

Brekeke Contact Analytics

Version 2.5

Administrator's Guide

Brekeke Software, Inc.

Version

Brekeke Contact Analytics v2.5 Administrator's Guide

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1. Introduction

Brekeke Contact Analytics (CA) is a software that offers information management tools for the call center built with Brekeke Customer Interaction Manager (CIM). Brekeke CA provides the following functionalities:

CDR Server	CDR Server analyzes logs from Brekeke CIM in real time and converts logs to the high-density information called CDR (Call Detail Record), and stores CDRs into the database.
Real-Time Report	Provides a real-time status and daily record summary of DNIS, ACD and agents.
Historical Report	Reports a summary of historical data of DNIS, ACD, agent in two types of output format: Scheduled Report and Quick Report.
Call History	Searches through call histories of agents and displays details and playbacks call audio files. <i>✓ In order to playback call audio files, CA must be integrated with Brekeke RFS.</i>
Agent Map	Graphically displays current status of agents in real time with the layout map format.

2. Installation

2.1. System & Software Requirements

Followings are the pre-installation requirements for Brekeke Contact Analytics:

CPU	1 GHz minimum (Multi-core Processor Recommended)
Memory	2 GB minimum
OS	Microsoft Windows 2000/XP/2003/Vista, Red Hat Linux
Java	JDK 6/JRE 6 or later (Java by Oracle Recommended)
Apache Tomcat	Version 6.0.20 or later (Version 7 is unsupported)
Database	MySQL 5.1 or later
Brekeke CIM	Version 2.5.0.0 or later

2.2. Installation

2.2.1. Installing Brekeke Customer Interaction Manager

Install Brekeke CIM following the instruction in Brekeke Customer Interaction Manager v2 Administrator's Guide. Brekeke CA and Brekeke CIM are installed on a separate machine normally, however, they can be installed on the same machine.

2.2.2. Installing Java SE

- 1) Install JDK or JRE.

✓ *When Brekeke CA and Brekeke CIM are installed on the same machine, this step is not necessary.*

2.2.3. Installing Tomcat

- 1) Access Apache Tomcat website(<http://tomcat.apache.org/index.html>) and download the appropriate version of Tomcat for your environment.
- 2) Set the environment variable JAVA_HOME to the path where you installed JDK or JRE.
- 3) Install downloaded Apache Tomcat

✓ *We recommend adding liveDeploy="false" to <Tom Cat Install Destination directory>/conf/server.xml file to avoid causing unnecessary errors.*

```
<Host name="localhost" appBase="webapps"
      unpackWARs="true" autoDeploy="true" liveDeploy="false"
      xmlValidation="false" xmlNamespaceAware="false">
```

✓ *When Brekeke CA and Brekeke CIM are installed on the same machine, this step is not necessary.*

2.2.4. Installing Database

- 1) Install database. Please refer to the instruction manual provided by the manufacture for instruction on how to install the database.

2.2.5. Installing Brekeke Contact Analytics

- 1) Place ca.war file to “webapps” directory found in the Tomcat Install directory.

2.2.6. Starting Tomcat

- 1) Start Tomcat.
- 2) Open a web browser and specify the URL <http://localhost:8080> (If you chose a port number other than the default “8080”, specify the appropriate port number in the URL.)
- 3) Tomcat has been started successfully if the Apache Jakarta Project page is displayed.

2.2.7. Confirming the access to Brekeke Contact Analytics

- 1) Open a web browser and point to <http://localhost:8080/ca/> and verify you can access to Admin page (If you chose a port number other than the default “8080”, specify the appropriate port number in the URL).
- 2) In order to perform the initial system configuration, [Database] page will be displayed.

2.2.8. Configuring Brekeke CIM

If Brekeke CIM and Brekeke CA are installed on a different domain, the integration is restricted due to the Same-Origin policy. Therefore, it is required to set Access-Control-Allow-Origin in Brekeke CIM in advance. Please refer to Brekeke Customer Interaction Manager Administrator's Guide for how to configure this setting.

2.3. Initialization**3 Initializing Database for configurations**

- 1) Initialize the database settings from [Initialize Database] page. Please refer to Settings > Database.
- 2) When the initialization is completed, you will proceed to [Database] page.
- 3) When the settings are saved, it will prompt you, “Database settings have been modified. You will be logged off. Would you like to continue?” and you will be able to access [Register to CIM] page.

4 Registration to CIM

- 1) Complete the registration to the running Brekeke CIM from [Register to CIM] page. Please refer to Settings > CIM.
- 2) After the registration successfully completes, you will proceed to [Login] page.

2.3.1. Setting Tenant Name (Single-Tenant version)

- 1) Specify the tenant ID that has already been specified in Brekeke CIM to [Tenant Name] field.
- 2) When the setting is saved, it will prompt you, "Tenant settings have been modified. You will be logged off. Would you like to continue?" and you will proceed to [Login] page.

2.3.2. Configuring Brekeke Contact Analytics

- 1) Login to Brekeke CA with an administrator's account. (After the initialization, login with User ID: sa, Password: sa)
- 2) Configure CDR Server
Because CDR server is the core functionality of CA, CDR server configuration must be completed in order to run CA. Configure from the menu [Settings] > [CDR Server] (Please refer to "Settings > CDR Server").
- 3) CDR Server is automatically restarted when the CDR Server settings are modified.
CA is working successfully if "Starting" or "Running" displays in the CDR Server Status section located at the lower left corner of the page.
- 4) CDR Server analyzes the unprocessed logs and recompiles real-time status at startup.
While running these startup tasks, the CDR server status will show "Starting" and some pages such as the real-time status does not display correctly. Depending on the number of unprocessed logs, CDR Server startup process could take from several minutes to several tens of hours.
- 5) If necessary, configure Real-time Report or Historical Report settings.
Use the menu [Real-time] > [Settings], [Historical] > [Settings] respectively to open the configuration page. For more details, please refer to "Settings".

2.4. Integration with Brekeke Recording File Server

By setting up the integration with Brekeke Recording File Server (RFS), you will be able to play a call audio file from Call History page.

2.4.1. Installing Brekeke Recording File Server

Install Brekeke Recording File Server.

Please refer to the documentation attached to RFS for how to install RFS. Brekeke CA and RFS are normally installed on a separate machine, however, they can be installed on the same machine.

2.4.2. Configuring RFS in Brekeke Contact Analytics

- 1) Login to Brekeke CA with an administrator's account.
- 2) Configure Call History Functionality.

Use the menu [Settings] > [RFS] to configure Recording File Server settings. Please refer to "Settings > RFS".

After applying the settings, the changes are immediately reflected to the application.

3. Maintenance

3.1. Version Updates

Follow the steps below to update Brekeke CIM to a newer version.

