

#### 4.4.2.5 MRAPI\_RMEM\_GET

##### NAME

`mrapi_rmem_get`

##### SYNOPSIS

```
mrapi_rmem_hdl_t mrapi_rmem_get(  
    MRAPI_IN mrapi_rmem_id_t rmem_id,  
    MRAPI_IN mrapi_rmem_atype_t access_type,  
    MRAPI_OUT mrapi_status_t* status  
);
```

##### DESCRIPTION

Given a `rmem_id`, this function returns the MRAPI handle referencing to that remote memory segment. `access_type` specifies access semantics. Access semantics are per remote memory buffer instance, and are either *strict* (meaning all clients must use the same access type), or any (meaning that clients may use any type supported by the MRAPI implementation). Implementations may define multiple access types (depending on underlying silicon capabilities), but must provide at minimum: `MRAPI_RMEM_ATYPE_ANY` (which indicates any semantics), and `MRAPI_RMEM_ATYPE_DEFAULT`, which has strict semantics. Note that `MRAPI_RMEM_ATYPE_ANY` is only valid for remote memory buffer creation, clients must use `MRAPI_RMEM_ATYPE_DEFAULT` or another specific type of access mechanism provided by the MRAPI implementation (DMA, etc.) The access type must match the access type that the memory was created with unless the memory was created with the `MRAPI_RMEM_ATYPE_ANY` type. See Section 3.5.2 for a discussion of remote memory access types.

##### RETURN VALUE

On success the remote memory segment handle is returned and `*status` is set to `MRAPI_SUCCESS`. On error, `*status` is set to the appropriate error defined below.

##### ERRORS

<code>MRAPI_ERR_RMEM_ID_INVALID</code>	The <code>rmem_id</code> parameter does not refer to a valid remote memory segment or it was called with <code>rmem_id</code> set to <code>MRAPI_RMEM_ID_ANY</code> .
<code>MRAPI_ERR_RMEM_ATYPE_INVALID</code>	Invalid <code>access_type</code> parameter.
<code>MRAPI_ERR_NODE_NOTINIT</code>	The calling node is not initialized.
<code>MRAPI_ERR_DOMAIN_NOTSHARED</code>	This resource can not be shared by this domain.
<code>MRAPI_ERR_RMEM_ATYPE</code>	Type specified on attach is incompatible with type specified on create.

##### NOTE

##### SEE ALSO

`mrapi_rmem_set_attribute()`, access types: Section 3.5.2