

Service Description

IBM Information Server Enterprise Edition on Cloud Managed

This Service Description describes the Cloud Service. The applicable order documents provide pricing and additional details about Client's order.

1. Cloud Service

IBM Information Server Enterprise Edition ("IIS EE") on Cloud Managed service ("Cloud Service") provides end-to-end information integration capabilities to help the Client understand, govern, create, maintain, transform, and deliver quality data. The service also provides data integration that can transform data in any style and deliver it to any system. IBM manages the infrastructure (network, storage and compute resources), applies fixes to the application and maintains the IBM software, infrastructure and applicable security and privacy controls.

Including the following features:

- a. Analyze, cleanse, monitor, and manage data to support decision making and business processes.
- b. Build trusted data by creating, maintaining, and monitoring consistent business policies and rules with Information Governance Catalog.
- c. Integrate data across multiple systems using a high performance parallel framework, and it supports extended metadata management and enterprise connectivity with DataStage.
- d. Design jobs in the DataStage Designer client and run them in the DataStage Director client.
- e. Search for information across the enterprise to gain insight and understanding of that information, supporting business needs with Enterprise Search.

Each Cloud Service configuration represents the capacity to process certain amounts of data volume and user operations in the specified time period as described below. The capacity descriptions are intended to be guidelines to help a Client select an appropriate configuration for intended workloads. Actual results may vary based on Client workload specifics.

1.1 Offerings

The Client may select from the following available offerings.

The details and specifications of the below offerings are available in the IIS on Cloud Managed User Guide found here: <https://www-01.ibm.com/support/docview.wss?uid=ibm11072004>. These configurations may undergo revision from time to time. The welcome letter shared with the Client provides the exact configuration of the offering purchased.

1.1.1 IBM Information Server Enterprise Edition on Cloud Managed Small

- IBM Hosted on Virtual Machines inside IBM Cloud environment.
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Provides 2TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- Seven (7) day Recovery Time Objective and (1) day / 24 hours Recovery Point Objective

1.1.2 IBM Information Server Enterprise Edition on Cloud Managed Medium

- Hosted on Virtual Machines inside IBM Cloud environment.
- Provides 5TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Seven (7) day Recovery Time Objective and (1) day / 24 hours Recovery Point Objective

1.1.3 IBM Information Server Enterprise Edition on Cloud Managed Large

- Hosted on Bare Metal inside IBM Cloud environment.
 - Provides 10TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
 - Parallel Processing set-up is permitted.
 - No limitation on the number of compute nodes for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Seven (7) day Recovery Time Objective and (1) day / 24 hours Recovery Point Objective

1.1.4 IBM Information Server Enterprise Edition on Cloud Managed High Availability Small

- IBM Hosted on Virtual Machines inside IBM Cloud environment.
- High Availability
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Provides 2TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- Seven (7) day Recovery Time Objective and (1) day / 24 hours Recovery Point Objective

1.1.5 IBM Information Server Enterprise Edition on Cloud Managed High Availability Medium

- IBM Hosted on Virtual Machines inside IBM Cloud environment.
- High Availability
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Provides 5TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- Seven (7) day Recovery Time Objective and (1) day / 24 hours Recovery Point Objective

1.1.6 IBM Information Server Enterprise Edition on Cloud Managed High Availability Large

- Hosted on Bare Metal inside IBM Cloud environment.
- Provides 10TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- High Availability
- No limitation on the number of compute nodes for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Seven (7) day Recovery Time Objective and (1) day / 24 hours Recovery Point Objective

1.1.7 IBM Information Server Enterprise Edition on Cloud Managed Disaster Recovery Small

- IBM Hosted on Virtual Machines inside IBM Cloud environment.
- Integrated High Availability and Disaster Recovery (HADR) multi data center solution
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Provides 2TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- Four (4) hours Recovery Time Objective and near real time Recovery Point Objective
- Annual validated business continuity and disaster recovery test is included. Additional frequency testing and validation greater than on an annual basis can be purchased under a separate statement of work.

1.1.8 IBM Information Server Enterprise Edition on Cloud Managed Disaster Recovery Medium

- IBM Hosted on Virtual Machines inside IBM Cloud environment.
- Integrated High Availability and Disaster Recovery (HADR) multi data-center solution.
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.
- Provides 5TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- Four (4) hours Recovery Time Objective and near real time Recovery Point Objective.
- Annual validated business continuity and disaster recovery test is included. Additional frequency testing and validation greater than on an annual basis can be purchased under a separate statement of work.