- 1) Stop Tomcat.
- 2) Create a copy of ca.war and ca directory located under TOMCAT_HOME/webapps into backup folder. (Do not place the backup directories directly under the webapps directory.)
- 3) Place the new version of ca.war under TOMCAT_HOME/webapps directory and unzip the contents to TOMCAT_HOME/webapps/ca directory. war file can be extracted using an unzip tool.
- 4) Restore the application settings and user data.
Rename the conf and work directories under ca/WEB-INF that you unzipped in step3 and copy the older versions of config and work directories from the backup folder.
- 5) Restart Tomcat and confirm the version has been updated.
- 6) If Tomcat cannot be started successfully, repeat step3 and start Tomcat and manually reconfigure initial settings from CA System settings page.

3.2. Uninstallation

Stop Tomcat and remove war file (e.g., ca.war) and the directory with same name without the extension from webapps directory. For uninstalling other applications and database, please follow the uninstall instructions provided from each vendor.

3.3. Rebuilding CDR

When your CDR(Call Detail Record) gets corrupted or lost due to, for example, a defect from the database, CDRs can be rebuilt using Brekeke CIM logs if they still exist.

- 1) Stop CDR Server.
- 2) If necessary, delete database records for CA (Note: when CDR is rebuilt, the CDR saved on the CA database that has already been analyzed will not be overwritten).
- 3) Please execute the following SQL command on the database for CA by using the console for example:

```
UPDATE cdr SET call_gid=0, call_time=0, state_gid=0, state_time=0, year=<n> WHERE  
tenant_name = '<s>';
```

Note: Please replace <n> with the starting year of the analysis and <s> with the target tenant name.

- 4) Start CDR Server.
CDR server status will show "Starting" and it starts the analysis of CIM logs. Depending

on the number of unprocessed logs, CDR Server startup process could take from several minutes to several tens of hours.

4. Administrator Menu (Multi-Tenant Edition)

These menus appear only when logged in as a system administrator in Brekeke CA Multi-Tenant Edition.

4.1. Tenant

4.1.1. Tenant list

Displays Tenant list. When creating a new tenant that should be managed in Brekeke CA, specify the tenant ID that has been created in Brekeke CIM.

4.2. Logs

4.2.1. Error Log List

Similar page exists in the main menu, however, here it displays errors for the overall system. For more details, please refer to Main Menu > Logs.

4.3. Settings

4.3.1. System

Name	Description
General	
Log Expires (days)	Specify in days for how long the logs should be kept.
User	Specify a user name for CA Administrator. This account is for CA only and it is used to login in the event of a failure or during initialization. Normally, when integrated with CIM, login to CA with the CIM account.
Password	Specify password for the CA Administrator user.

4.3.2. CDR Server

Similar page exists in the main menu for tenant, however, here it configures the default CDR Server settings. This CDR Server settings from this page is applied to a newly added tenant. For more details, please refer to Main Menu > Settings > CDR Server section in this document.

4.3.3. RFS

Similar page exists in the main menu for tenant, however, here it configures the default integration settings. This setting will be applied if not configured in the main menu for tenant.

For more details, please refer to Main Menu > Settings > RFS section in this document.

4.3.4. Security

Similar page exists in the main menu for tenant, however, here it configures the security settings for the overall system and it is applied to all tenants.

For more details, please refer to Main Menu > Settings > Security section in this document.

4.3.5. Others

Other Settings tab menus are the same as Brekeke CA Single-Tenant Edition.

For more details, please refer to “Main Menu” section in this document.

5. Main Menu(Single-Tenant Edition)

5.1. Real-Time Report

Reports real-time status of calls and agents and configures basic settings and display fields.
For more details, please refer to [Real-Time Report].

5.2. Historical Report

Summarizes operational information of calls and agents in the past and configures common settings and maintenance. For more details, please refer to [Historical Report].

5.3. Agent Map

Displays real-time status of agents and configures agent map management and access control.
For more details, please refer to [Agent Map].

5.4. Call History

Searches through call histories of agents, playbacks call audio files and displays the call details. For more details, please refer to [Call History].

5.5. Logs

5.5.1. Error Logs

Displays error logs. You can filter the logs by date.

Name	Description
Event Time	The date and time when error occurred.
Error Code	Type of error
Memo	Display error details by clicking on names

✓ With Brekeke CIM Multi-Tenant Edition, access this information from [Administrator Menu > Logs].

5.6. Settings

5.6.1. System

Configure System options:

Name	Description
General	
Tenant Name	Displays tenant name for CA
Description	Specify description for the tenant.
Log Expires (days)	Specify in days for how long logs should be kept.

User	Specify a user name for CA Administrator. This account is for CA only and it is used to login in the event of a failure or during initialization. Normally, when integrated with CIM, login to CA with CIM account.
Password	Specify password for the CA Administrator user.

✓ In Brekeke CA Multi-Tenant Edition, [Log expires (days)], [User], [Password] can be configured in [Administrator Menu > Settings]

5.6.2. CDR Server

Configure CDR Server settings.

After applying the setting, the changes are immediately reflected to the application except the Daily Report setting, which will be updated after CDR Server is rebooted.

Name	Description
Settings	
External Number	Specify External Number using regular expression. [Example 1: ^[0-9]{6,25}\$] [Example 2: ^[0-9]{7,25}\$ ^999.+\$]
IVR	Specify IVR number using regular expression. This value is used to determine to make decision to cut calls during the IVR conversation. [Example 1: ^ivr.+\$] [例 2: ^0001\$ ^0002\$]
Exclusion Number	Specify number to exclude in CA using regular expression. Sessions that meet this criteria are excluded from the analysis process on the CDR Server. [Example1: ^vm.+\$] [Example 2: ^0000\$ ^9[0-9]{3}\$]
CDR Expires (day)	Specify in days how long CDR should be kept. Please specify an integer value greater than or equal to 1. CDRs beyond this expiration value are automatically deleted from the database.
CDR Processing Data Expires (Hour):	Specify in hours how long CDR processing data should be kept. Please specify an integer value greater than or equal to 1. For example, if CIM logs are lost, the data, whose analysis process has not been completed, will be abandoned beyond this expiration value.
CIM Log Processing	Specify a CIM Log processing interval in milliseconds (sec).

