



## Service Description

### IBM BigInsights on Cloud

This Service Description describes the Cloud Service IBM provides to Client. Client means the company and its authorized users and recipients of the Cloud Service. The applicable Quotation and Proof of Entitlement (PoE) are provided as separate Transaction Documents

#### 1. Cloud Service

IBM BigInsights on Cloud provides pre-installed baremetal servers with IBM Open Platform and optional modules, ready to use. The base offering includes the following infrastructure features:

- Hardware servers,
- Networking infrastructure
- Internet facing firewall
- An operating system
- An LDAP server
- Metadata DB Hadoop Key Management Store

The Cloud Service is architected is based on IBM Open Platform with Apache Hadoop which includes::

- Hadoop including MapReduce, YARN and HDFS (Hadoop Distributed File System)
- Ambari cluster manager
- Avro
- HBase
- Hive
- Knox
- Oozie
- Open JDK
- Pig
- Parquet (Hadoop)
- Parquet (format)
- Spark
- Snappy
- Sqoop
- Slider
- Zookeeper

The Cloud Service provides data node and management node configurations. Both types of nodes are required for every cluster.

- a. Data nodes will hold data to be analyzed and run the programs developed by Client to analyze the data. The data (with the exception of any data IBM may, but is not committed to, provide, as part of the Cloud Service in the future and permitted software, programs and applications (see the Section titled "Client Obligations") will be provided by Client.
- b. Management nodes are comprised of services (like NameNode, Job Tracker, Management console, HBase Master etc), which help in managing and monitoring service on all the data nodes (like datanode, Hbase region, task tracker etc)

The Cloud Service is offered based on the configuration that best meets Client's needs. The available configurations of the nodes are:

Offering Type	Small Configuration	Medium Configuration	Large Configuration
---------------	---------------------	----------------------	---------------------

<b>Data Node</b>	<ul style="list-style-type: none"> <li>• 2 x 8 cores 2650 v2 Sandy bridge</li> <li>• 64 GB RAM</li> <li>• 16 TB (OS disks)</li> <li>• 20 TB (internal storage disks)</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x 8 cores 2650 v2 Sandy bridge</li> <li>• 128 GB RAM</li> <li>• 16 TB (OS disks)</li> <li>• 28 TB (internal storage disks)</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x 8 cores 2690 v2 Sandy bridge</li> <li>• 192 GB RAM</li> <li>• 16 TB (OS disks)</li> <li>• 32 TB (internal storage disks)<sup>1</sup></li> </ul>
<b>Management Node</b>	<ul style="list-style-type: none"> <li>• 2 x 8 cores 2650 v2 Sandy bridge</li> <li>• 64 GB RAM</li> <li>• 16 TB (OS disks)</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x 8 cores 2650 v2 Sandy bridge</li> <li>• 128 GB RAM</li> <li>• 16 TB (OS disks)</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x 8 cores 2690 v2 Sandy bridge</li> <li>• 192 GB RAM</li> <li>• 16 TB (OS disks)</li> </ul>

## 1.2 Optional Services

### 1.2.1 IBM BigInsights on Cloud Data Scientist Module

This optional offering includes the following features:

- Big R
- Machine Learning
- Text Analytics
- Big SQL
- BigSheets

### 1.2.2 IBM BigInsights on Cloud Anayst Module

This optional offering includes the following features:

- Big SQL
- BigSheets

## 1.3 IBM Bluemix

IBM Bluemix, IBM's open standards cloud platform for building, running, and managing apps and services, is a technical pre-requisite for the IBM BigInsights on Cloud offering. A free Bluemix account is included as part of this offering. The IBM Bluemix Service Description is appended to this Service Description and governs Client's use of the Bluemix offering.

## 2. Security Description

This Cloud Service follows IBM's data security and privacy principles for IBM SaaS which are available at <https://www.ibm.com/cloud/resourcecenter/content/80> and any additional terms provided in this section. Any change to IBM's data security and privacy principals will not degrade the security of the Cloud Service.

IBM has not determined compliance of this Cloud Service with HIPAA and may not be used for the transmission or storage of any Personal Health Information.

The primary method of encryption of user data is through the native HDFS encryption available in Hadoop. Client is responsible for identifying the data to be encrypted and executing the required steps to ensure that the data is encrypted.

