

MCEGOLD[®]

GETTING STARTED GUIDE

Revolutionizing Electrical Reliability





WELCOME TO MCEGOLD

This document is a quick overview of the MCEGold® Version 3.0 software. Detailed information can be found in the Chapter 3 of the Product Support Manual. The Product Support Manual is available within the MCEGold program by selecting Help, Product Manual.

MCEMAX® powered by MCEGold has several versions, therefore your tester may not have some of the functions described in this document.

Note: To assist you in locating a specific area of interest in this document, an index is provided on page 28.

STARTING MCEGOLD

1. To start MCEGold, click on the MCEGold icon  on the desktop or from the task bar select Start, All Programs, PdMA Corporation, MCEGold.
2. At the Login window (Figure 1) select the site/database by using the browse button ().
3. Select the Login Mode (Stand Alone or Network), Language (English is the default), and Display Mode (MCEGold or MCEGold Lite), from the drop down lists and click **OK**.

Note: MCEGold Lite is a simplified interface designed principally to collect data. A WatchList must be set up in MCEGold to use MCEGold Lite. See Chapter 3 of the Product Support Manual for full details. The Product Support Manual is available within the MCEGold program by selecting Help, Product Manual.

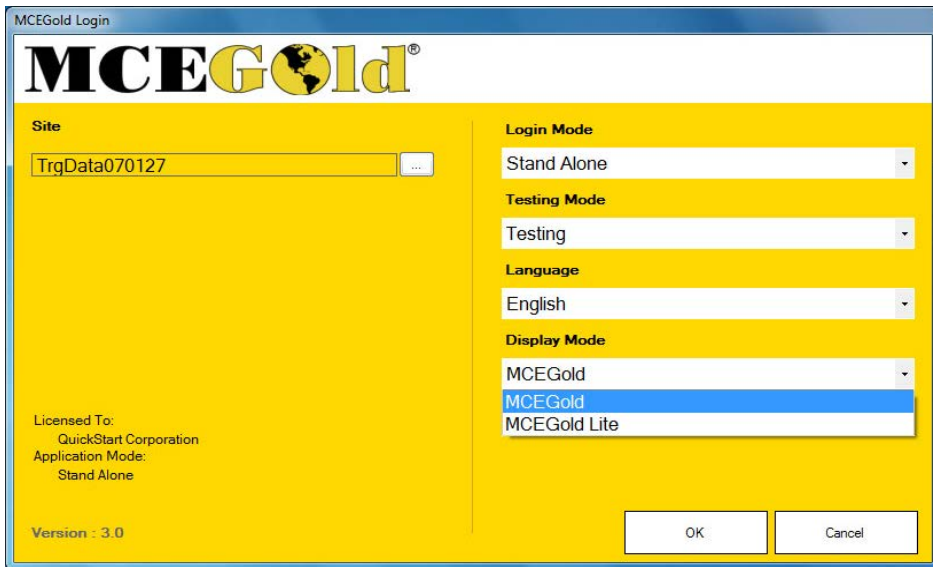


Figure 1: Login Window

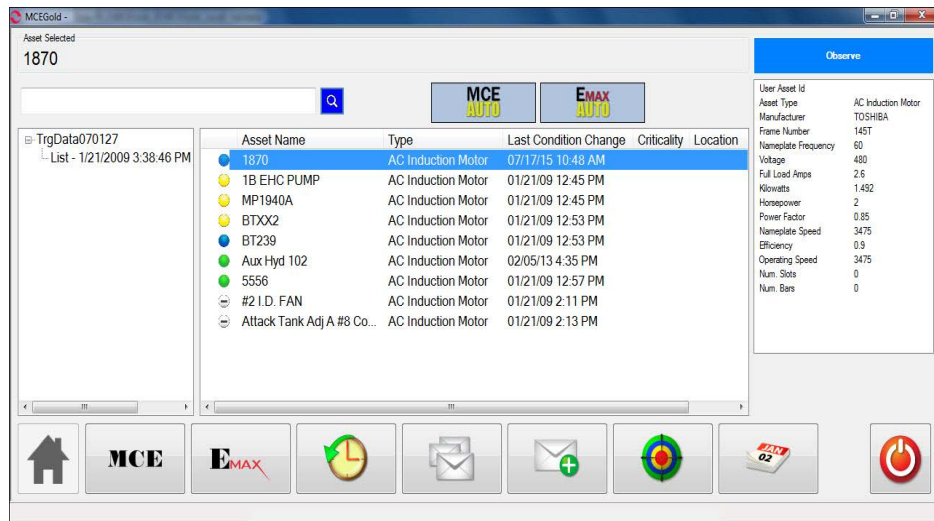
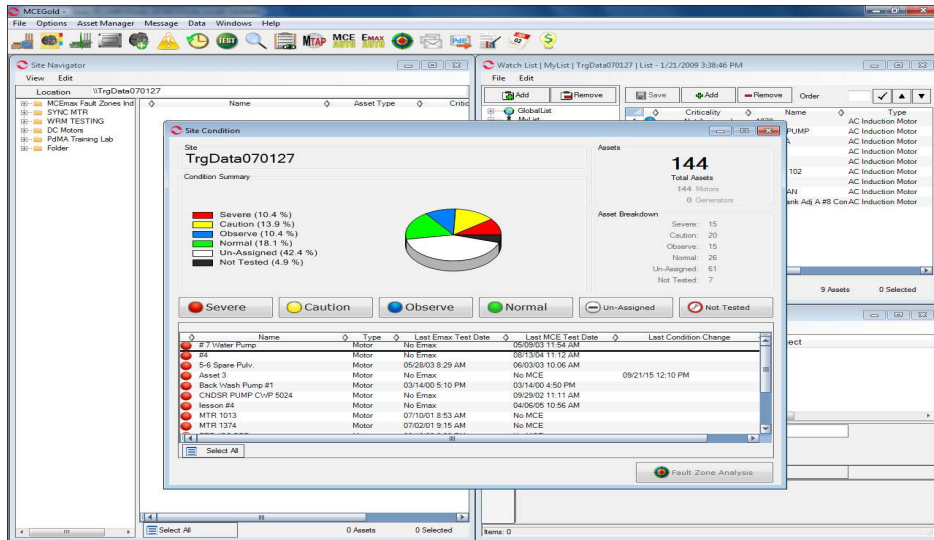
Home Window

