Virginia Tech Institute for Policy & Governance

VLDS Data Adapter

User Guide Version 2.1

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Contents

1 Change History

Version #	Date	Entered by	Comments
1.0	7/19/2012	Aaron Schroeder	Initial Documentation
2.0	9/12/2012	Aaron Schroeder	Document overhaul with detailed instructions for the UI.
2.1	9/17/2012	Austin Mills	Updated overview diagram for simplicity. Added a document overview section. Added new screenshots.

2   Document Overview

This document is a user manual for the Data Adapter interface. The majority of the functionality of the Data Adapter is done behind the scenes and this document only addresses the user interface. For documentation on how to install the Data Adapter, please see the Build Instructions document. The Data Adapter Admin (only user) steps are addressed in this document.

3   Terms

Exposure Database – Agency data used in the VLDS that resides behind the agency firewall and used for matching with other agency data

Shaker – Component in the VLDS where the identity resolution and query execution takes place. All data requests from a researcher are passed through the Shaker.

Lexicon – VLDS component that stores metadata and valid values for exposed agency data
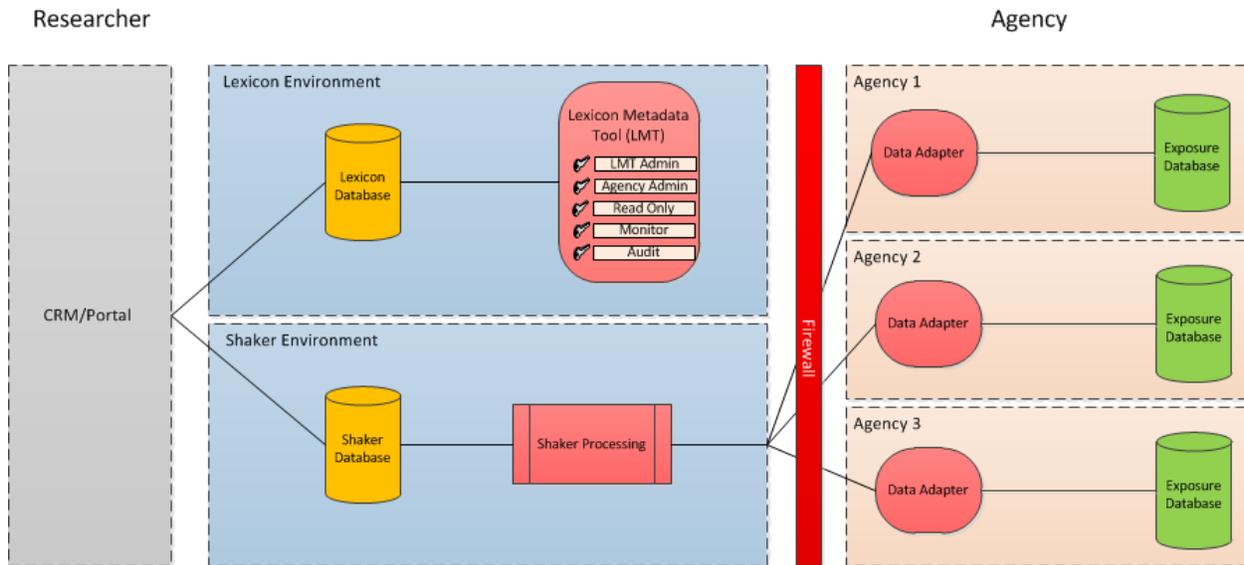
Lexicon Metadata Tool (LMT) – Tool used to manage the Lexicon and make edits to metadata and valid values

4   Data Adapter Overview

The VLDS Data Adapter is a tool built on top of each agency's exposure database behind the secured agency firewall. It is a pivotal tool used to interpret research queries and deliver data from the exposure database to the Shaker and back to a researcher. In addition, The Data Adapter contains a user interface that is used to help with installation and provides statistics with log data for the tool. The diagram below (Figure 1) displays the simple interaction with other components in the VLDS.

Figure 1

Data Adapter Overview

5 Logging In the First Time

As the agency admin, you will be given access to your agency's Data Adapter(s). To log in to the Data Adapter UI, open the URL in a web browser after installation. If the installation was done correctly, this will bring you to the login screen (Figure 2). From here enter the one password given to only database admins. Once logged in, you should be taken to the Home page.

Note: The login process may change to use COV Active Directory accounts for logging in.

