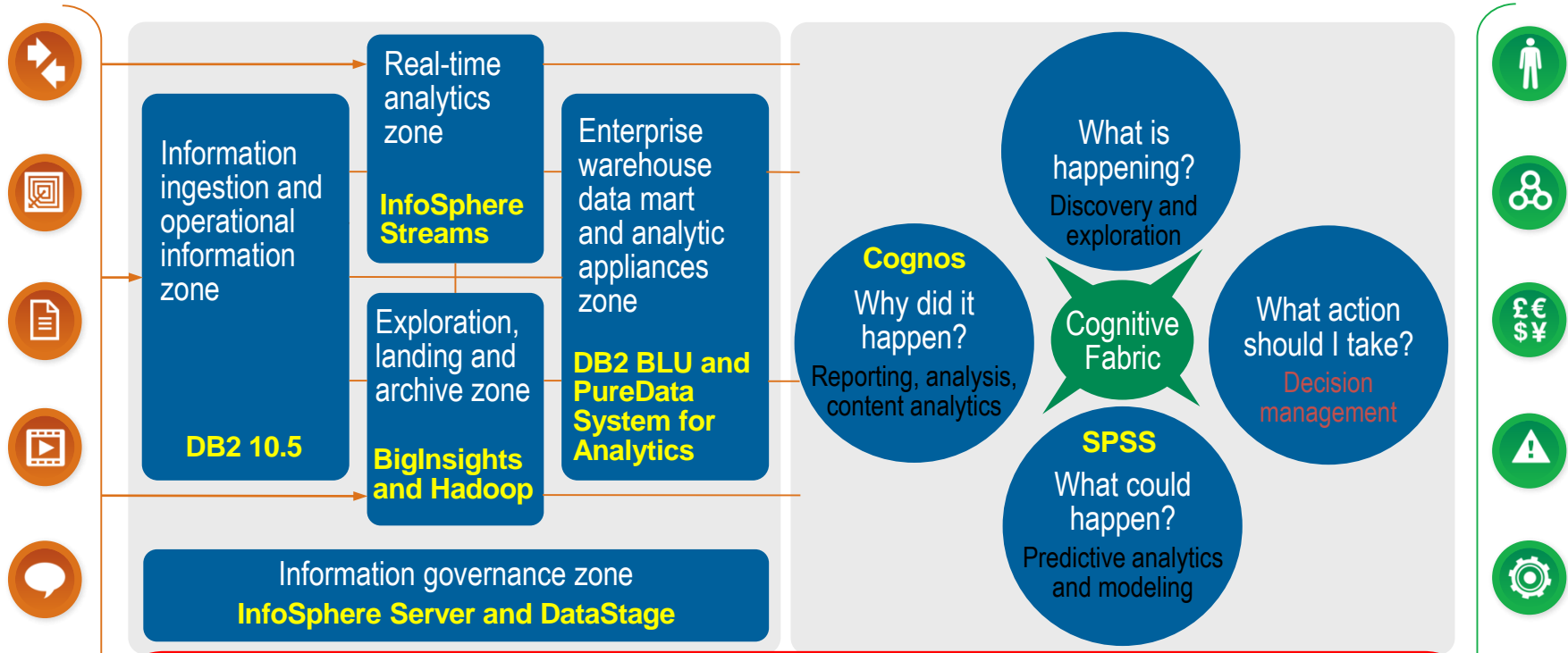
- Efficiently analyze your current data
- Visualize your data
- Analyze new sources of unstructured or semi-structured data, including data in motion
- Effectively integrate all your data
- **Simplify your environment with the right deployment model**

Make Sense out of BigData with IBM Watson Foundations

All Data

IBM Watson Foundations

New/Enhanced Applications






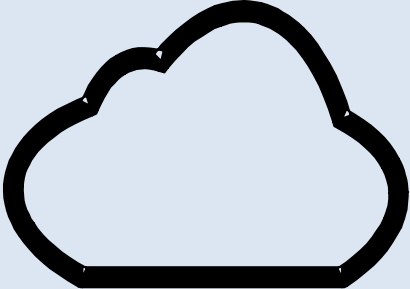
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an IBM Company