The MCEGold Home window (Figure 2) opens displaying the Site Navigator, Site Condition, WatchList, and Message Center windows. The Home window operates like a standard window and multiple windows may be open at the same time.

The MCEGold Lite Home window is shown in Figure 3. MCEGold Lite is a simplified interface designed principally to collect data. You must have a WatchList set up to use MCEGold Lite. You may switch between full MCEGold and MCEGold Lite by exiting and restarting in the desired display mode.

Figure 2: MCEGold Home Window

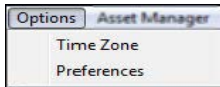
Figure 3: MCEGold Lite Home Window



The remainder of this guide refers to the full MCEGold software. Information regarding MCEGold Lite is in Chapter 3 of the Product Support Manual. The Product Support Manual is available within the MCEGold program by selecting Help, Product Manual.

Menu Items

File - Close, closes MCEGold.



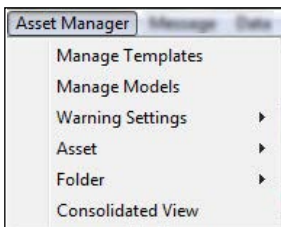
Options - In this window there are two choices, Time Zone and Preferences. Selecting Time Zone opens the Regional Settings window.

Time Zone changes the System Time Zone to a User Defined zone and changes the way the Date and Time are displayed to a User Defined format.

From the Time Zone tab, choose the desired time zone from the drop down list.

From the Date/Time tab, select either the System Date Time Format or User Defined option button. If the User Defined option is selected, choose the desired date and time formats from the drop down lists. Click **Apply** when the correct selections have been made. Click **OK** to close the Regional Settings window.

Preferences opens the Asset Management Preferences window. This window allows you to set a search limit (Search Results tab), change the default save location and control detaching the stand alone database when closing MCEGold (General tab). If you have a Workstation license and the computer is set up as a workstation, the default site, search by options, and on-screen keyboard functions can be selected using the Workstation Settings tab. After changes have been made click **Save** and **OK** in the Saved window.



Asset Manager - Use Asset Manager to setup the assets (motors) and folders that are displayed in Site Navigator. Under the Asset Manager the functions are Manage Templates, Manage Models (active only with

certain licenses), Warning Settings, Asset, Folder, and Consolidated View. Some of the functions may not appear until a folder or asset is selected.

Manage Templates (Figure 4 on page 6) allows you to develop templates for specific kinds of assets. By assigning a unique template to an asset the test results, alarm, and caution values are more meaningful.

To add a new template click **Add**, in the Add Template window select the asset type from the drop down list, then type in a Template Name. Click **Apply**. The template is added to the folder in the Templates display according to the asset type and the Add a New Template window remains open. Or click **OK**. The template is added to the folder according to the asset type and the Add a New Template window closes.

In the Manage User Templates window locate the Asset Type under the Templates tab, then highlight the new template name and adjust the Alert Alarms, Fault Zone Text, and Measurement Locations settings for the new template using the tabs in the area on the right and click **OK** or **Apply**.

The Assets tab, on the right hand side, displays a list of assets using the template highlighted in the Manage User Templates window Templates tab on the left hand side.

To copy an existing template, highlight the template in the Templates list, select Copy from the menu. Type in the new template name. Click **OK** or **Apply** (leaves the window open). The copied template is listed in the same folder as the original template.

To remove a template, highlight the template in the Templates list, click **Remove**. You will be asked to verify that you want to remove the template, click **Yes**. The software will provide a list of assets assigned to that template to be reassigned. You will be informed when the template is removed. Click **OK**.

To change the template name, highlight the template in the Templates list, enter the new name in the Template Name text box (upper right hand side of window), click **OK** or **Apply** to save the change.

