

Project Documentation

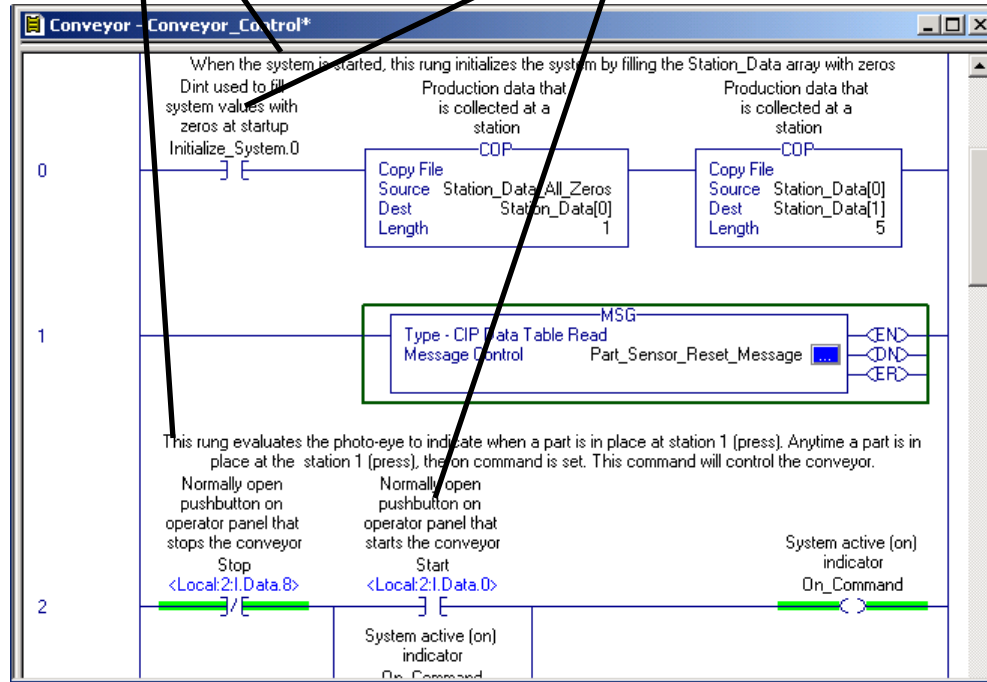
Project documentation is a means of describing the function of specific rungs and instructions. It is a valuable aid when fault finding. Although with controllogix, using tag names does make things easier than just relying on an address, descriptions can give more detail to the actual purpose.

Standard Documentation: Various text elements that describe the functions of ladder logic, function block diagrams, and sequential function charts:

- **Rung Comment:** Describes the function of a ladder logic rung.
- **Main Tag Description:** Describes the function of the main tag being operated on by the instruction. This will appear wherever the Tag is used.
- **Instruction Comment:** This is a comment attached to a specific instruction and will appear wherever the instruction is used.
- **User-Defined Data Type (UDT) Description:** Describes the data type itself and each member of the data type. Shown below is a typical routine with comments and descriptions.

Rung Comment

Tag Description



Searching a Project.

