



BLOOMBERG DESKTOP CONTRIBUTION APPLICATION

User Guide

Date: June 2024

Contents

1	About Bloomberg DCA.....	4
2	System Requirements.....	4
2.1	Minimum System Requirements and Prerequisites.....	4
2.2	Network Requirements	4
3	Installing DCAP	5
4	Getting Support	7
5	Quick Overview of the Bloomberg DCA UI.....	8
6	Configuring DCAP	9
6.1	DCA Settings	9
6.2	Advanced Options	10
6.3	Software Updates	11
7	Sending Data to Bloomberg.....	12
7.1	Throttling	13
7.2	Sending Page-based Data	14
7.3	Clearing Page-based Data.....	15
7.4	Sending Digital Prices	16
7.5	Sending a List of Instruments to a Monitor.....	20
7.6	Clearing Securities from Monitor	25
8	Logs.....	26
9	Troubleshooting DCAP Issues.....	27
9.1	Installation Issues	27
9.2	Post-Installation Issues	29

9.3	Connectivity Issues	31
10	Self-service tools for Trader ID Management	34
10.1	Create Trader ID	34
10.2	Delete Trader ID	36
10.3	Reset Trader ID	37
11	DCAP for Enterprise Platform	38
12	Table 1 – Transaction Type.....	40
13	Table 2 - Access Type.....	42
14	Table 3 – Record Type	43
15	Table 4 – SecurityID Type	44
16	Table 5 – Yellow Key	45
17	Table 6 – Error Messages	46

1 About Bloomberg DCA

Bloomberg Desktop Contributions Application (also called DCA) is an Excel® add-in that enables firms to publish data to their pages on the Bloomberg Terminal®. This software is intended only for publishing indicative, real-time data to Bloomberg. Please note that Bloomberg DCA can only be used to publish data to the Terminal and cannot be used to download market data from Bloomberg. This software is subject to our Software Terms and Conditions, which can be found [here](#).

2 System Requirements

2.1 Minimum System Requirements and Prerequisites

- >8 GB RAM, >4 core CPU, >8 GB free disk space
- Network connectivity
- 64-bit Windows 10 or above
- Microsoft Excel 2013 or above
- Microsoft Visual Studio 2010 Tools for Office Runtime

2.2 Network Requirements

Depending on how your feed is configured, DCA will use **one** pair of the IPs in the table and communicate over TCP. Please check with your Bloomberg Account Manager for the IP addresses to connect to. Bloomberg accepts all incoming connections on these IP addresses, and no whitelisting is needed on our part.

Region	IP: PORT
AMER	69.184.4.23:11011
	69.184.5.15:11011
APAC	69.184.68.18:11011
	69.184.69.28:11011
EMEA	69.184.36.14:11011
	69.184.37.18:11011
Internet	69.191.193.148:11011
	69.191.229.73:11011
Internet2	69.191.193.174:11011
	69.191.229.119:11011
Internet3	69.191.193.175:11011
	69.191.229.120:11011

3 Installing DCAP

Installing DCAP does not require local PC admin rights if the prerequisites are already installed.

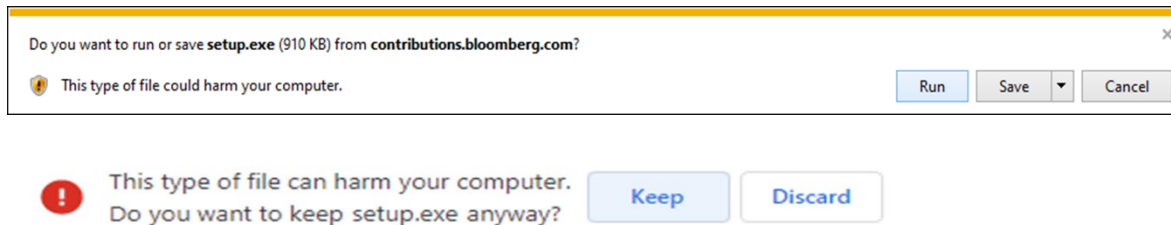
DCAP installer should be run by the profile that will be using it. If the prerequisites are not installed, you will need to be granted admin rights to run the installer or get an admin to run the installer for you while you stay logged in to Windows on the specific user's login. Please ensure this is not installed on the admin's login.

Take the following steps to install DCAP. Skipping any of the installation steps described below may result in an incomplete installation and may require DCAP to be reinstalled for proper operation.

Step 1: Close all Excel instances

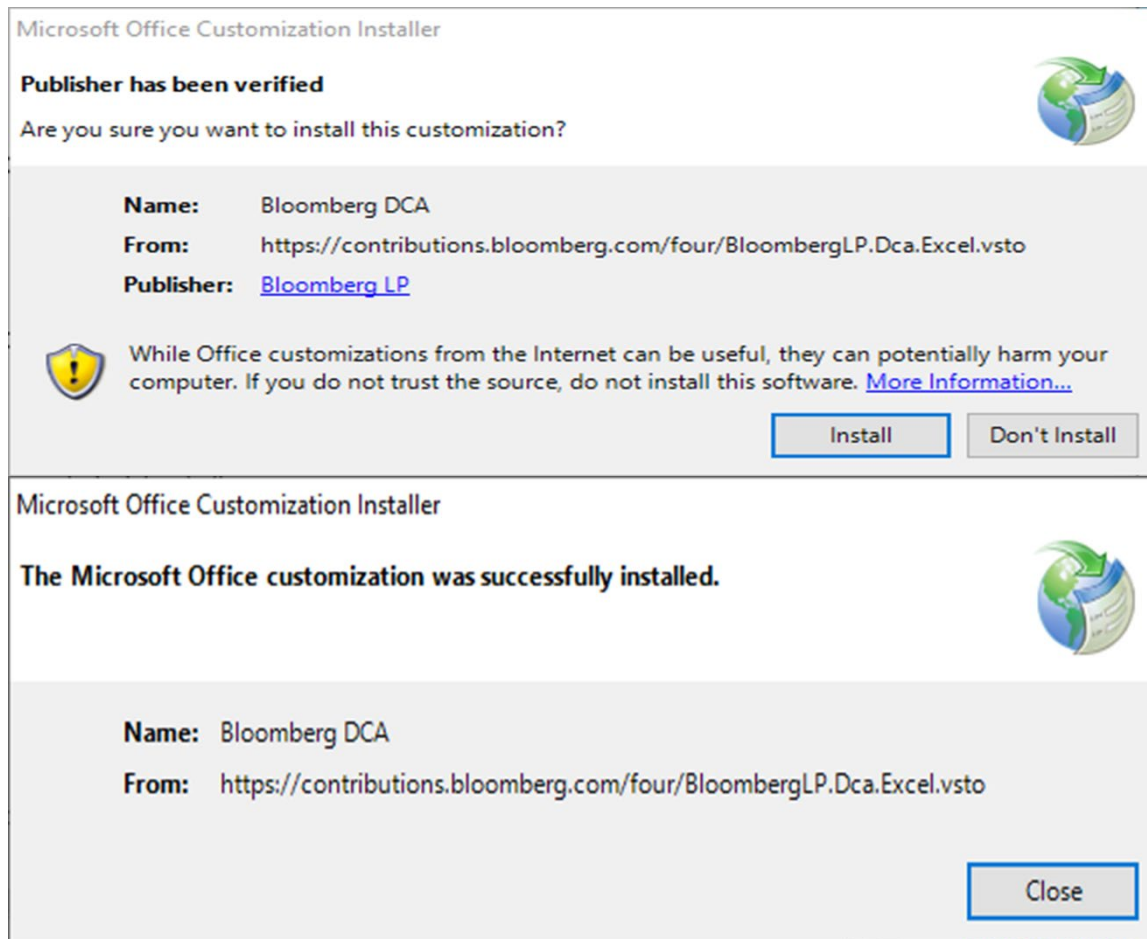
Step 2: Download the installer from: <https://contributions.bloomberg.com/>

Depending on the browser used, you may receive a warning indicating that the file being downloaded could be harmful to your computer and give the user the option to Keep or Discard.



Step 3: Select Keep, and choose to run the installer, or save it and then run the downloaded file.

Step 4: A dialog box will be displayed confirming that the Publisher (Bloomberg L.P.) has been verified. Click on Install to proceed with the installation.



Step 5: Upon completion of the installation process a new dialog will be displayed confirming installation has been completed. At this point, everything is ready for you to start configuring the software.

Step 6: Open Excel and you should be able to see "Bloomberg DCA" in the Excel Ribbon. If you do not see the Bloomberg DCA tab, please refer to [Missing Add-In](#)

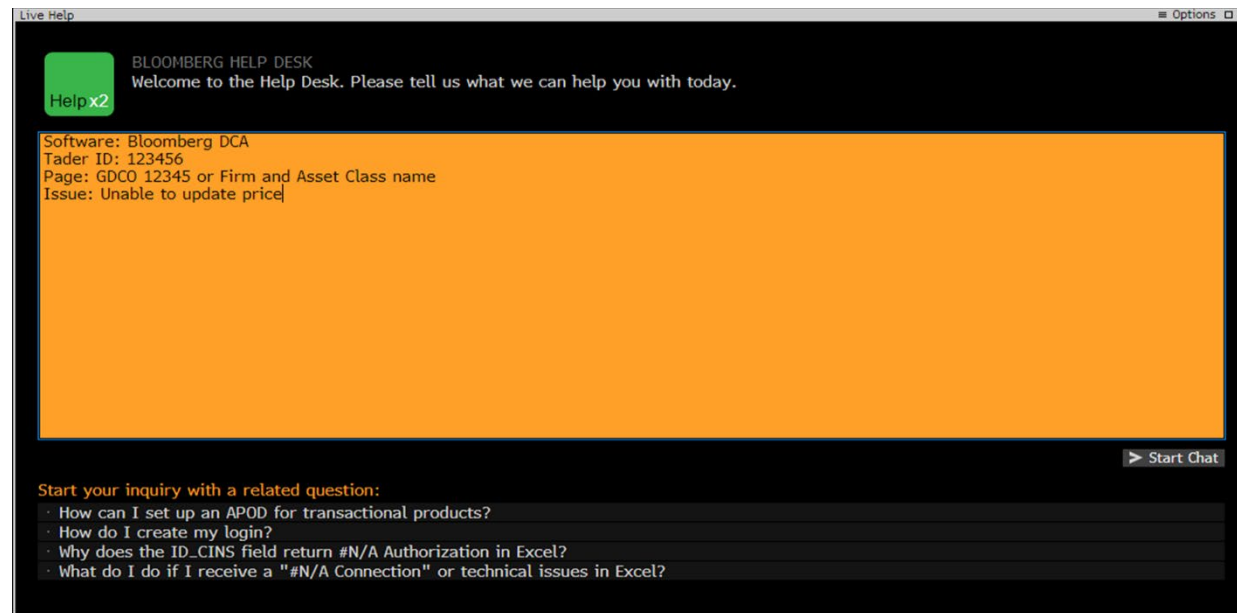
4 Getting Support

If you face issues during installation, setup, or use of Bloomberg DCA, please first refer to the [Troubleshooting](#) section of this manual to fix some common issues.

