Global Navigator Network ACD

Configuration Guide

NEC Unified Solutions, Inc.

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Contents

Figures

1

About This Guide

Purpose of this Guide

The *Global Navigator Network ACD Configuration Guide* describes the requirements, architecture, and features of the Network ACD and Global Navigator. This document also provides some high-level procedures regarding the configuration of a Network ACD.

This document is intended to be used as a learning tool. This is not an all-inclusive Network ACD user's guide. This document refers to other Navigator documentation for more detailed instructions and information.

How This Guide is Organized

The *Global Navigator Network ACD Configuration Guide* is divided into the following chapters:

- Chapter 2, Overview describes the capabilities of Global Navigator Network ACD and provides an example of a Network ACD.
- Chapter 3, Concepts provides detailed descriptions of the basic conceptual information you need to know to fully understand this documentation.
- Chapter 4, Requirements lists the hardware and software requirements for running a Global Navigator Network ACD.
- Chapter 5, Architecture describes the various configurations for Network ACDs.
- Chapter 6, Rerouting describes the capabilities and criteria involved in the call interflow process of Global Navigator Network ACD.
- Chapter 7, Network ACD View Screen explains what is displayed on the Network ACD-specific real-time view of GNAV Pro.
- Chapter 8, Programming Network ACD (Database Assignment) provides basic procedures for customizing Global Navigator Network ACD settings and assignments.
- Chapter 9, Statistical Reports lists the reports that Global Navigator Network ACD is capable of generating.

- Chapter 10, Technical Information includes detailed connection drawings and tips on troubleshooting.
- Chapter 11, Glossary provides definitions for commonly used Global Navigator Network ACD terms.

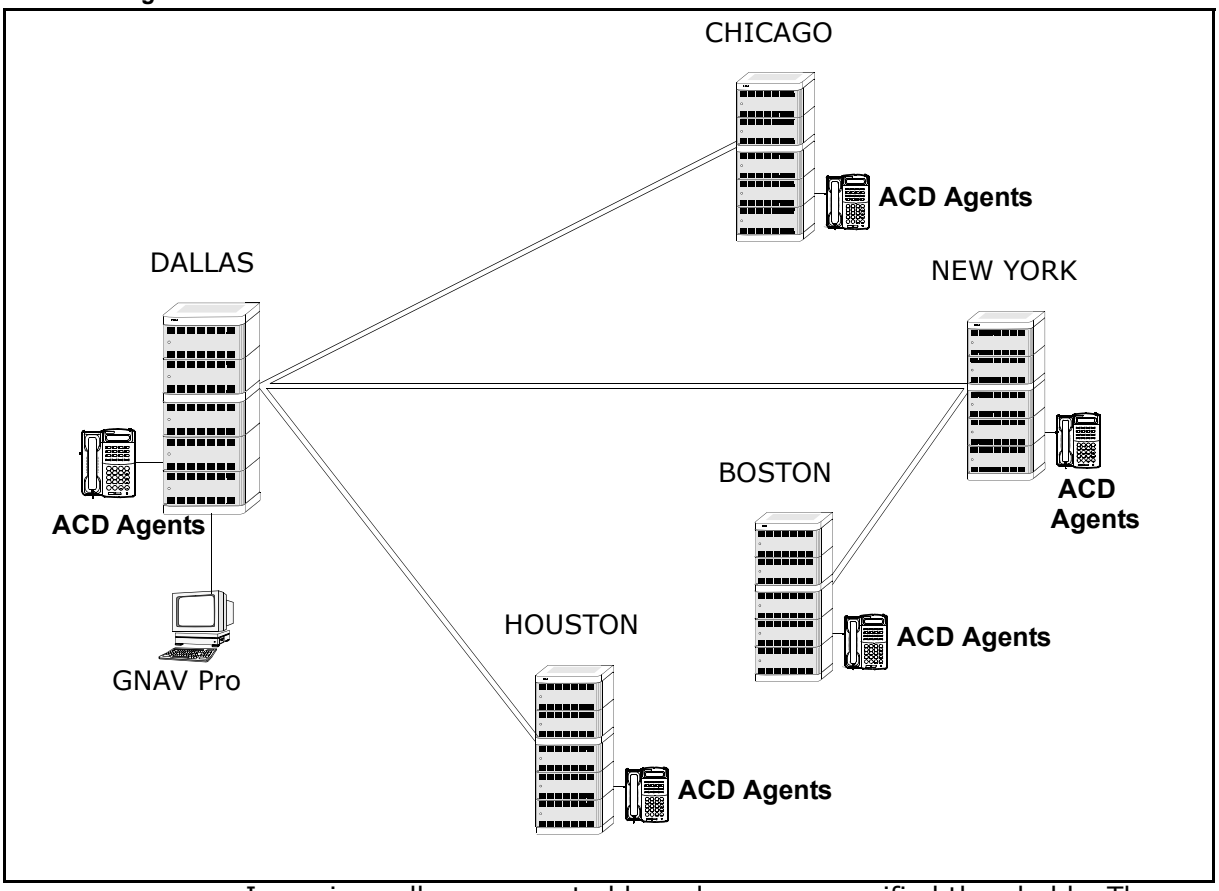
2

Overview

A Global Navigator Network ACD is a group of independent ACDs, called ACD nodes, which have been linked to each other with a switched or packet-based network, or a Public Switching Telephone Network (PSTN) in order to balance the distribution of incoming calls throughout a Network Team. A Network Team is made up of splits from different ACD nodes who perform the same job function. For example, customer service representatives at different ACD nodes can be on the same Network Team, and therefore, share the workload involved in answering incoming calls.

Other components of the Global Navigator Network ACD are Global Navigator Server and the client program, Global Navigator Pro (GNAV Pro). With GNAV Pro, you can control call routing throughout the ACD network, monitor incoming call patterns in real-time, generate historical call activity reports, and configure alerts and wallboards. Figure 2-1 depicts a 5-node ACD network, including a GNAV Pro.

Figure 2-1 5-Node ACD Network



Incoming calls are rerouted based on user specified thresholds. There are several threshold values used by the Global Navigator Network ACD including the **Longest Waiting Call (LWC)**, **Queue Disparity** and **Number of Available Agents**.

The **LWC** threshold equals the number of seconds a call waits in queue before it becomes eligible for rerouting.

The **Queue Disparity Value** equals the difference between the number of seconds the donor split's LWC has waited in queue and the number of seconds the possible recipient split's LWC has waited in queue.

The **Number of Available Agents** indicates the required number of agents in Ready mode servicing the recipient split.

Only member splits with a disparity greater than the assigned Queue Disparity value are eligible to receive rerouted calls. When there is more than one possible recipient split, the split with the greatest disparity will receive the rerouted call. If multiple potential recipient splits have available agents, the split with the longest available agent will receive the rerouted call.

When an incoming call threshold is reached, all subsequent calls remain in queue while the calls that have been holding the longest are routed to a Network ACD node with less incoming call traffic. Global Navigator

uses Proprietary Pilot Numbers to give rerouted calls the highest priority and to track rerouted call activity.