## 3. Technical Support

Technical support for the Cloud Service is provided via email, online forums, and an online problem reporting system which is available via the Bluemix Client portal at <https://support.ibmcloud.com>. Technical support is offered with the Cloud Service and is not available as a separate offering.

Information on upcoming maintenance windows are published at least 24 hours in advance on the Bluemix Service Status page (<https://developer.ibm.com/bluemix/support/#status>) and updated with the latest information until completion of the service update.

Response time objectives described below are intended to describe IBM's goals only, and do not represent a guarantee of performance.

Severity	Severity Definition	Response Time Objectives During Support Hours	Response Time Coverage
1	<p>Critical business impact/service down: Business critical functionality is inoperable or critical interface has failed. This usually applies to a production environment and indicates an inability to access services resulting in a critical impact on operations. This condition requires an immediate solution.</p> <p>Severity 1 issues require that Client is available to help IBM diagnose issues during the 24X7 period otherwise the issue is downgraded to Severity 2.</p>	Within 1 hour	24x7
2	Significant business impact: A service feature or function is severely restricted in its use or Client is in jeopardy of missing business deadlines.	Within 2 business hours	M-F business hours
3	Minor business impact: Indicates the service or functionality is usable and it is not presenting a critical impact on operations.	Within 4 business hours	M-F business hours
4	Minimal business impact: An inquiry or non-technical request.	Within 1 business day	M-F business hours

#### After Hours Support

After Hours Support (outside of the regular operating hours stated above) is available only for Severity 1 issues on business days, weekends, and holidays. Severity 1 issues require that Client is available to help IBM diagnose issues during the 24X7 period otherwise the issue is downgraded to Severity 2.

## 4. Entitlement and Billing Information

### 4.1 Charge Metrics

The Cloud Service is available under the charge metric specified in the Transaction Document:

- a. Instance is a unit of measure by which the Cloud Service can be obtained. An Instance is access to a specific configuration of the Cloud Service. Sufficient entitlements must be obtained for each Instance of the Cloud Service made available to access and use during the measurement period specified in Client's Proof of Entitlement (PoE).

### 4.2 Partial Month Charges

A partial month charge as specified in the Transaction Document may be assessed on a pro-rated basis.

## 5. Term and Renewal Options

The term of the Cloud Service begins on the date IBM notifies Client of their access to the Cloud Service, as documented in the PoE. The PoE will specify whether the Cloud Service renews automatically, proceeds on a continuous use basis, or terminates at the end of the term.

For automatic renewal, unless Client provides written notice not to renew at least 90 days prior to the term expiration date, the Cloud Service will automatically renew for the term specified in the PoE.

For continuous use, the Cloud Service will continue to be available on a month to month basis until Client provides 90 days written notice of termination. The Cloud Service will remain available to the end of the calendar month after such 90 day period.

## 2. Twitter Data

### 2.1 Definitions

"Analysis Report" means the results or output created by Client's applications on the Cloud Service from the process of analyzing and deriving information from the Twitter Content. Such results may not contain Twitter Content, but may contain content that is duplicative to that in the Twitter Content, such as search terms and references to the subject matter of the Tweets.

“Tweet ID” means the unique identification number generated by Twitter for each Tweet.

“Tweets” means a public posting with a text body of no more than 140 characters made by any end user of the Twitter service “Twitter Content” means Tweets and Tweet IDs, Twitter end user public profile information, and any derivative works thereof.

## **2.2 Access and Use of Twitter Content**

The Cloud Service provides a means for Client to select and access Twitter Content for Client’s use solely within the Cloud Service. Twitter Content is neither owned nor controlled by IBM. Twitter Content may include materials that are illegal, inaccurate, misleading, indecent, or otherwise objectionable. IBM or its suppliers have no obligation to review, filter, verify, edit or remove any Twitter Content. However, IBM or its suppliers may, at their sole discretion, do so. Client agrees, upon IBM’s request, to promptly delete or modify any Tweet that may be stored on the Cloud Service.

## **2.3 Volume of Twitter Data**

If Client has acquired entitlements to a Cloud Service configuration that includes a minimum of fifteen (15) nodes as part of the Cloud Service, then Client may be given access to Twitter Content.