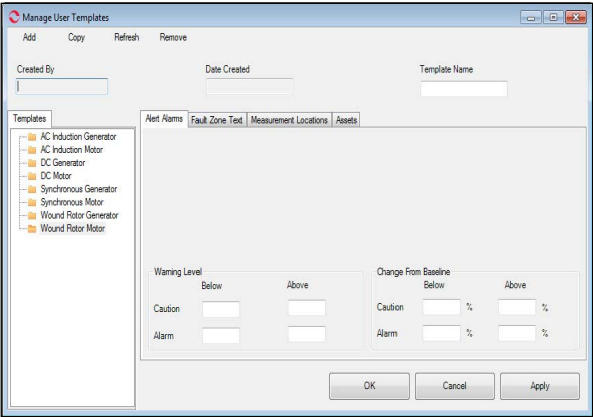
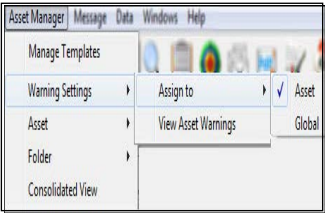


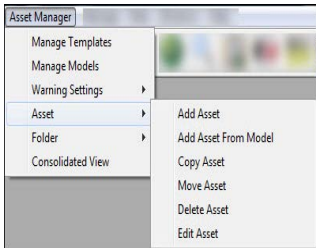
Figure 4: Manage User Templates



Warning Settings (displays only when an asset is highlighted), **Assign to** allows you to choose either a template (Global) or keep the asset specific warning (Asset). Certain licenses also have a Model option active.

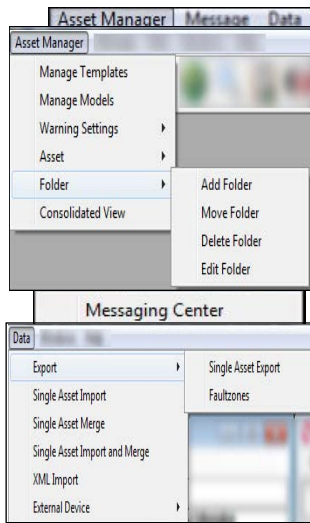
Warning Settings, View Asset Warning opens the Warning Settings window for the highlighted asset. Changes may be made in this window and saved.

Warning Settings, View Global Warning is active and will display the template if the selected asset has been assigned a template.



Asset allows you to add an asset, add an asset from the model if active, copy, move, delete, and edit an asset. Right clicking on an asset in the Site Navigator allows you to Add Asset, Add Asset From Model (if active), Copy Asset, Move Asset, Delete Asset, Edit Asset, Show Test History, and Show Warning Settings.

Folder allows you to add, move, delete, and edit a folder. Right clicking on a folder in the Site Navigator opens a window that allows you to Add Asset, Add Asset from Model (if active), Add Folder, Move Folder, Delete Folder, and Edit Folder.



Consolidated View opens the Asset Assignment Summary window. Highlight an asset/s in the Site Navigator and open the Consolidated View. A list of the asset/s with their Model/Template Name, Warning Assignment, Warning Status, and Asset Type displays.

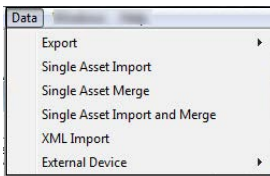
Message – Message opens the Message Center window if it has been closed. It typically opens when MCEGold is first started. *See the Message Center section in the More Details section.*

Data – The Data submenus allow a data file to be created so that it can be exported or imported to or from another computer electronically or combine two data files for the same asset.

Export, Single Asset Export. Highlight a single asset in Site Navigator, select Data, Export, Single Asset Export. When the file is exported to the selected location, the Single Asset Export message box tells you it is complete.

NOTE: Data exported from 3.0 cannot be imported into older MCEGold versions.

Export, Fault Zones allows the fault zone analysis to be exported into an XML interface file, to be used by other maintenance software such as SAP[®], Maximo[®], or Indus.

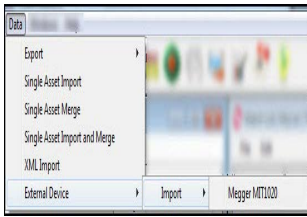


Single Asset Import is used to retrieve an asset data file that has been sent to you electronically. Select a folder in the Site Navigator, then select Data, Single Asset Import. Locate the .pdp file in the window and click **Open**.

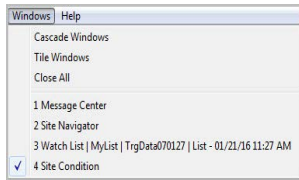
Single Asset Merge function is used to combine two assets into one. Highlight the asset the data is being merged into, then select Single Asset Merge. When the Merge Asset window opens, highlight the second asset and click **OK**. When the merge is complete the second asset will be automatically deleted from the database. Note: Assets must be of the same type in order to be merged.

Single Asset Import and Merge imports the data from a pdp file and directly merges it with the selected asset. A new asset will not appear on the database, the data is directly merged into an existing asset. Note: Assets must be of the same type in order to be merged.

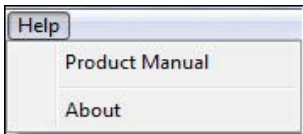
XML Import imports the nameplate information only of an asset via XML format. No data is imported. The nameplate information is automatically imported into MCEGold as a new asset.



External Device, Import, Megger is used to import PI data collected using an external device, the Megger MIT1020 insulation tester.



Windows - Cascade Windows and Tile Windows are the two options on how the open windows are displayed. Close All closes all open windows. The open windows are listed. A check mark indicates which window is active.



Help - The Help menu provides access to the Product Support Manual and About information.