3

Concepts

This chapter contains information you need to know to understand the rest of this document. Please read this chapter before proceeding. The following Global Navigator Network ACD features are discussed:

- *Call Interflow*
- *Network Team*
- *Proprietary Pilot Numbers*

Call Interflow

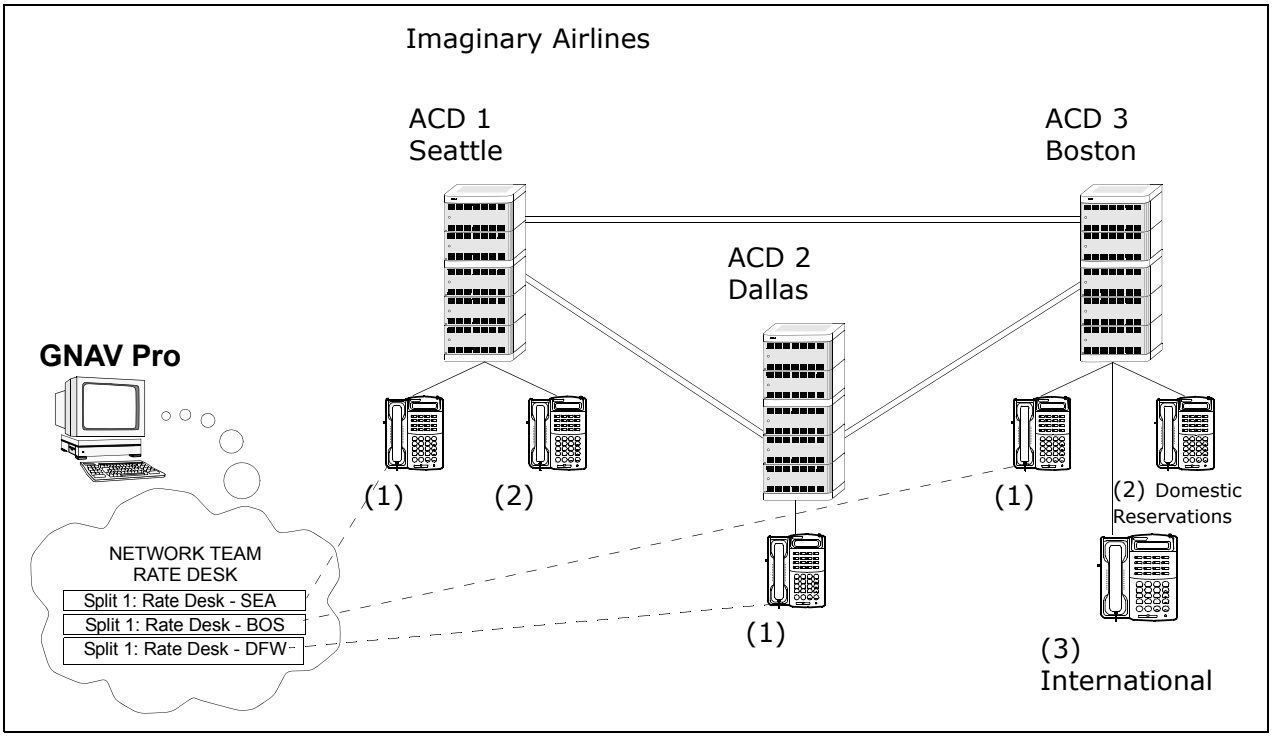
Calls which are not meeting user-defined threshold objectives can be rerouted to a split at another ACD node. Call interflow can be controlled by the user through various settings. Refer to Chapter 6, Rerouting for more information on Call Interflow.

Network Team

A Network Team comprises multiple splits from different ACD nodes. Splits in a network team are expected to perform the same or similar functions. When a call is queued to an overloaded split, it can be routed to an available agent in the same network team at another ACD node.

Example: *Figure 3-1 depicts a network team called "Rate Desk" which is created from ACD1 - Split 1, ACD2 - Split 1, and ACD3 - Split 1 since they are all the same type of splits.*

Figure 3-1 *Network Team Example*



Proprietary Pilot Numbers

Proprietary Pilot Numbers point to a Call Control Vector (CCV) which is programmed to raise the call's priority. These pilot numbers are used to tell the ACD that a call is being rerouted, or interflowed, from another ACD and should be given priority over calls coming into the local queue. Each split within an ACD has a unique pilot number to receive interflowed calls. Assigning Proprietary Pilot Numbers is necessary to maintain statistical profiles on interflowed calls.

4

Requirements

This chapter lists the software requirements for the ACD and Global Navigator.

ACD System

ACD System
CallCenter*WorX*–Enterprise version 4.11 or higher, or CallCenter*WorX*–Business ACD version 1.0 or higher, or CallCenter*WorX*–Enterprise(I) 4.11 or higher


NOTE

System requirements for Global Navigator Network ACD call for an operative PBX with CallCenterWorX ACD system programming (either CallCenterWorX–Business or CallCenterWorX–Enterprise) already in place.

System requirements for the particular PBX being used with a CallCenterWorX application will be found in the appropriate documentation set for that PBX.

Global Navigator

Global Navigator
Global Navigator version 6.00 or higher.

5

Architecture

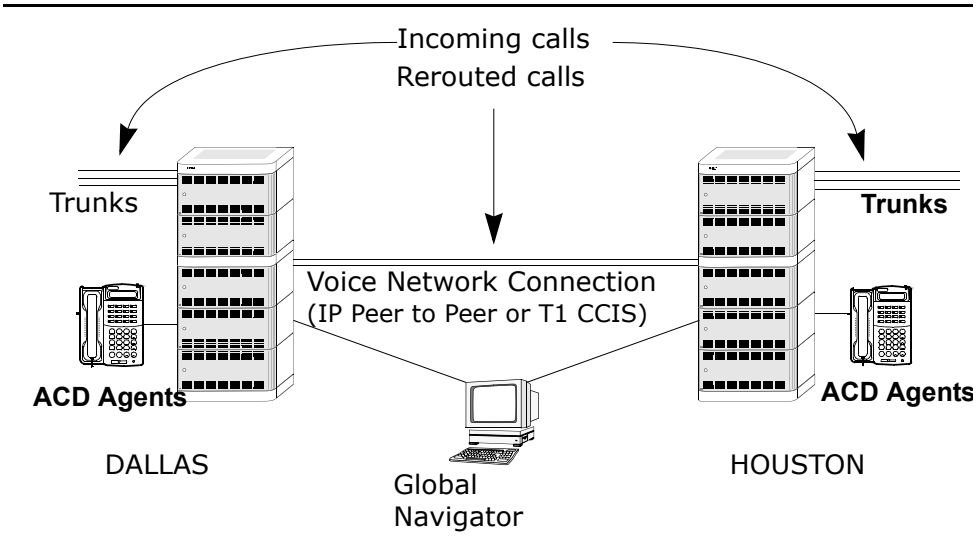
An ACD can be connected to other ACDs in the network via any direct switched or packet-based voice connection, and via the Public Switching Telephone Network (PSTN). This chapter illustrates the various architectures of a Network ACD. The following types of architecture are discussed:

- *Network ACD via PBX Voice Connection*
- *Network ACD via Public Switching Telephone Network (PSTN)*

Network ACD via PBX Voice Connection

In a Global Navigator Network ACD that uses a PBX voice connection, rerouted calls from other ACDs are received via the PBX network. The architecture used to integrate ACDs into a network using a switched or packet-based voice connection is shown in Figure 5-1.

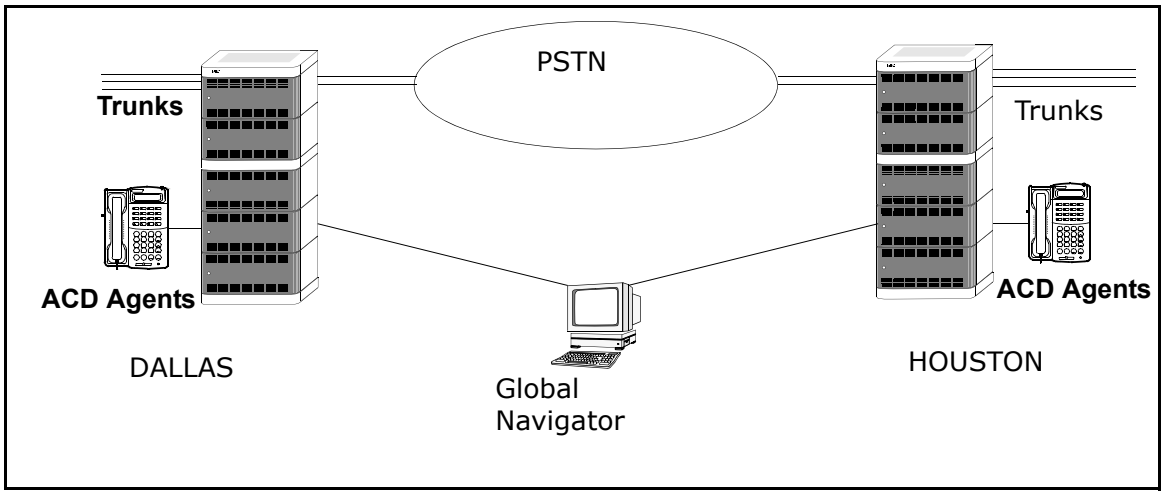
Figure 5-1 *Network ACD via PBX Voice Connection*



Network ACD via Public Switching Telephone Network (PSTN)

The architecture used to integrate ACDs into a network using the PSTN is shown in Figure 5-2. Each ACD can overflow calls to another ACD through the PSTN.

