IBM Cloudburst
Pre-sale/Pre-install
Solution Assurance Checklist
for a
Technical and Delivery Assessment (TDA)

Version 2.1

Randy Smith/US/IBM
Brian Naylor/UK/IBM
Michael M Behrendt/Germany/IBM

July 26, 2010

Abstract: This document is meant to assist the Subject Matter Expert (SME) and Quality Practitioner in preparation for and during a Technical and Delivery Assessment (TDA).

Overview for Cloudburst

The IBM CloudBurst™ solution is designed from IBM client cloud implementation experiences and integrates the service management software system with servers, storage, and Quickstart services to enable a private cloud in the customers IT environment. It takes the guess work out of establishing a private cloud by pre-installing and configuring the necessary software on the hardware and leveraging services for customization to your environment. All the customer needs to do is install their applications and start leveraging the benefits of cloud computing, such as virtualization, flexibility, scalability and a self-service portal for provisioning new services.

IBM CloudBurst provides an alternative to traditional IT infrastructure for IT executives seeking to enhance delivery of services and to transform the data center into a cost-effective Dynamic Infrastructure. IBM CloudBurst is “Built for performance”, based on architectures and configurations required by specific workloads. It enables the data center to accelerate the creation of services for a variety of workloads with a high degree of flexibility, reliability and resource optimization.

Economic and competitive demands on business is forcing customers to redefine and redesign their IT infrastructure as they must reduce capital and labor costs while simultaneously handling rapid growth in complexity and demands on IT to deliver services.

Customers currently exist on a continuum of the adoption curve from just starting to full realization of the value of virtualization and now starting the move into Cloud computing. In any of these cases the pressure to increase performance and availability and at the same time lower costs continues unabated.

Cloud computing promises greater business agility and performance at lower cost than possible with today’s IT infrastructures virtualized or not. Interest in private clouds is high because clients can gain the benefits of cloud computing while maintaining control of the underlying infrastructure. It is the logical first step.

This TDA is applicable for Cloudburst and the Cloud service automation with Tivoli Service Automation Manager which allows end users to request services as needed, increasing ease of use, enhancing and accelerating service delivery.

The automated provisioning, management and de-provisioning of the requested services enables dynamic availability of IT applications and infrastructure, supporting rapid service delivery and quality enhancements.

Standardized, role based services, enabling automated provisioning, management and de-provisioning of IT assets, can help make best use of available IT resources, helping reduce operational cost and lowering cost of ownership. And for an even more detailed and better cost control, usage based pricing can help facilitate alignment between Business and IT costs.

While this document is focused on the Cloudburst software, the table below provides other components that are required for the Cloudburst solution. These documents must be used in conjunction with this document to perform a complete TDA review of the Cloudburst solution.

	System X	System Power	
	Pre-sale/Pre-install	Pre-sale	Pre-install
Compute	SA294	SA909	SA909
Storage	SA798	SA836	SA836
System Software	SA924	SA924	

Document Links

Document Number	Solution Assurance	Partner World
SA294	http://w3-03.ibm.com/support/assure/assur30i.nsf/WebIndex/SA294	http://partners.boulder.ibm.com/src/assur30i.nsf/WebIndex/SA294
SA798	http://w3-03.ibm.com/support/assure/assur30i.nsf/WebIndex/SA798	http://partners.boulder.ibm.com/src/assur30i.nsf/WebIndex/SA798
SA836	http://w3-03.ibm.com/support/assure/assur30i.nsf/WebIndex/SA836	http://partners.boulder.ibm.com/src/assur30i.nsf/WebIndex/SA836
SA909	http://w3-03.ibm.com/support/assure/assur30i.nsf/WebIndex/SA909	http://partners.boulder.ibm.com/src/assur30i.nsf/WebIndex/SA909
SA924	http://w3-03.ibm.com/support/assure/assur30i.nsf/WebIndex/SA924	http://partners.boulder.ibm.com/src/assur30i.nsf/WebIndex/SA924

