

Strata[®] ***DK424***

Digital Business Telephone Systems

Insight DK Supervisor Guide

Publication Information

Toshiba America Information Systems, Inc., Telecommunication Systems Division, reserves the right, without prior notice, to revise this information publication for any reason, including, but not limited to, utilization of new advances in the state of technical arts or to simply change the design of this document.

Further, Toshiba America Information Systems, Inc., Telecommunication Systems Division, also reserves the right, without prior notice, to make such changes in equipment design or components as engineering or manufacturing methods may warrant.

D42-SG-INSIT-VA
4016162

Version A, May 1999

© Copyright 1999

**Toshiba America Information Systems, Inc.
Telecommunication Systems Division**

All rights reserved. No part of this manual, covered by the copyrights hereon, may be reproduced in any form or by any means—graphic, electronic, or mechanical, including recording, taping, photocopying, or information retrieval systems—without express written permission of the publisher of this material.

Strata is a registered trademark of the Toshiba Corporation. Insight DK is a trademark of Toshiba America Information Systems, Inc.

Trademarks, registered trademarks, and service marks are the property of their respective owners.

Contents

Introduction

Organization	iii
Conventions	iii
Related Documents	v

Chapter 1 – The Grand Tour

Before You Begin	1
Hardware	1
Software	1
Main Menu and Tool Bars	2
Online Help	2

Chapter 2 – Real Time Displays

Creating Real Time Displays	3
Composite Screen Layout	4
Agent Status Window	5
Create a new Agent Status Window	5
Configure the Agent Status Window	5
Real Time Statistics	6
Setting Real Time Stats	6
Agent Statistics	7
Create a new Agent Statistics Window	7
Configure the Agent Statistics Window	7
Wait Time Graph	8
Create a Wait Time Graph Window	8
Change Properties for the Wait Time Graph	9
Calls in Queue Graph (Insight DK Plus only)	10
Creating Calls in Queue Graph	10
Configuring the Calls in Queue Graph	11
Large Character Window	12
Create Large Character Window	12
Configure a Large Character Window	12
Duplicate a Large Character Window	13

Chapter 3 – Reports

Overview	15
Report Concepts and Terminology	16
Devices	16
Shifts	16
Filters	18

Templates	19
Scheduling	19
Reports	19
Event Reports	19
Traffic Reports for Agents or Extensions	21
Traffic Reports for Lines or DNIS/DID Numbers	24
Utilization Reports	27
Contention Reports (Insight DK Plus Only)	28
Wait Time Distribution Report	28
Account Code Report	28
Using MIS Reports to Improve Performance	29
Abandoned calls and long waits	29
Complaints of busy signals	30
Unexpected out-of-hours customer demand	30
Complaints about too many transfers	30
Creating Reports	31
Create a Report Template	31
Edit the Report Contents	32
Filter the Report Contents (optional)	33
Print the Report	34
Exporting Reports	35
Forecasting	36
Forecasting Reports	36
Forecasting Profile Report	38
 Chapter 4 – Wallboards	
Configuring Wallboards	41
Changing Fonts	44
Creating Temporary Wallboard Messages	45
Queuing Messages	46
 Chapter 5 – Alarms	
Configure Alarms	47
To View Alarms	49
 Glossary	
General Terms	51
Report Terminology	55
 Index	59

Introduction

This guide provides instructions for using the Strata DK Insight and Insight DK Plus Management Information System (MIS) for call centers. DK Insight and Insight DK Plus are compatible with the following Strata DK Systems:

- ♦ DK280 (Release 3.0 or higher) with the RCTUBA/BB, RCTUC/D, RCTUE/F processors
- ♦ DK424, with the RCTUBA/BB, RCTUC/D, RCTUE/F processors

Organization

This guide is divided as follows:

- ♦ [Chapter 1 – The Grand Tour](#) covers the basic requirements for Insight DK and DK Plus. It also provides an overview of the toolbars.
- ♦ [Chapter 2 – Real Time Displays](#) explains how to create and edit status, statistics, graphical, wait time, and large character displays.
- ♦ [Chapter 3 – Reports](#) details how to create and edit report templates, reports, as well as how to filter, compile, print, import and export report data.
- ♦ [Chapter 4 – Wallboards](#) shows how to configure wallboards, set up schedules and messages.
- ♦ [Chapter 5 – Alarms](#) covers configuring alarms, displaying alarms, and explains the various colors and thresholds associated with specific alarms.
- ♦ [Glossary](#)

Conventions

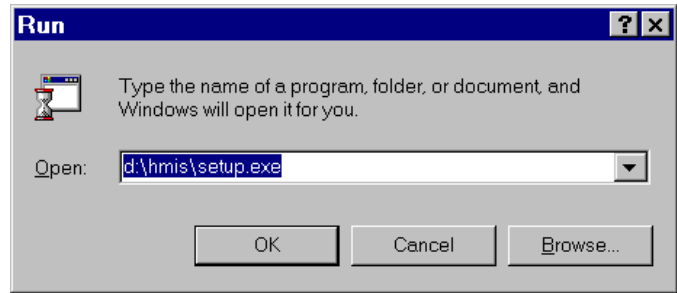
This guide uses these conventions:

► Denotes a procedure

1. *Actions* you perform appear in this column. They can consist of either a single step or a series of numbered steps.

The *immediate response to the action* performed appears in this column. Additional notes and comments are also included.

2. When the action you perform results in a screen, menu, dialog box, etc., the example to the right displays.



Letters in [brackets] represent buttons which have Directory Numbers on them. For example:

- [PDN] represents a Primary Directory Number (also known as an Extension Number for your telephone).
- [SDN] represents a Secondary appearance of a [PDN]. A [PDN] which appears on another telephone is considered an [SDN].
- [PhDN] represents a Phantom Directory Number button (an additional Directory Number).
- [DN] represents a Directory Number button (also known as an Extension or Intercom Number). Whenever [DN] is used in this guide, it means the user can use any [PDN], [SDN], or [PhDN].

Extra bold represents buttons on a telephone.

Courier shows a computer keyboard entry or screen display. “Type” indicates entry of a string of text. “Press” indicates entry of a single key. Example: Type **prog** then press **Enter**.

Times Roman words that are capitalized represent a specific dialog box button. For example: Transfer button.

“Click” means to press and then release the mouse button without moving the mouse.

~ means “through”

+ is used for multiple key entries.

➤ denotes the step in a one-step procedure.



represents an icon button on a feature toolbar. When you click on this icon, it achieves the same result as the step that it appears next to.

Note Elaborates specific items or references other information. Within some tables, unnumbered notes apply to the entire table and numbered notes apply to specific items.

Important! *Calls attention to important instructions or information.*

CAUTION! Advises you that hardware, software applications or data could be damaged if the instructions are not followed closely.

