



Data Analysis Tool v1.1.1.x, Beta

Document Version: 1.7

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CHANGELOG

DOCUMENT VERSION	DATE	COMMENTS	AUTHOR
1	3-6-2018	Document creation, first release	Robin Ward
1.1	3-12-2018	Added how to use Medicare section	Robin Ward
1.2	3-20-2018	Updated download location and tool name	Robin Ward
1.3	3-21-2018	Added section for installation when off the network	Robin Ward
1.4	3-23-2018	Added version 1.0.1 notes	Robin Ward
1.5	4-29-18	Added version 1.0.2 notes Changed the user interface section	Robin Ward
1.6	5-25-18	Added version 1.0.3 notes	Robin Ward
1.7	1/4/2019	Added version 1.1.1 notes	Robin Ward

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PURPOSE OF THE DATA ANALYSIS TOOL

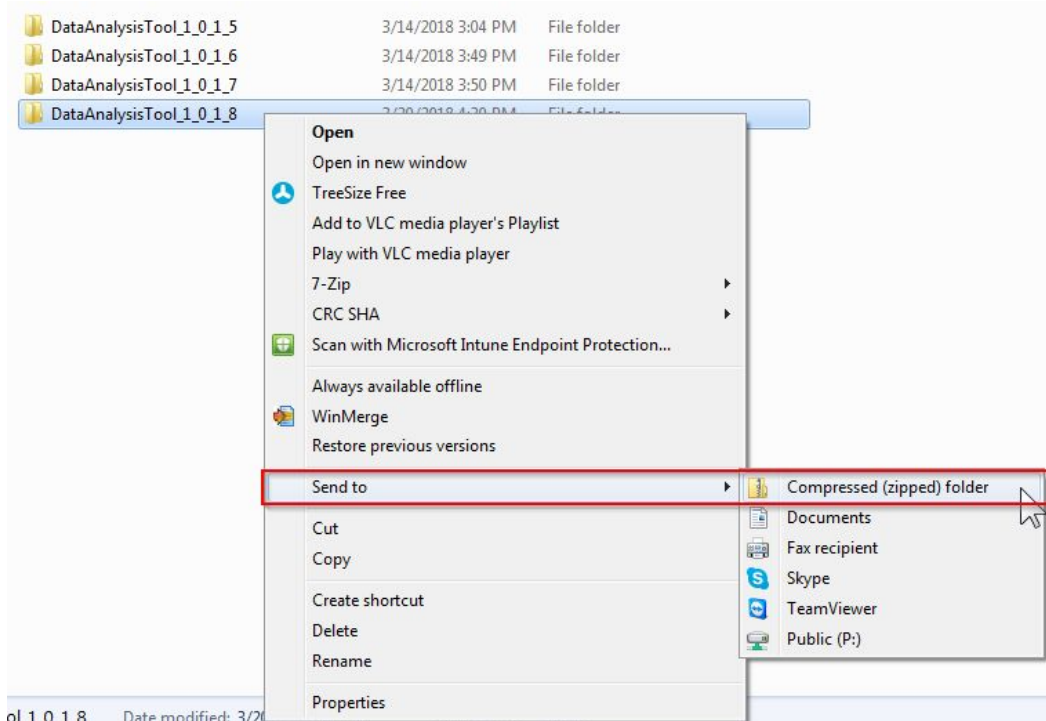
The purpose of the Data Analysis Tool is to streamline some of the tasks that the ICM Implementation team have to deal with. The end goal is to make your job easier, so if you can think of anything that you would like to see added as a feature, please reach out. The features that are implemented now or are coming soon are listed in the section below.

FEEDBACK

1. This tool is still in very early stages of development, so if/when you run into any bugs, please email roward@calliduscloud.com so that I can fix them.
2. Remember, the purpose of this tool is to make your job easier. So if there is a feature you would like to see added, please email roward@calliduscloud.com