Product Manual displays the chapters of the Product Support manual and Appendixes in PDF form.

About displays the version number, licensing and technology information, shipping address, and how to reach technical support.

Tool Bar Icons

The Tool Bar icons are designed to quickly access the common MCEGold functions with one click.



Site Navigator provides a graphical view of the sites, folders, and assets/motors. Use this icon to restore Site Navigator to the Home window.



Asset Summary provides Last Test Dates, Asset Condition (located above the Nameplate information), Nameplate, and the Fault Zone information for the selected asset.



Site Condition automatically displays when MCEGold starts and displays selected information about all of the assets within the selected site. The data automatically updates when a different site is chosen. Use this icon to restore Site Condition to the window.



Nameplate displays the nameplate data for the selected asset so you can view or modify the data. Some fields are automatically entered by the tester and cannot be modified. An area to assign a criticality code to the motor is provided. The code is limited to four characters, any combination of alpha and numeric.



Add Asset

Note: Throughout MCEGold, the term asset is used to denote a motor or generator.

1. Click the Add Asset icon on the toolbar or select Asset Manager, Asset, Add Asset from the menu, or right click on a folder in the Site Layout and select Add Asset.
2. Select An Asset Class from the drop down list. Choices are Generator or Motor.
3. Select An Asset Type from the drop down list. Choices are driven by the asset class selected.
4. Fill in the required fields, the orange text boxes, being sure to select every tab checking for required fields.
5. Click **OK** to add the asset and **OK** in the Asset Added Successfully window.



Warning Settings displays the warning settings for the selected asset. If the asset hasn't been assigned a template (using the Asset Manager, Warning Setting from the menu) the default settings are displayed. Changes to the settings can be made here.



Test History displays the MCE and EMAX test data, nameplate information, and Condition Code for the selected asset.



Test Selection opens the Test Selection window that is used to select individual MCE and EMAX tests for the selected asset. If an automatic combination of tests are preferred the MCE Auto or EMAX Auto icons can be chosen from the toolbar. *See the Testing section for more information.*



Search opens the Asset Search window to the simple search. For a more detailed search click the **Advanced** button to open the Advanced Search window. You may return to the simple search by clicking the **Simple Search** button.



WatchList automatically displays when MCEGold starts. It allows you to set up lists of assets. The list may be of assets to watch for criticality purposes or to set up a service route for a technician. Use this icon to restore WatchList to the Home window. *See WatchList in the More Details section for more information.*



MTAP opens the *MTAP* configuration window. You must first select an asset before the icon is active. The window provides information if the asset is linked to an *MTAP* or allows you to manually link the asset to an *MTAP*.



MCE Auto automatically starts the Standard Test followed by the Polarization Index. At the end of the tests, after the results are saved, the Fault Zone Report is displayed. Before selecting the MCE Auto icon an asset must be highlighted on the Site Navigator. *See the Testing section for more details.*



EMAX Auto automatically starts the Rotor Evaluation, Eccentricity, Power, and Demod tests. At the completion, after the test results are saved, the Fault Zone Analysis window displays. Before selecting the EMAX Auto icon an asset must be highlighted on the Site Navigator. *See the Testing section for more details.*



Fault Zones displays the Fault Zone Report for the selected asset.



Message restores the Message Center to the Home window. The Message Center window automatically displays when MCEGold starts. In the Message Center you can enter messages, view messages, and delete messages for one or a list of assets. Use this icon to restore the Message Center to the window. *See the More Details section for more information.*



Export File opens the Create Export File window, which is used to create an export file for the selected asset. The export file is used to send data electronically.



Report opens the Report Selection window. *See the More Details section for more information.*




Scheduler opens the Asset Schedule Configurations window which is used to set up the selected asset for scheduled testing on a one-time or reoccurring basis. A detailed description of the Scheduler is found in Chapter 3 of the Product Support Manual.



Energy Analysis opens the Energy Cost Analysis window which analyzes operating and replacement cost for AC Induction Design B motors only. You must have the Module Activation Key to activate this function. A detailed description of the Energy Cost Analysis module is found in Appendix C of the Product Support manual.

MORE DETAILS

Site Condition

The Site Condition window opens when MCEGold is started or when the Site Condition icon  is selected from the toolbar.