## **2.4 Restrictions on Twitter Content**

Client shall not:

- a. Use Twitter Content in violation of any applicable law including but not limited to privacy laws or for any unauthorized or improper purposes.
- b. Download or remove Twitter Content from the Cloud Service. However, Analysis Reports may be downloaded or removed from the Cloud Service.
- c. Make available to any third party any Twitter Content included in the Cloud Service.
- d. Use the Twitter Content for any other purpose except for the limited purpose allowed for in the Cloud Service.
- e. Aggregate, cache, or store location data or geographic information contained in the Twitter Content separately from the Tweet to which it is associated, or use the location data or geographic data included in the Twitter Content for any reason except to identify the location tagged in the Tweet.
- f. Comingle Twitter Content with other data, unless the Twitter Content will always be clearly attributable to Twitter.
- g. Use Twitter Content provided as part of the Cloud Service to perform analysis on a small group of individuals or a single individual for any unlawful or discriminatory purpose.
- h. Display the Twitter Content that Client receives access to as a part of Cloud Service.
- i. Use the Twitter Content or analysis therefrom in the Cloud Service as part of an advertising network.
- j. Use the Twitter Content for the purpose of performing analysis that is a regularly-produced, time-based series of measurements made using the same, or similar, methodologies for the purpose of comparing television program performance over time, or against a defined set or subset of other television programs.
- k. Use any aggregate Twitter user metrics, such as number of users or accounts, obtained while accessing and using the Twitter Content as part of the Cloud Service for any purpose.

## **2.5 Termination by IBM**

Client’s access and use of the Twitter Content shall cease upon termination of the Cloud Service. Notwithstanding the foregoing, in addition to the rights of suspension and termination in the Agreement, IBM may cease providing access to the Twitter Content at any time without notice and without the obligation to provide Client a refund, credit, or other compensation.

## **2.6 Warranty and Indemnification Disclaimer for Twitter Content**

NOTWITHSTANDING THE WARRANTY SET FORTH IN THE AGREEMENT, THE TWITTER CONTENT IS PROVIDED SOLELY “AS IS”, “AS AVAILABLE” WITH ALL FAULTS, AND CLIENT’S USE OF THE TWITTER CONTENT IS AT ITS SOLE RISK. IBM DOES NOT MAKE, AND HEREBY DISCLAIMS, ANY AND ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, PERFORMANCE, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, TITLE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING,

USAGE, OR TRADE PRACTICE, IN CONNECTION WITH THE TWITTER CONTENT. IBM DOES NOT WARRANT THAT THE ACCESS TO THE TWITTER CONTENT WILL BE UNINTERRUPTED, OR ERROR-FREE. THIS DISCLAIMER OF WARRANTY MAY NOT BE VALID IN SOME JURISDICTIONS AND CLIENT MAY HAVE WARRANTY RIGHTS UNDER LAW WHICH MAY NOT BE WAIVED OR DISCLAIMED. ANY SUCH WARRANTY EXTENDS ONLY FOR THIRTY (30) DAYS FROM THE EFFECTIVE DATE OF THIS AGREEMENT (UNLESS SUCH LAW PROVIDES OTHERWISE).

ANY OBLIGATION FOR IBM TO INDEMNIFY CLIENT UNDER THE AGREEMENT DOES NOT APPLY IN ANY WAY TO CLIENT'S ACCESS AND USE OF THE TWITTER CONTENT.

## 2.7 United States Government Use

The Twitter Content is a "commercial item" as that term is defined at 48 C.F.R. 2.101, consisting of "commercial computer software" and "commercial computer software documentation" as such terms are used in 48 C.F.R. 12.212. Any use, modification, derivative, reproduction, release, performance, display, disclosure or distribution of the Twitter Content by any government entity is prohibited, except as expressly permitted by the terms of this ToU. Additionally, any use by U.S. government entities must be in accordance with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4. If Client uses the Twitter Content in Client's official capacity as an employee or representative of a U.S., state or local government entity and Client is legally unable to accept the jurisdiction, venue or other clauses herein, then those clauses do not apply to such entity, but only to the extent as required by applicable law. Contractor/manufacturer is Twitter, Inc. 1355 Market Street, Suite 900, San Francisco, California 94103

## 3. Client Obligations

Client is responsible for:

- following IBM's initial configuring of the IBM Open Platform components and any BigInsights modules selected, monitoring, configuring and managing the IBM Open Platform components which run under Ambari as well as the BigInsights modules. Examples of these components and software include, but are not limited to, HBase, Hive, Zookeeper, Oozie, BigSQL, BigSheets, Big R etc. Client has flexibility to choose which components to run, but is therefore responsible for monitoring and stopping or starting those components.
- limiting access to members of their organization to the Cloud Service by sharing the URL, username and password available after the Cloud Service cluster is provisioned and also granting and revoking access (through entries in LDAP)
- developing, as necessary or required, programs and applications on the service to analyze data and obtain insights from it. Client is also responsible for the quality and performance of such programs or applications developed.
- use and maintenance of any permissible software or data that is added by or on behalf of Client to the cluster. IBM may provide assistance, but will not maintain, move or remove Client added permissible software and data that fills a partition or affects the functioning of the service.
- Using the Hadoop data encryption feature available on the SaaS to encrypt data as per business requirements.
- Checking the following link periodically to be informed about a scheduled non-disruptive or disruptive downtime - <https://developer.ibm.com/bluemix/support/#status>
- backing up all data, metadata, configuration files and environment parameters as per business requirements so as to ensure continuity
- restoring data, metadata, configuration files and environment parameters from any backup, to ensure continuity, in an eventuality of cluster failure of any type including but not limited to data center or pod failure, server failure or hard disk failure or software failures.
- ensuring continuity, compatibility and performance of the Cloud Service platform after installing permissible software (including any open source packages), or upgrading IBM Open Platform components or BigInsights software.

Client may:

- only install and run software on the Cloud Service which is required to perform or support analysis of data through the pre-installed IBM Open Platform or BigInsights software. Client is prohibited from installing or using any other software of any kind on the Cloud Service.

- install additional open source packages for use with the Cloud Service on the nodes. IBM is not obligated to support these packages and is not responsible for impacts to the performance of the Cloud Service due to any such additional packages. If Client installed software is determined by IBM to compromise security or security compliance guidelines of the infrastructure, server or environment, it may be disabled or removed by IBM.

### 3.1 IBM Operational Responsibilities

As part of the Cloud Service, IBM will:

- provide and manage servers, storage and networking infrastructure for the cluster.
- provide an initial configuration of the IBM Open Platform components and any BigInsights modules selected
- provide and manage an internet facing and internal firewall for protection and isolation.
- monitor and manage the following components on the Cloud Service:
  - (1) Network components
  - (2) Servers and their local storage
  - (3) Operating System
  - (4) Hadoop Key Management Store
  - (5) LDAP on the Hadoop cluster
  - (6) Nagios
  - (7) Ganglia
  - (8) Ambari cluster manager
- provide maintenance patches, including appropriate security patches for the operating system, the IBM Open Platform, and any BigInsights modules selected (but not for any software or components separately added by the Client).

Regular maintenance that should not require any system downtime (“non-disruptive” maintenance) and maintenance that may require some system downtime and restarting (“disruptive” maintenance”) will be performed at the scheduled times published at: <https://developer.ibm.com/bluemix/support/#status>. Any changes to the scheduled maintenance times will be posted with at least 24 hours advance notice. Client will be notified of additional scheduled downtimes at least 24 hours in advance.

## IBM Bluemix

### 1. Cloud Service Description

IBM Bluemix is an application development environment that delivers the speed and flexibility of a platform-as-a-service (PaaS). It allows developers to more quickly compose and build enterprise-grade applications for the cloud era by providing access to IBM's vast software portfolio as composable services.

#### 1.1 Bluemix UI

Upon acceptance by IBM you will be enabled to access the Cloud Service environment, you will have the ability to access the Cloud Service portal, use available API and command line interfaces to deploy available applications, and leverage IBM APIs to build applications. The Bluemix online user interface, APIs, and command line interface are collectively referred to as the "Bluemix UI" and may be presented only in English. A catalog of additional services will be provided that you can add to your account via the Bluemix UI.

Through the Bluemix UI, you can authorize other users to collaborate with you on your applications. That authorization may include the ability for those users to deploy applications, select additional services, and otherwise incur expenses associated with your account. You are responsible for any actions of users you have authorized and any associated charges.