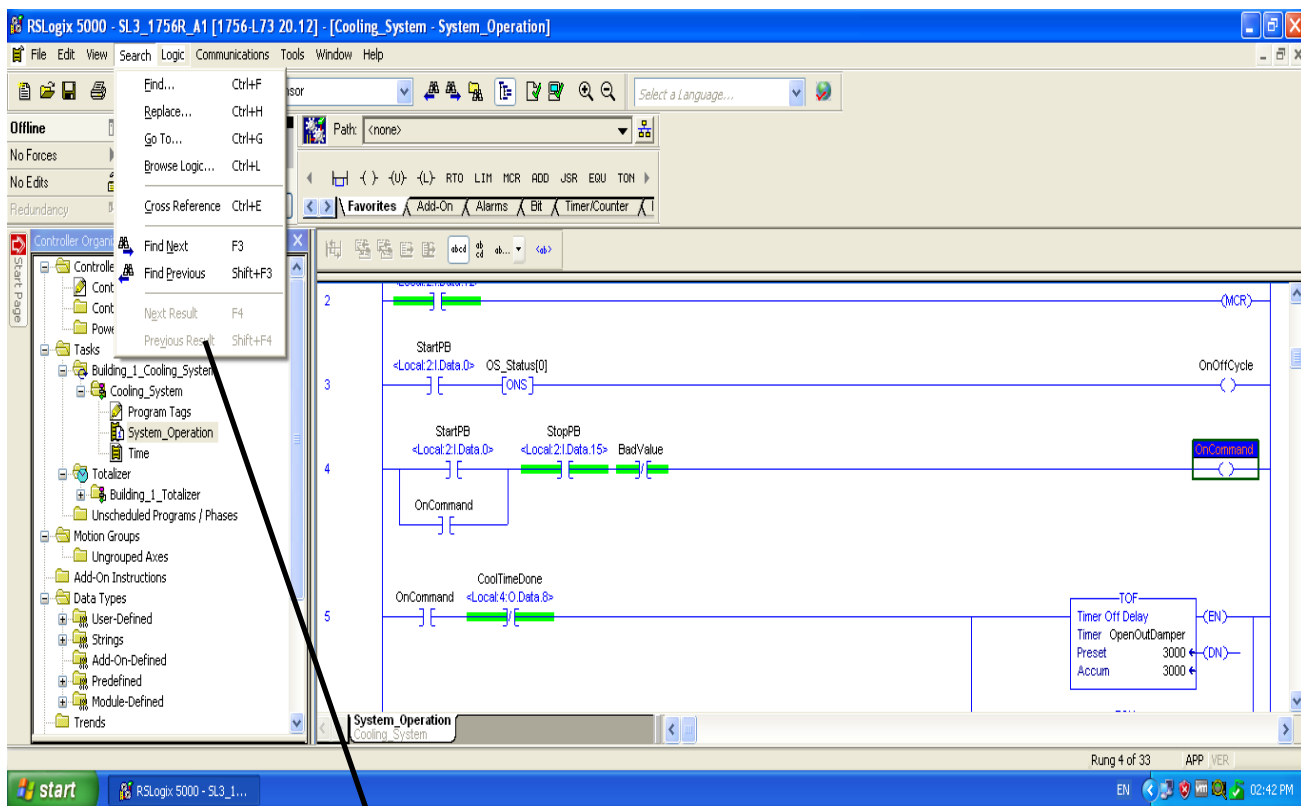
Searching a project is extremely useful during fault finding. If you are Online, and a specific output that should be On is not On, you can search back right to the source to locate the instruction or rung that is keeping the output off. This can point you in the right direction and on the way to correcting the fault.

There are a number of search options.