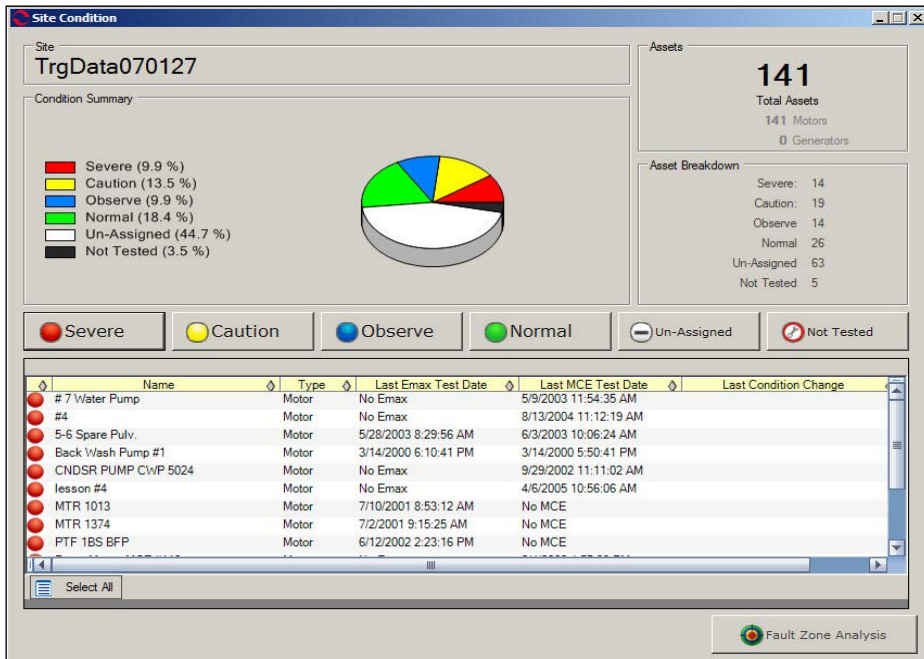
The Site Condition window (Figure 5 on page 14) provides an overview of the assets in the site including total number and percent in each condition. Clicking on a condition code button creates a list of assets in that condition and displays it in the lower section of the window. The window opens with the assets listed by name. The columns may be sorted by clicking on the diamond to the right of the column title. The diamond changes to a triangle. When the triangle is clicked the column reverse sorts. For example, click once, and the first asset is moved to last, click again and last asset is moved to first. Clicking on an asset name causes it to be located and highlighted on the Site Navigator and brings up messages in the Message Center.

Clicking the diamond to the right of the *Last EMAX Test Date* or the *Last MCE Test Date* sorts the assets by earliest to most recent test date. Click again and it reverse sorts.

Clicking the diamond to the right of *Type* or *Last Condition Code* causes the asset types to be grouped together or the assets to be sorted by earliest to most recent test date. Click again and it reverse sorts.

Clicking the Fault Zone Analysis button in the lower right corner opens the Fault Zone Report for the selected asset.

Figure 5: Site Condition Window

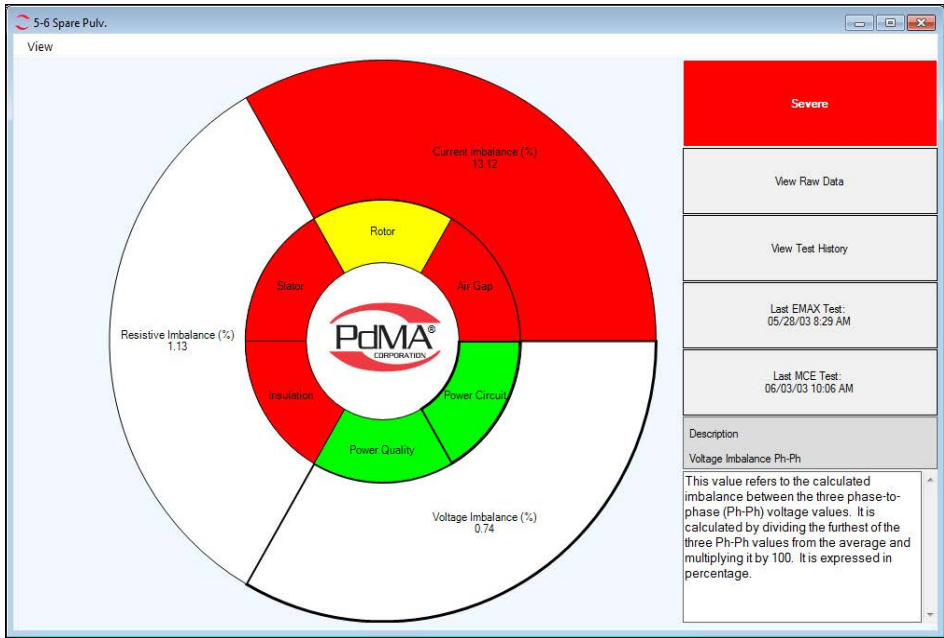


The Fault Zone Analysis window (Figure 6 on page 15) displays an ocular graph of the six fault zones color coded to their condition and the asset’s test values. Clicking on each fault zone displays the appropriate values for that fault zone. A description of that test value appears on the lower right side of the window. Clicking on the Condition Code button opens the Condition Code Update window allowing you to change the condition code. Clicking on the other buttons opens the appropriate window to display the selected asset’s test values.

View, Refresh returns to the original ocular graph/view.


View, Fault Zone List View displays the Fault Zone Analysis in a list format.

Figure 6: Fault Zone Analysis Window



For a full description of the Fault Zone Analysis window see Chapter 3 of the Product Support Manual.

WatchList

The WatchList window opens when MCEGold is started or when the WatchList icon  is selected from the toolbar.

The WatchList window (Figure 7 on page 16) can be used for multiple purposes. For example, it can be a list of critical motors or a service route for the technician or both. The WatchList can contain lists developed by multiple users.

The window consists of three sections, the upper left section displays the various lists created by the user, the

lower left section gives the details of the active list, and the large section to the right displays the assets in the active list. Due to computer screen size limitations the complete WatchList window is not visible. To view the complete window it is necessary to maximize the window using the square maximize button in the upper right or scroll left and right using the scroll bar across the bottom.

