Avaya Solution & Interoperability Test Lab

Application Notes for AMC Application Adapter for Avaya HDX and Avaya Communication Control Toolkit – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate third-party business applications using the AMC Application Adapter for Avaya HDX (Host Data Exchange). Avaya HDX Contact Center Manager provides a data exchange interface for third-party applications (or hosts) to send data to and receive data from an active script. The third-party application programming interface is referred to as the Host Data Exchange (HDX) API. Typically, a host application queries data in a third-party database based on data available in the script—such as CallID or DNIS—and returns data to the script to enable more intelligent call routing. The AMC Multi-Channel Integration Suite (MCIS), which includes the Application Adapter for Avaya HDX, can be used to query an external database based on parameters passed from Contact Center.

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

VK; Reviewed:
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Solution & Interoperability Test Lab Application Notes
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AMC_HDX

1. Introduction

The Application Notes describe the configuration steps to integrate third-party business applications using AMC Application Adapter for HDX with Avaya Contact Center Manager Server (formerly Nortel) (hereafter referred to as CCMS). The AMC Multi-Channel Integration Suite (MCIS), which includes the connector, provides call control, agent session control and screen pop. The AMC connector provides HDX Communication Control Toolkit (CCT) integration queries data in a third-party database based on data available in the script—such as CallID or DNIS—and returns data to the script to enable more intelligent call routing.

1.1. Interoperability Compliance Testing

The interoperability compliance test verified that the AMC Application Adapter for Avaya HDX was communicating with Avaya Contact Center by using the HDX script commands given in the document NN44400-510 Nortel Contact Center – Configuration Service Creation Environment Application Development (Section: **Command Line Reference →Host Data Exchange commands**).

1.2. Support

Technical support from AMC can be obtained through the following:
- **Phone:** +1 (800) 390-4866
- **Email:** support@amctechnology.com

2. Reference Configuration

The following diagram illustrates a sample configuration of a contact center environment with Avaya Contact Center integrated with MCIS server and AMC Application Adapter for Avaya HDX.

**Figure 1: Reference Configuration**
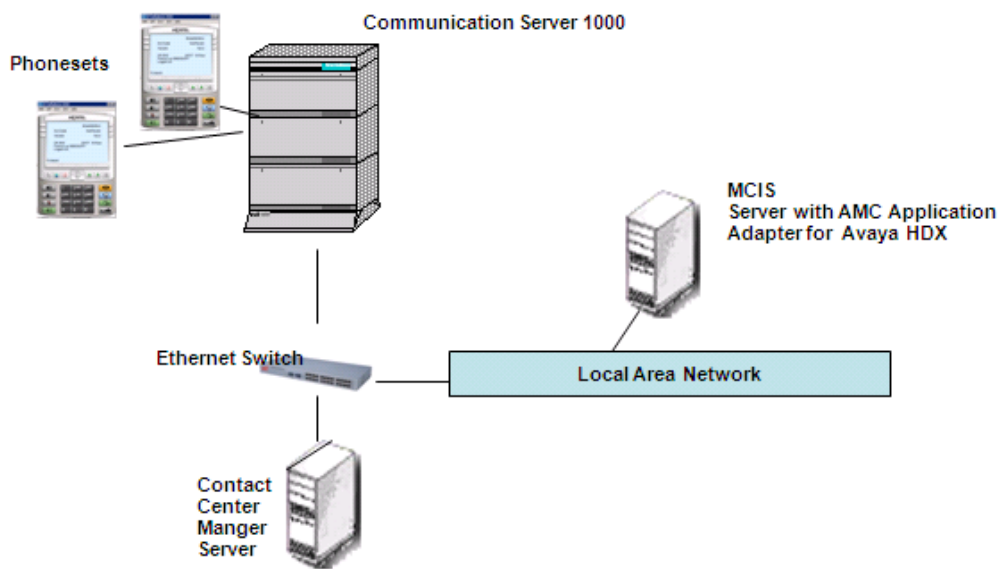
3. Equipment and Software Validated

The following equipment and software were used for the sample configuration:

| Equipment	Software version
Avaya Contact Center Manager Server running on Windows 2003 Server	7.0 (SU_02/SUS_0201)
Avaya Communication Control Toolkit running on Windows 2003 Server	7.0 (SU_02/SUS_0201)
Avaya Communication Server 1000	Release 6.0
Avaya i2050 IP Softphones	2.0
AMC MCIS coresident with AMC Data Connector for HDX running on Windows 2003 server	5.3 (MCIS) NortelHDXConnector.dll 5.3.0.0 (HDX), RoutingAddin HF 5.3.0.15.3.01. (HDX)

3.1. Create Contact Center Script

This section describes the procedure to create a script on CCMS through Contact Center Manager Administrator (CCMA). Launch CCMA GUI on Internet Explorer by typing in the CCMA URL.
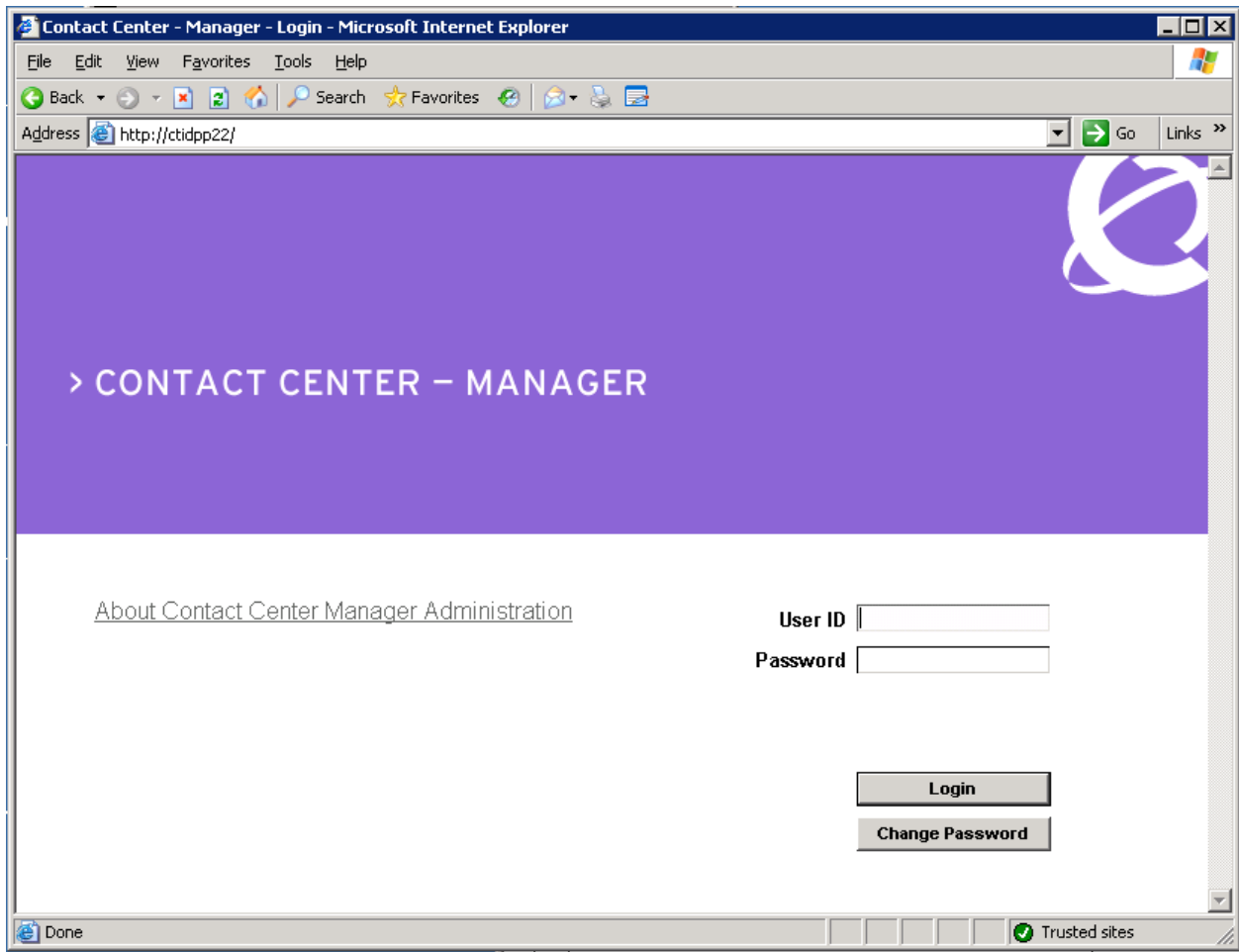
Login using the default user: webadmin (pw: webadmin).
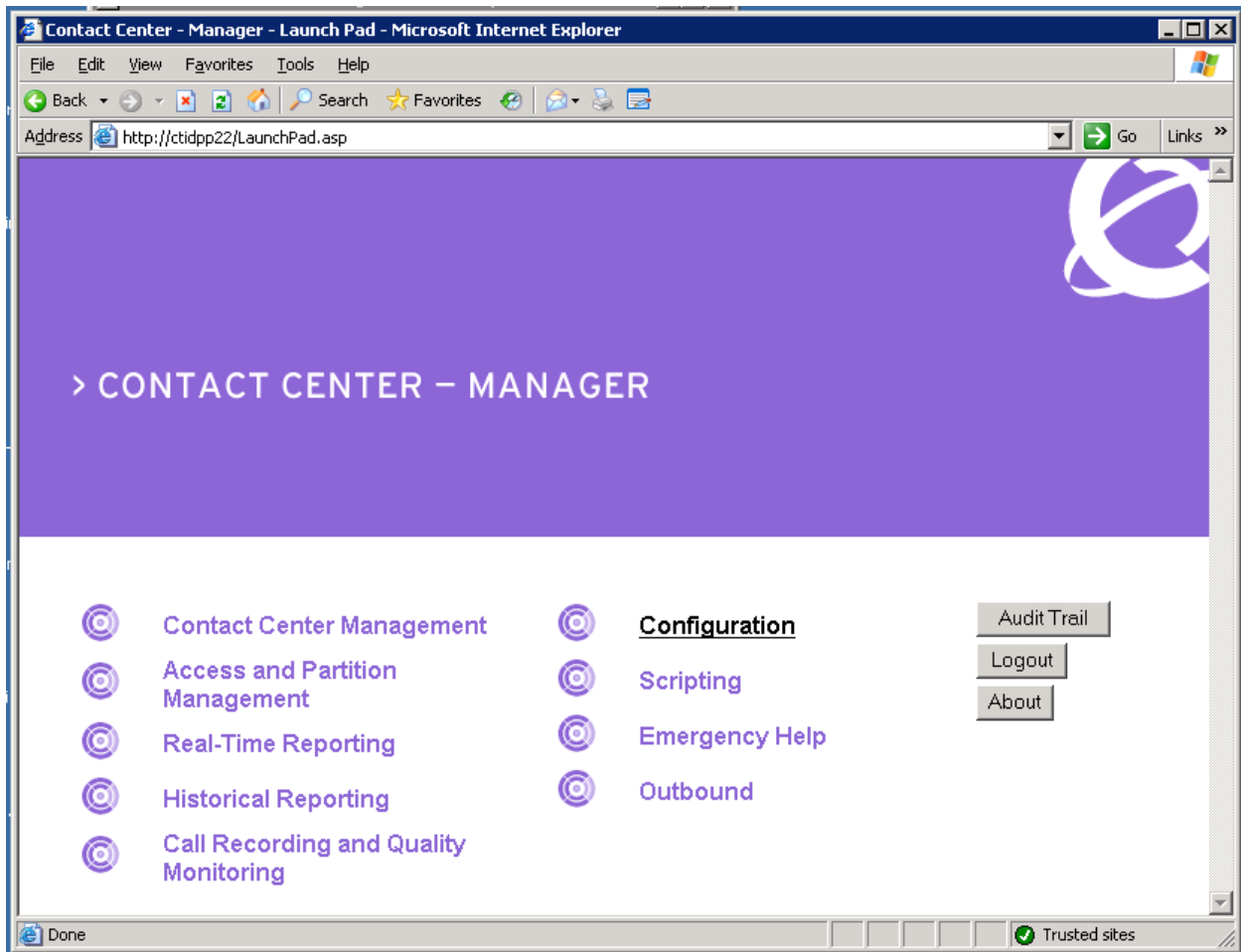
Go to **Scripting**.
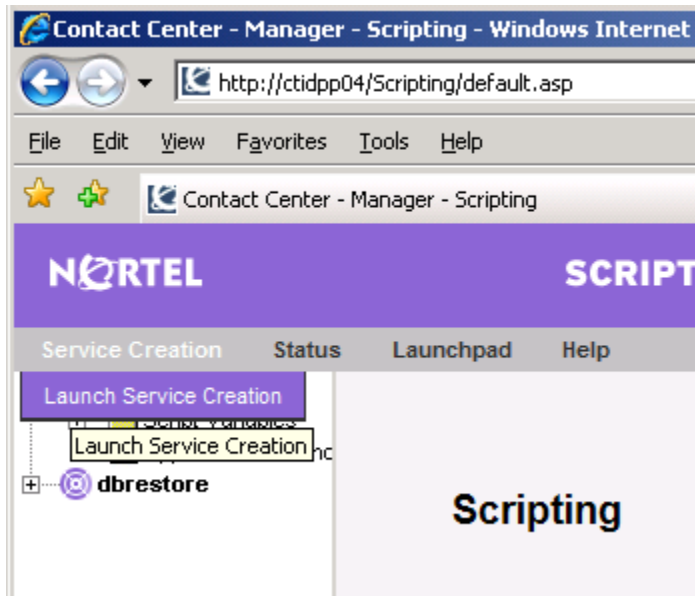
Go to **Service Creation → Launch Service Creation.** The Service Creation Environment (SCE) will load.

