

4.3.1.1 MRAPI_MUTEX_CREATE

NAME

mrapi_mutex_create

SYNOPSIS

```
mrapi_mutex_hndl_t mrapi_mutex_create(  
    MRAPI_IN mrapi_mutex_id_t mutex_id,  
    MRAPI_IN mrapi_mutex_attributes_t* attributes,  
    MRAPI_OUT mrapi_status_t* status  
);
```

DESCRIPTION

This function creates a mutex. For non-default behavior, attributes must be set before the call to `mrapi_mutex_create()`. Once a mutex has been created, its attributes may not be changed. If the attributes are `NULL`, then default attributes will be used. The recursive attribute is disabled by default. If you want to enable recursive locking/unlocking then you need to set that attribute before the call to create. If `mutex_id` is set to `MRAPI_MUTEX_ID_ANY`, then MRAPI will choose an internal id for you.

RETURN VALUE

On success a mutex handle is returned and `*status` is set to `MRAPI_SUCCESS`. On error, `*status` is set to the appropriate error defined below. In the case where the mutex already exists, `status` will be set to `MRAPI_EXISTS` and the handle returned will not be a valid handle.

ERRORS

MRAPI_ERR_MUTEX_ID_INVALID	The <code>mutex_id</code> is not a valid mutex id.
MRAPI_ERR_MUTEX_EXISTS	This mutex is already created.
MRAPI_ERR_MUTEX_LIMIT	Exceeded maximum number of mutexes allowed.
MRAPI_ERR_NODE_NOTINIT	The calling node is not initialized.
MRAPI_ERR_PARAMETER	Invalid attributes parameter.

NOTE

SEE ALSO

See `mrapi_mutex_init_attributes()` and `mrapi_mutex_set_attribute()`
See datatypes identifiers discussion: 3.12.13