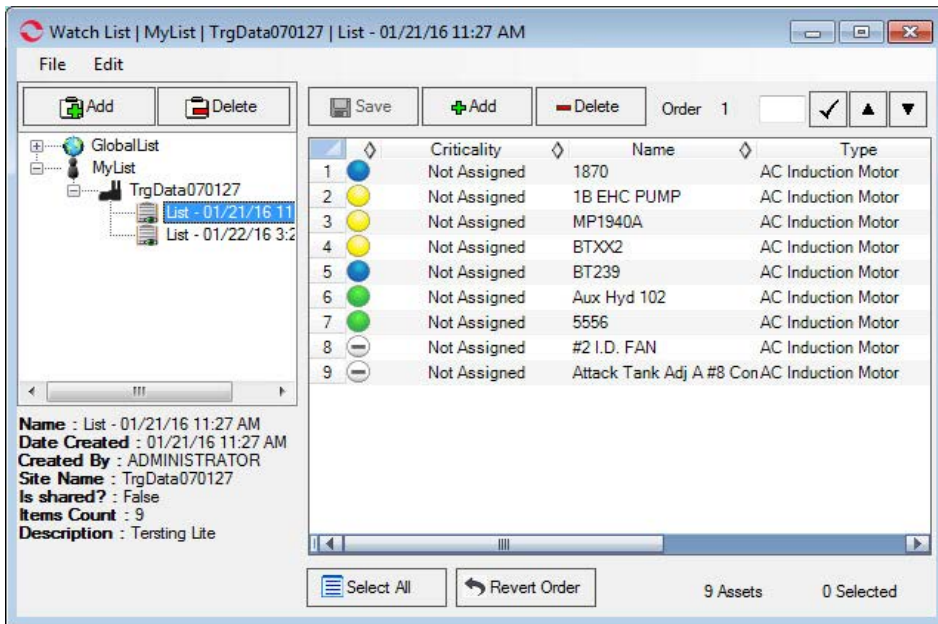


Figure 7: WatchList Window

Create a WatchList

1. In the WatchList window (upper left section), click



2. In the WatchList Create window (Figure 8) fill in the name for your list, check the Shared box if you wish others to be able to view or make changes to this list.

Enter a description. All other information is automatically entered for you. Click **Create**. The



icon and list name will appear on the layout displayed in the upper left section of the WatchList window. The lower left section gives the details of the WatchList.

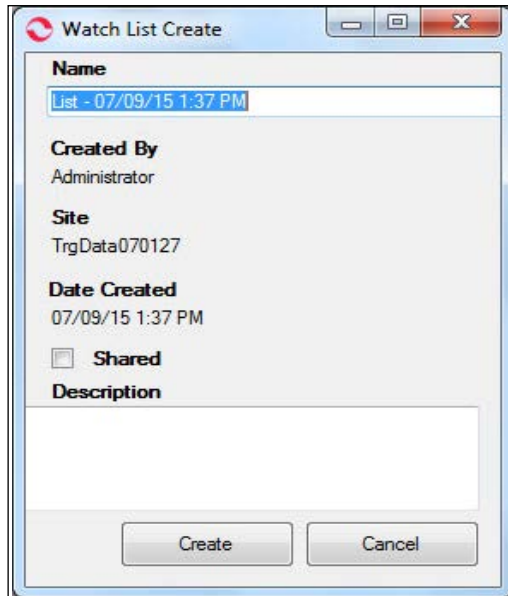
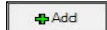


Figure 8: WatchList Create Window

Add Asset to WatchList

1. Highlight the asset in the Site Navigator window.
2. Highlight the WatchList name in the upper left section.

3. In the section above the asset list on the right, click



. The asset information is added to the WatchList.

Delete WatchList or Asset


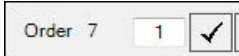




, found in the upper left section, deletes the highlighted WatchList and




, found above the asset list section on the right, deletes the highlighted asset from the WatchList.

Other Useful WatchList Information

- Save icon  saves the WatchList. If you do not save your changes, you will be prompted to save upon closing the WatchList or closing MCEGold.
- To move one asset to a different row/order, highlight the asset, enter the desired row/order number in the text box, and click the check button.  In this example the asset on line 7 will be moved to line 1.
- The Up and Down icons  move the highlighted asset up or down one level.
- You may change the order of the asset list by highlighting the number to the left of the asset and dragging it to a new location in the list or you may click on an asset and drag it to a new location.
- To return the asset list to its default order click the Revert Order button .
- Clicking on an asset name causes it to be located and highlighted on the Site Navigator.

Message Center

In Message Center you can enter, view, and delete messages for one asset or a list of assets. You can also view information for assets that have been scheduled for testing using the Scheduler Module. The Message Center window opens when MCEGold is started or when the

Message icon  is selected on the toolbar.

Note: Once a message is created it cannot be edited. It can be deleted, but no edits/changes can be made to it.