If this doesn't resolve the problem, you can get in touch with our 24x7 Help Desk by pressing F1 twice on the Bloomberg Terminal. Non-Terminal data contributors can reach out to their firm's Bloomberg Contributions Account Manager through their email.

Please share the following with the Help Desk to assist in resolving issues efficiently:

- Software Name: Bloomberg DCA
- Trader ID (if available): The Trader ID in your [Settings](#) window
- Page that you are pricing
- A short description of the problem



The screenshot shows a 'Live Help' window titled 'BLOOMBERG HELP DESK'. It features a green 'Helpx2' button and a welcome message: 'Welcome to the Help Desk. Please tell us what we can help you with today.' Below this, a large orange text area contains the following information: 'Software: Bloomberg DCA', 'Trader ID: 123456', 'Page: GDCO 12345 or Firm and Asset Class name', and 'Issue: Unable to update price'. At the bottom right of the orange area is a 'Start Chat' button. Below the orange area, there is a section titled 'Start your inquiry with a related question:' followed by four radio button options: 'How can I set up an APOD for transactional products?', 'How do I create my login?', 'Why does the ID_CINS field return #N/A Authorization in Excel?', and 'What do I do if I receive a "#N/A Connection" or technical issues in Excel?'.

5 Quick Overview of the Bloomberg DCA UI

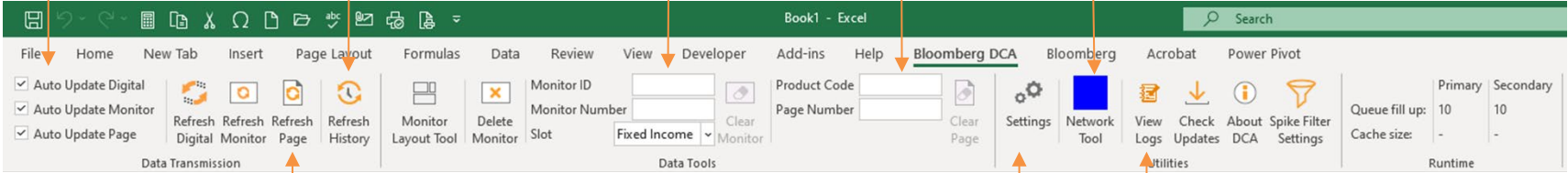
Publish data automatically when a change is detected

Publish Historical Data

Clear securities from screen managed by user

Clear non-digitized screen

Check network connection status and run diagnostics



The screenshot shows the Bloomberg DCA ribbon in an Excel application. The ribbon is divided into several groups: Data Transmission, Data Tools, Data Tools (continued), Utilities, and Runtime. Annotations with orange arrows point to specific features: 'Publish data automatically when a change is detected' points to the 'Auto Update Digital' checkbox; 'Publish Historical Data' points to the 'Refresh History' button; 'Clear securities from screen managed by user' points to the 'Clear Monitor' button; 'Clear non-digitized screen' points to the 'Clear Page' button; 'Check network connection status and run diagnostics' points to the 'Network Tool' button. Below the ribbon, there are three text blocks with arrows pointing to the ribbon: 'Publish data manually. See the following page for more details.' points to the 'Refresh Digital' button; 'Configure your Trader ID, Password, and other settings before establishing connection' points to the 'Settings' button; 'View Debug logs for troubleshooting' points to the 'View Logs' button.

[Publish data](#) manually. See the following page for more details.

[Configure](#) your Trader ID, Password, and other settings before establishing connection

View Debug logs for troubleshooting

6 Configuring DCAP

To configure Bloomberg DCA, four pieces of information are required:

1. Trader ID
2. Password
3. Region
4. Environment

The Trader ID and Password are used to authenticate users for publishing data to Bloomberg. Each Trader ID/Password pair is stored in the Windows login profile, so when using a different PC or different login ID on the same PC, you will require another Trader ID/Password. The Region and Environment will be provided to you by your Bloomberg Contributions Account Manager.

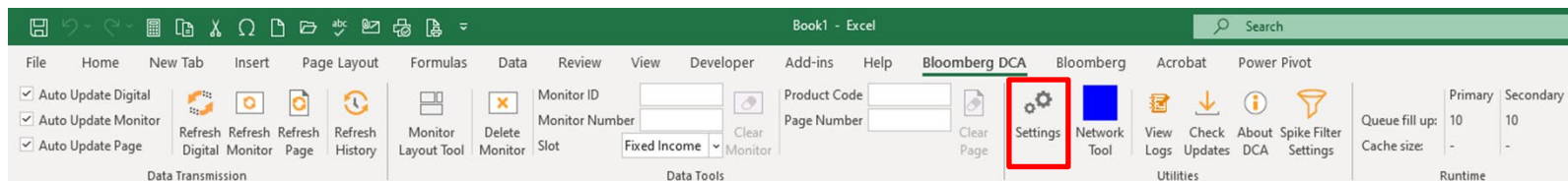
Bloomberg Terminal users are required to manage their own Trader IDs using our self-service tools. These tools will allow admins to create, delete or reset Trader IDs for your firm. For more information please refer to the [Self-Service](#) section.

6.1 DCA Settings

To configure DCAP take the following steps:

Step 1: Open Excel and go to the Bloomberg DCA ribbon.

Step 2: Click on the Settings button to open the configuration user interface (if Settings is not present, click Utilities first)



The **Direct TCP/IP** option should be selected, and you should populate the fields in the General tab with the configuration details provided by your Bloomberg Contributions Account Manager.

Settings

☒ Direct TCP/IP ☐ Enterprise Platform

General Advanced

Trader 123456

Password

Region Internet

Environment PROD Test

☐ Override Hosts ☐ Use Socks5

Primary host 69.191.193.148 11011

Secondary host 69.191.229.73 11011

OK Cancel

Enter the Trader ID, Password, Region and Environment, and click OK.

The Primary and Secondary host IP addresses and ports will be populated automatically based on your selection of Region and Environment. However, if you need to route connectivity over a proxy server, you have the option to manually override those IPs/Ports and configure your proxy to forward connectivity to the original IPs/Ports displayed.

6.2 Advanced Options

The Advanced tab allows you to define default values for the software so that a simplified version of the formulas can be used. Your Bloomberg Contributions Account Manager will tell you if you need to change the default settings.

You can also enable debug logging to assist with troubleshooting purposes, as well as define the folder to store log files in. Please make sure you have write-access to the folder you select.

It is recommended that you keep the “Enable automatic software updates on startup” box checked to ensure you always have the latest version of the software and have access to new features as they get rolled out.

The screenshot shows the 'Settings' dialog box with the 'General' tab selected. At the top, there are two radio buttons: 'Direct TCP/IP' (selected) and 'Enterprise Platform'. Below this, the 'General' tab is active, showing several configuration options. 'Default Record Type' is set to 'EQOPTION', 'Default Security Id Type' is 'CUSIP', 'Queue Size' is '10000', and 'Decimal Digits' is '4'. A section for logging is expanded, showing 'Enable Debug Log' checked and 'Logging Directory' set to 'C:\Users\mpillay7\AppData\Local'. Below this, three options for throttling are listed: 'Enable Digital Throttling', 'Enable Monitor Throttling', and 'Enable Page Throttling', each with a checkbox and a '0 mins' value. At the bottom of the logging section, 'Enable automatic software updates on startup' is checked. The dialog box has 'OK' and 'Cancel' buttons at the bottom right.

Setting	Value
Default Record Type	EQOPTION
Default Security Id Type	CUSIP
Queue Size	10000
Decimal Digits	4
Enable Debug Log	Checked
Logging Directory	C:\Users\mpillay7\AppData\Local
Enable Digital Throttling	0 mins
Enable Monitor Throttling	0 mins
Enable Page Throttling	0 mins
Enable automatic software updates on startup	Checked

DCAP has now been successfully configured, so please click on OK to save the settings and exit the user configuration. Configuration changes take effect immediately without the need to restart the PC or Excel and may result in a brief disconnection from the server.

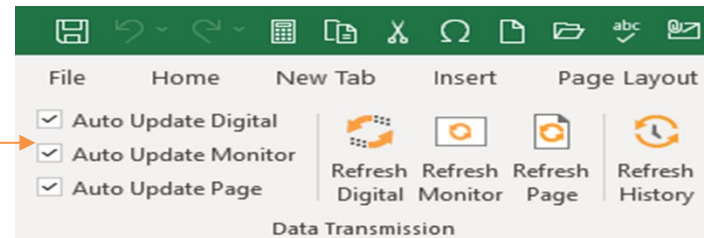
[6.3 Software Updates](#)

DCAP will automatically receive an update whenever a new version is available. The application will show a prompt requiring your permission to proceed with the update, and an Excel restart might be needed.

7 Sending Data to Bloomberg

DCAP allows contributors to send Page-Based Data (Data for View Only purpose) and Digital Prices (sending real-time and historical data that can run analytics) and to maintain the list of securities on their monitors. Once your Bloomberg Contributions Account Manager sends the Excel sheet with the formulas for each function you will be able to manage your data on the Bloomberg Terminal.

When the Auto Update flags are enabled, any changes to the sheet are detected and published automatically. Disable these flags and click on the Refresh buttons to publish prices manually.