Navigate to the Master Script on the CCMS server by choosing the configured **CCMS server (ccms7-node1 here) →Applications [Full Control] →Master Script**. Right click on Master Script and select **Open**. Input the test script.
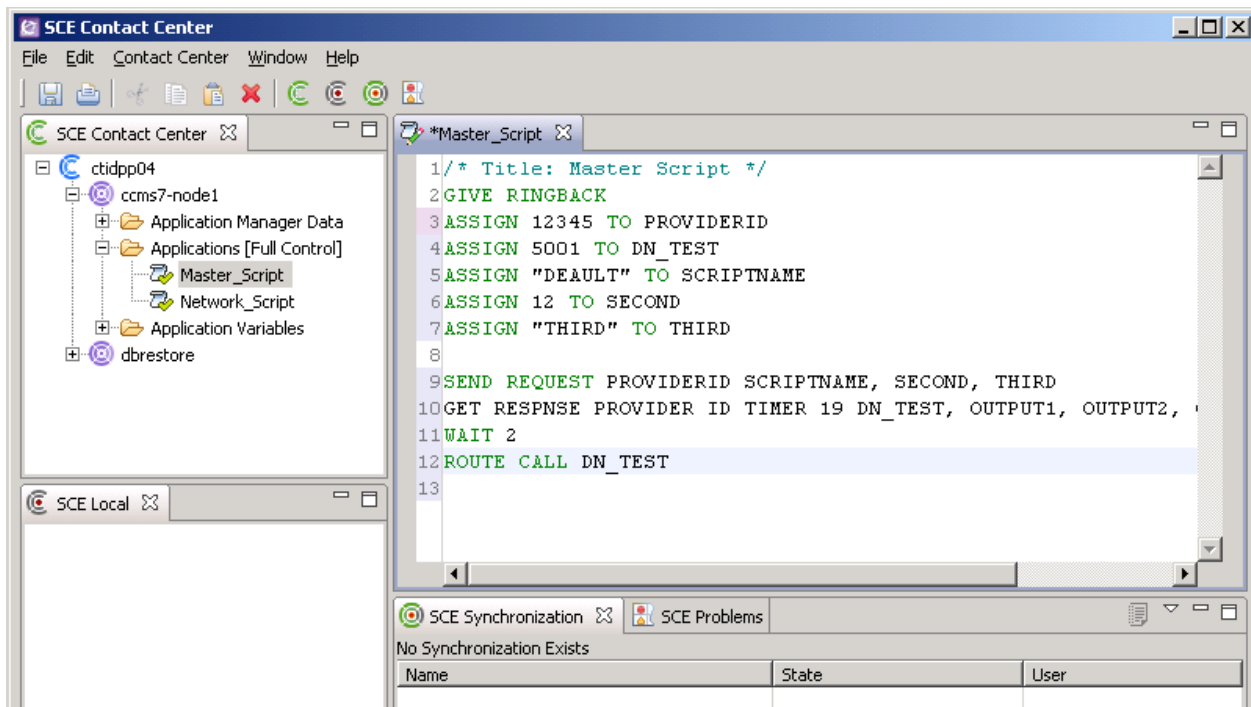
The test script is as follows:

```
GIVE RINGBACK
ASSIGN 12345 TO PROVIDERID
ASSIGN 5001 TO DN_TEST
ASSIGN "DEFAULT" TO SCRIPTNAME
ASSIGN 12 TO SECOND
ASSIGN "THIRD" TO THIRD

SEND REQUEST PROVIDERID SCRIPTNAME, SECOND, THIRD
GET RESPONSE PROVIDERID TIMER 19 DN_TEST, OUTPUT1, OUTPUT2 OUTPUT3
WAIT 2
ROUTE CALL DN_TEST
```