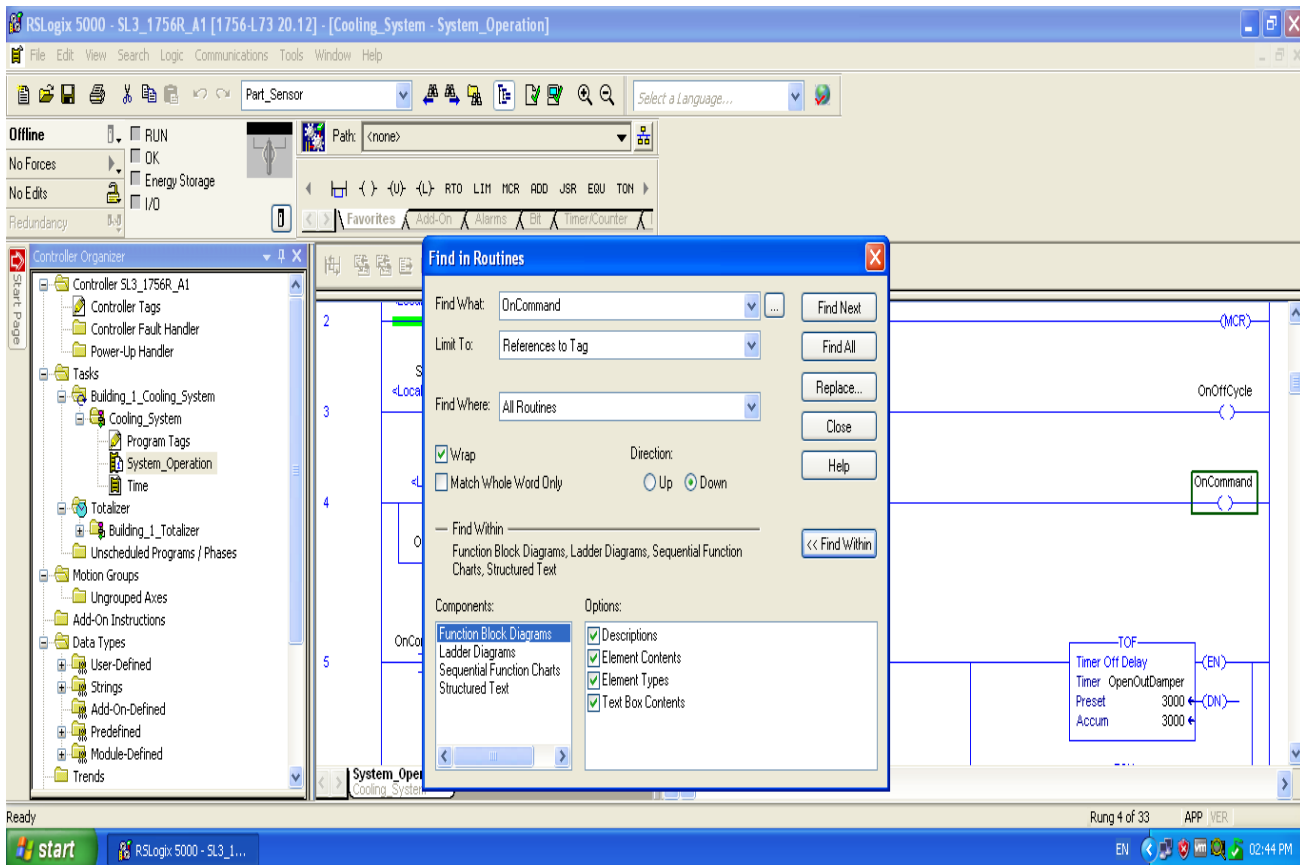
Find. Find all or the next occurrence of a specific instruction in a routine or all the routines.

Cross Reference. This will show all the locations and other routines and instructions related to the instruction being referenced.