Refresh Digital: Sends all the digital prices in the spreadsheet to Bloomberg. If the Auto Update Digital flag is enabled, the prices will be sent automatically as soon as they change in the spreadsheet. Functions associated with this button: [PLContribQuote](#)

Refresh Monitor: Maintain securities in monitors with the Refresh Monitor button and the Auto Update Monitor flag.

NOTE: Enabling the Auto Update Monitor option may result in an excessive number of unnecessary updates, causing monitors to “blink” and, in extreme cases, causes slowness on the feed. Functions associated with this button: [PLMonitorFull](#) and [PLBenchmark](#)

Refresh Page: Sends all page-based data in the spreadsheet to Bloomberg. If the Auto Update Page option is enabled, any text content will be sent automatically as soon as a change is detected. Functions associated with this button: [PLContribPage](#)

Refresh History: Sends digital prices to past dates to Bloomberg. Functions associated with this button: [PLSendHistory](#)

7.1 Throttling

To set up the automatic updates at specified time intervals you need to go to the “Advanced” tab in the configuration screen.

If you select Enable Digital Throttling and set the interval to every 5 minutes, DCAP will check every 5 minutes if the cells with the values referenced in the formulas have changed, and if they have, it will send an update to Bloomberg. The same logic applies for Monitor Contributions and Page Contributions throttling.

The screenshot shows the 'Settings' dialog box with the 'Advanced' tab selected. The 'Direct TCP/IP' radio button is chosen. Under the 'Advanced' tab, the following settings are visible: 'Default Record Type' is set to 'EQOPTION', 'Default Security Id Type' is 'CUSIP', 'Queue Size' is '10000', and 'Decimal Digits' is '4'. The 'Enable Debug Log' checkbox is checked. The 'Logging Directory' is set to 'C:\Users\mpillay7\AppData\Local'. The 'Enable Digital Throttling' checkbox is checked, and its interval is set to '5' minutes. The 'Enable Monitor Throttling' and 'Enable Page Throttling' checkboxes are unchecked, with their intervals set to '0' minutes. The 'Enable automatic software updates on startup' checkbox is checked. At the bottom are 'OK' and 'Cancel' buttons.

Throttling settings only apply if all three Auto Update Flags in the DCAP Ribbon have been disabled. If any of the Auto Update Flags are on, the Throttling settings will not take effect.

7.2 Sending Page-based Data

7.2.1 PLContribPage

This formula allows you to send text data to your contributions page (GPGX). Contributions pages only support ASCII text and cannot be used for analytical functions. This formula is subject to the Auto Update Page flag.

Formula: PLContribPage(Area, Product Code, PageNumber)

Sample formula: =PLContribPage(A1:H12,2,1)

Translation: Send all text within cells A1:H12 to Product Code:2, Page:1

Output Sample: 142 Cells (16:00:00.00000) [142 cells of data were sent successfully at 16:00]

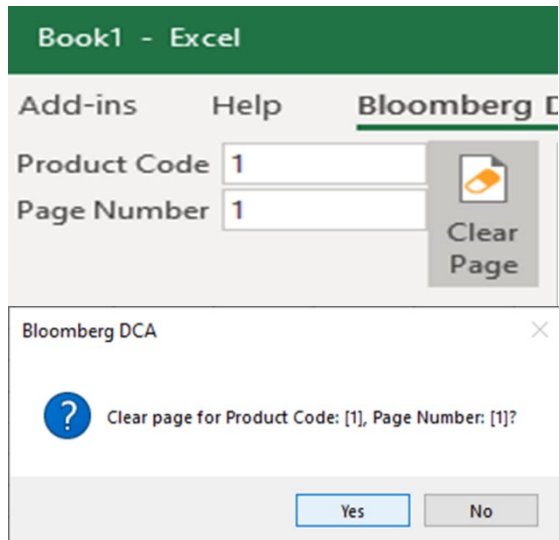
7.2.1.1 PLContribPage Arguments

Argument	Description	Valid Values
Area	Reference to the area of the spreadsheet that you wish to contribute as a page.	Example, A1:H12 .
ProductCode	A numeric value defining under which menu item (on the Bloomberg page display system) the page will appear.	Valid number corresponding to a menu item on the Bloomberg Terminal. Your Bloomberg Contributions Account Manager provides this.
PageNumber	A numeric value defining under which page number (within a menu item) the page will appear.	Valid number corresponding to a page number (within a menu item) on the Bloomberg Terminal. Your Bloomberg Contributions Account Manager provides this.

NOTE: PLContribPage will automatically align text within the cells, such that the text is displayed in columns. This function is limited to 23 rows of text, with 80 ASCII characters in each. Adding ">" at the beginning of the text in a cell will override the automatic alignment functionality.

7.3 Clearing Page-based Data

To clear the page, simply enter the Product Code and Page Number in the Bloomberg DCA ribbon in Excel and hit Enter; this will enable the Clear Page button. You can obtain the Product Code from your Bloomberg Contributions Account Manager. Then click on the Clear Page button. A dialog will display for you to confirm that you want to proceed.



7.4 [Sending Digital Prices](#)

7.4.1 [PLContribQuote](#)

This function sends prices for the current day to Bloomberg. It can also send an optional Size associated with the price. This formula is subject to the Auto Update Digital flag.

Formula: PLContribQuote(Value, TransactionType, SecurityId, RecordType, SecurityIdType, Size, Precision, FirmID, ConditionCode)

Sample Formula: =PLContribQuote("4.5324", "Bid", "MR", "FOREX", "TICKER", "4")

Translation: Sends Value of 4.5324 on Bid for Ticker MYR Curncy with 4 Decimal Point

Output Sample: 4.5324 (16:53:32.494162) *[The formula returns the value and the timestamp at which it was sent]*

7.4.1.1 PLContribQuote Arguments:

Argument	Description	Valid Values
Value	Normally a cell reference, defining the location of the value (price) to be contributed from the spreadsheet.	Any cell number, e.g., E3.
TransactionType	Defines what the value represents, e.g., Bid or Ask price. It accepts a set of standard keywords.	This formula is specific to handle BID, ASK, BLSPRDTOBENCHBIDRT, BLSPRDTOBENCHASKRT, and accompanying sizes.
SecurityId	The Security ID string used by Bloomberg to identify which security the price refers to. Normally SecId is a cell reference, which contains the Security ID.	A valid ISIN, CUSIP, or SEDOL number OR value pointing to the cell containing the Security ID.
RecordType	Any valid record types.	Refer to Table 3 .

Argument	Description	Valid Values	
SecurityIdType	Standard used in identifying the securities contributed to Bloomberg.	Refer to Table 4 .	
Precision	Specifies the maximum number of digits after the decimal point. To use the default precision set up in your contribution system set Precision to -1 (or any negative number).	Any number between 0 and 9.	
FirmID	This parameter is optional. It represents an ID that uniquely identifies a firm for this price. Contact your Bloomberg Contributions Account Manager to get a list of valid firm identifiers.	Any string, limited to 4 characters.	
ConditionCode	This parameter is optional. It represents a condition code for this price.	Condition Code	Value Represents
		Firm	The BID or ASK is Firm.
		Clear	If the BID or the ASK are zeroes, this indicates that the contributor wants to clear the data.
		Valid	If the BID or the ASK are zeroes, this indicates that the actual Bid or Ask has a (valid) zero value.
Size	This parameter is optional. Normally a cell reference, defining the location of the amount bid or offered.	Any cell number, e.g., E3.	

7.4.2 PLSendHistory

This formula allows you to send historical values up to 30 days back. To publish historical prices for >30 days, please contact your Bloomberg Contributions Account Manager. This formula is NOT subject to the Auto Update Digital setting, and you must always click the Refresh History

button in the DCAP ribbon in Excel.

Formula: PLSendHistory(SecurityId, Value, TransactionType, PastDate, RecordType, SecurityIdType, Precision)

Sample: =PLSendHistory("MS190004", 100.5023, "BID", "04/23/2021", "BOND", "CUSIP", 4)

Translation: Sending historical rate for 04/23/2021 for CUSIP MS190004 on Bid with 4 decimals

Output Sample: 100.5023 - 7/25/2021 (16:27:34.414759) [Value 100.5023 published to date 7/25/2021 at timestamp in the brackets]

7.4.2.1 PLSendHistory Arguments

Argument	Description	Valid Values
SecurityId	The Security ID string used by Bloomberg to identify which security the price refers to. Normally SecId is a cell reference, which contains the Security ID.	A valid ISIN, CUSIP, or SEDOL number OR value pointing to the cell containing the security identifier.
Value	Normally a cell reference, defining the location of the value (price) to be contributed from the spreadsheet.	Any cell number, e.g., E3.
TransactionType	Defines what the value represents, e.g., Bid or Ask price. It accepts a set of standard keywords.	See DCAP Transaction Table (Table 1) for a full list of valid entries. The most common values are BID, ASK, and TRADE.
PastDate	Defines the date for historical data.	Any date in mm/dd/yyyy format or reference to a cell containing that date. Ideally the referenced cell is in Excel date format, as opposed to text format.
RecordType	Any valid record types.	Refer to Table 3 .
SecurityIDType	Standard used in identifying the securities contributed to Bloomberg.	Refer to Table 4 .
Precision	Specifies the maximum number of digits after the decimal point. To use the default precision set up in your contribution system (see User	Any number between 0 and 9.

Argument	Description	Valid Values
	Configuration), set Precision to -1 (or any negative number).	

7.5 Sending a List of Instruments to a Monitor

7.5.1 PLMonitorFull

This function sends a list of tickers to be displayed on the Contributions page (GDCO).