#### 1.2 Bluemix Services

Additional services are subject to the Cloud Services Agreement and this Service Description. A service may provide its own Service Description, available through the Bluemix UI, which may provide additional or different terms that override inconsistent provisions in this Service Description. For example, a Service Description may provide a different service level commitment, unique security provisions, or identification of enabling software. Some non-IBM services will be subject to their own license terms and not be subject to the Cloud Services Agreement. Deployment and use of additional services constitutes agreement with the terms associated with the relevant services in the Bluemix UI.

The documentation for Bluemix and any additional services may include usage guidelines and/or limitations to preserve the performance, responsiveness, or integrity of the Bluemix platform. You agree to use Bluemix and the additional services in compliance with those guidelines and understand that applications that violate these guidelines may be terminated automatically by the system or by Bluemix system administrators.

The Bluemix Cloud Service, and the individual services available through it are offered on a month-to-month basis. IBM will provide you at least 30 days notice on the Bluemix site of any changes to the Cloud Services Agreement, this Service Description, the Service Description for an additional service, or withdrawal of an additional service. Your continued use of Bluemix or the additional service after the change effect date constitutes acceptance of the changed pricing or terms.

#### 1.3 Your Applications

You may not resell access to the Cloud Service or any additional services to any third party. However, you may use the Cloud Service and any additional services to create and make available your applications based on these services to your users. IBM may use cookies and tracking technologies to collect information in gathering usage statistics and information designed to help improve user experience and/or to tailor interactions with users in accordance with <http://www-01.ibm.com/software/info/product-privacy/index.html>. You are responsible to have appropriate agreements in place with your users and are responsible for their use of your applications, including content they provide. Except to the extent that such is part of a valid indemnity claim under the "Liability and Indemnity" Section of the Cloud Services Agreement, you are solely responsible for any liability for damages or losses your users may incur as a result of using your applications.

## **1.4 Compliance with Laws**

You are responsible for compliance with all laws, regulations, and contractual terms applicable to any services you utilize, applications you develop, or data you access or distribute. To the extent that IBM requires rights to process content or data as requested by you or your users, you are responsible for obtaining those rights prior to providing that content or data. For your applications where you permit your users to log into your application using Facebook, Google, or other third party user credentials, these rights include permission from your user for IBM to receive and process their email address, account ID, display name, telephone number, a URL to their profile picture, or other identifying information that is provided by that third party service. You understand that IBM may use global resources (non-permanent residents used locally and personnel located world-wide) to remotely support the delivery of Bluemix and the additional services. You agree not to provide any content or data which is controlled as a defense article under the US International Traffic in Arms Regulations (ITAR) or under any other country's laws or regulations or which requires an export license or is otherwise restricted from export to any personnel under applicable export control laws.

## **2. Security Description**

IBM Bluemix applies layered security controls across network, infrastructure, and applications.

### **2.1 Statement of Good Security Practices**

IT system security involves protecting systems and information through prevention, detection and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed or misappropriated or can result in misuse of your systems to attack others. No IT system or product can be made completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operation procedures, and may require other systems, products or services to be most effective. IBM DOES NOT WARRANT THAT SYSTEMS AND PRODUCTS ARE IMMUNE FROM THE MALICIOUS OR ILLEGAL CONDUCT OF ANY PARTY.

### **2.2 Security Policies**

IBM maintains privacy and security policies that are published and communicated to IBM employees. IBM requires privacy and security education training to individuals worldwide who support IBM data centers, and we maintain a security team that is uniquely focused on information security. IBM security policies and standards are reviewed and re-evaluated annually. IBM security incidents are handled in accordance with an incident response procedure.

### **2.3 Service Integrity and Availability**

Modifications to operating system resources (OSRs) and application software are governed by IBM's change management process. Changes to firewall rules are governed by the change management process and are separately reviewed by the IBM security staff before implementation. IBM data center resources are monitored 24x7 by IBM staff. Vulnerability scanning is regularly conducted by authorized administrators to help detect and resolve potential system security exposures. Malware detection (antivirus, vulnerability scanning, and intrusion prevention) systems are in place throughout IBM data centers.

### **2.4 Physical Security and Data Centers**

Bluemix's cloud infrastructure is hosted and managed within IBM Softlayer's data centers. It relies on Softlayer capabilities for physical security.

