

# ADDITIONAL TERMS AND CONDITIONS

## for Managed Services

### Implementation Services

IBM will provision, implement, deploy and verify (the "Implementation Services") the hardware, operating system software, management tools, and/or application components to be used by IBM for the purposes of providing the Managed Services outlined in the Solution Document ("Solution"), attached to a Statement of Work ("SOW" or "Order"). The Solution will be delivered to Customer within the guidelines of the Standard Implementation Delivery Intervals ("Interval") outlined in Figure 1.

Figure 1: Managed Services Intervals	Business Days*
Virtual Infrastructure (Shared)	10
Physical Infrastructure (Shared)	17
Physical Infrastructure (Dedicated)	22
Virtual Infrastructure (Dedicated)	45
Multi-Site Infrastructure (Dedicated)	60

\* from receipt of hardware when applicable, and based on 25 solution elements.

IBM will make Solution available to receive Customer content within the Interval, provided that Customer timely supplies all required Customer materials, necessary information, and access to qualified resources, and does not alter, modify change or otherwise revise Solution and/or Equipment contained therein. Upon delivery of Solution, Customer will have five (5) days ("Burn-in Period") to review deliverables and confirm receipt of Solution in good order. Assuming no material fault is discovered by Customer and brought to the attention of IBM within Burn-in Period; IBM will submit Solution to billing ("Activation Date"). IBM will provide Implementation Services support from 7:00 am to 7:00 pm, US Central Time, Monday through Friday, exclusive of IBM recognized holidays, until thirty (30) business days have elapsed after Activation Date or IBM has transitioned Customer from Implementation Services to standard service and support hereunder, whichever occurs first. In the event that Customer takes in excess of thirty (30) business days from Activation Date to perform all actions and tasks necessary to transition Customer from Implementation Services to standard service and support, unless another time period has otherwise been mutually agreed upon between the parties, Customer shall be charged \$500 per day (which will be converted to the currency of the country in which the services are invoiced) until these actions and tasks are performed and IBM is able to transition Customer to standard support and service. IBM will not transition Customer to standard service and support until Customer has loaded its content and IBM reasonably determines that Customer's application is stable.

### Professional Services

At any time after Activation Date, Customer may request IBM to provide Professional Services to perform work outside the scope of standard Implementation Services. Such Professional Services shall be subject to the terms of a new mutually agreed upon SOW. Services considered as out of scope of standard Implementation Services include, but are not limited to the following: (a) data migration services, including (i) database; (ii) mail boxes; (iii) active directory structure; and (iv) Customer application files; (b) Customer application development, including (i) custom code development, compiling, troubleshooting or resolution; (ii) non-standard third party application support; (iii) application and code user acceptance testing (UAT); (iv) directory services; messaging and application development and design; and (v) regulatory or compliance issues surrounding the Customer's application; and (c) contractual SLA events of any kind, including (i) 24 x 7 Implementation Services and support; (ii) application availability; and (iii) incident response times.

Customer will provide at no charge prompt and reasonable access to information, documentation, equipment, and personnel as requested by IBM to facilitate IBM's performance of the Managed Services under the applicable SOW. IBM's performance is contingent upon Customer's timely and effective performance of its responsibilities, decisions and approvals.

### Software Summary, SLA, Microsoft EULA, End User Terms for Oracle Software

The following documents are attached to and incorporated into any Managed Services SOW by this reference: Managed Services and Enterprise Cloud Software Summary ("Software Summary"), Service Level Agreement ("SLA") for Managed Services, Microsoft End User License Addendum – Terms and Conditions Regarding Use of Microsoft Software ("Microsoft EULA"), and End User Terms for Oracle Software. All referenced documents are accessible through this link:

<http://ibm.biz/vzcloud>

### Bandwidth

Bandwidth is defined as connectivity to the public Internet. Customer agrees to purchase Bandwidth in an amount detailed in the Solution ("Committed Bandwidth"). Bandwidth consumption in excess of purchased amount ("Bandwidth Overage") will be charged at the rate of two (2) times the per Mbps Committed Bandwidth rate. If the Committed Bandwidth rate specified in the Solution does not contain a per Mbps rate or is listed at \$0, Bandwidth Overages will be billed at \$100 per Mbps (which will be converted to the currency of the country in which the services are invoiced). With respect to Customer's bandwidth usage, a sampling is taken every five (5) minutes over the period of each calendar month. This sampling is taken of all inbound and outbound traffic over each customer-dedicated network port having a public Internet address. At the end of the calendar month, the highest five percent (5%) of aggregated network utilization measurements are dropped. The bandwidth utilization for that calendar month is set at the remaining highest utilization measurement. Incremental bandwidth usage calculations will be rounded up to the nearest one (1) Mbps.

