

VOICEGENIE

VoiceGenie 7 Call Analyst User's Guide

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Revision History

Version	Date	Change Summary	Author/Editor
Draft	April 21 st , 2005	Initial release	Andrew Wahbe
1.0	May 4 th , 2005	Incorporated changes from review	Andrew Wahbe
1.1	May 19 th , 2005	Updated the "Configuring the Eclipse Client" Section with the new Call Analyst Preference Page included as part of RC3.	Derek Barnes

1 Introduction

1.1 Overview

The VoiceGenie Call Analyst is a multifaceted tool providing insight into the performance and usability of applications running on the VoiceGenie platform. The key functional aims of the product are to:

- Provide information on the frequency with which specific applications and features are being used.
- Highlight caller behavior one call at a time and to provide overall statistics to uncover trends across multiple calls.
- Provide useful metrics to help gauge the overall user experience offered by specific applications.

The resulting benefits include the facilities to:

- Assist developers and support teams in troubleshooting applications.
- Identify potential problems with call flow and prompts.
- Better allocate development, platform and tuning resources to correspond with usage trends.

The Call Analyst includes a graphical desktop client for viewing statistics and logs generated by the VoiceGenie platform. The client is only a component of the Call Analyst; the remaining portions of this tool are composed of run-time servers which gather and store data from a VoiceGenie deployment, and serve the data to the client when needed. This document provides background information and describes how to install and use the Call Analyst.

The Call Analyst client is implemented as a plug-in for the Eclipse platform (see <http://www.eclipse.org>), and can be used along side any other Eclipse tool or plug-in. As such, some familiarity with Eclipse is recommended before reading this document in order to provide some basic context. Understanding how to use Eclipse for Java development is not necessary; however, some understanding of basic Eclipse concepts such as the *workbench*, *perspectives*, *views*, *editors*, *resources*, and *projects*.

1.2 Features

The Call Analyst provides two main sets of features:

- Generation of various statistical reports providing insight into overall application performance and usability; and
- Collection and display of detailed call logs to allow individual calls to be analyzed.

The statistical reports are based on *all* calls that are handled by the VoiceGenie deployment. The reports are organized into two groups: operational reports and usability reports. The following operational reports are provided:

- **Call Distribution** – this report provides a histogram describing the arrival pattern of calls to a platform (or cluster) over a specific period of time.
- **Call Length Distribution** – this report provides a histogram describing the length of calls to a platform (or cluster) over a specific period of time.

Additionally, the following usability reports are provided:

- **Recognition Performance Summary** – This report provides recognition performance statistics that give a high level analysis of how effective each part of the application is at gathering input. This essentially captures the number of times the user must typically be re-prompted at each point in the application.
- **Recognition Result Frequency** – This analysis provides statistics on the usage of different input tokens in voice and dtmf grammars. For each point in the application, the analysis provides a table containing the individual voice and dtmf input tokens used in that context over the specified time period.

- **Collection Attempt Details** – This analysis provides statistics on the attempts to collect input at each interaction in the application. For each recognition context a table is provided which details the outcome of the collection attempts executed at that context. The collection attempts are organized by the number of re-prompts in a visit to a recognition context.
- **Menu Selection Frequency** – This analysis shows the frequency with which the various choices in a menu dialog are selected.
- **Barge-In Analysis** – This report provides information the percentage of users who barge-in over prompts, and the amount of time they wait before barging in.
- **Transfer Analysis** – This analysis provides statistics on the outcome of transfer execution.

Additionally, statistics can be saved and loaded from disk (using an XML format), or exported to CSV, or HTML.

Analysis of usability and performance statistics may provide insight into problematic areas of a voice application. However, detailed traces of individual calls are often required to properly assess the cause and eventual solution of usability problems.

Call analyst can be used to collect detailed logs of individual calls. However, since VoiceGenie platform deployments often handle thousands of calls each day, collecting logs for all calls may result in much more data than could ever be analyzed. For this reason, the Call Analyst allows a user to subscribe to a specified percentage of calls to an application. The user can collect their subscribed call logs using the Call Analyst client.

The call logs are stored on the client machine in an XML format. When viewed in the Call Analyst client, they are displayed in a convenient, collapsible tree of events. Call logs stored on a client machine can be searched by ANI, DNIS, Call time and application name.

Statistics and call logs can be organized into *workbook* directories on the client machine's disk drive. Workbook data can be transferred to another machine and accessed even if there is no network access to the VoiceGenie deployment.

1.3 Terminology and Basic Concepts

1.3.1 Analysis Target

A single VoiceGenie deployment may host several applications at once. When a call arrives at a platform the application that is executed is usually determined by the DNIS (the called party's number or URI). Alternatively, the application may be selected based on some other criteria. For example, the user may select the application from a menu. Applications often need to be considered separately during analysis; for example, a user may wish to only see recognition results for a specific application. The Call Analyst provides a facility to define distinct *Analysis Targets* that are used to group calls and statistics.

An analysis target is defined by a name and an optional list of DNIS values. Every call that a deployment handles is assigned to an Analysis Target. If the call's DNIS matches an analysis target, then the call is assigned to that target. The VoiceXML `<meta>` tag can also be used to assign a call to an analysis target. This is done by setting the *application* meta data property for a VoiceXML page to the name of the analysis target. For example, including `<meta name="application" content="My Analysis Target"/>` in a VoiceXML page assigns a call that executes that page to the Analysis Target named "My Analysis Target". A call can only be assigned to a single Analysis Target and it cannot be reassigned. Thus, if a call executes two pages that set the application meta data property to different values, the call will be assigned to the value that is specified first. Also, the analysis target specified by the call's DNIS takes precedence over any target specified in

the VoiceXML pages executed by the call.

Calls that are cannot be mapped to an Analysis Target based on DNIS or meta data are assigned to a special target called "UNKNOWN". It is good practice to avoid assigning calls to the UNKNOWN analysis target, even if only a single application is handled by the platform as this prevents new applications from being added in the future.

All statistics are calculated by the Call Analyst for individual Analysis Targets. Statistics can also be reported for all calls handled by the platform, regardless of analysis target -- this is essentially an aggregation of the statistics for all analysis targets handled by the platform. A user may also subscribe to an analysis target so that the logs for some percentage of calls assigned to that target are collected for the user. This allows a sampling of calls to be gathered for usability analysis of a specific application.

Access to an analysis target's statistics and call logs can be controlled through user permissions. Users and analysis targets are defined through the call analyst web interface. This tool is also used to grant users permission to access specific analysis targets. This prevents call analyst users from accessing each other's applications in hosted environments.

1.3.2 Call Log Subscription

A call log subscription is a request for logs for a specific analysis target to be gathered for a specific user. A user can create, edit or delete a subscription using the Call Analyst Eclipse Client. When a user creates a subscription the analysis target is specified along with a percentage of calls that should be gathered. Once the subscription is created the system will collect the specified percentage of calls that match the analysis target. For example, if a user creates a subscription with analysis target "Voicemail Application" and a percentage of 5%, then 1 in 20 calls to the Voicemail Application will be collected for the user.

