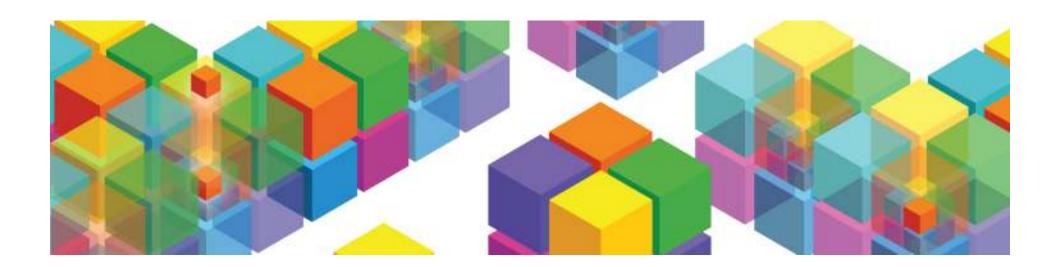


Introduction to Managed Services





Agenda

- Market Trends
- How Managed Services address Client challenges?
- IBM Application Hosting Services
- Value Proposition
- Solution Design
- References
- Why IBM?



Limited resources available

CIOs are under increasing pressure to deliver transformative business value – with limited resources available

Increased connection

700M

Smartphones & tablets will ship in 2012, a jump of 34%

Increased opportunity

60%

Of CIOs view cloud computing as critical to their plans

Increased demand

2.7ZB

Of digital content in 2012, a 50% increase from 2011

Increased risk

40%

Of Fortune 500 and popular websites contain a vulnerability

Budgetary constraints

71%

of the average IT budget is dedicated to ongoing operations.



CIOs are under increasing pressure ...

...to deliver transformative business value - with limited resources available

At the same time, their role within the organization continues to evolve.

2006 - 2010

2000 - 2005

CIO as application implementer

- Expansive, on-premise applications
- Highly customized, with dedicated hardware
- Internal staff and external trusted advisor

CIO as head of virtualization and standardization

- Early SaaS and cloud adoption
- Acceleration of virtualization and standardization
- Less staff, multiple suppliers

2011 - 2015

CIO as service integrator

- Widespread SaaS and cloud adoption
- Highly standardized and virtualized, delivered as a service
- Even less staff, many more suppliers and new modes of delivery



Client Issues – IBM Managed Services Answers

Client Issues

- Increasing expectations for IT Service availability
- New regulatory requirements
- Greater security threats
- Changing business requirements
- Short of IT staff and adequate skills
- IT staff over burdened
- Changing and disruptive technologies
- Pressure on investment capital
- Unpredictable operation costs
- Failing to manage service levels



Risk



Quality

IBM Managed Services enables

- Standardized, highly available and secure IT infrastructure to reduce risk
- Mature delivery and governance
- More IT services and reporting abilities
 - Flexible delivery options
 - Access to diverse expertise on demand
 - Free the IT staff for more strategic tasks



Cost

- Transform CAPEX to OPEX
- Greater cost visibility and control
- Provide high service quality 24x7x365



What is a Managed Services?