### Shared Managed Backup (Protected Metered Backup)

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Shared Managed Backup will be defined as the sum of the largest daily block of Gigabytes ("GB's") backed up over the network on a per server basis for Customer's Solution. Customer agrees to purchase Shared Managed Backup in an amount not to exceed the total GB's of Shared Managed Backup set forth in the Solution. With respect to Customer's backup usage, a report is generated over the period of each calendar month. The sum of the highest daily total of GB's per server transferred over IBM's backup network in a given month for the Solution is the calculation used for the consumption of Shared Managed Backup. Backup consumption in excess of purchased amount (" Overage") will be charged at the rate of \$10 per each additional one (1) GB of additional backup above the committed amount (which will be converted to the currency of the country in which the services are invoiced). Overage fees will be billed in arrears the month following the occurrence of the Overage.

# ADDITIONAL TERMS AND CONDITIONS

## for Enterprise Cloud

### Implementation Services

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IBM will configure, implement, deploy, provision and test ("Implementation Services") the computing resources, storage resources, network resources ("Infinistructure"), support services, and the application utilized to manage the Infinistructure ("Infinicenter Application"). The Infinistructure and Infinicenter Application will be used by IBM to provide Services ("Enterprise Cloud Services"). The Enterprise Cloud Services are documented in the Solution Document ("Solution"), attached to a Statement of Work ("SOW" or "Order"). Within five (5) business days for Enterprise Cloud resources or twenty two (22) business days of the later of the execution of the Agreement, including all General Terms and Statement(s) of Work, the delivery and implementation of the Equipment or Data Backup and Restore Services (if applicable), or the delivery of a signed certificate of acceptance, as described below, ("Commencement Date"), IBM will make Enterprise Cloud Services and/or Equipment (if applicable) ready for Customer use provided that Customer timely supplies all Customer Materials and necessary information to IBM and does not modify the configuration of the Enterprise Cloud Services and/or Equipment (if applicable). Upon making the Enterprise Cloud Services ready, Customer will receive login credentials with instructions on how to activate the Enterprise Cloud account and gain access to the Infinicenter Application. No more than three (3) business days after receiving login credentials IBM will transition Customer to standard service and support ("Activation Date"). Customer shall not be permitted to access the Enterprise Cloud Services however, until IBM receives all fees due hereunder (including Customer's Implementation Services Fee), any required proof of licenses for such content, and, if Customer is procuring Equipment from IBM, Customer must provide a copy of a signed certificate of acceptance for the Equipment. Any services support provided to Customer will be billed at IBM's current rate on a time and materials basis, except troubleshooting of the IBM Enterprise Cloud Services.

### Professional Services

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At any time after Activation Date, Customer may request IBM to provide Professional Services to perform work outside the scope of standard Implementation Services. Such Professional Services shall be subject to the terms of a new mutually agreed upon SOW. Services considered as out of scope of standard Implementation Services include, but are not limited to the following: (a) data migration services, including (i) database; (ii) mail boxes; (iii) active directory structure; and (iv) Customer application files; (b) Customer application implementation or development, including (i) custom code installation, development, compiling, troubleshooting or resolution; (ii) third party application installation or support; (iii) application and code user acceptance testing (UAT); (iv) directory services; messaging and application development and design; and (v) regulatory or compliance issues surrounding the Customer's application; (c) contractual SLA events of any kind, including (i) 24 x 7 Implementation Services and support; (ii) application availability; and (iii) incident response times.

Customer will provide at no charge prompt and reasonable access to information, documentation, equipment, and personnel as requested by IBM to facilitate IBM's performance of the Enterprise Cloud Services under the applicable SOW. IBM's performance is contingent upon Customer's timely and effective performance of its responsibilities, decisions and approvals.

### Software Summary, SLA, Microsoft EULA, End User terms for Oracle Software

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The following documents are attached to and incorporated into any Enterprise Cloud SOW by this reference: Managed Services and Enterprise Cloud Software Summary ("Software Summary"), Service Level Agreement ("SLA") for Enterprise Cloud, End User License Addendum – Terms and Conditions Regarding Use of Microsoft ("Microsoft EULA") and End User Terms for Oracle Software. All referenced documents are accessible through this link: <http://ibm.biz/vzcloud>

### Bandwidth

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Bandwidth is defined as connectivity to the public Internet. Customer agrees to purchase Bandwidth in an amount detailed in the Solution ("Committed Bandwidth"). If there is no Committed Bandwidth rate specified in the Solution or it does not contain a per Mbps rate or is listed at \$0, Bandwidth will be billed at \$25 per Mbps (which will be converted to the currency of the country in which the services are invoiced). With respect to Customer's bandwidth usage, a sampling is taken every five (5) minutes over the period of each calendar month. This sampling is taken of all inbound and outbound traffic over each customer-dedicated network port having a public Internet address. At the end of the calendar month, the highest five percent (5%) of aggregated network utilization measurements are dropped. For billing purposes, the bandwidth utilization for that calendar month is set at the remaining highest utilization measurement. Incremental bandwidth usage calculations will be rounded up to the nearest one (1) Mbps. Bandwidth billing will be based on bandwidth utilization and the rate specified above.

