

MCEGold® Network Data Usage Guide

Note 2601

Data Optimization Considerations

When utilizing network software whether it is configured as an On-Premises Network or a Cloud Based (SAAS) software, excessive traffic should be avoided to prevent negative attention from IT, service restrictions, suspension of service or even excess usage fees.

Down syncing the entire network database of motors to your field tester is never a good idea. In the worst case you will exceed the size limits of the local SQL SVR on your field tester making the field tester inoperable. When departing the office with an MCEMAX Field Tester it is important to know whether you will have network access at your destination. If you have network access, you can minimize the number of motors that you down sync from the network to your field tester and refresh the local database with more assets as you know you will test them. If you are unsure about network access then you will want to down sync the motors you expect to test and if you get to your final destination and missed selecting one of the motors to test, then add it as a new motor from scratch on the field tester and merge the new data back into the original motor once you return to the network. If you are a cloud user, access to the network is only as far as the nearest public internet.

For MCEGold users, optimizing the sync preferences for up and down sync of data from the network database to a local field tester is a primary method to minimize excess usage.

Most of the data analysis occurs from a desktop with a large monitor to assist in more easily looking at multiple data windows. Therefore, the need to have a vast history to compare the most recent test to is not present. In case additional troubleshooting is warranted while in the field, having the baseline and last test is more than sufficient to compare the next test against. Additionally, the need for historical raw data (full spectrums and graphs) is rarely needed in the field. Our suggestion for minimizing network traffic is to select “Last baseline and test only”, and do not select “Copy test raw data”.

Messages from past technicians can be helpful in the field. However, if you do not feel you need them on the field tester while testing and instead will get access to them when you are connected to the network database for analysis then do not select “DownSync Messages”. Attachments are often pictures of previous failures or asset images that are not necessary for the technician to complete a test. If you do not feel you need them on the field tester while testing and instead will get access to them when you are connected to the network database for analysis, then do not select “Include attachments”.

Clearing deleted assets on UpSync is a good idea to minimize the chance of testing an asset that has been removed from the network database. Additionally, it takes up space on the local database. We recommend selecting “Clear deleted assets on UpSync”.

Refreshing local assets should only be necessary if you need the latest information from an asset such as troubleshooting messages or if the test selection/warning settings window has been changed since your last DownSync.

Adjusting DataSync Preferences



From the Network home page select the Sync Icon.

From the DataSync window select the Options tool to open the DataSync Preferences Window (Figure 1). Make your Test Options and other appropriate selection and press OK. The following window was captured from MCEGold 3.2.9.

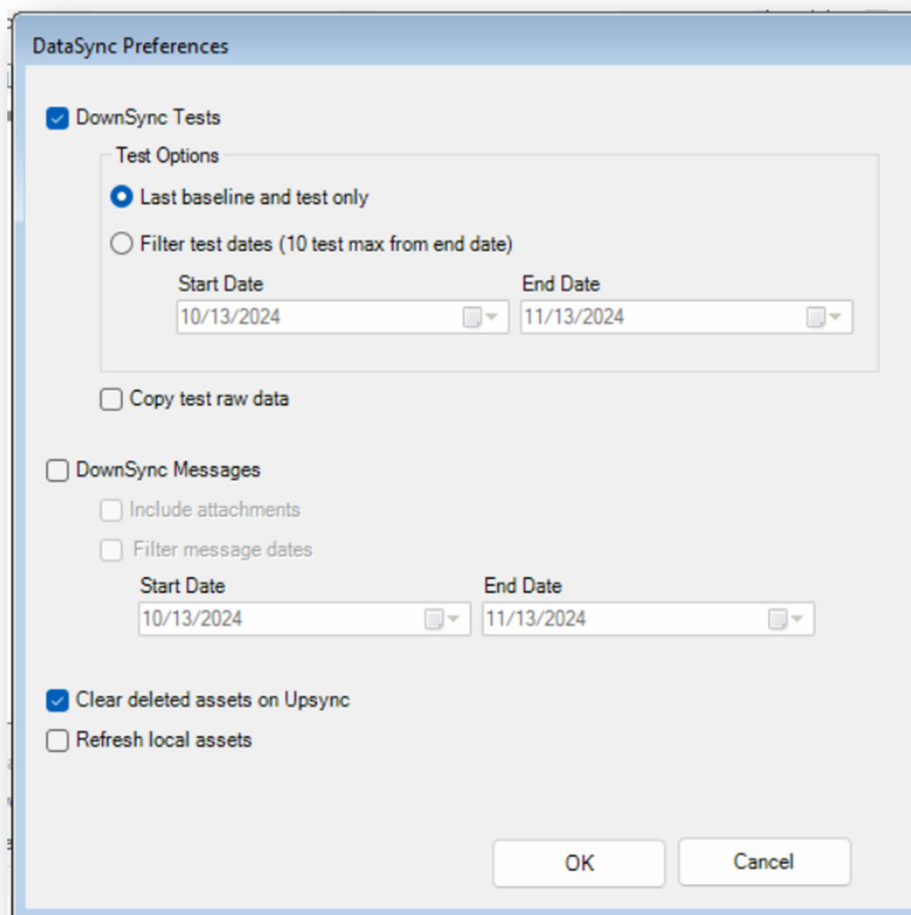
A screenshot of the 'DataSync Preferences' dialog box. The dialog has a title bar 'DataSync Preferences'. Inside, there are several sections. The first section is 'DownSync Tests' with a checked checkbox. Below it is a 'Test Options' group box containing two radio buttons: 'Last baseline and test only' (selected) and 'Filter test dates (10 test max from end date)'. Below the radio buttons are two date pickers labeled 'Start Date' and 'End Date', both showing '10/13/2024' and '11/13/2024' respectively. Below this is a checkbox 'Copy test raw data' which is unchecked. The next section is 'DownSync Messages' with an unchecked checkbox. Below it are two unchecked checkboxes: 'Include attachments' and 'Filter message dates'. Below these are two more date pickers labeled 'Start Date' and 'End Date', both showing '10/13/2024' and '11/13/2024'. The final section has two checkboxes: 'Clear deleted assets on Upsync' (checked) and 'Refresh local assets' (unchecked). At the bottom right are 'OK' and 'Cancel' buttons.

