

AUTOMATIC CALL DISTRIBUTION

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AUTOMATIC CALL DISTRIBUTION

1 Overview

The Automatic Call Distribution (ACD) service of CS1000 can build up the stand-alone call center and support call center composed with the Computer Telephony Integration (CTI).

This manual contains the call center construction using ACD service provided by the CS1000 system and the call center management.

This manual covers the following topics:

- q Chapter 1. Overview describes signs and glossaries used in this manual and the ACD specifications.
- q Chapter 2. ACD Function describes the various functions provided by the ACD service in the CS1000 system.
- q Chapter 3. ACD Management describes how to set up and use the ACD management of ACD data generation program.
- q Appendix includes cases of provisioning ACD services and the related data generation method for the beginners in used of ACD services of the CS1000 system.

1.1 Signs

- q Menu: ACD Management-Split Data
- q Menu Item: Split Queue DN
- q DKTU Button: **TRANS/PGM** button
- q Reference: [Ref.1.1]

1.2 Glossaries

- q ACD (Automatic Call Distribution)
- q AGENT - Counselor
- q CCV (Call Control Vector) – ACD I/B call processing procedure
- q DN (Directory Number) – Number of a telephone concept
- q PILOT DN – ACD representative number
- q QUEUE – ACD I/B call queue. One queue is present per ACD group.
- q SPLIT – ACD Group
- q I/B (Inbound) Call – Incoming call
- q O/B (Outbound) Call – Outgoing call
- q ACD I/B Call – Incoming call by dialing ACD representative number (Pilot DN)
- q Non ACD I/B Call –Incoming call by directly calling an agent
- q ACW (After Call Work) – Arrangement after completing a call

1.3 ACD System Specifications

| Specifications | Capacity |
|----------------------------------|----------|
| Configuration Agents (Log-on ID) | 600 |
| Active Agents | 200 |
| Splits (Groups) | 50 |
| Agent Per Split | 100 |
| Queue Depth Per Split | 200 |
| Pilot | 600 |
| Trunk Routes/Groups | 50 |
| Priority Levels | 100 |

2 ACD Functions

2.1 Abandon Call Search

Description

This function does not distribute an abandoned call under waiting in the queue to an agent.

How to Use

Data Generation

Note

2.2 Analog ACD Position

Description

This function allows a SLT (Single Line Telephone) to be used as telephone for an agent.

How to Use

1. Registration of telephone for an agent

Assign the SLT for an agent (SLT-Agent) [\[Ref. 3.2.10\]](#)

2. Logon

OFF-HOOK + ***462** (Note 1) + Logon ID (Note 2) + **ON-HOOK**

3. Logoff

OFF-HOOK + ***462** (Note 1) + (Logon ID) (Note2) + **ON-HOOK**

4. Registration/Cancellation of the pause mode

OFF-HOOK + ***463** (Note 4) + **ON-HOOK**

Data Generation

Note

1. Function code for Logon/Logoff on the SLT-Agent
OMS - DATA 2.1 System Numbering Plan
SLT Log ON/OFF Code (*462)
2. Confirm the Logon ID [\[Ref. 3.2.5\]](#)
3. Enter the Logon ID following the option in the state of Logoff
ACD Management - Split Data
Use ID on Logoff
4. Function code to register/release the pause mode on the SLT-Agent
OMS - DATA 2.1 System Numbering Plan
SLT Not Ready Code (*463)

2.3 Announcement in Queue

Description

This function allows an announcement to be sent for call(s) waiting in queue in maximum 5 steps.

How to Use

Data Generation

1. Assign announcement steps for call(s) waiting in the queue according to ACD group (Split).
[ACD Management] Split Data [\[Ref. 3.2.1\]](#)
Step of Announcement: 1~5
2. Assign a queue-waiting announcement to apply step by step.
[ACD Management] Split Tone [\[Ref. 3.2.2\]](#)
3. Assign a port and time to apply an announcement to a call waiting in the queue.
[OMS] DATA 2.4 System Tone Parameter
ACD Service Tone 1 ~ ACD Service Tone 20
4. The queue-waiting announcement using VPM token can be assigned as following methods.
 - (1) Assign the time for the queue-waiting announcement in the above step 3.
To send N time(s) for VPM token, assign VPM token length (sec) x N times with the sending time.
 - (2) Assign the VPM token to replace the system tone.
[OMS] DATA 15.1 Voice Tone
ACD Service Tone 1 ~ ACD Service Tone 20
 - (3) Assign the port to send VPM token.
[OMS] DATA 15.2 VPM Token
Assign the port and the token length (sec) to send an announcement based on the token ID.
 - (4) Assign the sending mode for VPM token.
[OMS] DATA 2.6 System Feature Option
Voice Tone Access Type: Interval / Real
 - Interval
This mode is to notify a VPM port of the start of the token as an event while

transmitting a token to a VPM port to assigned to each VPM token.

If an incoming call is routed to the Queue, the system basic tone is given and VPM perceives it as an event. Then the VPM send a VPM token.

The number of calls to send a VPM token is not limited. However, the announcement will be delayed for as long as the max duration of the token.

– **Real**

This mode is the way that seizes an idle one out of VPM ports assigned to the VPM token. Calls to send the VPM token is limited to as many ports assigned to the VPM token. If any idle port is not found, the system basic tone will be sent.

Note

2.4 Assistance

Description

This function is for an agent to call a specified subscriber for assistance in mid-conversation.

How to Use

1. Press the **ASSISTANCE** button (**Note 1**) in mid-conversation.
2. The counterpart will be placed on hold in the middle of conversation.
3. The ring signal will be sounded on the assistance subscriber (**Note 2**).
4. Afterward, the steps are the same as other transfer function.

If the assistance subscriber is busy, the agent will get to hear a busy tone. In this case, if you want to get back to the counterpart that is currently placed on hold, press the **TRANS/PGM** button.

Data Generation

1. Register the assistance button.
[ACD Management] Terminal Information / Button Data
Register the assistance button to the flexible button as follows:
Button Type: Feature Code-Assistance
2. Register an extension for assistance.
[ACD Management] Logon Data
Assist Tel Number: an extension number

Note

1. ASSISTANCE Button
Flexible button on DKTU assigned with Feature Code-Assistance
2. ASSISTANCE Subscriber
Assist telephone number registered to each Login ID [\[Ref. 3.2.5\]](#)

2.5 Automatic Answer

Description

This function is to automatically answer a call that is reached to an agent after the certain time (Note 1).

How to Use

1. Set the Auto Answer Mode per Logon ID. [\[Ref. Data Generation 1, 2\]](#)
2. A call is reached to an agent to whom the Auto Answer Mode set.
3. Conversation after the certain time.

Data Generation

1. Set the Answer Mode – enabled on Logon

[ACD Management] Logon Data

Answer Mode: Choose from Automatic / Manual

2. Set the Answer Mode – Using a function code

Register the function button for Answer Mode to the flexible button of DKTU.

The chosen function button is used to toggle the answer mode between Automatic and Manual.

[ACD Management] Terminal Information / Button Data

Feature Code-Automatic/Manual Answer

Flexible Button Control on LED

ON: Manual Answer

OFF: Automatic Answer

Note

1. Certain Time

Time until the automatic answer of incoming call

[ACD Management] Logon Data

Automatic Answer Time (sec)

2.6 Automatic Work Mode

Description

This function enables the agent to keep the after call work mode automatically to provide a spare time after conversation.

How to Use

1. Set the ACW (after-call work) mode to Automatic.
[Ref. Data Generation 1, 2]
2. Choose the options to use the Automatic ACW mode.
[Ref. Data Generation 4.]
Whether to apply the mode to Non ACD Inbound Call?
Whether to use 'Outbound Call'?
3. Specify how long a call stays during the use of ACW mode.
[Ref. Data Generation 5.]
The state is turned into the on-hook mode automatically or manually after a set time.

Data Generation

1. Set the ACW mode to Automatic. – Enable the mode on logon.
Choose whether to use the "Automatic" ACW mode per Split.
[ACD Management] Split Data
Use After Call Work Mode: YES
2. Set the ACW mode to Automatic – Using the function button
Register a DKTU button as a function button to be used for the Automatic ACW mode.
[ACD Management] Terminal Information / Button Data
Assigned with Feature Code-Work Mode after selecting the flexible button.
Flexible Button Control on LED
 ON: Auto After Work Mode
 OFF: After Available Mode
3. Function Button to indicate the ACW status
[ACD Management] Terminal Information / Button Data
Feature Code-Work After Call
Flexible Button Control on LED

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ON: Working Mode (In the middle of ACW)

OFF: Answering Mode (Answerable state)

4. Choose the options to use the 'Automatic' ACW mode

[ACD Management] Split Data

Not use ACW on Each I/B: Choose the option to use the 'Automatic' ACW mode for Non ACD Inbound Call

Not use ACW on Each O/B: Choose the option to use the 'Automatic' ACW mode for Non ACD Outbound Call

5. Specify how long a call stays during the use of the "Automatic" ACW mode

[ACD Management] Logon Data

Max Work Time (sec)

1~600 sec: The phone is maintained in the state of using the ACW mode is maintained for a set time and then the call will be automatically turned into the on-hook state.

0: The state of using the ACW mode is maintained until the manual switchover to the on-hook state (Note 1).

Note

1. To turn into the Manual ACW mode or on-hook state, use the function button as mentioned in Data Generation 3.

2.7 Automatic Available Mode

Description

This feature is for an agent to turn into the on-hook state after completing a call.

How to Use

1. Set the ACW mode to Automatic. [\[Ref. Data Generation 1., 2.\]](#)

Data Generation

1. Release the ACW mode from Automatic. – Apply it on logon.
Choose whether to use the Automatic ACW mode per Split
[ACD Management] Split Data
Use After Call Work Mode: NO
2. Release the ACW mode from Automatic – Using the function button

Register a DKTU flexible button with the “Automatic” ACW mode.

[ACD Management] Terminal Information / Button Data

Feature Code-Work Mode

Flexible Button Control on LED

- | | | |
|-------------------------------------|------|----------------------|
| <input checked="" type="checkbox"/> | ON: | Auto After Work Mode |
| <input type="checkbox"/> | OFF: | After Available Mode |

Note

2.8 Break Mode (Not Ready Mode)

Description

This feature is to set/release the agent to/from the break mode.

In this case, ACD Inbound calls are not distributed to the agent and Non ACD Inbound calls are distributable according to option. [\[Ref. Data Generation 3\]](#)

How to Use

1. In case that a DKTU set is used for an Agent, pressing the function button that is registered with the Break mode toggles the Break mode and the on-hook mode.
2. In case that a SLT set is used for an Agent, pressing the function code (*463) toggles the Break mode and the on-hook mode.

Data Generation

1. Register a flexible button for a DKTU-Agent with the Break mode button.
[ACD Management] Terminal Information / Button Data
Feature Code-Ready/Not Ready
2. Register a function code for an SLT-Agent with the Break mode button.
[OMS] DATA 2.1 System Numbering Plan
SLT Not Ready Code: *462
3. Choose whether to receive Non ACD Inbound call in the Break mode or Work mode.
[ACD Management] System Option
Directly call agent – Not Ready or ACW
NO: / YES:

Note

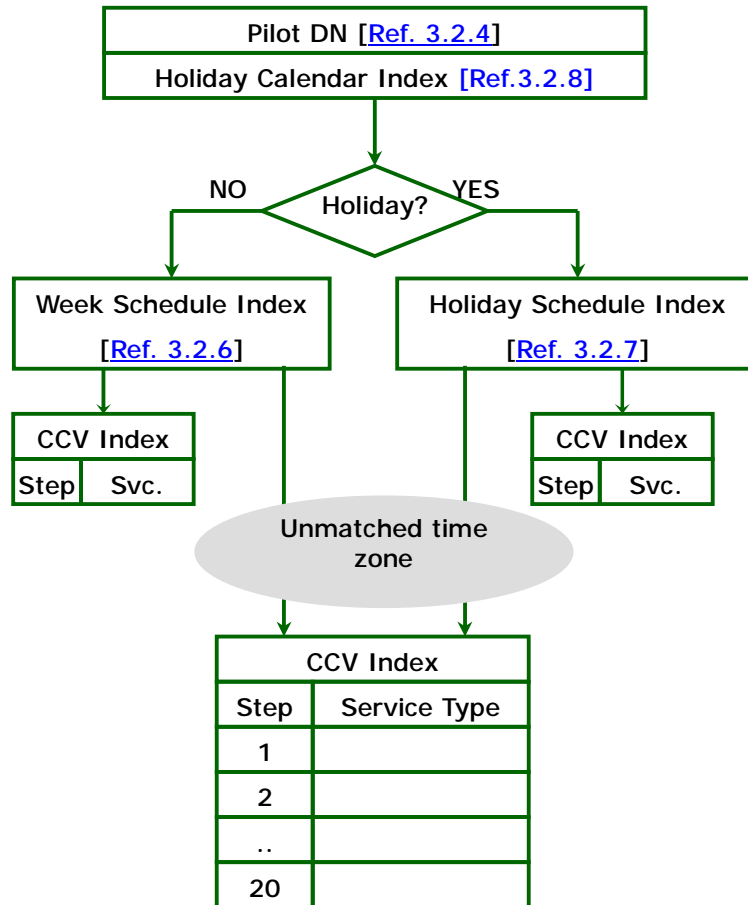
2.9 Call Control Vector

Description

This feature is to provide various procedures to process ACD I/B calls. CCV can be applied depending on weekday, weekend, and holiday.

