Display and CommandARM™ Simulator Help Guide

- GS2 1800 Display
- GS3 CommandCenter™ Display
- GS3 2630 Display
- Generation 4 CommandCenter™ Display

Last Updated: May 2015
Applies to Simulator Version: 2.4.0
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The Display and CommandARM™ simulator is a Windows application that can be installed on a laptop or desktop computer for the purpose of training, supporting, and learning to use John Deere displays and associated products. The simulator replicates the functionality of these displays, but there may be slight differences from running an actual display.

Refer to Information about Machines section for known simulation limitations and additional information.

What’s New in Release 2.4.0

- GS3 2630 Machine Sync Shared Data
- 469P & 569P Premium Round Baler with 2015 Software Features. Complete Automation 1 and 2 is not yet included.
- Gen 4 CommandCenter 2015-1 Update (version 8.12.2500-17)

Resolved Issues:

- Corrected default dimensions for 1775 NT CCS™ 16 Row ExactMerge™
- Corrected combine yield mapping
- Performance and reliability improvements.
- Button to reset all settings and data in GS2 and GS3 displays to defaults.

Known Issues:

- GS3 2630 sometimes gets stuck on green Please Wait screen (display should normally load within 40 seconds):
  1. Due to compatibility issue on Windows 8 tablet configuration computers. Fix is coming soon.
  2. Due to setup data issue. Reset button was added to Debug tab in Settings , which will reset all settings and data to factory defaults.
- Machine / implement simulations take about 10-30 seconds to fully load after display loads. Button presses on simulator during this time may be slow to respond.
- Gen 4 CommandCenter simulation takes about 60 seconds to load and requires 3GB RAM for best performance.
- 1775NT Planter simulated seed rates are sometimes erratic and section control disappears intermittently.
- Running Gen 4 CommandCenter with Machine Controllers Simulation and 1775NT planter together requires a 64 bit computers and greater than 4 GB RAM.
- Combine simulation incomplete.
- Gen 4 CommandCenter™ intermittently loses steering controller communication when running Tractor (or Machine) Simulation.
- On rare occasions, the following GS3 2630 simulator issues may occur, particularly on computers with limited CPU availability. Restart simulator to correct these issues:
  1. Changing field names causes GS3 2630 to respond slowly and implement simulators to fail.
  2. Data and settings do not save intermittently.
- On Windows XP, the Tractor (or Machine) Simulation is disabled due to a compatibility issue.
- Cotton Picker ADU display requires user to have administrative rights and will not work on Windows 64bit and Windows XP computers.
NOTE: Microsoft has ended support for Windows XP and therefore simulator support for Windows XP may end in spring of 2015.

See section on Information about Machines for known simulation limitations and additional information.

Minimum System Requirements

- **Operating System:**
  - MS Windows XP (32-bit)
  - MS Windows 7 (32 & 64-bit)
  - MS Windows 8 (32 & 64-bit)
  - Requires Microsoft Redistributable packages
    - C++ 2005 Redistributable version 8.0.61001
    - C++ 2010 Redistributable version 10.0.40219
    - C++ 2013 Redistributable versión 12.0.21005
    - Microsoft .NET Framework 4.0
- **3 GB of RAM Recommended:**
  - If running Generation 4 CommandCenter with only 2GB of RAM, you may need to uncheck the option for Tractor (or Machine) Simulation for the simulator to perform well.
  - The simulator will generally work fine with 2 GB of RAM if not running many other applications at the same time.
- **Dual core processor**
- **Screen Resolution:** The simulator is optimized for 1280 x 800, but will work with most resolutions. Utilizing a HDMI or Display Port cable will provide better resolution for viewing on projectors and TVs.
- **Internet Connection:** The simulator requires an internet connection to register at least every 50 uses.

Overview

There are two ways that machines and implements are simulated:

**Actual** – The software from the product is used, so that it is as accurate as possible. Equipment sensor signals are simulated.

**Simulated** – User interface is recreated. Expect pages to be fairly realistic, but there may be some inconsistencies with the actual product.

