

4.4.2.11 MRAPI_RMEM_WRITE

NAME

mrapi_rmem_write

SYNOPSIS

```
void mrapi_rmem_write(
    MRAPI_IN mrapi_rmem_hdl_t rmem,
    MRAPI_IN mrapi_uint32_t rmem_offset,
    MRAPI_IN void* local_buf,
    MRAPI_IN mrapi_uint32_t local_offset,
    MRAPI_IN mrapi_uint32_t bytes_per_access,
    MRAPI_IN mrapi_uint32_t num_strides,
    MRAPI_IN mrapi_uint32_t rmem_stride,
    MRAPI_IN mrapi_uint32_t local_stride,
    MRAPI_OUT mrapi_status_t* status
);
```

DESCRIPTION

This function performs `num_strides` memory writes, where each write is of size `bytes_per_access` bytes. The i -th write copies `bytes_per_access` bytes of data from `local_buf` with offset `local_offset + i*local_stride` to `rmem` with offset `rmem_offset + i*rmem_stride`, where $0 \leq i < \text{num_strides}$.

This supports scatter/gather type accesses. To perform a single write, without the need for scatter/gather, set the `num_strides` parameter to 1.

This routine blocks until memory can be written.

RETURN VALUE

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

ERRORS

MRAPI_ERR_RMEM_INVALID	Argument is not a valid remote memory segment handle.
MRAPI_ERR_RMEM_BUFF_OVERRUN	<code>rmem_offset + (rmem_stride * num_strides)</code> would fall out of bounds of the remote memory buffer.
MRAPI_ERR_RMEM_STRIDE	<code>num_strides > 1</code> and <code>rmem_stride</code> and/or <code>local_stride</code> are less than <code>bytes_per_access</code> .
MRAPI_ERR_RMEM_NOTATTACHED	The caller is not attached to the remote memory.
MRAPI_ERR_PARAMETER	Either the <code>local_buf</code> is invalid or <code>bytes_per_access</code> is zero.
MRAPI_ERR_NODE_NOTINIT	The calling node is not initialized.

NOTE

SEE ALSO