Interval (msec)	<p>Please specify an integer value greater than or equal to 1.</p> <p>The higher this number, the load on the system will be reduced however, at the same time, the number of log processing capacity is reduced. If the number of logs being created exceeds the processing capability, there may be a delay in the real-time information. Thus please set the appropriate value depending on the number of calls and the processing capability of the server.</p>
Time Table Interval (min)	<p>Specify a Time Table interval that holds Daily Summary values in minutes(min).</p> <p>Specify one integer from: 60,30,20,15,10,5,3,2, 1</p> <p>CDR Server creates time tables based on this setting value at startup and each table holds the Daily Record Summary values.</p> <p>The smaller the time interval, the finer the details of Daily Record Summary values will be, however at the same time it consumes more system resources.</p>
Daily Record Summary Settings	
Start Time	<p>Specify a time period to summarize the records for the Daily record Summary. If the Start Time and End Time is the same, the time period used for Daily Record Summary will be "Start Time" to "End Time extending until next day".</p>
End Time	
Short Call Reference Value (msec)	<p>Specify the reference value in milliseconds for the call to be identified as a short call.</p> <p>Please specify an integer value greater than or equal to 0.</p> <p>After connecting to DNIS, the call that has been disconnected withing this setting value will be identified as a short call, determined as invalid and excluded from the summary.</p> <p>When this value is set to 0, it does not perform the short call judgement.</p>
Service Level Reference Value (msec)	<p>Specify the reference value in milliseconds for the call to be identified if it met your preferred Service Level.</p> <p>Please specify an integer value greater than or equal to 1.</p> <p>After being connected to DNIS, if the call reaches to an agent within this setting value, it will be identified as it met the service level.</p>

5.6.3. Database

Configure database connection settings for CDR Server. CDRs are stored in the database specified on this page.

If database was initialized on the Database Initialization page, each field has already been configured to the appropriate values automatically.

Name	Description
Database Settings	
Driver Class	Specify the class name of the JDBC driver being used. [Example: com.mysql.jdbc.Driver]
URL	Specify the URL of database being connected from JDBC. [Example: jdbc:mysql://127.0.0.1:3306/ca?useUnicode=true&characterEncoding=UTF-8]
User	Specify a user name being used by JDBC connection
Password	Specify password being used by JDBC connection

5.6.4. Initializing Database

Name	Description
Database Server	
IP Address	Specify the IP Address of the database server
Port	Specify the port number of the database server (default: 3306)
Database	
Database Name	Specify a database name that is being created/initialized.
User Name	Specify the User ID that is being created to access to the database.
User Password	Specify password for the user being created.
Database Administrator	
Administrator Name	Specify the ID of database administrator for the database.
Administrator Password	Specify the password of database administrator for the database.

5.6.5. CIM

Name	Description
Registration to CIM	
CIM URL	Specify CIM URL that is being integrated in the format below:

	http:// <address>:<port>/cim
--	------------------------------

5.6.6. RFS

Configure integrations with Brekeke Recording File Server.

After applying the settings, the changes are immediately reflected to the application.

The settings for RFS is not required, if the settings are invalid, the application works without integrating with RFS.

Name	Description
General	
Integrate with Recording File Server	Specify if you would like to integrate with Recording File Server.
Recording File Server Settings	
Recording File Server URL	Select the Brekeke RFS you wish to integrate from the list of Brekeke RFS registered to Brekeke CIM. In that case, the JDBC settings below are automatically configured to appropriate value.
JDBC Driver Class	Specify the class name of the JDBC driver being used. [Example: com.mysql.jdbc.Driver]
JDBC URL	Specify the URL of the JDBC driver being used. [Example: jdbc:mysql://127.0.0.1:3306/rfs?useUnicode=true&characterEncoding=UTF-8]
JDBC User	Specify the user name being used by JDBC connection
JDBC Password	Specify the password being used by JDBC connection

5.6.7. Security

Configure access control for Brekeke CA.

Name	Description
IP Settings for Users	
Default	Configure the default setting for users to access to Brekeke CA. When [Allowed] is set, all the users are allowed to access to CA except those who are accessing from the forbidden IP addresses. If [Forbidden] is set, all the users except those who are accessing from the allowed IP addresses are forbidden to access to CA.

ForbiddenIP/AllowedIP	Specify forbidden and allowed IP Addresses.
-----------------------	---------------------------------------------

5.6.8. Advanced Options

By configuring the property values using this page, you are able to adjust the behavior of CA. These settings cannot be changed from application pages.

Property Name	Description
CDR Server Performance Properties	
web.lang	Specify display language. (Japanese:ja, English:en, Chinese:zh)
cdrserver.max.records <i>default:[1000]</i>	<p>Specify the maximum number of records read at a time by CDR Server.</p> <p>It allows you to adjust the number of records that can be processed in a block of time, combined with the CDR Server setting [CIM Log Processing Interval].</p> <p>For example, if you set “max.records=1000” and “CIM Log Processing Interval=250(ms)”, approximately 4000 records of logs are estimated to be readable per second.</p> <p>However, it takes a certain amount of time to perform the analysis process after the records are read, thus the actual number of records that can be processed is smaller than estimated.</p>
cdrserver.start.loop.sleep <i>default:[0]</i>	<p>Specify the interval in milliseconds for reading logs during the CDR server startup process.</p> <p>Normally, you do not add a weight, however, you will be able to reduce the load by adding a weight of a few milliseconds when the system load is high, for example during the server startup.</p> <p>The performance for startup process will be reduced in proportion to this setting value.</p>
cdrserver.record.sleep <i>default:[0]</i>	<p>Specify the interval in milliseconds for processing records during the CDR server log analysis process.</p> <p>Normally, you do not add a weight, however, you will be able</p>

	to reduce the load by adding a weight of a few milliseconds when the system load is high. The performance for log analysis process will be reduced in proportion to this setting value.
cdrserver.agent.refresh.interval	Specify the interval in minutes for updating agent information by the CDR server. (Unit: minute)
Supervisor(SV) Permission Properties	
sv.accessible.recfile.othergroup default:[false]	When set true, SV user is able to access to audio files of agents who are within his/her team.
sv.accessible.recfile.extension default:[false]	When set true, SV user is able to access to internal call audio files other than those with agents.
sv.accessible.historical.quick default:[false]	When set true, SV user is able to create Quick reports from the Historical Report.

5.7. Maintenance

You can stop or start CDR Server.

If you want to rerun the reports, for example after you modified the settings for Real-Time Report, the real time status can be rebuilt by restarting CDR Server.

Name	Description
Start Server	Start CDR Server that is being stopped. CDR Server status changes from "Starting up" > "Active"
Stop Server	Stop CDR Server that is starting up or running. CDR Server status will change to "Stopped"

6. Login Page

6.1. Overview

Enter a User ID and the password to login to Brekeke Contact Analytics.

Normally, when it is integrated with Brekeke CIM, you will login with the Brekeke CIM Administrator's account or Supervisor's account(SV).

When logged in as Administrator's account, you can access to all pages and functionalities can, however, when logged in as SV account, you are limited to Real-Time and Call History pages.

Please use CA Administrator account when you are not working with the integration with CIM, for example, when working with initialization of CA.