### Instance Based Services

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**1. Instance Based Resource Tool**

- 1.1 **"Instance Based Virtual Machine ("IBVM")"** means a virtual machine that is deployed on an as needed basis into an Instance Based Compute Pool. An IBVM can have any number of virtual processing units ("VPUs") and memory as allowed by the Infinicenter Application.
- 1.2 **"Instance Based Storage"** means the storage associated with an IBVM or detached by Customer from an IBVM and deployed on an as needed basis into an Instance Based Compute Pool.
- 1.3 **"Instance Based Compute Pool"** is an Infinicenter Application feature that manages the provisioning and management of IBVMs and Instance Based Storage deployed by the Customer.
- 1.4 **"In Use"** An IBVM or Instance Based Storage is considered to be In Use when it is accessible or usable by Customer; either through the Infinicenter Application or Enterprise Cloud Application Programming Interface ("API"). An IBVM or Instance Based Storage is considered In Use as long as Customer has not deleted such IBVM or Instance Based Storage.
- 1.5 **"Instance Based Billing Cycle"** commences on the first day of the calendar month at 00:00:00 Coordinated Universal Time ("UTC") through the last day in that calendar month ending at 23:59:59 UTC.

**2. Instance Based Billing**

- 2.1 **Billable Usage for IBVM's.** IBVM's will be metered hourly for billing purposes, per IBVM and based on the Customer VPU and memory configuration, while In Use during the Instance Based Billing Cycle at the rates specified in the Infinicenter Application. IBVM's will not be metered for billing purposes while powered off. The rates specified in the Infinicenter Application will be discounted based on the Instance Based Resource Pool Discount Tier specified in the Solution. At the end of each Instance Based Billing Cycle the hourly IBVM charges will be aggregated to determine Customer's total billable charges for IBVM's. All individual IBVM charges will be rounded up to the nearest \$0.01 (which will be converted to the currency of the country in which the services are invoiced). Any IBVM In Use for less than sixty (60) minutes but more than thirty (30) minutes will be rounded up to an hour for the purposes of determining usage charges.
- 2.2 **Pricing.** The Infinicenter Application shall be the sole source of pricing. The Infinicenter Application will display pricing for IBVM configurations and shall display both the final pricing elements and applicable discount for the Customer selected configuration. Pricing in the Infinicenter Application shall be subject to change without prior notice. The discount shall be maintained for the term of the applicable SOW.
- 2.3 **Billable Usage for Metered Subscription Software.** Metered Subscription Software will be metered and billed in accordance with the terms specified in the Software Summary.

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**Enterprise Cloud Resource Bundle Resource Bursting**

Resource Bursting will be defined as the Customer's ability to enable and disable the use of additional resources, such as CPU, Memory, or Storage (collectively referred to as "Bursting Resources") within the Enterprise Cloud Application above the resources detailed in the Solution (referred to as "Committed Resources"). Customer's ability to consume Bursting Resources is limited to the amount of excess resources available to all bursting customers deployed within the same Enterprise Cloud infrastructure. With respect to Bursting Resources usage, a measured sample is taken every five (5) minutes over the period of each calendar month for the amount of Bursting Resources used above the Committed Resources; commencing at the time the Resource Bursting option is enabled by the Customer and continues until the time the Resource Bursting option is disabled by the Customer. At the end of each calendar month, the aggregate Bursting Resources consumed at each measured sample during the month will be charged according to the following formulas using the bursting resource rates provided in the table below:

Price per measured sample = Bursting Resource Rate / (Total minutes per month / 5 Minutes); and,  
Aggregate Bursting price = Price per measured sample \* Sum of all measured Bursting Resources

<b>Bursting Resources</b>	<b>Bursting Resource Rate (will be converted to the currency of the country in which the services are invoiced)</b>
1GHz CPU	\$300
1GB MEM (Memory)	\$300
1GB Storage	N/A

# ADDITIONAL TERMS AND CONDITIONS

## for Cloud Backup

### Implementation Services

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IBM will provision, implement, deploy, and verify (the "Implementation Services") the computing resources, storage resources, network resources, support services, and the application utilized to make available the Cloud Backup Service (collectively the "Cloud Backup Infrastructure"). The Cloud Backup Infrastructure will be used by IBM to provide backend services for the Cloud Backup Services. The Cloud Backup Services are documented in the Solution Document ("Solution"), attached to a Statement of Work ("SOW" or "Order"). Within thirty (30) days of the execution of a Cloud Backup SOW, IBM will make the Cloud Backup Services ready for Customer's use provided that Customer timely supplies to IBM all Customer Materials, necessary information, and access to qualified resources, and does not modify the configuration of Cloud Backup Services and/or Equipment (if applicable). IBM will provide Implementation Services support from 7:00 am to 7:00 pm, US Central Time, Monday through Friday, exclusive of IBM recognized holidays, and upon making the Cloud Backup Services ready, Customer will have the functionality activated on the Infinicenter console. Assuming no material fault is discovered by Customer and brought to the attention of IBM within (3) business days following notification of delivery of Solution, IBM will submit Solution to billing ("Activation Date"), and Customer and Solution will be transitioned to standard service and support. Any services support provided to Customer outside of the Implementation Services will be billed at IBM's current rate on a time and materials basis, except troubleshooting of the Cloud Backup Infrastructure.