Figure 5-2 *Network ACD via PSTN*



6

Rerouting

This chapter describes Global Navigator Network ACD's call interflow capabilities. The following topics are covered in this chapter:

Call Interflow

Calls which cannot be answered by a local agent can be rerouted to another ACD node. This provides an equal distribution of calls, reducing caller wait time and agent idle time. Call interflow can be customized to meet the needs of individual call centers. The call interflow options are as follows:

Scope - Indicates the level of Network ACD control.

• Network Team Basis	Calls are referenced as a group of splits. Each call to any of the splits in the group will be considered in the same manner.

Control - Indicates the manner of rerouting.

• Automatic	Calls are automatically rerouted when specified criteria is met.

Options - Specifies which calls are automatically rerouted by the Network ACD.

• Longest Waiting Call	The call with the longest time in queue is rerouted when the conditions (criteria) for interflow are met.
• Internal Calls	By default, only incoming (trunk) calls are selected for rerouting. This option allows for rerouting of internal calls from business stations and agents' ACD or PBX lines.

• Next Longest Waiting Trunk Call	When the Internal Calls option is inactive, only incoming trunk calls can be rerouted. This option allows for Next Longest Waiting Trunk Call to be selected, even when the current longest waiting call is an Internal call.

Criteria - The Global Navigator Network ACD provides a list of conditions which can be used to determine if or when a call should be rerouted. These can be set individually or used in combination. The following table explains some of the different criteria options and the benefits they provide.


NOTE

The Longest waiting Call threshold is assigned on the Team Config dialog of Network ACD Configuration. The Internal calls and Next Longest Waiting Trunk Call options are configurable using the 'nav_help' utility

CRITERIA		DEFINITION	BENEFIT
Available Agents	Zero	Interflows calls to another ACD node automatically when threshold values are met regardless of agent availability.	Minimizes caller wait time by limiting the time callers wait in queue before being rerouted to another ACD node.
	1st	Reroutes a call when an agent is available at another node.	Minimizes caller wait times by allowing the LWC to be answered by the next available agent.
	Number of Agents	Interflows calls to another ACD node only when the user-specified number of agents are available.	Allows nodes to keep a certain number of agents available to handle local calls.
Pilot Number Restriction		Calls received on these pilot numbers will not be eligible for interflow and will not be considered in interflow criteria calculations.	Allows specific callers to be handled at the local ACD node.
Reroute Timeout		This represents the maximum number of seconds a Network ACD rerouted call will remain ineligible for a subsequent reroute.	Allows calls that have been rerouted via the Network ACD to become eligible for rerouting again, after they meet the Reroute Timeout criteria.
Time in Queue (Eligibility)		The length of time a call waits in queue at the local node before it is eligible to be interflowed to another ACD node.	Minimizes caller wait time by limiting the time callers wait in queue before being rerouted to another ACD node.
Split Type	Donor	Designates the direction of split's call interflow to be outgoing only. Calls can be rerouted from this split, but cannot be directed to it.	Provides control of the direction of call interflow. allows a split to be designated as "inflow" only.
	Recipient	Designates the direction of split's call interflow to be outgoing only. Call can be directed to this split, but cannot be rerouted from it.	Provides control of the direction of call interflow. Allows a split to be designated as an "overflow" split only.

Note: *The Split Type is* ***None*** *by default, which provides bi-directional interflow.*

CRITERIA		DEFINITION	BENEFIT
	Seconds	The difference between the wait time of the LWC in the origination queue and the wait time of the LWC in the destination queue expressed in seconds. The difference in the splits' LWC wait times must be greater than the Time in Queue Disparity value for a call to be rerouted. This value, whether given in seconds or calculated from a percentage, should be equal to or greater than the time it takes to transfer the call from one ACD to another.	Increases network efficiency by limiting unneccessary interflows prompted by slight call variations.
Time in Queue Disparity	Percent	The difference between the longest waiting call of the origination queue and the longest waiting call of the destination queue in relation to the total time in queue (expressed as a percentage). The difference in the queues' LWC wait times, when expressed as a percentage of the larger LWC's wait time, must be greater than the Time in Queue Disparity Percent for a call to be rerouted. This value, whether given in seconds or calculated from a percentage, should be equal to or greater than the time it takes to transfer the call from one ACD to another.	Increases network efficiency by interflowing calls in proportion to the amount of time the longest waiting call has been in queue.

Examples

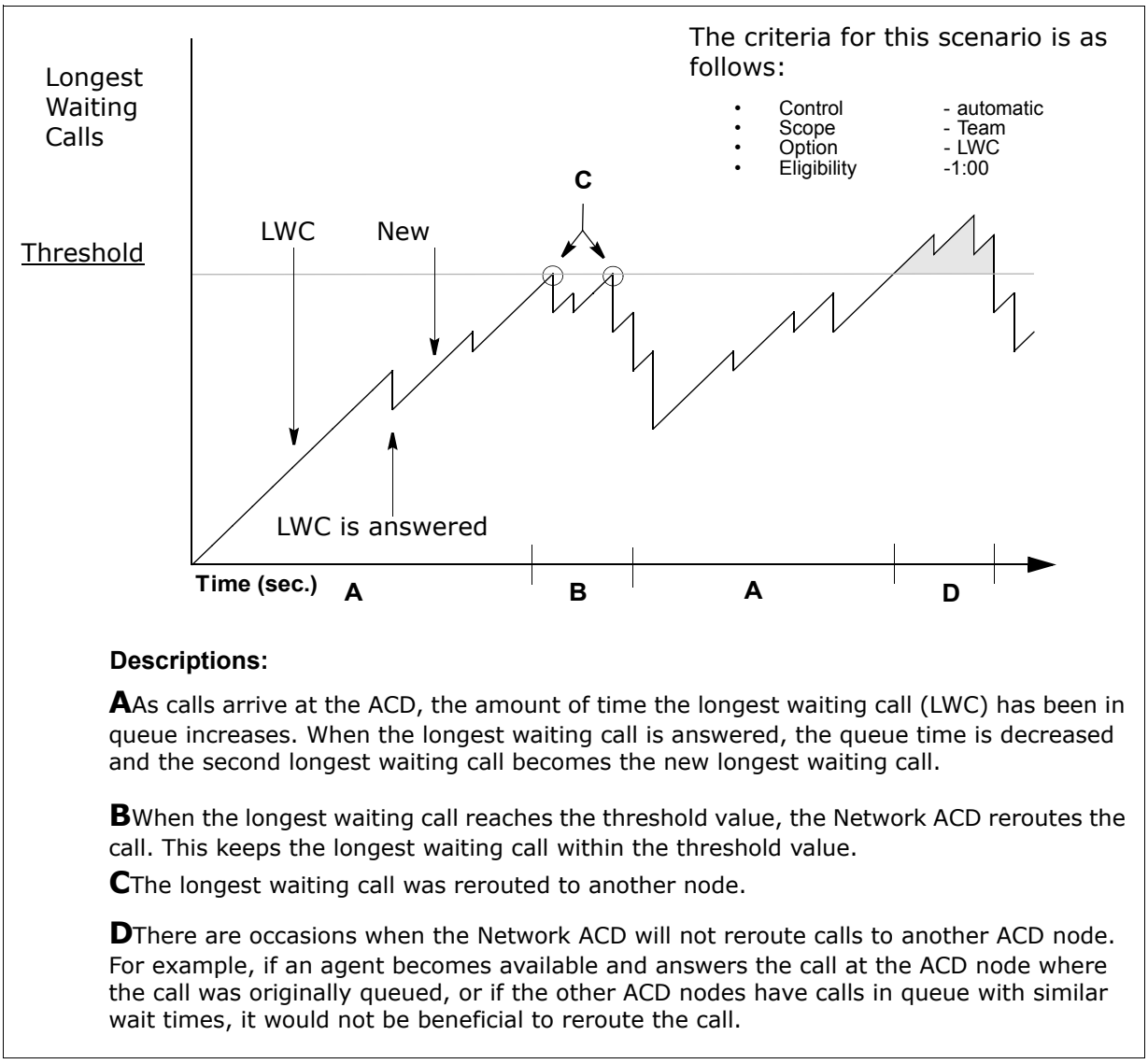
The following are examples of Global Navigator Network ACD's call interflow capabilities