Related Documents/Media

Refer to the following documents for more information:

- ♦ **Strata DK Call Center Solutions – Chapters 3~5** provide an overview of the Insight DK and Insight DK Plus Management Information System (MIS). It summarizes the differences between the Insight DK and DK Plus. It also provides examples of various PBX/MIS configurations, including some with wallboards, backup servers, and sub-clients.
- ♦ **Insight DK inView Quick Reference Guide** provides instructions for viewing and customizing the on-screen wallboard and large character views of the real time call center data.
- ♦ **Insight DK Installation Guide** explains how to set up the network, install the server software, install clients and explains how the data files are organized.
- ♦ **Insight DK CD-ROM** which includes training, all Insight DK documentation, Insight DK software and the upgrade to Insight DK Plus, and Demo software.
- ♦ **Strata DK Library CD-ROM** enables you to view, print, navigate and search publications for Strata DK14, DK40 and DK424 digital business telephone systems. It also includes Strata DK424 ACD Documentation, including the *Call Center Solutions General Description*, *ACD Agent Guide*, *ACD Supervisor's Guide*. ACD Installation and Programming instructions are included in the *Strata DK Installation and Maintenance Manual* and *Programming Manual*.

This chapter explains how to use the Strata Insight DK and Insight DK Plus MIS features.

Before You Begin

Strata Insight DK and Insight DK Plus require the following:

Hardware

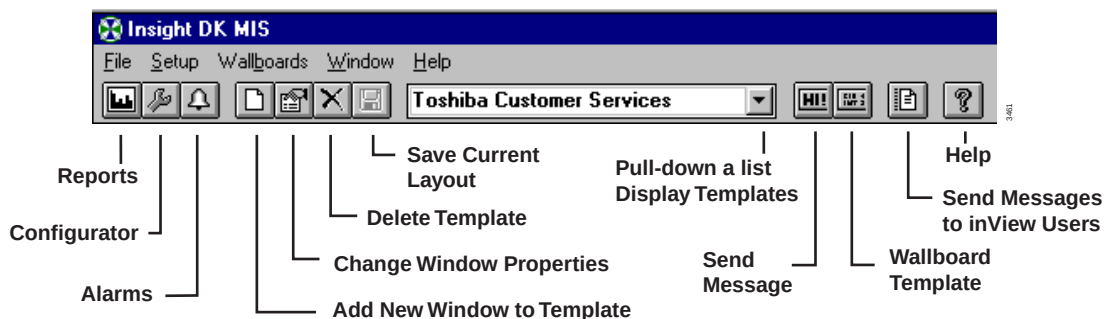
- ♦ Pentium PC running at 133 MHz or higher
- ♦ 16 MB memory (32 MBs preferred)
- ♦ Hard Disk with capacity to store data records (1.6 GB minimum). Program memory will use approximately 10 MBs.
- ♦ SVGA monitor
- ♦ 1 parallel port and 2 serial ports – must have unique Interrupt Requests (IRQs) available

Software

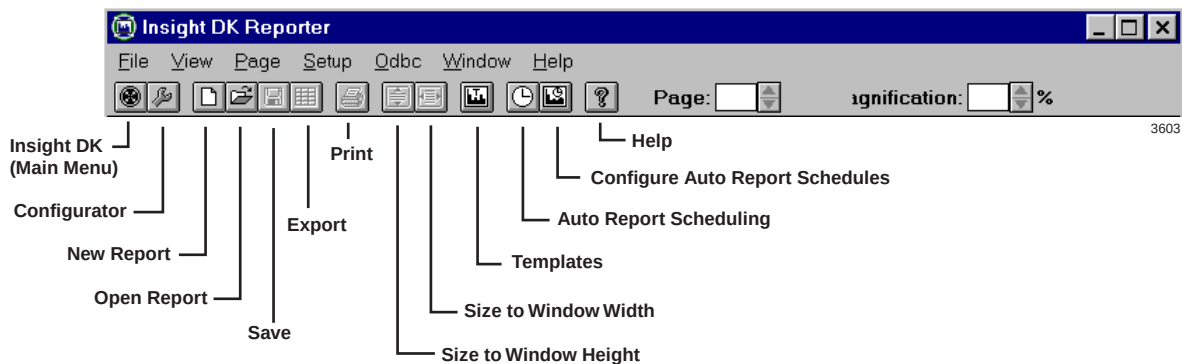
- ♦ Microsoft® Windows® 95, Windows 98, Windows NT® 4.0 or higher
- ♦ Windows 95 version 4.00.950, a, b, or c. Right click on My Computer, select Properties. Listed under system will be the operating system Window 95.
- ♦ Or, use Windows NT 4.00.1381 (must install Service Pack 3 (SP3), available from Microsoft).
- ♦ Uses pcAnywhere® V8.0 for remote software access

Main Menu and Tool Bars

The Insight DK Main Menu provides access to all of its features. The software is presented in a Windows format, which is easy to use. The following shows the Main Menu items and icons.



When you click on the Reports Icon, the Reporter Toolbar appears (shown below).



Online Help



You can access online help with specific help on virtually any window of Insight DK and DK Plus. Click on the help icon to view definitions and instructions.

This chapter covers setting up and interpreting Real Time Displays. These displays provide immediate feedback on the activity on your call center; they update every second. You can create custom templates using a variety of display windows. Standardized colors indicate various alarm states and status conditions.

Real Time Displays are configured into templates. A template is a set of display windows that can be viewed directly on the screen. Insight DK supports four templates, while the Insight DK plus has an unlimited number of templates.

Creating Real Time Displays

Real time displays are used to monitor activity in the call center during working hours. You will want to determine how many and what type of the following displays you would initially like to see. Refer to the table below for Display types.

Note [Table 1](#) describes all of the displays available with Insight DK Plus. Insight DK provides a subset of these displays, shown in **bold**.

