Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Genesis Systems Corporation Contact Center Manager to Interoperate with Avaya Communication Server 1000 – Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration consisting of Genesis Systems Corporation Contact Center Manager solution and Avaya Communication Server 1000 7.6.

Genesis offers a unified management and reporting solution for Avaya Communication Server 1000. This compliance test focused on the interoperability of Genesis Contact Center Manager with Avaya Communication Server 1000 R7.6.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

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1. Introduction

These Application Notes describe a compliance-tested configuration consisting of Genesis Systems Corporation Contact Center Manager (Contact Center Manager) solution and Avaya Communication Server 1000 R7.6 (Communication Server 1000).

Genesis offers a unified management and reporting solution for a variety of communication systems, including Avaya Communication Server 1000. This compliance test focused on the integration of Contact Center Manager with Communication Server 1000.

The Contact Center Manager solution uses a TeleType (TTY) interface to Communication Server 1000 in order to obtain the Automatic Call Distribution (ACD) reports 1, 2 and 4 that are generated by Communication Server 1000. Users access the Contact Center Manager server using a web browser in order to perform administrative tasks.

2. General Test Approach and Test Results

The compliance test focused on the ability for the Genesis Contact Center Manager application to accurately report Contact Center Statistics data from Communication Server 1000.

Two TTY ports are configured on Communication Server 1000. The server hosting the Contact Center Manager communicates with these two ports using serial connectivity. One TTY port is configured for historical data collection and the other for real time. The Contact Center Manager uses the Genesis GenStart module to collect the raw ACD report data generated by Communication Manager 1000. Users are then able to run the user friendly reports from the reporting option provided by the Contact Center Manager.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and /or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The compliance test validated the accuracy of the reports generated by the Contact Center Manager with respect to the raw ACD reports being generated by Communication Server 1000 in its day to day operation. Additionally, tests were performed to confirm the ability of Contact Center Manager to recover from network outages and server reboots.

2.2. Test Results

The objectives described in **Section 2.1** were verified.

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2.3. Support

Information, Documentation and Technical support for Genesis products can be obtained at:

- Phone: 1 (888) 993-2288 or 1 (604) 530-9348
- Web: http://www.buygenesis.com
- Email: support@buygenesis.com

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3. Reference Configuration

Figure 1 below illustrates the configuration used to compliance test the Contact Center Manager solution with Communication Server 1000.

The Genesis Server connects to the two TTY ports configured on Communication Server 1000 using serial interface. Two agents that belong to an ACD queue are configured on Communication Server 1000. During compliance testing since the server hosting the Contact Center Manager had no serial ports, a Serial to Ethernet converting device was used.

The following values were configured in Communication Server 1000 for the compliance testing.

ACD Directory Number (ACD DN)	54901
Agent IDs or Directory Numbers	54405, 54406
Agent Position IDs	1005, 1006