Example: *Longest Waiting Call With Disparity Measured in Seconds*

This section describes a scenario in which a Global Navigator Network ACD reroutes incoming calls to another Network ACD queue.

When a call waits in a network team queue over a user-specified period of time, the Global Navigator Network ACD checks the other member splits to determine whether the difference in wait times in these queues is above the specified disparity. If so, calls are rerouted. Figure 6-1 is a graphical representation of what occurs during this scenario.

Figure 6-1 *Longest Waiting Call with Disparity Measured in Seconds*



Descriptions:

A As calls arrive at the ACD, the amount of time the longest waiting call (LWC) has been in queue increases. When the longest waiting call is answered, the queue time is decreased and the second longest waiting call becomes the new longest waiting call.

B When the longest waiting call reaches the threshold value, the Network ACD reroutes the call. This keeps the longest waiting call within the threshold value.

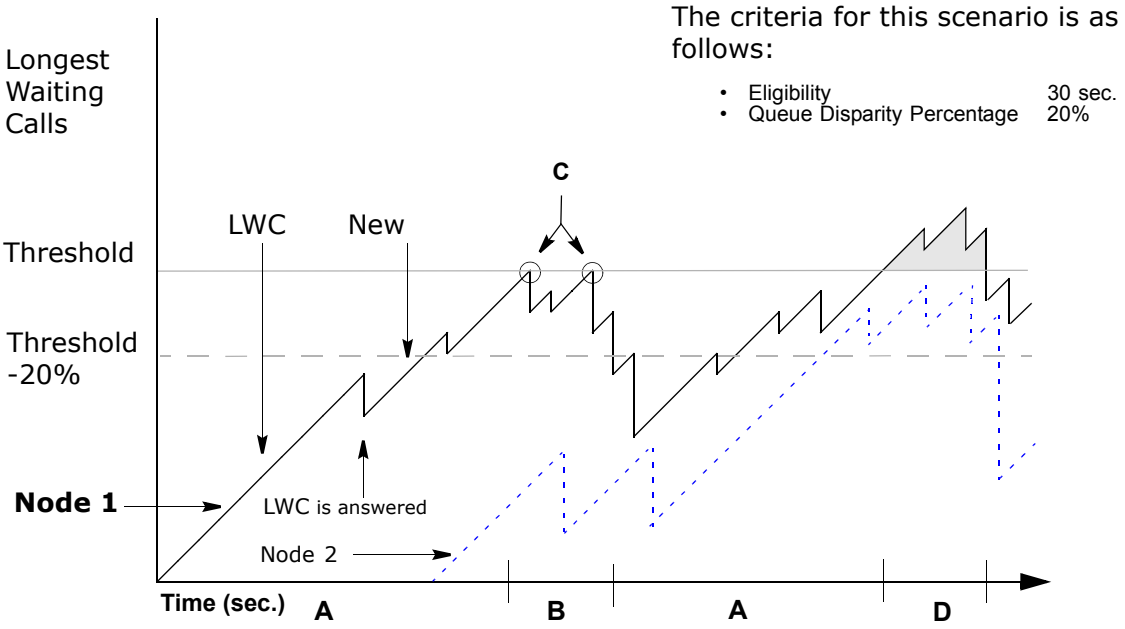
C The longest waiting call was rerouted to another node.

D There are occasions when the Network ACD will not reroute calls to another ACD node. For example, if an agent becomes available and answers the call at the ACD node where the call was originally queued, or if the other ACD nodes have calls in queue with similar wait times, it would not be beneficial to reroute the call.

Example: *Longest Waiting Call with Disparity Measured in Percentage*

When a call waits in the queue of a split belonging to a network team over the user-specified period of time, the Network ACD system will check the other member splits'queues. If the difference in wait times in those queues is above the specified disparity percentage, the call is rerouted. Figure 6-2 is a graphical representation of what occurs during this scenario.

Figure 6-2 *Longest Waiting Call with Disparity Measured in Percentage*



Descriptions

A As calls arrive at the ACD, the amount of time the longest waiting call (LWC) has been in queue increases. When the longest waiting call is answered, the queue time is decreased and the second longest waiting call becomes the new longest waiting call.

B During this period, when the longest waiting call reaches the threshold value, Network ACD

C Since the Disparity % was greater than 20%, the longest waiting call was rerouted.

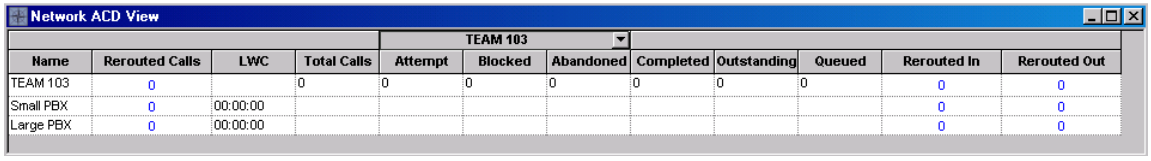
D There are occasions when the Network ACD will not reroute calls to another ACD node. For example, if the other ACD nodes have calls in queue with similar wait times such that the differences between these times (disparity) is less than the configured percentage, it would not be beneficial to reroute the call.

7

Network ACD View Screen

The Network ACD View (Figure 7-1) is provided by Global Navigator Network ACD for real-time information and is accessed from the Real-time View panel of the GNAV Pro Client application. The Network ACD View displays all calls currently being rerouted based on the node and split. This real-time screen can be presented for each Network Team.

Figure 7-1 *Network ACD View*



The following list describes some of the Network ACD View screen elements found in Figure 7-1:

- Name - The split or network team name
- Rerouted Calls - The number of calls which have been rerouted.
- LWC - Longest Waiting Calls
- Total Calls - The total number of calls handled by the split or team
- Rerouted Attempt - The number of calls the system attempted to reroute
- Blocked - The number of rerouted calls the system blocked
- Abandoned - The number of calls abandoned after rerouting
- Completed - The number of calls completed after being rerouted
- Outstanding - The number of rerouted calls still waiting to be completed
- Rerouted Queued - The number of rerouted calls currently in the queue
- Rerouted In - The total number of incoming rerouted calls
- Rerouted Out - The total number of outgoing rerouted calls

8

Programming Network ACD (Database Assignment)

The Network ACD configuration, accesible from the GNAV Pro client application, is used to name teams, assign splits to a team, assign network teams, modify the network team configuration, and enable and disable network teams.