1.3.3 Contexts

The Call Analyst uses the recognition contexts that are inherent in a VoiceXML application to organize and group the statistics that it calculates. There are three kinds of contexts: Recognition Contexts, Menu Contexts, and Transfer Contexts. Each context type identifies areas of an application where certain actions, such as a recognition, take place.

1.3.3.1 Recognition Contexts

A recognition context is a point in the application where voice and/or dtmf recognition can take place. For example, a VoiceXML menu is a recognition context; a specific field in a form is another recognition context. A recognition context is uniquely identified by the combination of a page URL, a dialog (menu or form) id, and an optional form item name. The form item name is only necessary when the dialog id refers to a form. For example, a VoiceXML page *http://myservice.com/page.vxml*, the id of a form on the page, say *form1*, and the name of a field in the form, for example, *cityField* together identify a recognition context.

1.3.3.2 Menu Contexts

Menu Contexts are the subset of Recognition Contexts that are VoiceXML Menus. A menu context is uniquely identified by the combination of a page URL and a menu id.

1.3.3.3 Transfer Contexts

Transfer Contexts are similar to Recognition Contexts, except that they identify points in an application where a transfer can take place. All transfer contexts occur at *transfer* form items and are uniquely identified by a page URL, a form id, and a transfer form item name.

1.3.3.4 Ensuring that Contexts can be uniquely identified

Because many applications use a host's IP in the URLs that it uses (e.g. `http://10.0.0.1/page.vxml` rather than `http://myservice.com/page.vxml`), it is often the case that a page of an application is specified by multiple URLs such as `http://10.0.0.1/page.vxml` and `http://10.0.0.2/page.vxml` etc. For this reason, the Call Analyst only looks at the request-id portion of a page when identifying a recognition context. For example, `/page.vxml` is used rather than `http://10.0.0.1/page.vxml`. Of course, this may cause problems when two separate applications use the same request-ids such as `http://app-one.com/page.vxml` and `http://app-two.com/page.vxml`; this is why properly identifying applications with analysis targets is so important. The analysis target that a page maps to serves as a way to distinguish it from an identically named page in another application.

It is also important to note that the query string portion of a URL is not used when identifying the current recognition context. For example, when executing a page with URL `http://myservice.com/servicename/page.jsp?variable=value&anothervariable=anothervalue`, only the string `/servicename/page.jsp` will be used to identify the current recognition context. This can cause problems in some dynamic VoiceXML applications where a single JSP file is used to generate pages that represent different parts of the application. In order to resolve this issue, the form and menu ids should be used to identify the part of the application that is being executed.

1.3.4 Collection Attempt

Many of the recognition performance statistics calculated by the Call Analyst are presented in terms of collection attempts. A collection attempt represents one execution of a recognition context. Some of the statistics number the collection attempt to denote the i-th consecutive attempt to gather information for a recognition context. **Note that this count is reset every time that the recognition context is successful (e.g filled) or changes (e.g a goto is executed in a noinput handler).**

1.3.5 Workbook

A Call Analyst workbook is a type of Eclipse project for managing call logs and analysis reports produced by the Call Analyst Server. Each workbook is associated with a subdirectory of the Eclipse workspace. All files that are added to the workbook are copied into its directory. One Eclipse workspace can contain multiple workbooks; this makes the workbook a convenient mechanism for organizing logs and analysis results.

2 Deployment Architecture

The Call Analyst consists of run-time components which are deployed on the VoiceGenie platform servers, as well as a desktop component which is installed on a user's workstation. The following are run-time components:

- Log agent – this component is installed on the VoiceXML platform. It gathers and summarizes information logged by the platform as calls are handled.
- Log Monitor – This component is installed on the platform's primary Management Server. It receives periodic updates from the Log Agents containing statistics. The statistics are persistently stored in the database as they are received. The log monitor also receives call logs that have been gathered by the log agent.

- Call Analyst Server – This component is a web-based Java Servlet that is deployed along-side the System Management Console on the primary Management Server. This server implements a web services interface that serves the gathered statistic and call logs to the Call Analyst Desktop client. It also provides the Call Analyst Administration web interface.

3 Installation

The Call Analyst consists of run-time components which are deployed on the VoiceGenie platform servers, as well as a desktop component which is installed on a user's workstation.

3.1 Installation of Run-Time components

Like all other VoiceGenie 7 components, the Call Analyst run-time components should be installed, deployed, and configured using VoiceGenie OA&M framework, which must be installed before any other VoiceGenie software can be deployed. For detailed instructions on installing these components, please refer to the [VoiceGenie 7 Installation Guide](#) and the VoiceGenie 7 Call Analyst Installation Guide.

3.2 Client Installation

The Call Analyst client is built on top of the open source Eclipse project (<http://www.eclipse.org>), and requires version 3.01 or above. Before un-packaging the Eclipse client, obtain the Eclipse Platform SDK from the download site:

<http://www.eclipse.org/downloads/index.php>

The following packages are required to install the Call Analyst desktop client.

- Eclipse Platform SDK v3.01 or above
- AnalystClient_v1.0.zip

Follow the step listed below to install and configure the client.

1. The Platform SDK is downloaded as a ZIP file. Unzip the platform SDK to a location of your choice (Note: this document assumes you unzipped the SDK to "C:\ Call Analyst").
2. Install the Call Analyst plug-in by unzipping AnalystClient_v1.0.zip into "C:\Call Analyst\eclipse".