<table>
<thead>
<tr>
<th>Machines</th>
<th>Models</th>
<th>Type</th>
<th>Interface Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractor</td>
<td>None</td>
<td>Simulated</td>
<td>None</td>
</tr>
<tr>
<td>Tractor</td>
<td>7R, 8R</td>
<td>Actual</td>
<td>Display</td>
</tr>
<tr>
<td>Self-Propelled Sprayer</td>
<td>4730, 4830</td>
<td>Actual</td>
<td>Display and CommandARM™</td>
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<tr>
<td>Combine</td>
<td>S-series</td>
<td>Actual</td>
<td>Display and CommandARM™</td>
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<tr>
<td>Cotton Harvester</td>
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<td>Actual</td>
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<table>
<thead>
<tr>
<th>Implements</th>
<th>Models</th>
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<td>1910</td>
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<tr>
<td>Air Seeder</td>
<td>1990 CCS</td>
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<tr>
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<tr>
<td>GS2 1800</td>
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<td>GS3 2630</td>
<td>Actual</td>
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<td>GS3 CommandCenter™</td>
<td>Actual</td>
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<td>Gen 4 CommandCenter™</td>
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</table>

<table>
<thead>
<tr>
<th>Additional Options</th>
<th>Models</th>
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<tbody>
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<td>AutoTrac Universal</td>
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<tr>
<td>Harvest ID Cotton</td>
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<tr>
<td>Machine Sync Shared Data</td>
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<td>StarFire Receiver</td>
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<td>Actual</td>
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</tr>
<tr>
<td>Wireless Data Transfer</td>
<td>Actual</td>
<td>Display</td>
<td></td>
</tr>
</tbody>
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1 – 7R and 8R tractors are only available with selection of Generation 4 CommandCenter™ display.

NOTE: Please continue to use the GS2 2600 simulator for Implement interfaces that are not yet added to this simulator.

**Installation**

**Display and CommandARM™ Simulator**

2. Run the installer file (DisplayAndCommandARMSimulator.exe) and follow the prompts to install.
**Generation 4 Display Package**

A software program named VirtualBox must be installed prior to installing the Generation 4 Display Package. For future updates, just run the Generation 4 Display package installer; no change to VirtualBox is required if it is already installed.

*NOTE: You will run the Display and CommandARM™ simulator to open Gen 4 CommandCenter™ and it will run VirtualBox in the background.*

1. Download and install **Oracle VirtualBox**
   [http://download.virtualbox.org/virtualbox/4.3.0/VirtualBox-4.3.0-89960-Win.exe](http://download.virtualbox.org/virtualbox/4.3.0/VirtualBox-4.3.0-89960-Win.exe)

   *NOTE: John Deere employees download VirtualBox v4.2.4 from SRS. Do not update it if prompted.*

2. Double-click on the .exe file to install it. If it prompts the USER ACCOUNT CONTROL dialog as show below, select **Yes**.

   ![User Account Control dialog](image)

3. Select **Next** on the Welcome window.

![Oracle VM VirtualBox 4.3.0 Setup dialog](image)

4. Select **Next** to keep default settings.
5. Select **Next**

6. Select **Yes**

7. Select **Install**
8. While installing, VirtualBox pops up messages asking for permission to install drivers. Select 'Install' option on all popups. **Uncheck Start Oracle VM VirtualBox** and select **Finish** to complete the installation.


   **NOTE:** This download is very large (> 800 MB). Use a high speed internet connection if possible.
   You can download the package to a USB drive and then copy to other computers.

10. Run the installer file and follow the prompts to install.
11. This installation will take about 10 minutes; wait for the “Success” window.

Updates

Updates to Display and CommandARM™ Simulator Package

You will be prompted automatically while opening the simulator if there is an update available (internet connection required). Follow the onscreen prompts if you choose to install it.

IMPORTANT: All previous data and settings stored in the simulator and simulated USB will be deleted during updates.

NOTE: Administrator level access is required for automatic updates.
Updates to Generation 4 Display Package

You will be prompted automatically when selecting the Generation 4 CommandCenter™ if there is an update available (internet connection required).


   **NOTE:** This download is very large (> 800 MB). Use a high speed internet connection if possible. You can download the package to a USB drive and then copy to other computers.

2. Run the installer file and follow the prompts to install. Typically, uninstallation of the existing package is NOT required.

   **IMPORTANT:** All previous data and settings stored in the simulator and simulated USB will be deleted during updates.

3. This installation will take about 10 minutes; wait for the “Success” window.

New and Updated Plugins

Each display, machine and implement is designed as an individual plugin for the simulator. You can check for updates to the plugins at any time with the following procedure:

1. Open **Display and CommandARM™ Simulator** on the computer desktop.
2. Select **Settings and Software Updates** next to the close button.

3. Select **Check for Updates** at the top of the page. Any available updates will appear.
   
   **NOTE:** Select **Daily** from the list box to be notified once per day of new plugin updates when you run the simulator.