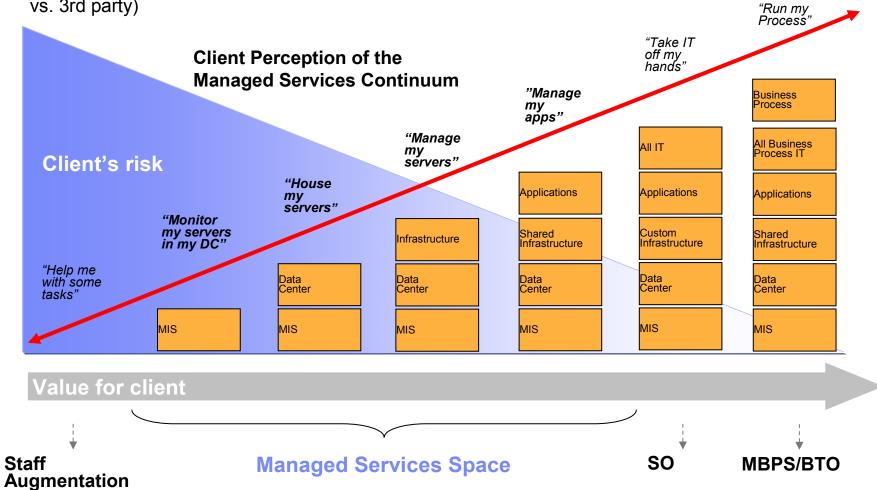


What is a Managed Services?

"Taking responsibility for daily operations of parts of the clients IT infrastructure"

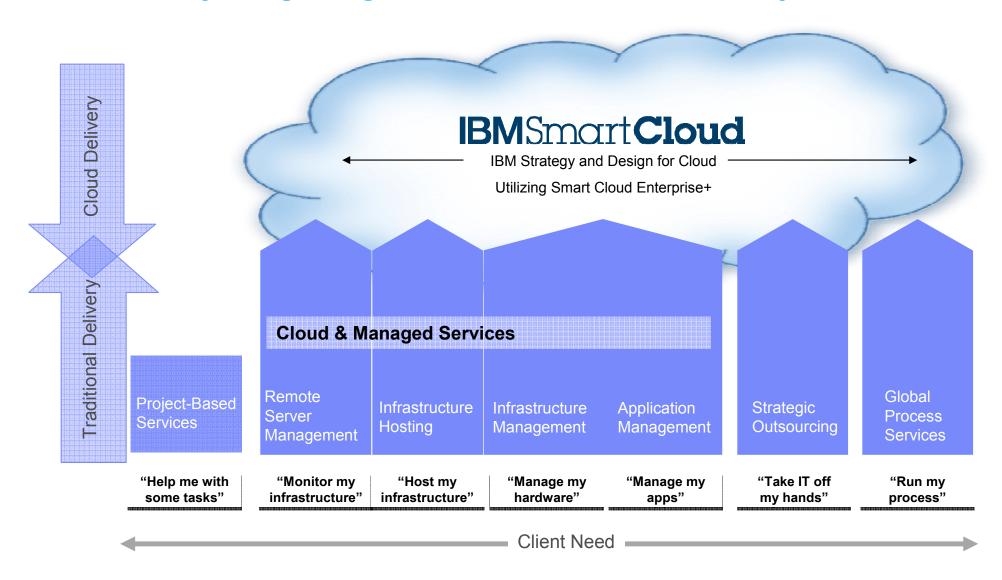
Parts of infrastructure: Server, Storage, Data center, Middleware, Networking, End-user, Security, etc.

Various delivery options (local vs. global), asset ownership (IBM vs. Client), locations (IBM vs. Client vs. 3rd party)





Seamlessly integrating traditional and cloud delivery models



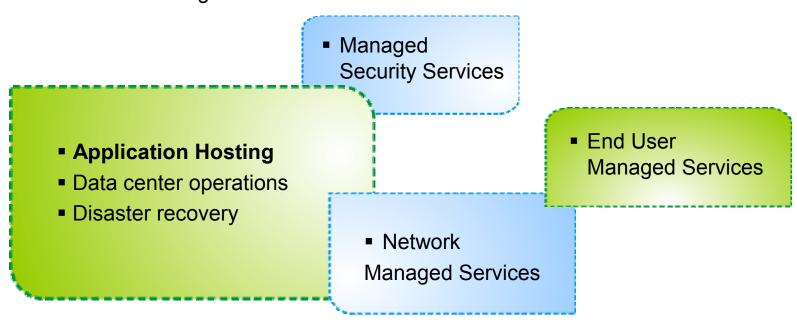


ManagedCloud services focus in CEE

IBM is the vendor that can provide a complete range of flexible managed services. Our experience and credentials make us the trusted partner of choice for long-term management of your IT.