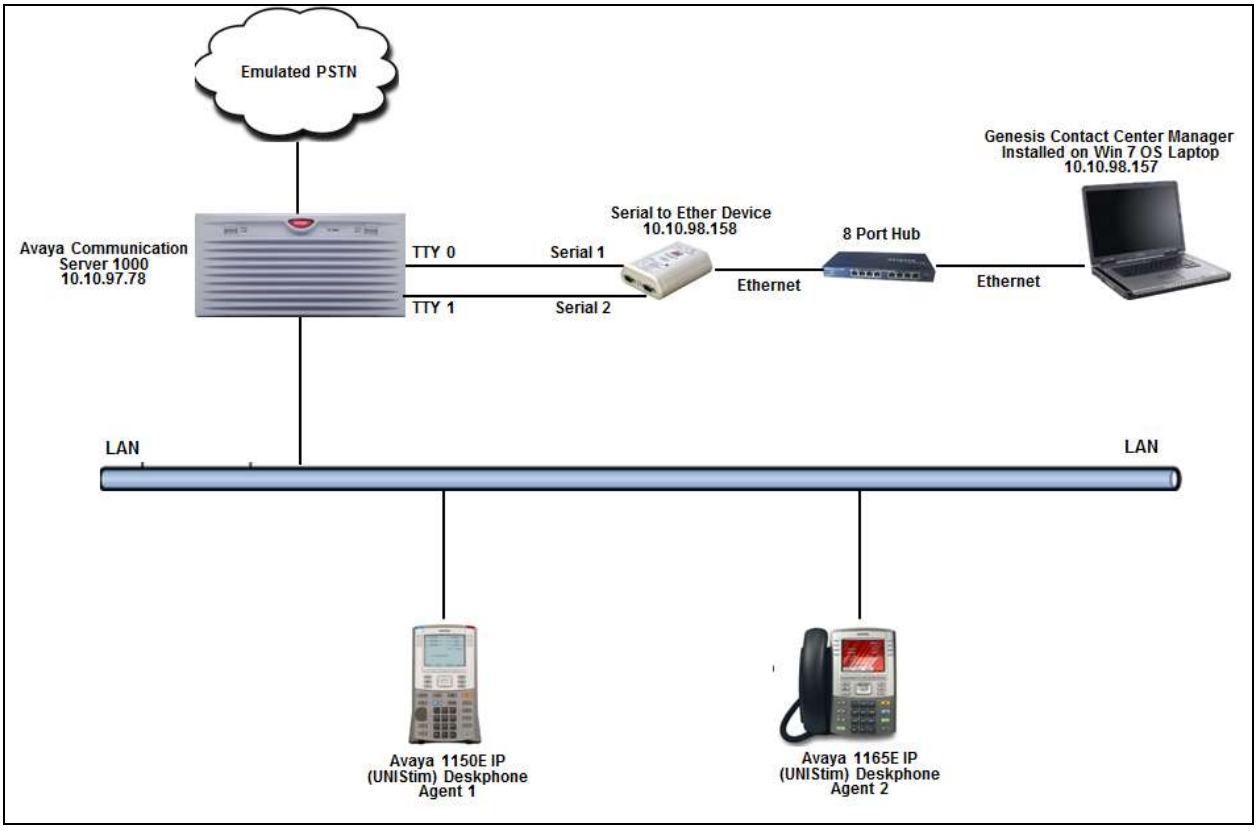

Figure 1 – Genesis Contact Center Manager Compliance Test Configuration

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4. Equipment and Software Validated

The following equipment and version were used in the reference configuration described above:

Equipment/Software	Release/Version
Avaya Communication Server 1000	7.65 SP7
Avaya IP Phones: • 1150(UNIStm) • 1165 (UNIStm)	 C94 C94
Genesis: GenCCM installed on MS Windows 7 Professional SP1 GenStart Module	 16.5.24* 4.16

*Note: Genesis does not manage releases with a single release number. The solution contains numerous components which are modified as required. The solution tested was the Generally Available release as of May, 2016 which included support for Avaya Communication Server 1000.

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5. Configure Avaya Communication Server 1000

This document assumes that the Communication Server 1000 was properly installed and configured. For detailed information on how to install, configure and administer Communication Server 1000 refer to **Section 9**. Assumption is also made that an administrative user account is created on the Communication Server 1000 that provides access to all overlays. Access to overlays is required to configure TTY ports, ACD Directory Number and Agents that will be used during the compliance testing.