4. **Select All**

5. **Install Selected**

6. The update will be finished when **100%** appears next the green bar.

7. Select **Settings and Software Updates** to run the simulator.

8. Select **Close** to restart the simulator.

**Un-installation**

**Windows XP**

1. Select **Start** -> **Settings** -> **Control Panel** -> **Add or Remove Programs**
2. Select **Display and CommandARM Simulator** and select **Remove**
3. Select **Generation 4 Display Package** and select **Remove**

**Windows 7**

1. Select **Start** -> **Control Panel** -> **Programs and Features**
2. Select *Display and CommandARM Simulator* and select *Uninstall*
3. Select *Generation 4 Display Package* and select *Uninstall*

**Registration**

Registration is required to ensure that the simulator is updated and used properly by all users. The simulator may be used 5 times prior to registration by clicking “Try.” The simulator may be used up to 50 times without an internet connection after registering.

**Open the Simulator**

1. Select *Display and CommandARM™ Simulator* on the computer desktop. The simulator may take 5 – 15 seconds to open.

   **NOTE:** The following error, Unhandled exception (status 407), may appear if the internet connection is through a proxy server the simulator has not been registered. Select [X] and follow the steps below for registering with an internet connection through a proxy server.

   ![Unhandled exception error](image)

   **NOTE:** The following error, Internet Proxy Configuration, may also appear if the internet connection is through a proxy server or VPN server. Select Cancel and the simulator will work like it is not connected to the internet.

   ![Internet Proxy Configuration](image)
Register the Simulator

1. Select Register
2. Enter your Name and if the Serial Number auto-populates, select Register.

   a. If the Serial Number does not auto-populate, open an internet browser and enter this website http://jdlicensing.farreachinc.com/.

   b. Select Generate Serial Number

   c. Copy the Serial Number and paste it into the Registration window. Then select Register.

3. The simulator will automatically complete registration.

   NOTE: The simulator requires an internet connection at least every 50 uses to renew the license. Simply connect your computer to the internet and start the simulator. The license will renew automatically.

Register the Simulator with (VPN) Proxy Server Internet Connection

There are three options; if one does not work, try another:

Option 1:

1. Close all simulator windows

2. Open Internet Explorer and browse to an external website.
NOTE: This temporarily configures the proxy server settings used by the simulator.

3. **Close** Internet Explorer
4. Select **Display and CommandARM Simulator** on the computer desktop
5. Follow the steps for Registering the Simulator

**Option 2:**

1. Close all simulator windows
2. Open **Internet Explorer** and browse to this website: [http://jdlicensing.farreachinc.com](http://jdlicensing.farreachinc.com)
3. Select **Generate Serial Number** and **Copy** the Serial Number
4. Select **Display and CommandARM™ Simulator** on the computer desktop
5. **Paste** the serial number into the Registration window
6. Select **Register**.

**Option 3:**

1. Obtain internet access through an outside line that does not use a proxy or VPN server.
2. Complete the normal registration.

   **NOTE:** With any of these options, the following error (**Internet Proxy Configuration**) will appear when opening the simulator. Select **Cancel** and the simulator will work like it is not connected to the internet. Options 1, 2, or 3 will need to be repeated to reset the usage count to 50.

### Languages

The following languages are supported by the simulator.

<table>
<thead>
<tr>
<th>Language</th>
<th>Language</th>
<th>Language</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgarian</td>
<td>Estonian</td>
<td>Italian</td>
<td>Russian</td>
</tr>
<tr>
<td>Chinese</td>
<td>Finnish</td>
<td>Latvian</td>
<td>Serbian</td>
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<tr>
<td>Croatian</td>
<td>French</td>
<td>Lithuanian</td>
<td>Slovak</td>
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<tr>
<td>Czech</td>
<td>German</td>
<td>Norwegian</td>
<td>Slovenian</td>
</tr>
<tr>
<td>Danish</td>
<td>Greek</td>
<td>Polish</td>
<td>Spanish</td>
</tr>
</tbody>
</table>
Changing the Language on the Setup Page

The simulator setup page language will be set automatically by the computer’s operating system.

1. Start menu on the computer
2. Control Panel
3. Region and Language

Changing the Language on the GS2 1800 and GS3 CommandCenter™ Displays

1. Menu
2. Display
3. Settings
4. Scroll to list box and select language

Changing the Language on the GS3 2630 Display

1. Menu
2. Display Settings
3. Global Settings
4. Regional tab

Changing the Language on the Gen4 Command Center Display

1. Menu
2. System
3. Language and Units
4. Select the language by selecting from the drop down for the option
Getting Started

Open the Simulator

Select **Display and CommandARM™ Simulator** on the computer desktop. The simulator may take 5 – 15 seconds to open.

