

#### 4.8.18 MRAPI\_ATOMIC\_RELEASE (ABB Extension)

##### NAME

mrapi\_atomic\_release

##### SYNOPSIS

```
void mrapi_atomic_release(  
    MRAPI_OUT void* sync, MRAPI_IN void* dest,  
    MRAPI_IN size_t size, MRAPI_OUT  
    mrapi_status_t* status  
);
```

##### DESCRIPTION

mrapi\_atomic\_release() performs integer exchange for the purposes of implementing an atomic lock. Atomic lock is provided by mrapi\_atomic\_lock(). The operation is only valid for memory locations within shared memory, where the synchronization can be across real-time processes. The integer value at destination address is written with constant 0. This is an release barrier that does not modify the destination unless it was locked by the same thread. Different integer widths are supported based on the platform. The desired `size` is passed as input and returned `status` indicates if the operation succeeded.

##### RETURN VALUE

None.

##### ERRORS

MRAPI_ERR_NODE_NOTINIT	The calling node is not initialized
MRAPI_ERR_ATOM_OP_FAILED	The local atomic operation failed

##### NOTE

Supported integer types:

Windows – uint32\_t

Unix - uint8\_t, uint16\_t, uint32\_t, uint64\_t

##### SEE ALSO