Refer to Chapter 6 Rerouting for more information about Scope, Control, Options, and Criteria.

Refer to the *GNAV Pro Online Help* for information on naming teams and assigning splits to a team.

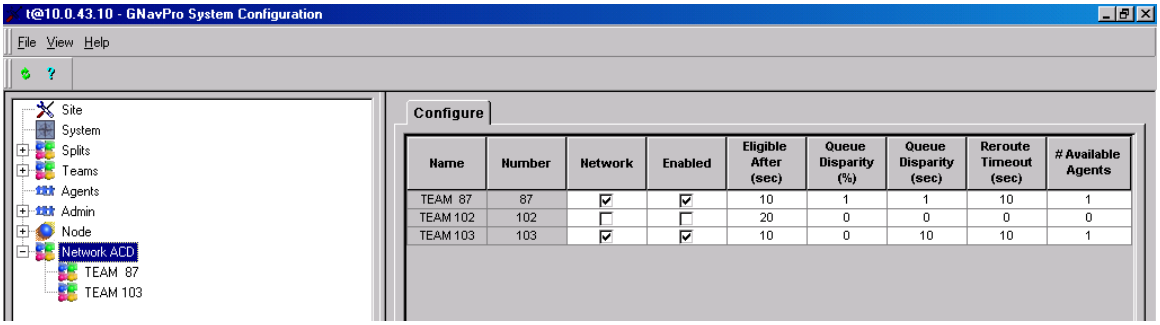
This chapter discusses the following:

- *Assigning Network Teams and Thresholds*
- *Assigning Proprietary Pilot Numbers*
- *Assigning Destination Numbers*
- *Enabling / Disabling Network Teams*
- *Navigator Help Utility*

Assigning Network Teams and Thresholds

Global Navigator Network ACD currently uses three threshold values: **LWC Threshold**, **Queue Disparity**, and **Reroute Timeout**
You can modify Network Teams and Thresholds using th**e Network ACD Configure ta**b (Figure 8-1).

***Figure 8-1** Assigning Network Teams and Thresholds*



The **LWC Threshold**, which is labeled as *Eligibility After (sec)*, equals the number of seconds a call waits in queue before it becomes eligible for rerouting.

The **Queue Disparity** value equals the difference between the number of seconds the donor split's LWC has waited in queue, and the number of seconds the possible recipient split's LWC has waited in queue. Only member splits with a disparity greater than the assigned queue disparity value are eligible to receive rerouted calls. When there is more than one possible recipient split, the split with the greatest disparity will receive the rerouted call. (For examples of rerouting based on queue disparity, see *Figure 6-1 on page 6-4* and *Figure 6-2 on page 6-5*.)

Reroute Timeout is the maximum amount of time a rerouted call will remain ineligible for subsequent reroute attempt.

The **Available Agents**, which is labeled as *# Avail Agents*, is set to the number of agents required to be in the Ready mode at the destination split before a reroute attempt will be made.

The maximum values for each field are:

Field Name	Maximum Value
Eligibility after N (sec)	900
Queue Disparity (sec)	255
Queue Disparity (%)	999
Reroute Timeout (sec)	3600
# Available Agents	999

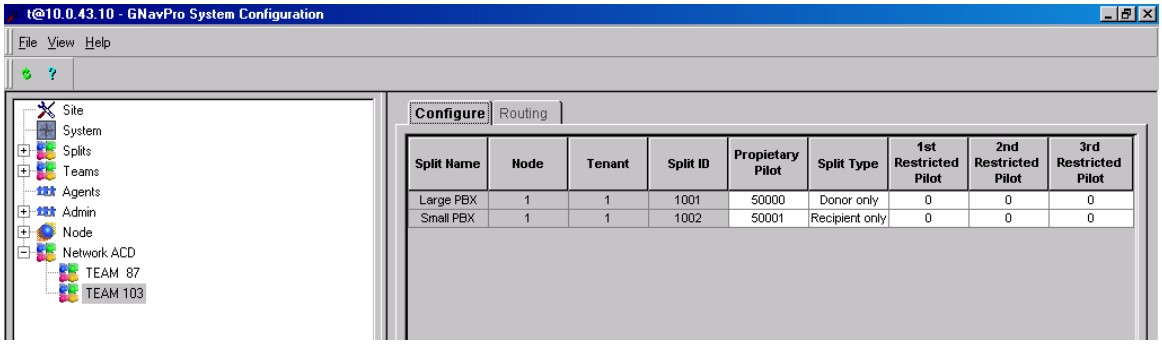
For complete information on how to access the Network ACD Configure tab and edit network teams and thresholds, refer to the *GNAV Pro Client Online Help*.

Assigning Proprietary Pilot Numbers

Proprietary Pilot Numbers are used to differentiate rerouted calls from normal call traffic. Rerouted calls can be given a higher priority by the appropriate programming of the call control vectors (CCV) in the ACD database. A CCV is a timed sequence of events which control incoming ACD calls prior to their connection to an agent. For more information on CCVs refer to the proper ACD Features and Specifications manual.

You can modify Proprietary Pilot numbers using the Team Configure tab in the Network Config node (Figure 8-2).

Figure 8-2 *Assigning Proprietary Pilot Numbers*



The information displayed in gray cannot be changed using this tab.

The **Split Type** indicates a restriction of the direction of call rerouting. Splits can be Donor-only or Recipient-only. An unassigned Split Type provides bi-directional call interflow.

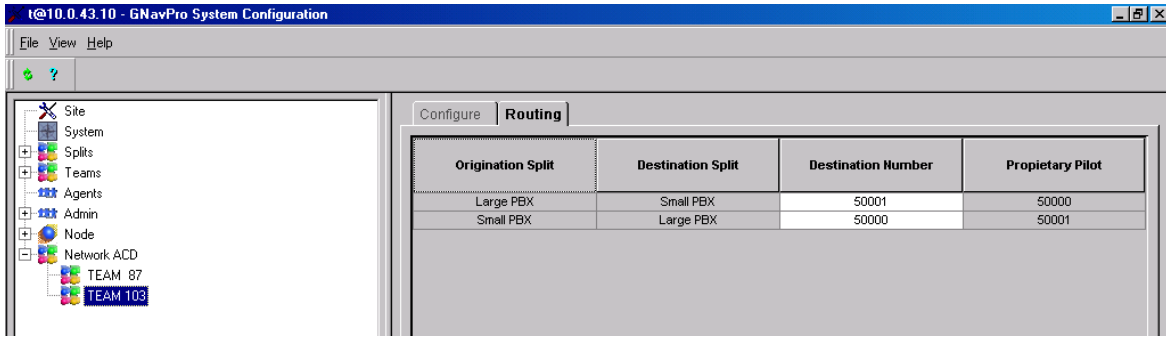
The **Restricted Pilot** list provides eligibility control over received calls on specific pilot numbers. Calls received on pilot numbers assigned as Restricted Pilot are not eligible to be rerouted. You can assign up to three pilot numbers as a Restricted Pilot for each member split. Each restricted pilot number displays in a separate column.

For complete information on how to access the Network ACD Configure tab and edit Proprietary Pilot numbers, refer to the *GNAV Pro Client Online Help*.

Assigning Destination Numbers

Use the Network ACD Routing tab (Figure 8-3) to assign numbers used for transferring (rerouting) calls between splits in a network team. These numbers are used to reroute calls, on a per split basis, to the Proprietary Pilot numbers of other member splits. Proprietary Pilot numbers are programmed using the Configure tab in the Network ACD node (Figure 8-2).

Figure 8-3 *Assigning Destination Numbers*



The information displayed in gray can not be changed using this tab.