Navigation

- Next
- Previous
- Close
- Minimize
- Settings and Software Updates
- Ignition Key
- Help
- Insert / Remove USB drive to display
  (GS2 1800, GS3 CommandCenter™, and GS3 2630 displays only)
- Screen Capture

1. **Choose a Machine**
2. Choose an Implement

If you chose Tractor as the machine, then you will be prompted to choose an implement.

3. Choose a Display

The displays that are compatible with selected machine and implement will appear.

4. Select Options

The available options depend on the selected machine, implement, and display.
- **Run StarFire™ 3000**: StarFire 3000 interface will populate on the display.
- **AutoTrac™ Integrated**: Makes the simulator behave like it is connected to an AutoTrac Capable machine.
- **Advanced AutoTrac Settings**: Makes the simulator behave like it is connected to a machine with a SSU capable of Advanced AutoTrac Settings.
- **AutoTrac Universal**: Makes the simulator behave like it is connected to an ATU.
- **GreenStar™ Lightbar**: Makes the simulator behave like it is connected to a GreenStar Lightbar (i.e. the GreenStar Lightbar Settings will appear in Guidance Settings).

**Initial GPS coordinates**
Enter the GPS coordinates of a field to locate the GPS simulation over it.

*NOTE: Moving the GPS location far from the selected field’s reference point will make the machine icon on the map look skewed. Create a new field name to solve this problem.*

**General Simulator Functions**

**Turn Simulation ON / OFF**
The key switch turns on / off all selected machine, implement and display simulators. It may take roughly 60 seconds for the display to load.

**Help**
The Help button opens the website where updated help information can be accessed.
Implement Functions

- Toggle through available alerts
- Cancel alerts toggle. Note: this button will NOT clear alerts that are triggered by the machine / implement software.

- Air cart - triggers Front Tank Low error condition
- Air cart – meter calibration switch

Sounds

Most beeps and other sounds are set to OFF. They can be turned ON/OFF by adjusting the volume in Display Settings. Guidance alert sounds and tracking tones will still be ON. Tracking tones may be turned OFF in Guidance Settings, as in an actual display.

GPS Simulation

- Increase Speed

Information about Machines

Combine

Known Simulation Limitations:

- Software shows all options at the same time on combine main page
- Calibration routines do not function
- Yield only works in U.S. units
- Several buttons on CommandARM™ do not function
- PDU Display not fully functional
How to Start Coverage Recording on Combine

1. Select the middle of the Multi-Function Lever to start the combine moving.
2. Set full throttle
3. Set gear
4. Engage separator
5. Engage header
6. Map should now be recording

RowSense™ on Combine

The RowSense option is checked by default in the options for the combine simulator.
**Operating RowSense:**

1. Select the middle of the Multi-Function Lever to start the combine moving.
2. Setup a guidance line on the display.
3. Enable RowSense
   - a. Menu
   - b. GS3
   - c. Guidance soft key
   - d. Change RowSense Settings
   - e. Guidance Settings
   - f. Enable System Status
   - g. Note that the Row Entry method can be set to Manual or GPS status.

Operating with **Manual Row Entry method:**

1. Drive combine into row
2. Press number 3 button to lower head
3. Press number 3 button a second time to engage guidance and row sensors.

Operating with **GPS Row Entry method:**

1. Drive combine into row
2. Press number 3 button to lower head and engage guidance
3. Press number 3 button second time to engage row sensors.
Simulation RowSense States:

RowSense sensor is installed and enabled

**Row Sensors Out of Crop** – AutoTrac is active and there is valid GPS data, but no data from the crop feelers. *NOTE: Simulator will set crop yield input to 0 for out of crop simulation.*

**Differential Correction Lost** – AutoTrac is active and there is a valid data from crop feelers but there is insufficient data from StarFire™ GPS. *NOTE: AutoTrac will run for up to 3 minutes without GPS.*

AutoTrac is active and there is a valid GPS and sensor data from the crop feelers.

NOTE: Reference the AutoTrac RowSense operator manual for more detailed instructions.

