**MRAPI API Specification V0.9.3**

**4.8.15 MRAPI\_ATOMIC\_XCHG\_PTR (ABB Extension)**

**NAME**

mrapi\_atomic\_xchg\_ptr

**SYNOPSIS**

void mrapi\_atomic\_xchg\_ptr(

MRAPI\_OUT void\* sync, MRAPI\_IN uintptr\_t\* dest, MRAPI\_IN uintptr\_t exchange, MRAPI\_IN uintptr\_t compare, MRAPI\_OUT uintptr\_t\* previous, MRAPI\_OUT mrapi\_status\_t\* status

);

**DESCRIPTION**

mrapi\_atomic\_xchg\_ptr()performs atomic pointer exchange. Atomic integer exchange

is provided by mrapi\_atomic\_xchg(). The operation is only valid for memory locations within shared memory, where the synchronization can be across real-time processes. The pointer value at destination address is replaced by exchange. The exchange argument can be NULL, otherwise it must be an address within the shared memory. The previous value is returned if that argument is non-NULL. Returned status indicates if the operation succeeded.

**RETURN VALUE**

None.

**ERRORS**

|  |  |
| --- | --- |
| MRAPI\_ERR\_NODE\_NOTINIT | The calling node is not initialized |
| MRAPI\_ERR\_ATOM\_OP\_FAILED | The local atomic operation failed |
|  |  |

**NOTE**

**SEE ALSO**