IBM is focused on key client challenges in CEE markets utilizing

- Strong local presence
- Strong technology and client base
- CEE based Global, Regional and Local delivery centers with more than 10 000 employees
- Global Cloud offerings infrastructure



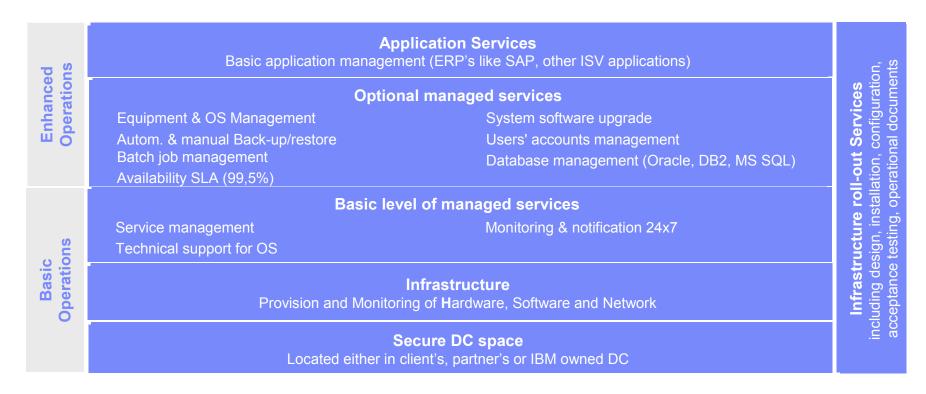


Application Hosting at a Glance



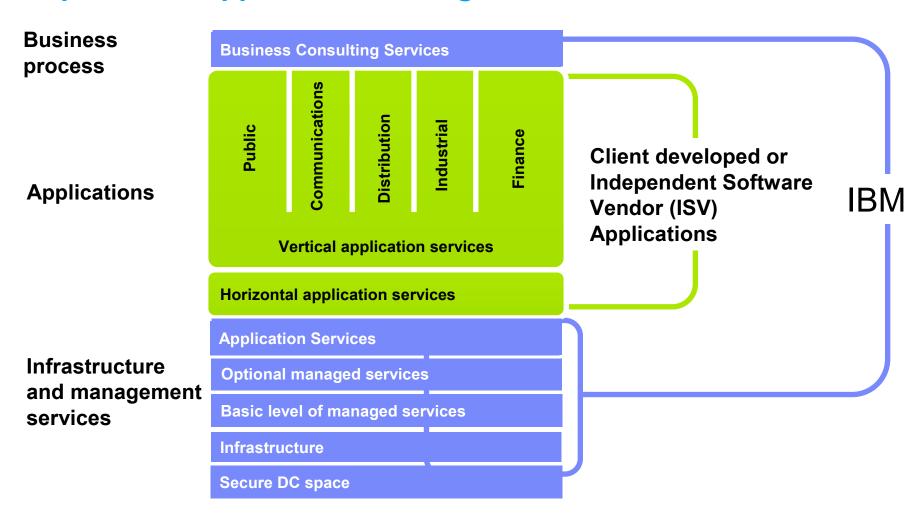
What is Application Hosting

- IBM Application Hosting offers clients mission-critical application hosting utilizing a highly flexible, scalable and resilient delivery model that is matched to the service level requirements of each client business application.
- Designed to support day-to-day operations, IBM Application Hosting provides integrated administration, monitoring, data protection and disaster recovery of the hosted infrastructure and applications to help reduce downtime and improve availability.