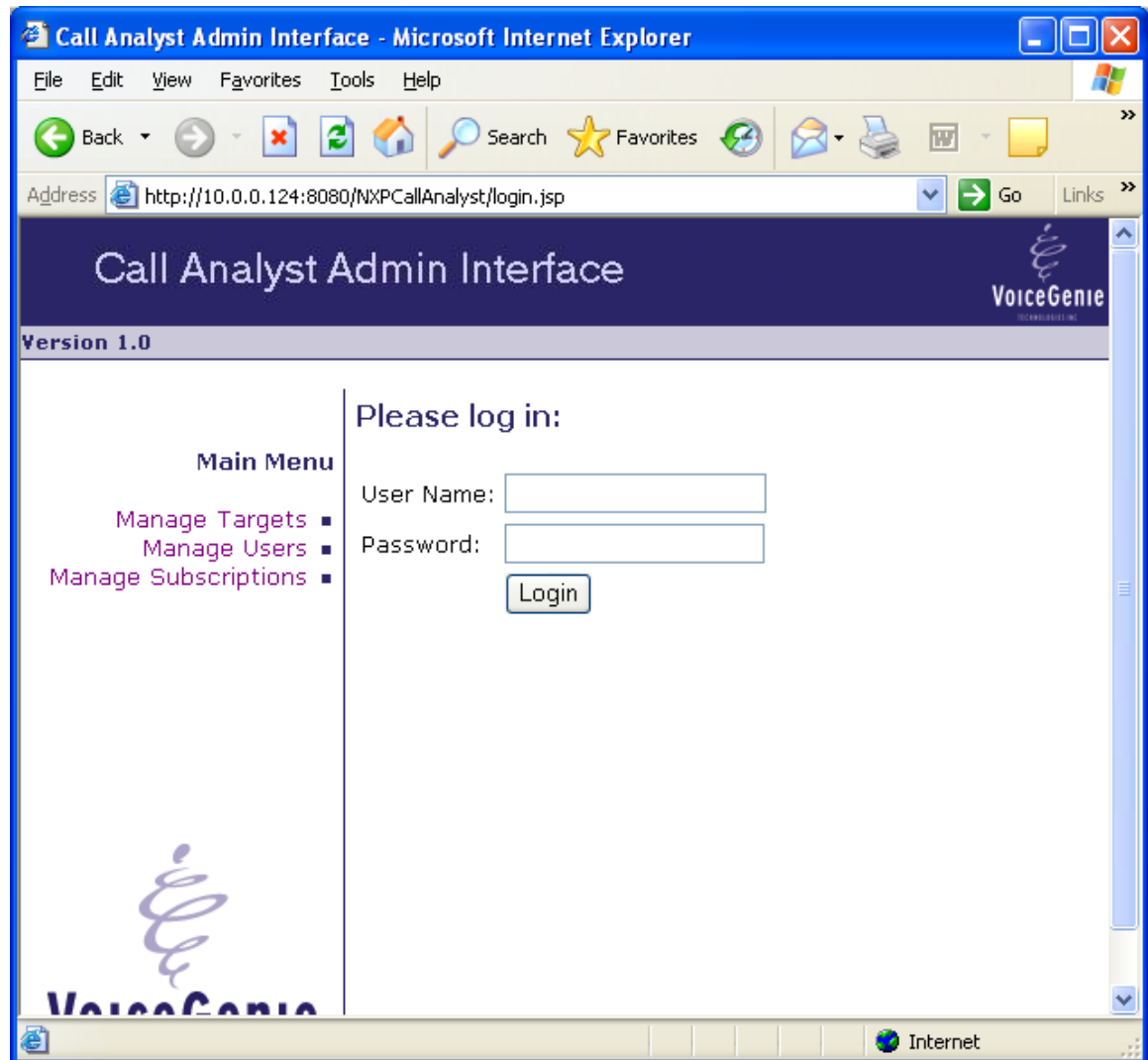
4 Configuration

4.1 Call Analyst Administration Interface

The Web Interface component of the Call Analyst provides a way for an administrator to manage all target applications, users and subscriptions using a web browser. The interface can be accessed at ***http://server:8080/NXPCallAnalyst*** where server is the name of the Call Analyst server. The main page provides a login interface. The default username/password on a fresh install is ***pw/pw***. Once the administrator has logged in, the three management interfaces for Targets, Users, and Subscriptions can be accessed from the main menu on the left-hand side of the screen.

Note: Administrators need to log in first before they can access any of the three management interfaces. Once logged in the default administrator password can be changed using the User management interface.

Log-in Page:



4.1.1 Target Manager

The Target Manager allows an administrator to view, modify, add, and delete a *target*. A target is a name that applications can be associated with. All statistics and call logs are organized by target.

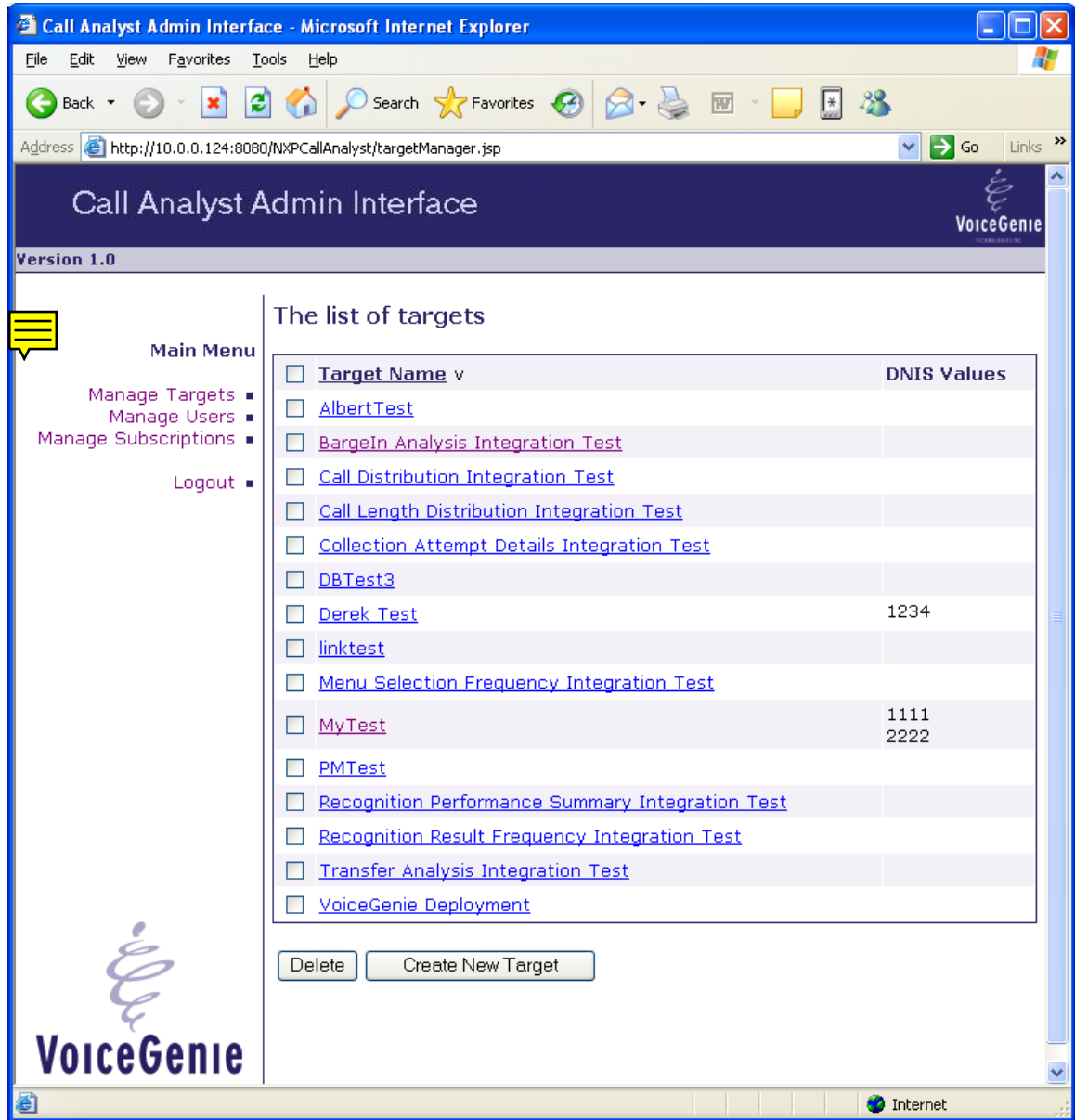
The VoiceXML meta tag can be used to assign an application to a target. To do this simply include a meta tag with a name attribute of "application" and a context attribute equal to the name of the Call Analyst target in the first page of the application. Alternatively, one or more DNIS values can be associated with a target.