Table 1 Available Displays

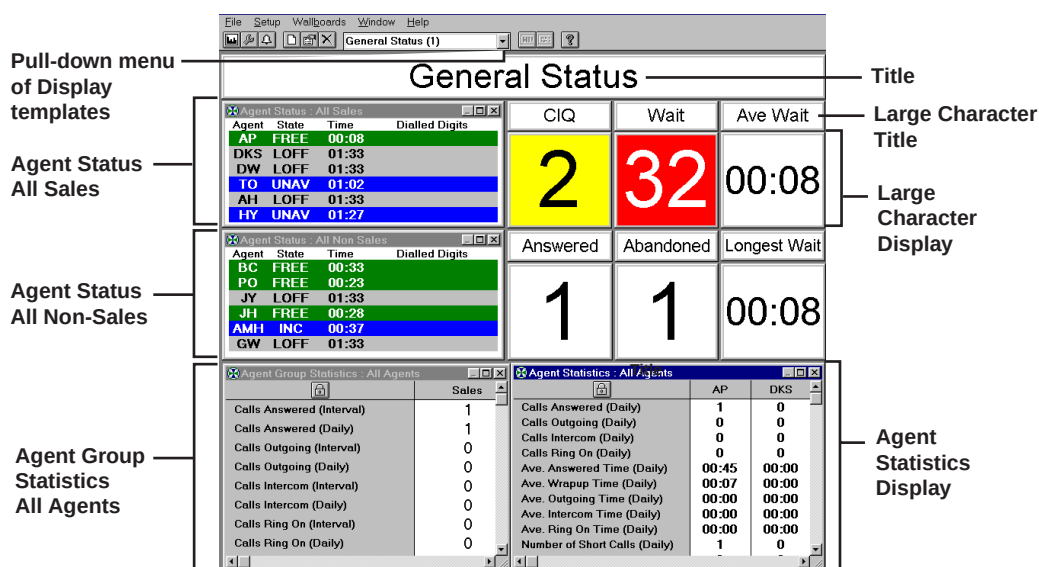
Display	Available for:	Shows
Status Displays	• Agents • Extensions • Lines	Name/Number, Associated Name/Number, connected to location and status.
Statistic Displays	• Agents • Extensions • Lines • DID • Agent Groups • Ext. Groups • Line Groups • DID Groups	Each row displays selected parameters and each column represent each individual or group.
Graphical Displays – Calls Waiting	• Agent Groups • Ext. Groups • Line Groups • DID Groups • DIDs	A bar represents either a group or a DID number. The length of the bar show the number of calls waiting.

Table 1 Available Displays (continued)

Display	Available for:	Shows
Graphical Displays – Wait Time	- Agent Groups - Ext. Groups - Line Groups - DID Groups - DIDs	A bar represents either a group or a DID number. The length of the bar show the number of seconds for the longest call waiting.
Large Character Displays	- Agents - DIDs - Extensions - Lines - Agent Groups - DID Groups - Ext. Groups - Line Groups	Each display shows the selected parameter from the device being monitored. A Large Character Display can also be defined as a label for placing titles on the screen.

Composite Screen Layout

The following figure shows an example of a composite layout with various real time display windows. When a layout like this one is saved, you can easily pull up the same windows by selecting this layout.



Indication Colors

On a color monitor, the above windows will show the status of agents and/or devices. Insight DK uses five colors for various alarms and call states.

Color	Meaning	Notes
Red	Alarm	Waiting time threshold exceeded, etc.
Yellow	Ringing	Device or line is ringing
Blue	Busy	Agent on call, in wrap up, etc.
Green	Idle	Agent is idle. Line is free.
Grey	Device logged off	

The following procedures describe how to create and configure Agent Displays. The procedures for each type of display are the same. For instance, the procedure to create Agent Status Displays is the same for Extension and Line Displays.

Agent Status Window

This window shows the current status of each agent in the selected group. Short descriptions of each agent's status appears with a background color that represents various call and/or alarm states. The amount of time that each agent has been in the current state is shown. Additional information can be displayed by selecting those parameters within the Configuration window.

Create a new Agent Status Window



1. From the Window menu, click on the New icon.
2. From the Agent Status, select Agent Status, click OK.

Agent	State	Time
TO	UNAV	08:41
AH	UNAV	04:11
HY	UNAV	09:06
AP	FREE	01:18
DKS	FREE	01:13
DW	FREE	00:34
BC	FREE	01:37
PO	FREE	01:14

3537

Configure the Agent Status Window



1. Right click on the Agent Status window
...or click the Properties for Agent Status Window icon.

Properties for the Agent Status Window

Agent Group: **Outbound Agents**

Show Agent Information: ☐ Number ☒ Name ☐ Group Name

Show Extension Information: ☐ Number ☐ Name ☐ Group Name

Show Connected To Information: ☐ Number ☐ Name ☐ Group Name
☐ Show Extension in Preference to Agent
☐ Show Line in Preference to DDI

Show Call Details: ☐ Dialed Digits

Agent Name Format: ☒ Short ☐ Long

Extn Name Format: ☐ Short ☒ Long

Connected To Name Format: ☐ Short ☒ Long

Display Mode: ☒ Rows ☐ Columns

OK Cancel

3536

2. From Properties for the Agent Status window, enter/select:
 - ♦ Agent Group
 - ♦ Agent information to be shown
 - ♦ Extension information
 - ♦ Connected to information
 - ♦ Devices to display

- | | |
|--|--|
| <ul style="list-style-type: none"> ♦ (Optional) Check Show Extensions in Preference to Agent. ♦ (Optional) Check Show Line in Preference to DID. ♦ (Optional) Check Dialed Digits. ♦ Select Rows or Columns. | <p>This options always displays the name/number of the extension an agent is connected to, even if the agent is logged on at another extension. If unchecked, the agent number/name displays.</p> <p>When checked, this displays the number/name of the line that the agent is connected to, even if there is a DID number associated with the line. If unchecked, the DID number/name displays.</p> <p>Check this box to display dialed digits for outgoing calls or Automatic Number Identification (ANI) or Caller ID (CLID) digits for incoming calls. (Requires RKYS4 key).</p> |
| <p>3. Click OK when done.</p> | <p>Show additional agents in columns, using the horizontal scroll bar. Or, to show rows, use the vertical scroll bar.</p> |

Real Time Statistics

Statistics can be presented as:

- ♦ **Interval Call Statistics** in which you set the length of time (from 1~1140 minutes) that the calculations should cover.
- ♦ **Daily Call Statistics**, which are based on shift schedules. The counter is reset to zero at the beginning of each shift.

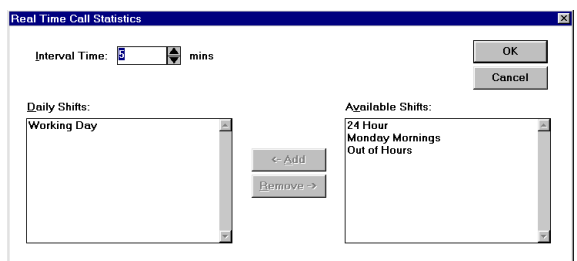
The parameters for Interval and Daily Call Statistics are defined under Setup, Realtime Stats.

Statistical Thresholds and Alarm Thresholds are established in the Configurator. Interval Time periods and Daily Shifts which have already been created can be added or removed for calculation purposes from the Setup menu.

Setting Real Time Stats

Access Real Time Stats to configure how the interval call statistics and the daily call statistics operate. This is a list of the shifts available to use to control the daily call statistics. See also Configuring real time call statistics

1. Click Setup, Real Time Stats.
2. Add new shifts by highlighting a shift from the Available Shift, then click Add



Daily Shifts lists the shifts that are to be used in the Real Time Displays. These can be used to provide automatic start and ending times.

...or remove shifts by highlighting the shift(s), then click Remove.

Agent Statistics

Statistics based on parameters and time periods that you select will be displayed in the Agent Statistics Window.