How to Use

1. Flowchart for CCV Index for ACD I/B Call



[Figure 2.9-1]

2. CCV Service Type

- q Access to Split # (1~50)
Distributing a call to any Split available to answer an inbound call
- q Queue to Split # (1~50)
First putting an inbound call in the Queue and then distributing it an

available Split

- q Pause # (1~250sec)
To stop call processing over a certain time
 - q Transfer to Telephone Num
This service is used to transfer ACD I/B Call to a specified number.
You cannot go over to the next stage during this service. Therefore, this service is proper at the last stage.
 - q Hang Up
Release the line
 - q New Priority (1~100)
Higher the value, higher the priority.
 - q Up Priority
The current priority is elevated over as many steps as the new priority is given.
3. CCV is organized into up to 20 stages.
4. Stage Shift Conditions
- q Access to Split # (1~50)
When there is no available Split in the group
 - q Queue to Split # (1~50)
When the state of Queue-waiting ends
 - q Pause # (1~250 sec)
When a certain time set for a pause passes
 - q Transfer to Telephone Num
When it is impossible to go over to the next stage
 - q Hang Up
When it is impossible to go over to the next stage
 - q New Priority (1~100)
When a call is given priority and immediately shifted to the next station
Effective when the next stage is in the service of 'Queue to Split #'
 - q Up Priority
When the priority is changed and then the call shifts to the next stage
Effective when the next stage is 'Queue to Split #'

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Data Generation

1. Generating Call Control Vector [\[Ref. 3.2.3\]](#)
2. Assigning a CCV Index to each ACD representative number (Pilot DN) [\[Ref. 3.2.4\]](#)

Note

2.10 Call Distribution to Agents

Description

A call waiting in the Queue is distributed to the agent that is idle longest.
Calls waiting in the Queue are processed according to priority. Calls are of the same priority are processed in the waiting order.

How to Use

Data Generation

Note

2.11 Call Forwarding -Split

Description

This feature is to forward ACD I/B calls to a specified subscriber when the calls arrive as ACD group.

This function is available for only Supervisor to register and deregister.

How to Use

1. Register/Deregister Call Forwarding with the ACD group (Split) to which the Supervisor belongs. [\[Ref. Data Generation 3.\]](#)
Supervisor Telephone: + *#
2. When Call Forwarding has been registered, all ACD I/B calls are forwarded to the specified subscriber when the calls reach the ACD group (Split).
[\[Ref. Data Generation 1.\]](#)

Data Generation

1. Specify a subscriber with whom to register Call Forwarding [\[Ref. 3.2.1\]](#)
Assign the forwarding telephone number each ACD group (Split).
2. Register Supervisor [\[Ref. 3.2.10\]](#)
3. Register the call forwarding to the flexible button of Supervisor. [\[Ref. 3.2.11\]](#)

Note

2.12 Call Transfer to Split Queue

Description

This feature is for a busy extension or ATD user to forward a I/B call to the ACD representative (Pilot DN).

The call will be processed according to ACD service procedure.

How to Use

Data Generation

Note

2.13 Call Waiting Indication – LCD Display

Description

This feature is to show the number of calls waiting in the Queue of the ACD group (Split) in the way of indicating on the LCD of the agent DKTU.

How to Use

Data Generation

Note

2.14 Calling Party Indication

Description

This function is to show the caller's number on the LCD of the agent DKTU when there is an ACD I/D call reaching the agent. This feature is available only when the CS1000 can process the caller's number.

How to Use

Data Generation

1. Choose the option of requesting the caller's number.

[OMS] DATA 4.8 Trunk Route Base All Option

Request ANI Information: YES

Note

2.15 CTI Call Routing

Description

This function is to distribute ACD I/B calls waiting in the Queue using CTI *Switching Function Service-Divert Call Service* instead of CS1000.

How to Use

1. Choose the option of routing CTI calls per ACD group (Split) Queue.
[\[Ref. 3.2.1\]](#)
2. Generate CCV to have ACD I/B calls waiting in the Queue. [\[Ref. 2.26\]](#)
3. ACD I/B calls will wait in the Queue during the set time even though there is an idle agent. After the set time the calls will be processed according to the service type of the stage following CCV.

Data Generation

Note

2.16 Do Not Disturb - Split

Description

This function is to reject ACD I/B calls for a specified ACD group (Split).
Only Supervisor is authorized to register/deregister this feature.

How to Use

1. Register/Deregister DND-Split with the ACD group (Split) to which the Supervisor belong. [\[Ref. Data Generation 2.\]](#)
Supervisor Telephone: +
2. ACD I/B calls are neither allowed to arrive in the Queue of ACD group (Split) with which DND-Split is registered nor to be distributed to any agent.
If the CCV service type to apply to an ACD I/B call is Access to Split # or Queue to Split #, the call will not be processed but shifted to the next stage. Using other service types, the call can be processed.

Data Generation

1. Register Supervisor. [\[Ref. 3.2.10\]](#)
2. Register DND at the flexible button of Supervisor. [\[Ref. 3.2.11\]](#)

Note

2.17 Flexible ID Codes

Description

Logon ID is not specified for a telephone.

An agent is allowed to log on using a random agent telephone. Using a logon ID can specify its ACD group (Split).

How to Use

Data Generation

1. Specify an ACD group (Split) according to logon ID. [\[Ref. 3.2.5\]](#)

Note

2.18 Holiday Scheduling

Description

This feature is to assign holiday ACD I/B calls to each CCV Index by the hour.

[\[Ref. 3.2.7\]](#)

Find a CCV Index for ACD I/B calls according to holiday schedule. If not found, try the weekly schedule. If neither from the weekly schedule, use the basic CCV Index.

[\[Ref. Fig 2.9-1\]](#)

How to Use

Data Generation

Note

1. Collect data on holidays.

Before using the holiday schedule, find holidays according to the calendar.

[\[Ref. 3.2.8\]](#)

2.19 Jack Status Recognition

Description

This feature is to automatically turn the agent into the Logoff or 'Not Ready' mode when the plug happens to come out of the jack.

How to Use

Data Generation

1. Choose a mode for the agent in case the plug comes out.

[ACD Management] Split Data

Status on Repair: Logon / Break

Note

1. If you try to connect the plug to the jack, the agent status will not automatically be recovered.

2.20 Logon/Logoff

Description

This feature is to distribute ACD I/B calls arriving at the ACD group (Split) to an agent, only when the agent log onto the ACD group (Split).

If the agent log off, ACD I/B calls will not be distributed to the agent any longer.

How to Use

1. Logon

When the agent uses a DKTU

+ +

When the agent uses a SLT set

+ + +

2. Logoff

Same as logon

Logon ID is omissible.

Data Generation

1. Register logon/logoff at a flexible button of DKTU. [\[Ref. 3.2.11\]](#)

[ACD Management] Terminal Information/Button Data

Flexible Button Control on LED

N: Logon

FF: Logoff

2. Feature code available on SLT

[OMS] DATA 2.1 System Numbering Plan

SLT Log ON/OFF Code: *462

3. Register digits length for the Logon ID. [\[Ref.3.2.12\]](#)

[ACD Management] System Option

Agent Logon ID Length: 3~6

4. Register a Logon ID. [\[Ref.3.2.5\]](#)

[ACD Management] Logon Data

5. Assign whether to use a Logon ID on logoff [\[Ref.3.2.1\]](#)

[ACD Management] Split Data

Use ID on Logoff

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Note

2.21 Multiple Supervisors

Description

This function is to register one Supervisor or more at the ACD group (Split). While an agent telephone can belong to an ACD group (Split) depending on its logon ID that is typed in, a Supervisor telephone depends on its telephone number.

How to Use

Data Generation

1. Choose a telephone for Supervisor. [\[Ref. 3.2.10\]](#)

[ACD Management] Terminal Information

Change DKTU-Agent to Supervisor and assign ACD group (Split) Index to the Supervisor.

Note

1. An agent is allowed to log onto the Supervisor telephone to process an I/B call.
2. Only DKTU telephone set can be available for the Supervisor mode.
3. Supervisor Mode
 - a. Call Forwarding – Split [\[Ref. 2.11\]](#)
 - a. DND – Split [\[Ref. 2.16\]](#)

2.22 Non ACD Call

Description

Non ACD call means a call placed by directly dialing the agent's number instead of the ACD representative number (Pilot DN).

If the agent is turned into the Not Ready or ACW mode, an ACD I/B call will not be distributed to the agent. Non ACD calls can be distributed according to option. [\[Ref. Data Generation 1.\]](#)

How to Use

Data Generation

1. Choose whether to let a Non ACD call reach the agent that is currently in the Not Ready or ACW mode. [\[Ref. 3.2.12\]](#)

[ACD Management] System Option

Direct call agent – Not Ready or ACW: NO / YES

Note

2.23 Overflow Outside ACD

Description

This feature is to forward ACD I/B calls to outside according to CCV service type (Transfer). [\[Ref. 2.9\]](#)

How to Use

Data Generation

Note

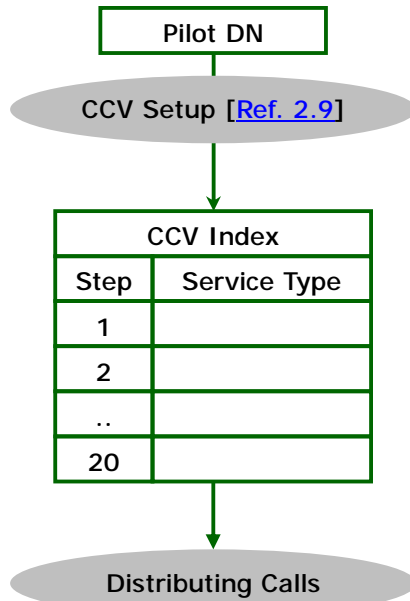
2.24 Pilot Number

Description

Pilot Number means a representative number to start ACD service as a virtual number matching up with CS-1000 extension numbering plan.

How to Use

1. Procedure to Process ACD I/B Call to Pilot Number



Data Generation

Note

2.25 Priority Queuing

Description

This feature is to give priority to ACD I/B calls according to incoming type. ACD I/B calls waiting in the Queue are processed according to high priority. Calls of the same priority are processed depending on which is waiting longest in the Queue.

How to Use

1. Prioritize per ACD representative (Pilot DN).
2. Priority by Incoming Type
 - q External Call Priority
Priority given to each ACD I/B trunk call
 - q Internal Call Priority
Priority given to each ACD I/B extension call
 - q Transfer Call Priority
Priority given to each ACD I/B call transferred by an extension
3. Priority Value
The value ranges from 1 to 100. The larger value, the higher priority.
4. Priority Change
Priority is changeable by Call Control Vector. [\[Ref.2.9\]](#)
 - q New Priority
New priority is given.
 - q Up Priority
The current priority is elevated over as much as the new priority is given.

Data Generation

1. Prioritize per ACD representative number (Pilot DN). [\[Ref.3.2.4\]](#)

Note

2.26 Queuing – ACD

Description

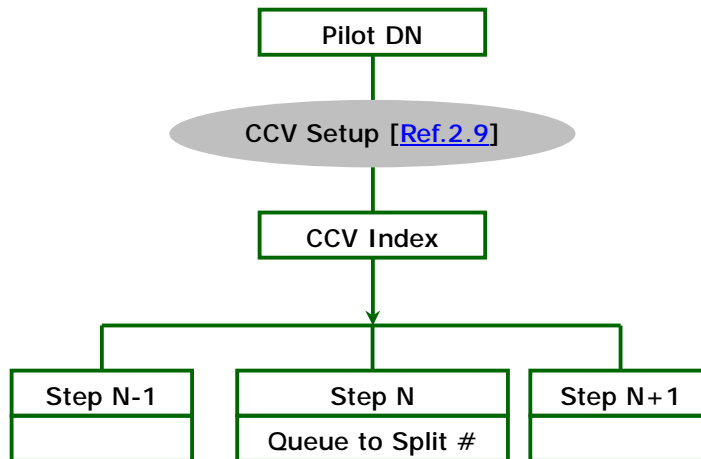
Each ACD group (Split) has a Queue that is capable of having up to 200 calls waiting.

Basically calls waiting in the Queue are distributed to an idle agent. However, they may not be distributed for CTI Call Routing (Note 1) according to option. [Ref. Data Generation 2.]

In case there is not agent that has currently logged onto the ACD group (Split), you can choose whether to keep ACD I/B calls waiting in the Queue. [Ref. Data Generation 4.]

How to Use

1. ACD I/B Call reaching the Queue



Data Generation

1. Queue Depth [Ref. 3.2.1]
2. CTI Routing Option [Ref. 3.2.1]
3. Queue waiting announcement [Ref. 2.3]
4. Whether to keep an ACD I/B call waiting in the Queue in case there is no agent that has currently logged onto an ACD group (Split) [Ref.3.2.1]

[ACD Management] Split Data

Logoff Mode: Allow Queue / Prohibit Queue

Note

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1. CTI Call Routing [\[Ref. 2.15\]](#)

Automatic Call Distribution using CTI *Switching Function Service-Divert Call Service*

2.27 Split

Description

Split means an ACD group. This feature is to group the agents by task type. An agent chooses an ACD group (Split) according to logon ID.