Figure 1

DownSync, UpSync, Two-way Sync



Found in the DataSync window (Figure 2), DownSync (Blue Down Arrow) is used to copy motors from the network database onto the local field tester. UpSync (Green Up Arrow) is used to load new test data from the field tester back to the network database. Two-Way Sync does both and should *not* be the standard selection. If you need data up and motors down, then two-way syncing is ideal. Otherwise, UpSync on a daily basis or as often as a network connection is available to ensure new data is secure on the network database.

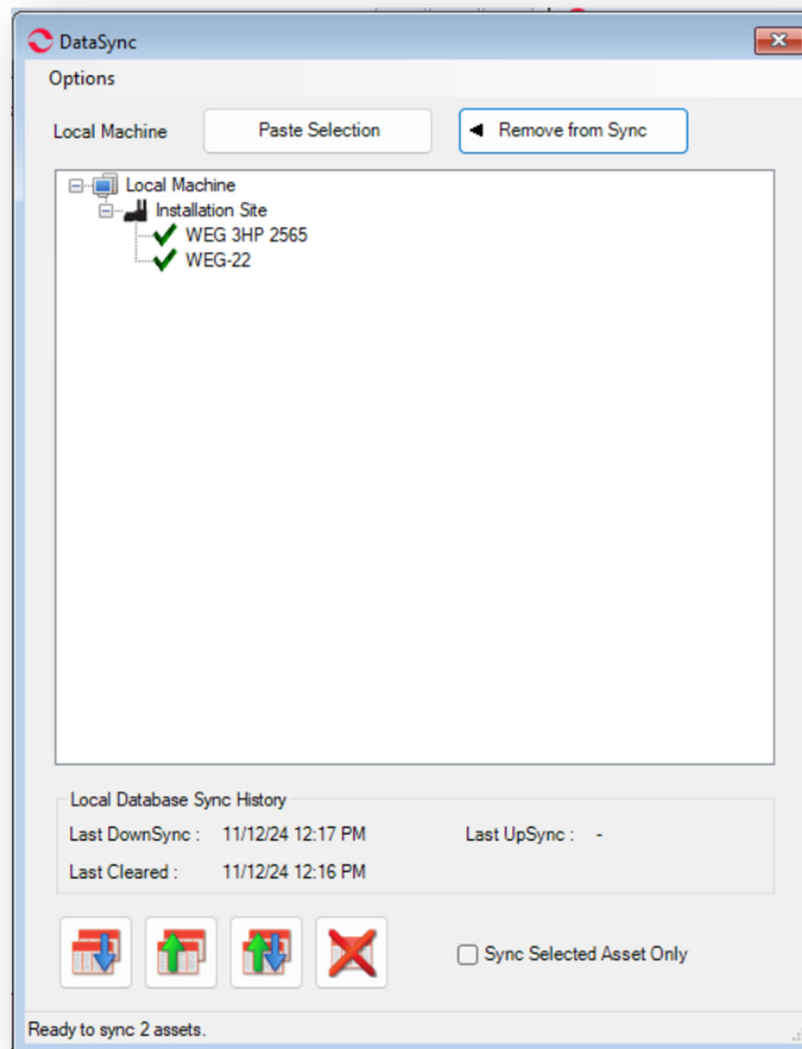


Figure 2

Clearing Local Database



Clearing the local database on the field tester is recommended to prevent an excessively large local database. Additionally, Microsoft has limits as to the size of the database that can exist on SQL SVR Express and will throttle the performance long before you reach the limit. This can be aggravating to the technician. However, clearing the local database also requires a fresh down sync of motors resulting in an increase in network traffic and data usage. If the tester will be traveling to a site with unknown network access, down syncing many assets before departure is likely. Refer to the data optimization considerations to minimize the data usage and network traffic. With a large number of motors on the local database once the testing event is complete and the new data is up synced to the network, clearing the local database is recommended. If only a few motors are added as they are being tested and regular access to the network is available, clearing the local database can be deferred to a monthly or quarterly planned event for database maintenance.

Synchronization Options Flowchart