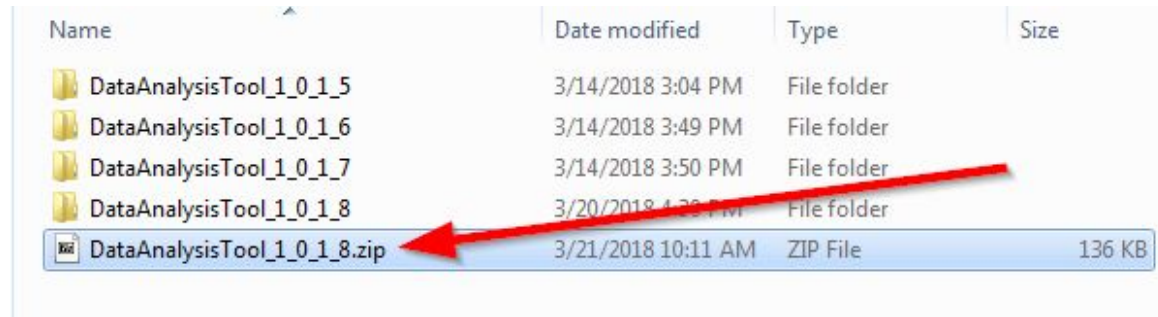
HOW TO INSTALL

1. For employees on the Callidus network
 - a. Navigate to P:\DataAnalysisTool\setup.exe
 - b. Click install
 - c. Until the.PFX certificate has been issued, there will be a security warning, just click install.
 - d. If you do not have an install option, you will need to make some registry changes. Run P:\DataAnalysisTool\registry.reg
2. For employees off of the Callidus network (remote employees)
 - a. Use Network Connect
 - i. Connect to the network using Network Connect then follow the steps above for employees on the network. If this is not possible, follow the below.
 - b. Without Network Connect
 - i. Ask someone on the Callidus network to navigate to P:\DataAnalysisTool\Application Files\
 - ii. The employee on the network will then need to zip the latest version. The format for the releases is as follows: DataAnalysisTool_x_x_x_x where x equals the latest version release
 - iii. In the screenshot below, version 1.0.1.8 is the latest. Also, look for the latest date modified.
 - iv. Right-click the latest release, then send to-->Compressed (zipped) folder



1. ol_1_0_1_8 Date modified: 3/20/2018 3:50 PM
- v. The zipped folder will then need to be emailed to the remote employee.

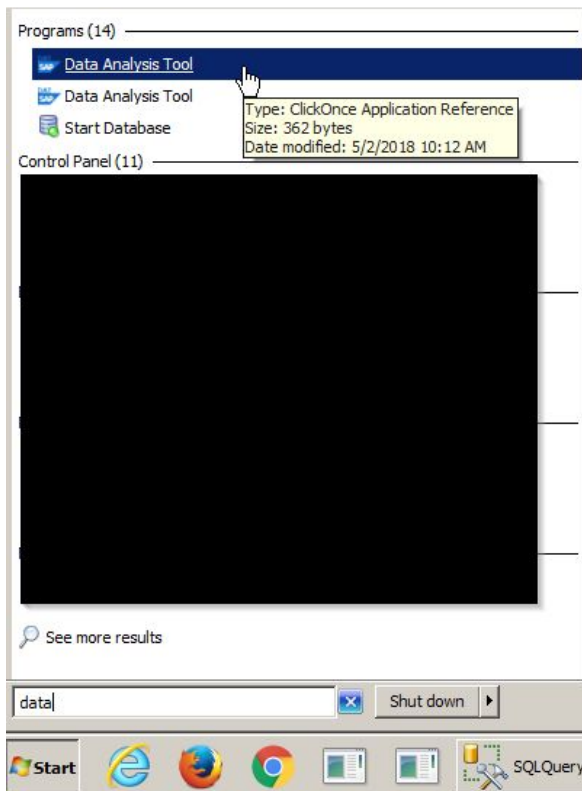
vi.



Name	Date modified	Type	Size
DataAnalysisTool_1_0_1_5	3/14/2018 3:04 PM	File folder	
DataAnalysisTool_1_0_1_6	3/14/2018 3:49 PM	File folder	
DataAnalysisTool_1_0_1_7	3/14/2018 3:50 PM	File folder	
DataAnalysisTool_1_0_1_8	3/20/2018 4:28 PM	File folder	
DataAnalysisTool_1_0_1_8.zip	3/21/2018 10:11 AM	ZIP File	136 KB

HOW TO RUN

Simply click the shortcut on your desktop or in the start menu.