How to Use

1. Generate each ACD group (Split) and assign a task type to each [\[Ref.3.2.1\]](#)
2. Register an agent with a specified ACD group (Split).
 - q Register the agent's telephone. [\[Ref.3.2.10\]](#)
 - q Register a Split per logon ID. [\[Ref.3.2.5\]](#)
 - q Log onto the agent's telephone. In this case, the entry of Logon ID is a factor to determine which ACD group the agent belongs to.

Data Generation

Note

2.28 Week Schedule

Description

This feature is to set up CCV Index to apply to ACD I/B calls by the hour each day of the week [\[Ref.3.2.6\]](#)

Find CCV Index for ACD I/B calls from the holiday schedule. If CCV Index is not found, try the weekly schedule.

If neither found from the weekly schedule, the basic CCV Index will be applied. [\[Ref. Fig 2.9-1\]](#)

How to Use

Data Generation

Note

2.29 Work Mode

Description

This feature is to display the status of ACW (After-Call Work) by the agent.
If the agent uses a DKTU set, LED shows the status.

How to Use

1. To turn into the ACW mode
 - q Use the automatic ACW service after completing a call.
 - q Press the function button on your DKTU phone to register the ACW mode if you use a DKTU set
2. To turn from the ACW mode into idle
 - q Check that you go idle automatically after a set time from the automatic ACW service.
 - q Press the function button to go idle if you have automatically been into the ACW mode but the time indicates 0 or in case you have manually been into the ACW mode.

Data Generation

1. Function button to indicate the ACW status [\[Ref.3.2.11\]](#)

[ACD Management] Terminal Information / Button Data

Feature Code-Work After Call

Flexible button Control on LED

- | | | |
|-------------------------------------|------|---------------------------------------|
| <input checked="" type="checkbox"/> | ON: | Working Mode (in mid-ACW) |
| <input type="checkbox"/> | OFF: | Answering Mode (in the on-hook state) |

Note

2.30 Work Mode Time Limit

Description

This feature is to set a time needed for ACW up to 600 seconds. After the set time, the mode turns automatically into the on-hook state.

If you set the time to "0", you will remain in the ACW mode until you go on-hook yourself.

How to Use

Data Generation

1. Set a time needed for ACW. [\[Ref.3.2.5\]](#)

[ACD Management] Logon Data

Max Work Time (sec)

2. Manually register/deregister the Work mode.

Register a DKTU flexible button as a function for the Work mode.

Toggle between the Work mode and the Answering mode pressing the button.

[ACD Management] Terminal Information / Button Data

Feature Code-Work After Call

Flexible Button Control on LED

ON: Work Mode

The LED for the Work mode is ON even during the automatic ACW mode

OFF: Answering Mode

Note

2.31 ZIP Tone

Description

This feature, as only available on LGP series, is to use a zip tone according to bell on the agent telephone.

How to Use

1. Choose whether to use a zip tone per agent (Logon ID).
2. Check that a zip tone, instead of the ringing type, plays to alert the agent when an I/B call reaches the agent.

Data Generation

1. Choose whether to use a zip tone – on logon

[ACD Management] Logon Data

Zip Tone/Ring Mode: Tone

2. Choose whether to use a zip tone – using the function button
Register a DKTU flexible button to be used as a to set a zip tone.
Toggle between a zip tone and the mode by pressing the button.

[ACD Management] Terminal Information / Button Data

Feature Code-Ring/Tone Mode

Flexible Button Control on LED

N: Ring Mode

FF: Zip Tone

Note

3 ACD Management

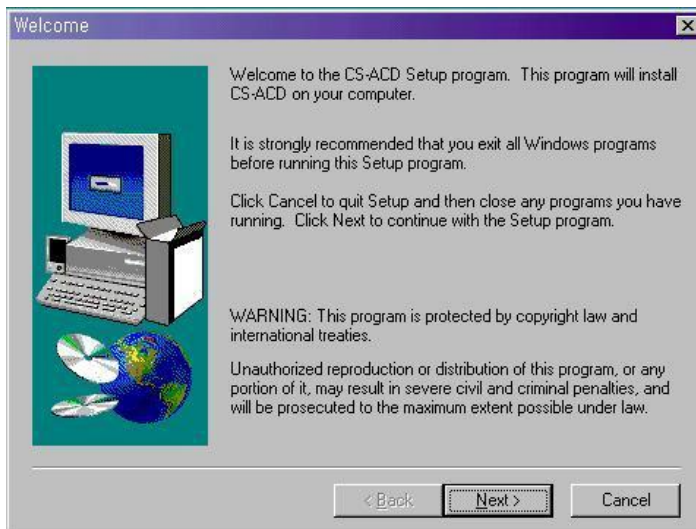
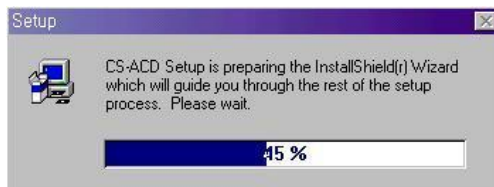
3.1 Overview

3.1.1 Setup Requirement

- q Operating System: Windows 95, Windows 98, Windows 2000
- q CPU: Pentium 200MHz or greater
- q Memory: 64 Mbytes or greater
- q LAN Card (10 Mbps TP)

3.1.2 Program Installation


- 1) Insert the ACD Management Install diskette into the drive.
- 2) Double-click Setup.exe.
- 3) ACD Management setup will start.



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User Information

Type your name below. You must also type the name of the company you work for.




Name:

Company:

< Back Next > Cancel

Choose Destination Location

Setup will install CS-ACD in the following directory.
To install to this directory, click Next.
To install to a different directory, click Browse and select another directory.
You can choose not to install CS-ACD by clicking Cancel to exit Setup.




Destination Directory:
 Browse...

< Back Next > Cancel

Select Program Folder

Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.

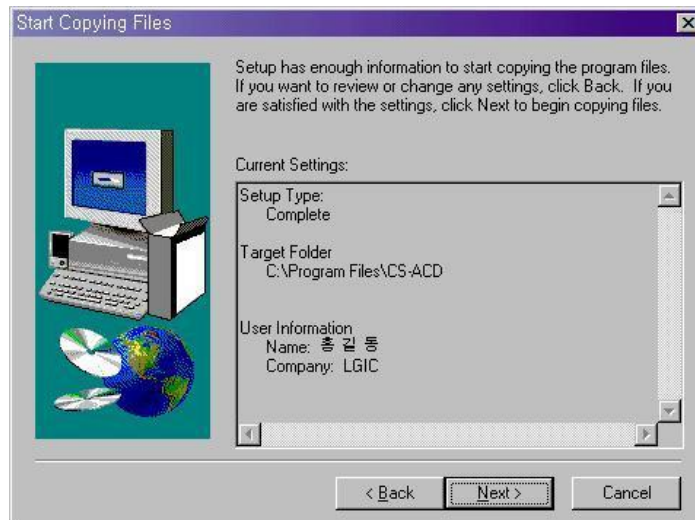


Program Folders:

Existing Folders:
Accessories
CS-HOTEL
HyperTerminal Private Edition
Microsoft Global IME
Microsoft Office Tools
Online Services
SnagIt
StartUp

< Back Next > Cancel

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3.1.3 Program Uninstallation

- 1) Follow the instructions under Settings à Control Panel and double-click Program Add/Remove to bring up the window as below.
- 2) Select 'CS-ACD' from the list and click the **Add/Remove(R)...** button.



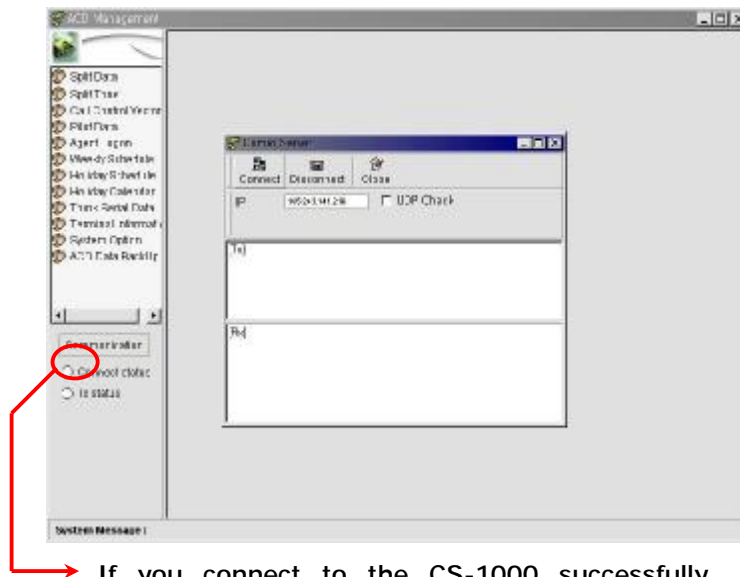
3.1.4 Program Uninstallation

Follow the steps under Start à Programs à ACD Management.



[Figure 3.1.4-1]

In the ACD Management window, enter the CS1000 IP address to access the CS1000. Then, click the 'Connect' button.

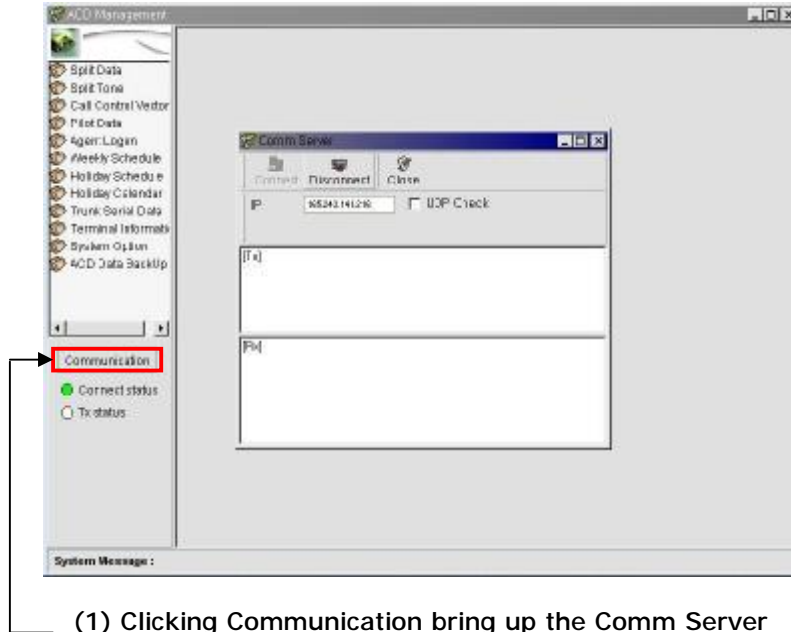


If you connect to the CS-1000 successfully, 'Connect status' turns green.

[Figure 3.1.4-2]

3.1.5 Program Close

1) Disconnection from the CS1000




(1) Clicking Communication bring up the Comm Server window.

(2) In the window, clicking 'Disconnect' break the connection.

2) In the ACD Management window, click as below to close the window.

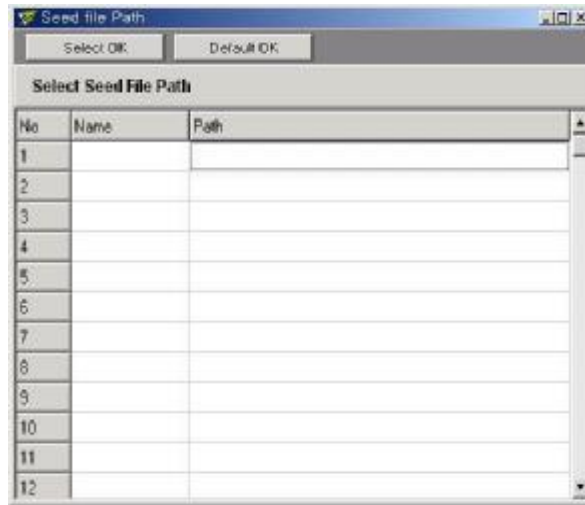


 If you close the window without disconnecting from the CS-1000, the connection will be automatically broken, with the result that the program ends.

3.1.6 Data Generation on Off Line

The ACD seed file can be created without connection with the CS1000 system by on line, and it can be available to query and change the data from ACD seed file.

1. Run the program. [Ref. 3.1.4]
2. Enter the IP address 127.0.0.1 and then click **Connect**.
3. Check that the Seed file Path window is brought up as shown in [Figure 3.1.6-1].



[Figure 3.1.6-1]

q Default OK

Run data generation on off line at the basic polder (C:\).

4. Register a Seed file path

(1) In [Figure 3.1.6-1], click the right mouse button on a selected number. Then a pop-up menu will appear.



(2) Select **Add Seed Path**. Then, a dialog box will appear as shown below.



(3) Enter in the Seed File Path field and the click **OK**.

5. Delete Seed file Path

(1) In the above [Figure 3.1.6-1], click the right mouse button on a path you want to delete. Then, a pop-up menu will be brought up.



(2) Select *Delete Seed Path*. Then information on the selected file path will be removed.