5.1. Configure TTY Port

Communication Server 1000 Command Line Interface (CLI) was used in configuring the TTY ports. Login to the Communication Server 1000 CLI (not shown) and access overlay (LD) **17** to add a TTY port. Two TTY ports, one for historical data collection (TTY0) and another for real time data (TTY1) were configured for compliance testing. The Contact Center Manager server connects to these two TTY ports using serial connectivity. Screen below shows an already configured TTY port that was used during compliance testing. The values shown in red are to be configured by the user and rest of the fields can be left at default values.

```
ADAN     TTY 0
  CTYP MGC
  IPMG 4 0
  DNUM 0
  PORT 0
  DES  Acd_Reports
  BPS  9600
  BITL 8
  STOP 1
  PARY NONE
  FLOW NO
  USER ACD
  CUST 00
  SSUP NO
  APRT YES
  TTYLOG       0

ADAN     TTY 1
  CTYP MGC
  IPMG 4 0
  DNUM 1
  PORT 1
  DES  ACD_RealTime
  BPS  9600
  BITL 8
```


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```
  STOP 1
  PARY NONE
  FLOW NO
  USER ACD
  CUST 00
  SSUP NO
  APRT NO
```

5.2. Configure ACD Directory Number

Access overlay (LD) **23** to add an ACD Directory Number (ACD DN). During compliance testing **54901** was configured as an ACD DN. This is the queue number that callers will be calling to access the agents during compliance testing. Screen below shows an already configured ACD DN that was used during compliance testing. The values shown in red are to be configured by the user and rest of the fields can be left at default values. Note that for **STIO** field the value needs to be the TTY port configured for real time data collection. During compliance testing this TTY port was configured as **1** as shown in **Section 5.1**.

```
TYPE ACD
CUST 0
ACDN 54901
MWC  NO
DSAC NO
MAXP 50
SDNB NO
BSCW NO
ISAP NO
AACQ NO
RGAI NO
ACAA NO
FRRT
SRRT
NRRT
FROA NO
CALP POS
ICDD NO
NCFW
FNCF NO
CWTT NONE
HMSB YES
ACPQ NO
FORC NO
RTQT 0
SPCP NO
OBTN NO
RAO  NO
CWTH 1
```


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```
NCWL NO
BYTH 0
OVTH 2047
TOFT NONE
HPQ  NO
OCN  NO
OVDN
IFDN
OVBU LNK LNK LNK LNK
EMRT
MURT
RTPC NO
STIO 1
TSFT 20
HOML YES
RDNA NO
LABEL_KEY0 NO
NRAC YES
DAL  NO
RPRT YES
RAGT 4
DURT 30
RSND 4
FCTH 20
CRQS 100
CCBA NO
SIPQ NO
IVR  NO
OBSC NO
OBPT 5
CWNT NONE
```


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5.3. Configure Agent

Access overlay (LD) **11** or **20** to add an Agent. During compliance testing **54405** and **54406** were configured as agents. These agents belong to the ACD queue **54901**. Screen below shows an already configured agent **54405** that was used during compliance testing. The values shown in red are to be configured by the user and rest of the fields can be left at default values.

```
DES  54901
TN   096 0 02 05  VIRTUAL
TYPE 1150
CDEN 8D
CTYP XDLC
CUST 0
NUID
NHTN
CFG_ZONE 00001
CUR_ZONE 00001
MRT
ERL  2
ECL  0
FDN
TGAR 0
LDN  NO
NCOS 7
SGRP 0
RNPG 0
SCI  0
SSU
XLST
SCPW
SFLT NO
CAC_MFC 0
CLS  CTD FBA WTA LPR MTD FNA HTA TDD HFA CRPD
     MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
     POD SLKD CCSD SWD LND CNDA
     CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBD
     ICDA CDMD LLCN MCTD CLBD AUTU
     GPUD DPUD DNDA CFXA ARHD CNTD CLTD ASCD
     CPFA CPTA ABDD CFHD FICD NAID BUZZ AGRD MOAD
     UDI RCC HBTD AHA IPND DDGA NAMA MIND PRSD NRWD NRCD NROD
     DRDD EXR0 USMD USRD ULAD CCBD RTDD RBDD RBHD PGND OCBD FLXD
FTTC DNDY DNO3 MCBN FDSD NOVD VOLA VOUD CDMR PRED RECA MCDD T87D
SBMD KEM3 MSNV FRA  PKCH MUTA MWTD DVLD CROD ELCD VMSA
CPND_LANG ENG
RCO  0
```