Systems Security Storage

On premise, Cloud, As a service

Operating systems: Windows, AIX, Linux, Power Systems, intel

IBM Offers Deployment Models That Fit Your Business Requirements

| Software Optimized for Existing Infrastructure | Expert Integrated Systems | Cloud |
|---|---|---|
|  <p>DB2 10.5 with BLU Acceleration</p>  <p>Cognos BI 10.2</p> <p>IBM BigInsights</p> <p>InfoSphere Information Server</p> <p>Best overall TCO(\$) for known consistent workloads</p> | <p>PureData Systems</p>  <p>Workload Optimized Expert Integrated Systems <i>Delivering Data Services</i></p> <p>Best for faster time to value</p> | <p>New Data delivery model</p>  <p>Scale on demand</p> <p>Flexibility for unknown and variable workloads</p> |

IBM PureData System for Analytics

Built In Expertise Simplifies Deep Analytics With An Efficient Dedicated Appliance

- **Smart**
 - Innovative Streaming Technology
- **Simple**
 - Fast installation
 - No DB administrator tasks
 - Very easy operation
- **Speed**
 - Optimized for purpose



PureData System for Analytics Provides Breakthrough Simplicity with Innovative Technology

- No software installation
- No indexes and tuning
- No storage administration
 - No dbspace / tablespace sizing and configuration
 - No redo/physical/Logical log sizing and configuration
 - No page/block sizing and configuration for tables
 - No extent sizing and configuration for tables
 - No Temp space allocation and monitoring
 - No RAID level decisions for dbspaces
 - No logical volume creations of files
 - No integration of OS kernel recommendations
 - No maintenance of OS recommended patch levels
 - No JAD sessions to configure host/network/storage

Spend Less Time Managing and More Time Innovating



UP and Running:

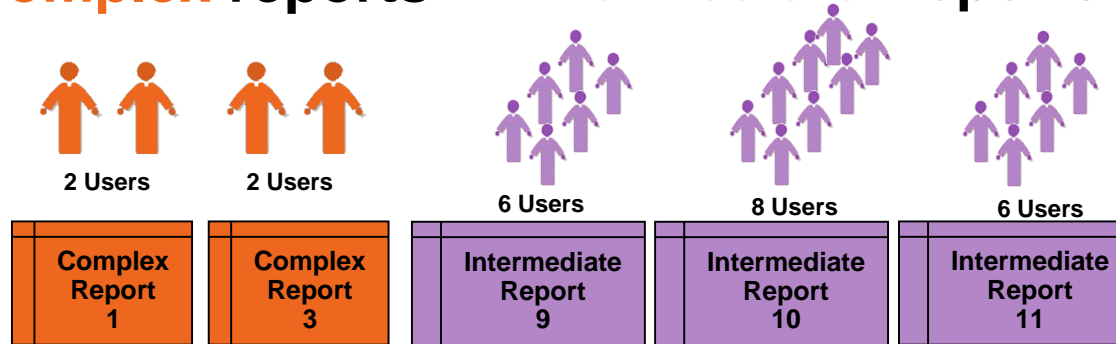
PureData for Analytics
2.5 days
 (includes 1 day learning)

VS.

2.5 weeks
 (with experienced admin)

BI Day Deep Analytics Test Measures Concurrent Multi-User Report Performance

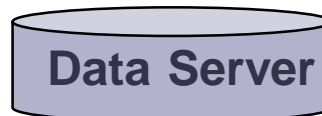
4 Users doing **complex** reports 20 Users doing **intermediate** Reports



Each report executes one or more queries

4 Connections

20 Connections



- 24 concurrent users
- Mix of complex and intermediate reports
- Focus on throughput

Note: Distribution of complex, intermediate, and simple workloads based on Forrester Research, Profiling the Analytic End User for Business Intelligence, 2004

PureData for Analytics Delivers 2-10x Better Performance on Deep Analytics Workload

IBM PureData for Analytics 1/2 Rack (N3001-005)



4 PDA S-Blades – 80 cores
512GB RAM
1 Active Host – 12 cores
120x 600GB HDD (RAID 1)



System Cost
3 year TCA
\$1.73 Million

1TB Deep Analytics Workload

1067 Intermediate Reports/Hour
9.4 Complex Reports/Hour

- ✓ **10x** more intermediate reports
- ✓ **2x** more complex reports
- ✓ **1.6x** Lower Cost

Cloud is New Deployment Model

- Simple and Easy to Use
 - Easy to deploy and operate
 - Simply - Load and Go
- Agility
 - Flexibility to add new applications faster
 - Adapts as your requirements change
 - Pay as you go
- Combines Speed, Performance, and Security
 - Use internet style scaling to handle queries at the speed of thought
 - Advanced security models for single and multi-tenant deployments

IBM SoftLayer® provides a global, interconnected platform with flexible options so you can move virtually any workload to the cloud.