6.2. Access Control for Administrator and Supervisor

Pages		Administrator	Supervisor (SV)
CDR Server	Settings	✓	x
	Maintenance	✓	x
Real-Time Report	DNIS Report	✓	✓
	ACD Report	✓	✓
	Agent Report	✓	Group with permission only
	Settings	✓	x
Historical Report	Quick Report	✓	x
	Scheduled Report	✓	x
	Settings	✓	x
Call History	Search	✓	Group with permission only
	Settings	✓	x
Agent Map	Agent Map	✓	✓
	Map Management	✓	Only with create permission set
	System Management	✓	x

7. CDR Server

7.1. Overview

CDR server is the core functionality of CA, thus in order to run CA, CDR Server is essential.

CDR Server analyzes logs from Brekeke CIM in real time and stores the data to the database after converting to the high-density information called CDR (Call Detail Record). Stored CDRs are used from Historical Report and Call History.

Additionally, in parallel with the CDR conversion process, it accumulates the real-time call states, the agent states, and the daily record summary in a repository on the memory. These information is used for pages such as Real-Time Report page.

CDR Serve state is displayed in the status column located at the lower left corner of the page.

Following table describes each state.

State	Description
Stopped	This is a state where CDR Server is stopped. When given database connection settings are invalid, when there was a critical defects while it was active, or when the server is manually stopped, the state of CDR Server changes to Stopped. In this Stopped state, it is expected that pages do not display information correctly.
Starting up	This is a state where CDR Server is being started. During the startup, CDR Server analyzes the unprocessed logs and recompiles real-time status. While running these startup tasks, the CDR server status will show "Starting" and for example, some pages do not display correctly. Depending on the number of unprocessed logs, CDR Server startup process could take from several minutes to several tens of hours.
Active	This is a state where CDR Server is running with no problem. Status changes to "Active" after completing the startup process. In this state, the server will monitor and read CIM logs, convert them to CDRs, accumulate real-time status. It is required to keep CDR state to this Active state for all the features of CA to function properly.

Real-Time Report

7.2. Overview

Reports the real-time information and daily record summary of calls and agents in each category.

Following three category types exist in Real-Time Report:

種別	Description
DNIS Report	Reports Real-Time Info and Daily Record Summary for every DNIS.
ACD Report	Reports Real-Time Info and Daily Record Summary for every ACD.
Agent Report	Reports Real-Time Info and Daily Record Summary for every agent.

Real-Time Report Display fields are categorized into two, Real-Time Info and Daily Record Summary Information. Following describes the display fields and the descriptions:

Types	Description
Real-Time Info	Such as current number or current status. This type of information are not affected by the summary duration, this value changes in real time according to the state of the target.
Daily Record Summary	Such as sums and averages within the Daily Record Summary duration. Accumulates operational data that occurred during the Daily Record Summary duration, displays the mean value, total value and statistical value at the time of viewing. This value does not change outside of the summary duration. It resets at every start time for Daily Record Summary. The summary duration can be configured in Real-Time Report Settings page.

7.3. DNIS Report Page

7.3.1. Overview

Reports the real-time information and Daily Record Summary for every DNIS.

Calls started within the target time is subject to be included in the summary.

7.3.2. Display Name

Name	Type	Description
DNIS		DNIS
Number of Calls	Real-Time	Number of calls being connected to DNIS.
Connected Calls	Daily	Number of calls being connected without short calls.
Completed Calls	Daily	Out of all connected Calls, the number of calls being transferred to agent.
Dropped Calls in IVR	Daily	Out of all connected Calls, the number of calls dropped during the IVR conversation before it transferred to agent.
Dropped Calls	Daily	Out of all connected calls, the number of calls dropped before it transferred to agent. This does not include [Dropped Calls in IVR]
Short Calls	Daily	The number of calls dropped within a short period of time after connected to DNIS. Short calls excluded from the summary as it is considered invalid.
Call Volume	Daily	Amount of connections per unit time. The value is calculated by dividing the elapsed time from the daily summary start time by the total call connection time to DNIS.
Average Ring Time	Daily	Average amount of time it took to connect after the incoming call reached to DNIS.
Drop Rate	Daily	Out of all connected calls, the percentage of calls that have not been transferred to the agent. The value is calculated by dividing the sum of [Dropped Calls] and [Dropped Calls in IVR] by [Connected Calls]
Service Level Achievement Rate	Daily	Number of calls that competed the transfer to an agent within a set of time after connected to DNIS.

7.4. ACD Report Page

7.4.1. Overview

Reports the real-time information and Daily Record Summary for every ACD.

Calls started within the target time is subject to be included in the summary.

7.4.2. Display Name

Name	Type	Description
ACD		ACD
Calls in Process	Real-Time	Number of calls being distributed by ACD
Calls in Queue	Real-Time	Out of all [Calls in Process], the number of calls that are in queue.
Ringing Calls	Real-Time	Out of all [Calls in Process], the number of calls that are calling an agent.
Connected Calls	Real-Time	Number of calls that have been distributed that are being connected.
Processed Calls	Daily	Number of calls processed by ACD
Completed Calls	Daily	Out of all [Processed Calls], the number of calls that agent distribution process completed.
Dropped Calls	Daily	Out of all [Processed Calls], the number of calls that agent distribution process did not complete.
Queued Occurrences	Daily	Number of occurrences when the call was put on a queue during ACD process.
Call Volume	Daily	Amount of connections per unit time. The value is calculated by dividing the elapsed time from the daily report start time by the total connected time of completed calls.
Drop Rate	Daily	Out of all connected calls, the percentage of calls that have not been transferred to the agent. The value is calculated by dividing the sum of [Dropped Calls] and [Dropped Calls in IVR] by [Connected Calls]
Average Wait Time	Daily	Average waiting time for the calls in queue.
Average Ring Time	Daily	Average Ringing Time during the call distribution to agent.

Average Connected Time	Daily	Average Connected time of completed calls.
Max Wait Time	Daily	Maximum Waiting time for the calls in queue.
Max Ring Time	Daily	Maximum Ringing Time during the call distribution to agent.
Max Connected Time	Daily	Maximum Connected Time of completed calls.

7.5. Agent Report page

7.5.1. Overview

Reports the real-time information and Daily Record Summary for every agent.

Calls started and agents work details within the target time are subject to be included in the summary.

7.5.2. Action Name

Name	Description
Group Filter	Filter agents by group to display in the data grid.