By giving each application a unique target name, a user can subscribe to call logs for a specific application. This also permits the system to generate statistics specific to an application.

4.1.1.1 Viewing Targets

The Target Manager page displays a list of all the targets in the database in either ascending or descending alphabetical order of target name. A target can have the option of having one or more DNIS values associated with it.

The list of targets:



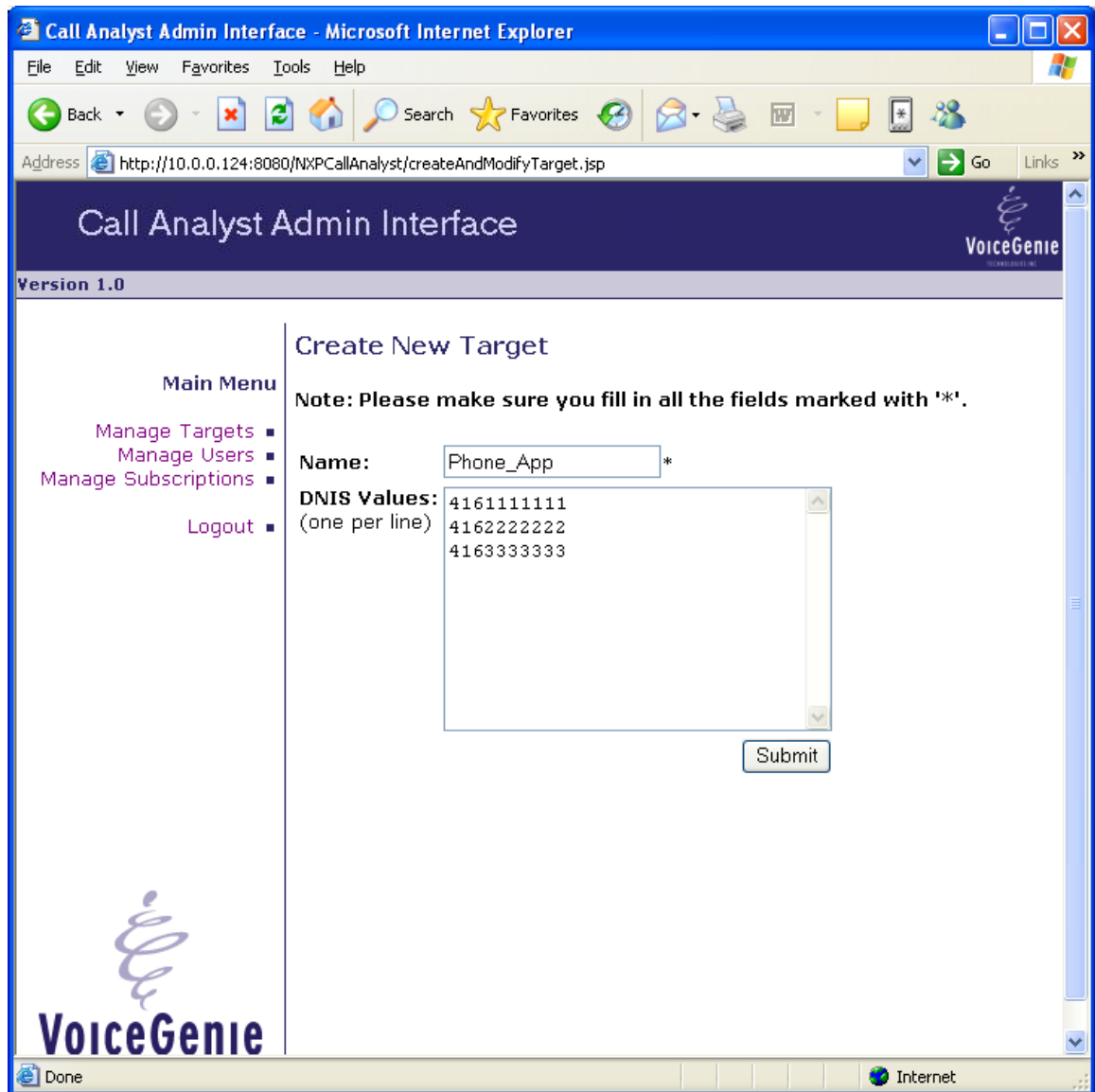
4.1.1.2 *Deleting Targets*

The administrator can delete one or more targets by clicking the check boxes for individual targets (the check box in the title line can be used to select/deselect all) and clicking on the "Delete" button. Any deleted target will also be immediately reflected on the User Manager page (the user will lose the permission of the target(s) that has been deleted), and the Subscription Manager page (the subscription associated with the target that has been deleted will be erased).

4.1.1.3 *Adding Targets*

To add a new target, click on the "Create New Target" button at the bottom of the page. This will lead to a page where the new target's information can be entered.