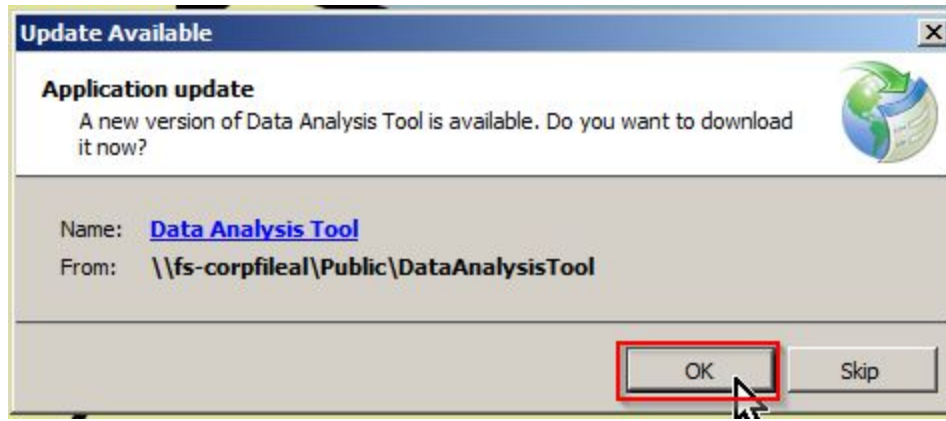


It also helps to add the shortcut to your taskbar for easy access



Please note: The Data Analysis Tool is designed to check if there is a new version upon every launch. This is to ensure that you are always running the latest version. If you receive a prompt to update, please allow.

Here is an example of what this prompt may look like:



DATA ANALYSIS TOOL VERSION FEATURES

V1.1.1.x :

- Cleaned up each other tabs so that they are easier to distinguish
- Added "Open in Excel" button for the Import Format checker
- Moved the general application log to the bottom of every tab
- Added a payout benchmark feature
- Added an API readiness feature
- Much other quality of life improvements

V1.0.3.x, Beta :

- Added an "Include Header Row" checkbox on the shortcut menu
- Major updates to the status bar functionality with SQL loading
- Removed Launch SSMS button due to functionality issues
- Addressed a couple bugs with importing TXT pipe files
- Added a checkbox to show Import Formats that are in "Open" status
- Removed the staging table
- Added a new tab called SQL Query
- Various speed enhancements when connecting to a database
- Added a new DAT logo
- Added the version in the top right for easy viewing
- Added a jump to row box for viewing a specific row in a large file
- Separated out the error file so that the values used are in a different text file

V1.0.2.x, Beta :

- Removed many of the menu items
- Created a new design for the tool. This is a ribbon-like style with different tabs for groups features
- Built the date checker to be able to check for any possible date
- Changed the shortcut icon
- Added Callidus and SAP links under the SAP logo
- Added SAP logo
- Added ability to open a pipe or comma delimited file
- Changed location of error files. This is due to security settings within Windows
- Added shortcut buttons to open the DAT log and IF error log
- Made the server/database/IF selection more straightforward
- Added a required field list box. This enables users to select which fields they want
- A lot of backend code cleanup especially on SQL connection code

V1.0.1.x, Alpha :

- In preparation for the Medicare database cross-check, a new Data Grid View table was added
- Due to the number of tables, a new legend feature was created to explain what each table does
- Various performance enhancements to the ACTEK and SSMS login popups
- Reduction of CPU utilization
- Reduction of memory usage
- Resizing of the main window and tables is now much more fluid
- The name of the tool has been changed from CC Data Tool to Data Analysis Tool
- The installation location has been changed to P:/DataAnalysisTool/setup.exe
- Added directions for installation off of the Callidus network
- Addition of various quality features such as using the escape key to close windows