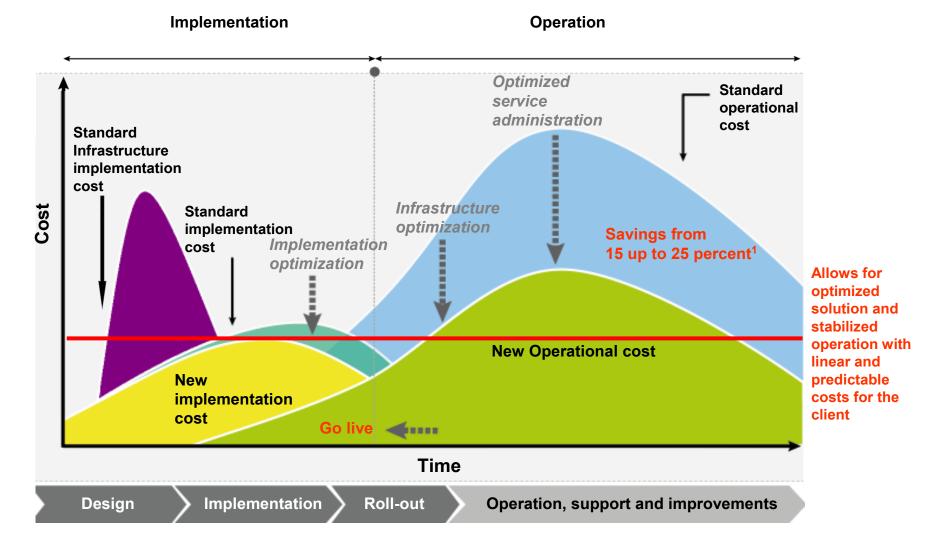
IBM provides expertise in working with ISVs to offer you options for application hosting



Applications supported may be ERP based (e.g. SAP), Oracle or any client owned & developed proprietary application.

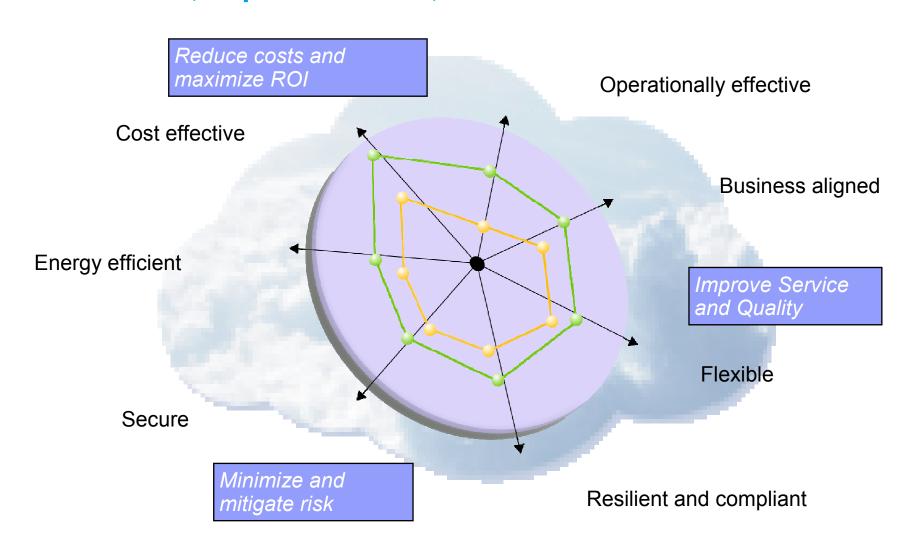


Application Hosting Services optimize cost and time from application implementation through ongoing operations





Application Hosting services are purpose built to help clients reduce cost, improve service, and reduce risk





With Application Hosting, IBM improves the quality of services while advancing client IT organizations capacity to deliver strategic impact

Reduce costs and maximize ROI

- Predictability of costs and no up front investment, freeing up funds for strategic initiatives.
- Optimization of CAPEX (e.g. for HW and infrastructure acquisition) and transfer to OPEX.
- Reduction of financial entry hurdles (e.g. pre-investment).
- More flexible and scalable pricing models incl. billing based on cost metrics related to business.
- Cost reduction of 20% to 30% possible, through integrated operations and increase in efficiency.