### Professional Services

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At any time after Activation Date, Customer may request IBM to provide Professional Services to perform work outside the scope of standard Implementation Services. Such Professional Services shall be subject to the terms of a new mutually agreed upon SOW. Services considered as out of scope of standard Implementation Services include, but are not limited to the following: (a) data migration services, including (i) database; (ii) mail boxes; (iii) active directory structure; and (iv) Customer application files; (b) Customer application implementation or development, including (i) custom code installation, development, compiling, troubleshooting or resolution; (ii) third party application installation or support; (iii) application and code user acceptance testing (UAT); (iv) directory services; messaging and application development and design; and (v) regulatory or compliance issues surrounding the Customer's application; (c) contractual SLA events of any kind, including (i) 24 x 7 Implementation Services and support; (ii) application availability; and (iii) incident response times; (d) Customer environment troubleshooting.

Customer will provide at no charge prompt and reasonable access to information, documentation, equipment, and personnel as requested by IBM to facilitate IBM's performance of the Cloud Backup Services under the applicable SOW. IBM's performance is contingent upon Customer's timely and effective performance of its responsibilities, decisions and approvals.

### Software Summary, SLA, Microsoft EULA, End User terms for Oracle Software

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The following documents are attached to and incorporated into any Enterprise Cloud SOW by this reference: Managed Services and Enterprise Cloud Software Summary ("Software Summary"), Service Level Agreement ("SLA") for Cloud Backup, End User License Addendum – Terms and Conditions Regarding Use of Microsoft ("Microsoft EULA") and End User Terms for Oracle Software. All referenced documents are accessible through this link: <http://ibm.biz/vzcloud>

### Cloud Backup Services

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Cloud Backup Services is defined as Customer's ability to backup and restore a Customer's virtual machine in its entirety through the IBM Cloud Backup Infrastructure. Cloud Backup Services uses integrated functionality behind the IBM Cloud to facilitate the transfer of data to and from Customer's environment and the Cloud Backup Infrastructure. The Cloud Backup Infrastructure includes a backup storage system managed by IBM ("Primary Backup") that will be used for the purposes for storing backup data. In the event Customer subscribes to Primary Backup, Customer agrees to pay for consumed Primary Backup storage at the rate detailed in the Solution (see "Cloud Backup Usage" or in the Solution). With respect to Customer's Primary Backup usage, a report is generated at the end of each calendar month. The actual pro-rated usage of all Primary Backup GBs stored each day in a given month is the calculation used for the consumption of Primary Backup.

### IBM Services Software

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Customer acknowledges that IBM may install software necessary for the delivery of Cloud Backup Services. This software includes, but is not limited to backup clients, monitoring agents, administrative utilities, etc. Customer shall not remove this software without express permission from IBM. Any costs associated with the installation, maintenance, and licensing of this software is included in the pricing as set forth in the Solution.

### Cloud Backup Bandwidth

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Cloud Backup Bandwidth is defined as connectivity into and out of, or within, the Cloud Backup Infrastructure. There is no direct bandwidth charges associated with Cloud Backup as the cost of bandwidth is included in the price per gigabyte stored. Any network services other than Cloud Backup, purchased by Customer to connect to Customer's premises are the sole responsibility of the Customer.

# ADDITIONAL TERMS AND CONDITIONS

## For Data Backup and Restore (DBR)

### Implementation Services

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IBM will configure, implement, deploy, provision and test ("Implementation Services") the computing resources, storage resources, network resources, support services, and the application utilized to manage the Data Backup and Restore Infrastructure (collectively the "DBR Infrastructure"). The DBR Infrastructure will be used by IBM to provide backend services for the DBR Services. The DBR Services are documented in documented in the Solution Document ("Solution"), attached to a Statement of Work ("SOW" or "Order"). Within thirty (30) business days of the execution of a DBR SOW, the delivery and implementation of DBR Services, IBM will make the DBR Services ready for Customer's use provided that Customer timely supplies all Customer Materials and necessary information to IBM and does not modify the configuration of DBR Services and/or Equipment (if applicable). Upon making the Data Backup and Recovery Services ready, Customer will receive a Customer Registration Information ("CRI") file along with a four (4) hour training session (if purchased) to use DBR Service. No more than three (3) business days after receiving the CRI file, IBM will transition Customer to standard service and support ("Activation Date").

### Professional Services

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At any time after the Activation Date, Customer may request IBM to provide Professional Services to perform work outside the scope of standard Implementation Services. Such Professional Services shall be subject to the terms of a new mutually agreed upon SOW. Services considered as out of scope of standard Implementation Services include, but are not limited to the following: (a) data migration services, including (i) database; (ii) mail boxes; (iii) active directory structure; and (iv) Customer application files; (b) Customer application implementation or development, including (i) custom code installation, development, compiling, troubleshooting or resolution; (ii) third party application installation or support; (iii) application and code user acceptance testing (UAT); (iv) directory services; messaging and application development and design; and (v) regulatory or compliance issues surrounding the Customer's application; (c) contractual SLA events of any kind, including (i) 24 x 7 Implementation Services and support; (ii) application availability; and (iii) incident response times; (d) Customer environment troubleshooting, including (i) access from DBR gateway to devices on customer networks; (ii) access from DBR gateway to DBR Infrastructure (except where required); (iii) access-control permissions to and from devices on Customer networks from DBR gateway; and (iv) Customer application troubleshooting post restore.