Create a new Agent Statistics Window



1. From the Window menu, click on the New icon.
2. Select Agent Statistics, click OK.

	Sales	Support	Admin	Tele Sales
Calls Answered (Daily)	261	234	236	0
Calls Outgoing (Daily)	0	0	0	0
Calls Intercom (Daily)	0	0	0	0
Calls Ring On (Daily)	0	0	0	0
Ave. Answered Time (Daily)	01:31	01:20	01:32	00:00
Ave. Wrapup Time (Daily)	00:08	00:10	00:11	00:00
Ave. Outgoing Time (Daily)	00:00	00:00	00:00	00:00
Ave. Intercom Time (Daily)	00:00	00:00	00:00	00:00
Ave. Ring On Time (Daily)	00:00	00:00	00:00	00:00
Longest Answered Time (Daily)	02:23	02:13	02:05	00:00
Longest Outgoing Time (Daily)	00:00	00:00	00:00	00:00
Number of Short Calls (Daily)	27	52	27	0
Number of Long Calls (Daily)	26	26	26	0
G.O.S. (Daily)	79.7	66.7	77.5	100.0
Calls Answered (Interval)	0	0	2	0
Calls Outgoing (Interval)	0	0	0	0
Calls Intercom (Interval)	0	0	0	0
Calls Ring On (Interval)	0	0	0	0
Ave. Answered Time (Interval)	00:00	00:00	01:09	00:00
Ave. Wrapup Time (Interval)	00:00	00:00	00:06	00:00
Ave. Outgoing Time (Interval)	00:00	00:00	00:00	00:00
Ave. Intercom Time (Interval)	00:00	00:00	00:00	00:00
Ave. Ring On Time (Interval)	00:00	00:00	00:00	00:00
Longest Answered Time (Interval)	00:00	00:00	01:24	00:00
Longest Outgoing Time (Interval)	00:00	00:00	00:00	00:00
Number of Short Calls (Interval)	0	0	1	0
Number of Long Calls (Interval)	0	0	0	0
G.O.S. (Interval)	100.0	100.0	50.0	100.0

3459

After creating the Agent Statistics window, you can go to the Properties for the Agent Statistics Window to configure this display.

Configure the Agent Statistics Window

1. Right click on the Agent Statistics window.

Properties for the Agent Group Statistics Window

Agent Super Group: All Agents

Font Size: ☐ Small ☒ Normal

Group Title: Word Wrap 18 Characters

Displayed Parameters:

- Calls Outgoing (Daily)
- Calls Intercom (Daily)
- Calls Ring On (Daily)
- Ave. Answered Time (Daily)
- Ave. Wrapup Time (Daily)
- Ave. Outgoing Time (Daily)
- Ave. Intercom Time (Daily)
- Ave. Ring On Time (Daily)
- Longest Answered Time (Daily)
- Longest Outgoing Time (Daily)

Alternative Label:

Parameters Available:

- Separators
- Calls Answered (Interval)
- Calls Answered (Daily)
- Calls Outgoing (Interval)
- Calls Outgoing (Daily)
- Calls Intercom (Interval)
- Calls Intercom (Daily)
- Calls Ring On (Interval)
- Calls Ring On (Daily)
- Ave. Answered Time (Interval)

< Add

Remove >

3604

2. From the Properties for Agent Group Statistics window, enter or select:

- ♦ Agent Super Group
- ♦ Font Size
- ♦ Agent Name Format
- ♦ Select Displayed Parameters, click Add or Remove ...or select a Parameter and click Alternative Label to rename it.



- ♦ (Optional) Use the lock button to toggle the Agent Statistics window between two display modes.

3. Click OK.

Button ON (pressed): Displays the single agent that was left most in the window before the lock button was pressed. The horizontal scroll bar is removed.

Button OFF: Displays all the agents within the selected agent group and provides a scroll bar if there are more agents than can fit in the window.

Wait Time Graph

This is one of the real time data windows that can be created in the work space area of the Insight DK MIS application window.

Each wait time bar graph window shows the wait time for the longest waiting call currently queued on a series of line groups, DID numbers, DID groups, extension groups or agent groups.

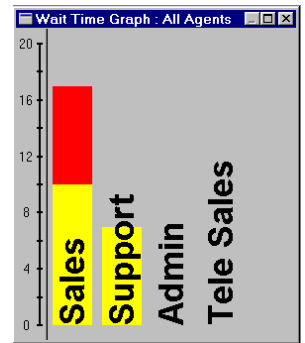
The graph uses status colors to provide an at-a-glance indication of the status of the longest wait time in each queue. If the longest wait time in a given queue exceeds the wait time alarm limit for that queue, then the corresponding bar turns red to show how much over the alarm threshold the call has been waiting.

Create a Wait Time Graph Window



1. Click the New icon.
2. Select Wait Time Graph from the drop down list.

- Click OK.



The bar graph can be orientated horizontally or vertically. It can also be set to auto-scale proportionally for the alarm limits configured for the displayed parameters.

Change Properties for the Wait Time Graph

- Right click on the Wait Time Graph that you wish to change.
- Select the desired Wait Time Graph, then choose Properties.

- Select the Name of the Device that you wish to monitor the members of.
- Select the graph orientation (horizontal or vertical).
- Enter a bar Height/Width (define the bar sizes in pixels).
- Enter a Bar Separation (define spacing between bars in pixels).

For example, if you select DID Group, you can monitor the DID numbers belonging to the selected group. Whereas, if you choose DID Super Group you can monitor DID Groups within the selected Super Group.

7. Check the Text In Bar box to display text labels within the bars.
8. Either check the Autoscale box or enter the maximum number of calls you wish the queue graph to display.
9. Choose the axis position (Top/Left, Bottom/Right, or both).
10. Click OK.

If you choose text in bar, the label size is governed by the bar size. If you choose text outside the bar the label size is governed by the bar spacing.

Calls in Queue Graph (Insight DK Plus only)

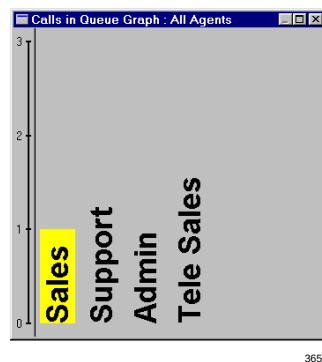
Each Calls in Queue Graph window displays bar graphs of the number of calls currently queued on a series of line groups, DID numbers, DID groups, extension groups or agent groups. This graph displays real time data and can be placed in the composite real time display area.

The graphs are in color so that queue status can be determined at a glance. If too many calls are waiting to be answered in a given queue (as defined by the calls waiting alarm limit for that queue), the corresponding bar turns red. The red bar also shows how many calls are exceeding the alarm threshold.

Creating Calls in Queue Graph



1. Click on the New icon
2. Select Calls In Queue Graph from the drop down list.
3. Click OK.



You can configure the contents of this window (see following instructions) to adjust the size and position of the window.

Configuring the Calls in Queue Graph

You can configure the Calls in Queue Graph properties: orient the bar horizontally or vertically, set the bar width, bar separation, set text in the bar, and scale the bar.