7.5.3. Display Name

Name	種別	Description
Agent ID	Immediate	Agent ID
Agent Current Status	Immediate	Status of the agent.
State Duration	Immediate	Duration of the state of the agent.
Call Status	Immediate	Call status of the agent.
Incoming Calls	Daily	Incoming Calls received by the agent.
Connected Calls	Daily	Number of connections after receiving incoming calls.
Dropped Calls	Daily	Number of disconnections after receiving incoming calls.
On-Hold Occurrence	Daily	Number of times set on-hold for connected calls.
Connection Duration	Daily	Total connection time for connected calls.
On-Hold Duration	Daily	Total on-hold duration for connected calls.
Average Connected time	Daily	Average connection time for connected calls.
Average On-Hold time	Daily	Average On-Hold duration for connected calls.
Online	Daily	Number of times agent became Online.
Ready	Daily	Number of times agent status changed to "Ready".
Idle	Daily	Number of times agent status changed to "Idle".
Talking	Daily	Number of times agent status changed to "Talking".
Wrap Up	Daily	Number of times agent status changed to "Wrap Up".
Work	Daily	Number of times agent status changed to "Work".
Online Total	Daily	Total duration in which agent was "Online".
Ready Total	Daily	Total duration in which agent status was "Ready".
Idle Total	Daily	Total duration in which agent status was "Idle".

Talking Total	Daily	Total duration in which agent status was "Talking".
Wrap Up Total	Daily	Total duration in which agent status was "Wrap Up".
Work Total	Daily	Total duration in which agent status was "Work".
Online Average	Daily	Average Online duration of agent.
Ready Average	Daily	Average duration in which agent status was "Ready"
Idle Average	Daily	Average duration in which agent status was "Idle"
Talking Average	Daily	Average duration in which agent status was "Talking"
Wrap Up Average	Daily	Average duration in which agent status was "Wrap Up"
Work Average	Daily	Average duration in which agent status was "Work"
Online Max	Daily	Maximum Online duration of agent.
Ready Max	Daily	Maximum duration in which agent status was "Ready"
Idle Max	Daily	Maximum duration in which agent status was "Idle"
Talking Max	Daily	Maximum duration in which agent status was "Talking"
Wrap Up Max	Daily	Maximum duration in which agent status was "Wrap Up"
Work Max	Daily	Maximum duration in which agent status was "Work"

7.6. Settings page

7.6.1. Overview

Configure Real-Time report settings and display fields.

After applying the setting, the changes are immediately reflected to the application.

7.6.2. Common Settings

Name	Description
Display Filter	Specify display filter for Real-Time Report. If “Show only operational data” is selected, each data grid of Real-Time Report only shows DNIS, ACD and Agent information that are up and running on that day.
Refresh Interval (msec)	Specify the refresh interval in milliseconds for Real-Time Report data grid. Please specify an integer value greater than or equal to 1.

7.6.3. Queue Alert Settings

Configure the settings for queue alert functionality for ACD Report.

If the queue alert functionality is enabled, when the number of calls in queue exceeds the specified threshold, its corresponding ACD row will be highlighted in the warning color.

Name	Description
Threshold (Default)	Specify a default threshold value for the queue alert. This setting is applied to ACD whose threshold is not individually set. If this setting is null, the Queue Alert functionality will be disabled.
Threshold (ACD)	Specify a threshold value for each ACD for the queue alert. ACDs whose threshold is not individually set using this value, the default threshold value will be applied. If this setting is null, the Queue Alert functionality will be disabled.

7.6.4. Display Field Settings

Configure display fields and their display orders for DNIS Report, ACD Report, Agent Report.

The data grids for each report displays fields selected in “Display Fields” list box from top to bottom and left to right.

8. Historical Report

8.1. Overview

Reports historical summary data of calls and agents in each category.

Report results can be output in two types of formats, PDF or CSV.

The two report output formats are, Quick Report and Scheduled Report.

Output Format	Description
Quick Report	Specify a report type, format, date range and time range and it creates report. It can be executed at any time.
Scheduled Report	Creates daily, weekly and monthly reports following the Scheduled Report settings. It is executed automatically by the Report Server.

Descriptions and report types that can be created are as follows:

Types	Description
DNIS Report by DNIS	Summarize incoming call information per DNIS.
DNIS Report by Time Range	Summarize incoming call information per Time Range.
DNIS Report by DNIS & Time Range	Summarize incoming call information per DNIS & Time Range.
ACD Report by Agent	Summarizes ACD Operating information per Agent.
ACD Report by ACD	Summarizes ACD Operating information per ACD.
ACD Report by DNIS	Summarizes ACD Operating information per DNIS.
Agent Report by Agent	Summarizes Agent Operating details per Agent.
Agent Report by Group	Summarizes Agent Operating details per Group.

8.2. Quick Report page

8.2.1. Overview

Specify a report type, format, date range and time range and it creates report. It can be executed at any time.

8.2.2. Action Name

Name	Description
Date Range	Specify a date range for the report summary. CDRs for the date range specified will be included in the summary. If the start date and end date are set to the same value, the whole day of the specified date will be included.
Time Range	Specify a time range for the report summary. CDRs for the time range specified will be included in the summary. If the start time and end time are set to the same value, all day time range (24 hrs) of the specified date range will be included.
Report Type	Specify the report type to output. For more details on the report types, please refer to Historical Report Overview or each report type section.
Output Format	Specify the report file format to output. You can select from two types of formats, PDF or CSV.
Export Report	When this button is clicked, it starts generating the report. Depending on the report type and the number of CDRs that are targeted for the summary, report creation could take from several seconds to several tens of minutes. When report creation process completes, it will display file download dialog. Please save to a folder of your choice.

8.3. Scheduled Report page

8.3.1. Overview

Configure settings for daily, weekly and monthly report.

The report server follows the settings specified and creates reports automatically at the deadline date and time. Common settings such as output directory for scheduled report should be configured in Historical Report settings page.

8.3.2. Daily Report Settings

Name	Description
Daily Report Output	Specify whether you want to enable the daily reports. If it is set to Invalid, daily reports are not created.
Time Range	Specify a time range for daily reports. CDRs for the time range specified will be included in the summary. If the start time and end time are set to the same value, all day time range (24 hrs) of the specified date range will be included.
Output Report Type	Specify daily report types and file formats. The report types and formats that are being selected will be created.

8.3.3. Weekly Report Settings

Name	Description
Weekly Report Output	Specify whether you want to enable the weekly reports. If invalid, weekly reports are not created.
Time Range	Specify a time range for weekly reports. CDRs for the time range specified will be included in the summary. If the start time and end time are set to the same value, all week time range (24 hrs) of the specified date range will be included.
Deadline Day	Specify the deadline day of the week for weekly report. For example if Sunday is specified, weekly reports are created using the range of Monday through Sunday.
Output Report Type	Specify daily report types and file formats. The report types and formats that are being checked will be created.