1.1.9 IBM Information Server Enterprise Edition on Cloud Managed Disaster Recovery Large

- Hosted on Bare Metal inside IBM Cloud environment.
- Integrated High Availability and Disaster Recovery (HADR) multi data-center solution.
- Provides 10TB of Object Storage; additional storage entitlement can be purchased under a separate statement of work.
- No limitation on the number of compute nodes for massively parallel processing ("MPP") setup additional nodes can be purchased under a separate statement of work.
- Four (4) hours Recovery Time Objective near real time Recovery Point Objective.

Annual validated business continuity and disaster recovery test is included. Additional frequency testing and validation greater than on an annual basis can be purchased under a separate statement of work.

1.1.10 IBM Information Server Enterprise Edition on Cloud Managed Dev/Test Small

- IBM Hosted on Virtual Machines inside IBM Cloud environment.
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.

1.1.11 IBM Information Server Enterprise Edition on Cloud Managed Dev/Test Medium

- Hosted on Virtual Machines inside IBM Cloud environment.
- Parallel processing set-up is permitted.
- One compute node limitation for massively parallel processing ("MPP") setup; additional nodes can be purchased under a separate statement of work.

2. Data Processing and Protection Data Sheets

IBM's Data Processing Addendum at <http://ibm.com/dpa> (DPA) and the Data Processing and Protection Data Sheet(s) (referred to as data sheet(s) or DPA Exhibit(s)) in the links below provide additional data protection information for the Cloud Services and its options regarding the types of Content that may be processed, the processing activities involved, the data protection features, and specifics on retention and return of Content. The DPA applies if and to the extent the European General Data Protection Regulation (EU/2016/679) (GDPR) applies to personal data contained in Content.

<https://www.ibm.com/software/reports/compatibility/clarity-reports/report/html/softwareReqsForProduct?deliverableId=074511A0C88611E88A68D3FD63CD0AC5>

3. Service Levels and Technical Support

3.1 Service Level Agreement

IBM provides Client with the following availability service level agreement (SLA). IBM will apply the highest applicable compensation based on the cumulative availability of the Cloud Service as shown in the table below. The availability percentage is calculated as the total number of minutes in a contracted month, minus the total number of minutes of Service Down in the contracted month, divided by the total number of minutes in the contracted month. The Service Down definition, the claim process and how to

contact IBM regarding service availability issues are in IBM's Cloud Service support handbook at https://www.ibm.com/software/support/saas_support_overview.html.

Availability	Credit (% of monthly subscription fee*)
Less than 99.9%	2%
Less than 99.0%	5%
Less than 95.0%	10%

* The subscription fee is the contracted price for the month which is subject to the claim.

3.2 Technical Support

Technical support for the Cloud Service, including support contact details, severity levels, support hours of availability, response times, and other support information and processes, is found by selecting the Cloud Service in the IBM support guide available at <https://www.ibm.com/support/home/pages/support-guide/>.

4. Charges

4.1 Charge Metrics

The charge metric(s) for the Cloud Service are specified in the Transaction Document.

The following charge metrics apply to this Cloud Service:

- Instance is each access to specific configuration of the Cloud Services.

5. Additional Terms

For Cloud Service Agreements (or equivalent base cloud agreements) executed prior to January 1, 2019, the terms available at <https://www.ibm.com/acs> apply.

5.1 Cloud Service Environment Updates

Maintenance

Cloud Service Major and Minor updates and/or patches will be evaluated for installation within a monthly maintenance window. Two weeks prior to the maintenance window, IBM will publish the list of Major and Minor updates being applied along with a brief description of the updates. During the maintenance window, the Cloud service may be unavailable. If required, IBM will notify the Client that the Cloud Services will not be available during the maintenance window. Where possible, IBM will minimize Service disruptions for maintenance activities, with a monthly downtime goal to not exceed four (4) hours. For environments with entitlement to the IBM Information Server on Cloud Managed Disaster Recovery (Small, Medium or Large), the monthly maintenance will occur in a secondary data center which improved the maintenance downtime goal to not exceed forty-five (45) minutes.