Figure 2

6 Data Adapter Setup

This section will describe how to setup the Data Adapter connection to the appropriate Exposure Database after installation. To navigate to the page select the Setup button in the menu (Figure 3) and click the "Exposure Database Connection" drop down (Figure 4).
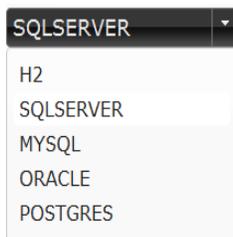
Figure 4

6.1 Selecting the Database Type

The database type (Oracle, SQLSERVER, etc.) is the first option to select when setting up your exposure database connection. This must match the database type used in your agency's exposure database. Click on the drop down and select the appropriate database type (Figure 5) to continue with the Data Adapter setup.

Figure 5

6.2 Additional Exposure Database Information

After entering the database type, you must enter the remaining information for the agency's exposure database. The database host, port, name, username, password, and schema should be entered before finally clicking the Setup button. Figure 6 shows all the fields for setting up the connection.

Figure 6

EXPOSURE DATABASE CONNECTION

Exposure database type:	SQLSERVER
Exposure database host:	localhost
Exposure database port:	1433
Exposure database name:	SLDS_TEST
Exposure database username:	shaker
Exposure database password:	
Exposure database schema:	dbo
Exposure-DB Connection:	Setup

6.3 Connecting to the Shaker

After the Exposure Database(s) have been successfully connected, the Data Adapter must be given the Shaker URL for establishing the connection. Click on the "Shaker" drop down to setup the connection (Figure 7).

Figure 7

SHAKER

The URL should already be auto filled with the correct Shaker URL. The option does exist for changing the URL if needed (Figure 8).
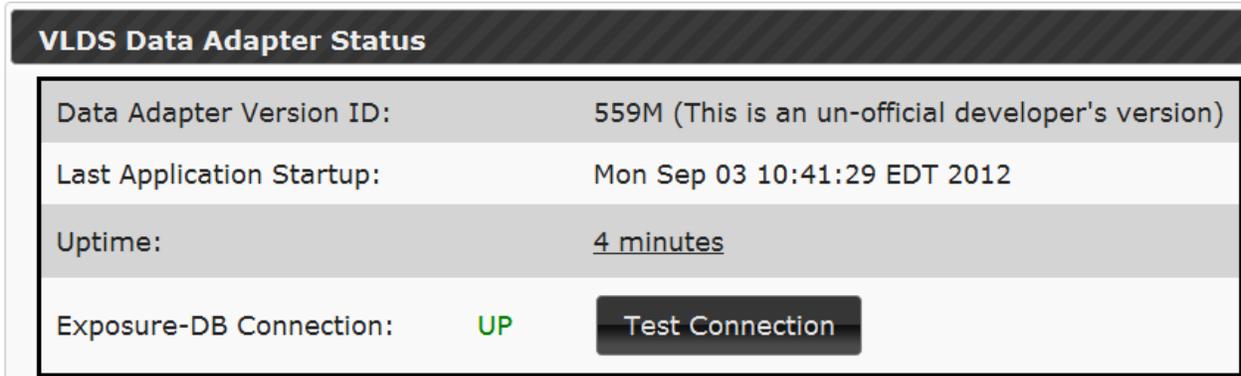
Figure 8

Shaker Service URL:	http://localhost:33996/
	Change

7 Data Adapter Home Page

The home page is the first page that appears after logging in to the Data Adapter. This page contains the version ID, last startup time, uptime duration, and the ability to test the Exposure Database connection.

Figure 9

7.1 Testing Connections

Testing the agency's exposure database connection from the Data Adapter is simple. Click the "Test Connection" button to allow the database to be pinged and a response to be sent back. The Data Adapter will display the message of whether the connection is "UP" or "DOWN".

Note: The Data Adapter must be setup prior to testing the uptime and database connection.

8 Data Adapter Statistics

The Data Adapter contains a page dedicated to displaying statistics for the web services that are hosted and consumed by the Data Adapter. This page shows the average durations, directions, most recent messages.

Figure 10

8.1 Viewing Statistics

To view the Data Adapter statistics, click on the "Statistics" tab in the menu (Figure 10). The page should first display the most recent message statistics and averages (Figure 11). To refresh the most recent message statistics or averages, click on the "refresh" button.