Formula: **PLMonitorFull(SecurityId, SecurityIdType, MonitorID, MonitorNumber, MonitorPage, MonitorLine, YellowKey, AccessType)**

Sample: =PLMonitorfull("AM7669089", "CUSIP", "35720", "1", "1", "1", "8", "23")

Translation: Updating security AM7669089 to GDCO 35720 on Page 1, Line 1

Output Sample: AM7669089 (18:08:16.881942) *[Updates security to GDCO at timestamp in the brackets]*

7.5.1.1 PLSecurityFull Arguments

Argument	Description	Valid Values
SecurityId	The Security ID string used by Bloomberg to identify which security the price refers to. Normally this is a number (or sequence of letters and numbers) defined using the ISIN, CUSIP or SEDOL standards. SecId can also be a cell reference, pointing to another cell containing the actual Security ID.	A valid ISIN, CUSIP, or SEDOL number or value pointing to the cell containing the SecID.
SecurityIDType	Standard used in identifying the securities contributed to Bloomberg.	Refer to Table 4 .
MonitorID	This is a unique number identifying the contributor's Bloomberg Monitor page.	This numeric identifier is provided by your Bloomberg Contributions Account Manager.
MonitorNumber	A numeric identifier dedicated to an individual Contributor per Monitor ID.	This numeric identifier is provided by your Bloomberg Contributions Account Manager.

Argument	Description	Valid Values
MonitorPage	A numeric identifier pointing to a specific “page” within each Monitor Number (MonNum) per Monitor ID (MonID).	Any valid page number.
MonitorLine	Allows you to specify which line within the “page” your security contribution should appear.	Any number between 1 to 40 depending on how many instruments per page the monitor has been set up for. In addition, “M” can also be sent if Bloomberg is to sort the instruments by maturity.
YellowKey	A name specifying the type of Security or Yellow Key you are contributing.	Please refer to Table 5 .
AccessType	A number that specifies the identifier type in use. For a complete list of valid Access Types refer to Table 2 .	Please refer to Table 2 .

7.5.2 PLBenchmark

This formula can also be used to maintain a list of securities on a monitor (GDCO). This allows for fine-grained deletion/updates of securities on each line of the monitor.

Formula: `PLBenchmark(Slot, SecurityID, AccessType, MonitorId, MonitorNumber, PageNumber, LineNumber, UpdateDelete, YellowKey, ShortName, Comment, BnchmkSecId, BnchmkAccessTyp, BnchmkDescr)`

Sample: `=PLBenchmark("F", "AM7669089", "23", "35720", "1", "1", "U", "8")`

Translation: Updating security AM7669089 to GDCO 35720 on Page 1, Line 1

Output Sample: `PLBenchmark(17:51:44.807667)` *[Updates security to GDCO at timestamp in the brackets]*

7.5.2.1 PLBenchmark Arguments

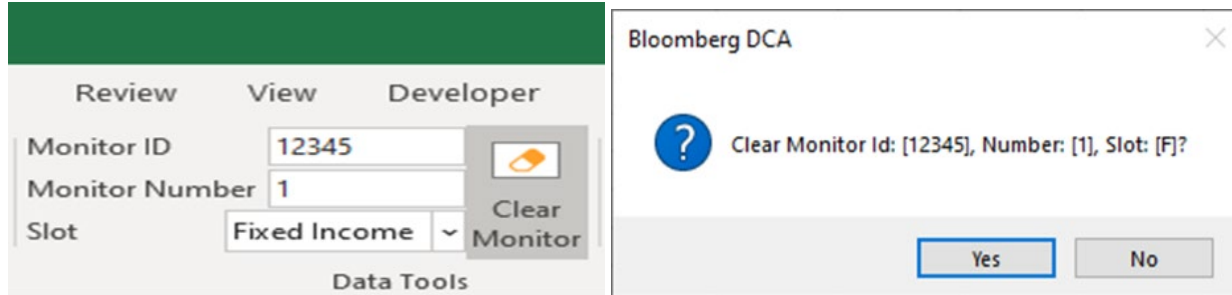
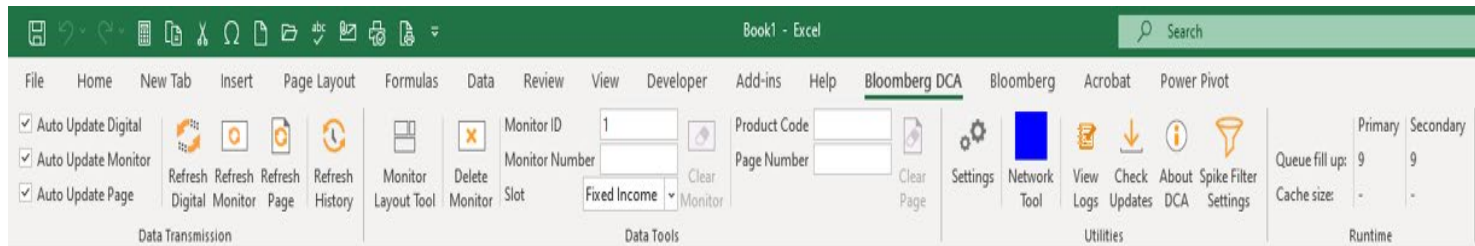
Argument	Description	Valid Values	
		Slot	Value Represents
Slot	The Slot is used by Bloomberg to identify what pricing source you want to feed using this formula. This is a one-character field that tells Bloomberg if you will feed your primary or secondary fixed income pricing or your currency pricing source.	Bond	F
		OddBond	O
		Currency	C
		Additional slots	41-49
SecurityId	The Security ID string used by Bloomberg to identify which security the price refers to. Normally this is a number (or sequence of letters and numbers) defined using the ISIN, CUSIP or SEDOL standards. SecId can also be a cell reference, pointing to another cell containing the actual Security ID.	A valid ISIN, CUSIP or SEDOL number or value pointing to the cell containing the Security ID.	
AccessType	A number that specifies the identifier type in use. For a complete list of valid Access Types refer to Table 2 .	Please refer to Table 2 .	

Argument	Description	Valid Values	
MonitorID	This is a unique number identifying the contributor's Bloomberg Monitor page.	This numeric identifier is provided by your Bloomberg Contributions Account Manager.	
MonitorNumber	A numeric identifier dedicated to an individual Contributor per Monitor ID.	This numeric identifier is provided by your Bloomberg Contributions Account Manager.	
PageNumber	A numeric identifier pointing to a specific "page" within each Monitor Number (MonNum) per Monitor ID (MonID).	Any valid page number.	
LineNumber	Allows you to specify which line, within the "page" your security contribution should appear.	Any number between 1 to 20 depending on how many instruments per page the monitor has been set up for. In addition, "M" can also be sent if Bloomberg is to sort the instruments by maturity.	
UpdateDelete	One-character field that tells Bloomberg if the instrument needs to be updated or deleted from the monitor.	Value	Value Represents
		U	Update
		D	Delete
YellowKey	A one-character field specifying the type of Security or Yellow Key you are contributing.	Please refer to Table 5 .	
ShortName	This parameter is optional. It represents the description of the instrument.	Any string, limited to 14 characters.	
Comment	This parameter is optional. It can be used to send any comments pertaining to the instrument.	Any string, limited to 30 characters.	
BnchmkSecId	This parameter is optional. The BenchmarkId string is used by Bloomberg to identify what the benchmark for the instrument referenced in the formula is. Normally this is a number (or sequence of letters and numbers) defined using the ISIN, CUSIP or SEDOL standards. SecId can also be a cell reference, pointing to another cell containing the actual Benchmark ID.	A valid ISIN, CUSIP or SEDOL number or value pointing to the cell containing the BenchmarkId.	

Argument	Description	Valid Values
BnchmkAccessType	A number that specifies the identifier type in use for the benchmark. For a complete list of valid Access Types refer to Table 2 .	Please refer to Table 2 .
BnchmkkDescr	This parameter is optional. It represents the description of the benchmark.	Any string, limited to 20 characters.

7.6 Clearing Securities from Monitor

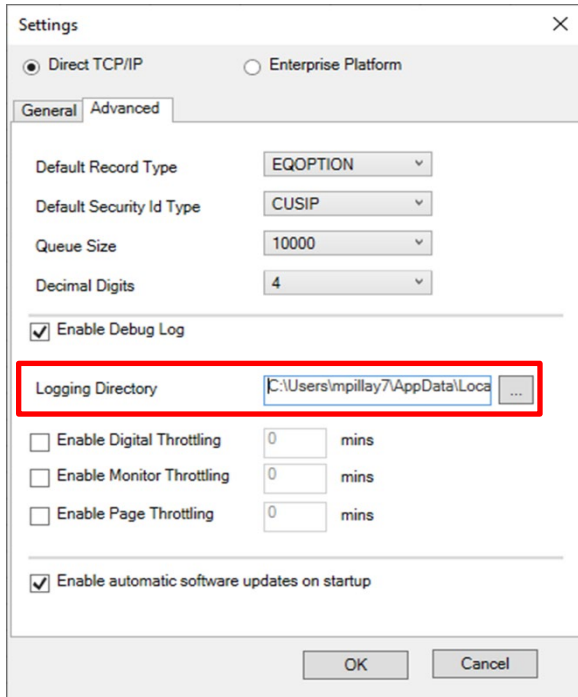
To clear your Monitor, simply enter the Monitor ID, the Monitor Number and the Slot on the Bloomberg DCA ribbon in Excel and hit Enter. This will enable the Clear Monitor button. Then click on the Clear Monitor button. A dialog will display for you to confirm that you want to proceed.



Please check with your Bloomberg Contributions Account Manager on the Slot.

8 Logs

DCAP offers different levels of logs to facilitate troubleshooting, and they are all set from the Advanced tab of the configuration screen.



The screenshot shows the 'Settings' dialog box with the 'Advanced' tab selected. The 'Direct TCP/IP' radio button is chosen. The 'Logging Directory' field is highlighted with a red rectangle and contains the path 'C:\Users\mpillay7\AppData\Local'. Other settings include 'Default Record Type' set to 'EQOPTION', 'Default Security Id Type' set to 'CUSIP', 'Queue Size' set to '10000', and 'Decimal Digits' set to '4'. The 'Enable Debug Log' checkbox is checked. There are also options for 'Enable Digital Throttling', 'Enable Monitor Throttling', and 'Enable Page Throttling', each with a '0' value and 'mins' unit. The 'Enable automatic software updates on startup' checkbox is also checked. 'OK' and 'Cancel' buttons are at the bottom.

