

Turbomachinery and Propulsion Systems Division

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Unclassified

Protected Member Functions

The CORBA Interface Definition Language makes no provision for **protected** or **private** methods in the manner of C++ class member functions; however, these capabilities are needed to allow instances of an interface to manipulate internals of other instances of the same interface without exposing those internals to external consumers of the interface. For instance, the manipulation of the link elements of the **GList** interface must be protected from outside, potentially corrupting, manipulations.

1. The **GsObject** implementation of the **GObject** interface provides internal functions for the generation and validation of encrypted, digitally signed messages.
2. An implemented method wishing to invoke a protected method of the interface must generate such a message. Because the encryption keys are made available only to interface implementation code, only such code may generate valid protection messages.
3. Each protected method requires a protection message as an argument to the method. If the message does not validate, the protected method simply exits without performing the protected function.