6. Create/Remove a Folder

You can create a folder to register a Seed file path or remove it.

(1) Creating a folder

On [Fig 3.1.6-1], click the right mouse button. Then, a pop-up menu will be brought up.

From the pop-up menu, select *Create Folder*. Then a dialog box will appear as below.



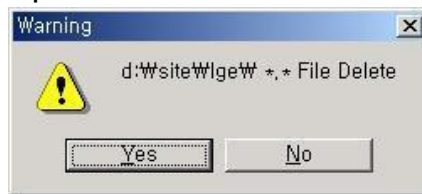
Enter the name of a folder you want to create and then click **Create OK**.

NOTE 1. A new folder can be created only under its higher folder. For example, if you create a folder named 'd:\site\lge', 'd:\site' must be present.

(2) Deleting a folder

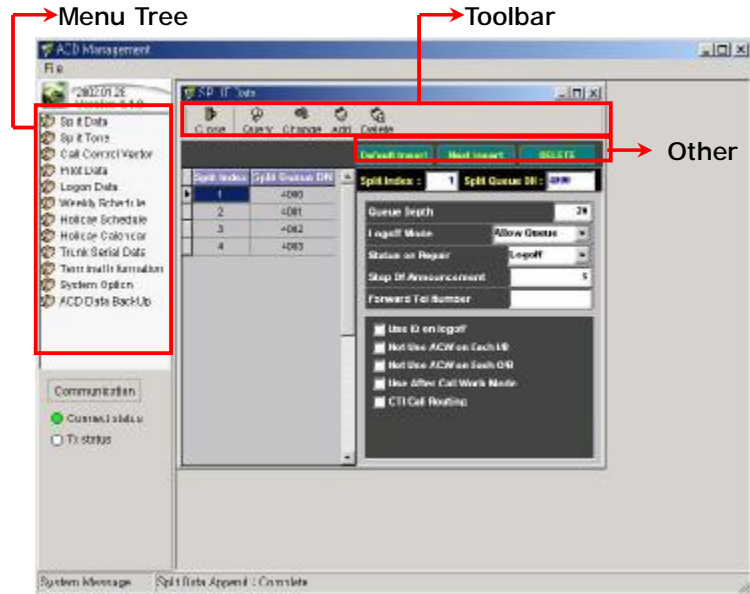
Click the right mouse button on a path selected from [Fig 3.1.6-1]. Then a pop-up menu will appear.

If you select *Delete Folder* from the pop-up menu, a warning dialog box will pop up.



If you click "Yes", all the files and sub-folders of the folder will be deleted.

3.1.7 Program Setup



Menu Tree

Menus of ACD Management are structured in the form of a tree.

Double-click a menu to display its organization.

| Components | Description |
|----------------------|---|
| Split Data | Agent group data |
| Split Tone | Announcement for calls waiting in Queue |
| Call Control Vector | Service procedure for ACD Inbound call |
| Pilot Data | ACD representative number |
| Logon Data | Agent data |
| Weekly Schedule | CCV data to apply by the hour every day of the week |
| Holiday Schedule | CCV data to apply by the hour every holiday |
| Holiday Calendar | Holiday data |
| Trunk Serial Data | Trunk group data |
| Terminal Information | Agent and Supervisor telephone data |
| System Option | Options of ACD features |
| ACD Data Backup | ACD data backup |

Toolbar Buttons

| Button Type | Description |
|-------------|--------------|
| CLOSE | Close Window |
| QUERY | Query data |
| CHANGE | Modify data |
| ADD | Add data |
| DELETE | Delete data |

Other Button Descriptions

Buttons discussed herein do not affect data on the CS-1000. Below are the buttons used to modify or add data.

| Button Type | Description |
|----------------|--|
| DEFAULT INSERT | To generate new data |
| NEXT INSERT | To generate the same data as the last in value |
| DELETE | To delete data |

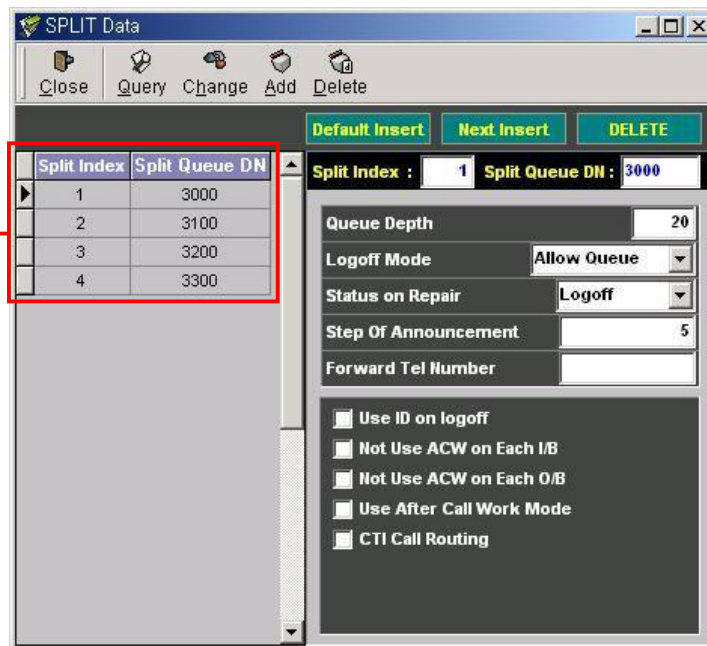
3.2 How to Use Manual

3.2.1 Split Data

Description

Agent groups are classified according to task type and can be made available up to 50 groups.

Configuration



The whole Split (up to 50) Queue DN is displayed and the selected split is displayed in detail in the right frame.

- q Split Index
Split Index means serial number to sort splits (1~50)
- q Split Queue DN
Split Queue DN means Queue number per agent group and is needed for CTI Call Routing, regardless of CS-1000 numbering plan. It may overlap Pilot DN and cannot overlap with Split Queue DN.
- q Queue Depth
Queue Depth means the max number of calls that can be waiting in Queue (0~200).

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- q Logoff Mode
This mode is needed to decide whether to keep ACD I/B calls waiting in the Queue when all the agents have logged off. [[Ref. 2.26](#)]

- q Status on Repair
This mode is to turn into the 'Not Ready' or Logoff state. [[Ref. 2.19](#)]

- q Step of Announcement
This step is used to play an announcement to the caller waiting in the Queue. (1~5) [[Ref. 2.3](#)]

- q Forward Tel Number
This number is an extension used to answer ACD I/B calls forwarded to an agent group in case the Split is placed in the 'Call Forward' mode. [[Ref. 2.11](#)]

- q Use ID on Logoff
This mode is used to choose to use the logon ID when the agent logs off.

- q Not use ACW on Each I/B
This mode is used to choose not to use the ACW mode for non-ACD I/B call. [[Ref. 2.6](#)]

- q Not use ACW on Each O/B
This mode is used to choose not to use the ACW mode for non-ACD O/B call [[Ref. 2.6](#)]

- q Use After Call Work Mode
This mode is used to choose to use ACW mode [[Ref.2.6](#)]

- q CTI Call Routing
This mode is used to choose to distribute ACD I/B calls waiting in the Queue using CTI server command. [[Ref.2.15](#)]

Note

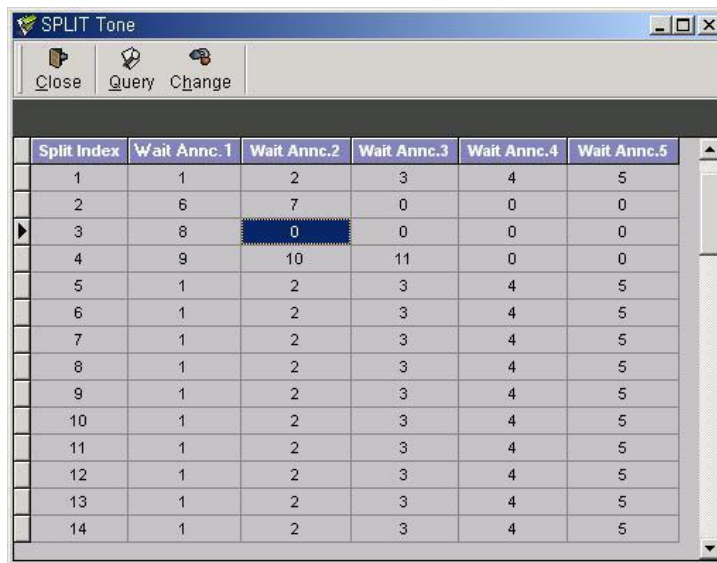
- q Split Data that has been changed is applied when the agent re-log on.

3.2.2 Split Tone (Announcement for Calls Waiting in Queue)

Description

This feature is to choose an announcement to play to callers waiting in the Queue up to 5 steps. [\[Ref. 2.3\]](#)

Configuration



| Split Index | Wait Annc.1 | Wait Annc.2 | Wait Annc.3 | Wait Annc.4 | Wait Annc.5 |
|-------------|-------------|-------------|-------------|-------------|-------------|
| 1 | 1 | 2 | 3 | 4 | 5 |
| 2 | 6 | 7 | 0 | 0 | 0 |
| 3 | 8 | 0 | 0 | 0 | 0 |
| 4 | 9 | 10 | 11 | 0 | 0 |
| 5 | 1 | 2 | 3 | 4 | 5 |
| 6 | 1 | 2 | 3 | 4 | 5 |
| 7 | 1 | 2 | 3 | 4 | 5 |
| 8 | 1 | 2 | 3 | 4 | 5 |
| 9 | 1 | 2 | 3 | 4 | 5 |
| 10 | 1 | 2 | 3 | 4 | 5 |
| 11 | 1 | 2 | 3 | 4 | 5 |
| 12 | 1 | 2 | 3 | 4 | 5 |
| 13 | 1 | 2 | 3 | 4 | 5 |
| 14 | 1 | 2 | 3 | 4 | 5 |

- q Split Index
Split Index, as a serial number to sort splits (1~50), is used to choose an announcement to play callers waiting in the queue per split (Agent group)
- q Wait Annc.#
This is to indicate how many steps are needed to play an announcement to callers waiting in the Queue.
 - 0: Announcement is not chosen. In this case, the status of waiting in the Queue will end
 - 1~20: CS-1000 TONE Parameter à ACD Service Tone
OMS DATA 2.4 system Tone Parameter
ACD Service Tone 1 ~ ACD Service Tone 20

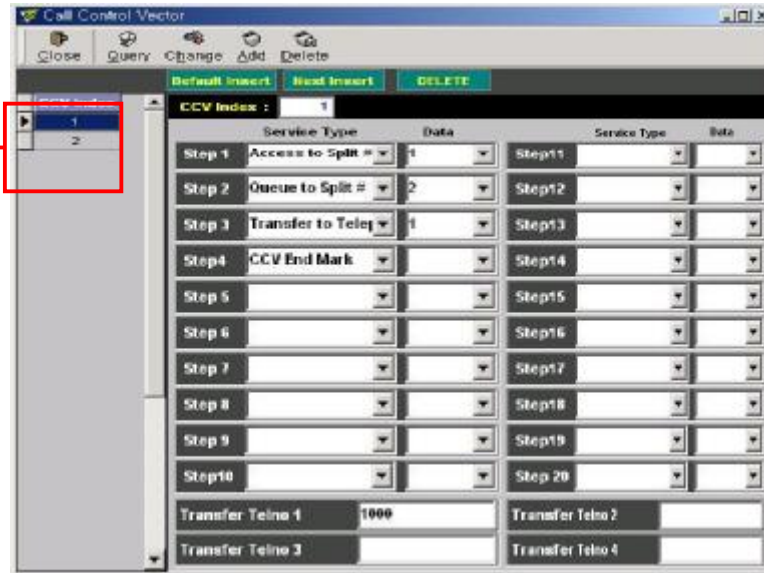
Note

3.2.3 Call Control Vector

Description

This feature is to set up the procedures of the service for ACD I/B Call. [\[Ref. 2.9\]](#)

Configuration



→ To display CCV index whose data is generated in detail in the right frame.

- q CCV Index
CCV serial numbers available up to 200.
- q Step
Service step available to choose up to 20 steps.

Service Type and Data

| Service Type | Data |
|------------------------------|--------------|
| Access to Split # | Split Index |
| Queue to Split # | Split Index |
| Pause # (sec) | 1 ~ 250 sec. |
| Transfer to Telephone Number | 1 ~ 4 |
| Hang Up | None |
| New Priority # | 1 ~ 100 |
| Up Priority # | 1 ~ 100 |
| CCV End Mark | |

- q Access to Split #
 Distributes an I/B call to only an available Split

- q Queue to Split #
 First keeps an I/B call waiting in the Queue and then distributes it to an available Split

- q Pause #
 Pauses call processing for a certain time

- q Transfer to Telephone Num
 Transfers an ACD I/B Call to a specified number
 This service is not followed by any step, with the result that you must use it in the last step of a service.

- q Hang Up
 Release the line that is currently busy

- q New Priority
 Give a new priority. The bigger value, the higher priority.

