

FUJITSU Cloud Service K5 COLMINA Platform Service Description

January 26, 2018

1. Service Overview

Fujitsu provides the following services.

(1) Basic Service

This Service enables the Customer's factory data to be received, stored, and used.

I. Data Receive

The Customer can receive CSV files sent via a Web API.

Also, the Customer can assign a receive data number to each receive unit, and record the receive results in the data arrival record table.

II. Data Store

The Customer can convert CSV files received as described in I. above to RDB format, and store them as sequential performance data in the data store area.

III. Authentication Function

The Customer can identify the End User by its user name and password, and authenticate it.

IV. COLMINA Portal

The Customer can operate as follows:

- Setting of End User (add/change/delete)
- Data Receive Status Check
- Service Usage Status Check (disk usage amount)
- Calling Data Visualization Applications

V. Usage Status Check

The Customer can check the usage status of this Service (a list of visualized factories) via the Help Desk^(*).

(2) Data Visualization

The Customer can visualize data received and stored by using Data Visualization "powered by Intelligent Dashboard^(*)".

I. Visualization

The Customer can display data stored as described in (1) II. above layer by layer in graph form on the dashboard screen.

Also, the Customer can import its images and graphics and display them on the dashboard screen.

- examples of layer type: country, region, factory/production line/machine
- examples of graph type: by time period, by year, by month, by day

II. Alarm Display

The Customer can display alarm information on the dashboard screen based on the data threshold pre-set by the Customer.

III. Master Maintenance

i. Screen Design Configuration

The Customer can configure contents (templates, graphs, alarm threshold, screen transition layers, etc.) to be displayed on the dashboard screen and register graphics.

ii. End User Authority Management

The Customer can manage functions and permissions that can be assigned to each End User.

iii. Sequential Performance Data Output

The Customer can download stored data as a CSV file.

2. Restrictions and Notes

(1) About Basic Service

- I. The following table lists the restrictions that apply to Data Receive:

Overview	Description
Amount of Data per Communication	517 Kbytes per 1,000 records
Send Interval	Once per minute
Maximum Number of Columns in a CSV File	15
Maximum Size of a Record in a CSV File	529 bytes (Average: 75 bytes)

Note: The Customer may fail to receive data correctly if any of above restrictions is applicable.

II. The following table lists the notes that apply to data formats:

Overview	Description
Character Encoding used in this Service	UTF-8
Linefeed Code used in this Service	LF
CSV Layout used in this Service	Comma-Separated Data Fields with Values enclosed in double quotation marks (example: "value", "value")
Date Format in this Service	Notation: YYYY-MM-DD hh:mm:ss.SSS (example: 2017-05-25 20:42:36.123)

- III. If data is registered with the same key items (time, data type, data elements, etc.) in storing, it will be overwritten with the information that is registered later.
- IV. The transfer protocol in this Service is HTTPS, and the method is POST.
- V. In the case of the excessive usage that could cause serious damage to the operation of this Service or the usage that regularly exceeds the restrictions that apply to data receive, the access to this Service may be rejected.
- VI. The Customer may apply for the addition of a disk usage amount under this Service. If Fujitsu consents to said application, Fujitsu will separately notify the Customer of the work date for said addition. Once said addition has been completed, Fujitsu will notify the Customer of the use start date for said addition, and the addition will take effect on said use start date. Note that when the Customer applies for the addition of a disk usage amount, the Customer shall cease using this Service by the work date for said addition to be separately notified by Fujitsu, and the Customer cannot use this Service on said work date.
- VII. The Customer shall be solely responsible for data received and stored while using this Service.

The Customer hereby gives Fujitsu its consent to Fujitsu's use data collected in the "Location of Information Collection" listed below, in order to improve service quality, improve functionality, and collect and disclose statistics from the data. In any event, Fujitsu will not use the Customer's actual resource data without the Customer's permission.

Location of Information Collection	Target Data
Servers or Communications Devices	<ul style="list-style-type: none"> • Communication Information (time, access count, traffic) • Server Performance Information (load, resource usage) • Server System Logs • Logs of Applications and Middleware that make up this Service

- VIII. If the Customer uses, or provides to Fujitsu, personal information or personal data under this Service, the Customer shall necessarily give mandatory notification to the subject of said personal information or said personal data, or shall obtain mandatory consent from said subject. The Customer hereby represents and warrants that personal information or personal data provided to Fujitsu, and the use of said personal information or personal data by Fujitsu, shall neither violate any applicable laws, rules or regulations of any country nor prejudice any rights of any third party.
- IX. If data suspected of containing a virus is detected in the Fujitsu Environment, the data used by the Customer in this Service may be deleted without notice to the Customer in order to protect the Fujitsu Environment.
- X. Fujitsu will not recover data registered or created in this Service. It is the Customer's responsibility to take backups of, recover or recreate said data.
- XI. Data used in this Service shall be prepared by the Customer in CSV format (the format mandatory for this Service) and shall be sent to the URL designated in this Service.
- XII. In addition to the present Service Description, the detailed service description at the following URL sets forth

the license terms and conditions applicable to open source and other software to be separately identified by Fujitsu as part of this Service. If the license terms and conditions set forth in said detailed service description are contrary to the provisions of the present Service Description, the license terms and conditions set forth in said detailed service description shall prevail.

<https://k5-doc.jp-east-1.paas.cloud.global.fujitsu.com/doc/en/colminapf/document/manual/servicedetails.pdf>

(2) About Data Visualization

I. Refer to the following URL for details of client environments that can access this Service.

<https://k5-doc.jp-east-1.paas.cloud.global.fujitsu.com/doc/en/colminapf/document/manual/requirements.pdf>

II. The Customer can add the languages to be displayed on the dashboard screen. Other than Japanese, a total of five (5) languages can be added.

III. The Customer shall prepare the graphic images to be displayed on the dashboard screen. These include images of the factory, production line and machinery, as well as alerts and icons.

IV. In the Master Maintenance, the linefeed code for uploading and downloading CSV files is CRLF. Note that the CSV files that can be uploaded is only those of the definition information used for screen design configuration.

V. In the Master Maintenance, the maximum number of records when using a CSV file to download stored data is 50,000. If the number of records to be downloaded exceeds this limit, the Customer shall divide the records into several instances, for example, by reducing the target time selected in downloading.

VI. Regardless of the disk usage amount, the maximum number of sequential performance data items that can be stored is 80,000,000.

(3) This Service is available in following regions:

- Eastern Japan Region 2

Footnotes:

*1. Contact the Help Desk to confirm usage status.

*2. Intelligent Dashboard means the solution offered by Fujitsu to assist the overall optimization leading to the resolution of problems in the manufacturing industry and IoT-based visualization of entire factory operations.

Supplementary Provision (January 26, 2018)

The present Service Description is effective from January 26, 2018.