The Current Object





Up to now, we have tacitly ignored the trailing parameter of type Ice::Current that is passed to each skeleton operation on the server side. The Current structure is defined as follows:

Slice					
module Ice					
ι	loc	cal dictionary <string, string=""> Context;</string,>			
	enu	m OperationMode	<pre>DperationMode { Normal, \Idempotent }</pre>		
	local struct Current				
	{				
		ObjectAdapter	adapter;		
		Connection	con;		
		Identity	id;		
		string	facet;		
		string	operation;		
		OperationMode	mode;		
		Context	ctx;		
		int	requestId;		
		EncodingVersion	encoding;		
	}				
}					

Note that the Current value provides access to information about the currently executing request to the implementation of an operation in the server:

adapter

The adapter member provides access to the object adapter via which the request is being dispatched. In turn, the adapter provides access to its communicator (via the getCommunicator operation).

• con

The con member provides information about the connection over which this request was received.

• id

The id member provides the object identity for the current request.

• facet

The facet member provides access to the facet for the request.

operation

The operation member contains the name of the operation that is being invoked. Note that the operation name may indicate one of the operation ns on lce::Object, such as ice_ping or ice_isA. (ice_isA is invoked if a client performs a checkedCast.)

• mode

The mode member contains the invocation mode for the operation (Normal or Idempotent), which influences the retry behavior of the Ice run time.

• ctx

The ctx member contains the current request context for the invocation.

requestId

The lce protocol uses request IDs to associate replies with their corresponding requests. The request Id member provides this ID. For oneway requests (which do not have replies), the request ID is 0. For collocated requests (which do not use the Ice protocol), the request ID is -1.

- encoding
- The encoding version used to encode the input and output parameters.

If you implement your server such that it uses a separate servant for each lce object, the contents of Current are not particularly interesting. (You would most likely access Current to read the adapter member, for example, to activate or deactivate a servant.) However, as we will see in our discussion of d efault servants and servant locators, the Current object is essential for more sophisticated (and more scalable) servant implementations.

- Object IdentityDefault ServantsServant Locators
- Servant Locators
 Request Contexts
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 The Ice Protocol