Cotton Picker

Important Notes:

- ADU Display is only operational with Administrative Rights
- ADU Display is only operational with computer screen set to small text and icons; otherwise the interface will appear like this image.
Changing Screen to Small Text and Icons

1. **Start** menu on the computer
2. **Control Panel**
3. **Display**

4. Ensure selection is set to **Smaller – 100%**

*NOTE: This setting will affect the size of text and icons on your desktop.*
Sugarcane Harvester

Features Not Currently Available

- CommandARM™ and PDU display
- Track Setup page

Tractors - 7R and 8R with Generation 4 CommandCenter™

Features Not Currently Available

- CommandARM™, Navigation bar, and PDU display not available for the following configurations:
  - 7R e23™
  - 7R CommandQuad™

If your computer has less than 3GB of RAM, uncheck **Tractor (or Machine) Simulation** in Machine Options for best performance. Refer to Resolution of RAM Usage Issues for more options.

*NOTE: Unchecking this option will disable Tractor Settings applications in the Gen 4 CommandCenter™ Menu.*

Known Issues

1. When Tractor (or Machine) Simulation is checked Gen 4 CommandCenter will start up more slowly and DTC alerts may appear frequently. If many DTC alerts appear, try restarting the simulator.
2. On Windows XP, the Tractor (or Machine) Simulation is disabled due to a compatibility issue.
3. Help Center may not open from the shortcut bar. Open it from Menu > Applications instead.

Information about Implements

Baler

*NOTE: Complete Automation 1 and 2 is not yet included.*
Baler Operation Example:

1. Switch ON the PTO from the Baler window
2. Increase Speed from the Navigation window
3. Increase crop flow (Yield)

Crop flow (Yield) will automatically reset to None when bale size is reached for simulation purposes.

4. Open gate from the Baler window.
5. Close gate from the Baler window.

Baler Operation Example with B-Wrap:

1. Switch ON the PTO from the Baler window
2. Increase Speed from the Navigation window
3. Increase crop flow (Yield)
Crop flow (Yield) will automatically reset to None when bale size is reached for simulation purposes.

4. After wrapping is complete, switch OFF the PTO from the Baler window.

5. Open gate from the Baler window.

6. Close gate from the Baler window.

**NOTE:** Use Reset button on Baler window if wrapping simulations fail or Actuator open load alert appears frequently.
Information about Displays

GS2 1800 Display

NOTE: The GS2 1800 simulator screen will appear fuzzy, because it was scaled 75% to fit on a computer screen.

Navigation

There are 3 options for scrolling the thumbwheel in the simulator:
1. Left-click the mouse on the top or bottom of the thumbwheel.
2. Hover the mouse over the middle of the thumbwheel and turn the mouse wheel.
3. Use the up and down arrows on the keyboard.

There are 2 options for selecting a button in the simulator:
1. Press the check button.
2. Press down on the middle of the mouse (this option may be required for Live Edit Entries)

<table>
<thead>
<tr>
<th>Thumbwheel</th>
<th>Mouse wheel</th>
<th>Live Edit Entry</th>
</tr>
</thead>
</table>

GS3 2630 Display

NOTE: The GS3 2630 simulator is not currently capable of simulating Surface Water Pro Plus.

Import User Data to the Simulator

Import user data from a GS3 2630 display or Apex™ desktop software. This feature is meant for training purposes only. The same software version rules apply for compatibility of importing data as with the real display. As a rule of thumb, ensure the most recent updates are installed so that the data will import.

IMPORTANT: Simulator software updates will delete any data and settings stored in the simulator. Export prior to updating simulator to save your data and settings.

1. Select Machine, Implement, and then GS3 2630 display
2. In the Display Options select Open Simulated USB. This will open a folder on your computer that simulates a USB drive.
3. Open your actual USB drive and copy the GS3_2630 folder to the Simulated USB.
4. Turn ON the simulator.
5. Import the Profile to the simulator just like you would on an actual display. Click the USB button to simulate inserting and removing the USB.

Export User Data from the Simulator

1. Export data from the display just like you would on an actual display.
2. Turn OFF the simulator.
3. Select Machine, Implement, and then GS3 2630 display
4. Select Open Simulated USB and use File Explorer to copy and paste the Profile folder to a location of your choice.

Generation 4 CommandCenter™ Display

The simulator has a minimum version check for Gen 4 CommandCenter™. When starting the simulator with Gen 4 CommandCenter™, a message will appear if an update is required for compatibility. In that case, download the latest Generation 4 display simulator package from the Stellar Support.

![Error - Incompatible Generation 4 display package](image)

The installed version of Generation 4 Display Package is no longer compatible with this simulator. Please install the new Generation 4 Display Package version available [here](#).

OK

Import User Data to the Simulator

Import user data from a GS3 2630 display or Apex™ desktop software. This feature is meant for training purposes only. The same software version rules apply for compatibility of importing data as with the real display. As a rule of thumb, ensure the most recent updates are installed so that the data will import.