Customer will provide at no charge prompt and reasonable access to information, documentation, equipment, and personnel as requested by IBM to facilitate IBM's performance of DBR Services under the applicable SOW. IBM's performance is contingent upon Customer's timely and effective performance of its responsibilities, decisions and approvals.

### Software Summary, SLA, Microsoft EULA, End User terms for Oracle Software

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The following documents are attached to and incorporated into any Enterprise Cloud SOW by this reference: Managed Services and Enterprise Cloud Software Summary ("Software Summary"), Service Level Agreement ("SLA") for DBR Services, End User License Addendum – Terms and Conditions Regarding Use of Microsoft ("Microsoft EULA") and End User Terms for Oracle Software. All referenced documents are accessible through this link: <http://ibm.biz/vzcloud>

### Backup and Restore Services

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Data Backup and Restore Services are defined as Customer's ability to backup, restore, and archive server data (files, databases, mail stores, etc.) from Customer's Environment to IBM's Data Backup and Restore Infrastructure ("Backup Infrastructure"). The Data Backup and Restore Services uses a virtual or physical backup appliance(s) ("Gateway") deployed in Customer's Environment running IBM provided backup software and are used to facilitate the transfer of data to and from Customer's Environment and the Backup Infrastructure. The Backup Infrastructure includes an online backup storage system managed by IBM ("Primary Backup") that will be used for the purposes for storing backup data, and optionally a secondary backup storage system for existing customers managed by IBM ("Backup Archival") that may be used for rules-based archival of data backed up to Primary Backup as defined below.

Customer shall be fully responsible for entering and maintaining the encryption key(s). The encryption key(s) does not need to be entered each time a restore is initiated. However, if the Gateway needs to be rebuilt or whenever the backup software needs to be reloaded, the original encryption key(s) must be entered. **NO DATA CAN BE RESTORED WITHOUT THE ENCRYPTION KEY.** IBM will not manage nor be in possession of the encryption key(s) at any time.

In the event Customer subscribes to Primary Backup, Customer agrees to purchase Primary Backup storage at the rate detailed in the Solution (see "DSS Online" or "Committed Backup" in the Solution). With respect to Customer's Primary Backup usage, a report is generated at the end of each calendar month. The sum of all Primary Backup GBs stored in a given month is the calculation used for the consumption of Primary Backup. Primary Backup storage consumption in excess of purchased amount ("Primary Backup Overage") will be charged at the rate of 1.3 times the per GB committed rate per each additional 1GB of Primary Backup stored and billed to Customer in arrears. To support the Primary Backup Service a Gateway has been selected by the Customer and details in the Solution (See "Virtual Gateway or "Physical Gateway").

### IBM Services Software

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Customer acknowledges that IBM may install software necessary for the delivery of DBR Services. This software includes, but is not limited to backup clients, monitoring agents, administrative utilities, etc. Customer shall not remove this software without express permission from IBM. Any costs associated with the installation, maintenance, and licensing of this software is included in the pricing as set forth in the Solution.

### DBR Bandwidth

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DBR Bandwidth is defined as connectivity into and out of, or within, the DBR Backup Infrastructure. There is no direct bandwidth charges associated with DBR as the cost of bandwidth is included in the price per gigabyte stored. Any network services other than DBR Bandwidth, purchased by Customer to connect to Customer's premises are the sole responsibility of the Customer.

### **Resource Bursting**

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Resource Bursting will be defined as the Customer's ability to enable and disable the use of additional storage (referred to as "Bursting Resources") within the DBR Infrastructure above the resources detailed in the Solution (referred to as "Committed Storage"). Customer's ability to consume Bursting Resources is limited to the amount of excess resources available to all bursting customers deployed within the same Data Backup and Restore infrastructure. With respect to Bursting Resources usage, a measured sample is taken every one (1) week over the period of each calendar month for the amount of Bursting Resources used above the Committed Resources. This sampling is always in effect and the Customer may control the amount of data being sent to the DBR Infrastructure. At the end of each calendar month, the aggregate Bursting Resources consumed will be charged at the rate of 130% of the committed rate.

## ADDITIONAL TERMS AND CONDITIONS

### For Virtualized Disaster Recovery Services and Storage Replication Option (VDR/SRO)

#### Implementation Services

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The Virtualized Disaster Recovery Services or Replication Option ("Services") are documented in the Solution Document ("Solution"), attached to a Statement of Work ("SOW" or "Order"). IBM will configure, implement, deploy, provision, and test ("Implementation") the computing resources, storage resources, network resources ("Infrastructure"), and support services ("Project Scope"). The Project Scope shall be defined at the commencement of the Implementation process. Customer acknowledges and agrees that the Project Scope for Implementation of the Services set forth in the Solution shall not be altered to the extent that the Implementation timeline is delayed.