Client is responsible for testing and compatibility of all Client Development Artifacts and Client specific use of the Cloud Service with proposed updates.

Client may provide a request to delay Major and Minor updates once notified. IBM will use commercially reasonable efforts to coordinate the implementation of the update with the Client. Requests for Major update delays must be provided within 30 days of original notification and requests for Minor update delays must be provided within 7 days of original notification. Client acknowledges and agrees that IBM will deploy Major updates within 6 months of the original notification and will deploy Minor updates within 45 days of notification. In the event of Client's failure to allow an IBM-initiated update to be promoted into the Cloud Service, additional monthly charges could occur.

Emergency Maintenance

In addition to Major and Minor updates, IBM may determine that an emergency environment update is required to address significant vulnerabilities or regulatory requirements and cannot wait for a scheduled maintenance window. In this situation, IBM may update the environment at any point in time with no advance notice to the Client.

5.2 Backup and Restore

For environments not designated as Dev/Test routine scheduled file system backups (recommended files) and periodic (daily / weekly / monthly) data base backups are provided. Periodically, backup files will be archived to Spectrum Protect (IBM Cloud Object Storage) and retained for up to 28 days. Information Server Enterprise Edition does not support online backups, therefore backups are required to be scheduled and taken during a coordinated maintenance window. Clients will be able to request up to 2 backup restores per month. Additional restores or increased system backup frequency greater than on a daily basis can be performed under a separate statement of work.

In addition, for environments with entitlement to the IBM Information Server on Cloud Managed Disaster Recovery (Small, Medium or Large), data will replicate between data centers for the full HADR integrated solution.

Snapshot Backup are not provided.

5.3 LDAP Directory

A standalone Identity Management ("IdM") LDAP configuration is provisioned as part of this Cloud Service. Additionally, IBM provides the ability to leverage IdM's native capability to synchronize the Cloud based LDAP service with Client's on-premises Active Directory("AD").

The following on-premises AD synchronization approach can be implemented on request, after provisioning has been completed and the environment has been turned over to Client:

- a. Support for synchronization of specified user credentials and attributes stored in one of the Client's on-premises AD domain(s) with credentials and attributes stored in the Cloud Service IdM domain.
- b. Support for Security Assertion Markup Language ("SAML") authentication from the Client's on-premises AD via Active Directory Federation Services ("ADFS").
- c. Support for Identity Provider ("IdP") authentication where the user is first authenticated with the Client's on-premises AD domain via ADFS for SAML authentication to the Cloud Service IdM domain.
- d. Support for Service Provider ("SP") initiated logins where the user identity is requested by the Cloud Service IdM domain for SAML authentication.

5.4 Virtual Private Network (VPN)

Client may select to utilize a software VPN connection for securely connecting to the Cloud Service.

- a. Configuration of one (1) VPN endpoint (gateway) is provided as part of this Cloud Service. Additional endpoints may be quoted separately and can be added through an additional services agreement.
- b. The IBM Cloud Integrated Analytics VPN Connectivity service uses Site-to-Site IPsec VPN technology.

5.5 Use Restrictions and Limitations

The Cloud Service is limited regarding Information Server programmatic and client user interfaces as follows:

- a. User Interface functionality is limited to HTTPS access to Information Server user functionality.
- b. For environments not designated as dev/test IBM is not providing direct access to the individual servers, OS level, or application admin consoles for Information Server, WebSphere Application Server or DB2.
- c. Information Server Web Services interfaces are limited to running over an HTTPS protocol.
- d. For environments not designated as Dev/Test, IBM is not providing access or interfaces to any of the Information Server development tooling as part of this Cloud Service. IBM will provide Clients with the ability to deploy Information Server customizations, including development artifacts, into the managed environment through the support ticketing service.