1. Select the New icon.
2. From the New Real Time window, select Calls in Queue Graph from the drop down list.
3. Right click on the Calls in Queue Graph Window that you wish to configure.

The New Real Time Window displays.

4. From the Properties for the Calls in Queue Window, select the Name of the Device that you wish to monitor the members of.
5. Select the graph orientation (horizontal or vertical).
6. Enter a bar Height/Width (define the bar sizes in pixels).
7. Enter a Bar Separation (define spacing between bars in pixels).
8. Check the Text In Bar box to display text labels within the bars.

For example, if you select DID Group, you can monitor the DID numbers belonging to the selected group. Whereas, if you choose DID Super Group you can monitor DID Groups within the selected Super Group.

Large Character Window

You can create large character windows that display a single parameter for a device or group of devices. These windows can display real time status information, such as the number of calls waiting to be answered or call statistics information, such as the average call wait time. Real time status data is shown with the correct background status color. And, both interval and daily call statistics are supported.

Create Large Character Window



1. From the Window menu, click on the New icon.
2. In the New Real Time Window box, select Large Character, click OK.

A large character window appears.

Configure a Large Character Window

1. Right click on the large character window that you wish to configure.

3535

2. From the Properties for Large Character Window, enter or select:

- ♦ Device Type
- ♦ Device Name
- ♦ Parameter
- ♦ Window Text
- ♦ Expected Display Length digits
- ♦ (Optional) Hide Window Caption

If you chose Device Type <None>, then enter Window Text that you wish to display.

(See Device Type.)

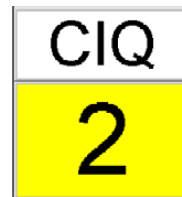
To minimize font size switching within the window, enter the Expected Display Length digits.

- ♦ (Optional) Check Mouse Drag Window Positioning When Caption Hidden
- 3. Click OK when done.

This option enables you to move the large character window when the window caption is hidden.

Duplicate a Large Character Window

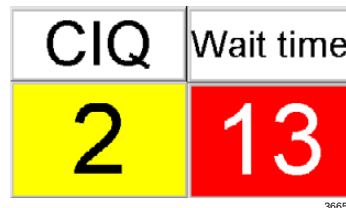
1. Click on the Large Character window to duplicate.



2. Click the New icon and enter information ([Substep 2](#), "Configure a Large Character Window").
3. Click OK.



A data window appears.



Tip: This is a good technique for creating windows with the same size dimensions for a uniform display appearance.

This chapter provides an in-depth look at of the Insight DK Reporter. The Reporter program enables you to collate, view, and print historical reports. This chapter explains how to create report templates and how to interpret the report data. Also included are instructions for Insight DK Plus, which enables exporting data that can be imported into spreadsheet programs, such as Microsoft Excel®.

Overview

The programming in the Configurator is a key element for creating reports. The Configurator must mirror the telephone system configuration so that data can be collected for each device used in Strata DK, including Lines, Agents, Extensions, Agent Queue Groups and DID Numbers.

While Insight DK is running, all monitored telephone traffic is logged to the hard disk for analysis by the Reporter. To simplify the process of reporting, Insight Reporter provides the concept of a “report template” to define the contents of a report. You can create any number of report templates.

A report template is a series of reports used collectively to achieve a desired result. For example, a weekly report for Inside Sales may include a Line Traffic Report, an Agent Group Traffic Report, or Call Distribution Report.

Reports can be collated with respect to any number of definable weekly shifts. For example, if two sets of agents man the call center at different times during each day of the week, then Insight Reporter can generate reports for each shift as necessary. Once collated you can either view the report on screen or send a copy to the printer.

Insight DK and Insight DK Plus support Traffic and Event Reports.

- ♦ **Traffic Reports** provide general information on the call center and are useful for spotting trends in work and areas for improvement.
- ♦ **Event Reports** give detailed information about an individual or a group (of agents, lines, extensions, DIDs) and provide a valuable investigative tool to pinpoint a problem.

Report Concepts and Terminology

Understanding the key concepts and terminology used with the Reporter is vital to understanding the product. The following paragraphs explain these key concepts and terms. Also refer to [“Report Terminology” on Page 55](#) of the Glossary.

Devices

Insight DK refers to lines, DIDs, extensions, agents and account codes as devices. Users can create “groups” and “super groups” of devices. A group is simply a collection of devices and a super group is a group of groups. Insight Reporter reports on:

- ♦ Individual devices
- ♦ Groups
- ♦ Super Groups

To ensure the accuracy of the reports it is vital that the configuration of the telephone system is reflected in the programming of Insight. The devices are configured in the Configurator. See [Table 2](#) for more information:

Table 2 Configurator Terms

Lines	In the context of Insight DK, a line represents either one of your external trunks or tie lines connected to the Strata DK being monitored. Each line can handle only one telephone call at any one time. These calls are denoted as incoming calls because the call was originated outside the switch. Strata DK does not report real time status of outgoing calls placed over the monitored lines.
DNIS/DIDs	A Dialed Number Identification Service (DNIS) or Direct Inward Dial (DID) number is a dynamic numeric attribute assigned to a line on an incoming call. A DNIS/DID call can be routed to groups of extensions/agents or to an individual extension/agents depending how the call routing software within the Strata DK has been programmed. If configured correctly, Insight DK can monitor in real time and historically the activity of inbound calls associated with DNIS/DID numbers.
Extensions	An extension is the physical telephone handset at which an agent can receive incoming calls, make outgoing calls or handle other forms of internal telephony traffic. Within the Strata DK systems, an extension is reported like an Agent. Thus the reports available for Extensions look very similar to those reported for an Agent except an Extension does not have the ability to log in or out.
Agents	An agent is the telephone operative who handles calls at an extension. Agents are identified by an Agent ID Code they use at the extension to enable call center telephony routing facilities within the switch. The Agent ID must uniquely identify the agent for Insight DK to give meaningful statistics concerning the activity of individual agents.
Account Codes	While on a call, agents can enter account codes that describe the nature of the call. Up to 15 account code digits can be entered, but Strata DK only reports the first two digits to Insight DK for reporting. The Strata DK allows up to 100 account code to be entered and up to 20 account codes can be entered per call. Insight Reporter provides analysis of account code usage.

Shifts

Reports are compiled based upon shifts that are defined in the Configurator. These are used to filter the collected data to those times the user is interested. Real working shifts are used to create reports; however, shifts can also be used to determine what happens outside normal working hours, or certain days of the week, or just during certain hours (e.g., lunchtimes). For example, you can create a report over a six-month period that only reports the activity on Mondays.

Types of Reports

This section defines the types of reports available for the user. The terms used on the reports are explained in the next section.

Note Table 3 describes all of the reports available through Insight DK Plus. Insight DK provides a subset of these reports, shown in **bold**.

