4.3.3.7 MRAPI_RWL_LOCK

NAME

mrapi_rwl_lock

SYNOPSIS

```
void mrapi_rwl_lock(
  MRAPI_IN mrapi_rwl_hndl_t rwl,
  MRAPI_IN mrapi_rwl_mode_t mode,
  MRAPI_IN mrapi_timeout_t timeout,
  MRAPI_OUT mrapi_status_t* status
);
```

DESCRIPTION

This function attempts to obtain a single lock on the reader/writer lock and will block until a lock is available or the timeout is reached (if timeout is non-zero). A node may only have one reader lock or one writer lock at any given time. The `mode` parameter is used to specify the type of lock: `MRAPI_READER` (shared) or `MRAPI_WRITER` (exclusive). If the lock can't be obtained for some other reason, this function will return the appropriate error code below.

RETURN VALUE

On success, `*status` is set to `MRAPI_SUCCESS`. On error, `*status` is set to the appropriate error defined below. When extended error checking is enabled, if lock is called on a reader/writer lock that no longer exists, an `MRAPI_ERR_RWL_DELETED` error code will be returned. When extended error checking is disabled, the `MRAPI_ERR_RWL_INVALID` error will be returned. In both cases the attempt to lock will fail.

ERRORS

`MRAPI_ERR_RWL_INVALID`	Argument is not a valid reader/writer lock handle.
`MRAPI_ERR_RWL_DELETED`	If the reader/writer lock has been deleted then if `MRAPI_ERROR_EXT` attribute is set, MRAPI will return `MRAPI_ERR_RWL_DELETED` otherwise MRAPI will just return `MRAPI_ERR_RWL_INVALID`.
`MRAPI_TIMEOUT`	Timeout was reached.
`MRAPI_ERR_RWL_LOCKED`	The caller already has a lock
`MRAPI_ERR_PARAMETER`	Invalid mode.
`MRAPI_ERR_NODE_NOTINIT`	The calling node is not intialized.

NOTE

SEE ALSO