IBM IoT Continuous Engineering on Cloud

and

IBM Collaborative Lifecycle Management on Cloud

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

This IoT Continuous Engineering and Collaborative Lifecycle Management on Cloud offerings provide managed services, ongoing maintenance, patching and upgrades for this Cloud Service, an application lifecycle management and software and systems engineering solution that supports the following:

1.1 Tiers, Data Storage & LDAP

Clients with a subscription of 100 Authorized Users or 50 Concurrent Users or less, excluding Track and Plan on Cloud users, are considered Professional tier, and are provided with 25 Gigabytes of data storage. Clients with a subscription of more than 100 authorized or 50 concurrent users, excluding Track and Plan on Cloud users, are considered Enterprise tier, and are provided with 200 Gigabytes of data storage.

Clients in an Enterprise tier are deployed to a virtual private cloud environment. Included with the Enterprise tier is an option to set up a site to site IPSec VPN tunnel to ensure network connectivity in steady state operation.

Clients in both tiers are provided a dedicated LDAP to administer their users. Clients in an Enterprise tier have an option to map their existing localized LDAP server accounts to user logins for the Cloud Service.

1.2 IBM Rational Quality Manager on Cloud

This Cloud Service provides dynamic test plans, governed workflows, lab efficiency, test coverage analysis, and manual test authoring. These features integrate with other lifecycle artifacts such as work items and requirements, and with reporting and dashboards. They provide detailed and highly customized analytics to help monitor the health and progress of a project. Customizable reports provide both real-time views and historical trends of artifacts across the entire lifecycle, including requirements, work items, builds, test cases and test results. Team reports and dashboards help Clients keep tabs on the health of their project. Dashboards provide an at-a-glance view of work item queries, event feeds, reports, and other items critical to understanding progress.

1.3 IBM Team Concert on Cloud

This Cloud Service provides change management, planning, software configuration management, and automation capabilities as described below:

a. Change Management

The main feature of Change Management is customizable work items, which track and coordinate epics, features, stories, tasks and ordinary defects. Work items and the workflow process can be customized to suit a Client's specific needs to support any process. By separating the process from the underlying architecture, new workflows and process can be added and shared across teams as needs change in the future or new methodologies emerge.

b. Planning

The Planning capability provides tools to assist with the planning, estimation, ranking and velocity management for entire projects, for teams within those projects, and for individual developers. Plans are accessible to everyone on the team, and show the progress on releases and iterations at any point in time. The planning capability includes visual taskboards and Kanban boards to prioritize and optimize the flow of work or quickly address blocked tasks to speed delivery cycle times.
c. **Software Configuration Management**
   The component-based source control system provides strong support for parallel development, agile development, and geographically distributed teams. It integrates tightly with defect tracking, builds, and process automation.

d. **Automation**
   The Automation capability provides build management control to the development and test teams. Team members can track build progress, view build alerts and results, request builds, and trace the relationship of builds to artifacts such as change sets and work items.

e. **Reporting**
   The Reporting capability provides an easy to use self-serve reporting interface that integrates with visual dashboards to enable web based project status and visual tracking of work efforts across teams and programs. Both advanced cross project and cross capability reporting are supported as well as trend and historical data analysis. Dashboards communicate to the entire organization key live project data and status allowing teams to move away from "out of date" data status reports.

1.4 **IBM Track and Plan on Cloud**
   This Cloud Service provides a subset of the capabilities of IBM Team Concert on Cloud. Included in IBM Track and Plan on Cloud are the change management, planning and reporting capabilities as described above. IBM Track and Plan on Cloud does not include Software Configuration Management or Automation.

1.5 **IBM DOORS Next Generation on Cloud**
   This Cloud Service provides support for a range of requirements practices, from light-weight requirements to fully regulated systems engineering tools to capture, organize, and collaboratively review, analyze, and report on requirements, especially in relation to their associated development work items and test artifacts.

1.6 **IBM Engineering Lifecycle Manager on Cloud**
   This Cloud Service provides capabilities to visualize relationships among engineering artifacts across the lifecycle to yield insights into helping to improve project efficiency and product completeness. The Cloud Service offering can only be purchased within the IBM IoT Continuous Engineering on Cloud bundle, or with the IBM Collaborative Lifecycle Management on Cloud offering in the Enterprise tier.