For each team selected, this tab displays the **Origination Split Name**, the **Destination Split Name**, and the **Destination Number**.

For complete information on how to access the Network ACD Configure tab and edit destination numbers, refer to the *GNAV Pro Client Online Help*.

Enabling / Disabling Network Teams

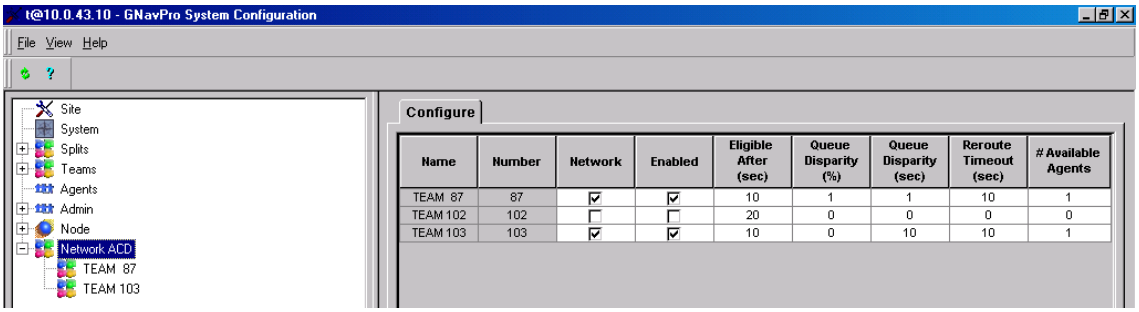
Only enabled network teams are monitored for rerouting eligibility.

To be enabled, a team must be assigned as a network team and must have the appropriate database configuration. The configuration includes split assignments, threshold values, proprietary pilot numbers, and destination numbers.

Once a network team is enabled, these database assignments cannot be modified. Network teams must be disabled before modifications can be made.

Use the Network ACD Configure tab (Figure 8-4) to modify the status of network teams.

Figure 8-4 *Team Enable / Disable*



The information displayed in gray cannot be changed using this tab.

For complete information on how to access the Network ACD Configure tab and modify network team status, refer to the *GNAV Pro Client Online Help*.

IMPORTANT

Once assigned as a Network Team, split membership cannot be changed. To modify a Network Team, first unassign the Network Team status (set to ***Disabled****), then change the split assignments.*
Changing the Team Configuration Values also requires you to disable the team before making changes.

Navigator Help Utility

Use the Navigator Help Utility (nav_help) from the Global Navigator server to enable Network ACD and to allow further configuration. Use the following to follow the procedure below.

Step 1 From the Linux desktop interface press **Ctrl + Alt and F1**.

Step 2 Type **root** for the login name and press **Enter**.

Step 3 Type **neax2400** for the password and press **Enter**.

Step 4 Type **cd /u/acdmis/run** and press **Enter**.

Step 5 Type **bin/nav_help** and press **Enter**. The Navigator Help Utility screen displays with the available options.

Step 6 Press **c** and then **Enter**. The three additional configuration settings for Netwok ACD display.

Step 7 Press **c** and then **Enter**.

Step 8 When prompted **Modify status of reroute Internal Calls (y/n)?** press **y** and then **Enter**.

Step 9 When prompted **Modify status of reroute of next Incoming LWC (y/n)?** press **y** and then **Enter**.

Step 10 When prompted **Modify status of reroute activity tracing (y/n)?** press **y** and then **Enter**. Reroute Internal Calls, Reroute Next Incoming LWC, and Reroute Activity Tracing configuration settings should now display a status of **ACTIVE**.

Step 11 Press **q** and **Enter** to quit.

Step 12 Reboot the Navigator server.

9

Statistical Reports

Statistical information regarding call flow patterns is tracked by the Global Navigator Network ACD. As a result, various reports can be generated to help monitor the efficiency of the Global Navigator Network ACD. The following Network ACD-related reports are available through the GNAV Pro:

- *Pilot Number Statistics Report*
- *Pilot Number Summary Report*
- *Pilot Number Hourly Report*

Refer to the *GNAV Pro Online Help* or the *GNAV Pro Client Reports Manual* for information on how to setup and run reports.

Pilot Number Statistics Report

Figure 9-1 is an example of the Pilot Number Statistic Report:

Figure 9-1 *Pilot Number Statistic Report*

Pilot Number Stats

By Pilot
Weekly

Report # 77

Printed: 4/1/2004 11:57:23AM
From: **Sunday, 21 March, 2004**
To: **Saturday, 27 March, 2004**

User: t

Site: **6.0**

LARGE PBX

Date	Total Calls	Answered Calls	Abandoned Calls	LWC	ASA	Average Talk Time	Total Talk Time
3/21/04 _ 3/27/04	49	33	16	00:02:35	00:00:22	00:00:19	00:10:47
Summary	**49**	**33**	**16**	**00:02:35**	**00:00:22**	**00:00:19**	**00:10:47**

SMALL PBX

Date	Total Calls	Answered Calls	Abandoned Calls	LWC	ASA	Average Talk Time	Total Talk Time
3/21/04 _ 3/27/04	14	6	8	00:07:54	00:00:20	00:00:12	00:01:15
Summary	**14**	**6**	**8**	**00:07:54**	**00:00:20**	**00:00:12**	**00:01:15**

KEY SYSTEM

Date	Total Calls	Answered Calls	Abandoned Calls	LWC	ASA	Average Talk Time	Total Talk Time
3/21/04 _ 3/27/04	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
Summary	**0**	**0**	**0**	**00:00:00**	**00:00:00**	**00:00:00**	**00:00:00**

Pilot Number Summary Report

Figure 9-2 is an example of the Pilot Number Summary Report.

Figure 9-2 *Pilot Number Summary Report*

Pilot Number Summary

By Pilot

Report # 78

Printed: 4/1/2004 11:58:58AM
From: Sunday, 21 March, 2004
To: Saturday, 27 March, 2004

User: t

Site: **6.0**

Pilot	Total Calls	Answered Calls	Abandoned Calls	LWC	ASA	Average Talk Time	Total Talk Time
LARGE PBX	49	33	16	00:02:35	00:00:22	00:00:19	00:10:47
SMALL PBX	14	6	8	00:07:54	00:00:20	00:00:12	00:01:15
SPANISH	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
Summary	**63**	**39**	**24**	**00:07:54**	**00:00:22**	**00:00:18**	**00:12:02**

Pilot Number Hourly Report

Figure 9-3 is an example of the Pilot Number Hourly Report.

Figure 9-3 *Pilot Number Hourly Report*

Pilot Number Hourly

By Pilot
By Hour

Report # 79

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From: Sunday, 21 March, 2004 00:00
To: Saturday, 27 March, 2004 24:00
User: t
Site: **6.0**

LARGE PBX

Time	Total Calls	Answered Calls	Abandoned Calls	LWC HH:MM:SS	ASA HH:MM:SS	Average Talk Time	Total Talk Time
0:00 - 01:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
1:00 - 02:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
2:00 - 03:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
3:00 - 04:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
4:00 - 05:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
5:00 - 06:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
6:00 - 07:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
7:00 - 08:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
8:00 - 09:00	4	1	3	00:02:29	00:00:11	00:00:13	00:00:13
9:00 - 10:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
10:00 - 11:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
11:00 - 12:00	1	0	1	00:00:45	00:00:00	00:00:00	00:00:00
12:00 - 13:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
13:00 - 14:00	3	3	0	00:00:34	00:00:14	00:00:14	00:00:42
14:00 - 15:00	17	12	5	00:01:55	00:00:30	00:00:32	00:06:30
15:00 - 16:00	9	7	2	00:02:35	00:00:43	00:00:05	00:00:37
16:00 - 17:00	13	10	3	00:01:07	00:00:04	00:00:16	00:02:45
17:00 - 18:00	2	0	2	00:02:05	00:00:00	00:00:00	00:00:00
18:00 - 19:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
19:00 - 20:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
20:00 - 21:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
21:00 - 22:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
22:00 - 23:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
23:00 - 24:00	0	0	0	00:00:00	00:00:00	00:00:00	00:00:00
Summary	**49**	**33**	**16**	**00:02:35**	**00:00:22**	**00:00:19**	**00:10:47**

10

Technical Information

This chapter contains information concerning:

- Network ACD TCP/IP Connection Requirements
- Network ACD Serial Connection Requirements
- Troubleshooting
- Knowledge Base Solutions

Network ACD TCP/IP Connection Requirements

NEAX2400 Ethernet Requirements

External ACD

ACD, Modular, or External requires a CC98 package connected to the ACD CPU via bus cable 10ALST-TW-150 ca.