Cloudburst Software Solution Assurance Checklist

This checklist is meant to assist the IBM team or IBM Business Partner in preparing for a Cloudburst Technical and Delivery Assessment (TDA). It lists the tasks involved in the successful planning and installation of Cloudburst throughout an organization. This checklist provides guidance for the following areas (sections):

1. **Opportunity Information**
2. **Pre-Review Checklist**
3. **Attendees and Roles**
4. **Requirements**
5. **Solution Design**
6. **Configuration**
7. **Implementation and Operation**
8. **Migration**
9. **Product/Solution Capability**
10. **Hardware Configuration**
11. **TDA Summary**
12. **Action Item List**

Note: Not all of these areas need to be completed prior to the Technical and Delivery Assessment. However, plans should be in place to address each of these areas when information is available.

1. Opportunity Information

Customer Name:	
TDA Date:	
Revenue:	
Siebel #:	
Solution Description (Summary):	

2. Pre-Review Checklist

Item or Person required at the Review	Reference or Name
Documents describing customer requirements	
Documents describing the proposed solution	
SME for each technology area in the solution	
Opportunity Owner	
Technical Owner or Technical Team Lead responsible for the design of the solution	
Description of performance guarantees, if applicable	
Services provider or description of proposed services	

3. Attendees and Roles

Role	Person
Quality Practitioner	
Opportunity Owner	
Technical Owner/Technical Team Lead	
Subject Matter Expert(s)	
Premium Support Manager (if applicable)	

4. Requirements

		Yes / No / NA	Comments
4.1	Has a client organization and/or executive sponsor or been identified?		
4.2	Are the assumptions and customer risks understood and documented?		
4.3	Is the customer's present environment and background understood and documented?		
4.4	Have the customer's baseline requirements been documented in the following areas? • Functional • Operational • Performance • Scalability & Load Balancing		
4.5	Have the baseline requirements been approved by the customer?		
4.6	Have the business benefits been documented?		

5. Solution Design

		Yes / No / NA	Comments
5.1	Does the design meet the functional requirements?		
5.2	Does the design meet the performance requirements?		

		Yes / No / NA	Comments
5.3	Does the design meet availability requirements?		
5.4	Have detailed systems management procedures (backup / recovery, server monitoring, problem management and change management) been defined?		
5.5	Does the design meet upgradeability requirements?		
5.6	Does the design meet scalability requirements?		
5.7	Does the design meet security requirements?		
5.8	Has this proposed solution been successfully implemented before? Where? By whom?		
5.9	Is a benchmark or proof of concept required? If so has it been resourced and funded?		
5.10	Does the design or solution depend on unannounced products? If yes, identify the design or solution. How will the customer get support for unannounced products?		
5.11	What source of best practice guidance was used to design this solution – i.e., Development Guides, Redbooks, Lab.		
	Cloud Management Platform		
5.12	Have you defined where the CMP be will be installed – physical/virtual machine type & OS ?		
5.13	Have you defined how many CMP's will be installed (dev / test / prod / multi-site) ?		
5.14	Has the specification for CMP platform (mem / cpu / disc) been determined ?		

		Yes / No / NA	Comments
5.15	Has the topology that will be used to deploy the CMP (single, distributed, multi-tier) been defined?		
5.15.1	Does the customer have existing provisioning environment / tool? If so will they be requiring integration to their existing tool?		
5.15.2	Is reporting required? If so, are there any current tools that need to be integrated?		
5.15.3	Has development reviewed and approved any significant design changes from the default configuration? eg. additional Drive, SWstack changes, alternate storage techniques, etc.		
	Virtualized Infrastructure		
5.16	Has the hypervisor1 type and specification that will be used been identified ?		
5.17	Has the hypervisor2 type and specification that will be used been decided?		
5.18	Has a determination of where the components of the managed virtual infrastructure will be placed been completed?		
5.19	Has the capacity of the managed virtual infrastructure (dedicated to CMP) been made?		
5.20	Has the organization of the physical server pools (shared / dedicated / resource specific) been completed?		
	Network Infrastructure		
5.21	Has the network zone the CMP be placed been defined?		
5.22	Has the network IP allocation schema that will be used (range, pre-allocated, static, DHCP) been decided?		