Setting	Value
Direct TCP/IP	Selected
Enterprise Platform	Not Selected
Default Record Type	EQOPTION
Default Security Id Type	CUSIP
Queue Size	10000
Decimal Digits	4
Enable Debug Log	Checked
Logging Directory	C:\Users\mpillay7\AppData\Local
Enable Digital Throttling	0 mins
Enable Monitor Throttling	0 mins
Enable Page Throttling	0 mins
Enable automatic software updates on startup	Checked

DCAP by default logs basic protocol level messages exchanged by the DCAP client and server dealing mainly with changes in connectivity status. If data logs or more verbose logs are required to aid troubleshooting, your Bloomberg Contributions Account Manager may ask you to tick the Enable Debug Log box. The logs will be stored in the folder you select in the Logging Directory field. Please make sure you have write access to the directory/folder you select. Note that a restart of Excel may be required for DCAP to start writing to the debug log.

The current log file will be named **dcacsvc_date.log** (i.e., **dcacsvc_20160322.log**). If the log reaches a size of 5 MBs, there will be a new **dcacsvc_date.log** and the older logs will be copied to a file named **dcacsvc_date.log.date_timestamp**. The “View Logs” button in the Bloomberg DCA ribbon opens the selected logging folder.

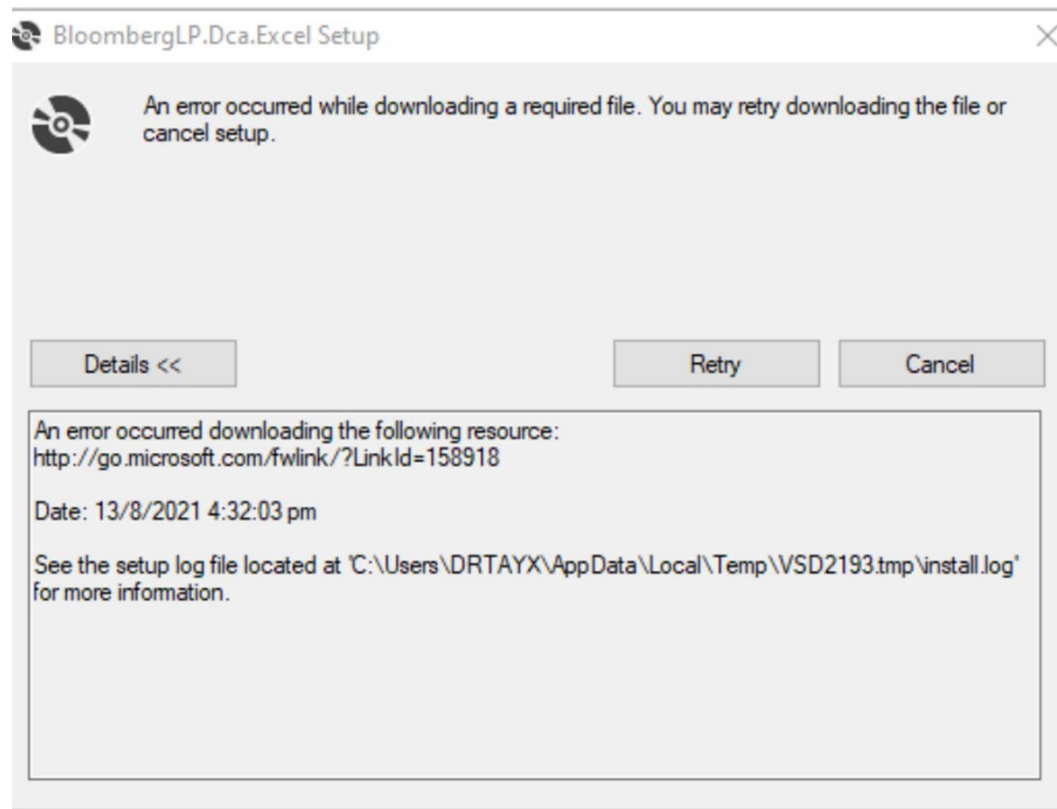
9 Troubleshooting DCAP Issues

This section details issues that users have run into and some common troubleshooting steps. We have categorized these into three subsections:

- Installation issues
- Post-installation issues
- Connectivity issues

9.1 Installation Issues

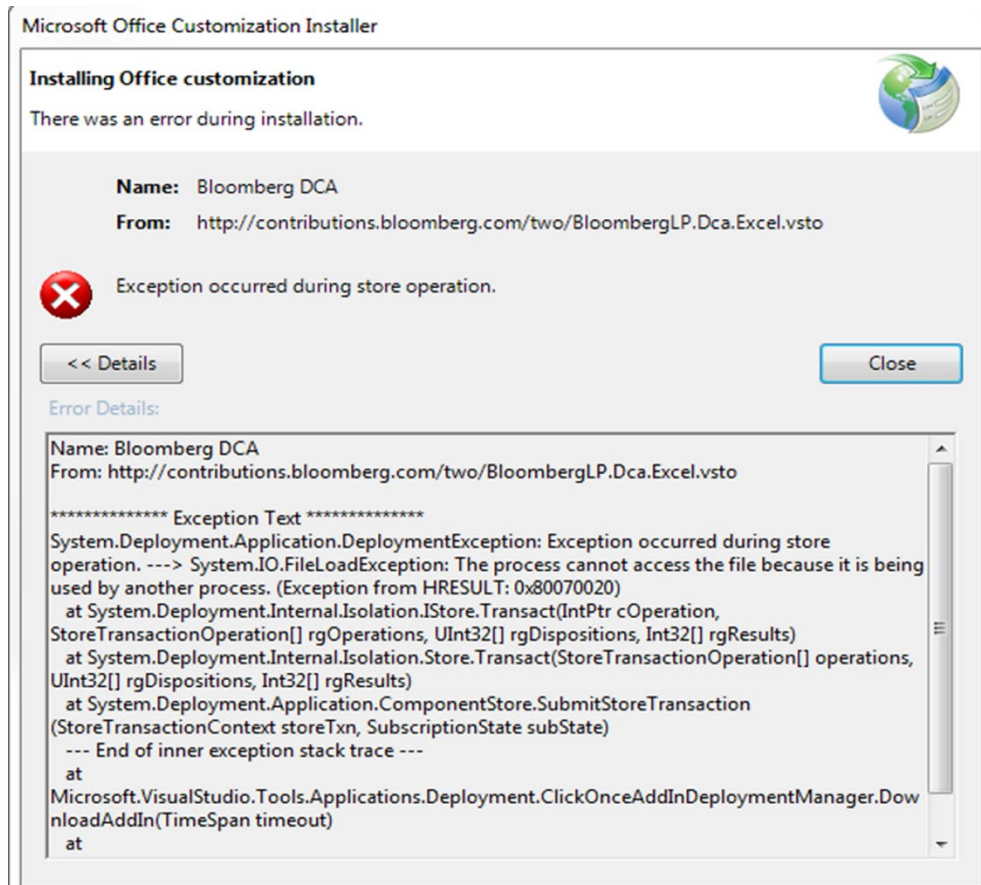
9.1.1 Missing Component



Missing prerequisites when installing DCA.

1. Download and install Microsoft Visual Studio 2010 Tools for Office Runtime (x86 and x64) directly from Microsoft website: <https://www.microsoft.com/en-us/download/details.aspx?id=48217>
2. Run the DCAP installer again.

9.1.2 Exception during store operation



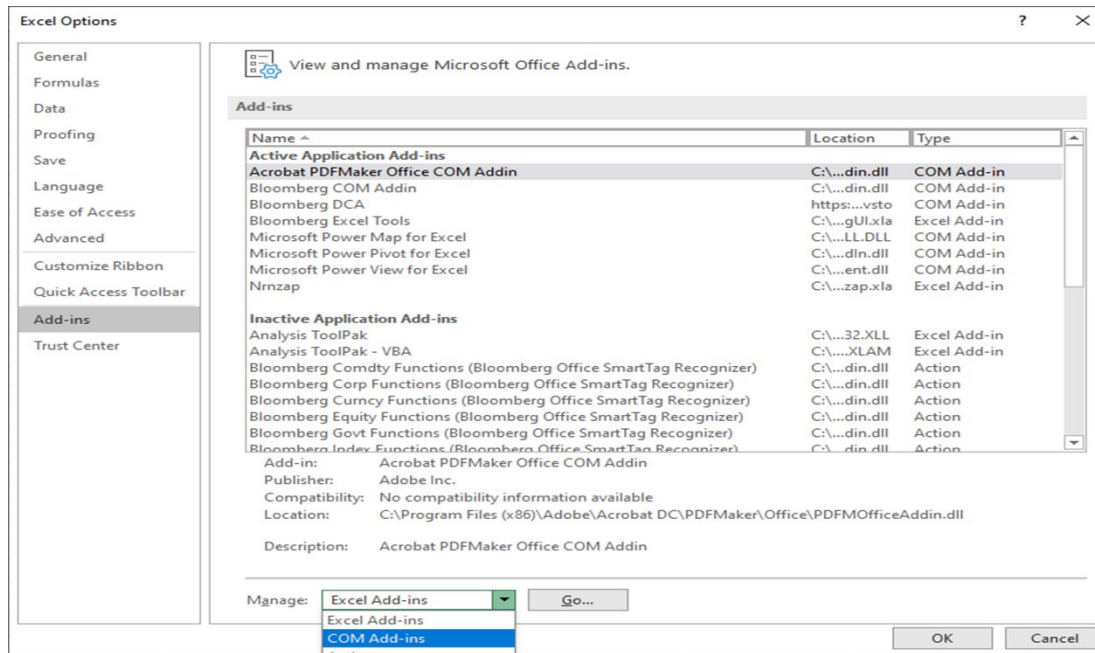
This issue is caused by remnant DCAP files from a previous version being installed.

Solution:

1. Remove all DCAP files from desktop, including any icons showing on the taskbar.
2. Remove registry files from below:
 - a. HKEY_LOCAL_MACHINE\Software\Microsoft\Office\Excel\Addins\BloombergLP.Dca.Excel
 - b. HKEY_LOCAL_MACHINE\Software\Wow6432Node\Microsoft\Office\Excel\Addins\BloombergLP.Dca.Excel
3. If DCAP has not been installed by IT, have IT install DCAP using their admin credentials.