The CC-98 package is connected to a transceiver via cable 133-521595-044-0 KKD45Y.

The Transceiver IEEE 802.3 10-Base-T (MAU) is connected to the hub of a LAN.

Refer to Knowledge Base Solutions for Global Navigator ("Configuring an Ethernet MIS port". Solution ID: S344QS6).


NOTE

The CC-98 package must have a unique sub MAC address from the rest of the network. This is provided via switch settings on the CC-98 package.

The IP address is assigned by the AIPT command.

Internal ACD (IACD)

For programming, refer to the *NEAX2400 IMX ACD System Manual,* stock #200874.

The configuration disk must include IACD.

A PZ_PC19 Lani card is used to provide MIS output to the LAN for IP connectivity.

NEAX2000 IVS or IVS2 Ethernet Requirements

AP01 and CC01

CallCenter*WorX*–Business*,* version 2 build 182 or higher

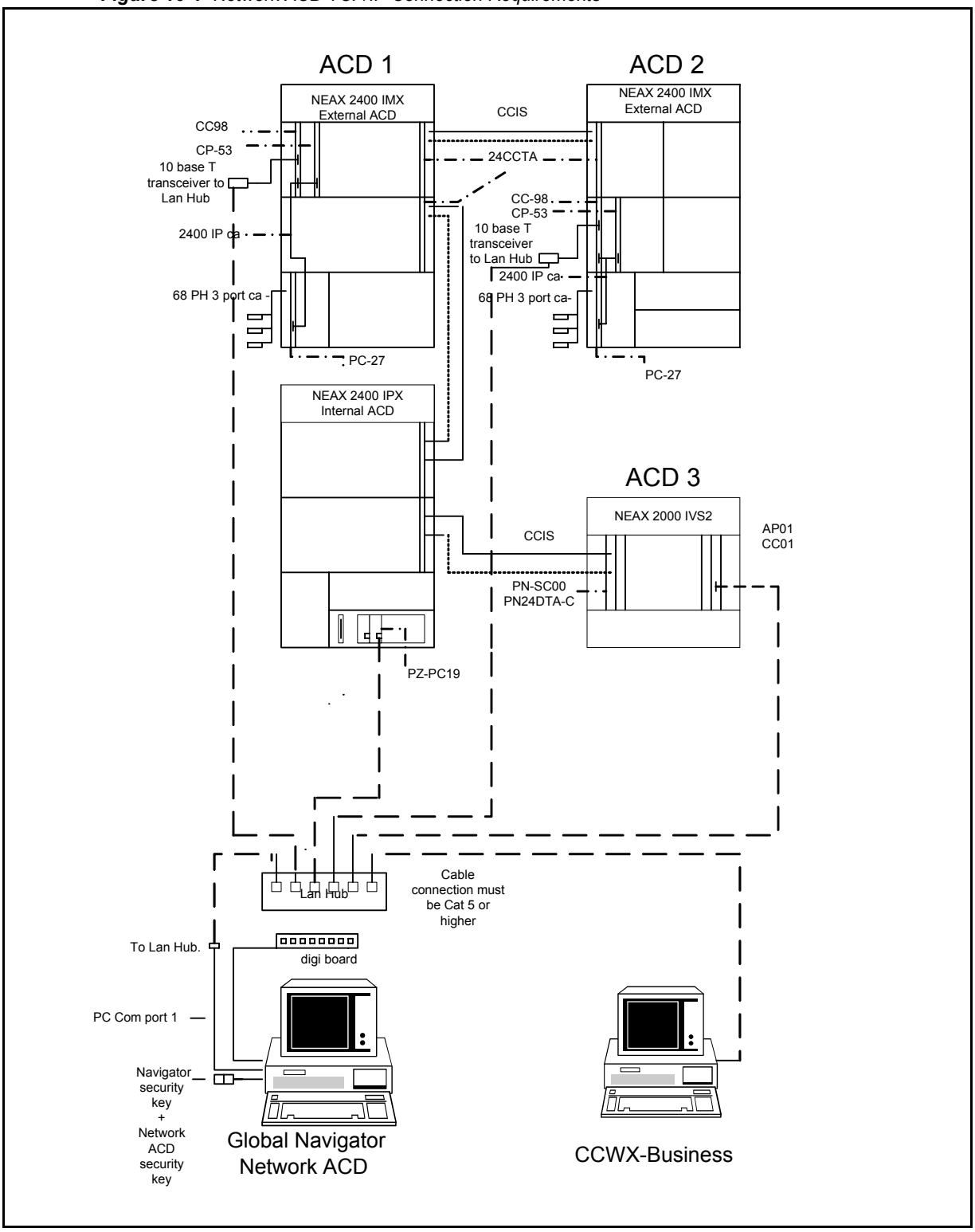
Global Navigator Ethernet Requirements

Global Navigator Version G3.04 or higher

The Navigator server must be equipped with an Ethernet card.

Refer to Knowledge Base Solutions for Global Navigator Solution ID: S344QS6 for detailed UNIX and Navigator programming information.

Figure 10-1 *Network ACD TCP/IP Connection Requirements*



Network ACD Serial Connection Requirements

NEAX2400 IMS Serial Requirements

ACD software release 3.07 or higher.

Asynchronous communication equipment

- Module ACDIO02-A
- External ACDPC 27

NEAX2000 IVS2 Serial Requirements

IVS2 software should be 2200 series or better

PN-AP01 revision C1_1.01 or higher

CallCenter*WorX–Business* ACD version 2, build 182 or higher

CallCenter*WorX* agent capacity is directly related to the necessary security key.

Global Navigator Serial Requirements

Global Navigator version G3.02 or higher

Agent capacity is directly related to the necessary security key.

There are several ways to accomplish the MIS connection with the Navigator. Refer to the *Navigator Configuration Manual* for PC connections. The example in Figure 10-2 reflects modem to digi board ports. Additional options are:

- Direct connection, "within 50 feet."
- Nail Down connection over CCIS is mentioned in ETI-023 and ETI-122, relating to data modules.

In all cases, a multi-node Navigator environment must be in place prior to Network ACD implementation.

Additional information relating to multi-node navigator node addition can be found in the NEC Knowledge Base Solutions (Solution ID: S8BRS3C).

