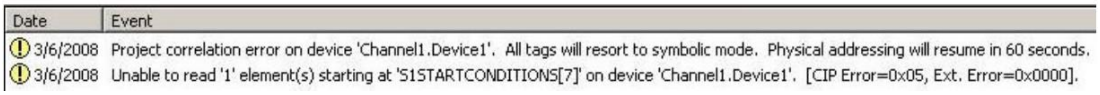
Technical Note

RSLogix 5000 Project Edit Warning

Because of KEPServerEX's ability to download a controllers project and tag database there is the concern of both KEPServerEx and RSLogix 5000 not being in sync. The primary concerns with the controller project are the effects of making online edits and downloading a project while Clients are connected and accessing active tags.



Online Edits There is no mechanism for detecting and handling project correlation errors resulting from online edits made to a project.	**Caution!** If online edits are made while clients are accessing active tags, the ControlLogix Ethernet driver accesses incorrect data for tags modified and are not flagged as invalid (Physical Addressing modes only).
Project Download The ControlLogix Ethernet Driver has been designed to monitor for project correlation errors resulting from downloads. The only caveat is that there must be data access occurring while the download occurs. When a download is detected the following actions take place: **Symbolic Addressing Mode** 1. Download occurs and is detected. 2. Tags in progress are invalidated. 3. During download process, device is polled on a 2 second interval to detect if download is complete.	**Caution!** If data access is not occurring on a device while a download occurs, the download operation will not be detected. This will result in invalid access to the controllers memory. To prevent this, have at least 1 tag accessing the controller every 500 - 1000ms so that downloads can be detected and handled properly. **Example** Only 1 tag is being accessed on a given device whose scan rate is 10 seconds. Scan x @ time t Download starts @ time t + 3 seconds

4. Upon download completion, normal tag transactions resume. **Physical Addressing Modes** 1. Download occurs and is detected. 2. Tags in progress are invalidated. 3. During download process, device is polled on a 2 second interval to detect if download is complete 4. Upon download completion, tags processed are demoted to Symbolic Addressing Mode. 5. 60 seconds after project download, tags are promoted back to Physical Addressing Mode as normal tag transactions resume.	Download finishes @ time t + 8 seconds Scan x+1 @ time t + 10 In this example, the download operation is not caught.

