

Solution Edition for Cloud Computing

Combines industry-leading IBM System z server with Tivoli software and IBM services to create a service automation and management framework used for cloud computing workloads and use cases within the enterprise



Enables operational efficiency by leveraging the strengths of the System z platform with z/VM and Linux

- *Massive virtualization capability supporting thousands of virtual Linux guests on a single LPAR*
- *Improves utilization capability of system infrastructure from ranges of 10 – 20 percent to ranges of 80 – 90 percent*
- *Reduces labor, maintenance and energy costs significantly*
- *Creates easy and affordable access to mainframe resources*

Highlights

Delivers a competitively priced solution, consisting of hardware, software and services for getting started with cloud computing quickly

- *Tivoli software automates requesting, deployment, monitoring and management of cloud computing services*
- *Systems z server capacity supports platform efficiency for centralized and virtualized cloud workloads,*
- *IBM services implements and optimizes the Solution Edition for Cloud Computing*

Provides a cloud computing service automation and management framework for cloud computing workloads

- *Automates the provisioning of images, consisting of applications, platforms, and operating systems*
- *Speeds delivery of IT assets from weeks to minutes*
- *Introduces automated service consumer capabilities*
- *Simplifies lifecycle management*
- *Automates processes around deploying, optimizing and terminating components of the service*

The Solution Edition for Cloud Computing creates a framework for clients to get started with cloud computing. It is offered at an aggressive and competitive price point, and combines our industry-leading System z® hardware, Tivoli® software and IBM services.

Cloud Computing holds promise for innovation in the enterprise

Many businesses are evaluating cloud computing as a way to overcome costly and inefficient processes within their enterprise. For them, the promise of cloud computing will reduce their overall costs through efficiency and automation.

A CIO study of 2,500 CIOs across geographies, industries and company size indicated that high-performing CIOs are focused on reducing costs through different infrastructures and processes.

- *Three-fourths of all CIOs—including those in both high profit before tax (PBT) growth and low PBT growth organizations—anticipate having a strongly centralized infrastructure in five years*
- *Within five years, 22 percent more High-growth CIOs than Low-growth CIOs expect to implement completely standardized, low-cost business processes.*

Cloud computing offers the ability to standardize and centralize services for reduced costs and increased opportunity for innovation.

Create a self-managed platform with IBM Tivoli

IBM understands that the effectiveness and efficiency of a cloud implementation is contingent upon a service process management platform that can deliver and automate a dynamic infrastructure, while enabling self service for the end user.

IBM Tivoli Service Automation Manager provides automated service lifecycle management, including dynamic instantiation of cloud services and management throughout their lifecycles. Automation and management of this instantiation is based on templates and management plans for manual and automated management components.

Not only does automation reduce the time required to deploy and manage a cloud computing environment, it can also significantly reduce IT operational

costs, reduce errors, and reserve highly valuable team members' time for other tasks.

Tivoli Service Automation Manager addresses the challenges of manual deployments by delivering three critical customer benefits in a cloud computing model:

- *Faster services deployment*
 - *Service offerings exposed directly to service consumers*
 - *Automated service provisioning*
 - *Integrated and role-based process workflows*
- *Lower the cost of service delivery*
 - *Improved server to administrator ratios*
 - *Low- or no-touch deployment*
- *Improved quality of service delivery*
 - *Standardized delivery models and templates, including audit trails*
 - *Consistent configurations*
 - *Self-service portal for service consumers*

With Tivoli Service Automation Manager, services can be made available to end users through request-driven provisioning, increasing end user satisfaction.

IBM System z is the ideal platform for cloud computing

A dynamic computing infrastructure is a key component of a cloud. Characteristically, a dynamic computing infrastructure is virtualized, available, secure, energy efficiency and operationally efficient.

IBM System z delivers:

- *Unchallenged virtualization leadership*
 - *System utilization rates +80 percent*
 - *Shared everything approach— network, memory, CPU, etc.— enables less components and a more simplistic IT foundation*
 - *1/4 of the network costs of distributed capacity*
- *Created on zero downtime design principles*
 - *Physical redundant parts within the box that support hot failover*
 - *System capacity that can be plugged into existing, running systems*
 - *Mean time between failure is measured in decades on System z*

- *Secure and trusted platform*
 - *High-performance cryptography*
 - *Improved Secure Sockets Layer (SSL)*
 - *z architecture has less intrusion points*
 - *LPARs are equivalent of separate physical boxes*
- *Energy efficient with less footprint*
 - *Consumes 1/12th the electricity as a distributed server farm*
 - *Consumes 1/25th the floor space as distributed capacity*
- *Operationally efficient with less resources required to support more workload*
 - *1/5 the administration resources*
 - *Greater ROI for IT projects*
 - *Near-linear scalability with +1M servers supported*

System z provides a powerful platform for hosting cloud computing workloads.

IBM Services Accelerates the Time to Value

Whether you are upgrading existing capacity or buying new system resources, the IBM services team delivers a cloud computing framework to accelerate customer value.

With planning workshops, IBM services can determine how best to meet the client's cloud computing needs, while ensuring active involvement.

We provide implementation and optimization services to prepare the base environment, install the cloud service management software and finally to optimize the environment to meet the client's needs.

When IBM services leaves the account, the client has a cloud computing environment up and running on System z.

Flexible Financing

The cloud financing portfolio from IBM Global Financing is a comprehensive set of funding options that can free up capital and turn large upfront investments into affordable monthly payments. From simple loans to custom leases, the total cloud solution can be financed with competitive rates and customized payment structures for hardware, software and services from both IBM and third parties—in one simple contract with one low periodic payment.

IGF has announced a 90-day payment deferral, whereby clients can implement their cloud solution now, and make no payments until next year.

www.ibm.com/financing/us/



For more information

To learn more about the IBM Solution Edition for Cloud Computing, please contact your IBM marketing representative or IBM Business Partner, or visit: ibm.com/systems/z/solutions/editions/cloud/index.html/

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