



# TECHNICAL NOTE TNPC15

**Title: Output Read Capability in the Modular Controller**

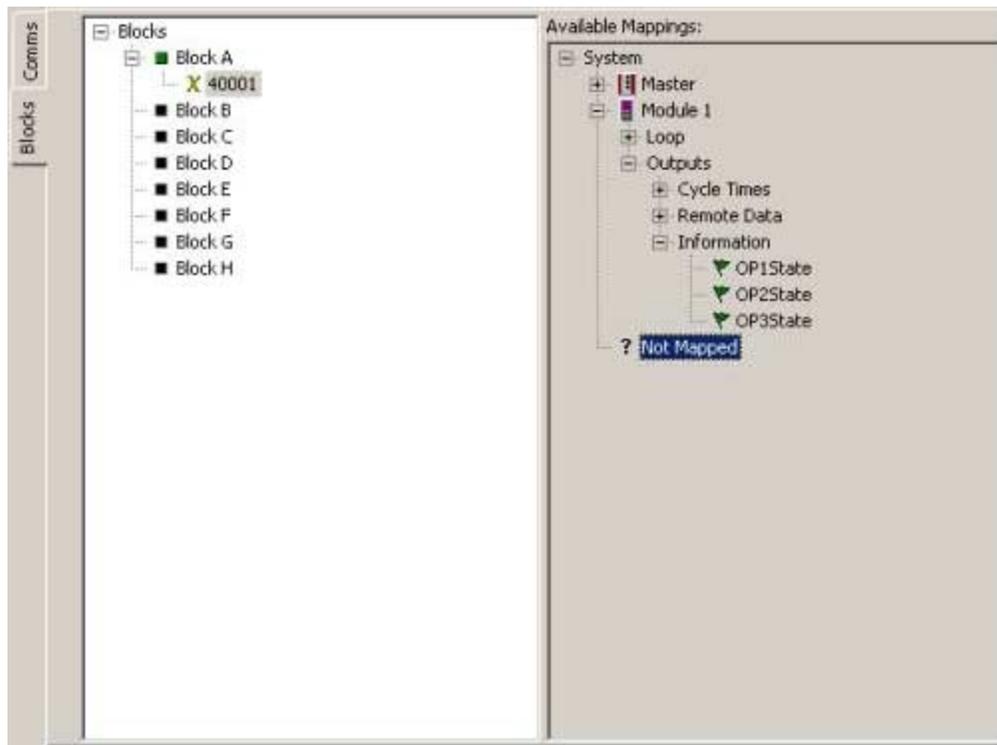
**Product(s): CSMSTRSE, CSPID1, CSPID2 and CSDIO14**

Output state read capability has been added to the CSPID1, CSPID2, and CSDIO modules in Crimson, starting with build 140.