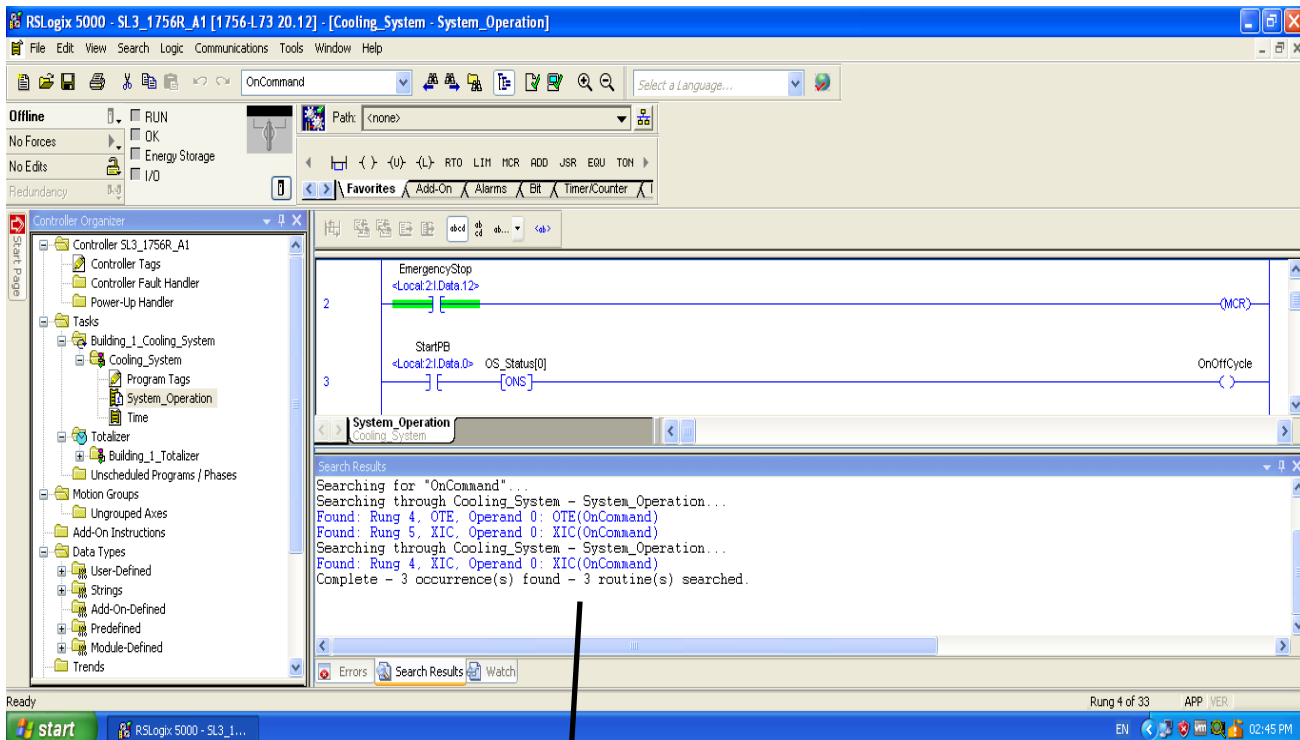
Replace. If you want to replace a tag or instruction in a location or multiple locations where it is being used, one operation can do the replacement for all instances. Illustrated below is where all the search options can be located



Search Options Menu



When searching, it is important that the criteria is correct. Particularly the routine type to search, tags or text as shown above.



Search Results

When cross reference of a tag is carried out all usage of the tag is shown including the tasks programs and routines as shown below. A very useful tool when fault finding

The screenshot shows the RSLogix 5000 software interface. The main window is titled "RSLogix 5000 - SL3_1756R_A1 [1756-L73 20.12] - [Cross Reference]". The interface includes a menu bar (File, Edit, View, Search, Logic, Communications, Tools, Window, Help), a toolbar, and a "Controller Organizer" pane on the left. The "Controller Organizer" pane shows a tree view of the project structure, including "Controller SL3_1756R_A1", "Controller Tags", "Controller Fault Handler", "Power-Up Handler", "Tasks", "Building_1_Cooling_System", "Cooling_System", "Program Tags", "System_Operation", "Time", "Totalizer", "Building_1_Totalizer", "Unscheduled Programs / Phases", "Motion Groups", "Ungrouped Axes", "Add-On Instructions", "Data Types", "User-Defined", "Strings", "Add-On-Defined", "Predefined", "Module-Defined", and "Trends".

