

Service Description

IBM Analytics Engine

This Service Description describes the Cloud Service IBM provides to Client. Client means the contracting party 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 Analytics Engine provides an environment to build and deploy analytics applications. This offering provides the ability for users to create and manage Apache Spark and Apache Hadoop clusters, configure them through scripts and deploy applications to analyze data. The Cloud Service is architected based on Hortonworks Data Platform.

- a. The Cloud Service provides compute nodes, and management node configurations. Management nodes and compute nodes are required for every cluster. Compute nodes will be used to run programs developed by Client to analyze the data.
- b. Management nodes are comprised of services (like NameNode, Ambari console etc.), which help in managing and monitoring service on all the compute nodes.

The Cloud Service is offered based on different configurations. The available configurations of the nodes are:

Offering Type	Default nodes	Memory Intensive nodes
Compute Node	4vCPU, 16 GB RAM, 1 x 100 GB OS disk, 1 x 200 GB metadata disk and 2 x 300 GB raw HDFS disks	32vCPU, 128 GB RAM, 1 x 100 GB OS disk, 1 x 200 GB metadata disk and 3 x 300 GB raw HDFS disks
Management Node	4vCPU, 16 GB RAM, 1 x 100 GB OS disk, 1 x 200 GB metadata disks	32vCPU, 128 GB RAM, 1 x 100 GB OS disk, 1 x 200 GB metadata disks

1.2 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 Cloud Service. New users can register for access via the online registration form: <https://console.ng.bluemix.net/registration>.

2. Security Description

This Cloud Service follows IBM's data security and privacy principles for IBM SaaS which are available at <http://www.ibm.com/cloud/data-security> 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.

Client recognizes this Cloud Service does not offer features for the protection of content that contains personal data, sensitive personal data or data subject to additional regulatory requirements. If Client includes such data in its content, it instructs IBM to process such data in accordance with this Agreement after determining that the technical and organizational security measures are appropriate to the risks presented by the processing and the nature of the data to be protected. Client acknowledges that IBM has no knowledge of the types of data that have been included in the content, and cannot make an assessment as to the suitability of the Cloud Services or the security protections in place.

2.1 Security Features and Responsibilities

The Cloud Service implements the following security features:

The primary method of encryption of user data at-rest in the service is through the native HDFS encryption feature, Transparent Data Encryption in HDFS, 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.

The Cloud Service encrypts content during data transmission between the cluster and an external end point over SSL.

3. Service Level Agreement

IBM provides the following availability service level agreement ("SLA") for the Cloud Service as specified in a PoE. The SLA is not a warranty. The SLA is available only to Client and applies only to use in production environments.

3.1 Availability Credits

Client must log a Severity 1 support ticket with the IBM technical support help desk within 24 hours of first becoming aware that there is a critical business impact and the Cloud Service is not available. Client must reasonably assist IBM with any problem diagnosis and resolution.

A support ticket claim for failure to meet an SLA must be submitted within 3 business days after the end of the contracted month. Compensation for a valid SLA claim will be a credit against a future invoice for the Cloud Service based on the duration of time during which production system processing for the Cloud Service is not available ("Downtime"). Downtime is measured from the time Client reports the event until the time the Cloud Service is restored and does not include time related to a scheduled or announced maintenance outage; causes beyond IBM's control; problems with Client or third party content or technology, designs or instructions; unsupported system configurations and platforms or other Client errors; or Client-caused security incident or Client security testing. IBM will apply the highest applicable compensation based on the cumulative availability of the Cloud Service during each contracted month, as shown in the table below. The total compensation with respect to any contracted month cannot exceed 10 percent of one twelfth (1/12th) of the annual charge for the Cloud Service.

3.2 Service Levels

Availability of the Cloud Service during a contracted month

Availability during a contracted month	Compensation (% of monthly subscription fee* for contracted month that is the subject of a claim)
Less than 99.9%	2%
Less than 99.0%	5%
Less than 95.0%	10%

* If the Cloud Service was acquired from an IBM Business Partner, the monthly subscription fee will be calculated on the then-current list price for the Cloud Service in effect for the contracted month which is the subject of a claim, discounted at a rate of 50%. IBM will make a rebate directly available to Client.

Availability, expressed as a percentage, is calculated as: the total number of minutes in a contracted month minus the total number of minutes of Downtime in a contracted month divided by the total number of minutes in the contracted month.

4. Technical Support

Technical support for the Cloud Service is provided via email, online forums, and an online problem reporting system which is available on the Client portal at <https://support.ibmcloud.com>. IBM will make available the IBM Software as a Service Support Handbook which provides technical support contact information and other information and processes. Technical support is offered with the Cloud Service and is not available as a separate offering.

5. Entitlement and Billing Information

5.1 Charge Metrics

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

- 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 PoE or Transaction Document.

6. 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.

7. Additional Terms

7.1 General

Client agrees IBM may publicly refer to Client as a subscriber to the Cloud Services in a publicity or marketing communication.

7.2 Cloud Service Expiration

Before expiration or termination of the Cloud Service, Client can use any of the provided reporting or export features of the Cloud Service to extract data.

7.3 Use of Compiled Data

IBM may monitor Client's use of the Cloud Service, for the purpose of IBM's internal research, testing and development of improvements or enhancements to the Cloud Service or for the development of new services or to provide Client additional services that provide a more tailored and meaningful experience for users. In doing so, IBM may compile and analyze, in aggregated and anonymized format, summary information reflecting the use of the Cloud Service by Client's authorized users, and may prepare reports, studies, analysis and other work product resulting from this compilation and analysis (collectively the "Compiled Data"). IBM retains ownership rights in and to the Compiled data.