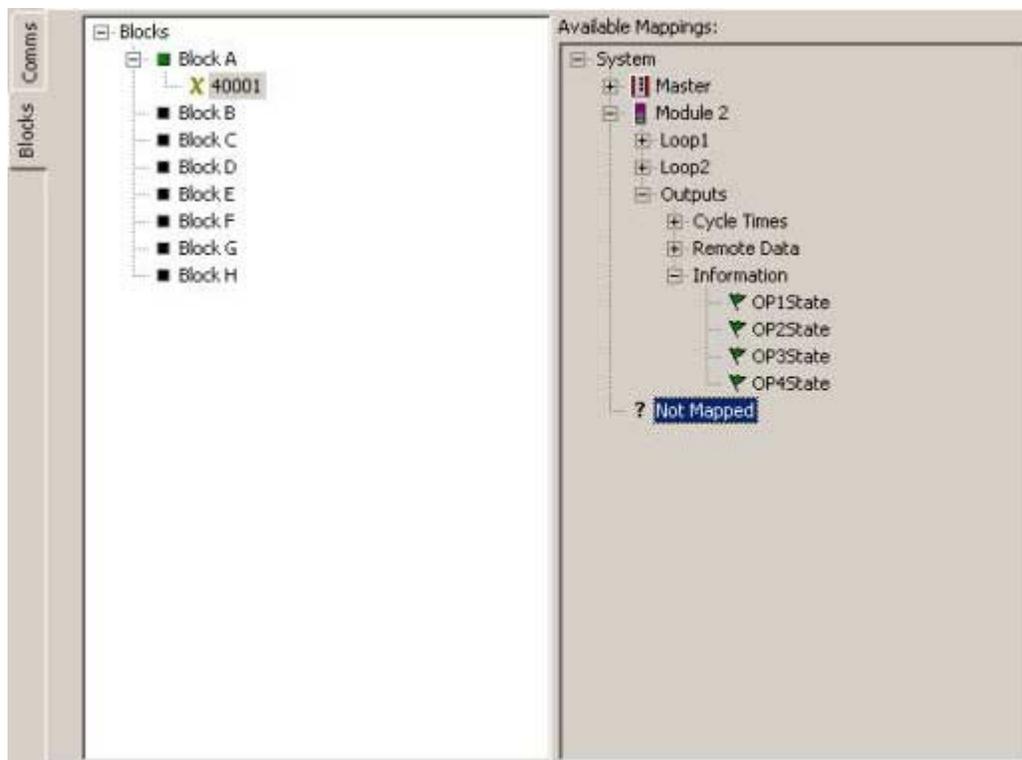


For the latest build of Crimson go to <http://www.redlion.net/Support/Downloads/SoftwareLibrary/Crimson.html>

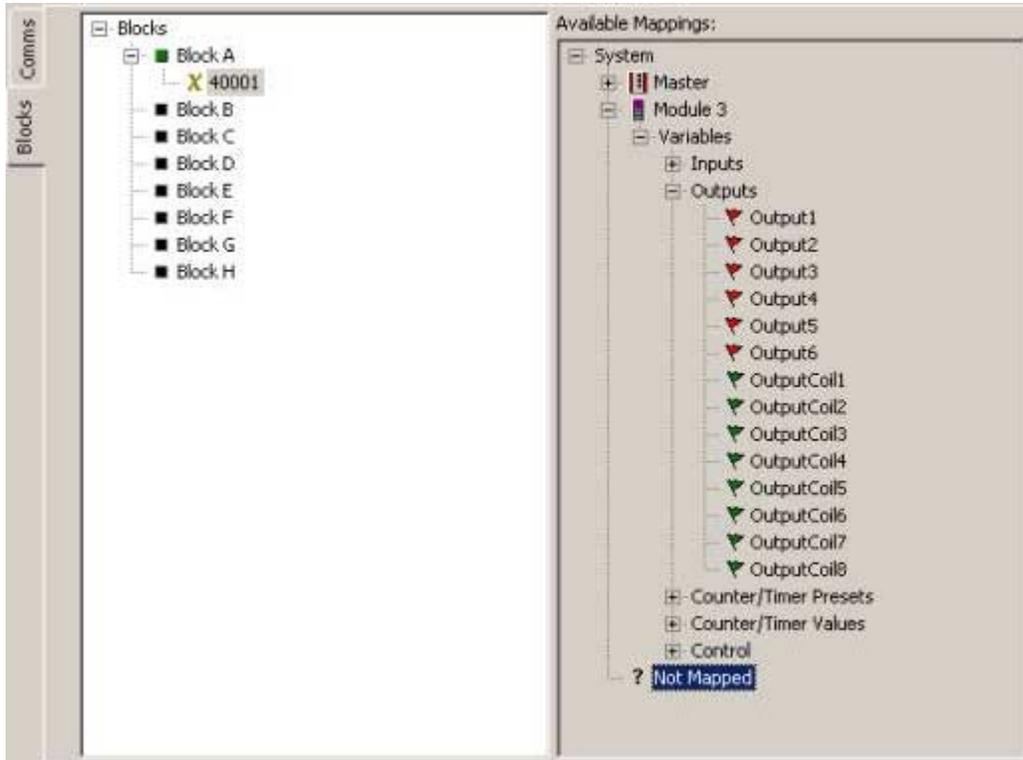
**CSPID1** – Available starting with build 111 of cspid1.bin. OpxState was added to available mappings. It is located in the module mappings at “Outputs, Information, OPxState”. These variables will return 0 if the output is OFF, or 1 if the output is ON.



**CSPID2** – Available starting with build 107 of cspid2.bin. OpxState was added to available mappings. It is located in the module mappings at “Outputs, Information, OPxState”. These variables will return 0 if the output is OFF, or 1 if the output is ON.



**CSDIO14** – Available with build 103 of csdio14.bin. Read access was added to “Variables, Outputs, Outputx”. In previous builds, these variables were write-only, and would return “0” if read, regardless of the output state.



Please realize the effects of adding the output states to the list of mapped data if the CSMSTRSE is acting as a master to the PLC or device. Every time the output changes state, the CSMSTRSE will send updated data. This will increase the amount of the data being passed to the PLC or other device. This is not significant in most applications, but something to consider on applications with many loops of control or for those that require high throughput on their communications network.