The Implementation Timeline and Responsibility Matrix for Services (the "Matrix") in Appendix A hereto sets forth the estimated timelines for Implementation of the Services and defines each stage within the Project Scope. Further, the Matrix defines each Stage Gate and commencement of invoicing for the Services as set forth in the Billing/Payment section of the applicable SOW.

Customer and IBM each acknowledge that the Implementation timeline as set forth in the Matrix may be reasonably extended or otherwise affected based upon external factors, including but not limited to: i) timely response by all parties including third-party WAN providers; ii) vendor delivery dates; or iii) other unforeseen technical issues. IBM will make the Services and/or equipment (if applicable) ready for Customer use, provided that Customer timely supplies all Customer Materials and necessary information to IBM as outlined in the Matrix.

Customer shall not be allowed to make any alterations to the Project Scope prior to Stage Gate 4 which delay the Stage Gates and invoicing for such associated Services. Any additional services support provided to Customer and not already included in the Project Scope will be quoted and billed at IBM's current rate on a time and materials basis, except troubleshooting of the IBM Services, and shall commence after the Activation Date. Customer shall not be permitted to access the Services, for the purposes of a production Disaster Declaration and Failover, until IBM receives all fees due hereunder (including Customer's Implementation Services Fee), any required proof of licenses for such content, and, if Customer is procuring equipment from IBM, Customer must provide a copy of a signed certificate of acceptance for the equipment.

Customer agrees to perform all actions and tasks necessary to successfully complete one (1) acceptance test to allow transition of Customer from Implementation to standard Support.

#### Professional Services

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At any time after Activation Date, Customer may request IBM to provide Professional Services to perform work outside the scope of standard Implementation Services. Such Professional Services shall be subject to the terms of a new mutually agreed upon SOW. Services considered out of scope of standard Implementation Services include, but are not limited to the following: (a) data migration services, including (i) database; (ii) mail boxes; (iii) active directory structure; and (iv) Customer application files; (b) Customer application implementation or development, including (i) custom code installation, development, compiling, troubleshooting or resolution; (ii) third party application installation or support; (iii) application and code user acceptance testing (UAT); (iv) directory services; messaging and application development and design; and (v) regulatory or compliance issues surrounding the Customer's application; (c) contractual SLA events of any kind, including (i) 24 x 7 Services and support; (ii) application availability; and (iii) incident response times.

Customer will provide at no charge prompt and reasonable access to information, documentation, equipment, and personnel as requested by IBM to facilitate IBM's performance of the Services under the applicable SOW. IBM's performance is contingent upon Customer's timely and effective performance of its responsibilities, decisions and approvals.

#### Software Summary, SLA, Microsoft EULA, End User terms for Oracle Software

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The following documents are attached to and incorporated into any Enterprise Cloud SOW by this reference: Managed Services and Enterprise Cloud Software Summary ("Software Summary"), Service Level Agreement ("SLA") for VDR/SRO, End User License Addendum – Terms and Conditions Regarding Use of Microsoft ("Microsoft EULA") and End User Terms for Oracle Software. All referenced documents are accessible through this link: <http://ibm.biz/vzcloud>

#### Testing and Acceptance

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Upon completion of Implementation, the Services shall be declared ready for Customer use ("System Ready") at which point Customer and IBM will conduct one (1) technical acceptance test. When a successful test is completed, Stage Gate 5 shall be declared and Implementation of the Services is considered complete (the "Activation Date"). Customer shall not be permitted perform a production Disaster Declaration and Failover in place of a Disaster Recovery Test.

A replication is deemed successful based on applicable completion logs and reporting. Customer may receive copies of such documentation upon written request to IBM.

#### IBM Environment

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The IBM Environment is defined as IBM's multi-tenant environment serving as the failover destination for Customer's replicated data. Customer Environment is defined as any network, data center, or computing environment containing the source operating systems, applications and data to be replicated to the IBM Environment using the method(s) specified in the Solution and in accordance with the applicable method as defined below. Customer acknowledges the IBM Environment will only serve as the failover destination for up to thirty (30) days and may not be used as a long term replacement for the Customer Environment.



### **1. Storage Replication Option (Array-Based Replication)**

Array-Based Replication is defined as the replication of source data from a Storage Area Network (“SAN”) in a Customer Environment to a destination SAN in the IBM Environment. Customer agrees to implement a SAN in the Customer Environment that contains data replication technology compatible with the SAN located in the IBM Environment. Customer agrees they will be responsible, at all times, for maintaining configuration changes, updates, and compatible software versions for the SAN located in the Customer Environment as necessary to ensure the Array-Based Replication is functional. IBM agrees to implement, maintain, and monitor the destination SAN in the IBM Environment.

### **2. Hypervisor-Based Replication (requires Disaster Recovery Services option)**

Hypervisor-Based Replication is defined as the replication of data from a source hypervisor in a Customer Environment to a destination hypervisor in the IBM Environment. Customer shall maintain a hypervisor technology in the Customer Environment that is compatible with the hypervisor technology in the IBM Environment. Customer will be responsible, at all times, for maintaining configuration changes, updates, and compatible hypervisor versions for the hypervisor located in the Customer Environment as necessary to ensure the Hypervisor-Based Replication is functional. IBM agrees to implement, maintain, and monitor the destination hypervisor in the IBM Environment.