- q Up Priority
 The current priority is elevated over as many steps as the new priority is given

- q CCV End Mark
 Indicates the last step of the service

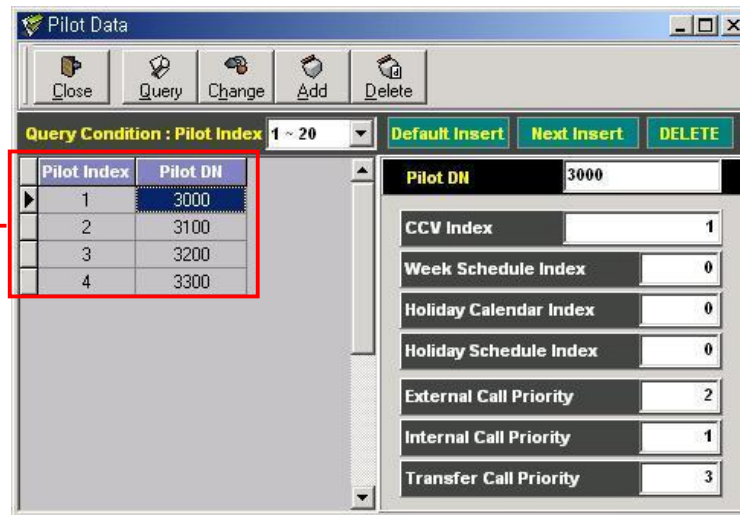
Note

3.2.4 Pilot Data (ACD Representative Number)

Description

Pilot Direct Number (DN) means an ACD representative number. This feature is to assign CCV Index to each ACD representative number and to prioritize ACD I/B calls.

Configuration



→ To display Pilot DN whose data is generated in detail in the right frame.

- q Pilot Index
Pilot Data serial number
- q Pilot DN
ACD representative number
- q CCV Index
Applicable Basic CCV Index
- q Week Schedule Index
Applicable Weekly Schedule Index [[Ref. 3.2.6](#)]
- q Holiday Calendar Index
Applicable Holiday Calendar Index [[Ref. 3.2.8](#)]
- q Holiday Schedule Index
Schedule Index to be applied for holidays according to the above Holiday
Calendar Index [[Ref. 3.2.7](#)]

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- q External Call Priority
Priority of ACD I/B trunk calls
- q Internal Call Priority
Priority of ACD I/B extension calls
- q Transfer Call Priority
Priority of ACD I/B calls transferred by an extension

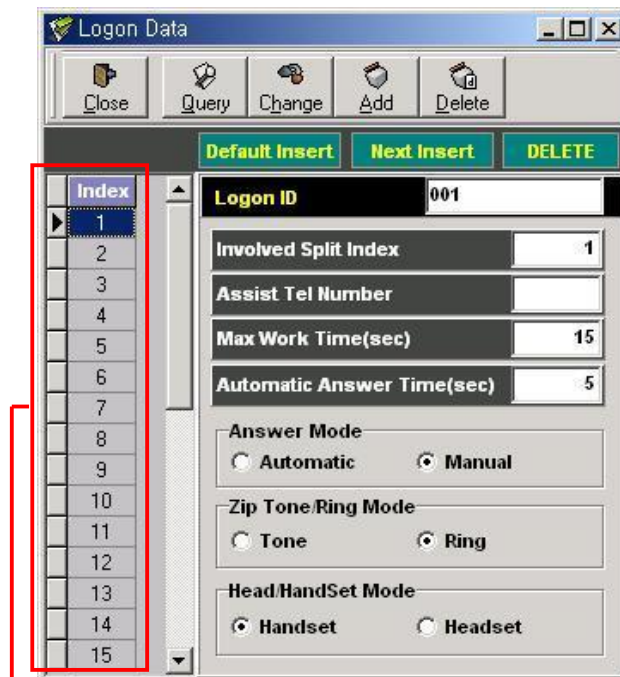
Note

3.2.5 Logon Data

Description

Logon ID is used to identify an agent when he/she log on to his/her telephone or log off it.

Configuration



To select a Logon Data Index that is registered to display its detailed data

- q Index
Logon Data serial number (1~600)
- q Logon ID
ID to identify an agent that has logged on
The ID can use any number, not depending on CS-1000 numbering plan. [[Ref. 3.2.11](#)]
- q Involved Split Index
Index of the group (split) in which an agent log on for activities.
- q Assist Tel Number [[Ref. 2.4](#)]
Extension number called when an agent requests the ASSISTANCE feature

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- q Max Work Time (sec) [\[Ref. 2.30\]](#)
Max time while an agent keeps the ACW mode when the mode is enabled.
1~600 sec: The ACW mode is maintained for a set time. After the time, the mode is turned into the on-hook state.
0: The ACW mode is maintained until the mode is manually turned into the on-hook state.
- q Automatic Answer Time (sec) [\[Ref. 2.5\]](#)
A set time passing until automatic answer to an I/B call. (180 seconds max)
- q Answer Mode [\[Ref. 2.5\]](#)
Option to choose for automatic answer to an I/B call (Automatic / Manual)
- q Zip Tone/Ring Mode
I/B ring mode (Zip Tone / Ring)
- q Head/Handset Mode
Option to choose between the Headset/Handset modes

Note

1. Capacity

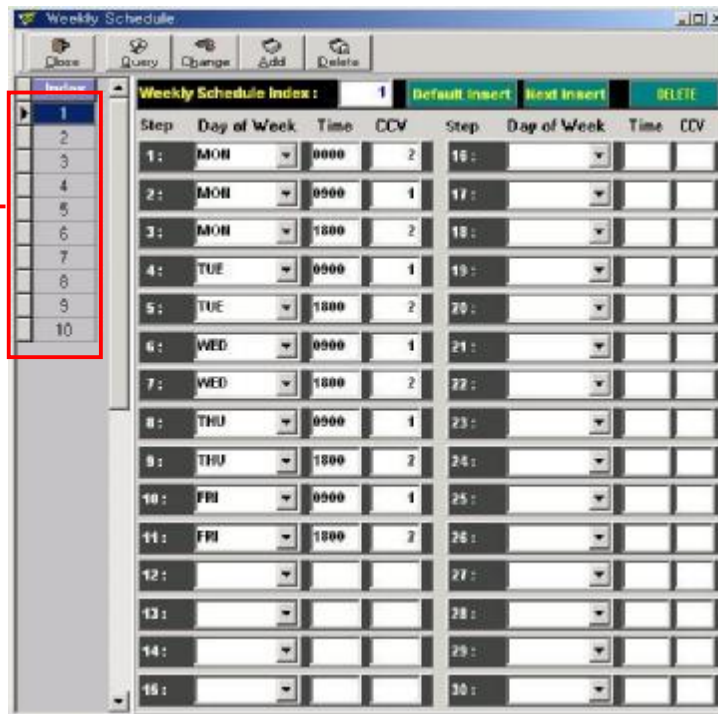
- q Max number of Logon IDs: 600
- q Max number of agents authorized to logon: 200
- q Max number of agents authorized to log on only one group (Split): 100

3.2.6 Weekly Schedule

Description

This feature is to assign each hour CCV Index to be applied to ACD I/B calls per weekday

Configuration



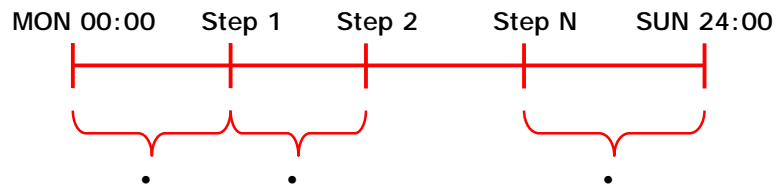
→ To select a Weekly Schedule Index that is registered to display its detailed data

- q (Weekly Schedule) Index
Weekly Schedule serial number (up to 10)
- q Step
Time zone per day of the week (max 30 steps)
- q Day of Week + Time
Hour setting per day of the week (start point)
- q CCV
CCV Index to be applied per hour per day of the week [\[Ref. 3.2.3\]](#)

Note

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1. Finding CCV Index to be applied



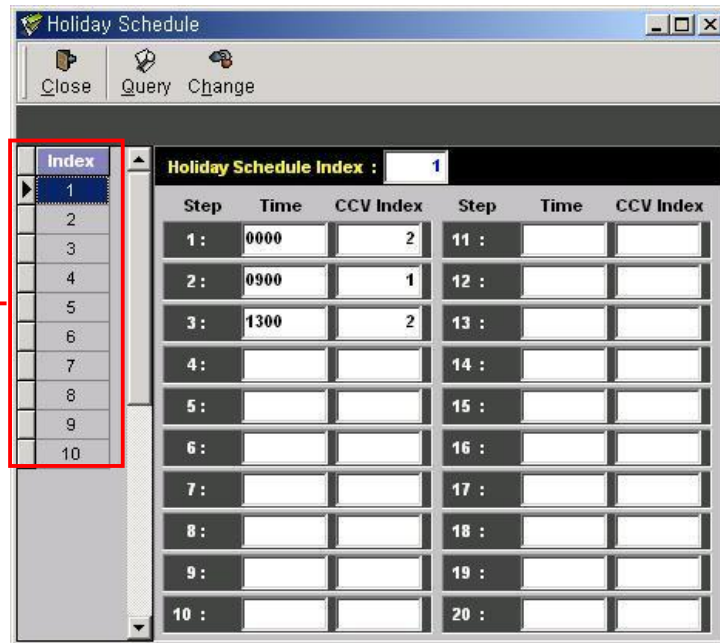
- q In case the current day/hour is beyond the range • , there is no CCV Index to be applied. In this case, use the CCV Index assigned according to Pilot Data [\[Ref. 3.2.4\]](#)
- q In case the current day/hour is within the range • , apply Step 1 CCV Index.
- q In case the current day/hour is within the range • , use Step N CCV Index.

3.2.7 Holiday Schedule

Description

This feature is to apply CCV Index for ACD I/B calls per hour for holidays.

Configuration



To select a Holiday Schedule Index that is registered to display its detailed data

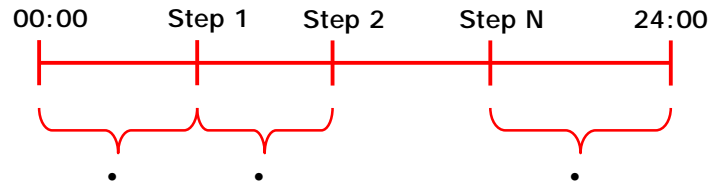
- q (Holiday Schedule) Index
Holiday Schedule serial number (up to 10)
- q Step
Assorted time zone (20 steps max)
- q Time
Hour setting per day of the week (start point)
- q CCV
CCV Index to be applied per hour per day of the week [\[Ref. 3.2.3\]](#)

Note

1. Finding Holidays [[Ref. 2.18](#)]

Holiday calendar index is chosen according to Pilot DN and the holidays are found according to the Holiday calendar.

2. Finding CCV Index according to Holiday schedule



q In case the current time is within the range • , there is no CCV Index to be applied. In this case, use the CCV Index assigned according to Pilot Data [[Ref. 3.2.4](#)]

q In case the current time is within the range • , apply Step 1 CCV Index.

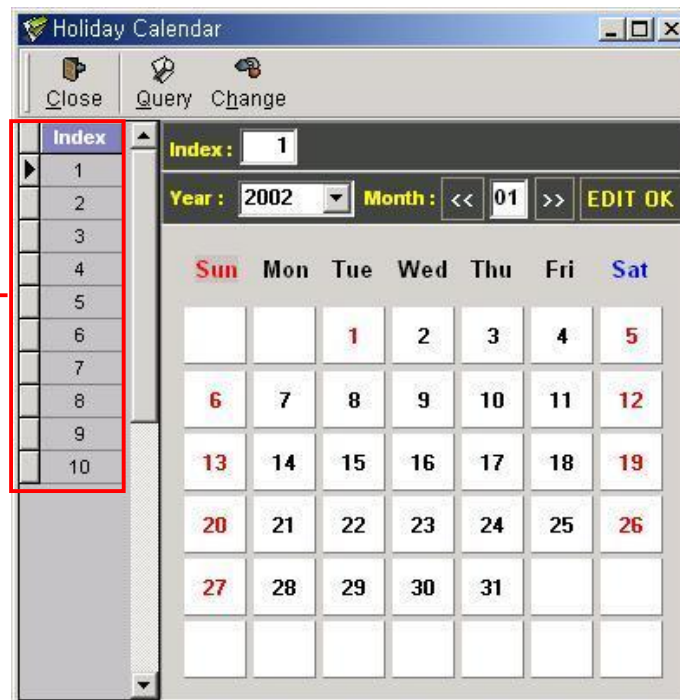
q In case the current time is within the range • , use Step N CCV Index.

3.2.8 Holiday Calendar

Description

This feature is to create holiday calendars needed to choose to apply holiday schedules to ACD I/B calls

Configuration



To select a Holiday Calendar Index that is registered to display its detailed data

- q Index
Holiday Calendar serial number (up to 10)
- q Year
'Year' shows the past 4-year and the future 5-year calendars based on the current PC year. (Note 1)
- q Month
Using the << and >> buttons displays the previous and the next month
- q **Edit OK**
Before moving to the next month or pressing the **Change** button, be sure to use the **Edit OK** button so that the data that has been changed for current

month can be saved.

Note

1. You can store one-year holiday data that can be displayed for the calendar of the selected year.

2. How to Choose Holidays

Clicking a date in the calendar change it into the other color.