1.7 **IBM Rhapsody Design Manager on Cloud**
   This Cloud Service is used to help design teams and their stakeholders share, trace, review and manage designs, supporting the systems engineering and embedded software development lifecycle. This Cloud Service offering can only be purchased within the IBM IoT Continuous Engineering on Cloud bundle, or in the Enterprise tier. This Cloud Service provides:
   - Central design storage – teams can store, share, search and manage designs and models using a central system repository with web-based access.
   - Stakeholder collaboration – suppliers, customers, contractors and other extended stakeholders can access information through a web client.
   - Design reviews – the software automates design reviews with all stakeholders to facilitate the communication of requirements, decision making and quality improvement.
   - Multi-discipline document generation and reporting – Client can create comprehensive documentation for specifications, communication, compliance and reporting.

1.8 **IBM Collaborative Lifecycle Management on Cloud**
   This Cloud Service includes the functionality described above for IBM DOORS Next Generation on Cloud, IBM Rational Quality Manager on Cloud, and IBM Team Concert on Cloud, and additionally provides:
   - Customizable reports with real-time views and historical trends of artifacts across the entire lifecycle, including requirements, work items, builds, test cases and test results.
   - Team reports and dashboards to help Clients oversee a project, providing an at-a-glance view of work item queries, event feeds, reports, and other items critical to understanding progress.

When this Cloud Service is subscribed at the Enterprise tier, the service includes the option of:
• Strategic re-use through organization of lifecycle engineering artifacts according to re-usable products, systems, subsystems, and components in development
• Configuration Management of IBM DOORS Next Generation, IBM Rational Quality Manager on Cloud, and Global Configuration Management across the lifecycle.

1.9 IBM IoT Continuous Engineering on Cloud

This Cloud Service is only available in the Enterprise tier, and includes the functionality described above for IBM DOORS Next Generation on Cloud, IBM Rational Quality Manager on Cloud, IBM Team Concert on Cloud, IBM Engineering Lifecycle Manager on Cloud, IBM Rhapsody Design Manager on Cloud, and IBM Collaborative Lifecycle Management on Cloud, and additionally provides:
• universal access to engineering information from across the lifecycle and enables key engineering competencies:
  • find and discover relevant information regardless of where the data is stored and managed;
  • understand and react to engineering change with full visibility across the engineering lifecycle;
  • visualization and analysis capabilities that help turn insights into predictable outcomes;
  • tools to create, edit, and share models and designs, integrate design artifacts with other lifecycle resources; and
  • collaboratively review, analyze, and report on models and designs.

1.10 Additional Storage

The Cloud Services listed below are available, as designated, as a subscription or pay per use service providing Client with additional storage capacity in increments of 100 Gigabytes (GB).

Subscription additional storage offerings:
• IBM IoT Continuous Engineering on Cloud Data Storage
• IBM Collaborative Lifecycle Management on Cloud Data Storage

Pay per use additional storage offerings:
• IBM DOORS Next Generation on Cloud 100 GB Pay Per Use
• IBM Rational Quality Manager on Cloud 100 GB Pay Per Use
• IBM Team Concert on Cloud 100 GB Pay Per Use
• IBM Track and Plan on Cloud Pay 100 GB Per Use
• IBM Design Manager on Cloud 100 GB Pay Per Use
• IBM Engineering Lifecycle Manager on Cloud 100 GB Pay Per Use
• IBM IoT Continuous Engineering on Cloud 100 GB Pay Per Use
• IBM Collaborative Lifecycle Management on Cloud 100 GB Pay Per Use

1.11 Optional Services

1.11.1 IBM Collaborative Lifecycle Management on Cloud VPC
With this Cloud Service, IBM will construct and configure a CLM on Cloud Professional tier deployment into a Virtual Private Cloud environment, isolating and allocating resources dedicated to Client use. This is a pre-requisite for other Cloud Services when noted.