### **2.5 Network and Infrastructure Security**

Bluemix uses firewalls to restrict access to the Bluemix network. It uses dedicated intrusion protection appliances to monitor and detect network intrusion. It regularly scans the firewalls to verify that they are configured properly. It has implemented penetration testing procedures to detect vulnerabilities so they can be addressed. It uses application vulnerability scanning to detect application vulnerabilities so they can be mitigated. Bluemix operations team verifies that patches for operating systems are applied at appropriate frequencies, depending on the complexity and urgency of fixes.

### **2.6 User Authentication and Access Control**

All application developer users of Bluemix are required to obtain an IBM Web Identity in order to have access to Bluemix platforms and services. Bluemix performs authorization checks based on the logged in



user identity to restrict access only to authorized applications. Bluemix uses open standards such as OpenID and OAuth to enable single sign on for the application developer to the Bluemix environment.

## **2.7 Audit Logs**

Bluemix performs period audits of access logs to enable visibility into who logged into various systems, failed authentications, etc. to detect potentially unauthorized access or network attacks.

## **2.8 Identities**

Bluemix governs access to privileged identities, including approvals and recertification of accesses every few months.

## **2.9 Application Isolation**

Bluemix builds on Cloud Foundry technology. Each application built on Bluemix executes in its own application container. These containers are limited in terms of CPU usage, memory usage, and disk usage.

## **2.10 Data Security**

Bluemix does not provide any guarantee of the security of customer data or the prevention of data loss.

## **3. Service Level Objective**

IBM provides the following service level objective (“SLO”) for the Cloud Service, after IBM makes the Cloud Service available to you.

IBM will provide an SLO of 99.9% service availability measured by the following:

- a. The ability to deploy an application either through the portal or command line
- b. The ability to connect to an application service
- c. The availability of an individual service instance

There are no service level credits or reporting offered at this time.

## **4. Entitlement and Billing Information**

### **4.1 Charges and Billing**

#### **4.1.1 Pay As You Go**

There is no charge for access to the Bluemix platform. Additional services available through Bluemix may have charges associated with them. If they do, the pricing metric (the unit measured by the service) will be described in the services Service Description. The service may identify a “Free Tier”, which is a level of use or a configuration of the service for which no charge is made. Use above that level or use of other configuration will incur the charges identified for the service.

Certain services charge on a monthly usage metric which bases the fee on a unit of service that is used for an entire month. Use or deployment of that service for less than a month will be pro-rated based on the number of days in the month. For all other metrics, all partial usage is rounded up to a full unit of measure.

#### **4.1.2 Subscription**

In addition to Pay As You Go, Bluemix offers a Subscription through which, in exchange for a committed usage level on the Bluemix platform over the chosen Subscription period, you can obtain a discount off the usage charges incurred for eligible Bluemix services. Usage charges for Bluemix services over and above the committed usage level will be billed, in arrears, as a Subscription overage.

To provide usage flexibility, Subscription periods are divided into 12 month cycles (or if less than 12 months remain on the Subscription period, the remaining number of months as a cycle). Usage credits that are paid in advance or are associated with that cycle can be used any time during that cycle. Subscription overages will not be billed until all usage credits that are prepaid or are associated with that cycle are consumed. Usage credits unused at the end of a cycle are forfeited.

Subscriptions for Bluemix may not be canceled during their term and auto-renew at the end of their term at the same usage commitment for the same Subscription period. To prevent automatic renewal, you must provide IBM ninety days written notice of cancellation prior to the end of the current Subscription period.

## 4.2 Trial Period

Your account may be eligible for a 30 day Trial period during which charges for IBM provided services are waived. If you have administrative authority over an account, you may upgrade it from Trial to production at any time. If an account is not upgraded prior to the expiration of the Trial period, the account will be disabled until it is upgraded. Service Level Commitments, if any, do not apply during the Trial period. Otherwise, all other terms apply.

## 5. Technical Support

Technical support for IBM Bluemix is available three ways:

### 5.1 Free Support

All customers of Bluemix are provided Free Support. A consumer of resources provided by the platform can go to the DeveloperWorks Forum (<https://developer.ibm.com/bluemix>) and post a question about any item found in the Bluemix product. Questions posted to the forum are not provided an SLA for response or a commitment to fix. Free Support does not entitle access to our Support Ticket System. All questions or issues are addressed in the Forum.

If you have not purchased support and find an issue which you feel is a defect, you can email [support@bluemix.net](mailto:support@bluemix.net). These issues will be taken on a first come basis and there is no guaranteed response.