		Yes / No / NA	Comments
5.23	Has the number of virtual nics allocated to each virtual machine been determined?		
5.24	Has the number and allocation of data/customer VLANs been defined?		
5.25	Has the method of how management VLANs are allocated been defined?		
	Storage Infrastructure		
5.26	Has the type/technology of storage to be allocated to the virtualised environment been defined?		
5.27	Has the method that storage pools setup (for the virtualised environment) been defined?		
5.28	Is the storage structure definition complete for: • Image Data Store • Multiple VMs Data Stores • Backup Data Store • Separate data disk Data Store		
5.28.1	Does the implementation need to be integrated into an existing backup and /or storage solution? Is there sufficient capacity available?		
	Security		
5.29	Has the LDAP that will be used for authentication / authorization / access control decided for the following: • Integration with LDAP user directory for authentication of users of the TSAM user interface • Secure access to self-service portal • Mapping of LDAP users and groups attributes to users, teams and roles		

		Yes / No / NA	Comments
5.30	Will CMP natively integrate with the LDAP or will (TDI) integration be required?		
5.31	Has the security model for communication between the components been defined?		
5.32	Is there any special security software used in the management or managed environment?		
5.33	Will the CMP have direct access to the virtualized environment or through firewalls?		
5.33.1	Do the management server and other images meet the security standards of the customer environment?		
	Availability		
5.34	Does CMP need high availability and do any technology preferences exist?		
5.35	Has a decision been made on what backup and restore technology should be used?		
5.36	Does CMP need disaster recovery configuration and do technology preferences exist?		
	SLA		
5.37	Has s decision been made on what KPI´s are to be measured? • End to end service • Provisioning timeline		
	Sizing		

		Yes / No / NA	Comments
5.38	For each of the following components of the architecture has a sizing of the Managed environment and management systems been completed? ▪ Number of physical servers ▪ Number of virtual systems and size (CPU, memory disk) ▪ Number of administrators ▪ Number of end users ▪ Frequency of provisioning requests (number of provisions per hr) ▪ Rate of growth of traffic		
	Image management		
5.39	Is there an agreement on how many images will be required?		
5.40	Is there an agreement on what the initial catalog of images in image library will contain?		
5.41	Is there a defined model for what approach will be used for SW image installation (silent install, golden masters, etc) ?		
5.42	Is there additional post-installation configuration required (management, backup)?		
5.43	Has the Configuration of customer specific settings been defined: • language, keyboard, time zone, etc. • Management components settings • Security settings		
	Usage and accounting		
5.44	Are the usage and accounting metrics that will need to be metered and reported defined?		

		Yes / No / NA	Comments
5.45	Are the usage and accounting variable / fixed pricing models that will be used defined?		
5.46	Has the usage and accounting metrics been mapped to chargeable accounts?		
	Management of cloud services		
5.47	For management of cloud services, has the SMTP server that will be used for notifications been identified?		
5.48	For management of cloud services, has the method the CMP will be monitored and integrate with systems management been defined?		
5.49	For management of cloud services, hast backup management that will be used for CMP & managed environment been determined?		
5.50	For management of cloud services, has the change management that is to be used been determined?		
5.51	For management of cloud services, has the asset management that is to be used been determined?		
5.52	For management of cloud services, has the license management that is to be used been determined?		
	Multi-tenancy		
5.53	Has the model of how resources are shared but servers separated (by VM, app, group, location, customer) been defined ?		
5.54	How the model for how VLANs are setup and allocated for multi-tenancy been completed?		
	Presentation Layer		

		Yes / No / NA	Comments
5.55	Are the web browsers that are supported in the organisation understood and included in the plan?		
5.56	Will the CMP be delivered by an existing portal / presentation layer?		
5.57	Is the scope of presentation changes that are required understood and planned?		