Right Click on **Master_Script** and select **Activate**.

4. Configure MCIS server and AMC Application Adapter for Avaya HDX

4.1. Installing Application Adapter for SAP Web Client with MCIS

The MCIS and the AMC Application Adapter for Avaya HDX are installed on the same server. Install the AMC Application Adapter for SAP Web Client by running the setup file for the AMC HDX Connector (amc_hdx_connector.exe). The setup must be run by a user having Administrative privileges. Choose default options presented during installation.

4.2. Modifying config.ini

This section covers the procedure for configuring the config.ini file to contain information for HDX integration.

- Modify **config.ini** in the C:\Program Files\AMC Technology\MCIS directory on the MCIS server as follows. Note that the complete file is not shown below.

```
########################################################################
# MCIS Configuration file: Config.ini (Sample File)
#
# MCIS Release 5.3
# File Version 1.0
```

```
#
# This file should contain all the potential keys for every module.
# Refer to the MCIS Implementation Guide, Adapter Implementation Guide,
# and Connector Implementation Guide for more information.
#
# It is recommended you create a copy of this file for Backup
#
# It is also recommended you create system specific ini files and copy
# the contents of those files to the config.ini file using the MCIS
# Administration Tool or Manually.
#
########################################################################

…


### MCIS CORE ###


ModuleClass=AgentManagerClass,AgentManager.AMCAgentManagerModule
ModuleClass=DataStoreClass,DataStore.AMCMemoryDataStore
ModuleClass=EventManagerClass,AMCEventManagerModule.AMCEventManagerModule
ModuleClass=LicenseManagerClass,LicenseManager.AMCLicenseManagerModule
ModuleClass=WorkManagerClass,WorkManager.AMCWorkManager
ModuleClass=StandardizedClass,AMCMultiChannelInterface.AMCApplication
ModuleClass=CMGatewayClass,CMGateway.CMGatewayModule

Module=AgentManager,AgentManagerClass
Module=DataStore,DataStoreClass
Module=EventManager,EventManagerClass
Module=LicenseManager,LicenseManagerClass
Module=WorkManager,WorkManagerClass
Module=StandardizedInterface,StandardizedClass
Module=CMGateway,CMGatewayClass

…

=== MODULE CONFIGURATION ===

###
# Notel HDX Data Connector
#
###
[HdxModule]
ServerHost=47.249.66.152
ProviderHost=192.168.0.220
ScriptTimeout=4
ProviderId=12345


###
# License Manager
#
###
[LicenseManager]
```

```
#  TraceEnabled=1
#  TraceLevel=2
#  TraceMaxSize=1024
#  CTI_CTConnect=<REPLACE WITH LICENSE KEY>
CTI_Cisco=BRGWDUBTHCHDEEDIJBEFPCCEIEEBEFDRFIMNJOJSLM
CTI_CentreVu=BRGKDTBVHCHDEEDIJBEFQBDEIEEBEFDRFIMNJOJSLM
CTI_CCT=BRGNDVBOHCHDEEDIJBEFPDGEIEEBEFDRFIMNJOJSLM
#  CTI_AIC=<REPLACE WITH LICENSE KEY>
#  E-mail=<REPLACE WITH LICENSE KEY>
#  IVR_Conversant=<REPLACE WITH LICENSE KEY>
#  WebChat=<REPLACE WITH LICENSE KEY>
MCIS=BRGMDOBYHJHDEJDCJGEAOCJEIEEBEFDRFIMNJOJSLM
AA-DOTNET=BRGYDWBZHRHEEGDJJGEDSEFEIEEBEFDRFIMNJOJSLM
AA-ICWC=BSGKDVBSHVHEEGDJJGEDYDCEIEEBEFDSFIMNJOJSLM
DATA_NortelHDX=BTGPDKBKHBHEEADIJIEJMDHEIEEBEFDTFIMNJOJSLM


…


###
# Admin Tool
#
###
[AdministrationTool]
AdminToolHost=<admintoolhost>
WebServiceHost=<WebserviceHost>
MCISName=MCIS
AdminRemotingPort=65372
SMTPServer=<smtpserver>
TraceLevel =5
TraceMaxSize =1000000
TracePath =C:\Program Files\AMC Technology\MCIS\Server\Logs\
TraceFileName=AdministrationTool.log
```

The **ServerHost** field should be configured with the IP address of the CCMS server. The **ProviderHost** field should be the IP address of the MCIS server. The **Data_NortelHDX** field should be configured with the license for the HDX Connector (obtained from AMC).

5. General Test Approach and Test Results

The test plan developed by AMC and DevConnect was implemented. The test plan included implementing a test script in Contact Center. Once the AMC Application Adapter for Avaya HDX is successfully implemented, this script will route any call coming into the Contact Center to be routed to a specific phoneset specified by the variable DN_TEST. The value of DN_TEST is changed by the AMC Application Adapter for Avaya HDX from the value configured in the Contact Center script.

6. Verification Steps

Verified that the call placed to the Contact Center system was routed successfully to the DN specified by the AMC Application Adapter for Avaya HDX.

7. Conclusion

These Application Notes describe the configuration steps required for AMC Application Adapter for Avaya HDX to integrate with Contact Center Manager Server

8. Additional References

Product documentation for Avaya Contact Center Manager Server can be found at
http://support.avaya.com/

The following documentation was provided by AMC:

[1] AMC Data Connector for Nortel HDX - Implementation Guide.doc