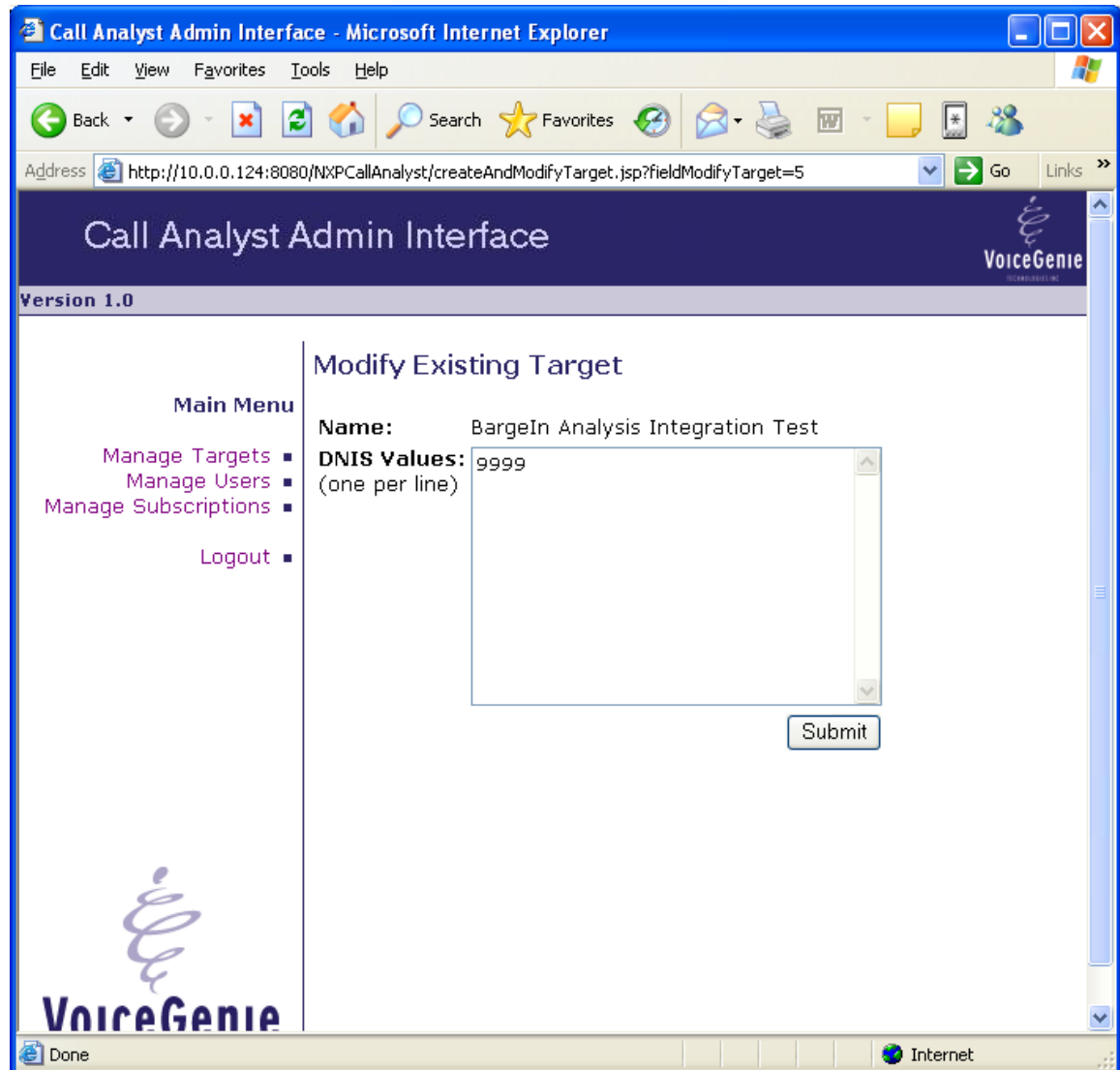
Below is the page where a new target's information can be entered. Note that a target has the option of having DNIS values associated with it. The DNIS values can be entered in the DNIS values text field. Each line of the entered DNIS counts as one DNIS value. There's no limit to the number of DNIS values associated with a target. Here is an example of a new target called "Phone_App" with multiple DNIS values associated with it:



4.1.1.4 Modifying Targets

To edit an existing target, go back to the Target Manager page and click on the name of the target to be modified. This will lead to a page where the target's information can be changed. This page will look almost the same as the page for creating a new target and works identically, except that once a target has been created, its name can no longer be modified. Only the DNIS values associated with the targets can be deleted, modified, or added.

This is the page where an existing target's DNIS values can be modified:



4.1.2 User Manager

The User Manager allows an administrator to view, modify, add, and delete all users (both of the type administrator and user). Each user should be given a unique user name and e-mail address upon creation. When a user is given permissions to access one or more targets, he/she can subscribe to call logs for those targets and view statistics collected for those targets.

Administrators have the ability to use this web interface, while normal users do not.

4.1.2.1 Viewing Users

The User Manager page displays a list of all the users, including the administrator(s), in ascending or descending alphabetical order of one of user name, user type and user email address.

The list of users:

Call Analyst Admin Interface - Microsoft Internet Explorer

Address: http://10.0.0.124:8080/NXPCallAnalyst/userManager.jsp

Call Analyst Admin Interface
Version 1.0

Main Menu

- Manage Targets
- Manage Users
- Manage Subscriptions
- Logout

The list of users

<input type="checkbox"/>	User Name	User Type	User Email Address	Permitted Targets
<input type="checkbox"/>	awahbe	Administrator	awahbe@voicegenie.com	ALL TARGETS
<input type="checkbox"/>	AWTest	Administrator	fool@voicegenie.com	ALL TARGETS
<input type="checkbox"/>	bchanAdmin	Administrator	bchan@voicegenie.com2	ALL TARGETS
<input type="checkbox"/>	bchanUser	User	bchan@voicegenie.com	UNKNOWN PMTTest
<input type="checkbox"/>	drbarnes	Administrator	dbarnes@voicegenie.com	ALL TARGETS
<input type="checkbox"/>	pw	Administrator	pw@voicegenie.com	UNKNOWN VoiceGenie Deployment PMTTest Transfer Analysis Integration Test BargeIn Analysis Integration Test Call Distribution Integration Test Recognition Performance Summary Integration Test Recognition Result Frequency Integration Test Call Length Distribution Integration Test Collection Attempt Details Integration Test Menu Selection Frequency Integration Test DBTest3 linktest MyTest AlbertTest
<input type="checkbox"/>	test	Administrator	test@voicegenie.com	

Buttons: Delete, Create New User

4.1.2.2 Deleting Users

To delete users, an administrator is given the option to delete a single or multiple users simply by selecting the check boxes for individual users (the checkbox in the title line can be used to select/de-select all). Afterwards, click the "Delete" button to complete the operation. After deleting the user, the subscription assigned to the user will be deleted automatically. This change will be immediately reflected on the Subscription Manager page.