6. Configuration

		Yes / No / NA	Comments
6.1	Has the proposed IBM Software and Hardware been configured and documented?		
6.2	Has the proposed non-IBM Software and Hardware configuration been documented and verified?		
6.3	Have the configurations been produced and checked by a specialist experienced in using the appropriate configurator?		
6.4	Have the appropriate versions of all required Software been included? List Software versions here.		
6.5	Has software and hardware compatibility been checked? Identify any issues or concerns here.		

7.0 Implementation and Operation

	Activity	Yes / No / NA	Comments
7.1	Has an agreement been reached as to who will provide implementation services?		
7.2	Has the service provider provided a quote and has this been included in		

	Activity	Yes / No / NA	Comments
	the proposal? Does the service provider have adequate skills?		
7.3	If more than one provider (Customer, BP or IBM) is involved, is it clear who is responsible for what? Is the exit criteria clear?		
7.4	Does a project plan exist for the implementation and has someone with relevant experience reviewed and approved the project plan?		
7.5	Does the customer understand IBM Support Services and Support Line?		
7.6	Has a post-sales support contract been included in the proposal to cover operational hours?		
7.7	Is it explicitly stated who will be responsible for systems management? This includes defining the processes, tools and services for Change/Problem/Performance/ Availability/Capacity/Operations/ Security Administration.		
7.8	Are there any formal acceptance tests. If so, who owns them and have sufficient resources been allocated to execute them?		
7.8	Has a training and education plan been defined and documented?		
7.9	Are there any requirements for integration with or using existing IT resources / infrastructure which will drive additional services?		

8.0 Migration

	Activity	Yes / No / NA	Comments
8.1	Are plans for migration of current applications needed?		
8.2	If migrating to a new product level, has the customer reviewed all		

	Activity	Yes / No / NA	Comments
	available migration information for migrating planning assistance?		
8.3	Does the customer have a fall back plan if migration is not successful?		

9.0 Product/Solution Capability

	Activity	Yes / No / NA	Comments
9.1	Has the overall architecture of the solution been documented?		
9.2	Have the customer's scalability and load balancing requirements been documented?		
9.3	Has the customer approved the scalability and load balancing requirements?		
9.4	Can customer expectations be met by Cloudburst published capabilities?		
9.5	Has the expected workload been evaluated (max. / avg # of **concurrent** access by applications, **expected transactions per second**, peak usage periods, off periods of maintenance, etc.)?		

10.0 Hardware Configuration

	Activity	Yes / No / NA	Comments
10.1	Has the hardware configuration been sized and verified to match the customer's requirements?		
10.2	Have the following been taken into consideration? • Cost • Number of users, applications, nodes, partitions, etc. • Footprint (physical size of the servers) • Scalability and high availability • The number of servers required to support the solution • Is redundancy required for each server		

	Activity	Yes / No / NA	Comments
	• Does the fully configured server allow for expected growth • Will the planned configuration provide the required throughput and response time?		
10.3	Will the hardware configuration allow for easy expansion to meet future growth requirements?		
10.4	Has the customer planned for connectivity options?		
10.5	Is the appropriate network infrastructure in place (routers, bridges, cabling, etc.)?		
10.6	Are availability requirements known and documented? Does the proposed configuration meet those availability requirements?		
10.7	Are hardware maintenance requirements known?		
10.8	This there a backup and recovery plan in place?		
10.9	Have systems management tools and services been identified?		

11.0 TDA Summary

	Activity	Yes / No / NA	Comments
11.1	Is anyone aware of any risks or issues that have not been adequately explored?		
11.2	Is there any other useful information the Quality Practitioner or SME's need to be aware of?		

12.0 Action Item List

From Question #	Action Item	Owner	Due Date	Complete Date

Document Change Control

Version	Changes
V1.0	Created Cloudburst TDA from General TDA template
V2.0	Modified to make document single control document.
V2.1	Incorporated links to required hardware and system software in order to perform complete solution reviews.

End of document.