

***DaVinci Minds Software***

*Smart Software for Smart People! TM*

**DCA – Data Collection App**

**Users Guide**



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**1. DCA Overview**

This document provides user operation information for the DCA (Data Collection App).

The DCA, short for Data Collection App, is an automated system for extracting data from the Opera Oracle database for use in the DVMS reporting system. It consists of two pieces:

1. The DCA GUI, and
2. The DCA Windows Service

A screenshot of a social media post

Description automatically generated

Each of these pieces work together to make the data collection work which in summary is:

1. Wait for Night Audit to complete then…
2. Extract the necessary data from the Opera database using SQL contained in a SQL file…
3. Produce a set of data files which are then…
4. Zipped up into a single password protected data file which is then…
5. Transmitted via Secure FTP (SFTP) to the DVMS SFTP server where…
6. The data is then loaded and processed into the DVMS data warehouse where it is then…
7. Available to be viewed as reports using the DVMS web browser GUI application.

The DCA replaces the previous data collection system which used what were called “Push Mode Scripts”. These are a combination of batch files and SQL files which when used with the Oracle SQLPlus command line utility extracted the data starting at step #2 above. These scripts could not detect when Night Audit was complete so had to be triggered by a Task Scheduler scheduled task sometime after Night Audit was expected to complete.

This, of course, was subject to problems. If Night Audit was delayed and did not complete until after the timed event started the Push Mode Scripts then a set of empty files would be sent. This would require manual intervention to run a command line on the server to regenerate and resend the data file. This would often also significantly delay the availability of the data in the DVMS business intelligence system.

The DCA has been created as a new generation data collection system which runs as a Windows Service continuously and automatically detects the completion of Night Audit and then automatically extracts the data, packages it, and sends it to the DVMS servers. The DCA GUI program is used to configure and control the DCA Windows Service as well as function as an easy to use manual system as well. The DCA also has the ability to extract additional data by adding additional SQL scripts to the SQL file which will allow for expanded analysis and reporting in the future.

**2. The DCA GUI Startup Initialization and Checks**

To manually run the DCA simply run the DCA GUI from the Program Start entry under “DVMS Data Collection App”.

The DCA GUI will display and perform its startup initialization and database connectivity and Night Audit checks.

When you first start the DCA GUI you’ll see the following in the Status group box highlighted in yellow/gold:

* Database Connection: Checking database connectivity…
* Last Night Audit: Getting the last night audit date…

A screenshot of a computer

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The DCA GUI in Startup Initialization Mode

When the DCA settings are correct this will rapidly transition to “Green Mode” status:

A screenshot of a social media post

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The DCA GUI in “Green Mode” with a Good Status

The Status will be displayed as “Ok” in green and the Database Connection will also display as “Ok” in green. The Last Night Audit date will also be displayed and show in green.

This indicates that the DCA has proper database connectivity to the Opera database server.

If the initial configuration of the DCA does not allow connecting properly to the Opera database server in your installation you will encounter a delay of up to one minute and then you’ll see the Status fields display in red.

A screenshot of a social media post

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The DCA GUI in “Red Mode” with a Wrong Configuration Status

This simply indicates that the DCA is not yet configured properly and that the current default settings are not correct for this installation.

See the DVMS DCA Installation and Configuration Guide for information on configuring the DCA.

**3. Using the DCA GUI**

Once the DCA GUI has been started and completes its startup initialization and checks (explained in the previous section) you can use the DCA GUI to get and send data manually to DVMS.

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Description automatically generated

Using the DCA GUI to Get and Send Data!

If the date of the last Night Audit was yesterday, simply click the “Get and Send Data!” button and yesterday’s data will be extracted, packaged, and sent to DVMS.

If you want to select and/or test another date simply:

1. Click the “Get This Day’s Day Data Only:” checkbox,
2. Select the Start Date in the drop down calendar field, and
3. Click the “Get and Send Data!” button.

After a few moments the “Extract and Send Data Status:” field will display “Data Extracted and CSV Files Generated Successfully!” which indicates that the Get and Send operation was completed successfully.

You can also extract and send data for a range of dates. Simply click the “Get Data for the Date Range:” checkbox and then select the Start Date and the End Date. Then click the “Get and Send Data!” button.

Note that the End Date field is inclusive not exclusive with the end date. This means that the date selected in the End Date will be included in the data extracted and sent to DVMS. So if you want to select a date range of November 1, 2015 to November 10, 2015 simply set the Start Date to November 1, 2015 and the End Date to November 10, 2015. The full date range will be extracted, packaged, and sent to DVMS.

That’s how simple it is to get and send data manually with the DVMS DCA GUI.

Note:

The DVMS DCA GUI has a variety of configuration settings which are set at installation time and do not need to be changed. They are disabled and grayed out in the DCA GUI.

To learn more about configuring the DCA please see the DVMS DCA Installation and Configuration Guide.

**4. Using the DCA Service**

The DCA Windows Service, DCA Service for short, is a program that runs as a Windows system service on the server and automatically detects Night Audit completion every night and extracts the data from the Opera database, packages it, and SFTPs it to the DVMS servers for automatic processing and display in the DVMS Web GUI.

A Windows service program, unlike a regular Windows program, does not have a GUI interface. Instead it has no user interface. You just install it and it runs without user intervention.

The DCA GUI can be used in Full or Admin mode to check the status of the DCA Service by accessing the Windows Service tab and clicking the “Get Status” button.

It can also install, un-install, and start and stop the DCA Service. This is not necessary for normal operation and a DCA user does not need to modify or change the DCA Service.

Note that the DCA Service uses exactly the same settings file that the DCA GUI uses so that configuration settings changes done and saved in the DCA GUI on the same server where the DCA Service is running will cause these changes to be picked up by the DCA Service when it is restarted such as when it is automatically restarted after a server reboot.

So the configuration settings of the DCA should not be changed or modified once they are established at the time of DCA installation.