4.1.2.3 Adding Users

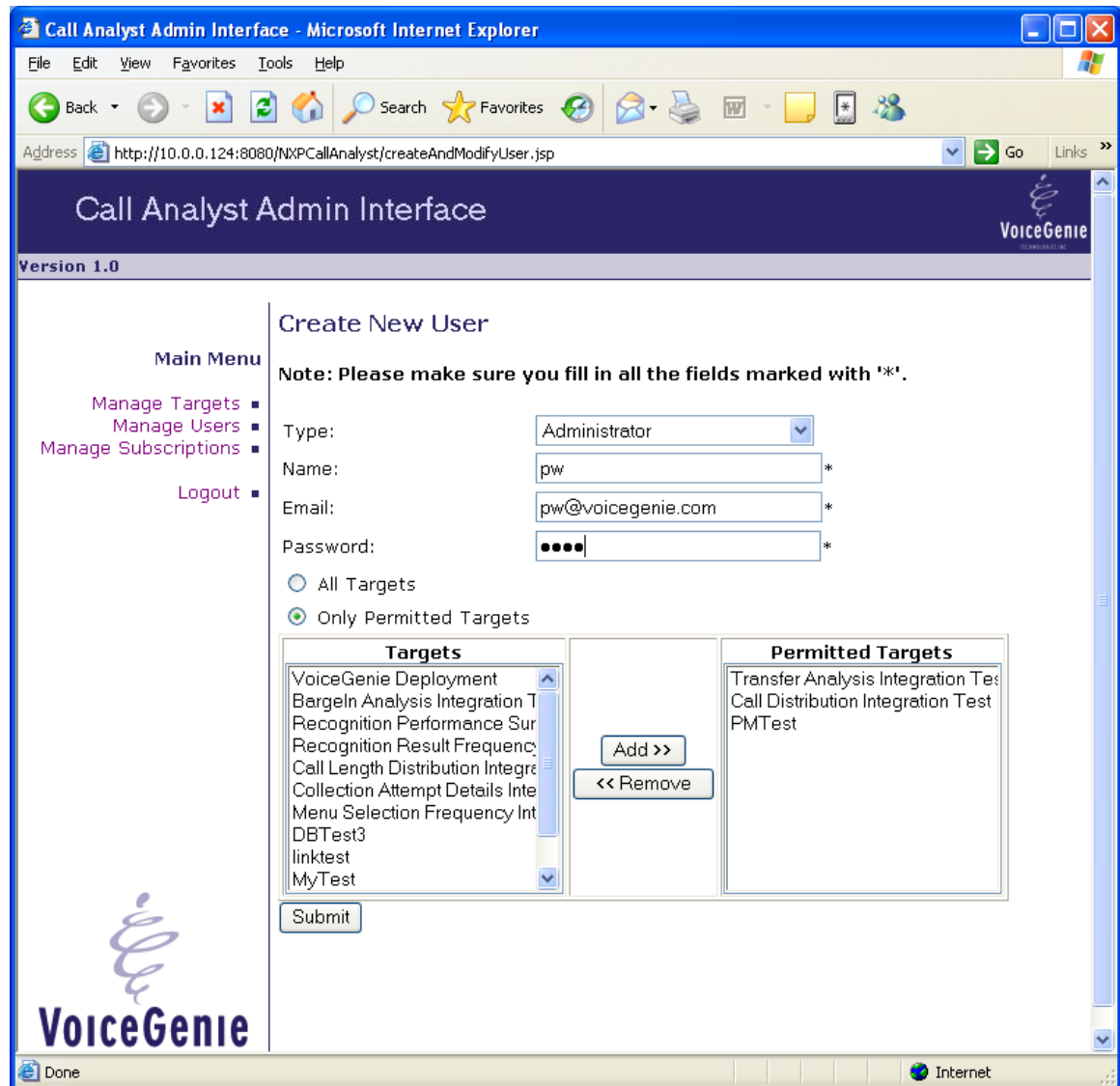
To add a new user, scroll down to the bottom of the page and click on the "Create New User" button. This will lead to the page for entering new user's information.

The web page where the new user's information is entered:

The screenshot shows a Microsoft Internet Explorer browser window titled "Call Analyst Admin Interface - Microsoft Internet Explorer". The address bar shows the URL "http://10.0.0.124:8080/NXPCallAnalyst/createAndModifyUser.jsp". The page content includes a "Main Menu" on the left with links for "Manage Targets", "Manage Users", "Manage Subscriptions", and "Logout". The main content area is titled "Create New User" and contains a "Note: Please make sure you fill in all the fields marked with '*'." Below the note are form fields for "Type" (a dropdown menu set to "Administrator"), "Name", "Email", and "Password", each followed by an asterisk. There are also radio buttons for "All Targets" (selected) and "Only Permitted Targets". A "Submit" button is located below the form fields. The VoiceGenie logo is visible in the bottom left corner of the page content.

A user can be given the permission to access all the available targets by clicking the "All Targets" radio button. On the other hand, if a user is only allowed to access certain targets, click on the "Only Permitted Targets" radio button. This will show the table where target permissions can be selected. The left column lists all the targets that are currently unavailable to the user. The right column lists all of the user's permitted targets. To change permissions, click on the desired target and move them back and forth between the columns using the "Add >>" and "<< Remove" button.

An example of the page with the "Only Permitted Targets" option selected; the target permission selection table is displayed:



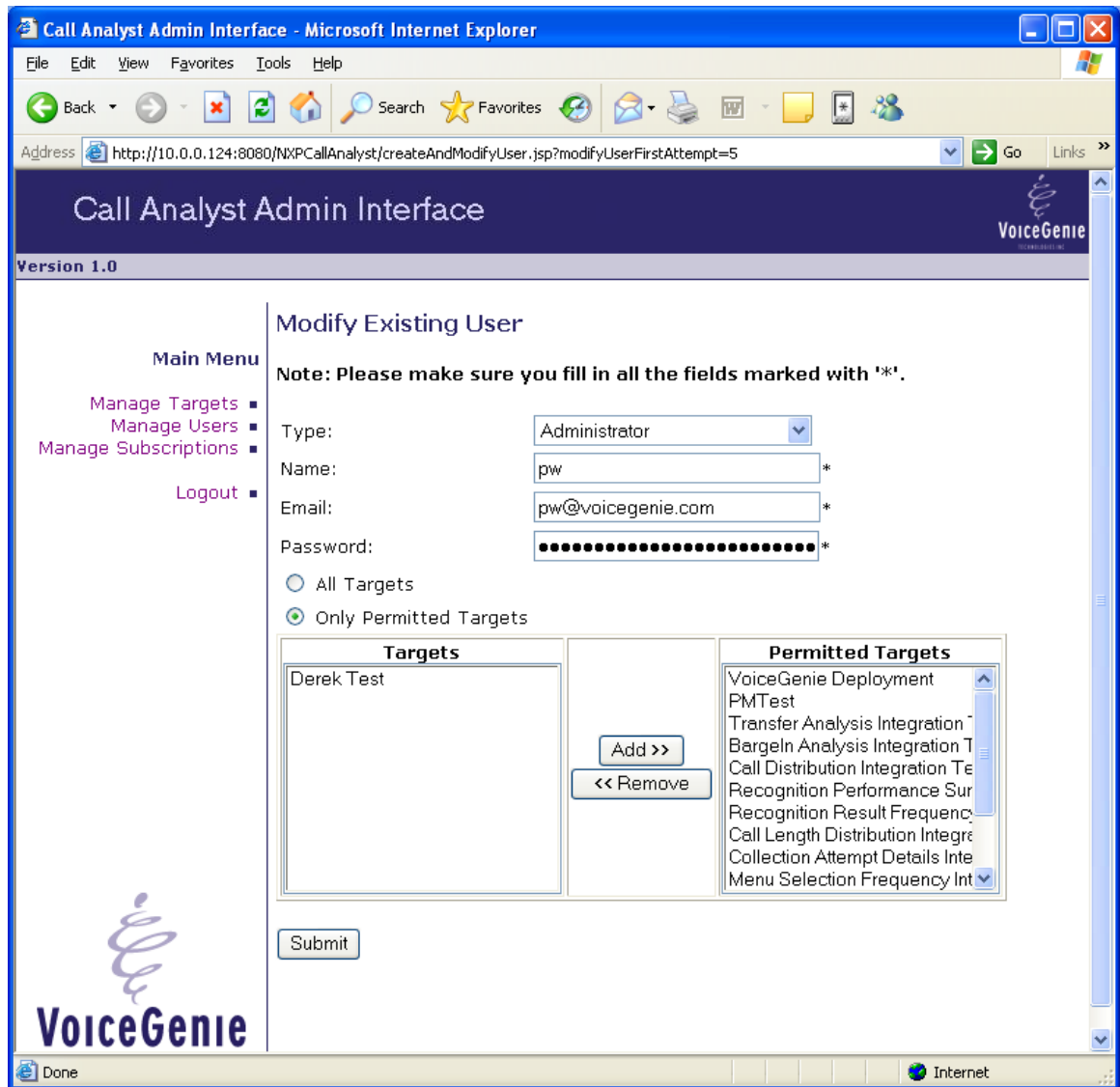
Then by clicking on the "Submit" button, the new user will be added and the administrator will be automatically directed back to the User Manager web page containing the list of all users.

