4.3.3.8 MRAPI_RWL_TRYLOCK

NAME

mrapi_rwl_trylock

SYNOPSIS

```
mrapi_boolean_t mrapi_rwl_trylock(
  MRAPI_IN mrapi_rwl_hndl_t rwl,
  MRAPI_IN mrapi_rwl_mode_t mode,
  MRAPI_OUT mrapi_status_t* status
);
```

DESCRIPTION

This function attempts to obtain a single lock on the reader/writer lock. 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 because a reader lock was requested and there is already a writer lock or a writer lock was requested and there is already any lock then the function will immediately return `MRAPI_FALSE` and status will be set to `MRAPI_SUCCESS`. If the request can't be satisfied for any other reason, then this function will immediately return MRAPI_FALSE and status will be set to the appropriate error code below.

RETURN VALUE

Returns `MRAPI_TRUE` if the lock was acquired, returns `MRAPI_FALSE` otherwise. If there was an error then `*status` will be set to indicate the error from the table below, otherwise `*status` will indicate `MRAPI_SUCCESS`. If the lock could not be obtained then `*status` will be either `MRAPI_ELOCKED` or one of the error conditions in the table below. When extended error checking is enabled, if `trylock` 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 and the 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_ERR_RWL_LOCKED`	The reader/writer lock is already exclusively locked.
`MRAPI_ERR_PARAMETER`	Invalid mode.
`MRAPI_ERR_NODE_NOTINIT`	The calling node is not intialized.

NOTE

SEE ALSO