Black: weekday

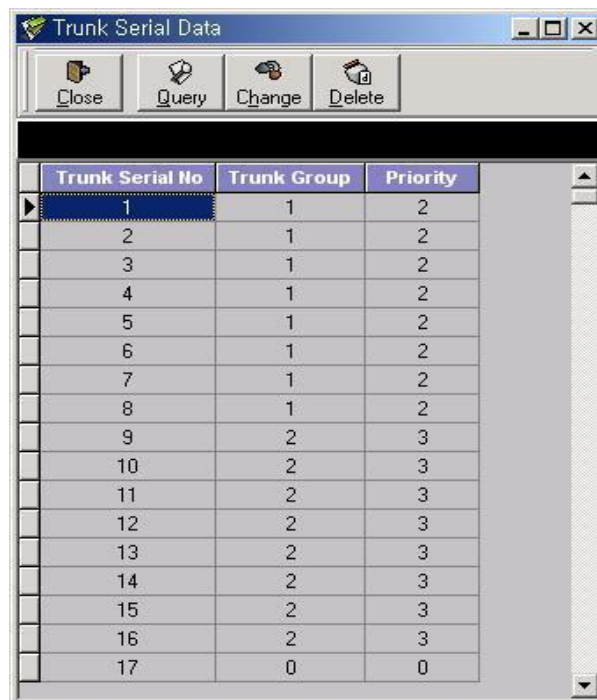
Red: holiday

3.2.9 Trunk Serial Data

Description

This feature is to create a trunk group to be used for CTI event parameters.
(Unnecessary for the ACD feature)

Configuration



The screenshot shows a window titled "Trunk Serial Data" with a toolbar containing "Close", "Query", "Change", and "Delete" buttons. Below the toolbar is a table with the following data:

| Trunk Serial No | Trunk Group | Priority |
|-----------------|-------------|----------|
| 1 | 1 | 2 |
| 2 | 1 | 2 |
| 3 | 1 | 2 |
| 4 | 1 | 2 |
| 5 | 1 | 2 |
| 6 | 1 | 2 |
| 7 | 1 | 2 |
| 8 | 1 | 2 |
| 9 | 2 | 3 |
| 10 | 2 | 3 |
| 11 | 2 | 3 |
| 12 | 2 | 3 |
| 13 | 2 | 3 |
| 14 | 2 | 3 |
| 15 | 2 | 3 |
| 16 | 2 | 3 |
| 17 | 0 | 0 |

- q Trunk Serial No
Trunk Serial Number (1~500)
- q Trunk Group
Trunk group (1~50)
- q Priority
Not used

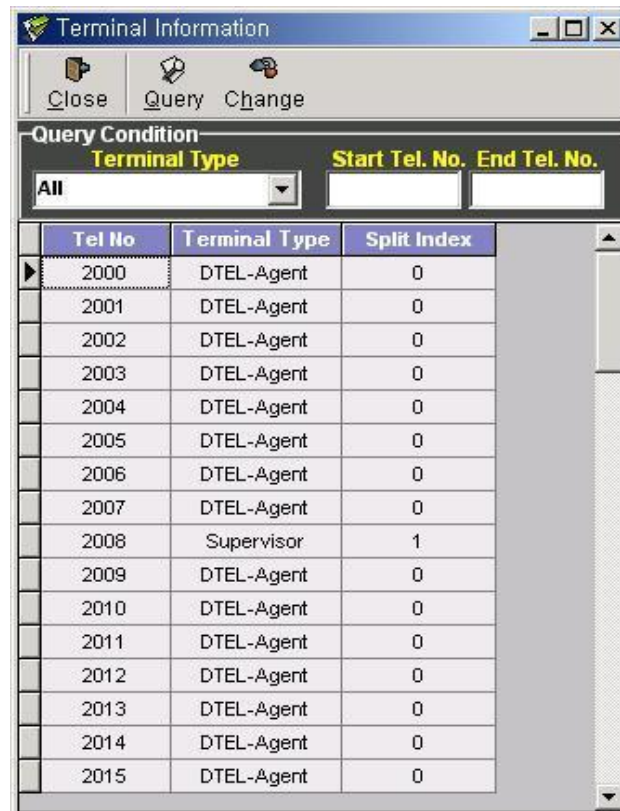
Note

3.2.10 Terminal Information

Description

This feature is to register a telephone to be used for Agent or Supervisor.

Configuration



The screenshot shows a window titled "Terminal Information" with a toolbar containing "Close", "Query", and "Change" buttons. Below the toolbar is a "Query Condition" section with a "Terminal Type" dropdown menu set to "All", and two empty input fields for "Start Tel. No." and "End Tel. No.". The main area contains a table with the following data:

| Tel No | Terminal Type | Split Index |
|--------|---------------|-------------|
| 2000 | DTEL-Agent | 0 |
| 2001 | DTEL-Agent | 0 |
| 2002 | DTEL-Agent | 0 |
| 2003 | DTEL-Agent | 0 |
| 2004 | DTEL-Agent | 0 |
| 2005 | DTEL-Agent | 0 |
| 2006 | DTEL-Agent | 0 |
| 2007 | DTEL-Agent | 0 |
| 2008 | Supervisor | 1 |
| 2009 | DTEL-Agent | 0 |
| 2010 | DTEL-Agent | 0 |
| 2011 | DTEL-Agent | 0 |
| 2012 | DTEL-Agent | 0 |
| 2013 | DTEL-Agent | 0 |
| 2014 | DTEL-Agent | 0 |
| 2015 | DTEL-Agent | 0 |

- q Query Condition
This condition is used to query (display) extension subscribers of the CS1000.
 - Displays extension number from the start to the end per *Terminal Type*
 - Displays all the extension numbers of a selected terminal type.
 - Displays *Terminal Types* of the following:
DKTU, DKTU-Agent, SLT, SLT-Agent, and Supervisor. * 'All' means the five types.

- q TelNo
Extension Number

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- q Terminal Type
Agent Telephone: DKTU-Agent, SLT-Agent
Supervisor Telephone: Supervisor
- q Split Index
ACD group (Split) to which a Supervisor belong

Note

1. How to Choose a Supervisor

If the current terminal type is DKTU-Agent, it can be used for a Supervisor. In this case set the Terminal type to 'Supervisor' and choose a Split Index so that the Supervisor can belong to the Split.

3.2.11 Button Data

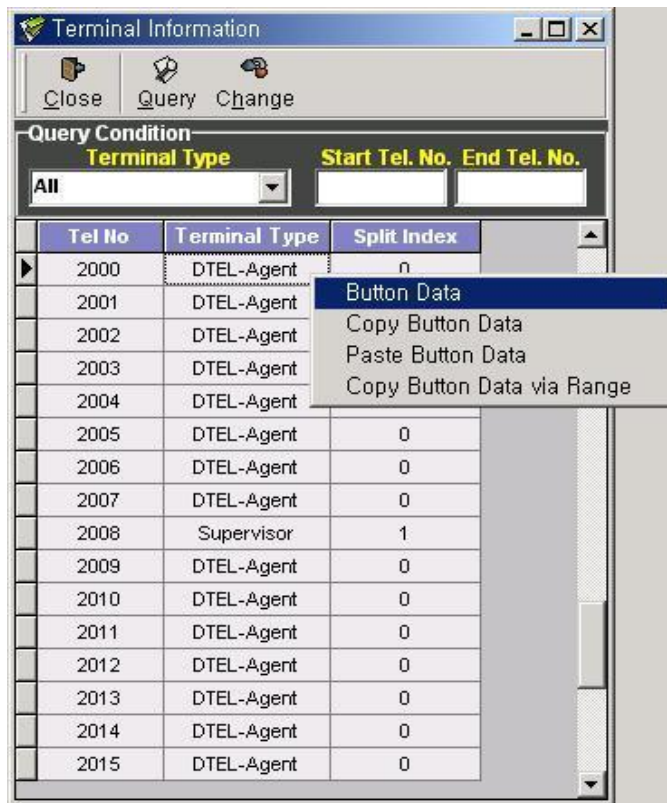
Description

This feature is to register features with flexible buttons of Agent or Supervisor DKTU, if only used.

Configuration

1. How to Display

Click the right mouse button on a selected number from Terminal Information. Then, a pop-up menu will be brought up as shown in [Figure 3.2.11-1].

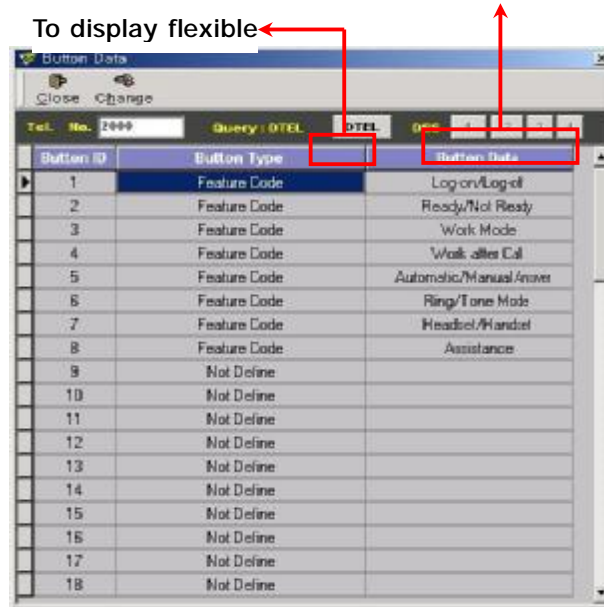


[Figure 3.2.11-1]

Select 'Button Data'. Then the button data will be displayed as shown in [Figure 3.2.11-2] below.

q DSS Connection Information

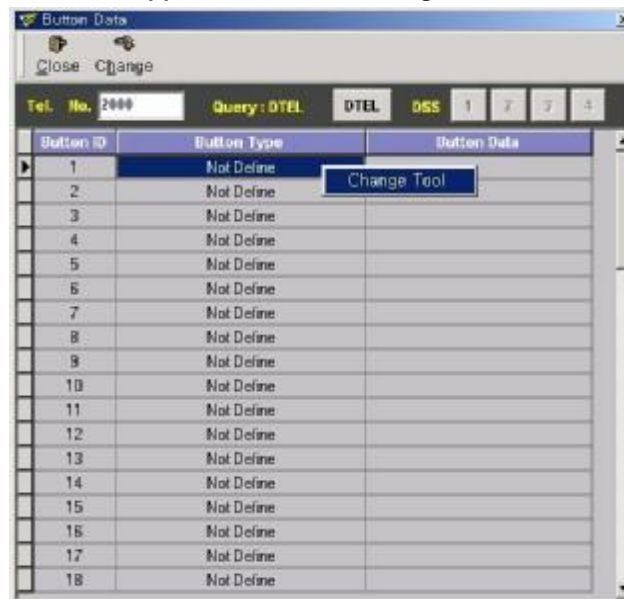
If a DSS is connected to a telephone, it can be enabled.
To display the flexible button data, press DSS.



[Figure 3.2.11-2]

2. How to Change

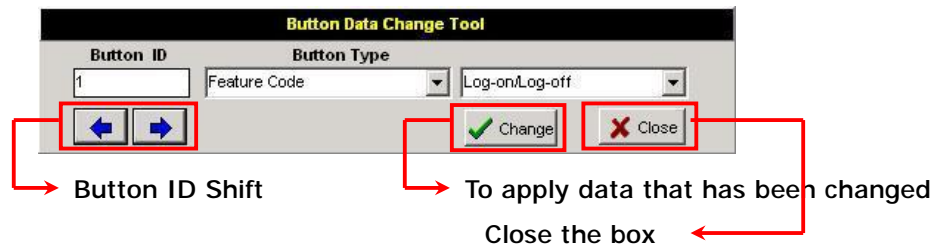
- (1) Click the right mouse button on a selected ID. A pop-up of 'Change Tool' menu will appear as shown in [Figure 3.2.11-3] below.



[Figure 3.2.11-3]

- (2) Choose Change Tool from the pop-up menu. A dialog box will be

brought up as shown in [Figure 3.2.11-4].



[Figure 3.2.11-4]

(3) If you finish registering features per Button ID, click the **Change** button in [Figure 3.2.11-2] to apply the data that has been changed.

3. Copy Button Data/Paste Button Data

Copy the button data of telephone (A) for Agent or Supervisor to telephone (B).

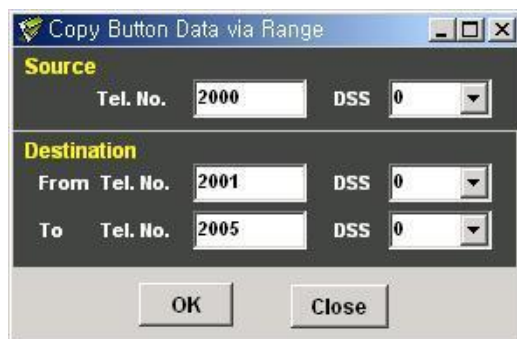
(1) Choose (A) and select 'Copy Button Data' from the pop-up menu of [Figure 3.2.11-1].

(2) Choose (B) and select 'Paste Button Data' from the pop-up menu of [Figure 3.2.11-1].

4. Copy Button Data via Range

Copy the button data of telephone (A) for Agent or Supervisor to several telephones.

