Prerequisite

To use the FUJITSU Cloud Service K5 - CF Service, the Customer must download the CF commands^{*1} and in compliance with the instructions provided, install them.

1. CF Service Overview

Fujitsu provides the following services as the CF Service using Cloud Foundry, an open source platform.

- (1) CF Basic Service
 - i Application Execution Environment

This Service provides an environment which enables the Customer's applications to be deployed and executed on this CF Service. It is also possible to specify in the environment the amount of memory to be allocated for execution of the applications deployed by the Customer (hereinafter "Applications"). If the amount of memory is not specified by the Customer, then a default value of 1GB will be allocated to the memory for Applications.

- ii Service Link This Service provides, through use of the CF commands, a function which creates instances^{*2} for services such as the relational database, and enables such instances to be called out from the Applications.
- iii Scaling and Load Balancer Instances of the Applications can be increased or decreased manually. Requests sent to Applications are automatically distributed to instances as the number of instances increases or decreases.
- Health Monitoring and Auto-Recovery This Service monitors the status of Applications, and automatically recovers instances of Applications when they end abnormally.

(2) Buildpack

- i This Service provides a function that deploys within the Application Execution Environment a build pack which includes the framework and runtime as required for the operation of Applications.
- ii Attachment Table 1 shows the buildpack types that can be deployed.

(3) Relational Database

i This Service provides a relational database based upon PostgreSQL as the database engine. The Customer can use one of the plans of relational database sets from the following table:

	Details
Plan	Small
Number of virtual CPUs (vCPUs)	1
Allocated memory (GB)	4
Capacity of object storage (GB)	20
Applicable database engine	PostgreSQL

(4) Logging and Monitoring

Logs output from Applications can be saved and viewed by the Customer using one of the following plans:

	Details		
Plan	L1 (light)	M1 (medium)	
Log storage size (GB)	10	50	
Data storage	1 location	2 locations (by replication)	

ii Creation of Custom Meter^{*3}, and collecting and viewing Sample^{*4} The Customer can create a Custom Meter, and collect and view the Sample. This enables the Customer to monitor the conditions of Applications for any item.

(5) CF Dashboard

i This Service provides an operation window for management of the Applications.

ii This Service provides a function for management of the status of the Organization^{*5}, Space^{*6} and other items of the CF environment as follows:

Item		Details	
Organization	Summary	Display usage status (amount of allocated memory for the Organization and each Space), Display and/or modify the quota (upper limits of the number of the memory size or the service instances that can be used in the Application Execution Environment) for the Organization	
	Space	Display a list of space	
	User (* ⁷)	Granting of user privileges in the Organization *One of the following user privileges can be selected and granted:	

Saving and Viewing of logs

	View of Logging and Monitoring(M1 (medium) only)	 Org Manager Billing Manager Org Auditor Retrieve/view logs Check the log storage size Check the Custom Meter and the Sample
Space	Summary	Display the usage status (amount of allocated memory for the Space)
	Application	Display the Application list (including the activation status) and activate and deactivate Applications
	User	 Granting of user privileges in the Space *One of the following user privileges can be selected and granted: Space Manager Space Developer Space Auditor
	View of Logging and Monitoring (M1 (medium) only)	 Retrieve/view logs Check the log storage size Check the Custom Meter and the Sample
Other	-	Display the download page for the CF command Display the download page for the sample applications Display the documentation

2. Restrictions and notes

- (1) Refer to the following web site for the client environment under which the Customer can use this CF Service: <u>https://cf-docs.jp-east-1.paas.cloud.global.fujitsu.com/en/manual/index.html</u>
- (2) Documentation > Introduction > General information > Web browserIt is not possible to restrict external access to the Application Execution Environment provided by this CF Service, and the Applications will remain exposed to the Internet. The Customer is solely responsible for the security of the Applications.
- (3) This CF service is available in following regions:
 - Eastern Japan Region 1
 - UK Region 1
 - Finland Region 1
 - Germany Region 1
 - Spain Region 1
- (4) No more logs can be stored beyond the log storage size. The Customer is solely responsible for deleting logs regularly and for managing the output frequency of logs by the Applications and the duration of log storage.
- (5) When an error occurs at a log service instance, stored logs cannot be viewed. The Customer is solely responsible for backing up logs as necessary.

Footnotes:

- *1 The CF commands can be downloaded from the following website: <u>https://github.com/cloudfoundry/cli/releases</u>
- *2 "Instance" is a unit used when virtually executing the services such as the Applications and relational database on a K5 resource.
- *3 "Custom Meter" is a monitoring parameter which the Customer can arbitrarily set.
- *4 "Sample" is data collected by Custom Meter.
- *5 "Organization" is a unit of this CF Service for management. One Organization is assigned per a contract number.
- *6 "Space" is a unit of this CF Service for management. A space manages Application instances and service instances. Only Users with privileges to a certain space can access that space.
- *7 "User" is a person who uses functions or manages resources provided by this CF Service.

Attachment Table 1 - Buildpack Types (1) Buildpack Types

The Customer can deploy the buildpacks listed in the following table by the method described:

Puildpook	Deployment method	
Buildpack	Catalog view	CF commands
Java (GlassFish 4.1 Web Profile / Java SE 8)	Yes	Yes
Java (Tomcat / OpenJDK)	N/A	Yes
Go	Yes	Yes
Node.js	Yes	Yes
PHP	Yes	Yes
Python	Yes	Yes
Ruby	Yes	Yes
Staticfile	Yes	Yes

The following website lists the versions of buildpacks that are supported, and only listed versions of buildpacks can be deployed on this CF Service. The Customer must use the CF commands to deploy the versions that are not noted as being the latest in the list.

https://cf-docs.jp-east-1.paas.cloud.global.fujitsu.com/en/manual/release/basic.html

Supplementary Provision (July 31, 2016) The present Service Description is effective from July 31, 2016.

Supplementary Provision (August 19, 2016) The present Service Description is effective from August 19, 2016.

- Supplementary Provision (November 18, 2016) The present Service Description is effective from November 18, 2016.
- Supplementary Provision (December 19, 2016) The present Service Description is effective from December 19, 2016.
- Supplementary Provision (January 27, 2017) The present Service Description is effective from January 27, 2017.
- Supplementary Provision (March 23, 2017) The present Service Description is effective from March 23, 2017.
- Supplementary Provision (May 8, 2017) The present Service Description is effective from May 8, 2017.