### **3. Application-Based Replication (requires Disaster Recovery Services option)**

Application-Based Replication is defined as the replication of data from a Customer Environment to the IBM Environment using replication technologies included with applications that are supported by IBM. Customer agrees they will be responsible for implementing and maintaining all source applications and their respective network configurations within the Customer Environment as necessary to ensure the Application-Based Replication is functional. IBM agrees to implement, support and make available a IBM Environment that will serve as the destination for the replicated application data. Customer will be responsible for the configuration, replication, management, and monitoring of these servers in the IBM Environment and that IBM shall only be responsible for providing the underlying infrastructure, up to and including the hypervisor. IBM will not monitor the applications or their replication methods within or outside of the IBM Environment.

### **4. Disaster Recovery Services (requires at least one of the above Replication options)**

Disaster Recovery Services is defined as one or more of the above Replication Services Options in conjunction with managed services, required network configurations, and Customer tools (as created in the runbook during Implementation) to provide a Disaster Recovery Environment for the Customer.

#### **Disaster Declaration and Failover**

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A “Disaster Declaration” is defined as a request in writing from Customer to make the IBM Environment available for the purposes of recovering the Customer data to the Customer Environment.

Customer agrees a disaster cannot be declared unless Customer has provided IBM with a written Authorized Customer List (“ACL”) designating Customer personnel who are authorized to notify IBM a disaster has been declared. The ACL must be provided in writing to IBM during Implementation and personnel on the ACL may initiate a Disaster Declaration only by contacting IBM Support. A password is required for Disaster Declaration (“Disaster Declaration Password”) which will be verified by IBM Support personnel. Customer shall be responsible, at all times, for maintaining the ACL and the Disaster Declaration Password. All updates to the ACL must be transmitted to IBM in writing to IBM Support. All updates to the Disaster Declaration Password must be forwarded to IBM in writing. A flat fee will be charged for each Disaster Declaration equal to \$4,800 (which will be converted to the currency of the country in which the services are invoiced) or ten percent (10%) of the then-current Monthly Recurring Charges for the IBM Environment at the time of Disaster Declaration, whichever is greater.

A “Failover” is defined as IBM executing the runbook to make Customer’s data operational in the IBM Environment. Disaster Recovery Services are required for IBM to execute a Failover. In the event Customer has not purchased Disaster Recovery Services and a Disaster is declared, Failover shall consist of IBM replicating the Customer data from the IBM Environment to a Customer-supplied alternative environment. Customer has the option to purchase, by means of a new SOW, an IBM-provided alternative environment to which the IBM Environment can be transitioned.

After Failover, IBM will provide Customer with IP connectivity to the IBM Environment and Customer shall be responsible for the application(s), remote login capabilities (e.g., Remote Desktop Connection for a Windows environment), and any Domain Name Service (“DNS”) updates.

Personnel listed on the ACL may terminate the Failover only by contacting IBM Support in writing. The Disaster Declaration Password is required for terminating the Failover which will be verified by IBM Support.

In the event of a Failover, IBM will continue to make the IBM Environment operational for up to thirty (30) days from the date of the Disaster Declaration. In the event the Failover lasts longer than thirty (30) days, or as otherwise agreed to by the parties, IBM will work with Customer to transition the data in the IBM Environment to one of the following:

- (1) Customer Environment. If the Customer Environment is available, IBM will coordinate with Customer to transition all data from the IBM Environment to the Customer Environment (“Failback”).
- (2) IBM Production Environment (additional charges shall apply). If the Customer Environment is not available, Customer has the option to purchase, by means of a new SOW, a IBM-provided alternative environment (“Production Environment”) to which the IBM Environment can be transitioned.

#### **Disaster Recovery (“DR”) Services Test**

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A Disaster Recovery Services Test (“DR Test”) is defined as a test of the Disaster Declaration and Failover. Failback is not a part of a DR Test. IBM will make the IBM Environment operational for Customer for the purposes of verification for a

maximum of three (3) business days (“DR Test Duration”). A DR Test shall not act as a substitute for Customer’s Production Environment.

After Customer’s Acceptance of the Services, IBM will provide one (1) DR Test per year at no additional charge to Customer. Upon the Commencement Date and with thirty (30) days advanced written notice, prior to the initiation of the DR Test, Customer and IBM will jointly develop a “DR Test Plan” that contains the scope of the DR Test, test cases and the pass or fail criteria. The DR Test Plan shall provide the basis for the DR Test. All active replication methods may be suspended in accordance with the DR Test Plan for the length of the DR Test Duration.

For the DR Test Duration, testing may only be performed during the hours of 8:00 am to 6:00 pm Eastern Time, Monday through Friday, excluding any IBM-recognized holidays. IBM shall provide test results to Customer within three (3) business days after the conclusion of the DR Test. For any test case failures, IBM agrees to cooperate with Customer, to the extent possible, to identify issues and to continue testing without additional charges, for up to three (3) business days beyond the DR Test Duration.

