

Unsigned integer operations: should not wrap (bsearch-X, bsearch_X)

Integer operations should not wrap (expl-4, expl_4)

<https://www.securecoding.cert.org/confluence/display/c/INT30-C.+Ensure+that+unsigned+integer+operations+do+not+wrap>

Integer conversions: lost or misinterpreted data (bufovf-2, bufovf_2)

<https://www.securecoding.cert.org/confluence/display/c/INT31-C.+Ensure+that+integer+conversions+do+not+result+in+lost+or+misinterpreted+data>

Operations on signed integers: should not overflow (bufovf-1, bufovf_1)

Integer overflow: incorrect space requested from heap (expl-2, expl_2)

<https://www.securecoding.cert.org/confluence/display/c/INT32-C.+Ensure+that+operations+on+signed+integers+do+not+result+in+overflow>

Divide-by-zero errors: make checks to prevent (expl-8)

<https://www.securecoding.cert.org/confluence/display/c/INT33-C.+Ensure+that+division+and+remainder+operations+do+not+result+in+divide-by-zero+errors>

Shifting: do not shift by a negative number of bits (expl-9)

Shifting: do not shift by $\$ \geq \$$ number bits of the operand (expl-9)

<https://www.securecoding.cert.org/confluence/display/c/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>

Integer precision: precision and size may be different! (expl-3)

<https://www.securecoding.cert.org/confluence/display/c/INT35-C.+Use+correct+integer+precisions>

Convert a pointer to an int: size may be different (expl-1)

Convert an int to a pointer: implementation dependent (expl-1)

<https://www.securecoding.cert.org/confluence/display/c/INT36-C.+Converting+a+pointer+to+integer+or+integer+to+pointer>

Improper testing of integer value (expl-5, expl_5)

<https://www.securecoding.cert.org/confluence/display/c/ARR32-C.+Ensure+size+arguments+for+variable+length+arrays+are+in+a+valid+range>

Sign conversion: watch out for comparisons (expl-6, expl-7)