Table 3 Available Reports

Report Type:	Available for:	Shows:	Uses:
Event Reports	- Agents - Extensions - Line Groups	Each event shown per line with important information.	Provides a step-by-step account of what is occurring on a particular device.
Traffic Reports	Agents - Extensions - Lines	Each device is shown per line with call statistics presented in columnar format.	Traffic Reports are designed to give an overview of activity and performance of all members of a group.
Group Traffic Reports	Agent Groups DID Groups - Ext. Groups Line Groups	Each line reports call statistics and performance. Each group of the super group are displayed in a side-by-side columnar format.	Group Traffic Reports are designed to give an overview and comparison of activity and performance against certain parameters.
Traffic Profile Reports	- Agents - Extensions	Each line reports a time period with call statistics for a particular device reported in a columnar format.	Shows activity of particular device for selected performance parameters.
Group Traffic Profile Reports	- Agent Groups DID Groups - Ext. Groups Line Groups	Each line reports call statistics for a particular group reported over a profile time period.	Shows peak and quiet times for a particular group.
Utilization Reports	Agents - Extensions	Each line reports a particular device with statistics displayed as the percentage of time involved in a given activity in a columnar format.	Utilization Reports can be used to see how the resources in a particular group are being used.
Utilization Profile Reports	Agents - Extensions	Each line reports a time period with statistics displayed as a percentage of time in a given activity in a columnar format.	Utilization Profile reports show the peaks and valleys of a selected device over the selected time periods.
Contention Reports	- Agents - Extensions - Lines	Each line shows a number of idle devices and each group in a columnar format.	Contention Reports are used to show the amount of time (%) a line or agent is free over the reporting period.
Contention Profile Reports	- Agents - Extensions - Lines	Each line shows a number of idle devices and time profiles in a columnar format.	Contention Profiles provide a view when devices are busiest over the period defined.
Wait Time Distribution Reports	DIDs DID Groups Lines	Each line reports a time period for the groups shown in a columnar format.	Wait Time Distribution Reports are used to profile the times into a chart.
Wrap-up Time Distribution Reports	- Agents - Agent Groups	Each line reports a time period for the groups shown in a columnar format.	Wait Time Distribution Reports are used to profile the times into a chart.

Table 3 Available Reports *(continued)*

Report Type:	Available for:	Shows:	Uses:
Call Time Distribution Reports	- Agents - DIDs - Extensions - Lines - Agent Groups - DID Groups - Ext. Groups - Line Groups	Each line reports a time period for the groups shown in a columnar format.	Wait Time Distribution Reports are used to profile the times into a chart.
Account Code Reports	Acct Code Groups	Each line reports the statistics for an account code number.	Account Code Reports present information relating t the purpose of the call as defined by the user.
Forecast Reports	- Standard - Profile	Each report shows the original data for the period and modified data.	The report can be either a profile or standard report.

Filters

The standard items that make up a report template tend to analyze your call center from one point of view only. For example, consider the DID Traffic Report and the Agent Traffic Report. These two reports analyze DID traffic and the associated agent traffic in isolation.

What if your call center is set up to route a series of DID numbers to the same group of agents. To obtain the performance of each agent on a per DID basis you need to attach report filters to the report items. In this example you could either create a series of DID traffic reports, each filtered to a different agent, or you could create a series of agent traffic reports each filtered to a different DID number.

A report filter is made up of a logical combination of filter elements. Each report item within a report template can have a different report filter attached to it if necessary. [Table 4](#) shows the filter elements that are supported:

Table 4 Report Filters

Filter	Only accepts calls that were:
Line	connected to a specific line.
DID	associated with a specific DID number.
Extension	connected to a specific extension.
Agent	connected to a specific agent.
Account Code	attached to a specific account code
Line Group	connected to lines within a specified line group.
DID Group	associated with DID numbers within a specified DID group.
Extension Group	connected to extensions within a specified extension group.
Agent Group	connected to agents within a specified agent group.
Account Code Group	attached to a specified within an account code group with account codes.
Extension Queue Group	inbound and that were finally queued to a specific extension group corresponding to the Strata DK (EG501 ~ EG516).
Agent Queue Group	inbound and finally queued to a specific agent group corresponding to the Strata DK (AG501 ~ AG516).

Table 4 Report Filters (continued)

Filter	Only accepts calls that were:
Dialed Digits (requires Open Architecture Interface (OAI) Port)	with inbound/outbound dialed digits that match a specified string. Note The character * may be used at any point to denote that the filter will accept dialed digit strings which are identical up to that point but differ afterwards.

Templates

Individual reports are grouped together to form a template. Templates are created by the user to provide relevant information for the selected devices to be monitored. Report items are added to a template to create all the information desired. These report items can also be configured by the user to include or exclude certain event or traffic types. Once a report template is created, a report for a given time period can be created by selecting the template, work shift, starting time, and ending time for the report.

Keep in mind that Event Reports are highly detailed and therefore it is unlikely that you would want to run this report over long periods of time. Similarly, Profile Reports that are suitable for daily use (say with hourly resolution) would not make sense if the report were being compiled over a six-month time frame. This being the case you will be advised to create many templates all designed for specific use and each containing appropriate report items.

Scheduling

Once the Templates have been created, the final step is to create a schedule to create and print the information. This scheduling is totally optional for the user.

Reports

Having established the type of report you need, use this section to help choose exactly the right report for your needs. This section includes a list of the available report items that can be included in a report template for your reference.

Event Reports

There are three types of event reports, each recording all events that occur on the specified device (agent, extension or line group). Events are caused by the device, such as an agent, receiving an incoming call, accepting a call, dialing an intercom or outgoing call etc.

Agent or extension reports show exactly what an individual device has been doing over the period by examining all events caused by the device's activities. The report is presented in a call event per row format. Pagination of the report occurs if either there are too many call events to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

A line group event report provides an event/call trace for a selected line group. You can select the call types in which you are interested, for example, incoming, outgoing or abandoned calls. For example to see a list of all abandoned calls the call center experienced, compile a line group event report for all lines, selecting abandoned calls only.

This report can be useful in finding out the Calling Line Identity (CLID) of the customers who abandoned so their calls may be returned. The report is presented in a call event per row format. Pagination of the report will occur if either there are too many call events to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

The types of events and call types supported are shown in [Table 5](#).

Table 5 Recorded Call Events

Events Recorded:	Agent	Ext.	Line Group
Log on	X	X	
Log off	X	X	
Wrap-up	X	X	
Unavailable	X	X	
Available	X	X	
Call Ringing	X	X	X
Answers Call	X	X	
Outgoing Call	X	X	X
Internal Call	X	X	
Abandoned Call			X
Other Information Included:			
Name/Number	X	X	X
Name/Number DID			X
Date/Time	X	X	X
Call Duration	X	X	X
Ring Time	X	X	X
Talk Time	X	X	X
Call Time (includes talk, held, and wrap-up time)	X	X	X
Wrap-up Time	X	X	
Connected Device	X	X	X
ANI Digits	X	X	X
Account Codes	X	X	

Traffic Reports for Agents or Extensions

There are four different report types available on the Insight DK for traffic reporting on agents or extensions:

- ♦ **Agent/Extension Traffic Report** – provides a breakdown of the traffic for individual agents within an agent group. An agent/extension traffic report provides historical call statistics data for each device within a selected group. The report is presented in an agent/extension per row format with a “totals” entry for the whole group being presented at the bottom of the report. Pagination of the report will occur if either there are too many devices to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

- ♦ **Agent/Extension Traffic Profile Report** – provides a profile of traffic information for an individual agent over a number of time periods.