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```
HUNT
LHK  0
PLEV 02
PUID
UPWD
DANI NO
SPID NONE
AST  00 03
IAPG 0
AACS NO
ITNA NO
DGRP
PRI  01
MLWU_LANG 0
MLNG ENG
DNDR 0
KEY  00 ACD 54901 0  1005
     AGN
     01 NRD
     02 MSB
     03 SCR 54405 0     MARP
     04 SCR 54042 0     MARP
     05
     06
     07
     08
     09
     10
     11
     12
     13
     14 ASP
     15 EMR
     16
     17 TRN
     18 AO6
     19 CFW
     20 RGA
     21 PRK
     22 RNP
     23
     24 PRS
     25 CHG
```


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5.4. Configure Schedule Data Block for ACD Management Reports

Access overlay (LD) **23** to add a Schedule Data block (SCB). During compliance testing reports 1, 2 and 4 were being generated. Screen below shows an already configured SCB that was used during compliance testing. The values shown in red are to be configured by the user and rest of the fields can be left at default values. Note that for **PRIO** field the value needs to be the TTY port configured for historical data collection. During compliance testing this TTY port was configured as **0** as shown in **Section 5.1**.

```
TYPE SCB
CUST 0
CPRD 01 01  12 31
SHR  0
EHR  23
DOW  1 2 3 4 5 6 7
RFRQ 3
SFRQ 1
ROPT 1 2 4
PRIO 0
PAGE NO
AID  NO
TOT4 YES
```


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6. Configure Genesis Contact Center Manager

Genesis engineer or an approved installer will install and initially configure all server components including Site information. Details of the steps are beyond the scope of this document. Refer to **Section 9** for detail configuration of Genesis Server.