**IMPORTANT:** Simulator software updates will delete any data and settings stored in the simulator. Export prior to updating simulator to save your data and settings.

1. Put guidance lines on a USB drive as you would for transferring to an actual Generation 4 CommandCenter.
2. Insert the USB drive into your computer.
3. Open the simulator.
4. In Display Options, select the USB drive to link to.

5. Turn ON the simulator. After the display loads the following message should appear.

If message does not appear refer to USB fails to connect in Troubleshooting section.

6. Import data into the simulator just like you would on an actual display.

**Export User Data from the Simulator**

1. Insert the USB drive into your computer.

2. Open the simulator.

3. In Display Options, select the USB drive to link to.

4. Turn ON the simulator.

5. Export data to the USB drive just like you would on an actual display.

**Information about Options**

**Machine Sync Shared Data**

This feature simulates coverage data and guidance lines coming from and going to a second machine (Machine 2). The coverage of Machine 2 drives at 4 mph (6.4 km/h) with an implement width of 60 feet (18.3 meters) and turns around after 0.5 miles (0.8 km). The Machine 2 icon is not displayed and it is not capable of section control.
Setup Sharing

*Note: Network setup is saved between uses of the simulator.*

1. Choose any Machine and Implement option with GS3 2630 display

2. Select **Machine Sync Shared Data** in **Display Options** page. The Machine Sync window will appear after you turn the key to start the stimulator.

3. Select the same **Task** in both the Machine Sync window and display. If you select a Task other than Documentation Off in the GS3 2630, you will need to setup Documentation (Softkey I).

4. Setup Network in display
   a. Go to **Menu > GS3 > Equipment (H) > Network tab**
   b. Select **Manage Networks**
   c. Select **Add New**
   d. Enter any name for **Network Name**
   e. Select **Connect**
   f. Select **Accept**
   g. **Machine 2** will now show up on Network. Various signal qualities are simulated for demonstration.

5. Go to **Mapping (A) > Multi-Machine tab**
a. Select Application from list: **Machine Sync Shared Data**
b. **Check** Share Coverage
c. Select Communication Device from list: **MCR**

---

**Join Coverage**

1. Go to **Menu > GS3 > Resources (G)**
2. Select **Join** from Field list box
3. Select **Join** for Machine 2 in the window that appears. If Machine 2 is missing from the list, restart the simulator.

   ![Join Shared Data](image)

   **Note:** On some computers, a communication lost alert may appear. As long as the machine or implement still appears in the Menu, the simulation is still working.

4. Go to **Mapping (A)**

5. Select **Recording** on the **Machine Sync window**. The second machine coverage will display on the map to the right of the first machine. You may need to zoom out to see it.
Share AB Line from Machine 1

1. Go to Menu > GS3 > Guidance (B)
2. Select Set Track 0
3. Select Share AB Line
4. Status on Machine Sync window will show: AB Line Received

Share AB Line from Machine 2

1. Select Send Guidance Line
2. AB Line Received message will appear on the GS3 2630. East Line_001 is the name of the track.

   Note: This AB line is created for the default GPS location of the simulator.

Reference the Machine Sync Operator Manual for more information.

StarFire™ 3000

Calibrate TCM Alarm

The Calibrate TCM alarm will appear once every time the simulator is started with a different Machine, Implement, or Display and the TCM has not been calibrated for that combination.
Calibrate TCM

Recent system changes indicate that the TCM was reinstalled. Please calibrate the TCM again to ensure optimized system performance.

1. **Menu**
2. **StarFire**
3. **Setup tab**
4. **CAL**
5. Select **Accept** on the next 3 messages

**AutoTrac Universal (ATU)**

**ATU Activation**

The first time you run the ATU with a display you will need to activate it by entering 323. With the GS2 1800, turn the thumbwheel of the display using mouse wheel.

**No ATU Activation**

ATU has not been activated. Enter an activation code below or disconnect the ATU unit to access the GreenStar application.

Serial Number 123456
Troubleshooting

Gen 4 CommandCenter™ Fails to Load – Green Screen

Green screen appears.

Common Cause:

- Generation 4 Display Package is installed under a different user name.
- Generation 4 Display Package not installed. Follow these steps to verify:

1. Open VirtualBox from your desktop.
2. If Gen 4 Package installed properly, you will see a Gen 4 Display tab.

Common Fix:

- Reinstall Gen 4 Display Package with the current user logged into Windows, selecting default options throughout install. See instructions in installation section. Reinstalling Oracle Virtual Box may also be needed in some cases.
Gen 4 CommandCenter™ Fails to Load – Black Screen

Display does not load after black screen and spinning wheel appears for 2 minutes.