8.3.4. Monthly Report Settings

Name	Description
Monthly Report Output	Specify whether you want to enable the monthly reports. If invalid, monthly reports are not created.
Time Range	Specify a time range for monthly reports. CDRs for the time range specified will be included in the summary. If the start time and end time are set to the same value, all day time range (24 hrs) of the specified month range will be included.
Deadline	Specify the deadline day for monthly report. For example if 20 th is specified, monthly reports are created using the range of 21 st of the previous month through 20 th of this month. If the last day of the month is specified, then for some months that do not reach to the day, it will automatically adjust the day of closing for the month. For example, if 31 st is specified, the report range for April, May and June will be: 4/1 - 4/30, 5/1 – 5/31, 6/1 – 6/30.
Output Report Type	Specify daily report types and file formats. The report types and formats that are being checked will be created.

8.4. Settings page

8.4.1. Overview

Configure common settings for Historical Reports and maintenance of the Report Server.

8.4.2. Settings

Name	Description
Short Call Reference Value (msec)	<p>Specify the reference value in milliseconds for the call to be identified as a short call.</p> <p>Please specify an integer value greater than or equal to 0.</p> <p>After connecting to DNIS, the call that has been disconnected withing this setting value will be identified as a short call, determined as invalid and excluded from the report.</p> <p>When this value is set to 0, it does not perform the short call judgement.</p>
Service Level Reference Value (msec)	<p>Specify the reference value in milliseconds for the call to be identified if it met your preferred Service Level.</p> <p>Please specify an integer value greater than or equal to 1.</p> <p>After connected to DNIS, if the call reaches to an agent within this setting value, it will be identified as it met the service level.</p>

8.4.3. Scheduled Report Directory Settings

Name	Description
Output Directory	<p>Specify the absolute path to the directory where you want to output the Scheduled Reports to be created.</p> <p>You need to create the directory in advance.</p>
Output Start Time Delay (sec)	<p>Specify the delay in seconds after the deadline for each report and before it starts creating report.</p> <p>Please specify an integer value greater than or equal to 1.</p> <p>By specifying the delay, you can have the output process run when it is idle and wait for the information confirmation of calls that went over the summary deadline to finish.</p>
Output Language	Specify the output language for Scheduled Report.

8.4.4. Report Server Settings

Name	Description
Start Server	Start Report Server.
Stop Server	Stop Report Server. While it's being stopped, all scheduled reports are not generated.

8.5. DNIS Report

8.5.1. Overview

Summarize historical call details by the DNIS categories.

All calls that started during the target duration and hours are included in the report.

8.5.2. Report Name

Name	Description
Connected Calls	Number of calls connected to DNIS
Short Calls	The number of calls dropped within a short period of time after connected to DNIS. Short calls excluded from the summary as it is considered invalid.
Dropped Calls	Out of all valid connected calls, the number of calls dropped before it was transferred to agent. This does not include [Dropped Calls in IVR]
Dropped Calls in IVR	Out of all valid connected Calls, the number of calls dropped during the IVR conversation before it transferred to an agent.
Completed Calls	Out of all valid connected Calls, the number of calls being assigned to an agent.
Total Ring Time	Total ring time of incoming calls to connect to DNIS.
Total Connected Time	Total connected time of all valid calls connected to DNIS.
Service Level Achievement Rate	Percentage of calls that competed the transfer to an agent within a set of time after connected to DNIS.

8.5.3. Report Types

Name	Description
DNIS Report	Summarize data per DNIS.
DNIS Report by Time Range	Summarize data every hour during the business hours. It is the sum of all DNIS.
DNIS Report by DNIS and Time Range	Summarize data, every hour during the business hours, grouping DNIS.

8.6. ACD Report

8.6.1. Overview

Summarizes historical call details by the ACD categories.

All calls that started during the target duration and hours are included in the report.

8.6.2. Report Columns

Columns	Description
Processed Calls	Number of calls processed by ACD
Completed Calls	Out of all [Processed Calls], the number of calls that agent distribution process completed.
Dropped Calls	Out of all [Processed Calls], the number of calls that agent distribution process did not complete.
Queued Occurrences	Number of occurrences when the call was put on a queue during ACD process.
Average Wait Time	Average waiting time for the calls in queue.
Calls Assigned to Agent	Number of times calls from distribution process were assigned to Agent.
Calls Connected to Agent	Number of times calls were connected to agent after calls were assigned to the agent.
Calls Put On-hold by Agent	Number of times agent put the call on hold after calls were connected to the agent.
Average Ring Time to Agent	Average ringing time after calls were assigned to agent.
Average Agent Talk Time	Average Agent talk time after calls were connected to agent.
Average Agent on-Hold Time	Average on-hold time after calls were connected to agent.

8.6.3. Summary Group

Name	Description
ACD Report by Agent	Group data by ACD and summarize per Agent
ACD Report by ACD	Summarize data per ACD.
ACD Report by DNIS	Group data by ACD and summarize per DNIS

8.7. Agent Report

8.7.1. Overview

Summarizes historical call details and agent information by Agent categories.

All calls that started and agent information during the target duration and hours are included in the report.

8.7.2. Report Name

Name	Description
Assigned	Number of occurrences when calls were assigned to Agent.
Connected	Number of occurrences when calls were connected after being assigned to an agent.
On Hold	Number of occurrences when calls were put on hold after being connected to an agent.
Ring Time	Total ring time after calls were assigned to Agent.
Talk Time	Total talk time after calls were connected to Agent.
Hold Time	Total hold time after calls were connected to Agent.
Online	Number of times agent became Online.
Ready	Number of times agent status changed to "Ready".
Idle	Number of times agent status changed to "Idle".
Talking	Number of times agent status changed to "Talking".
Wrap Up	Number of times agent status changed to "Wrap Up".
Work	Number of times agent status changed to "Work".
Online Total	Total duration in which agent was "Online".
Ready Total	Total duration in which agent status was "Ready".
Idle Total	Total duration in which agent status was "Idle".
Talking Total	Total duration in which agent status was "Talking".
Wrap Up Total	Total duration in which agent status was "Wrap Up".
Work Total	Total duration in which agent status was "Work".

8.7.3. Summary Group

Name	Description
Agent Report by Agent	Group data by agent group and summarize per agent
Agent Report by Group	Summarize data per agent group.

9. Call History

9.1. Overview

Search through call histories of agents, plays back call audio files and displays details. When logged in as a Supervisor(SV) account, you are limited to information that belong to the managed group(s).

In order to access call audios, you will need Brekeke RFS. For more details on Brekeke RFS, please refer to Brekeke RFS documentation.

9.2. Search page

9.2.1. Overview

Search call histories of agents with a specified set of filters, list search results and playback call audios.

All the search criteria are combined with AND.