Client is not authorized to use any of the following components or functions:

- a. IBM InfoSphere DataStage Pack for SAS (of IBM InfoSphere DataStage)
- b. Storage Optimization Feature (of IBM DB2)

- c. pureScale Feature (of IBM DB2)
- d. High Availability/Failover Hot Standby Configuration (of IBM DB2)
- e. Connection to IBM Process Center Express (of IBM Process Server Standard)
- f. Client's usage of IBM Process Center Standard, IBM Process Server Standard and IBM Process Designer is limited to Data Quality Remediation and Stewardship Processes.
- g. "Data Quality Remediation and Stewardship Processes" means the Client is only permitted to create processes and activities that manage data quality remediation and/or the stewardship of Governance Assets relation to events which are (1) captured by the Cloud Service or (2) captured by the following IBM InfoSphere Information Server Programs; IBM InfoSphere DataStage, IBM InfoSphere QualityStage, IBM InfoSphere Information Analyzer, IBM Information Server on Cloud Data Quality or IBM DataStage on Cloud. When the Cloud Service is listed as enabling software for another service, then use of the IBM Process Center and IBM Process Server and IBM Process Designer are prohibited.

5.6 Disaster Recovery

In the event of an IBM declared Disaster, IBM will communicate with Client on an hourly basis as to the status of the recovery process, including progress regarding the RTO and RPO.

IBM will provide a projected RTO and RPO, based on existing subscription, to perform recovery activities for Client's Cloud Service Environment.

5.7 Client Obligations

- a. Client will provide a single technical point of contact knowledgeable in the client enterprise network, VPN and security requirements.
- b. Client will complete the Virtual Private Network ("VPN") questionnaire and return it to IBM for review no later than 60 days from the date the order is placed ("Order Date"). If Client has not provided IBM with the required VPN questionnaire within 60 days of the Order Date, IBM will continue to engage Client to obtain the VPN questionnaire information. Once the VPN questionnaire has been completed and provided to IBM, IBM will notify Client with provisioning details upon completion of the environment VPN configuration, which may take several days.
- c. Client will ensure that a security and network administrator is/are available during the configuration and validation phase of the VPN configuration to work with IBM to complete VPN setup.
- d. Client is responsible for all administration, maintenance, modification, configuration and testing of hardware and software at the Client site used for the VPN.
- e. Client is responsible for user acceptance testing to validate the VPN configuration during implementation.
- f. Client will notify via the online problem reporting system of any changes required to VPN configuration.
- g. Client is responsible for the definition, setup and maintenance of all users and groups as they relate to any Information Server solutions in the Cloud Service.

5.8 Development Artifacts

Development Artifacts permit the Client to configure the Cloud Service to meet Client's business requirements by creating software Development Artifacts to the Cloud Service application. Development Artifacts are content provided in the use of the Cloud Service and are not part of the Cloud Service. Client is responsible for the development, management, maintenance and support of all Development Artifacts. Client may contract separately with IBM or a third party contractor specifically authorized in writing by IBM to create Development Artifacts. Client is responsible for ensuring that any such third party contractor complies with these terms.

- a. Client-created Development Artifacts are subject to the following additional terms and conditions:
 - (1) IBM will have the right to review and approve or reject the design documents, testing plans, test results and object code for Development Artifacts for compliance with the terms of the Agreement.
 - (2) IBM may require Client to perform performance tests specified by IBM. Client shall provide such design documents, testing plans and results, and object code to IBM for review a

reasonable time in advance of the Cloud Service going live and shall co-operate with IBM in resolving issues identified by IBM.

