



# Allen-Bradley ControlLogix OPC Server

## Performance and Configuration Tips

Our ControlLogix driver is somewhat limited on start up because of its unique ability to go directly into the controller and grab all of the available tags and make them available to your client application. (Automatic Tag Database Generation) There are a few settings to help with the performance of the server. These settings are dependent on tag counts and their locations within the controller among other things

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1. In Device Properties there is a tab called Logix Options. Here you will want to select Protocol Options. There are three options – Symbolic, Physical Blocking, and Physical Non-Blocking.

A. Symbolic – Most efficient if you have only a few tags being read.

B. Physical Blocking – This can either help or hurt, depending on the number of tags you are accessing within a structure (structure within RSLogix 5000). What this will do is pull the entire structure into the driver, and allow the driver to parse the tag addresses internally. If you are referencing only a few tags within a structure this would be inefficient. If the arrays you are accessing are all within a structure and make up most of the tags within that structure this option would improve your performance.

C. Physical Non-Blocking – Generally speaking, this is the most efficient method of communications. If you're accessing less than 30 percent of the tags within a structure, this is the recommended method.

2. In RSLogix 5000 you can change the SOTS (System Overhead Time Slice). This prioritizes ladder verse communications.

3. In KEPServerEX - Device Properties there is a tab called Logix Comm. Parameters. Here you can set your block sizes. Default is 120 and can be set up to 3840 elements per transaction. If you are only reading a few tags within a large block it is better to keep your elements per transaction down.

Also take a look at the ControlLogix help file and the Optimizing Your Communications section.