### 5.2 Standard Support

Standard Support is priced at a standard percentage of your Bluemix usage charges (exclusive of any discount which is available through a Subscription offering) with a minimum per-month fee, as more fully described on the Bluemix website.

Customers have access to Standard Support through two ways.

- 30 Day Trial user
- At any point after the 30 day Trial, by ordering Standard Support for your account, by contacting your IBM Sales Representative. Support subscriptions auto-renew at the end of their term for the same term. To prevent automatic renewal, you must provide IBM ninety days written notice of cancellation prior to the end of the current Support subscription period.

Standard Support customers can open tickets in IBM's Support Ticketing System. Our dedicated support team will triage the ticket based on the initial severity defined by the customer, subject to IBM's confirmation of the actual severity level.

All tickets opened by Standard Support customers are investigated with the purpose of identifying root cause. When problem diagnostic data is needed to isolate an issue, you will be asked if we do have your approval to access logs and other problem determination data from your application to help determine root cause. Not providing access to this data may delay problem resolution. Once root cause analysis is complete, the team will take one of the following actions:

- a. Root cause is an IBM Generally Available Service  
If a ticket is opened and the root cause analysis determined that this is a defect in the IBM provided Generally Available service, the ticket will be provided attention based on the severity set by the customer and as confirmed by IBM.
- b. Root cause is an IBM Beta Service  
IBM will release services that are classified as Beta. This helps the development and Marketing teams assess the value of the service in the market and make adjustments before making the service Generally Available. If a ticket is opened and the root cause analysis determines that there is a defect in an IBM provided Beta service, then IBM is not obligated to provide a fix. Additionally, the ticket would be handled with a severity 3 or 4 where applicable.
- c. Root cause is an Experimental Services  
IBM will release services that are classified as Experimental. These services are maybe unstable, change frequently and maybe discontinued with short notice. Services identified as Experimental will be support via our Bluemix forum only.
- d. Root cause is a Third Party Service

Third party services are provided by vendors outside of IBM. They can be provided by individual software entities, partners or ISVs. If a ticket is opened and the root cause analysis determines that there is a defect in a Third Party Service, then IBM is not obligated to provide a fix.

- e. Root cause is an Open Source or Community Service

Open Source or Community services are provided by open source communities outside of IBM. If a ticket is opened and the root cause analysis determines that there is a defect in a Community Service, then IBM is not obligated to provide a fix. Additionally, IBM will close the ticket and refer the customer to the community or forum for support.

### 5.1.1 Technical Support Details

Technical Support hours are defined in the SaaS Support Handbook on the Client Success Portal at: <https://cloudoe.support.ibmcloud.com/ics/support/mylogin.asp?splash=1>

After Hours Support (outside of the regular operating hours stated above) is available only for Severity 1 issues.

To get assistance:

- Click the Support link under accounts when logged into Bluemix
  - **Support web portal:** <https://support.ibmcloud.com>
- **For existing tickets, Email:** support@bluemix.net (include "5377#ticket" in the subject line, where ticket is the ticket number)

The Client defines the severity of the issue based on their business needs, subject to confirmation by IBM that the severity level is accurate.

Severity	Severity Definition	Response Time Objectives	Response Time Coverage
1	Critical business impact/service down: Business critical functionality is inoperable or critical interface has failed. This usually applies to a production environment and indicates an inability to access services resulting in a critical impact on operations. This condition requires an immediate solution.  Severity 1 issues require that the client will be available to help us diagnose issues during the 24X7 period otherwise, they are downgraded to severity 2.	Within 1 hour	24x7
2	Significant business impact: A service business feature or function of the service is severely restricted in its use or you are in jeopardy of missing business deadlines.	Within 2 business hours	M-F business hours defined above
3	Minor business impact: Indicates the service or functionality is usable and it is not a critical impact on operations.	Within 4 business hours	M-F business hours defined above
4	Minimal business impact: An inquiry or non-technical request	Within 1 business day	M-F business hours defined above

### 5.3 Premium Support

If you have purchased Standard Support and need more focused support you can purchase Premium Support. Premium Support includes a Named Support Engineer to work with your company, either full or half time, to help your team develop and deploy your applications in the Bluemix Environment. Those interested in this option can talk with their sales representative, send email to sales@bluemix.net or call 1-844-BLUEMIX or 1-267-238-3490.