- (3) Client agrees to have in place and maintain a program to prevent malware, including viruses, Trojan horses, denial-of-service and other disruptive and covert technologies from being included in the Development Artifacts.
 - (4) IBM may monitor and scan Development Artifacts for security vulnerabilities and/or malware. IBM may remove the Development Artifacts from any Cloud Service environment or suspend the Cloud Service until the security vulnerability or malware issue is resolved.
 - (5) Development Artifacts will not include or add any third party commercial or packaged software product that operates independently of the Cloud Service, and the addition of any such third party commercial or packaged software is prohibited.
 - (6) Client is responsible to train and maintain staff with an appropriate knowledge and skill level to work with the Cloud Service and Development Artifacts during the term of the subscription. Any training or educational assistance that is required is at the Client's expense. Should it be determined by IBM that the Client is not able to perform its required tasks with reasonable assistance, IBM, at its sole discretion, may require that Client engage in hands-on knowledge transfer activities with IBM professional services personnel. Such knowledge transfer activities shall be, unless between IBM and its affiliates, at the Client's expense. IBM will provide such training to Client upon Client's request for an additional charge.
 - (7) Client, or their licensors retain all right, title, and interest or license in and to the Development Artifacts provided to IBM for hosting with the Cloud Service. Client represents and warrants to IBM that Client has all rights necessary to provide the Client Development Artifacts to IBM for the purpose of hosting with the Cloud Service and that neither the Client Development Artifacts nor the hosting by IBM with the Cloud Service violate any third party patent or copyright.
 - (8) Client grants to IBM, on a world-wide, royalty-free, fully-paid, revocable, sub-licensable basis, all rights and licenses to, and agrees to promptly obtain and keep in effect Required Consents for all Development Artifacts, necessary for IBM and its subcontractors to host the Development Artifacts and otherwise perform its obligations. Upon request, Client will provide to IBM evidence of any such rights, licenses, or Required Consents. IBM will be relieved of its obligations to the extent that they are affected by Client's failure to promptly obtain and provide to IBM any such rights, licenses, or Required Consents. In this paragraph, "Required Consents" means any consents, licenses or approvals required to give IBM and its subcontractors the right or license to access, use and/or modify in electronic form and in other forms solely as necessary to perform under this Service Description, including making derivative works, the Development Artifacts, without infringing the ownership or intellectual property rights of the providers, licensors, or owners of such Development Artifacts.
 - (9) Client will ensure code, data and other artifacts introduced by Client through the Development Artifacts, do not increase the security risk, or require additional certification requirements unless expressly agreed to by IBM through an amendment or addendum to this Service Description. Without limiting any of the foregoing, Client will: (a) perform web application and static code vulnerability scans on all Development Artifacts to identify any security exposures; and (b) disclose to IBM in writing the existence of any exposures that were identified by a vulnerability scan that are included in or is provided in connection with the Development Artifacts.
- b. Client is responsible for testing Development Artifacts in all environments.
 - c. Any additional work to be performed by IBM in support of Development Artifacts, such as creation of Development Artifacts or activation of other integrated components, may be described in a separate statement of work between IBM and Client, and will be subject to separate fees invoiced in accordance with the terms and fees contained in such a statement of work.

5.9 Dev/Test Environment Restrictions

If the Cloud Service is designated as dev/test the Client may only use the environment for non-production development activities, quality assurance, integration testing, fault diagnosis, internal benchmarking, and/or staging activities. In addition to IBM administrative system access, additional administrative access

can be granted to Client designated authorized users as mutually agreed upon between the Client and IBM.

IBM will treat detected Dev/Test environment application unavailability as a Severity 3 support case and resolve the issue by way of restoring to the last known working backup or reinstalling.

5.10 Performance Testing

Client accepts that the Cloud Service is modified by Development Artifacts and integrates with third party services and Client's other applications. As a result, performance and response times cannot be guaranteed by and are not the sole responsibility of IBM. Client is responsible for performing any and all performance tests before and after activation of the Cloud Service Environment for use by the Client for normal business activities and/or use by the Client in servicing, in anyway, their customers and/or use by the Client in support of revenue generation. IBM will provide reasonable assistance to Client in the resolution of any performance as part of support services.

5.11 Definitions

Development Artifacts – are the software artifacts and configuration provided by the Client, or their authorized third party, to extend the Cloud Service by implementing the Client's business process flow, manage specific data needs, and provide Client specific integration processing, in support of the Client's business requirements. This can be, but not limited to, software code, database development artifacts, jobs, scripts or files created to customize Client's utilization of the Cloud Service, including integrations to third party services or data sources. Development Artifacts are the responsibility of the Client.

Application – refers to the IBM software products that provide the base functionality for the Cloud Service, including the original and all whole or partial copies which are provided by IBM and which the Client may access through the Cloud Service.

Major – is defined as a maintenance update that IBM reasonably determines does require Client Development Artifact and/or data remediation in order to insure compatibility. Examples might include major operating system or Application version upgrades.

Minor – is defined as a maintenance update that IBM reasonably determines does not require Client Development Artifact and/or data remediation in order to insure compatibility. Examples might include minor operating system or Application product patches.

Recovery Point Objective ("RPO") – is the maximum tolerable period in which data might be lost from an IT service due to a Disaster.

Recovery Time Objective ("RTO") – is the targeted duration of time, and a service level, within which a business process must be restored after a Disaster is declared in order to avoid unacceptable consequences associated with a break in business continuity.