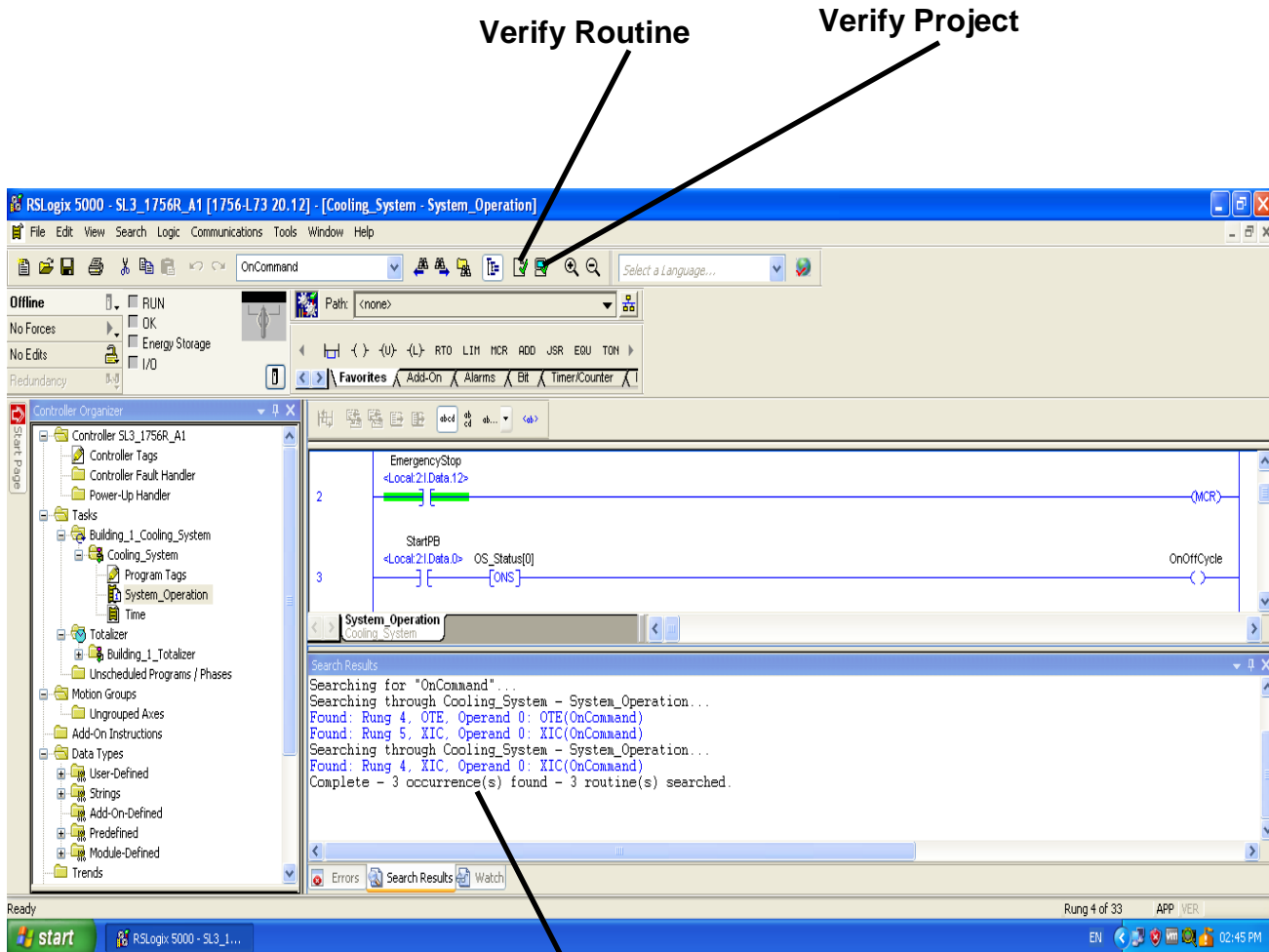
The main window displays a cross-reference table for the tag "OnCommand". The table has the following columns: Element, Container, Routine, Location, Reference, BaseTag, Destructive, and Description. The table contains three rows of data:

Element	Container	Routine	Location	Reference	BaseTag	Destructive	Description
OTE	Cooling_System	System_Operation	Rung 4	OnCommand		Y	
XIC	Cooling_System	System_Operation	Rung 4	OnCommand		N	
XIC	Cooling_System	System_Operation	Rung 5	OnCommand		N	

The status bar at the bottom shows "Ready" and the time "02:46 PM".

Showing of Errors.

When a program is written, it is advisable to verify to check for Errors. This can be done by using one of the two verify buttons on the main toolbar.



**Search Results showing Errors.
Click on the error and it will go
straight there.**