Procedure Overview


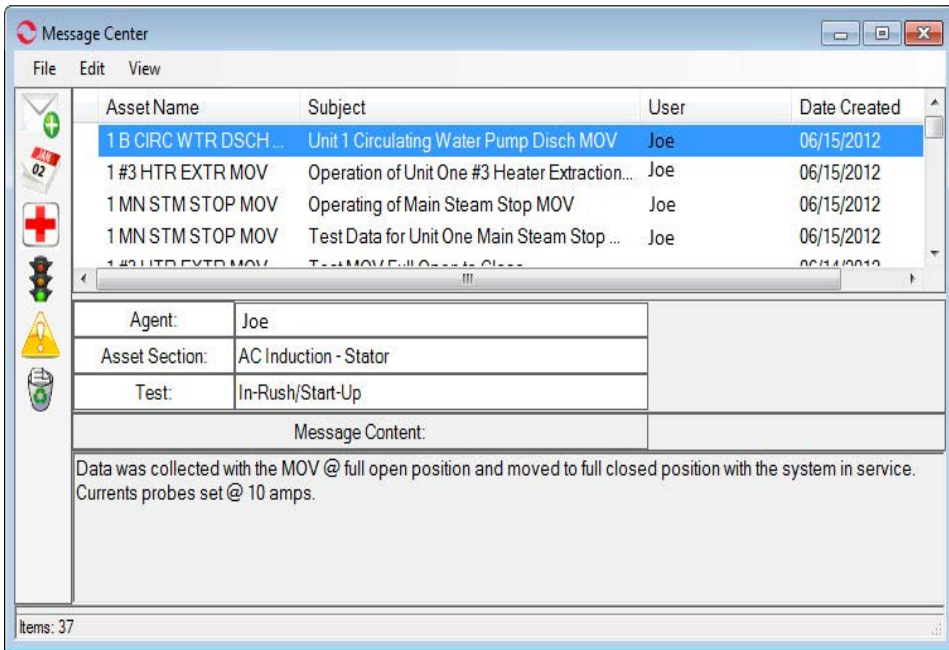
1. Select View and verify that Active Asset Only (default) is in the checked or unchecked position (which ever is desired).
2. When Message Center initially opens, the Asset Diagnostic  option is the default setting. If Active Asset Only is not checked in the View menu, a list of all the assets with messages will display. This is the view shown in Figure 9 on page 20. If Active Asset Only is checked, then the asset highlighted in Site Navigator is displayed, but only if it has messages associated with it.
3. If a list of messages is displayed, highlight a message from the resulting list.
4. Proceed with the desired action for the message using the File, Edit, View menu or the icons in the left pane.

Figure 9: Message Center




Messages

To view the message content, highlight the line that corresponds to the message. The information is displayed in the Message Content section below the list.

Condition Code. Messages are automatically generated when a condition is assigned or changed.

Warning Levels. Messages are automatically generated when a warning level is changed.

Schedules. Schedules set up using the Scheduler function are viewed in the Message Center by clicking the Schedules icon . A list of schedules displays and a Schedule menu, is added to the Message Center menus.

There are two choices for viewing scheduled jobs: single asset or all assets with scheduled jobs. The outcome is controlled by the Active Asset Only selection in the View menu (Figure 10).

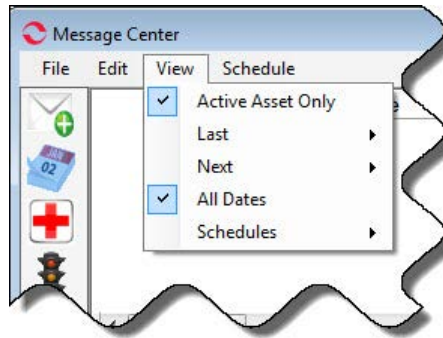


Figure 10: View, Active Asset Only


If Active Asset Only is checked (default) then only the scheduled jobs for the selected asset will appear when the Schedules icon is clicked.

If Active Asset Only is unchecked then scheduled jobs for all assets will appear when the Schedules icon is clicked.

Click the + sign to the left of the line to expand the line and view the details. Click the - sign to collapse the lines.

For more detailed information see Chapter 3 of the Product Support Manual.


Trash

Clicking the Trash icon  displays a list of deleted messages. You can restore them to their original location by highlighting the message and selecting Edit, Restore Message from the menu. To permanently delete the message, select Edit, Delete Message from the menu.

To refresh the Message Center window, close the window and reopen it.

Compose

Note: Once a message is created it cannot be edited. It can be deleted, but no edits/changes can be made to it.

Using Compose allows you to add a message or attach files to an asset's record. Compose can be reached by selecting File, Compose Message on the menu or clicking the Compose icon . The Compose Asset Message window appears as shown in Figure 11.

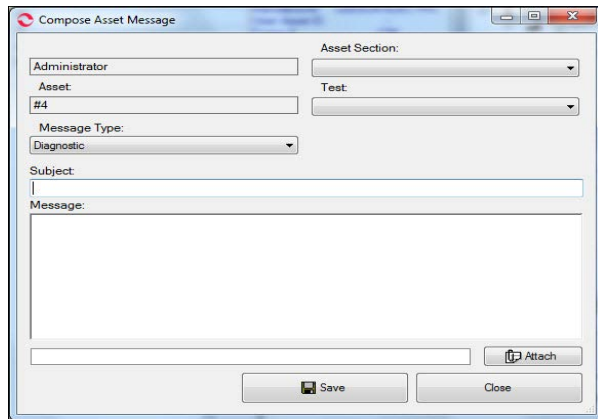


Figure 11: Compose Asset Message Window

Subject and message are required fields. After composing the message you may attach a file or graphic by using the Attach tab. When you are finished, click the Save tab.