4.1.2.4 Modifying Users

To edit an existing user in the User Manager page, click on the name of the user whose information is to be modified. This will bring the administrator to another page where a user's information can be changed. From there, the procedure is the same as adding a new user, which is explained above.

It should be noted that after target permissions have been removed, subscriptions for those targets will automatically be cancelled and immediately reflected in the Subscription Manager page.

To commit the modifications to an existing user's information, click the "Submit" button when the changes are complete:



4.1.3 Subscription Manager

The Subscription Manager allows an administrator to view and delete subscriptions. A *subscription* allows a user to capture a specified percentage of call logs for an application target and download them upon request. The user must be granted permissions for a target in order to subscribe to its call logs. Subscriptions are created through the Call Analyst client.

4.1.3.1 Viewing Subscriptions

The Subscription Manager page displays a list of all the subscriptions in ascending or descending alphabetical order of one of user name, user email address and target name.

The list of subscriptions:

The screenshot shows the 'Call Analyst Admin Interface' in a Microsoft Internet Explorer browser window. The address bar shows the URL: http://10.0.0.124:8080/NXP/CallAnalyst/adminSubscriptionManager.jsp. The page title is 'Call Analyst Admin Interface' and it is version 1.0. On the left is a 'Main Menu' with options: Manage Targets, Manage Users, Manage Subscriptions, and Logout. The main content area is titled 'The list of subscriptions' and contains a table with columns: User Name, User Email Address, Target Name, and Sample Size. Below the table is a 'Delete' button. The VoiceGenie logo is visible in the bottom left corner of the interface.

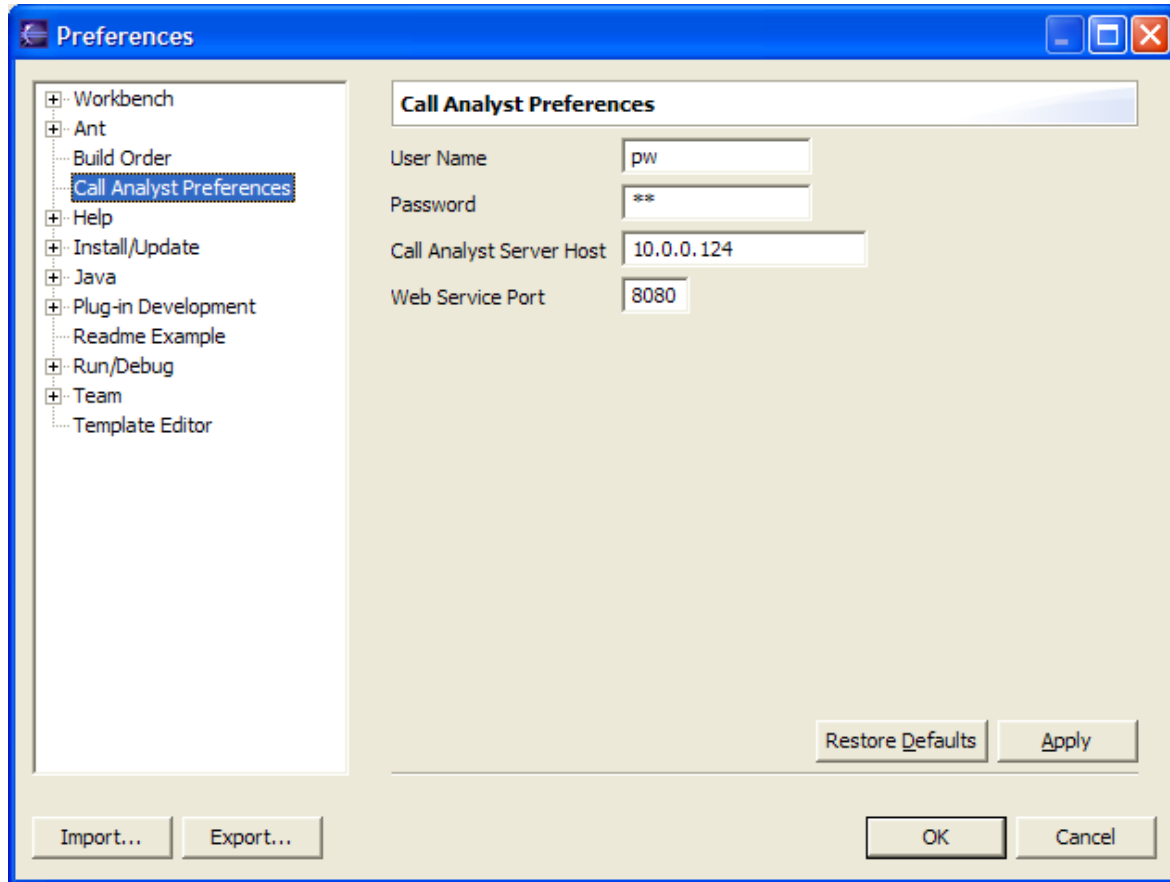
<input type="checkbox"/>	User Name	User Email Address	Target Name	Sample Size
<input type="checkbox"/>	drbarnes	dbarnes@voicegenie.com	Derek Test	100 %
<input type="checkbox"/>	drbarnes	dbarnes@voicegenie.com	PMTest	10 %
<input type="checkbox"/>	pw	pw@voicegenie.com	AlbertTest	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	BargeIn Analysis Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Call Distribution Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Call Length Distribution Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Collection Attempt Details Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Menu Selection Frequency Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	PMTest	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Recognition Performance Summary Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Recognition Result Frequency Integration Test	100 %
<input type="checkbox"/>	pw	pw@voicegenie.com	Transfer Analysis Integration Test	100 %

4.1.3.2 Deleting Subscriptions

To delete subscriptions, an administrator is given the option to delete a single or multiple subscriptions simply by selecting the check boxes for individual subscriptions (the checkbox in the title line can be used to select/de-select all). Afterwards, click the "Delete" button and the selected subscriptions will be deleted.

4.2 Configuring the Eclipse Client

- i) Launch C:\Call Analyst\eclipse\eclipse.exe
- ii) The Eclipse workbench will appear. Choose Window -> Preferences from the main menu.