Common Cause:
- Virtual Box lost the IP Address needed for the Generation 4 CommandCenter

Common Fixes:

3. Open VirtualBox from your desktop
4. File > Preferences

5. Network > Host-only Networks > select Screwdriver icon
6. Change the **IPv4 Address** to **10.0.56.1**
7. Change the **Network Mask** to **255.255.255.0**. If the IP Address does not save after closing and reopening, use 255.255.0.0.

*NOTE: Administrative Rights are required for changing this setting.*

8. Click **OK**

![Host-only Network Details](image)

**Gen 4 CommandCenter™ - An Application Unexpectedly Quit**

![Application Error](image)

**Common Cause:**
- Computer has run out of RAM memory

**Common Fixes:**
- See **Resolution of RAM Usage Issues** section below.

**Resolution of RAM Usage Issues**

**Common Fixes:**
- Turn the key **OFF** to restart the simulator and close all applications other than the simulator. Then restart simulator, or
- Select “None” as the Implement, or
- Upgrade computer to 3 or more GB of RAM, or
- Uncheck **Tractor (or Machine) Simulation** option

*NOTE: Unchecking this option will disable Tractor Settings applications in the Menu.*
Gen 4 CommandCenter™ - opens as separate window

Common Cause:

- Opening simulator for first time
- Computer has run out of RAM memory

Common Fixes:

- Restart simulator
- See Resolution of RAM Usage Issues section above

Gen 4 CommandCenter™ - USB fails to connect

After linking a USB drive, the message below fails to appear after display loads.
Common Cause:

- USB is not mounted by Virtual Box

Common Fixes:

1. First, check whether display has detected USB. Go to Menu >> System tab >> Diagnostics Center >> Readings tab
   a. If USB Present: 1 = Yes, there is not a problem. Proceed to File Manager or Software Manager in Menu.
   b. If USB Present: 1 = No, continue to step 2.
2. Close all Simulator Windows
3. Open Virtual Box from your desktop
4. Right-click on Gen 4 Display > Select Settings…
5. Select **USB** from the tabs at the left of the screen.
6. Select **Add Filter** from the options at the right of the screen.
7. Select your **USB drive** from the list (be careful not to select your USB mouse!).
8. Open the simulator and follow the steps in the Import User Data to the Simulator section above.
Gen 4 CommandCenter™ - Tractor PDU and CAB Stop Working

Common Cause:
- XCOPY executable not found in the Windows system PATH

Common Fixes:
1. Add Windows System directory (C:\Windows\System32) to PATH environment variable.
   a. Open the Start Menu and right click on **Computer** > select **Properties**.
   b. Select **Advanced system settings**
   c. In the **Advanced** tab, select **Environment Variables**
d. Select **Path** in the System Variables and **Edit** near the bottom of the window

![Image of Environment Variables]

```
<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMP</td>
<td>%USERPROFILE%\AppData\Local\Temp</td>
</tr>
<tr>
<td>TMP</td>
<td>%USERPROFILE%\AppData\Local\Temp</td>
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</tbody>
</table>
```

```
System variables
```

![Image of System Variables]

```
<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSPL_IMPL_PATH</td>
<td>X:(C:\Oracle\product\11.2.0\client\bin) dbpp</td>
</tr>
<tr>
<td>OSPL_URI</td>
<td>file://(C:\Oracle\product\11.2.0\client\bin) dbpp</td>
</tr>
<tr>
<td>Path</td>
<td>C:(Oracle\product\11.2.0\client\udf) .</td>
</tr>
<tr>
<td>PATHEXIT</td>
<td>.COM, .EXE, .BAT, .CMD, .VB, .JS, . …</td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path</td>
<td>\C:\Windows\System32;</td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th>New…</th>
<th>Edit…</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK</td>
<td>Cancel</td>
<td></td>
</tr>
</tbody>
</table>
```

e. Add `;C:\Windows\System32;` as the Variable value

```
<table>
<thead>
<tr>
<th>Variable name:</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable value:</td>
<td>;C:\Windows\System32;</td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th>OK</th>
<th>Cancel</th>
</tr>
</thead>
</table>
```

f. Select **OK**.