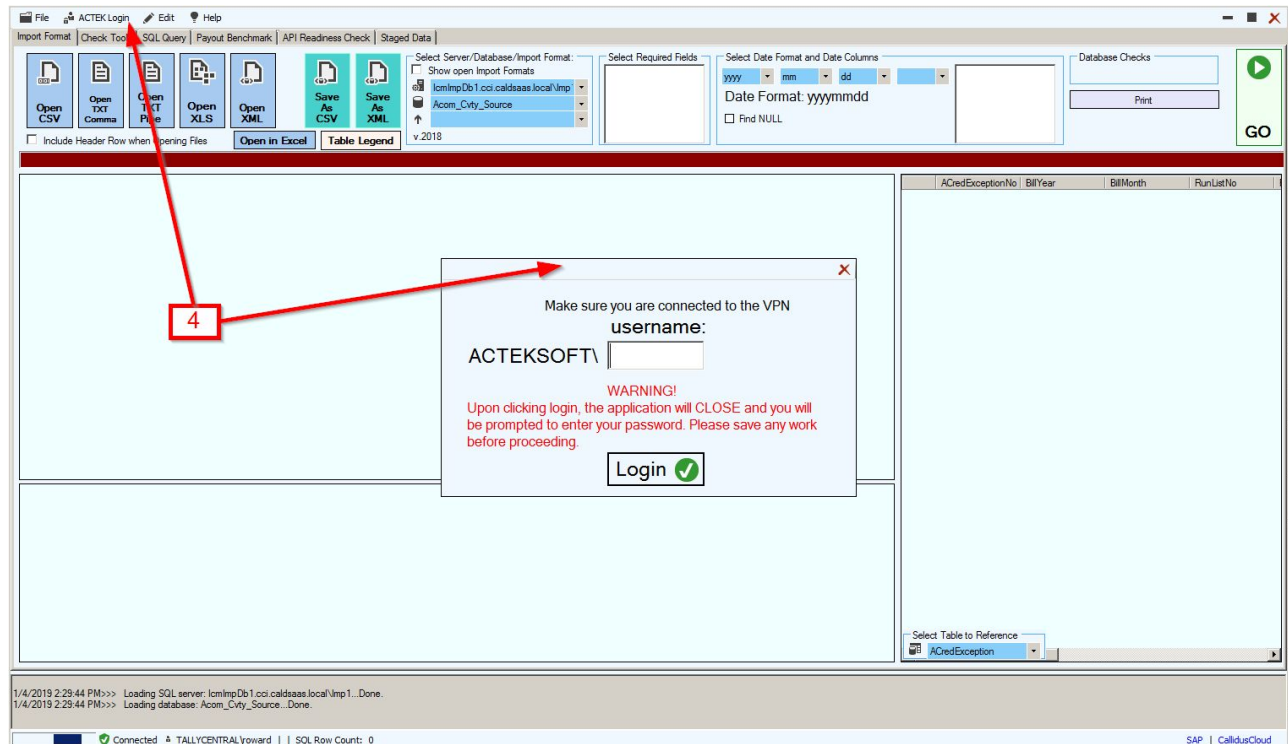
V1.0.0.x, Alpha :

- Added Launch SSMS button
- Added ACTEK Login button
- Added the ability to open and save CSV and XML files
- Added the ability to print data that is in the working file window
- Added cut, copy, paste functionality to the edit menu
- Added various column check tools to the header bar
- Added the ability to check the file that is in the working file window against Medicare standards
- Added the ability to view any table for all ICM clients(more features will come to this)
- Added a log box of actions that are taken while the user is using the Data Analysis Tool
- Created an About box for general information and version checking
- Added a status column at the bottom of the tool
- Added a box to view selected import formats
- Added the ability to create a Medicare error file with the options to sort by error or by column
- Added the ability to check a Medicare file within the program for quit error correction
- Added the functionality for the user to resize the tool to fit their needs
- Added a view log option in the file menu to view the past logs of the application

USER INTERFACE

This section has several screenshots of the application with a legend describing their features to follow.

Global User Interface



1. Open various logs used throughout the tool
2. General system log
3. Global toolbar
4. Actek login (this is necessary for most of the features)

Import Format Tab

The screenshot shows the 'Import Format' tab in a software application. The interface includes a top toolbar with buttons for opening and saving files in various formats (CSV, TXT, Pipe, XLS, XML), a 'Table Legend' button, and a 'GO' button. Below the toolbar are several configuration sections: 'Select Server/Database/Import Format', 'Select Required Fields', 'Select Date Format and Date Columns', and 'Database Checks'. The main area contains two tables. The left table, 'MedicareRates', has columns for ImportFormatId, Delimiter, HeaderRows, RecType, InExtName, ImportFormatFieldId, FieldSeq, FieldLength, IgnoreField, and EntryFieldNo. The right table, 'Broker', has columns for BrokerNo, Pro, BrokerId, and BrokerType. A 'Database Checks' section at the bottom right includes a checkbox for 'Is the Broker in the Database?' and a 'Print' button. Red callout boxes with numbers 1 through 14 point to specific UI elements: 1 points to the 'MedicareRates' table, 2 points to the 'DataGridView Text' table, 3 points to the 'Broker' table, 4 points to the 'Open CSV' button, 5 points to the 'Save As CSV' button, 6 points to the 'Select Server/Database/Import Format' dropdown, 7 points to the 'Select Required Fields' multi-select list, 8 points to the 'Date Format' dropdown, 9 points to the 'GO' button, 10 points to the 'Open in Excel' button, 11 points to the 'Table Legend' button, 12 points to the 'FieldSeq' column in the 'MedicareRates' table, 13 points to the 'Database Checks' section, and 14 points to the 'Print' button.