1.11.2 IBM Collaborative Lifecycle Management on Cloud Configuration Management
This Cloud Service will enable configuration management capability in a Collaborative Lifecycle Management (CLM) on Cloud Professional tier deployment. With this service, configuration management capabilities may be enabled for IBM DOORS Next Generation on Cloud, IBM Rational Quality Management on Cloud projects, or be enabled for Global Configuration Management capability for IBM Collaborative Lifecycle Management on Cloud. Associated capabilities (such as Lifecycle Query Engine) are also enabled. IBM Collaborative Lifecycle Management on Cloud Virtual Private Cloud (VPC) is a pre-requisite for this Cloud Service.

1.11.3 IBM Collaborative Lifecycle Management on Cloud Test
This Cloud Service provides a test environment in the same VPC as the CLM production environment. Access to the environment and user authentication will be provided the same as the production
environment. The test environment will be created with the same configuration and topology as the CLM production environment. The environment will be managed with a change management process to make updates to the test environment. One major change (upgrade, major patch, ifix) is included monthly. The environment will be created with the minimum set of resources required to run the applications. Resource monitoring is not included, thus, service level objectives are neither applicable nor provided. Backup services are provided.

1.11.4 IBM Collaborative Lifecycle Management on Cloud Sandbox
This Cloud Service provides a sandbox environment in the same VPC as the CLM production environment, with the same components, access to the environment, and user authentication. The Client will be provided access permission necessary to make changes or updates to this environment, including extensions and customizations, and the ability to restart the applications. This environment will be created with the minimum set of resources to run the applications. Resource monitoring is not included, thus, service level objectives are neither applicable nor provided. Backup services are provided.

1.11.5 IBM Collaborative Lifecycle Management on Cloud User Acceptance Test
This Cloud Service provides a cloned copy of the production environment of the primary Cloud Service application servers. This environment will be created in a different VPC. The cloned environment will be the identical topology as production, though with reduced compute resources. The service will include one upgrade/major change monthly and allow Client to perform user acceptance testing (UAT). This offering runs on a monthly basis with a minimum of one month for testing. The environment will not include a site-to-site VPN. Server rename will neither be required nor supported. User access to the UAT environment is through SSL VPN connectivity. Neither resource monitoring nor backup services are provided, thus service level objectives are neither applicable nor provided.

1.12 Set-up Services

1.12.1 IBM Collaborative Lifecycle Management on Cloud Data Import
With this set-up service, IBM will perform a data import during the deployment of a CLM on Cloud environment. This import will only be supported from versions of CLM 5.0.2 or later, otherwise additional fees and services will be required. The total amount of data imported is limited to a maximum of 300GB for both the database and storage. If the destination environment domain name is different than that of the data source, a data domain name change procedure will also be performed.

1.12.2 IBM Collaborative Lifecycle Management on Cloud VPN
With this set-up service, IBM will add, manage and operate a site to site Virtual Private Network to a CLM on Cloud Professional tier. The VPN provides a private tunnel between the cloud hosted environment and a Client's enterprise network. The Client's cloud hosted instance will be hidden from the public internet. The VPN will enable integration with other Client systems without the need to open sensitive firewall ports. IBM Collaborative Lifecycle Management on Cloud Virtual Private Cloud (VPC) set-up service is a pre-requisite for this Cloud Service.

1.12.3 IBM Collaborative Lifecycle Management on Cloud AD/LDAP
This set-up service will establish a connection to Client's enterprise Active Directory or LDAP service from a CLM from a Professional tier deployment. This integration will enable user authentication against a Client's enterprise LDAP directory service. The pre-requisite for this service is IBM Collaborative Lifecycle Management on Cloud Virtual Private Cloud (VPC).

2. Content and Data Protection
The Data Processing and Protection Data Sheet (Data Sheet) provides information specific to the Cloud Service regarding the type of Content enabled to be processed, the processing activities involved, the data protection features, and specifics on retention and return of Content. Any details or clarifications and terms, including Client responsibilities, around use of the Cloud Service and data protection features, if any, are set forth in this section. There may be more than one Data Sheet applicable to Client's use of the Cloud Service based upon options selected by Client. The Data Sheet may only be available in English and not available in local language. Despite any practices of local law or custom, the parties agree that they understand English and it is an appropriate language regarding acquisition and use of the Cloud Services. The following Data Sheet(s) apply to the Cloud Service and its available options.

Link(s) to the applicable Data Sheet(s):
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------|

Client is responsible to take necessary actions to order, enable, or use available data protection features for a Cloud Service and accepts responsibility for use of the Cloud Services if Client fails to take such actions, including meeting any data protection or other legal requirements regarding Content.