Choose (A) and select 'Copy Button Data via Range' from the pop-up menu of [Figure 3.2.11-1]. Then a dialog box will appear as shown [Figure 3.2.11-5] below.



[Figure 3.2.11-5]

Note

1. Data per Button Type

q Trunk Serial Number

Digital Communication Server CS1000

Data: trunk serial number

Function: seizing an assigned trunk

q Extension

Data: Extension number

Function: calling an assigned extension number

q Feature Button

Data: (Note 2)

Function: performing a specified feature

q Trunk Code with external party

Data: caller number including the trunk access code (up to 20 digits)

Function: calling an assigned number

q Hold (Pool/Loop)

Data: no input data

Function: holding an active call using the HOLD

q Speed (Digit)

Data: registering random digits like various feature codes (up to 20 digits)

Function: activated depending on analysis of digits that are registered

Digital Communication Server CS1000

2. Feature Code

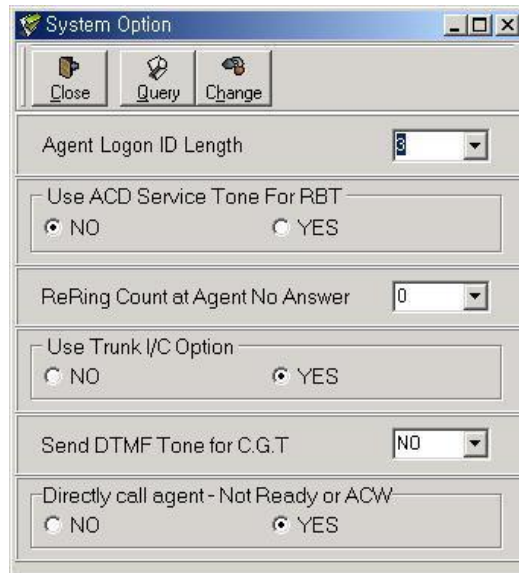
| Feature code | DKTU Agent | Supervisor |
|------------------------------------|------------|------------|
| Log-on/off | 0 | 0 |
| Incoming Call answer | 0 | 0 |
| Call release | 0 | 0 |
| Ready/Not ready | 0 | 0 |
| Work mode (Automatic / Manual) | 0 | 0 |
| Work after call (Work / Answering) | 0 | 0 |
| Answer Mode (Automatic/Manual) | 0 | 0 |
| Ring/Tone mode | 0 | 0 |
| Headset/Handset | 0 | 0 |
| Assistance | 0 | 0 |
| Split Call Forwarding | X | 0 |
| Split Do Not Disturb | X | 0 |

3.2.12 System Option

Description

This feature is to define options needed for ACD service.

Configuration



- q **Agent Logon ID Length**
Length of Agent Logon ID (3~6)
- q **Use ACD Service Tone for RBT**
This option is to play Queue-waiting announcement to the caller instead of RBT (ring back tone) when I/B calls waiting in the Queue are distributed to an agent.
- q **ReRing Count at Agent No Answer**
Count of re-ringing when the agent is in a no-answer mode. (0~100)
- q **Use Trunk I/C Option**
This option is to use a Day/Night incoming trunk route when no agent is available to answer I/B trunk calls. (Note 1)
- q **Send DTMF Tone for C.G.T**
This option is to send a DTMF tone twice to the caller instead of Congestion Tone (CGT) in case the caller hangs up in mid-conversation with the agent.
Available Tone: A, B, D

Digital Communication Server CS1000

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | A |
| 4 | 5 | 6 | B |
| 7 | 8 | 9 | C |
| * | 0 | # | D |

- q Direct call agent - Not Ready or ACW
This option is to choose whether to answer to Non ACD I/B calls when the agent is in the 'Not Ready or Break mode or in the ACW (After Call Work) state.

Note

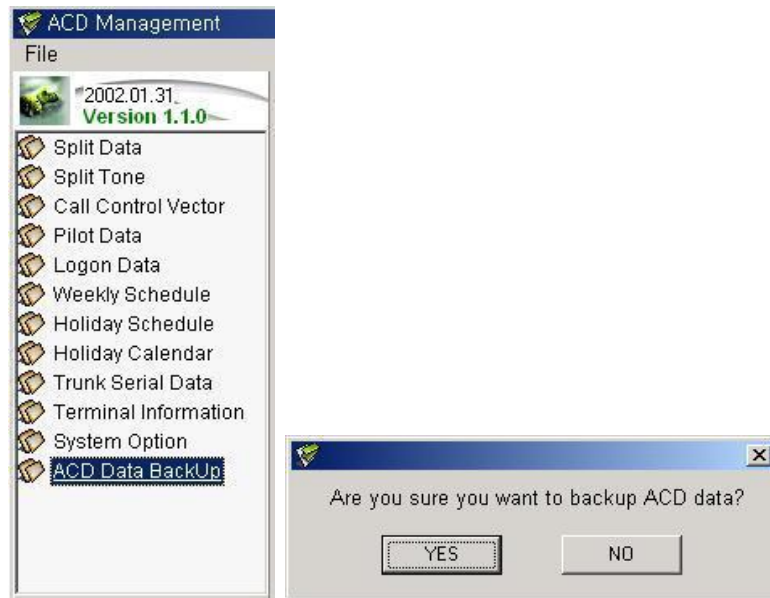
- Trunk I/C Option per Route
OMS - Data 4.9 Trunk Route base I/C Day/Night Option
I/C Vacant Extension Call

3.2.13 ACD Data Backup

Description

This feature is to back up ACD data.

Configuration



Note

1. Result

The 'acngen.dt' file is created to CS-1000 DiskOnChip

4 Appendix: Example of Using ACD

4.1 ACD Call Center

Description

This feature is to establish a call center using the CS-1000 ACD feature.

Analysis of Call Center Operation

- q ACD Pilot Number: 3000
- q Weekday (Mon ~ Fri) working hours (09:00~20:00)
Keep callers waiting in the Queue of a ACD group and distribute them to any idle agent(s).
If not distributed during the waiting time, switch the waiting calls to VMS (2800).
- q Holiday and after-work hours
Switch all the calls to VMS (2900)
- q Queue Waiting Announcement: 3 steps
- q Agent ID and Telephone
Telephone: (3 sets) 2000, 2001, 2002
Agent ID (5): 001, 002, 003, 004, 005

Data Generation

1. Pilot Data

The screenshot shows a window titled "Pilot Data" with a toolbar containing "Close", "Query", "Change", "Add", and "Delete". Below the toolbar, there is a "Query Condition" dropdown set to "Pilot Index" and a range of "1 ~ 20". To the right of the query condition are three buttons: "Default Insert", "Next Insert", and "DELETE". A table displays the query results with two columns: "Pilot Index" and "Pilot DN". The first row shows "1" and "3000". To the right of the table is a list of configuration parameters with their corresponding values:

| | |
|------------------------|------|
| Pilot DN | 3000 |
| CCV Index | 1 |
| Week Schedule Index | 1 |
| Holiday Calendar Index | 1 |
| Holiday Schedule Index | 1 |
| External Call Priority | 2 |
| Internal Call Priority | 1 |
| Transfer Call Priority | 3 |

2. Call Control Vector

Digital Communication Server CS1000

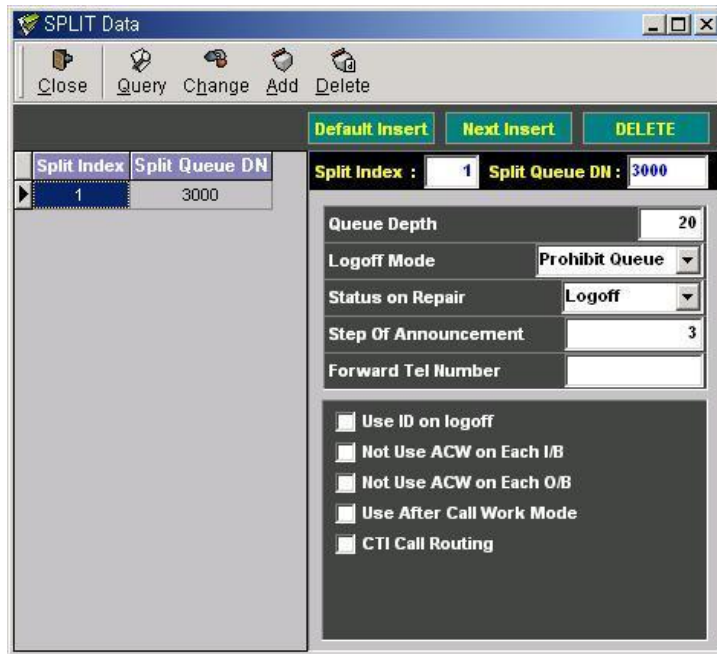
| Step | Service Type | Data | Step | Service Type | Data |
|------------------|-------------------|------|------------------|--------------|------|
| Step 1 | Queue to Split # | 1 | Step11 | | |
| Step 2 | Transfer to Telej | 1 | Step12 | | |
| Step 3 | CCV End Mark | | Step13 | | |
| Step 4 | | | Step14 | | |
| Step 5 | | | Step15 | | |
| Step 6 | | | Step16 | | |
| Step 7 | | | Step17 | | |
| Step 8 | | | Step18 | | |
| Step 9 | | | Step19 | | |
| Step 10 | | | Step 20 | | |
| Transfer Telno 1 | | 2800 | Transfer Telno 2 | | |
| Transfer Telno 3 | | | Transfer Telno 4 | | |

| Step | Service Type | Data |
|------------------|-------------------|------|
| Step 1 | Queue to Split # | 1 |
| Step 2 | Transfer to Telej | 1 |
| Transfer Telno 1 | | 2800 |

| Step | Service Type | Data | Step | Service Type | Data |
|------------------|-------------------|------|------------------|--------------|------|
| Step 1 | Transfer to Telej | 1 | Step11 | | |
| Step 2 | CCV End Mark | | Step12 | | |
| Step 3 | | | Step13 | | |
| Step 4 | | | Step14 | | |
| Step 5 | | | Step15 | | |
| Step 6 | | | Step16 | | |
| Step 7 | | | Step17 | | |
| Step 8 | | | Step18 | | |
| Step 9 | | | Step19 | | |
| Step 10 | | | Step 20 | | |
| Transfer Telno 1 | | 2900 | Transfer Telno 2 | | |
| Transfer Telno 3 | | | Transfer Telno 4 | | |

| Step | Service Type | Data |
|------------------|-------------------|------|
| Step 1 | Transfer to Telej | 1 |
| Step 2 | CCV End Mark | 1 |
| Transfer Telno 1 | | 2900 |

3. Split Data



4. Split Tone

| Split Index | Wait Annc. 1 | Wait Annc. 2 | Wait Annc. 3 | Wait Annc. 4 | Wait Annc. 5 |
|-------------|--------------|--------------|--------------|--------------|--------------|
| 1 | 1 | 2 | 3 | 0 | 0 |
| 2 | 1 | 2 | 3 | 4 | 5 |
| 3 | 1 | 2 | 3 | 4 | 5 |
| 4 | 1 | 2 | 3 | 4 | 5 |
| 5 | 1 | 2 | 3 | 4 | 5 |
| 6 | 1 | 2 | 3 | 4 | 5 |
| 7 | 1 | 2 | 3 | 4 | 5 |
| 8 | 1 | 2 | 3 | 4 | 5 |
| 9 | 1 | 2 | 3 | 4 | 5 |
| 10 | 1 | 2 | 3 | 4 | 5 |
| 11 | 1 | 2 | 3 | 4 | 5 |
| 12 | 1 | 2 | 3 | 4 | 5 |
| 13 | 1 | 2 | 3 | 4 | 5 |
| 14 | 1 | 2 | 3 | 4 | 5 |

5. Logon Data

Logon Data

Close Query Change Add Delete

Default Insert Next Insert DELETE

| Index | Logon ID |
|-------|----------|
| 1 | 001 |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

Involved Split Index: 1

Assist Tel Number:

Max Work Time(sec): 15

Automatic Answer Time(sec): 5

Answer Mode: Automatic Manual

Zip Tone/Ring Mode: Tone Ring

Head/HandSet Mode: Handset Headset

6. Weekly Schedule

Weekly Schedule

Close Query Change Add Delete

Weekly Schedule Index: 1 Default Insert Next Insert DELETE

| Step | Day of Week | Time | CCV |
|------|-------------|------|-----|
| 1: | MON | 0900 | 2 |
| 2: | MON | 0900 | 1 |
| 3: | MON | 1800 | 2 |
| 4: | TUE | 0900 | 1 |
| 5: | TUE | 1800 | 2 |
| 6: | WED | 0900 | 1 |
| 7: | WED | 1800 | 2 |
| 8: | THU | 0900 | 1 |
| 9: | THU | 1800 | 2 |
| 10: | FRI | 0900 | 1 |
| 11: | FRI | 1800 | 2 |
| 12: | | | |
| 13: | | | |
| 14: | | | |
| 15: | | | |

| Step | Day of Week | Time | CCV |
|------|-------------|------|-----|
| 1: | MON | 0000 | 2 |
| 2: | MON | 0900 | 1 |
| 3: | MON | 1800 | 2 |
| 4: | TUE | 0900 | 1 |
| 5: | TUE | 1800 | 2 |
| 6: | WED | 0900 | 1 |
| 7: | WED | 1800 | 2 |
| 8: | THU | 0900 | 1 |
| 9: | THU | 1800 | 2 |
| 10: | FRI | 0900 | 1 |
| 11: | FRI | 1800 | 2 |

7. Holiday Schedule

The 'Holiday Schedule' window displays a table for configuring holiday steps. The 'Holiday Schedule Index' is set to 1. The table has three columns: Step, Time, and CCV Index. The first row (Step 1) has a Time of 0000 and a CCV Index of 2. The remaining rows (Steps 2-10) are empty.

| Step | Time | CCV Index | Step | Time | CCV Index |
|------|------|-----------|------|------|-----------|
| 1: | 0000 | 2 | 11: | | |
| 2: | | | 12: | | |
| 3: | | | 13: | | |
| 4: | | | 14: | | |
| 5: | | | 15: | | |
| 6: | | | 16: | | |
| 7: | | | 17: | | |
| 8: | | | 18: | | |
| 9: | | | 19: | | |
| 10: | | | 20: | | |

8. Holiday Schedule

The 'Holiday Calendar' window shows a calendar for the year 2002, Month 01. The calendar grid displays days from 1 to 31. The days of the week are labeled: Sun, Mon, Tue, Wed, Thu, Fri, Sat. The calendar shows that the 1st of the month is a Tuesday.

