

4.8.14 MRAPI_ATOMIC_CAS_PTR (ABB Extension)

NAME

`mrapi_atomic_cas_ptr`

SYNOPSIS

```
void mrapi_atomic_cas_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_cas_ptr()` performs atomic pointer compare and swap. Atomic integer compare and swap is provided by `mrapi_atomic_cas()`. 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 compared with `compare`, and if they match then replaced with `exchange`. The compare and exchange arguments can be NULL, otherwise they must be addresses 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

<code>MRAPI_ERR_NODE_NOTINIT</code>	The calling node is not initialized
<code>MRAPI_ERR_ATOM_OP_FAILED</code>	The local atomic operation failed

NOTE

SEE ALSO