1. A table that displays the selected Import Format
2. A table that shows the imported file to be checked against
3. A table that can be used to quickly reference any table within ICM
4. Various shortcut buttons to open different file types
5. Various shortcut buttons to save different file types
6. Various drop-down menus to select your environment and Import Format
7. A multi picklist to select all of the fields that are required for the Import Format
8. A date builder for the Import Format. This will default to yyyyymmdd
9. A button to execute the Import Format check
10. A button to open the imported file in Excel. This can be useful for saving into a different format
11. A button that will display a quick legend of each window
12. Loading bar
13. Database checks. Currently, only a check to enable if you want the Import Format to check if the broker is already in the database
14. Print the contents of the imported file

Check Tools Tab

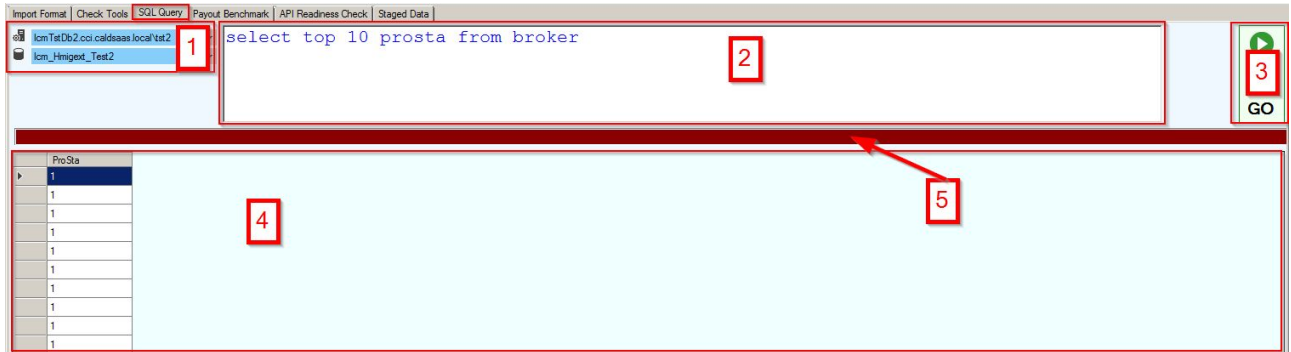
The screenshot shows the 'Check Tools' tab in a software application. The interface includes a tab bar at the top with 'Import Format', 'Check Tools', 'SQL Query', 'Payout Benchmark', 'API Readiness Check', and 'Staged Data'. Below the tab bar, there are four main tool panels, each with a 'GO' button and a 'Clear' button. The panels are:

- Date Checker:** Labeled with a red box and the number 1. It has a 'Find NULL?' checkbox and a list of columns: 1. name, 2. NoName, 3. F3.
- Special Character Checker:** Labeled with a red box and the number 2. It has a 'Special char' field and the same column list.
- NULL Checker:** Labeled with a red box and the number 3. It has a 'Find NULL?' checkbox and the same column list.
- Cell Length Checker:** Labeled with a red box and the number 4. It has a 'Max length' field and the same column list.

 Below these panels is a large horizontal bar, labeled with a red box and the number 5, which serves as a loading bar. A red arrow points from the number 5 box to the loading bar.