9.2 Post-Installation Issues

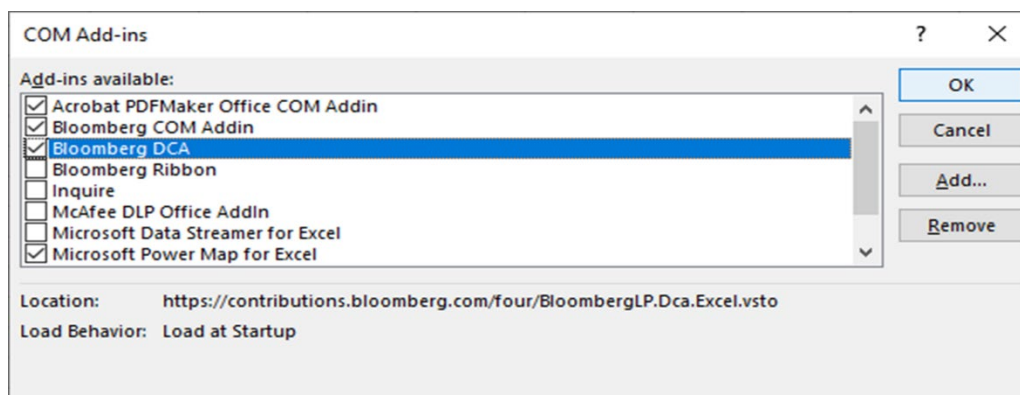
9.2.1 Missing Add-in



File → Options → Add-ins → Click on the “Manage” drop-down, and select “COM Add-ins” → Click on “Go”

If you find the add-in in the Disabled Application Add-ins section, go to Manage: Disabled Item, click in Bloomberg DCA and click on the Enable button.

Then go back to Manage: COM Add-ins and check the Bloomberg DCA add-in.



9.2.2 OK Button Grayed Out

Settings

☒ Direct TCP/IP ☐ Enterprise Platform

General Advanced

Default Record Type EQOPTION

Default Security Id Type CUSIP

Queue Size 10000

Decimal Digits 4

☒ Enable Debug Log

Logging Directory ...

☐ Enable Digital Throttling 0 mins

☐ Enable Monitor Throttling 0 mins

☐ Enable Page Throttling 0 mins

☒ Enable automatic software updates on startup

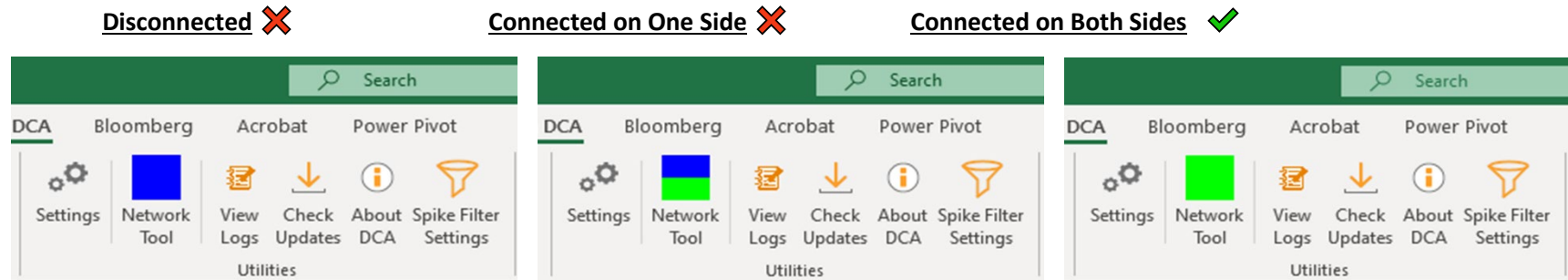
OK Cancel

If the OK button is grayed out, please ensure that the Logging Directory is filled in.

Click on the “...” to select the folder where DCA should store logs.

9.3 Connectivity Issues

The state of the connection can be monitored directly in the Bloomberg DCA ribbon in Excel with the Network Tool button.



DCAP connects to two separate production servers for redundancy, so each half of the “Network Tool” icon indicates connectivity status to one server. In the images above, green indicates an active connection and blue indicates no connection.

Your configured DCAP IP addresses and port should automatically be populated with the values you see in the General tab of the configuration screen. Click on the Run Test button. This will run ping, tracert and telnet to the selected IPs/Ports. The results of the tests should display in the Details section of the screen. The following images show samples of test results for successful and unsuccessful connections.

Successful Connection

The screenshot shows the 'DCA Network Diagnostics' window. Under 'DCA Configuration', the Primary IP is 69.191.193.175 and the Secondary IP is 69.191.229.120, both with Port 11011. The 'Run test' button is highlighted with a blue border. The 'Details' section shows two successful connection tests for both the Primary and Secondary IP addresses.

DCA Network Diagnostics

DCA Configuration

Primary IP : 69.191.193.175 Port : 11011

Secondary IP : 69.191.229.120 Port : 11011

Run test Clear Copy to Clipboard

Details

Connection Test 1 of 2: Primary IP
Attempting to connect to 69.191.193.175:11011
==> Successfully connected

Connection Test 1 of 2: Secondary IP
Attempting to connect to 69.191.229.120:11011
==> Successfully connected

Unsuccessful Connection

The screenshot shows the 'DCA Network Diagnostics' window. Under 'DCA Configuration', the Primary IP is 127.0.0.1 and the Secondary IP is 127.0.0.1, both with Port 11011. The 'Run test' button is disabled. The 'Details' section shows two failed connection tests for both the Primary and Secondary IP addresses. Below the details, a 'Test Results' section provides troubleshooting advice.

DCA Network Diagnostics

DCA Configuration

Primary IP : 127.0.0.1 Port : 11011

Secondary IP : 127.0.0.1 Port : 11011

Run test Clear Copy to Clipboard

Details

Connection Test 1 of 2: Primary IP
Attempting to connect to 127.0.0.1:11011
==> Unable to establish connection to 127.0.0.1:11011

Connection Test 1 of 2: Secondary IP
Attempting to connect to 127.0.0.1:11011
==> Unable to establish connection to 127.0.0.1:11011

Test Results

Unable to establish connection to both of the Bloomberg DCA servers.
DCA needs to connect to both Primary and Secondary IP addresses to work normally.

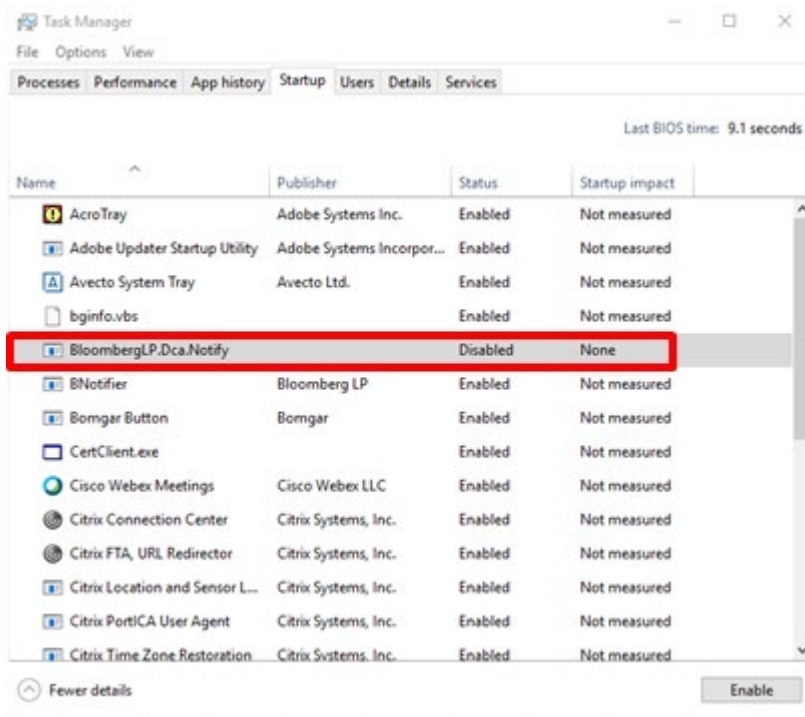
Please consult with your IT administrator about the following common causes:

1. Your network firewall is blocking outgoing connections to Bloomberg
2. Your antivirus software is blocking outgoing connections to Bloomberg
3. Your network is not correctly configured to allow connections to Bloomberg

Bloomberg DCA servers do not block any incoming network connections.

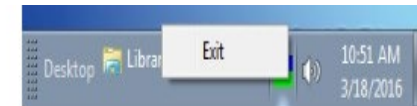
If your connection is unsuccessful, please check the description in the Test Results and consult with your firm's Networks team for troubleshooting. Bloomberg accepts all incoming connections on these IP addresses, and no whitelisting is needed on our part.

9.3.1 Switching off DCA Notification Tool



With newer versions of DCAP, users will not see the DCA Notification tool on the taskbar. This tool has been known to cause connectivity issues in some environments.

To close this tool, right-click on the icon in the taskbar and select Exit. Next, run Task Manager → Startup tab → Right-click on BloombergLP.Dca.Notify → Disabled



9.3.2 Changing to a different PC

If you have changed to a new PC and wish to use your existing trader ID, please use the self-service options to reset your trader ID from the Bloomberg Terminal. For more information, please refer to the [Self-Service](#) section.

10 Self-service tools for Trader ID Management

As mentioned in the Configuring DCAP section, a valid trader ID/Password combination is required to publish data to Bloomberg. This ID/Password combination is specific to a particular Windows login on each PC. Bloomberg provides tools for contributors to manage their Trader IDs using the Terminal.

Your Bloomberg Contributions Account Manager will enable one or more users within your firm as Admins, and these users will be able to manage the firm's Trader IDs.

There are three operations that these tools allow:

1. Creating a new Trader ID: When additional ID/Passwords are required for new users, or when logging in from a different machine/Windows account.
2. Deleting an existing Trader ID: When a certain Trader ID is no longer necessary.
3. Reset an existing Trader ID: Resetting a Trader ID will associate that ID to the first PC that connects to Bloomberg after the reset. Use this when you change to a new PC/Windows login or after network changes.