**Gen 4 CommandCenter™ - VirtualBox Error**

Common Symptoms:

- VirtualBox error appears when starting simulator with Gen 4 CommandCenter

![Image of VirtualBox Error]
Common Cause:
- In some computers, it is observed that VirtualBox 4.3.x is not working. The reason for this could be insufficient memory and/or outdated system configuration.

Common Fix:
- Install VirtualBox version 4.2.4 and do not update it, if prompted. Download is available here: http://download.virtualbox.org/virtualbox/4.2.4/VirtualBox-4.2.4-81684-Win.exe

GS3 2630 Display Fails to Load

Common Symptoms:
- Stays on green “Please Wait…" screen for longer than 20 seconds
- Loads to blank yellow screen

Common Causes:
- Firewall, Administrative Rights, or antivirus software conflicts with simulator
- Data files from previous versions were not cleaned up during uninstall

Common Fixes:
- DO NOT turn off Firewall. When the firewall is off it can still block network communication that the simulator requires for CAN communication. When the firewall is on it pops up a message allowing you to give access to the simulator.
- Reset all settings and data in GS2 and GS3 displays to defaults.
  1. Settings
  2. Debug tab
  3. Reset
- Report issue to GreenStar@JohnDeere.com.

Implement doesn’t load to Menu

1. View table above in Machines and Implements section to determine whether the simulator includes the ‘Display’ interface for the implement
2. If the simulator does include the interface but it does not appear:
   a. First, wait 2 minutes, because they sometimes take time to load
   b. Second, turn key to turn off Simulator and then turn key to turn it back on to reset
Communication error appears or Task fails to open

Common Causes:
- Lack of available CPU or firewall settings.
- Second, turn key to turn off Simulator and then turn key to turn it back on to reset
- Exit back to the Setup page and then reopen the simulator. If this occurs frequently, contact help.

Common Fixes:
- Close any other applications that are running
- Turn key to turn off Simulator and then turn key to turn it back on to reset

Computer responds slowly

1. Determine CPU Usage
   a. Press the Control, Alt, and Delete buttons at the same time
   b. Select the Performance tab
2. If CPU Usage is over 60%, try closing any other applications that may be running.

Cotton Picker ADU simulator buttons appear out of place

Common Causes:
- ADU Display is only operational with computer screen set to small text and icons.

Common Fixes:
- See section on Information about Machines for instructions.

Machine icon on map does not move

Common Causes:
- Need to increase speed
  1. Use Increase Speed button or
  2. On CommandARM, put machine in gear and use multifunction hydrohandle
- Lack of CPU availability during startup
- Internal error in simulator

Common Fixes:
- Turn key to restart simulator

Machine icon on map moves backwards

Common Causes:
- Lack of CPU availability during startup

Common Fixes:
- Turn key to restart simulator

Machine icon on map looks skewed

Common Causes:
- GPS location is too far from reference point of selected field

Common Fixes:
• On Simulator Setup page, select a GPS location over the selected field
• Select a new name in the display

Reporting Issues
Please email any feedback to GreenStar@JohnDeere.com with Display and CommandARM Simulator in the subject line.

• Always send screenshots and a description of the issue.
• If simulator does not open or crashes, sending an error log will be helpful. Error logs can be found in in [C:\Program Files\John Deere\DisplayAndCommandARMSimulator]. Look at the modified date to find that logs from the timeframe the issue occurred.

<table>
<thead>
<tr>
<th>File Name</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD_GS_DisplaySim1.log</td>
<td>4/14/2014 19:41 PM</td>
</tr>
<tr>
<td>JD_GS_DisplaySim2.log</td>
<td>4/14/2014 19:53 PM</td>
</tr>
<tr>
<td>JD_GS_DisplaySim3.log</td>
<td>4/14/2014 19:57 PM</td>
</tr>
<tr>
<td>JD_GS_DisplaySim.exe</td>
<td>4/14/2014 20:56 PM</td>
</tr>
<tr>
<td>JD_GS_DisplaySim.exe.config</td>
<td>4/14/2014 21:17 AM</td>
</tr>
<tr>
<td>JD_GS_DisplaySim.exe.log</td>
<td>4/15/2014 01:09 AM</td>
</tr>
</tbody>
</table>

• Issues resulting from firewall conflicts require advanced error logs. Enable advanced error logging, run the simulator to reproduce the issue, and then send the log files. Advanced error logging is OFF by default, so the simulator opens more quickly.

1. Open the simulator
2. Open Settings
3. Select the Debug tab
4. Check Enable advanced error logging
5. Select Close and restart the simulator

*Note: The advanced error logging will apply only to the next simulator run and not the current run in which the option was enabled.*