9.2.2. Search Filters

Field	Description
Call Start Date	Filter by call start date. If only left value is filled, "on and after" search, if only right value is filled, "on and before" search.
Call Start Time	Filter by call start time. If the same value is given, it will not filter.
Type of Call	Filter by call type. You can specify a type from three options: "Incoming", "Outgoing", "Internal Line"
DNIS/ANI	Filter by incoming/outgoing number or external number. Partial matching is used.
ACD	Filter by ACD. Partial matching is used.
Agent ID	Filter by Agent ID. Partial matching is used.
Agent Name	Filter by Agent Name Partial matching is used.
Display Rows	Specify the number of rows of search results to display per page.
Sort	Specify the sorting of search results.

	Please specify the sort order and the field name to sort by.
--	--------------------------------------------------------------

9.2.3. Search Results Field

Field	Description
Call ID	Call ID. When clicked, its detail page displays.
Type of Call	Call Type. Three types of calls exist, "Incoming", "Outgoing", "Internal Line".
External Number	Customer's phone number
Group	Group that agent belongs to.
Agent	Agent ID and Name.
Start Date and Time	Date and time at which the call was started.
End Date and Time	Date and time at which the call ended.
Connected Time	Total time that the agent was connected to the call.
Connected Users	Number of PBX users who connected to the call.
Call Audio	Link to the call audio file. Link is displayed only if integrated with Brekeke RFS, if the call audio file exists, and if you have permission. Left click to play and you can download the file using right click menu.

9.3. Call Details page

9.3.1. Overview

Displays call information, PBX User information who connected to the call, session information.

9.3.2. Call Information

Name	Description
Call ID	Call ID
Type of Call	Call Type
Call Results	Call Results
DNIS/ANI	Incoming/outgoing Number or external number.
Start Date and Time	Date and time at which the call was initiated.
End Date and Time	Date and time at which the call ended.

Talk Time	Duration of the call.
Number of Sessions	Number of sessions in the call.

9.3.3. Connected User

Name	Description
Group	Group that user belongs to (Only displayed for an agent).
ID	User ID.
Name	User Name (Only displayed for an agent)
Connected Time	Total time that the user was connected to the call.
Total Hold Occurrences	Total number of occurrences when it was put on hold.
Total Hold Duration	Total duration when it was put on hold.
Call Audio	Link to the call audio file. Link is displayed only if integrated with Brekeke RFS, if the call audio file exists, and if you have permission.

9.3.4. Session Information

Name	Description
Session ID	Session ID
ACD	ACD. The value will be set to blank if the session does not pass through the ACD.
Client Type	Client Type. Examples are "Agent", "Customer", "IVR", "Internal Line".
Client Number	Client Number
Connection Result	Session connection result. "Connected" or "Unconnected"
Disconnected By	By whom the session was disconnected. If it is set to "PBX", the session was disconnected from PBX, if it is set to "Client", from the client.
Start Time	Date and time at which the session was started.
End Time	Date and time at which the session was ended.
Connected Time	Connected time after the session is connected and until it is disconnected.

Agent Map

9.4. Overview

Graphically displays the real-time status of agents with the layout map format.

Additionally, if integrated with CIM client, the SV features (such as monitor, tutor, join the call) can be called for an individual agent from the agent map.

9.5. Quick Start

9.5.1. Create Agent Map

- 1) Agent Map > Open [Map Management] tab.
- 2) Clicking on the [Create New Agent Map] button will display a dialog for the map name, please enter your map name and click [OK].
- 3) You will see the map name above in the [Existing Map List] list if created successfully.

9.5.2. Duplicate Agent Map

- 1) Agent Map > Open [Map Management] tab.
- 2) Select the map to be duplicated from the map list.
- 3) Clicking on the [Duplicate] button located on the right side of the map list will display a dialog for the map name, please enter your map name and click [OK].
- 4) You will see the map name above in the [Existing Map List] list if duplicated successfully.

9.5.3. Delete Agent Map

- 1) Agent Map > Open [Map Management] tab.
- 2) Select the map to be deleted from the map list
- 3) Click on the [Delete] button located on the right side of the map list.
- 4) The map name is successfully deleted if you no longer see the map from the map list.

9.5.4. Edit Agent Map

- 1) Agent Map > Open [Agent Map] tab.
- 2) Select the map you wish to edit from the map list and click the [Show] button.
The agent map (rectangular region) is displayed in the CA's page.
- 3) The edit mode begins when you right-click the map and select [Start Editing] from the right-click menu on the agent map.
- 4) To Edit Agent Map Properties:
Selecting [Properties] from the right-click menu on the agent map will display Map Properties dialog. Here you can change properties such as map size and background color.
- 5) To Place Agent Icon:
Selecting [Add Icon] from the right-click menu on the agent map will create a blank Agent Icon on the agent map. The icon can be placed in any position by dragging with the mouse.
If you would like to remove unwanted icons, right-click the icon and select [Delete] from the menu to delete the icon.
- 6) Assign Key to Agent Icon
Selecting [Properties] from the right-click menu on the agent icon will display Icon Properties dialog. Assign a key type and a key.
After applying, the setting is completed if you see the key on top of the icon.
- 7) Save Edits and move back to Normal Mode.
- 8) Selecting [Finish Editing] from the right-click menu on the agent map will display confirmation dialog to Save. Selecting [Yes] to set it back to normal mode.
- 9) Editing is completed. Real Time status is reflected on the agent map.

9.5.5. Use SV features on the agent map

- 1) Login with Administrator or Supervisor(SV) account using a browser toolbar.
- 2) From the same browser toolbar where you accessed as above, open a new browser and open the CA login page and login with Administrator or Supervisor(SV) account.
- 3) Open [Agent Map] > [Agent Map] tab, select a map to view.
- 4) Select a SV Feature from the right-click menu on the agent icon

9.6. Agent Map page

9.6.1. Overview

This is a main page for agent map functionality, where you can view and edit agent map.

Agent map page consists of the following areas:

Areas	Description
Map Selector	This area provides functionalities to switch agent map to be displayed in CA and to display the map in a separate window.
Agent Map	<p>This area displays the real time status of working agents in a layout map format.</p> <p>Agent Map has two modes, “Normal Mode” for using its functions and “Edit Mode” for changing map layout or placing icons. For both modes, various operations are performed through right-click menu using the mouse.</p> <p>Agent map can be displayed within CA or in a separate window.</p>

9.6.2. Map Selector

You are able to switch agent map to be displayed in CA and to display the map in a separate window.

Following table describes the display names and descriptions:

Name	Description
Map Name	Select an agent map to be displayed. The dropdown list contains all maps created by the logged in user or by other users that are set to viewable.
Display Format	Select a display format of Agent Map. Select from the dropdown list which contains "Standard", "New Window".
Show	Displays the agent map selected in the map name list. Behavior varies depending on the display format. 【If the "Standard" is selected】 Display the agent map selected in the map name list within CA. Multiple maps cannot be displayed at the same time if displayed within CA. 【If the "New Window" is selected】 Displays the agent map selected in the map name list in a separate new window. Multiple maps can be displayed at the same time in this case.