Testing

Toolbar Testing Icons

There are three icons on the toolbar associated with testing.



Test Selection opens the Test Selection window so that you may setup the asset for testing if needed. To test select any one of the MCE or EMAX tests and click **Test**.



MCE Auto should only be selected if the asset has previously had the test setup performed. If needed, you may perform the test setup by clicking the Test function, entering the setup values and clicking **Save**.

Click MCE Auto and the Verify Test Information window opens. After verifying the Test Location and Temperature, click OK. The MCE Auto Test window opens and automatically runs the Standard test followed by the Polarization Index test. A status bar in the lower right corner charts the progress of testing and during the PI test a graph in the lower left corner displays the test results. When the tests are completed the results are saved and the Fault Zone Report displays. If you wish to add a message, use the Edit, Create Message menu located at the top of the Fault Zone Report window.




EMAX Auto should only be selected if the asset has previously had the test setup performed. If needed, you may perform the test setup by clicking the Test function, entering the setup values and clicking **Save**.

Click EMAX Auto and the Pre-EMAX Power Test Verification window opens. If data appears valid, click Continue. Verify the Test Location and click **OK**. The EMAX Auto Test window opens and automatically starts the Rotor Evaluation test, followed by the Eccentricity, Power, and Demod tests. At the completion the Test Status

window informs you that MCEGold is saving and storing test data. Then the Fault Zone Report window opens. If you wish to add a message, use the Edit, Create Message menu located at the top of the Fault Zone report window.

Reports

The Report Selection window (Figure 12) is reached by selecting the Report icon  on the tool bar.

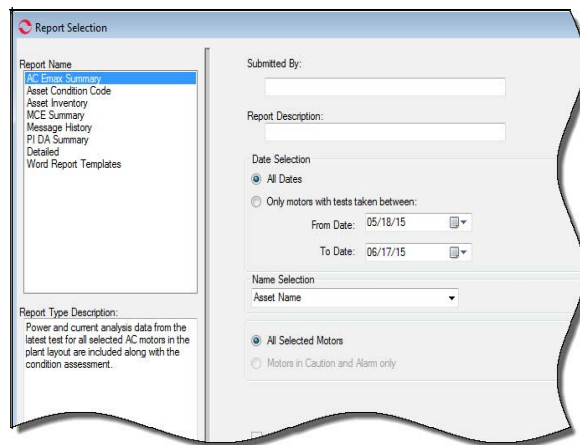



Figure 12: Report Selection Window

There are eight reports available: AC EMAX Summary, Asset Condition Code, Asset Inventory, MCE Summary, Message History, PI DA Summary, Detailed, and Word Report Templates.

Detailed instructions on using the reports are found in Chapter 3 of the Product Support Manual.

Search and Advanced Search

Search is reached through the Search icon  on the toolbar. Use this to search by Asset Name or User Asset ID. To search using more in depth criteria use advanced search. To reach Advanced Search, click the Advanced button on the lower right side of the Asset Search window. The Advanced Search window is shown in Figure 13. Search and Advanced Search are discussed in detail in Chapter 3 of the Product Support Manual.

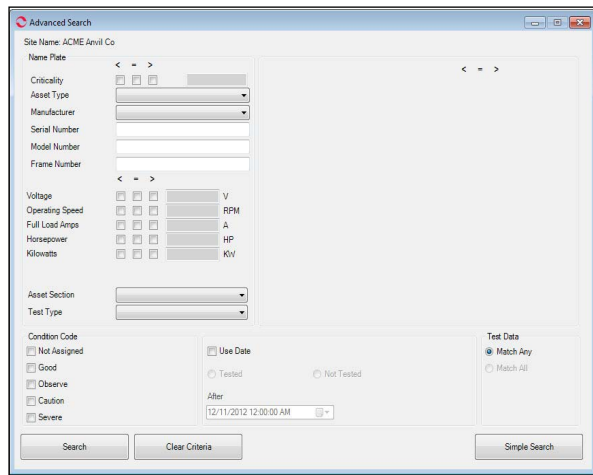


Figure 13: Advanced Search Window

Shutting Down MCEGold

MCEGold may be shut down by selecting File, Close from the menu or clicking the close button (red X) in the upper right corner. You will be asked to verify that you want to close MCEGold and, depending on the preference set in Asset Management Preferences, you may be asked if you want to detach the database.

Where to Get Help

Technical Support is available Monday through Friday, 8 A.M. to 5 P.M., EST. You may contact PdMA Technical Support by any of the following methods.

- Telephone: (813) 621-6463 ext. 2
- Fax: (813) 620-0206
- Email: techsupport@pdma.com
- Web site: www.pdma.com

Audio/Video Tutorials

There are tutorials located on the disc. Insert the disc. In the AutoPlay window select Open folder to view files. Locate the Video Tutorial_Rev_1 folder, then MCEGold tutorials, and double click on MCEGold Tutorials. From the Main Menu window double click on the desired topic.

Product Support Manual

Access the Product Support Manual by selecting Help, Product Manual. A window opens displaying each chapter in the manual as a PDF file. Double click the chapter you wish to view. You must have Adobe Acrobat Reader to view a PDF file. The free Reader can be downloaded from <http://www.adobe.com/products/reader.html>.

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