

#### 4.3.1.9 MRAPI\_MUTEX\_UNLOCK

##### NAME

mrapi\_mutex\_unlock

##### SYNOPSIS

```
void mrapi_mutex_unlock(
    MRAPI_IN mrapi_mutex_hdl_t mutex,
    MRAPI_IN mrapi_key_t* lock_key,
    MRAPI_OUT mrapi_status_t* status
);
```

##### DESCRIPTION

This function unlocks a mutex. If the mutex is recursive, then the `lock_key` parameter passed in must match the `lock_key` that was returned by the corresponding call to lock the mutex, and the set of recursive locks must be released using `lock_keys` in the reverse order that they were obtained. When extended error checking is enabled, if this function is called on a mutex that no longer exists, an `MRAPI_ERR_MUTEX_DELETED` error code will be returned. When extended error checking is disabled, the `MRAPI_ERR_MUTEX_INVALID` error will be returned.

##### RETURN VALUE

On success, `*status` is set to `MRAPI_SUCCESS`. On error, `*status` is set to the appropriate error defined below.

##### ERRORS

MRAPI_ERR_MUTEX_INVALID	Argument is not a valid mutex handle.
MRAPI_ERR_MUTEX_NOTLOCKED	Mutex is not locked.
MRAPI_ERR_MUTEX_KEY	<code>lock_key</code> is invalid for this mutex.
MRAPI_ERR_MUTEX_LOCKORDER	The unlock call does not match the lock order for this recursive mutex.
MRAPI_ERR_PARAMETER	Invalid <code>lock_key</code> parameter.
MRAPI_ERR_MUTEX_DELETED	If the mutex has been deleted then if <code>MRAPI_ERROR_EXT</code> attribute is set, MRAPI will return <code>MRAPI_ERR_MUTEX_DELETED</code> otherwise MRAPI will just return <code>MRAPI_ERR_MUTEX_INVALID</code> .
MRAPI_ERR_NODE_NOTINIT	The calling node is not initialized.

##### NOTE

##### SEE ALSO