Improve service and quality

- Increase utilization and optimize IT capacity due to virtualization and near-real-time allocation of storage.
- Re-allocation of scarce resources to focus on core business functions.
- Increase in operational efficiency e.g. by utilization of tools and processes from IBM which can reduce application installation period by 30%.
- Flexible and scalable solution, e.g. based on advantage of scalable cloud based environment.
- Broad set of cloud tools and time-tested methodologies.
- Reduced complexity of IT environment.
- Near-continuous operations supported by SLAs customized according to client's service requirements.
- Leveraging IBM's extensive pool of skilled resources and expertise.

Minimize and mitigate risk

- Improve access to mission-critical business applications and reduce (un)planned downtime.
- Lower the risks cost overruns and resource shortages.
- Reduce risks by around-the-clock monitoring and management in a save environment.
- Integrated solution can combine production operations with data protection and DR.



Solution Design



Solution Design - Basic Operations of Application Hosting

Basic Operations

Provision and Management of

- Secured Data Center space (IBM DC, Partner DC, client DC)
- Infrastructure provision and roll-out services incl. design, installation, configuration, testing, and documentation for dedicated, shared and cloud based Hardware, Software and Network connection.
- Hardware infrastructure monitoring and Proactive Service Management for Operating System through Rich dashboard for collection and presentation of real time data, 24x7 notifications, OS technical support.



Environment for one client. May include Cloud technologies.



Shared

Different clients covered out of one infrastructure.



Cloud based

Environment provided as Smart Cloud Enterprise+

Basic Operations

Basic level of managed services

Service management

Monitoring & notification 24x7

Technical support for OS

Infrastructure

Provision and Monitoring of Hardware, Software and Network

Secure DC space

Located either in client's, partner's or IBM owned DC

roll-out Services Infrastructure



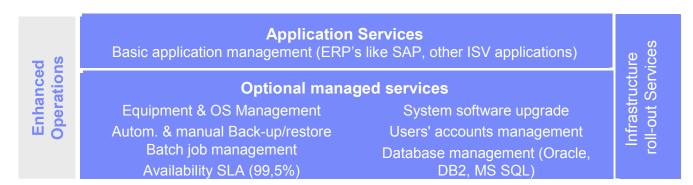
Solution Design - Flexible Application Hosting Design

Enhanced Operations

Based on customer requirements different setups and complexities are possible:

Provision and Management of

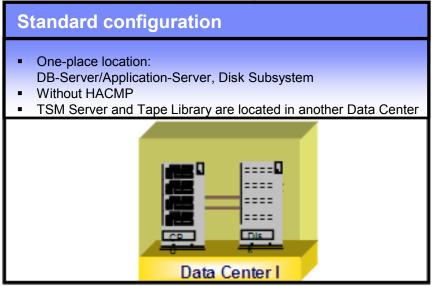
- Infrastructure preventive and corrective maintenance for Network, Firewall, Server and Storage Hardware.
- Monitoring and Proactive Service Management for Database, Middleware and applications on top of the OS through the Rich dashboard, 24x7 notifications, technical support and administration.
- Automated Back-up services, User Profile Management Services, Upgrades of System Software and Enhanced Security Services – System logical security reviews.
- Performance and Capacity planning, SLA agreements, Operational documentation administration.
- Application response time monitoring, Management and Support Services for ERPs like SAP or any other application.