9.6.3. Agent Map(Normal Mode)

This is a mode to actually use the agent map functionality.

Real-Time agent status is displayed on each agent icon placed on the rectangular area.

If you are logged in as a SV user in CIM client, you are able to detect the help requests sent from the agents(agent icon flashes) and to call SV features(monitor, tutor, join the call) from click-menu on an Agent Icon.

In order to change map settings or edit layout, change the mode to “Edit Mode” through click-menu on the map.

Click Menu on the Map

Name	Description
Start Editing	Change displayed agent map to the Edit Mode. It is available only if the logged in user has permission to edit the map.
Details	Display agent map details in the dialog.

Click Menu on an Agent Icon

Name	Description
Silent Monitor	Join the agent's call on mute in the listen-only mode. This option can only be selected if you have logged on as a SV agent in the CIM client and plus if agent state is in 'Talking'.
Tutor	Join the agent's call in the tutor mode. This option can only be selected if you have logged on as a SV agent in the CIM client and plus if agent state is in 'Talking'.
Join the Call	Join the agent's call in the conference mode. This option can only be selected if you have logged on as a SV agent in the CIM client and plus if agent state is in 'Talking'.
Release Help	Release the help request notification(flash state) on agent icon.
Details	Display agent details in the dialog.

9.6.4. Agent Map(Edit Mode)

This is a mode to edit the agent map, such as changing properties of agent map or add, delete place or view properties of Agent Icons.

Agent Icon can be added from the click-menu on the map and placed by dragging to the desired location.

Newly added agent icons are considered as invalid in the normal mode since the key is not set. In order to make the agent icon valid, open its properties dialog through click-menu and link with a SIP client or with an agent.

Select [Finish Editing] from click-menu on the map to save the edits. Please note if you move to another page without saving your edits, your edits will be lost.

Click Menu on the Map

Name	Description
Add Icon	Add a new agent icon on the map. Icon that are added to the map can be moved freely by dragging.
Properties	Open Properties dialog of Agent Map. For more details on Properties, please refer to “Agent Map Properties” section.
Finish Editing	Switches the agent map being modified to normal mode. In the Save Confirmation dialog, select “Yes” to save the edits, “No” to discard changes.

Click Menu on the Agent Icon

Name	Description
Delete	Delete the agent icon that the click-menu is displayed from.
Properties	Open Properties dialog of Agent Icon that the click-menu is displayed from. For more details on Properties, please refer to “Agent Icon Properties” section.

9.6.5. Agent Map Properties

Open Properties dialog from the click-menu on the agent map to configure.

General Settings (Setting for Map Name or the appearance)

Name	Description
Map Name	Specify a Map Name.
Display Location	Specify the display location of map name on the map. Select from the dropdown list: "none", "left-top", "right-top", "left-bottom", "right-bottom". If "none", the map name will not be displayed.
Map Size(x, y)	Specify a frame size of map. Specify Width(x) and Height(y) in pixels.
Background Color	Specify a background for the map. Specify HTML color code using HEX value or color name. (Example: "darkgray", "#A9A9A9", "green", "#008000")
Background Image	Specify a background image for the map. Select from the dropdown list: "none", "<image file name>". Image file name can only be selected if the background image is uploaded for the map. If "none", the background image will not be displayed.
Upload Background Image	Upload a background image. Only one background image can be uploaded to one map. Therefore, the existing background image will be overwritten every time new image is uploaded.

Editor Settings (Settings related to the Edit mode)

Name	Description
Default Icon Type	Default icon type when adding new icon in the Edit mode. Icon types that can be selected vary depending on different versions, and the editions.
Icon Movement Interval (x, y)	Specify a movement interval in when you drag an agent icon in the Edit mode. Specify the amount of movement in pixels for horizontal(x) and vertical(y) directions. This is useful if you wish to place icons with a certain spacing in between.

Security Settings (Settings for the access level)

Name	Description
Security	Configure security of the map. Select “private” or “public” from the dropdown list. When “private” is selected, only map owner and administrators can access to the map. When “public” is selected, the map owner, administrators and SV user can access to the map.

9.6.6. Agent Icon Properties

Open Properties dialog from the click-menu on the agent icon to configure.

General Settings (Key Settings or Icon Type Settings)

Name	Description
Key Type	Specify the key type for linking the icon with an agent. Select “Phone-Id” or “Agent-Id” from the dropdown list. If it is set to “Phone-Id”, the key will be considered as Phone ID, if set to “Agent-Id”, the key will be considered as Agent ID to link with an agent.
Key	Specify a key string to be used for linking with an agent If it's blank, the icon will be considered as invalid in the Normal mode.
Icon Type	Icon Type for the map Determine the appearance such as the shape, display name and format. Icon types that can be selected vary depending on different versions,

	and the editions.
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9.7. Map Management page

9.7.1. Overview

Create a new agent map, duplicate or delete existing map.

This page can only be accessed if the logged on user has a permission to create a map. Administrators are always allowed but SV user is allowed only if the map creation permission is set to true in the agent map settings.

You can perform different functions depending on the logged-in user type.

Depending on the user type of the logged in user, you can perform different functionalities.

Details can be found below:

Page	Administrators	Supervisors
Create a new map	✓	✓
Duplicate your own map	✓	✓
Delete your own map	✓	✓
Duplicate other users' map	✓	Only viewable maps
Delete other users' map	✓	x

9.7.2. Creating a New Map

Create a new agent map.

After you click [Create New Agent Map] button, enter the map name and click OK. It will create a blank map.

The map name has to be unique on the CA. An error message will be displayed if the map with the same name already exists, please specify the name of the map that is different in that case.

After creating a new map, open the map from the agent map page to edit.

9.7.3. Duplicating Agent Map

Duplicate an agent map selected in the list.

Select the map you wish to duplicate and click the [Duplicate] button. Enter your map name and click OK. It will create a duplicate of the map selected.

9.7.4. Deleting Agent Map

Delete the agent map selected in the list.

Select the map you wish to delete and click the [Delete] button. The map will be deleted.

9.8. Settings page

9.8.1. Overview

Configure the access permission for agent map functionality.

Only administrator users can access to this page.

9.8.2. Basic Settings

Name	Description
SV User to Create Map	Configure permission for SV User to create a new map. Select "Allowed" or "Not Allowed" from the dropdown list. If "Not Allowed" is set, SV users cannot access to the Map Management page.
View Agent Info Outside of Managed Group	Configure permission to view agent information outside of your own managed group. Select "Allowed" or "Not Allowed" from the dropdown list. If "Not Allowed" is set, SV users cannot view agent information on the agent map for agents outside of his/her own manage group.