4.2.3 MCAPI_ENDPOINT_GET

NAME

`mcapi_endpoint_get` – Obtain the endpoint associated with a given tuple.

SYNOPSIS

```
#include <mcapi.h>


mcapi_endpoint_t mcapi_endpoint_get(
     MCAPI_IN mcapi_domain_t domain_id,
     MCAPI_IN mcapi_node_t node_id,
     MCAPI_IN mcapi_port_t port_id,
     MCAPI_IN mcapi_timeout_t timeout,
     MCAPI_OUT mcapi_status_t* mcapi_status
);
```

DESCRIPTION

`mcapi_endpoint_get()` allows other nodes (“third parties”) to get the endpoint identifier for the endpoint associated with a global tuple name <`domain_id, node_id, port_id`>. This function will block until the specified remote endpoint has been created via the `mcapi_endpoint_create()` call or a timeout is reached. An endpoint can receive messages from a multitude of other endpoints. Message type endpoints can therefore have multiple outstanding endpoint gets from other nodes. Channel connected endpoints on the other hand has a one to one relationship. Channel type endpoints can therefore only have one outstanding get. A second get on a channel type endpoint will result in an error. A timeout value of `MCAPI_TIMEOUT_INFINITE` would cause this function to block until completion (success or failure).

RETURN VALUE

On success, an endpoint is returned and `*mcapi_status` is set to `MCAPI_SUCCESS`. On error, `MCAPI_NULL` (or 0) is returned and `*mcapi_status` is set to the appropriate error defined below. `MCAPI_NULL` (or 0) could be a valid endpoint value so status has to be checked to ensure correctness.

ERRORS

`MCAPI_ERR_PORT_INVALID`	The parameter is not a valid port. This error also covers endpoints without ports (routing nodes).
`MCAPI_ERR_NODE_INVALID`	The parameter is not a valid node.
`MCAPI_ERR_DOMAIN_INVALID`	The parameter is not a valid domain.
`MCAPI_ERR_NODE_NOTINIT`	The node is not initialized.