1. Checks the date of the selected columns of the file that was imported in the Import Format tab
2. Checks the specified special character of the selected columns of the file that was imported in the Import Format tab
3. Checks to see if there is a NULL of the selected columns of the file that was imported in the Import Format tab
4. Checks the specified length of the selected columns of the file that was imported in the Import Format tab
5. Loading bar

SQL Query Tab



1. Server and database selection
2. Query box
3. Query executer
4. Results
5. Progress bar

Payout Benchmark Tab

The screenshot shows the 'Payout Benchmark' tab in a software application. The interface includes a top navigation bar with tabs: 'Import Format', 'Check Tools', 'SQL Query', 'Payout Benchmark', 'API Readiness Check', and 'Staged Data'. Below the navigation bar, there are several sections:

- Server/Database/Payout Selection:** A dropdown menu showing 'lcmimpDb1.cci.caldsaas.local\lcmimp1' (labeled 1).
- Payout Status:** Radio buttons for 'Pending', 'Finalized' (selected, labeled 2), and 'Reversed'.
- Buttons:** 'Clear Results' and 'Export Results' buttons.
- GO Button:** A green 'GO' button with a play icon (labeled 3).
- Benchmark Results:** A large text area showing benchmark details and statistics (labeled 4). The text includes:


```

      =====DataAnalysis Tool - Payout Benchmark=====
      Current Date: 1/7/2019 2:22:58 PM
      Server: lcmimpDb1.cci.caldsaas.local\lcmimp1
      Database: lcm_Well_UAT
      Payout Type: Medicare Advantage-External
      RunListNoRoot: 15434113665850000

      =====PAYOUT STATS=====
      Elapsed time: 254 Minutes
      Average payout time for the Medicare Advantage-External payout: 107 Minutes
      Percent slower than the payout average: 137.38317757009345794392523364%
      
```
- Payout Tasks - Longest Running First:** A table listing tasks and their run times (labeled 5).

Task #	Task Name	Task Run Time in Minutes
1	ProcessEventBef...	2
2	ProcessEventBef...	0
3	RetroMarkConfig...	159
4	MarkRetroPolicy...	0
5	TranHeadHoldsT...	0
6	TranHeadHoldsC...	0
7	ProcessEventBef...	0
8	RepostTransacti...	26
9	ProcessEventAlt...	0
10	PrepayCapAccu...	0
11	PrePayAccumula...	0
12	ComputationCalc...	15
13	ProcessEventAlt...	0
14	PostUpdateComp...	0
15	GenInterest	0
16	GenAdjustments	0
17	PostUpdateGenAdj...	0
18	ProcessEventBef...	0
19	GenBrokerBonus...	0
20	BonusProcessing	0
21	PostUpdateBonus	0
22	ProcessEventAlt...	0
23	DrawProcessing	0

1. Server/Database/Payout Selection
2. Payout status selection
3. Execute the benchmark
4. Benchmark results
5. Payout tasks with the runtime, longest running first

API Readiness Check Tab

The screenshot shows the 'API Readiness Check' tab in a software application. The interface includes a top navigation bar with tabs: 'Import Format', 'Check Tools', 'SQL Query', 'Payout Benchmark', 'API Readiness Check', and 'Staged Data'. Below the navigation bar, there is a 'Select Server/Database' section with a dropdown menu showing 'lcmImpDb1.cci.caldsaa.local\lmp1' (callout 1) and 'lcm_Well_Training'. To the right of this are 'Clear Results' and 'Export Results' buttons. Further right is a 'Test API Call' button (callout 2) and a 'GO' button (callout 3). The main area on the left displays the 'RUN RESULTS' section (callout 4), which contains the following text:

```

=====DataAnalysis Tool - API Readiness=====
Current Date: 1/7/2019 2:27:52 PM
Server: lcmImpDb1.cci.caldsaa.local\lmp1
Database: lcm_Well_Training

=====RUN RESULTS=====

API enabled:
Yes

API Security Groups:
RobinTest

Optionally, configure the system api ip whitelist to restrict access to a range of client IP addresses.
(Admin > Configuration > Options) E.g. restrict access to internal IP addresses. Note that if this option
is not configured, the System API's may be accessed from any IP address. This may be considered a security
risk if your SCM instance is externally accessible.

API Users:
ROWARDAPI

It looks like this environment is ready to test an API call. If you would like to do this, please select a user above, type the password, then click Test Call
  
```

On the right side of the main area, there is a large green circle with a white checkmark (callout 5).

1. Server/Database Select
2. API call test (only available if readiness passes)
3. Execute the readiness check
4. Log
5. A display explaining how to fix issues (if any)