- iii) Select "Call Analyst Preferences" in the list on the left side of the preferences page.
 - iv) Enter your Call Analyst username and password (pw/pw is the default user that comes with the installation). Administrators can configure additional users by pointing their web browser to the following URL:
<http://ServerAddr/NXPCallAnalyst/userManager.jsp>
 (Where *ServerAddr* is replaced with the host name or IP address of the platform on which the Call Analyst server is installed -- usually the CMP server.)
 - v) Specify the IP address or host name of the platform on which the Call Analyst server is installed,
 - vi) Specify the port on which the Call Analyst web services are listening. The default installation uses port 8080 for all web services.
- Press Apply and restart the Eclipse Platform.

5 Operations, Administration, and Maintenance

5.1 Starting and Stopping

5.1.1 Log Agent and Log Monitor

Like all other VoiceGenie 7 components, the System Management Console contains a page to start or stop the Log Agent and Log Monitor. Click on the Operations tab and click on "Start/Stop Software" on the left hand column. Click on the '+' icon next to the server(s) that you want to start/stop to view the components running on that server. You can click on the checkbox next to the components you want to start/stop or click the checkbox next to the server to select all components running on that server. Next, click the Start/Stop button to invoke the operation.

Note that the Log Agent and Log Monitor do not support the Suspend and Resume operations.

5.1.2 Call Analyst Server

On Linux, you must be the root user to start, stop or restart the Call Analyst Server. To become the root user log in to the system and type in 'su', then enter the root password when prompted.

Then, to start the Call Analyst Server, issue the following command:
`/etc/init.d/vgtomcat start`

To stop the Call Analyst Server, issue the following command:
`/etc/init.d/vgtomcat stop`

To restart the Call Analyst Server, issue the following command:
`/etc/init.d/vgtomcat restart`

On Windows, the Call Analyst Server can be started, stopped or restarted from the Services window, which can be accessed from the Administrative Tools section under the Control Panel. To start the Call Analyst Server, click on the Apache Tomcat Service entry and click the Start Service button. To stop the Call Analyst Server, click on the Apache Tomcat Service entry and click the Stop Service button. To restart the Call Analyst Server, click on the Apache Tomcat Service entry and click the Restart Service button.

Note that the System Management Console is also started/stopped/restarted as a side effect of starting/stopping/restarting the Call Analyst Server.

5.2 Logging

5.2.1 Examining the Log Agent and Log Monitor Logs

The Log Agent and Log Monitor generate logging information using the VoiceGenie OA&M Framework. All logs of level Critical (LOG_0), Error (LOG_1), and Warning (LOG_2) are sent upstream and to the log file. The default log file for the Log Agent is in `/usr/local/vg-tools/logagent/log/CMP.log.logagent`. The default log file for the Log Monitor is in `/usr/local/vg-tools/logmon/log/CMP.log.logmon`.

Log levels for Notice (LOG_3) and Information (LOG_4) are stored in the log file.

Trace logs (LOG_5) are disabled by default. Enabling it will log detailed debug information. Trace is not recommended for a deployment environment as trace will flood the trace files quickly and decreases system performance.

To enable trace, go to the Log Agent or Log Monitor Configuration in the System Management Console and set `cmp.trace_flag` to true. Click Update to submit the configuration change.

5.2.2 Examining Call Analyst Server Logs

By default, there are three log files generated by the Call Analyst Server:

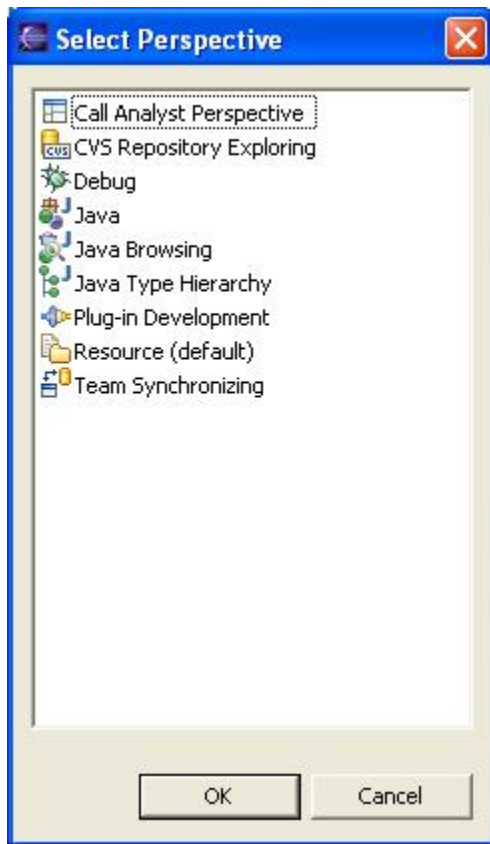
1. **webInterface.log**: information logged from the Call Analyst Admin Interface when Analysis Targets, subscriptions, and/or users are modified.
2. **webServices.log**: debugging information logged from the Web Services.
3. **webServices.err**: reports any errors encountered during the processing of a Web Service request.

By default, all of the log files will be located at `$CA_INSTALL_ROOT/server/logs`. However, the location can be changed in the Log4J configuration file found at `$CA_INSTALL_ROOT/server/WEB-INF/classes/NXPAnalyst_log4jconf.xml`. Please see the System Reference Guide for details.

6 Using the Call Analyst Client

6.1 Launching the Call Analyst Perspective

- i) Open Eclipse (e.g. `C:\Call Analyst\eclipse\eclipse.exe`).
- ii) Open the Call Analyst Perspective by selecting `Window -> Open Perspective -> Other ...` from the main menu. Select "Call Analyst Perspective" from the dialog that appears and click 'OK'.



6.2 Getting Started

1. Once you have installed the Call Analyst (see above), you should first familiarize yourself with the basic concepts upon which the tool is based by reading section 1.3 of this document.
2. Make sure you have a user name assigned (an administrator must do this for you via that Call Analyst Admin Interface – section 4.1.2.3) and that you have properly configured the Call Analyst Client (see section 3.2).
3. Make sure your applications have been assigned to analysis targets. This must be done by an administrator through the Call Analyst Admin Interface (see section 4.1.1.3). Your applications must either contain the appropriate application meta tag or be assigned to an appropriate DNIS value for the mapping to take effect.
4. Make sure that the contexts in your application can be uniquely identified. This should require no action or modifications for most applications.
5. Run Call Analyst and launch the Call Analyst Perspective (see section 6).
6. Read the detailed instructions on using the Call Analyst client to view statistics and call logs. These instructions can be found by accessing the Call Analyst Help files using the Help Reader that is launched from the *Help --> Contents* menu item.
7. Create a new workbook using the *New Workbook Wizard*. The wizard can be launched from *File --> New --> Project...*

8. Create any required subscriptions for your analysis targets using the *Call Log Subscription View*. 100% subscriptions are generally not desirable for live deployments under load as they will unnecessarily stress the system and produce far more data than could ever be analyzed.
9. After, the application has been run for a period of time, generate analysis reports using the *Report Generation View* to get insight into how your application is executing.
10. Update your subscriptions using the *Call Log Subscription View* to get call logs and view them in the *Call Log Editor* to investigate usability issues that appear in the analyses.