An agent/extension traffic profile report provides historical call statistics data for a selected device presented in a series of uniform time bands. The interval time governing the time bands can be anything from 1 minute up to 999 weeks.

The report is presented in a time band per row format. Pagination of the report will occur if either there are too many time bands to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

- ♦ **Group Traffic Report** – provides a breakdown of traffic information for all agent groups within an agent super group (group of groups), such as “All Agents”.

An agent/extension group traffic report provides historical call statistics data for each agent group within a selected agent/extension super group. The report is presented in a device group per column format. Pagination of the report will occur if either there are too many groups to fit in the width of a page or there are too many statistics parameters to fit in the height of a page.

- ♦ **Group Traffic Profile Report** – provides a profile of traffic information for an agent group, such as “Sales” or “Support,” over a number of time periods.

An agent/extension group traffic profile report provides historical call statistics data for a selected agent/extension group presented in a series of uniform time bands. The interval time governing the time bands can be anything from 1 minute up to 999 weeks.

The report is presented in a time band per column format. Pagination of the report will occur if either there are too many time bands to fit in the width of a page or there are too many statistics parameters to fit in the height of a page.

Table 6 shows the parameters available for individual agent or extension reports:

Table 6 Parameters for Agent or Extension Reports

Parameter	Agent	Ext.	Agent Profile	Ext. Profile
Number Calls Handled	X	X	X	X
Total Handling Time	X		X	
Avg. Handling Time	X	X	X	X
% Time Agent Busy on Handled Calls	X	X	X	X
Calls per Hour for Logged In Period	X			
Call Rates per Hour	X			
Number of Answered Calls per Hour	X			
Total Time of Incoming Calls	X		X	
Avg. Time of Incoming Calls	X	X	X	X
Total Talk Time of Incoming Calls	X		X	
Avg. Talk Time of Incoming Calls	X	X	X	X
Number of Incoming Calls Answered	X	X	X	X
Total Wrap-up Time	X		X	
Avg. Wrap-up Time	X	X	X	X
Number of Transferred-in Calls	X	X	X	X
Number of Transferred-out Calls	X	X	X	X
Number of Calls Held	X	X	X	X
Total Holding Time	X		X	
Avg. Holding Time	X	X	X	X
Number of RNA Calls	X	X	X	X
Total Ringing Time of RNA Calls	X		X	
Avg. Ringing Time of RNA Calls	X	X	X	X
Number of Internal Calls		X	X	X
Total Call Time* Internal Calls	X		X	
Avg. Call Time* Internal Calls	X	X	X	X
Number of Internal Calls per Hour	X		X	
Number of Outgoing Calls	X	X	X	X
Total Call Time* for Outgoing Calls	X		X	
Avg. Call Time* for Outgoing Calls	X	X	X	X
Total Talk Time for Outgoing Calls	X			
Avg. Talk Time for Outgoing Calls	X			
Number Outgoing Calls per Hour	X			
Number of Short Calls	X	X	X	X
Number of Long Calls	X	X	X	X
GOS – % Calls within Long/Short Criteria	X	X	X	X
Number of Log On Events	X	X	X	X
% Logon during the Period	X	X	X	X
Number of Unavailable Events	X	X	X	X
% Unavailable during the Period	X	X	X	X

The parameters available for agent or extension group reports are shown in [Table 7](#):

Table 7 Parameters for Agent or Extension Group Reports

Parameter	Agent Group	Ext. Group	Agent Group Profile	Ext. Group Profile
Number Incoming Calls Answered	X	X	X	X
Total Call Time* Answered Calls	X		X	
Avg. Call Time* Answered Calls	X	X	X	X
Longest Call Time* Answered Calls	X	X	X	X
Total Talk Time	X		X	
Avg. Talk Time	X		X	
Longest Talk Time	X		X	
Number of Internal Calls Answered	X	X	X	X
Total Call Time* Internal Calls	X		X	
Avg. Call Time* Internal Calls	X	X	X	X
Longest Call Time* Internal Calls	X	X	X	X
Number of Outgoing Calls	X	X	X	X
Total Call Time* Outgoing Calls	X		X	
Avg. Call Time* Outgoing Calls	X	X	X	X
Total Talk Time Outgoing Calls	X		X	
Avg. Talk Time Outgoing Calls	X		X	
Longest Call Time* Outgoing Calls	X	X	X	X
Longest Talk Time Outgoing Calls	X		X	
Total Wrap-up Time	X		X	
Avg. Wrap-up Time	X	X	X	X
Longest Wrap-up Time	X	X	X	X
Number of Transferred-in Calls	X	X	X	X
Number of Transferred-out Calls	X	X	X	X
Number of Calls Held	X	X	X	X
Total Holding Time	X		X	
Avg. Holding Time	X	X	X	X
Longest Holding Time	X	X	X	X
Number of RNA Calls	X	X	X	X
Total Ringing Time of RNA Calls	X		X	
Avg. Ringing Time of RNA Calls	X	X	X	X
Longest RNA Time		X	X	X
Number of Short Calls	X	X	X	X
Number of Long Calls	X	X	X	X
GOS – % Calls within Long/Short Criteria	X	X	X	X

Traffic Reports for Lines or DNIS/DID Numbers

There are four different report types available on Insight DK for traffic reporting on DNIS/DID numbers and three report types for lines:

- ✦ **Line/DID Traffic Report** – provides a breakdown of the traffic information for individual Lines/DIDs within a group.
- ✦ **DID Traffic Profile Report** – provides a profile of traffic information for an individual DID over a number of time periods.
- ✦ **Line/DID Group Traffic Report** – provides a breakdown of traffic information for all groups within a Line/DID super group (group of groups), such as “All Lines” or “All DIDs”.
- ✦ **Line/DID Group Traffic Profile Report** – provides a profile of traffic information for a Line/DID group, such as “Sales DIDs” or “Support Lines”, over a number of time periods.

For each of these reports, to configure the statistics analysis thresholds that control the calculation of GOS refer to “Configuring DID groups or Configuring lines” in the help file.

A Line/DID traffic report provides historical call statistics data for each line or DID number within a selected group. The report is presented in a line/DID per row format with a “Totals” entry for the whole group being presented at the bottom of the report. Pagination of the report will occur if either there are too many devices to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

A DID traffic profile report provides historical call statistics data for a selected DID number presented in a series of uniform time bands. The interval time governing the time bands can be anything from 1 minute up to 999 weeks. The report is presented in a time band per column format.

