CHAPTER 20

Using Remote Objecting Services

Introduction

Remote Objecting is an extension of the messaging capabilities applied to the object-oriented application environment. It allows SAS/AF developers to distribute selected partitions of their encapsulated object frameworks across remote session boundaries.

Enablement is through a dynamic remote object that uses methods for
1 instantiating an object in a remote SAS session
2 building a method parameter list
3 invoking a method on the remote instance and receiving the output results
4 destroying the remote instance.

Remote objects can be created and manipulated on a remote host, while the results are sent to the user’s local host. Therefore, you are no longer limited to object access only within your local environment, you now have the flexibility to do the same operations remotely.

Using Remote Objecting

The enhanced capability described in this chapter is a process for remoting Frame objects between a local and a remote SAS session. Therefore, to use remote objecting, you must first establish a connection by using the SIGNON command. See Chapter 23, “Starting and Stopping SAS/CONNECT Software,” on page 191 for more information.

This capability is interfaced with a remote object class.

The interface steps are:
1 Instantiate an object remotely by supplying a destination and class name.
2 Begin a method invocation by supplying a method name.
3 Build the argument list through typed ADD_METHOD invocations. Define value, mode, and an optional name tag.
4 Invoke the method.
5 Post-process the return_list, which is an argument list of update and output mode arguments (names are promoted if supplied on the invocation parameter list).
6 Repeat steps 2 through 5 as needed.
7. Destroy the remote instance.
8. Repeat per step 1 as needed.

The remote objecting services are provided by the ROBJECT class. The instance methods defined to the ROBJECT class enable applications to create and act upon remote objects.

The ROBJECT class runs in the local session, while the instance methods invoked by the ROBJECT class run in the remote session.