6.1. Genesis Contact Center Manager Configuration Details

The Contact Center Manager application is accessed via web browser. Enter http://<hostname>/GenWeb/ where <hostname> is the IP address or qualified domain name of the Genesis server.

Login to the system using the credentials supplied by the installer as shown in the screen below.

If the system is configured for more than one site, select the site to interact with and choose the tab for the **ACD** application as shown in the screen below. During compliance testing only one site was configured on Genesis system.

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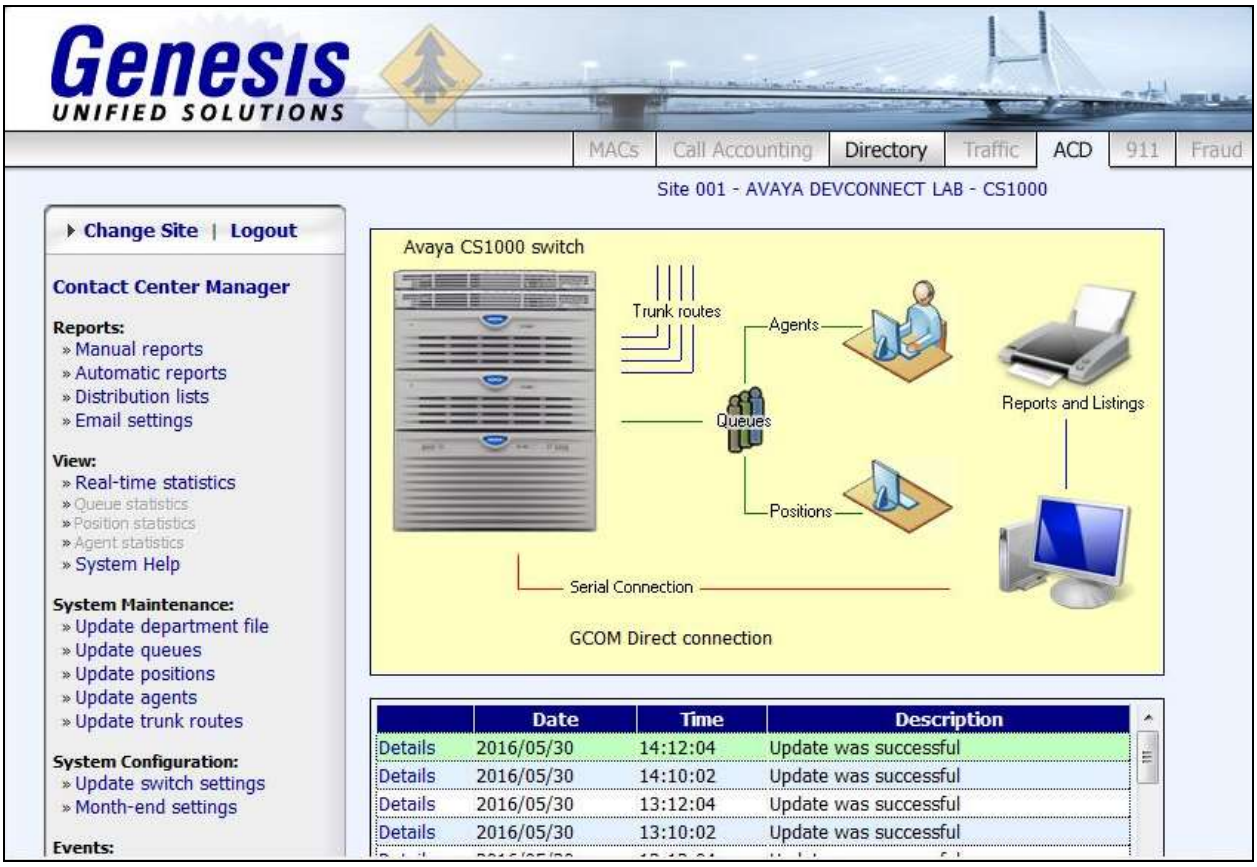
The initial **ACD** screen provides a list of recent Contact Center data download attempts (successful or not) from Communication Server 1000. Clicking on the objects in the diagram or the links in the navigation panel on the left side of the screen will navigate to the respective task screens.



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To configure the connection settings to Communication Server 1000, on the navigation panel, click **System Configuration → Update switch settings**. Select the radio button for **Telnet capture (TCP/IP)**. Enter the IP address of the serial to ethernet converting device box that was used during compliance testing and its configured TCP port in the **IP address / host** and **TCP port** fields respectively. Retain default values for all other fields.

