

CHANGING A NODE USING ETHERNET/IP™ IN STUDIO 5000® - APPLICATION NOTE

This guide is used to change a node that is currently being used in an EtherNet/IP™ integration for a new node. The same set of instructions apply for adding a new node if a spare node is present in an L5X file that the node will take the place of. This method does not require going offline with the project or downloading changes so it is preferred when exchanging nodes. If you are adding a new node and there is no spare node slot, please see ControlGate™ L5X/XML Configuration Guide and EtherNet/IP™ Integration Guide with Studio 5000® - Application Note. This will require a new L5X file to be exported from the Maintenance Hub, imported into Studio 5000®, and re-download to the controller.

This guide is intended for users that are familiar with Studio 5000® and can modify an existing project with ControlGate™ data. It is not intended to be all encompassing and will skip over some steps for the sake of brevity. This guide was created with the assumption that your system is currently running and you have experience starting a new ControlGate™ integration from scratch. If you have any Studio 5000® specific navigation questions, please refer to the user guide for Studio 5000.

Your exact data, configuration, file names and locations, and program may vary based on a variety of factors. A simple example is provided to illustrate the process and can be expanded to larger or more complex systems. Your version of Studio 5000® may also change navigational steps and capabilities slightly.

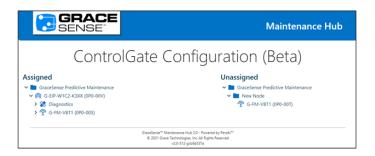
CONFIGURING THE MAINTENANCE HUB

For this example, we will be removing the Vibration and Temperature Node G-FM-VBT1 (0P0-00S) that is currently assigned to the ControlGate™ G-EIP-W1C2-K3XX (0P0-00V). We will be replacing it with G-FM-VBT1 (0P0-00S).

- 1. Visit http://hub.gracesense.com and log in
- Using the menu on the left of the screen, navigate to Settings > PLC Configuration



3. This will take you to the ControlGate™ Configuration page. You will see two columns: Assigned and Unassigned. You will have available ControlGates™ on the left in the Assigned column. You will also have Nodes that are already assigned to a ControlGate™ on the left and nodes that are not assigned to a ControlGate™ on the right in the Unassigned Column.



4. Now we will make the required changes to the system. First, drag and drop all nodes that you are adding to a ControlGate™ by clicking and hold on them, drag to appropriate ControlGate™, and releasing the mouse button to assign it to that ControlGate™.



5. A popup window will appear asking if you are sure that you want to make that change. Click Confirm to complete the new node assignment. Complete steps 4 and 5 for all nodes that are being added.

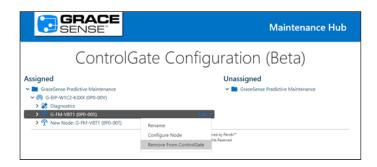


Warning: Verify an electrical conductor has been de-energized using an adequately rated test instrument before working on it. Follow appropriate Energy Control (Lockout/Tagout) procedures as per OSHA Subpart S. © Grace Technologies, Inc. All rights reserved. Specifications are subject to change with/without notice.

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Remove the node(s) that are being swapped out by hovering over the node, clicking "Edit" and selecting "Remove from ControlGate". Complete this step for all nodes being removed.



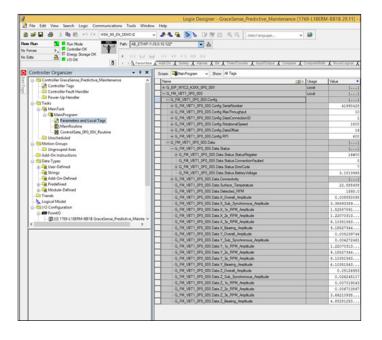
 Now the system setup is complete in the Maintenance Hub. Confirm that the nodes in the Assigned and Unassigned Columns are correct.

Reminder: The above instructions only apply when exchanging nodes one for one. If you are adding nodes, you would have to export the L5X file and download a new configuration. This is described in ControlGate™ L5X/XML Configuration Guide and EtherNet/IP™ Integration Guide with Studio 5000® - Application Note.

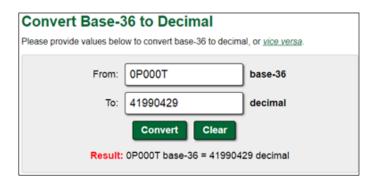


CONFIGURING STUDIO 5000®

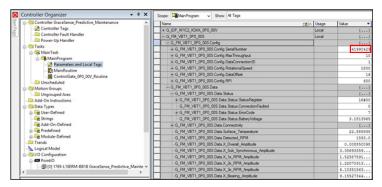
- 8. Open your existing Studio 5000® project.
- 9. Navigate to Parameters and Local Tags.
- 10. Click on "Monitor Tags" at the bottom.
- 11. Expand the Config channels of the node(s) that are being replaced.

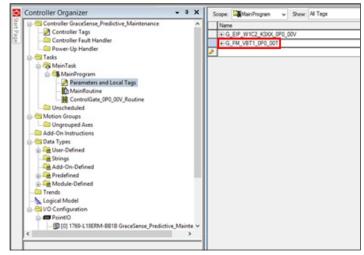


- 12. The next step will be replacing the Serial Number field (in this case 41990428) with the Base-36 to Decimal conversion of the new node.
- 13. To determine the correct serial number, use a Base-36 to Decimal converter, such as the one used from unit converters net below.



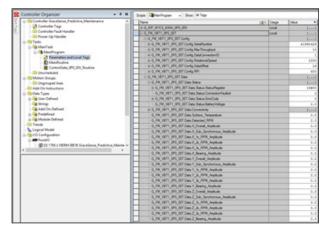
- 14. Use the number provided in the decimal field to replace the serial number of the node, as shown below.
- 15. Next, change the tag name as needed by going to Edit Tags. In this case, just the serial number needed to be changed.





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16. Reboot the ControlGate[™] by cycling power so that it will receive the changes. This will remove all of the data from its channels, as shown below.



- 17. Power on the new node in range of the ControlGate™.
- 18. Over the next few hours, new data will start to come in. Come back to the project in a few hours to ensure that all data has successfully made it through.

