Overview

When users try to add or modify a CYCLIC task interval to a value faster than the Mechatrolink-III communication cycle, the result will be the error shown below:

![eCLR error for invalid watchdog value.](image)

The Mechatrolink Communication Cycle is the fastest interval that a PLC CYCLIC task can execute. In the example below, the Mechatrolink-III communication cycle is set to 4 mSec, the Fast Task setting of any multiple of 4 mSec is allowed.

![Mechatrolink-III update rate](image)
However, the Fast task **CANNOT** be set to 2 msec, since this is faster than the Mechatrolink-III communication cycle.
FAQ

Title: Setting the Minimum Task Interval on a MPiec Controller

Product(s): MP3000iec Series Controllers, MotionWorks IEC 3

Doc. No. AN.MPIEC.25

Figure 6: eCLR error for invalid watchdog value.

Table 1: Allowable settings.

<table>
<thead>
<tr>
<th>Mechatrolink-III Setting</th>
<th>User Task Setting</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8</td>
<td>✔️</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>✔️</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>✗</td>
</tr>
</tbody>
</table>
Implementation
Assuming it is necessary for the application to operate at a faster update interval and the MPiec has sufficient CPU capability to operate all the axes on the system at a faster interval, use the following steps to remedy the Minimum Task Interval error:

1. Open Hardware Configuration and go online with the MPiec Controller.
2. Change the Mechatrolink-III update rate (Example: 2 msec.)
3. Save.
4. Reboot the MPiec controller.
5. In MotionWorks IEC 3 Pro, connect to the controller by clicking on the Project Control Dialog
6. Now change the FastTsk interval and watchdog time.
   - Example: 2 msec.
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7. Repeat step 6 by verifying the new minimum task interval by typing in ‘1’ mSec.
   • Notice the message changes to the minimum task number.

Key Note: Opening the "Project Control Dialog" updates the minimum task interval setting to the Mechatrolink Communication cycle.