Pagination of the report will occur if either there are too many time bands to fit in the width of a page or there are too many statistics parameters to fit in the height of a page.

A Line/DID group traffic report provides historical call statistics data for each DID group within a selected super group. The report is presented in a group per column format. Pagination of the report will occur if either there are too many groups to fit in the width of a page or there are too many statistics parameters to fit in the height of a page.

A Line/DID group traffic profile report provides historical call statistics data for a selected group presented in a series of uniform time bands. The interval time governing the time bands can be anything from 1 minute up to 999 weeks. The report is presented in a time band per column format. Pagination of the report will occur if either there are too many time bands to fit in the width of a page or there are too many statistics parameters to fit in the height of a page.

The parameters available for Line or DNIS/DID reports are shown in [Table 8](#):

Table 8 Parameters for Line or DNIS/DID Reports

Parameter	Line	DID	DID Profile
Number of Calls Handled	X		
Total Call Time – Handled Calls	X		
Avg. Call Time – Handled Calls	X		
Number of Calls exceeding Wait Time – All Calls		X	X
GOS – All Calls		X	X
% Time on Call during Shift	X		
Number of Calls Offered (Incoming)	X	X	X
Number of Calls Answered	X	X	X
Total Call Time* -- Answered Calls	X	X	X
Avg. Call Time* -- Answered Calls	X	X	X
Total Talk Time – Answered Calls	X	X	X
Avg. Talk Time – Answered Calls	X	X	X
Total Waiting Time -- Answered Calls	X	X	X
Avg. Waiting Time -- Answered Calls	X	X	X
Longest Call Time* -- Answered Calls		X	X
Longest Talk Time -- Answered Calls		X	X
Longest Waiting Time -- Answered Calls		X	X
Number of Outgoing Calls	X		
Total Call Time* -- Outgoing Calls	X		
Avg. Call Time* -- Outgoing Calls	X		
Total Talk Time – Outgoing Calls	X		
Avg. Talk Time – Outgoing Calls	X		
Number of Held Calls	X	X	X
Total Hold Time	X	X	X
Avg. Hold Time	X	X	X
Longest Holding Time		X	X
Number of Transferred Calls		X	X
Avg. Number of Transfers per Trans. Call		X	X
Total of all Transferred Calls		X	X
Number of Calls Abandoned	X	X	X
% Calls Abandoned		X	
Total Waiting Time – Abandoned Calls	X	X	X
Avg. Waiting Time -- Abandoned Calls	X	X	X
Number of Calls exceeding Wait Time – Abandoned Calls		X	X
Longest Waiting Time -- Abandoned Calls		X	X
GOS – Abandoned Calls		X	X
Target Answer Time		X	X
Erlangs of Traffic		X	X

The parameters available for Line or DNIS/DID group reports are shown in [Table 9](#):

Table 9 Parameters for Line and DNIS/DID Group Reports

Parameter	Line Group	DID Group	Line Group Profile	DID Group Profile
Number of Calls Offered (Incoming)	X	X	X	X
Number of Calls Answered	X	X	X	X
Total Call Time* -- Answered Calls	X	X	X	X
Avg. Call Time* -- Answered Calls	X	X	X	X
Total Talk Time -- Answered Calls	X	X	X	X
Avg. Talk Time -- Answered Calls	X	X	X	X
Total Waiting Time -- Answered Calls	X	X	X	X
Avg. Waiting Time -- Answered Calls	X	X	X	X
Longest Call Time* -- Answered Calls	X	X	X	X
Longest Talk Time -- Answered Calls	X	X	X	X
Longest Waiting Time -- Answered Calls	X	X	X	X
Number of Calls exceeding Wait Time -- All Calls	X	X	X	X
GOS -- All Calls	X	X	X	X
Number of Calls Abandoned	X	X	X	X
% Calls Abandoned	X	X	X	X
Total Waiting Time -- Abandoned Calls	X	X	X	X
Avg. Waiting Time -- Abandoned Calls	X	X	X	X
Longest Waiting Time -- Abandoned Calls	X	X	X	X
Number of Calls exceeding Wait Time -- Abandoned Calls	X	X	X	X
GOS -- Abandoned Calls	X	X	X	X
Number of Outgoing Calls	X		X	
Total Call Time* -- Outgoing Calls	X		X	
Avg. Call Time* -- Outgoing Calls	X		X	
Longest Call Time* -- Outgoing Calls	X		X	
Total Talk Time -- Outgoing Calls	X		X	
Avg. Talk Time -- Outgoing Calls	X		X	
Longest Talk Time -- Outgoing Calls	X		X	
Number of Held Calls	X	X	X	X
Total Hold Time	X	X	X	X
Avg. Hold Time	X	X	X	X
Longest Holding Time	X	X	X	X
Number of Transferred Calls	X	X	X	X
Avg. Number of Transfers per Trans. Call	X	X	X	X
Total of all Transferred Calls	X	X	X	X
Target Answer Time	X	X	X	X
Erlangs of Traffic	X	X	X	X

Utilization Reports

Utilization reports apply to agents and extensions and are available in two formats: standard and profile. There are four utilization reports in all.

An agent or extension utilization report provides historical time utilization data for each agent or extension within a selected group. Note that the times are shown as a percentage normalized to the shift that you collated the report with. The report is presented in an agent per row format with a “totals” entry for the whole group being presented at the bottom of the report.

Pagination of the report will occur if either there are too many agents to fit in the height of a page or there are too many statistics parameters to fit in the width of a page. Utilization percentages can be calculated with respect to either the total reporting period or the amount of time each agent had spent logged on.

Note The “totals” entry for each column is the average for all the agents/extensions in the group.

An agent utilization profile report provides historical time utilization data for a selected agent presented in a series of uniform time bands. The interval time governing the time bands can be anything from 1 minute up to 999 weeks. The report is presented in a time band per column format. Pagination of the report will occur if either there are too many time bands to fit in the height of a page or there are too many statistics parameters to fit in the width of a page.

Utilization percentages can be calculated with respect to either each profile interval or the agent/extension logged on time with each profile interval.

Note The times are shown as a percentage normalized to the shift that you collated the report with.

The parameters for Utilization reports are shown in [Table 10](#).

Table 10 Utilization Report Parameters

Parameter	Agent	Ext.	Agent Profile	Ext. Profile
Time Handling Incoming Calls	X	X	X	X
Time Handling Outgoing Calls	X	X	X	X
Time Handling Internal Calls	X	X	X	X
Time Incoming Calls Held	X	X	X	X
Time Outgoing Calls Held	X	X	X	X
Time Internal Calls Held	X	X	X	X
Time in Wrap-up	X	X	X	X
Time Unavailable	X	X	X	X
Time Busy	X	X	X	X
Time Free	X	X	X	X
Time Ringing Incoming Calls	X	X	X	X
Time Ringing Internal Calls	X	X	X	X
Time Logged On	X	X	X	X
Time Logged Off	X	X	X	X