10.1 Create Trader ID

1. Run DCAB <GO> on the Bloomberg Terminal. (Please ensure admin rights are enabled for your UUID. Otherwise, please reach out to your Contributions Account Manager).
2. On the DCAB screen, click on the Create Trader button on the top left (**Image 1**). If you are an admin for more than one feed, please ensure you select the correct feed from the drop-down as shown in **Image 2**.

Image 1

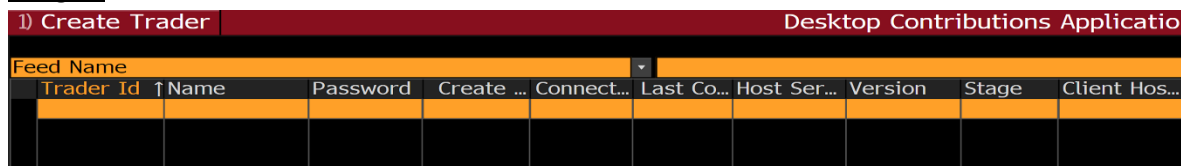
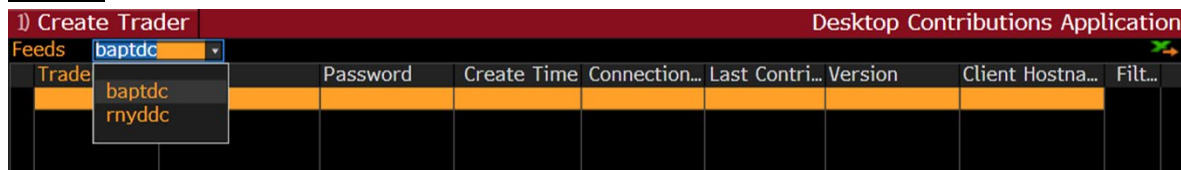


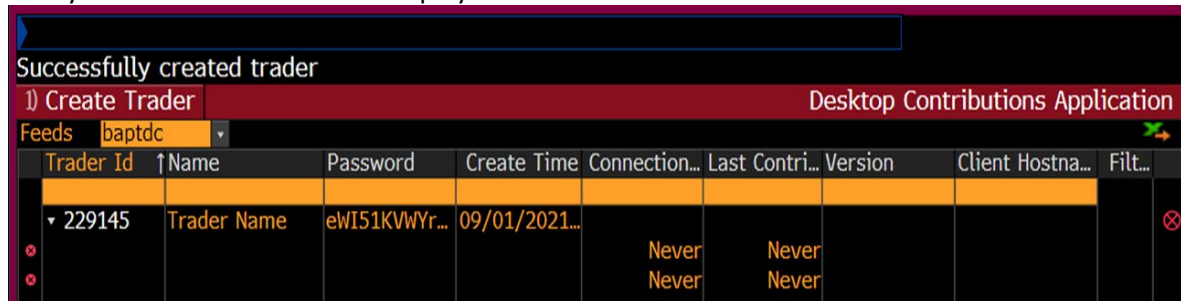
Image 2



3. Click on **Create Trader** and key in the Trader Name and click Submit.



4. Once the Trader ID is created you will see the message "Successfully created trader," and the newly created Trader ID will be displayed in the list.



10.2 Delete Trader ID

1. Run DCAB <GO> on the Bloomberg Terminal.
2. Right-click on the Trader ID that you want to Delete and select **Delete Trader**.

1) Create Trader

Desktop Contributions Application

Feeds

baptdc

Trader Id	Name	Password	Create Time	Connection...	Last Contri...	Version	Client Hostna...	Filter...
▼ 229145	Trader Name	eWI51KVWYr...	09/01/2021...					
				Never	Never			
				Never	Never			

3. Click on Submit on the prompt "Are you sure you want to delete the trader?"

baptdc : Delete Trader (229145)

Are you sure you want to delete the trader?

1) Submit

99) Cancel

- Once the Trader ID is deleted you will see the message “Successfully deleted trader.”

[illegible]

10.3 Reset Trader ID

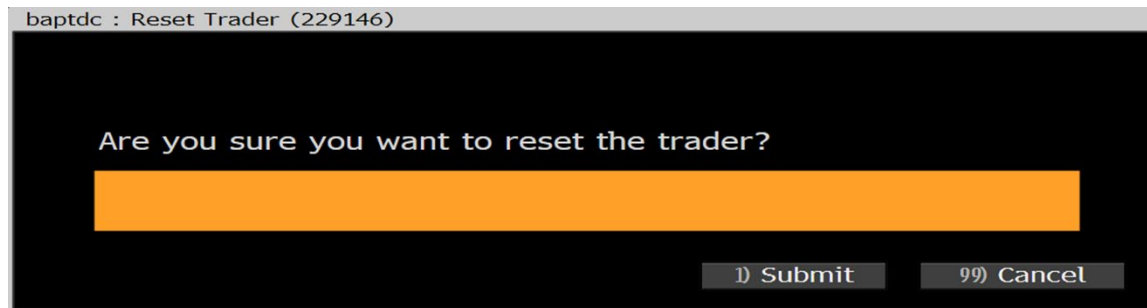
1. Run DCA <GO> on the Bloomberg Terminal.
2. Right-click on the Trader ID that you want to reset and select **Reset Trader**.



The screenshot shows a Bloomberg Terminal window titled "Deskto". It displays a table with columns: Feed Name, Trader Id, Name, Password, Create T..., Connect..., Last Co..., and Host Ser... The first row is selected, showing Trader Id 229146 and Name Trader. A context menu is open over the first row, with options: Expand All, Collapse All, Modification History, Reset Trader (highlighted), Copy Selection, and Copy "Trader Name 1".

Feed Name	Trader Id	Name	Password	Create T...	Connect...	Last Co...	Host Ser...
	229146	Trader	5PT2...	09/01/2...	Never	Never	UNKNOW...
					Never	Never	UNKNOW...

3. Click on Submit on the prompt "Are you sure you want to reset the trader?"



The screenshot shows a confirmation dialog box titled "baptdc : Reset Trader (229146)". The dialog contains the text "Are you sure you want to reset the trader?" and a large orange rectangular input field. At the bottom, there are two buttons: "1) Submit" and "99) Cancel".

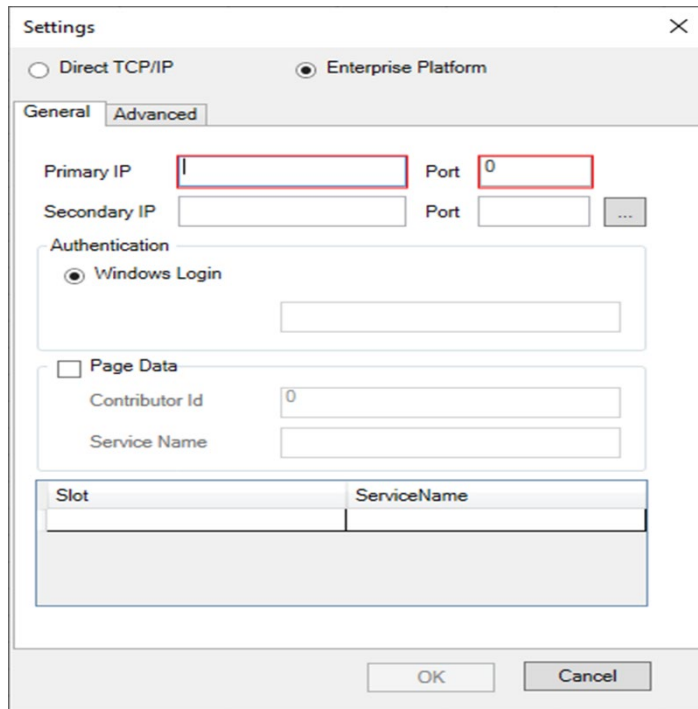
baptdc : Reset Trader (229146)

Are you sure you want to reset the trader?

1) Submit 99) Cancel

11 DCAP for Enterprise Platform

The **Enterprise Platform** option should be selected when you are using the DCAP-DDM method to connect and contribute. Your system administrator will provide all the pertinent field values, but the following fields will need to be set up before proceeding:



The screenshot shows the 'Settings' dialog box with the 'Enterprise Platform' radio button selected. The 'General' tab is active. The 'Primary IP' and 'Port' fields are highlighted with red boxes. The 'Port' field contains the value '0'. The 'Secondary IP' and 'Port' fields are empty, with an ellipsis button next to the 'Port' field. The 'Authentication' section has the 'Windows Login' radio button selected. Below it is an empty text field. The 'Page Data' section has a checkbox that is not selected. Below it are 'Contributor Id' and 'Service Name' text fields, both containing the value '0'. At the bottom is a table with two columns: 'Slot' and 'ServiceName'. The table is empty. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Slot	ServiceName
------	-------------

Primary/Secondary IP – An Enterprise Platform configuration consists of at least two appliances/servers. This setting requires that the IP addresses and ports are stipulated for the Primary and Secondary devices. The Port is typically 8196. If there are additional servers, these should be configured by clicking on the ellipsis button.

Authentication – This setting configures whether the DCAP Excel add-in will use entitlements based on the user's Windows login, or an Active Directory object (e.g., "mail"). The above settings ensure that the DCAP Excel add-in can connect to the Enterprise Platform with the appropriate credentials. Once this has been achieved, there is a need to set up the Enterprise Platform *services* that will be used by DCAP

formulas. These *services* allow the DCAP formulas to target different asset classes using corresponding pricing sources (where applicable).

Page Data – If you need to publish GPGX/text pages using the PLContribPage() formula, then this checkbox must be ticked. When checked, you must supply the Contributor Identifier (ConID) of the GPGX in question, and the service name that will be associated/leveraged by the PLContribPage() formula. An example might be: **//mybank/c-gpgx**.

Slot/ServiceName – Most DCAP formulas will require a reference to a *slot*. Typically, in a **Direct TCP/IP** environment, these slots will drive which contribution channels are used during pricing updates. Examples of slots include “Forex”, “Bond”, “Spread”, etc. In an **Enterprise Platform** configuration, these slots drive which Enterprise Platform *services* are targeted.

To set up a slot, double-click in a blank cell under the “Slot” column, then select one of the slots from the drop-down (e.g., Forex). Once selected, double-click in the cell to the right and proceed to type an Enterprise Platform service name, e.g., **//mybank/fx-treasury-desk**. No validation is performed at this point.