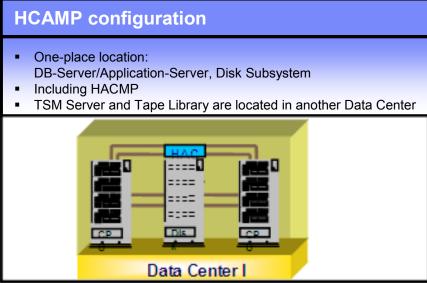




Solution Design Options – Dedicated Environment

Application Server deployment - One Data Center

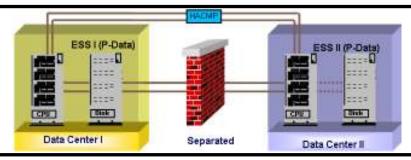




Application Server deployment - Two Data Centers, mirroring disc systems

Two Data Centers configuration

- Location at separated Data Centers: DB-Server/Application-Server, DB-Backup-Server
- Disc systems located at separated Data Centers, mirroring
- HACMP
- TSM Server and Tape Library at separated Data Centers



oration



Solution Design Options – Shared Environment

Providing a Shared Environment

Virtual IT infrastructure

 Manageability, reliability, safety and secure data, performance and capacity scalability

Delivery and Management by IBM

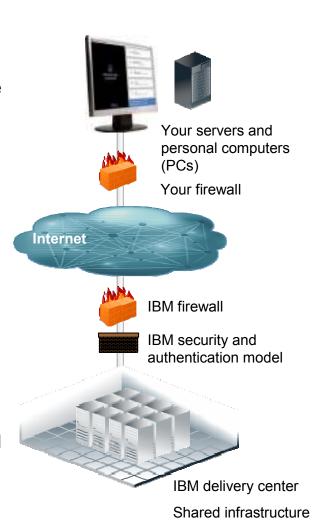
- Multi-tenant shared infrastructure
- High level virtualisation
- IBM Data Center
- Virtual machines are configured according to the client's demand

Enhanced security

- Secure access via internet
- VPN options
- Based on IBM security standards

Pay-per-usage

- Model of payment is based on resource utilisation, operational expenses
- Reserved capacity planning model





Solution Design – Supported Platforms

Dedicated Environment	
Hardware platform	System p, System x, System z, System i, non-IBM
Operating systems	IBM AIX, MS Windows 2003, 2008, z/OS, i, Linux
DBMS	Oracle RDBMS, IBM DB2, MS SQL Server
Infrastructure location	IBM Hosting center / Customer Data Center
Hardware owner	IBM / Customer

Shared Environment	
Hardware platform	System p, System x, System i
Operating systems	IBM AIX, MS Windows 2003, 2008, i, Linux
DBMS	Oracle RDBMS, IBM DB2, MS SQL Server
Infrastructure location	IBM Hosting center
Hardware owner	IBM



Addressing concerns

Will my data be transferred cross border?

No. The infrastructure is based in the country. No data will be transferred.

How can IBM provide better support than my own (in house) staff?

 By signing Managed Service contract the client tap into enormous pool or resources on local (country), regional and global level. Although technical resources are, in many cases dedicated, human resources are shared in almost all cases providing better utilization and lower overall cost.

I can not afford to have in-house staff and a Managed services contract.

With a Managed Services contract the client does not need additional resources assigned to parts of
the infrastructure under the managed services contract. Thus, the client can shift his existing in-house
resources to more productive and value add activities (e.g. New Applications, business process
development). Further, the client does not need to hire new resources or train existing ones for new
technologies.

I am afraid that other IBM Clients will interfere with my infrastructure and applications.

• In Managed Services contracts IBM commits to dedicated key HW and SW components for a client. This components will not be shared (unless specified) with other clients.

I am concerned about the latency between IBM site and end-user location.

• IBM is very flexible about the location infrastructure that is part of the Managed Services Contract. If requested, the infrastructure can also be based in the Client's Data Center.



Case Studies



IBM Managed Services - ISV hosting case study

The business environment

The public limited liability company from the Banking Sector, CEE

The need

An internal study diagnosed a need to create an infrastructure to implement and to support the new banking system in the short term rapid deployment and getting well functioning applications in optimal time



The solution

Managed Hosting Services for Retail Banking System.

