Rule 03. Integers (INT)

- INT50-CPP. Do not cast to an out-of-range enumeration value

The following rules from the SEI CERT C Coding Standard also apply in C++:

- INT30-C. Ensure that unsigned integer operations do not wrap
- INT31-C. Ensure that integer conversions do not result in lost or misinterpreted data
- INT32-C. Ensure that operations on signed integers do not result in overflow
- INT33-C. Ensure that division and remainder operations do not result in divide-by-zero errors
- INT34-C. Do not shift an expression by a negative number of bits or by greater than or equal to the number of bits that exist in the operand
- INT35-C. Use correct integer precisions
- INT36-C. Converting a pointer to integer or integer to pointer

Information for Editors
To have a new guideline automatically listed above be sure to label it `int` and `rule`.

Risk Assessment Summary

<table>
<thead>
<tr>
<th>Rule</th>
<th>Severity</th>
<th>Likelihood</th>
<th>Remediation Cost</th>
<th>Priority</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT50-CPP</td>
<td>Medium</td>
<td>Unlikely</td>
<td>Medium</td>
<td>P4</td>
<td>L3</td>
</tr>
</tbody>
</table>