### 5.4 Expert Consulting Services

Expert Consulting Service (ECS) can help you speed your adoption of the Bluemix platform. Consulting services are negotiated individually with each customer where scope, duration and description of service will be agreed upon and a contract will be written.

## 6. Safe Harbor Framework

The Cloud Service does not comply with the US-EU and US-Swiss Safe Harbor Frameworks.

## 7. Enabling Software

Bluemix and the additional services may provide enabling software which is intended to be used to access the services. Unless other terms are provided in the individual service's Service Description, you may use the enabling software only associated with your use of the Cloud Service in the manner described in the documentation, for the length of the term of the Cloud Service. To the extent that the enabling software contains sample code, you have the additional right to make derivative works of the sample code and use them consistent with this grant. The enabling software is provided subject to the Service Level Objective, if any, as a component of the Cloud Service, but is otherwise provided "AS IS".

## 8. Derived Benefit Locations

Where applicable, taxes are based upon the location(s) you identify as receiving benefit of the Cloud Services. IBM will apply taxes based upon the business address listed when ordering a Cloud Service as the primary benefit location unless you provide additional information to IBM. You are responsible for keeping such information current and providing any changes to IBM.

## 9. Beta / Experimental Services

Some of the services available within Bluemix may be provided as a Beta or as an Experimental Service. Beta or Experimental Services will be identified as such in the Bluemix UI. Unless the Beta or Experimental Service provides different terms, those Services are subject to the following:

- a. The Beta / Experimental Service is a Cloud Service IBM is developing and testing. You are authorized to use the Beta / Experimental Service during the specified period for the purpose of evaluating its functionality and to provide feedback to IBM or the third party service provider. IBM may provide additional supporting details and information that apply to your access and use of a Beta or Experimental Service.
- b. Beta / Experimental services may not comply with the normal Bluemix security practices and do not comply with the US-EU and US-Swiss Safe Harbor Frameworks and are not designed to comply with any specific governmental regulation or specific security measures. You agree not to input content that may be subject to any such regulations or required additional security measures.
- c. The Beta / Experimental Service may not be at a level of performance or compatibility of generally available services IBM markets and is not fully tested, including any data protection and security features. Beta / Experimental Services are not designed for use in a production environment or for commercial purposes and any such use is at your own risk. IBM does not guarantee it will make a Beta or Experimental Service or any similar services available, or if made available, it will be similar to the Beta / Experimental Service. If a generally available service is offered, IBM is under no obligation to offer migration capabilities or services.
- d. Generally there are no charges for use of a Beta / Experimental Service unless specified otherwise by IBM or a third party service provider. If any authority imposes a custom, duty, tax (including withholding tax), levy or fee for the import or export, transfer, access or use of a Beta or Experimental Service or third party service, then you are responsible to pay any such amount imposed.
- e. You may use a Beta / Experimental Service for the period IBM specified or until IBM withdraws or terminates the Beta / Experimental Service. You may terminate use of a Beta / Experimental Service at any time by notifying IBM. You are responsible to remove any of your proprietary content you wish to retain prior to expiration or termination of a Beta / Experimental Service. IBM may at any time suspend, revoke, limit or refuse participation in or use of a Beta / Experimental Service. Content may be destroyed upon the expiration or cancellation of the Beta / Experimental Service unless specific migration to the related generally available Cloud Services is available.
- f. IBM may in its reasonable discretion, change the terms applicable to a Beta / Experimental Service, modify the computing environment, or withdraw features of a Beta / Experimental Service, in whole or in part by providing notice. Continued use is your acceptance of any such change. If you do not accept a change, you are responsible to discontinue use upon such notice.
- g. If there are no charges, IBM's entire liability for all claims in the aggregate arising from your use of a Beta / Experimental Service acquired hereunder will not exceed the amount of any actual direct

damages up to U.S. \$1,000.00 (or equivalent in local currency). Beta / Experimental Services are provided without warranties of any kind.

- h. You agree IBM may use all feedback and suggestions you provide. IBM may use cookies and tracking technologies to collect personally identifiable information in gathering usage statistics and information designed to help improve user experience and/or to tailor interactions with users in accordance with <http://www-01.ibm.com/software/info/product-privacy/index.html>. Where required by applicable law, you have notified the users and obtained their consent to do all of the above.