Figure 11

Web Service Statistics			
Most Recent Message Statistics			
Web Service Message	Direction	Most Recent	Duration(sec.)
DA_Ping	OUTBOUND	Wed Aug 29 02:47:17 EDT 2012	0.4
DA_AgencyEntities	OUTBOUND	Mon Aug 27 18:08:24 EDT 2012	1.2
DA_Metadata	INBOUND	Sun Sep 02 20:10:56 EDT 2012	1.9
DA_ValidValues	OUTBOUND	Thu Aug 30 16:24:28 EDT 2012	2.2
LX_Ping	OUTBOUND	Mon Sep 03 00:41:30 EDT 2012	0.2
LX_MetadataUpdateNotify	OUTBOUND	Wed Aug 29 20:08:11 EDT 2012	0.3
LX_ValidValues	OUTBOUND	Fri Aug 31 18:05:13 EDT 2012	1.6
LX_ValidValuesUpdateNotify	INBOUND	Fri Aug 24 23:11:42 EDT 2012	2.4
SH_Ping	OUTBOUND	Sun Sep 02 18:26:31 EDT 2012	0.7

refresh

Web Service Message	Last 24 hours	Last 7 Days	Last 30 Days	Last 90 Days
Average Message Statistics				
DA_Ping	-	1 / 0.4(sec.)	5 / 0.8(sec.)	16 / 0.9(sec.)
DA_AgencyEntities	-	1 / 1.2(sec.)	5 / 1.4(sec.)	22 / 1.4(sec.)
DA_Metadata	1 / 1.9(sec.)	1 / 1.9(sec.)	5 / 1.7(sec.)	19 / 1.3(sec.)
DA_ValidValues	-	1 / 2.2(sec.)	9 / 1.2(sec.)	25 / 1.1(sec.)
LX_Ping	2 / 1.1(sec.)	5 / 1.2(sec.)	10 / 1.2(sec.)	26 / 1.1(sec.)
LX_MetadataUpdateNotify	-	1 / 0.3(sec.)	8 / 1.1(sec.)	23 / 1.3(sec.)
LX_ValidValues	-	2 / 1.3(sec.)	7 / 1.3(sec.)	28 / 1.3(sec.)
LX_ValidValuesUpdateNotify	-	-	5 / 1.3(sec.)	15 / 1.4(sec.)
SH_Ping	1 / 0.7(sec.)	3 / 1.6(sec.)	10 / 1.7(sec.)	26 / 1.5(sec.)

refresh

Figure 12

9 Viewing Logs

The Data Adapter UI allows the user to see all the web service interactions hosted and consumed by the agency's Data Adapter. The Logs page lists out these interactions and the timestamp. To view the logs, navigate to the "Logs" page in the menu (Figure 12).

9.1 Filtering Log Records

Each column in the list of logs can be filtered to help users navigate through the records. To filter between certain dates, select a Start and End date and click "Apply Filter." Logs can also be filtered by threads, categories, levels, or any combination of the criteria.

MENU

Setup

Home

Statistics

Logs

logout

Figure 13

Filter Criteria

Start Date: _____   End Date: _____

Thread: [ALL ▼]   Category: [ALL ▼]   Level: [ALL ▼]

Message Contains: _____

Apply Filter   Clear Filter

The log list should automatically update after applying the filter (Figure 14). To page through results, click on the page numbers or ">>" to go page by page. To navigate to the last page, click ">|."

Figure 14

Log List

Date	Level	Thread	Category
Tue Jun 12 11:00:43 EDT 2012	INFO	TEST_qtp55555550	Entities_DA
Tue Jun 19 09:20:16 EDT 2012	INFO	TEST_qtp55555552	Entities_DA
Fri Aug 03 09:14:44 EDT 2012	TRACE	TEST_qtp55555550	Entities_DA
Sun Jul 01 04:46:17 EDT 2012	TRACE	TEST_qtp55555552	Entities_SH
Mon Jul 23 01:15:07 EDT 2012	FULL_TRACE	TEST_qtp55555550	Entities_SH
Tue Jul 10 11:42:04 EDT 2012	TRACE	TEST_qtp55555552	Entities_SH
Wed Jul 11 21:13:45 EDT 2012	INFO	TEST_qtp55555551	Entities_LX
Mon Jun 25 21:23:20 EDT 2012	INFO	TEST_qtp55555551	Entities_DA
Fri Aug 10 16:12:31 EDT 2012	FULL_TRACE	TEST_qtp55555552	Entities_DA
Fri Jun 08 13:00:48 EDT 2012	INFO	TEST_qtp55555551	Entities_LX
Thu Aug 23 12:12:43 EDT 2012	TRACE	TEST_qtp55555550	Entities_DA
Thu Aug 30 20:02:45 EDT 2012	INFO	TEST_qtp55555552	Entities_SH
Mon Jul 16 06:37:06 EDT 2012	INFO	TEST_qtp55555551	Entities_LX
Fri Jun 15 10:53:09 EDT 2012	TRACE	TEST_qtp55555552	Entities_DA

Pagination: |< << 1 2 3 4 5 6 7 8 9 10 >> >|