<u>Technical components</u>: IBM x3850M2 (operation system – Linux), 4 servers IBM x3550, server IBM x3650, storage systems IBM DS4700 and Tape Library IBM TS3200. Server virtualization has been implemented with VMWare

The benefit

Hosted IT infrastructure allowed the optimization of the the management costs and fast return of investment through:

- The overall IT costs optimization to ensure the required quality of service
- Translations of capital IT costs and fixed assets in current controlled assets
- Optimization of the customer own resources, allowing them to meet their strategic objectives, as well as provide opportunities for further development and scaling of the banking system in accordance with business requirements.

Our solution resulted in

Reduction of capital and operating costs by 15 %



Managed Services - SAP hosting case study

The business environment

Large joint-stock company from the Mining Sector, CEE

The need

Necessitate in improving the effectiveness of the organization's management by moving to the outsourcing model the operation and maintenance of SAP IT infrastructure



The solution

Managed Hosting Services for ERP system in 24x7x365 mode with an SLA at 99,5% of system availability. <u>Technical components</u>: HW platform based on IBM p570 and IBM DS5300, SW platform includes AIX and IBM HACMP

The benefit

Business case decision criteria have been based on the following advantages:

- IT efficiency provided by consolidation with additional benefits through the use of shared IT resources.
- Absence of major capital investments
- Hiring, training and retention of qualified staff

Our solution resulted in

Up to 25% of cost saving with Application Hosting vs. In-house solution.



IBM Managed Services - Infrastructure hosting case study

The business environment

Mid-size state stock company from the Transportation Sector, CEE

The need

Necessity to improve Server infrastructure efficiency and service availability in order to maximize the customer satisfaction as well as an extension of the application availability level

The solution

Consolidation and Managed Services for Server and Storage infrastructure.

<u>Technical components</u>: Hardware: System x, Storage – Disk (Storwize 7000), Storage Area Network (SAN), Software: Linux, KVM, Tivoli Storage Productivity Center, Tivoli Monitoring, Tivoli Storage Management

The benefit

With the complex solution proposed by IBM the customer satisfaction criteria have been based on the following benefits:

- Transformation of CAPEX to OPEX, resulting in greater visibility and control over the costs
- Improvement of the service resiliency
- Improvement of Service availability with server and data storage virtualization
- Improvement of the information availability with network modernization
- Enhancement of the customer service satisfaction

Our solution resulted in

45% savings on Power consumption 35% savings on SW license costs No further investment required



Why IBM?



Why IBM?

- IBM has 20+ years experience running mission critical applications in production environments for clients:
 - As an OEM of software, hardware, maintenance and services, IBM is able to provide an end-to-end solution including all cricital components, out of one hand.
 - Experience in implementation, upgrading, migration, hosting and dimensioning of critical applications.
 - Processing 4.5 million transactions through IBM Cloud per day.
- IBM is an industry-leading provider of business continuity services:
 - Over 160 global resiliency centers in 70 countries with 1,800 dedicated business continuity professionals.
 - Possessing extensive business process and technology expertise.
- As a service partner IBM grants instant access to a broad range of skills in Central and Eastern Europe
 - More than 2200 client services people across 15 countries in CEE
 - More than 6500 people in global delivery centers in Poland, Czech Republic, Hungary, Romania and Slovakia.
 - Wide range of technical skills and competencies covering IBM and non-IBM technologies
- Flexible solution design allows for a tailored approach based on best practices:
 - Service Levels to ensure availability of applications based on business requirements.
 - · Option for an On-demand provisioning.
 - Dedicated vs. Shared vs. Cloud setup is offered locally, regionally and globally based on client's demand.
 - Predictability of costs through transparent pricing models.



Backup



Contact and Links

Contact

. . .

Remote Infrastructure Management Services:
 http://www-935.ibm.com/services/us/its/html/rmis-landing.html