Hosted private clouds

Choose bare metal, virtualized infrastructure or both in a single-tenant model to meet enterprise needs.



High-performance computing

Access industry-leading HPC cluster technologies to run entry-level to the most demanding HPC apps.



Big data and analytics

Store, manage and analyze data with the robust storage and computer power.



Social business

Host social business apps for global enterprise customers.



Mobile applications

Build and host mobile apps on a global infrastructure at Internet scale.



Development and test

Develop and test business apps with APIs¹ and a DevOps runtime services environment.



Web applications and e-Commerce

Deploy any n-tier application with demanding requirements on an easily scalable, hybrid infrastructure.



ISVs², production ERP and unmanaged production

Combine dedicated and shared cloud environments on a hosted infrastructure, backed by monitoring, backup and restore, and high availability.

¹Application programming interface (API); ²Independent software vendor (ISV)

Introducing IBM dashDB



Data warehouse and analytics as a service on the cloud

Build More

- **Simple, up and running in minutes** with rapid cloud provisioning
- **No infrastructure investment** provides true business agility

Grow More

- **Grow faster** by focusing on your business, not the business of data warehousing
- **Built-in Performance with In-memory** technology delivers answers faster

Know More

- **Built for Analytics** to help you understand your data and business
- **In-Database Analytics** for greater efficiency and performance
- Compatible with **Advanced Tooling** like R and Watson Analytics

dashDB keeps data warehouse infrastructure out of your way

dashDB – Available Now with Three Deployment Choices



- Deploy within Bluemix cloud-based environment for analytics and warehousing services
- Ingest data from a wide variety of sources
- In-database analytics included
- Pay as you go
- Rapid Deployment

1



- Auto-provisioning from Cloudbant management GUI
- Built-in automated synchronization from Cloudbant JSON data stores
- Built-in analytics for Cloudbant data
- Pay as you go
- Rapid Deployment

2



- Enterprise Plan
- Dedicated infrastructure
- Terabyte-scale capacity
- Closed Beta for qualified accounts

3

BLU Acceleration is Available in the Cloud

BLUforCloud.com

DB2 BLU for Cloud

Self-service Data Warehousing & BI in the Cloud

The same benefits of DB2 with BLU Acceleration, plus

- Complete analytics solution, deployed in under an hour
- Powerful database & analytic capabilities at a fraction of the cost
- No infrastructure investment
- Cognos Business Intelligence included
- Expert-built schemas for business insight

Available on:



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For use by:

| | |
|----------|--|
| Business | Data Scientists Business Analysts Line of Business Users |
| IT | DBAs Developers |

Cloudbant: NoSQL DB as a Service



Delivered as a cloud service, **Cloudbant** eliminates complexity & enables developers of fast-growing web and mobile apps to focus on developing their applications, without the need to manage database infrastructure and growth

- *Fully managed* distributed NoSQL Database as a Service (DBaaS)
- Operational JSON “document” database built on CouchDB with RESTful API
- Spreads data across data centers & devices for scale & HA
- Ideal for mobile apps that require:
 - Massive, elastic scalability
 - High availability
 - Geo-location services
 - Full-text search
 - Support for occasionally connected users



IBM Provides Comprehensive Cloud Capabilities to Meet Your Information Management Needs

Public Cloud

SOFTLAYER[®]
an IBM Company



- Infrastructure as a service (IaaS)
- Platform as a Service (PaaS)
- Software as a Service (SaaS)

Managed Cloud Infrastructure



- Fully managed environments
- Enterprise servers, storage, network, security
- Service Level Agreements

Private Cloud Infrastructure



- Hardware and software solutions
- Private, Hybrid, and Dynamic cloud solutions

IBM Information Management Systems Simplify Your Decisions

For all your big data workloads

- Faster time to solution
- Simplified experience
- Faster performance at lower costs
- A broader spectrum of deployment options to fit your business needs



Service Oriented Finance CIO