IBM's Data Processing Addendum at [http://ibm.com/dpa](http://ibm.com/dpa) (DPA) applies and is referenced in as part of the Agreement, if and to the extent the European General Data Protection Regulation (EU/2016/679) (GDPR) applies to personal data contained in Content. The applicable Data Sheet for this Cloud Service will serve as the DPA Exhibit.

3. **Technical Support**

   Technical support for the Cloud Service is provided via email, online forums, and an online problem reporting system. IBM's software as a service support guide available at [https://www-01.ibm.com/software/support/saa_support_guide.html](https://www-01.ibm.com/software/support/saa_support_guide.html) provides technical support contact and other information and processes. Technical support is offered with the Cloud Service and is not available as a separate offering.

4. **Entitlement and Billing Information**

4.1 **Charge Metrics**

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

   - **Authorized User** is a unit of measure by which the Cloud Service can be obtained. Client must obtain separate, dedicated entitlements for each unique Authorized User given access to the Cloud Service in any manner directly or indirectly (for example, through a multiplexing program, device or application server) through any means. Sufficient entitlements must be obtained to cover the number of Authorized Users given access to the Cloud Service during the measurement period specified in Client's PoE or Transaction Document.

   - **Concurrent User** is a unit of measure by which the Cloud Service can be obtained. A Concurrent User is a person who is accessing the Cloud Service at any particular point in time. Regardless of whether the person is simultaneously accessing the Cloud Service multiple times, the person counts only as a single Concurrent User. Client must obtain entitlements for the maximum number of Concurrent Users simultaneously accessing the Cloud Service in any manner directly or indirectly...
(for example: through a multiplexing program, device, or application server) through any means
during the measurement period specified in Client's PoE or Transaction Document.

- Gigabyte is a unit of measure by which the Cloud Service can be obtained. A Gigabyte is defined as
  2 to the 30th power bytes of data (1,073,741,824 bytes). Sufficient entitlements must be obtained to
cover the total number of Gigabytes processed by the Cloud Service during the measurement
period specified in Client's PoE or 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.

- Connection is a unit of measure by which the Cloud Service can be obtained. A Connection is a link
  or association of a database, application, server, or any other type of device to the Cloud Service.
Sufficient entitlements must be obtained to cover the total number of Connections which have been
or are made to the Cloud Service during the measurement period specified in Client's PoE or
Transaction Document.

4.2 Set-Up Charges
A one-time setup fee will be billed at the rate specified in the Transaction Document for each setup
service ordered.

4.3 Overage Charges
If actual usage of the Cloud Service during the measurement period exceeds the entitlement specified in
the PoE, an overage charge will be billed at the rate specified in the Transaction Document in the month
following such overage.

4.4 Pay per Use Charges
A pay per use charge will be billed at the rate specified in the Transaction Document in the month
following such use.

4.5 Billing Frequency
Based on selected billing frequency, IBM will invoice Client the charges due at the beginning of the billing
frequency term, except for overage and usage type of charges which will be invoiced in arrears.

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.

6. Additional Terms

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

Client may not use Cloud Services, alone or in combination with other services or products, in support of
any of the following high risk activities: design, construction, control, or maintenance of nuclear facilities,
mass transit systems, air traffic control systems, automotive control systems, weapons systems, or
aircraft navigation or communications, or any other activity where [program] failure could give rise to a
material threat of death or serious personal injury.

6.2 Client Administration Responsibilities
Clients are responsible for application administration, including but not limited to:

- Coordination and communication to end users
- User and project administration
- Problem identification and collaboration to resolution
- User testing when a fix, requested configuration change, or upgrade has been delivered.
- Work Item, work flow & report configuration

6.3 Upgrades and Patches

Upgrades and Patches are normally executed within a scheduled maintenance window, on the third Friday of each Month. The Cloud Service provides proactive customer communications about planned maintenance and outages. Upgrades typically occur within 60 days of the generally available version of the on premise offering. The third Friday of each month should be planned as a maintenance window for applying patches or iFixes for each Professional tier Client. The Cloud Service will be brought down at 7 P.M., and brought back up by 9 P.M of the data center time zone.