NEAX2000 IVS^2 CCIS Connection with NEAX2400 IMS

PN-24DTA-C and SC00

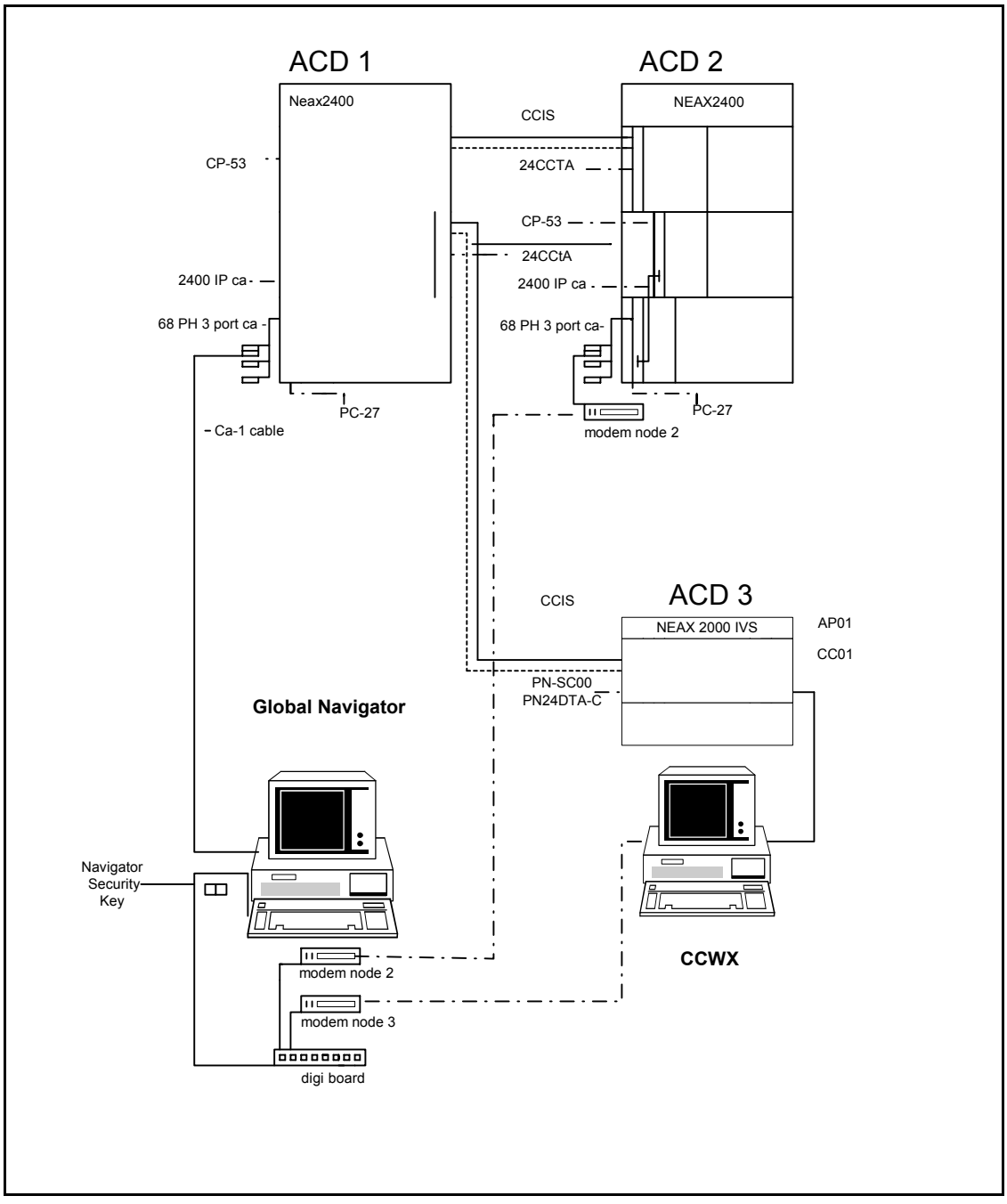
The CallCenter*WorX* ACD PC is necessary for collection of information from the 2000 IVS2 and transmission of MIS formatted information to the Global Navigator.

To interface the 2000 IVS2 with the CCWX:

- PN-AP01 (OAI application).
- PN-CC01 (Ethernet).

Refer to the *CallCenterWorX System Manual* for PC connections and PBX/ACD programming.

Figure 10-2 *Network ACD Serial Connection Requirements*



Troubleshooting

- To determine if a network connection has been established between nodes, enter **ping** plus the **IP address** of the node. The response will report errors, or will indicate a successful connection.
- The multi-node Navigator system will function using a mix of TCP/IP and serial connections. However, if these inputs are changed, the Navigator will need to be re-initialized for the changes to take effect.
- ACD nodes are added and deleted from the Network ACD using the **nav_help** utility and option **n**. These ACD nodes are configured from the host using the **Site Config->Set Switch** menu option.

Knowledge Base Solutions

In addition to the documents referred to in Chapter 1, , NEC maintains the Knowledge Base Solutions system to provide more detailed information on many items, such as those shown in the following table.

Subject	Solution ID #
Global Navigator MIS (Configuring an Ethernet MIS port)	S344QS6
Adding ACD Nodes (multi-node Navigator MIS)	S8BRS3C
Default Routing on Navigator or UAP	S5A7Q23
System time on a multi-node Navigator MIS	S9G9SRB

Access to the Knowledge Base Solutions is available to qualified users through the NEC National Technical Assistance Center.

11

Glossary

This glossary contains words used in this guide which are of a specific nature to NEC, Global Navigator Network ACD, or the telecommunications industry.

TERM	DEFINITION
ACD	Automatic Call Distributor - a telephone switching system component responsible for managing the incoming calls to a call center and distributing those calls to available agents according to programmed priorities and criteria.
ACD Node	Individual call center within a Network ACD.
CCIS	Common Channel Interoffice Signaling - a way of carrying telephone signaling information along a different path from the path used to carry voice.
Disparity	The difference between the LWC in the origination queue and the LWC in the destination queue. This calculation is used to determine whether a call meets the criteria to be interflowed to another ACD. Disparity is expressed in both seconds and percentages.
Donor-only	The assignment of the split type that prevents a split from receiving rerouted calls.
Donor Split	The split that interflows a call to a recipient split.
Global Navigator	The MIS system which measures and reports the performance of the NEAX2400 ACD's trunks and trunk groups, agents and agent groups, and pilot numbers.
Interflow	The rerouting of an ACD call from one ACD node to another.
Local Agent	A phone agent at the ACD node where an incoming call is originally received.
LWC	Longest Waiting Call - the call that has been waiting in queue the longest.
Network ACD	A systematic way of monitoring incoming call traffic and redistributing incoming calls.
Network Team	A group of remote ACD Splits that have been assembled to share responsibilities and information related to common job functions, and to optimize the productivity of the entire group.
Number Available Agents	The minimum number of agents servicing a split required to be in Ready mode. This value is used as one of the criteria for call interflow.
Pilot Number	Access codes which are programmed into the PBX and ACD numbering plan and are used to direct calls within the ACD.
Pilot Number Restriction	Calls received on these pilot numbers will not be eligible for interflow and will not be considered in interflow criteria calculations.

TERM	DEFINITION
Proprietary Pilot Number	Access codes which are programmed into the PBX numbering plan and are used by Global Navigator Network ACD to direct interflowed calls between ACDs.
PSTN	Public Switching Telephone Network - the network which connects individual subscribers to the network via a Central Office and inter-exchange carriers.
Queue	The sequential arrangement of the incoming calls which are waiting to be processed by an ACD.
Queue Disparity Value	The difference between the donor and recipient's longest waiting calls.
Recip-only	The assignment of the split type that prevents a split from sending rerouted calls.
Recipient Split	The split that receives an interflowed call from another split.
Reroute Timeout	This represents the maximum number of seconds a Network ACD rerouted call will remain ineligible for a subsequent reroute.
Split	An organization of users who handle ACD calls related to a specific area, such as Sales, Parts, Customer Service, etc.
Split Type	There are two type of splits, Donor and Recipient, which indicate whether calls to the split are eligible for interflow, or if the split can receive interflowed calls from other splits.
Tie Line	Transmits telephone signaling information along a different path from the path used to carry voice. Tie lines cannot carry as much information as a CCIS line, and are not capable of transmitting caller-specific information such as a caller's name and extension number to the ACD's LCD.

For additional information or support on this NEC Unified Solutions product, contact your NEC Unified Solutions representative.

NEC Unified Solutions, Inc.

Global Navigator Network ACD Configuration Guide

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