For every associated *slot* that will be in use in the spreadsheet/workbook, build an association with an Enterprise Platform service.

Click OK to complete the configuration. The DCAP Excel add-in will immediately attempt connections to the nominated servers.

12 Table 1 – Transaction Type

Transaction to Use in Formula	Value It Represents, Type	Transaction to Use in Formula	Value It Represents, Type
TRADE	Last Trade Price, Float	BIDFIRSTLEGDV01	CDS Leg 1 DV01 Bid, Float
BID	Bid, Float	ASKFIRSTLEGDV01	CDS Leg 1 DVO1 Ask, Float
ASK	Ask, Float	BECHGONDAYRT	Breakeven Change on Day, Float
ASKYIELD	Ask Yield, Float	BESPDIDRT	Bid Breakeven Spread, Float
BIDYIELD	Bid Yield, Float	BESPDASKRT	Ask Breakeven Spread, Float
VOLUME	Total Volume, Integer	BREAKEVEN_BNCHMRK	Breakeven Benchmark, String
RTOPENINTEREST	Open Interest, Integer	CDSCOUPONRT	CDS Underlying Coupon, Float
BLPSPRDIDBENCHBIDRT	Bid Yield Spread, Float	UPFRONTBIDREALTIME	CDS Upfront Bid, Float
BLPSPRDIDBENCHASKRT	Ask Yield Spread, Float	UPFRONTASKREALTIME	CDS Upfront Ask, Float
BLPSPRDIDBENCHMIDRT	Mid Yield Spread, Float	BIDFIRSTLEG	CDS Leg 1 Bid, Float
BLPRTSPRDIDBENCHLASTRT	Last Yield Spread, Float	ASKFIRSTLEG	CDS Leg 1 Ask, Float
SPREADBENCHMARKSECURITYTYPE	Benchmark Access Type (Table 2), Integer	BIDSECONDLEG	CDS Leg 2 Bid, Float
YIELD_SPREAD_BNCHMRK	Benchmark identifier, String	ASKSECONDLEG	CDS Leg 2 Ask, Float
EFPRATERT	EFP Rate, Float	BIDSECONDLEGDV01	CDS Leg 2 DV01 Bid, Float
EFPCHANGERT	EFP Rate Change on Day, Float	ASKSECONDLEGDV01	CDS Leg 2 DV01 Ask, Float
EFPBIDRATEREALTIME	EFP Bid, Float	CDSOPTIONDELTAREALTIME	CDS Option Delta, Float
EFPASKRATEREALTIME	EFP Ask, Float	CDSOPTIONREFERENCELEVELRT	CDS Option Reference Value, Float
EFPBIDCHANGEREALTIME	EFP Bid Change on Day, Float	REPOVWAPREALTIME	Repo VWAP, Float
EFPASKCHANGEREALTIME	EFP Ask Change on Day, Float	REPOVWAPVOLUMEREALTIME	Repo VWAP Volume, Float
EFP_BNCHMRK	EFP Benchmark, String	FUNDNETASSETVALRT	Fund NAV, Float
BESPDIDRT	Mid Breakeven Spread, Float	PRICESCALINGFACTOR	Price Scaling Factor, Integer (from 1 to 7)
VOLUMESCALINGFACTOR	Size Scaling Factor Integer (from 1 to 7)		
SOURCE_ASK_DISCOUNT_MARGIN (Requires DCAP version 4.1.0.1 and up)	FRN Ask Discount Margin, Float	BID_ASW_SPREAD (Requires DCAP version 4.1.0.1 and up)	Asset swap spread Bid, Float
SOURCE_BID_DISCOUNT_MARGIN (Requires DCAP version 4.1.0.1 and up)	FRN Bid Discount Margin, Float	ASK_ASW_SPREAD (Requires DCAP version 4.1.0.1 and up)	Asset swap spread Ask, Float

Transaction to Use in Formula	Value It Represents, Type	Transaction to Use in Formula	Value It Represents, Type
BID_G_SPREAD (Requires DCAP version 4.1.0.1 and up)	G spread Bid, Float	BID_OAS_SPREAD (Requires DCAP version 4.1.0.1 and up)	Option adjusted spread Bid, Float
ASK_G_SPREAD (Requires DCAP version 4.1.0.1 and up)	G spread Ask, Float	ASK_OAS_SPREAD (Requires DCAP version 4.1.0.1 and up)	Option adjusted spread Ask, Float
BID_I_SPREAD (Requires DCAP version 4.1.0.1 and up)	I spread Bid, Float	BID_Z_SPREAD (Requires DCAP version 4.1.0.1 and up)	Z spread Bid, Float
ASK_I_SPREAD (Requires DCAP version 4.1.0.1 and up)	I spread Ask, Float	ASK_Z_SPREAD (Requires DCAP version 4.1.0.1 and up)	Z spread Ask, Float

13 Table 2 - Access Type

Access Type	Identifier It Represents	Access Type	Identifier It Represents	Access Type	Identifier It Represents
01	CINS	13	Danish	27	Belgian Loan
02	Sedol 1	14	Austrian	28	UK Epic Code
03	Sedol 2	15	Luxembourg	29	Hong Kong
04	Euro Clear Number	16	Misc. Domestic	30	Equity Ticker & Exchange
05	Cedel	17	Norway	31	Ticker
06	Valoren	18	Euro Com	32	Tokyo Special
07	Wertpap	20	Italy	33	New ISIN
08	ISIN	21	Sweden	35	TBA Mortgage Security
09	Japanese	22	Japan Company	36	Malaysian
10	French	23	CUSIP	37	Parsekey
11	Belgian	24	Spain		
12	Dutch	26	Singapore	99	Clear Page

14 Table 3 – Record Type

Record Type	Value Represents
FOREX	Currency
Bond	FIXEDINCOME
ODDBOND	ODDLLOT
Slot41- Slot49	Additional slots
Special	Special

15 Table 4 – SecurityID Type

SecurityID Type	SEDOL	WPKN
	ISIN	FRENCHNUM
	CUSIP	JAPANNUM
	TICKER	OPTION
	VALOREN	

16 Table 5 – Yellow Key

YellowKey	Value Represents
1	Comdty
2	Equity
3	Muni
4	Pfd
5	Client
6	M-Mkt
7	Govt
8	Corp
9	Index
10	Curncy
11	Mtge

17 Table 6 – Error Messages

Error Message	Functions Applicable	Description
Error: queue is full	PLContribPage PLContribQuote PLSendHistory PLMonitorFull PLBenchmark	The DCAP local PC queue is full. This can be caused by connectivity issues or the contribution data rate exceeding the capacity of the software for an extended period of time.
Skip Page	PLContribPage	The referenced value has changed, but the data has not been sent to Bloomberg because the Auto Update Page flag is not on and the Refresh Page button in the DCAP ribbon has not been clicked to send the data.
Invalid Product Code	PLContribPage	The value assigned to the ProductCode parameter in the formula is invalid.
Invalid Page Number	PLContribPage	The value assigned to the PageNumber parameter in the formula is invalid.
Skip Digital	PLContribQuote	The value has changed, but the data has not been sent to Bloomberg because the Auto Update Digital flag is not on and the Update Digital button in the DCAP ribbon has not been clicked to send the data.
Invalid Transaction Type	PLContribQuote PLSendHistory	The value provided in the TransactionType parameter in the formula is not supported.
Invalid Security Id Type	PLContribQuote PLSendHistory	The value provided in the SecurityIdType parameter in the formula is not supported.

Error Message	Functions Applicable	Description
	PLMonitorFull PLBenchmark	
Invalid SecId Length	PLContribQuote PLSendHistory PLMonitorFull PLBenchmark	Length of the string provided in SecurityId parameter in the formula is not consistent with the value provided in the SecurityIdType (e.g., ISIN should be 12 characters long)
Invalid Record Type	PLContribQuote PLSendHistory	The value provided in the RecordType parameter in the formula is not supported.
Invalid condition code	PLContribQuote	The value provided in the ConditionCode parameter in the formula is not supported.
Duplicate Value	PLContribQuote PLSendHistory	The update is a duplicate and has not been sent.
Blank Skipped	PLContribQuote PLSendHistory	The cell referenced in the Value parameter in the formula is blank/empty.
Invalid Date	PLSendHistory	The value provided in the PastDate parameter in the formula is not supported.
Skip History	PLSendHistory	The referenced value has changed, but the data has not been sent to Bloomberg because the Update History button in the DCAP ribbon in Excel hasn't been clicked to send the data. Note that PLSendHistory is NOT subject to any Auto Update flags and the data needs to be pushed out manually with the Update History button in the DCAP ribbon in Excel.

Error Message	Functions Applicable	Description
Invalid Access Type	PLMonitorFull PLBenchmark	The value provided in the AccessType parameter in the formula is not supported.
Invalid Yellow Key	PLMonitorFull PLBenchmark	The value provided in the YellowKey parameter in the formula is not supported.
Invalid Benchmark Access Type	PLBenchmark	The value provided in the BnchmkAccessTyp parameter in the formula is not supported.
Error: client isn't initialized	PLContribPage PLContribQuote PLSendHistory PLMonitorFull PLBenchmark	Error appears when the user has not configured or has incorrectly configured their Trader Id and Password in the Bloomberg DCA Settings screen.

The BLOOMBERG TERMINAL service and Bloomberg data products (the "Services") are owned and distributed by Bloomberg Finance L.P. ("BFLP") except that Bloomberg L.P. and its subsidiaries ("BLP") distribute these products in Argentina, Australia and certain jurisdictions in the Pacific islands, Bermuda, China, India, Japan, Korea and New Zealand. BLP provides BFLP with global marketing and operational support. The following are trademarks and service marks of BFLP, a Delaware limited partnership, or its subsidiaries: BLOOMBERG, BLOOMBERG ANYWHERE, BLOOMBERG MARKETS, BLOOMBERG NEWS, BLOOMBERG PROFESSIONAL, BLOOMBERG TERMINAL and BLOOMBERG.COM. Absence of any trademark or service mark from this list does not waive Bloomberg's intellectual property rights in that name, mark or logo. All rights reserved.