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |
| | | | | | | |

9. Terminal Information

The Terminal Information window displays a table with the following data:

| Tel No | Terminal Type | Split Index |
|--------|---------------|-------------|
| 2000 | DTEL-Agent | 0 |
| 2001 | DTEL-Agent | 0 |
| 2002 | DTEL-Agent | 0 |
| 2003 | DTEL | 0 |
| 2004 | DTEL | 0 |
| 2005 | DTEL | 0 |
| 2006 | DTEL | 0 |
| 2007 | DTEL | 0 |
| 2008 | DTEL | 0 |
| 2009 | DTEL | 0 |
| 2010 | DTEL | 0 |
| 2011 | DTEL | 0 |
| 2032 | DTEL | 0 |
| 2033 | DTEL | 0 |
| 2034 | DTEL | 0 |
| 2035 | DTEL | 0 |

10. Button Data

The Button Data window shows configuration for Tel. No. 2000, Query: DTEL. The table lists button settings:

| Button ID | Button Type | Button Data |
|-----------|--------------|-------------------------|
| 1 | Feature Code | Log-on/Log-off |
| 2 | Feature Code | Ready/Not Ready |
| 3 | Feature Code | Work Mode |
| 4 | Feature Code | Work after Call |
| 5 | Feature Code | Automatic/Manual Answer |
| 6 | Feature Code | Ring/Tone Mode |
| 7 | Feature Code | Headset/Handset |
| 8 | Feature Code | Assistance |
| 9 | Not Define | |
| 10 | Not Define | |
| 11 | Not Define | |
| 12 | Not Define | |
| 13 | Not Define | |
| 14 | Not Define | |
| 15 | Not Define | |
| 16 | Not Define | |
| 17 | Not Define | |
| 18 | Not Define | |

11. System Option

The screenshot shows a dialog box titled "System Option" with a standard Windows-style title bar (minimize, maximize, close buttons). At the top, there are three buttons: "Close", "Query", and "Change". The dialog contains several configuration options:

- Agent Logon ID Length:** A dropdown menu currently showing the value "3".
- Use ACD Service Tone For RBT:** A group box containing two radio buttons: "NO" (selected) and "YES".
- ReRing Count at Agent No Answer:** A dropdown menu currently showing the value "0".
- Use Trunk I/C Option:** A group box containing two radio buttons: "NO" (selected) and "YES".
- Send DTMF Tone for C.G.T:** A dropdown menu currently showing the value "NO".
- Directly call agent - Not Ready or ACW:** A group box containing two radio buttons: "NO" and "YES" (selected).

4.2 Call Center using CTI Routing

Description

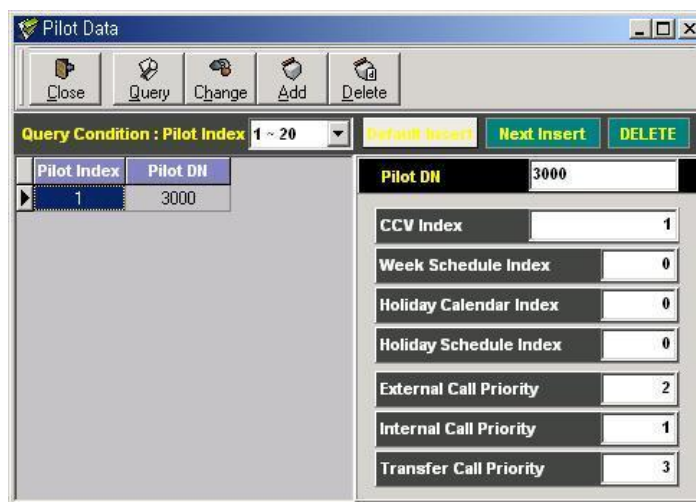
This feature is to establish a call center using the CTI Call Routing feature

Analysis of Call Center Operation

- q ACD Pilot Number: 3000
- q Service Procedure for ACD I/B Call (CCV)
 - Keep calls waiting in Routing Queue
 - Have the calls waiting in the Queue until calls are distributed using CTI *Switching Function Service-Divert Call Service*.
 - If the Queue waiting time is over, keep the calls waiting in the ACD Queue
 - Distribute the calls according to the CS-1000 ACD feature
- q Queue Waiting Announcement
 - Routing Queue: 2 steps
 - ACD Queue: 1 step
- q Agent ID and Telephone
 - Telephone Set: (3 sets) 2000, 2001, 2002
 - Agent ID (5): 001, 002, 003, 004, 005

Data Generation

1. Pilot Data



| Pilot Index | Pilot DN |
|-------------|----------|
| 1 | 3000 |

Pilot DN: 3000

CCV Index: 1

Week Schedule Index: 0

Holiday Calendar Index: 0

Holiday Schedule Index: 0

External Call Priority: 2

Internal Call Priority: 1

Transfer Call Priority: 3

2. Call Control Vector

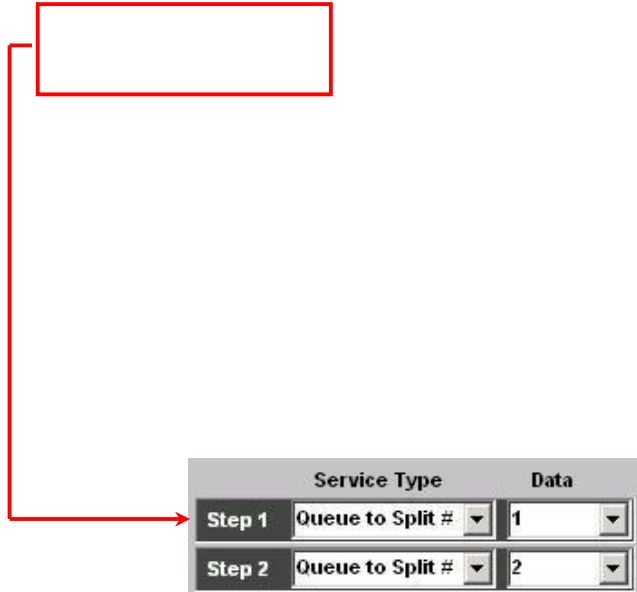


| CCV Index | Data |
|-----------|------|
| 1 | |

Service Type: Data

Step 1: Queue to Split # 1

Step11:

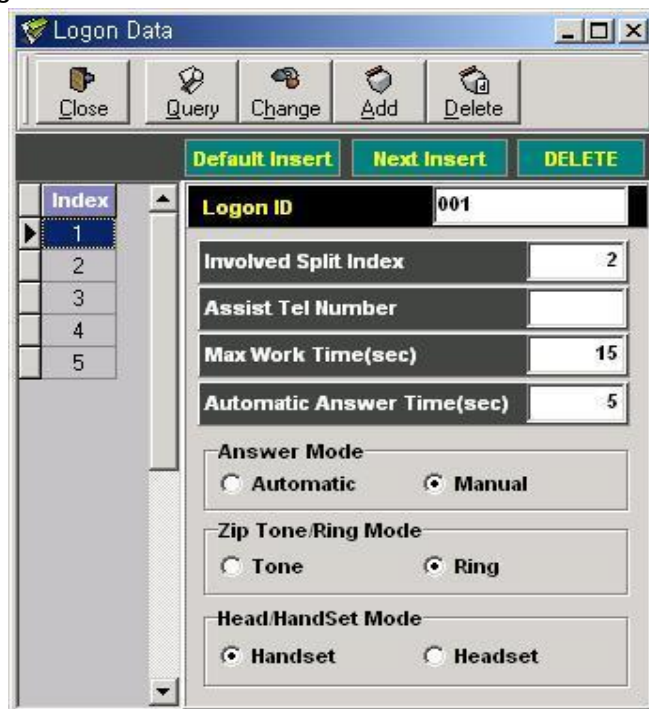


3. Split Data

The screenshot shows the 'SPLIT Data' window. At the top, there are buttons for 'Close', 'Query', 'Change', 'Add', and 'Delete'. Below these are three buttons: 'Default Insert', 'Next Insert', and 'DELETE'. A table with two columns, 'Split Index' and 'Split Queue DN', contains two rows: (1, 3000) and (2, 3001). To the right of the table, there are fields for 'Split Index : 1' and 'Split Queue DN : 3000'. Below these are several configuration options: 'Queue Depth' (20), 'Logoff Mode' (Allow Queue), 'Status on Repair' (Logoff), 'Step Of Announcement' (2), and 'Forward Tel Number'. At the bottom, there are several checkboxes: 'Use ID on logoff', 'Not Use ACW on Each I/B', 'Not Use ACW on Each O/B', 'Use After Call Work Mode', and 'CTI Call Routing' (checked).

This screenshot is similar to the one above but shows the second row selected. The 'Split Index' field is now '2' and the 'Split Queue DN' field is '3001'. The 'Queue Depth' field is still '20'. The other configuration options are not visible in this view.

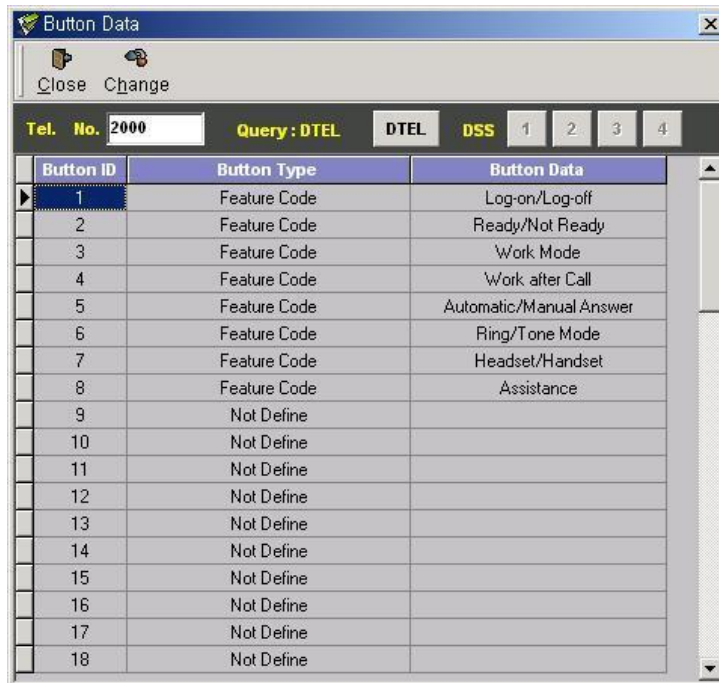
4. Logon Data



5. Terminal Information



6. Button Data



The screenshot shows a window titled "Button Data" with a toolbar containing "Close" and "Change" buttons. Below the toolbar, there is a "Tel. No." field with the value "2000", a "Query" dropdown menu set to "DTEL", and a "DSS" section with buttons for "1", "2", "3", and "4". The main area is a table with three columns: "Button ID", "Button Type", and "Button Data".

| Button ID | Button Type | Button Data |
|-----------|--------------|-------------------------|
| 1 | Feature Code | Log-on/Log-off |
| 2 | Feature Code | Ready/Not Ready |
| 3 | Feature Code | Work Mode |
| 4 | Feature Code | Work after Call |
| 5 | Feature Code | Automatic/Manual Answer |
| 6 | Feature Code | Ring/Tone Mode |
| 7 | Feature Code | Headset/Handset |
| 8 | Feature Code | Assistance |
| 9 | Not Define | |
| 10 | Not Define | |
| 11 | Not Define | |
| 12 | Not Define | |
| 13 | Not Define | |
| 14 | Not Define | |
| 15 | Not Define | |
| 16 | Not Define | |
| 17 | Not Define | |
| 18 | Not Define | |

7. System Option



The screenshot shows a window titled "System Option" with a toolbar containing "Close", "Query", and "Change" buttons. Below the toolbar, there is a field for "Agent Logon ID Length" with a dropdown menu showing the value "3". Below that, there is a checkbox labeled "Use ACD Service Tone For RBT" which is currently unchecked.