In the event that additional DR Tests beyond those set forth above are required, a separate amendment to the applicable SOW shall be required for such services.

**Bandwidth**

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VDR/SRO Bandwidth is defined as connectivity into and out of the VDR/SRO Infrastructure. There are no direct bandwidth charges associated with VDR/SRO. Customer agrees that obtaining the necessary connectivity and bandwidth between Customer Premise facilities and IBM facilities are the sole responsibility of the Customer.

**Managed Router Services (CIR)**

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Managed Router Services purchased in addition to the VDR/SRO Services will have a maximum burst capacity of three (3) times the Committed Information Rate (“CIR”) unless otherwise limited by Customer’s connection. The burst cost is two (2) times the contracted CIR rate unless otherwise set forth in the Special Terms of the applicable SOW.

## VDR/SRO APPENDIX A – Implementation Timeline and Responsibility Matrix for Services

Legend:	R – Responsible A – Accountable C – Consulted I – Informed
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Task	IBM	Customer	Timeline
Stage Gate 1: Commencement Date – Beginning of implementation			Within 15 days of SOW execution
Implementation: Information Gathering			
Order equipment set forth in Appendix A, as applicable	R, A	I, C	VDR Questionnaire completed Est. Time (15 days)
Define Project Scope for initial environment	I, C	R, A	
Define required firewall rules	I, C	R, A	
Define network VLAN requirements	I, C	R, A	
Provide storage requirements	I, C	R, A	
Provide compute requirements	I, C	R, A	
Provide Users/Credentials for any authentication-based tools	I, C	R, A	
Provide compute (VM) requirements	I, C	R, A	
Implement: Prepare IBM Environment			
Establish IBM Environment for customer	R, A	I	Est. Time (30 days) + HW Delivery Time
Install/Config Network Infrastructure	R, A	I	
Prepare Storage Replication Targets	R, A	I, C	
Prepare Hypervisor Replication Targets	R, A	I, C	
Prepare Resource Pools	R, A	I, C	
Stage Gate 2: Implementation Completion Date			
Implement: Prepare Customer Environment			
Provision any WAN circuits required	C, I	R, A	Est. Time (30 days) + Circuit Provision Time
Establish Network connectivity between Customer and IBM	R, A, I	R, A, C	
Verify Network Connectivity			
Customer side network configs	C, I	R, A	
IBM side network configs	R, A	C, I	
Install any software tools for Replication	R, A	C, I	
Test sample data for replication	R, A	C, I	
Stage Gate 3: Data Transmission Date			
Implement: Initiate Replication Traffic			
Initiate Application Based Replication	I, C	R, A	Est. Time (Actual Replication Time)
Upload/Deploy appropriate images	C, I	R, A	
Link Authentication domains as required	C, I	R, A	
Install required Applications	C, I	R, A	
Verify data in transit	C, I	R, A	
Initiate Storage Based Replication	R, A	I, C	
Initiate Hypervisor Based Replication	R, A	I, C	
Troubleshoot any Replication Issues	R, A, C	R, A, C	
Provides Logs for Hypervisor and Storage Replication completion	R, A	I, C	
Provide Application replication specifications for runbook	I, C	R, A	
Create DR runbook	R, A	C, I	
Stage Gate 4: System Ready Date			
Schedule Disaster Recovery Test	C, I	R, A	45 days
Disaster Recovery Test			
Execute failover per runbook	R, A	C, I	3 Days
Confirm IBM Environment online	C, I	R, A	
Perform any validation of Environment	C, I	R, A	
Return environment to Pre-DR state	R, A	C, I	

Customer Accepts DR Test	C, I	R, A	
Stage Gate 5: Activation Date (completion of Implementation)			
Task	IBM	Customer	Timeline
General Maintenance Tasks			
Provide updated network configuration (FW, VLAN, etc)	C, I	R, A	
Provide relevant advanced notification of updates	C, I	R, A	
Provide notification of planned Customer Environment changes	C, I	R, A	
Provide notification of planned IBM Environment changes	R, A	C, I	
VM Maintenance Tasks			
Add/Remove VM	R, I	A, C	
Resize VM replicated VM Disks	R, I	A, C	
Adjust source datastore location	R, I	A, C	
Array Maintenance Tasks			
Resize Volumes to meet specs	R, I	A, C	
Add/Remove replication partners	R, I	A, C	
Changes to Billable Values			
Request additional capacity	I, C	R, A	

## **ADDITIONAL TERMS AND CONDITIONS**

### **Unified Data Center Interconnection**

Unified Data Center Interconnection ("UDI") provides Customer with a connection that Customer may use to connect between the Resources Customer maintains at an IBM data center, solely on an intra-data center basis. "Resources" shall mean Managed Hosting, IBM Cloud Compute, Enterprise Cloud or Colocation. UDI is a virtual routed or switched connection and utilizes Bridge Domains, virtual LANs and routers. The connection is established using a managed UDI infrastructure within the data center. For connections between Resources other than colocation, UDI is provided at no additional charge. For any connection between Resources that includes colocation, Customer shall pay a charge for the physical port connection to colocation as specified in the rates and charges for such Resource.