Click **Save** to complete the task.

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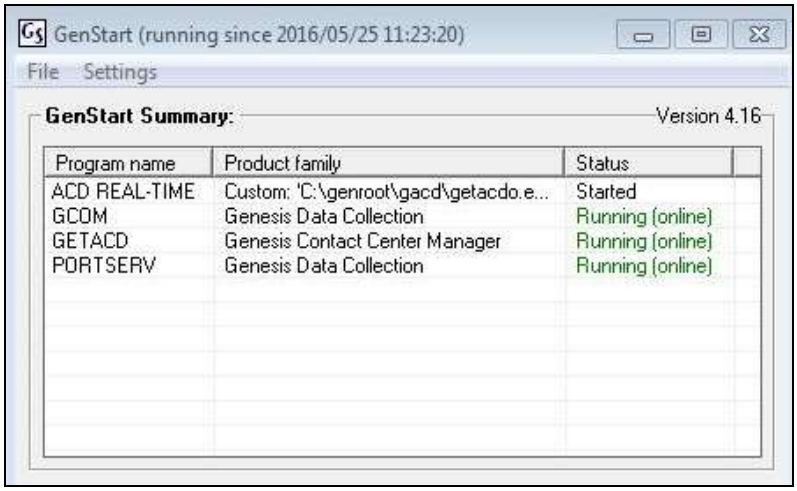
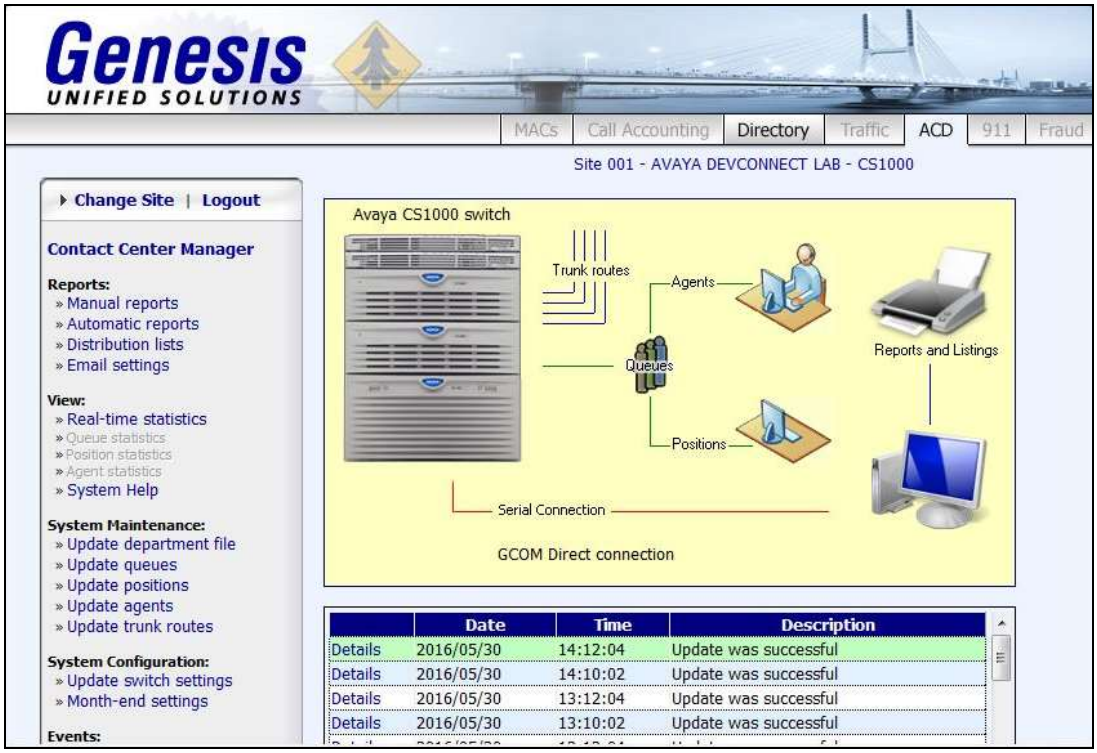
7. Verification Steps

Open the **GenStart** module in the Genesis Server and verify that the **GCOM** application status is **Running (online)** as shown in the screen below. The GenStart module can be accessed from the Windows System Tray on the Genesis server.



ACD calls were made to Communication Server 1000 agents to generate ACD data on the Communication Server 1000 which were then downloaded by the Contact Center Manager application. Screen below shows the successful collection of this data.



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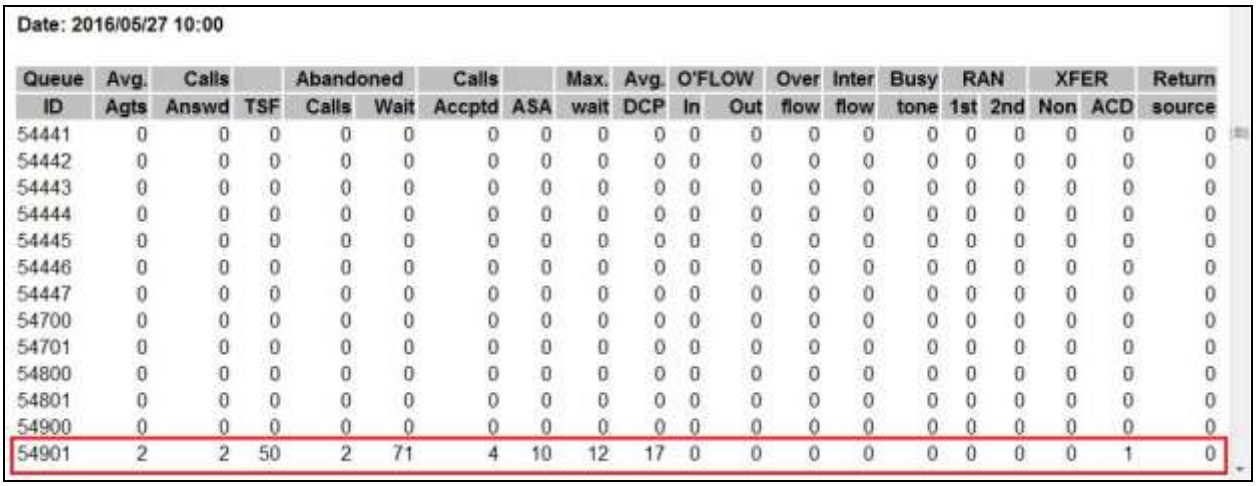
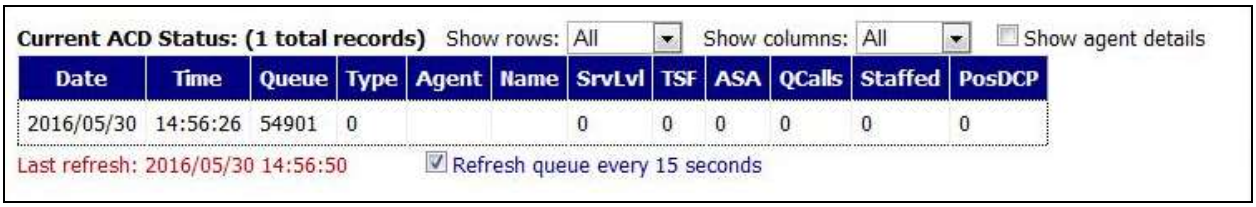
Additionally, reports were run from the Contact Center Manager application as shown below. The Genesis Contact Center Manager solution provides various options to run the reports. The full details of reports are beyond the scope of these Application Notes. The example screens below shows a Manual report and Real-time statistics.



Date: 2016/05/27 10:00

Queue	Avg.	Calls		Abandoned		Calls		Max.	Avg.	O'FLOW		Over	Inter	Busy	RAN		XFER		Return
ID	Agts	Answd	TSF	Calls	Wait	Accptd	ASA	wait	DCP	In	Out	flow	flow	tone	1st	2nd	Non	ACD	source
54441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54442	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54444	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54446	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54447	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54701	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54801	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54901	2	2	50	2	71	4	10	12	17	0	0	0	0	0	0	0	0	1	0



Current ACD Status: (1 total records) Show rows: All Show columns: All Show agent details

Date	Time	Queue	Type	Agent	Name	SrvLvl	TSF	ASA	QCalls	Staffed	PosDCP
2016/05/30	14:56:26	54901	0			0	0	0	0	0	0

Last refresh: 2016/05/30 14:56:50 Refresh queue every 15 seconds

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8. Conclusion

These Application Notes describe the procedures required to configure Genesis Systems Corporation Contact Center Manager solution for collecting ACD reports that are generated by Avaya Communication Server 1000. The Contact Center Manager application successfully passed compliance testing.

9. Additional References

This section references the product documentation relevant to these Application Notes. All Avaya documents can be found at http://support.avaya.com

- *Software Input Output Reference — Administration Avaya Communication Server 1000 7.6 NN43001-611.*
- *Automatic Call Distribution Fundamentals Avaya Communication Server 1000 Release 7.6 NN43001-551.*

Product documentation for Genesis Contact Center Manager Solution can be found at http://www.buygenesis.com/documents.htm.

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