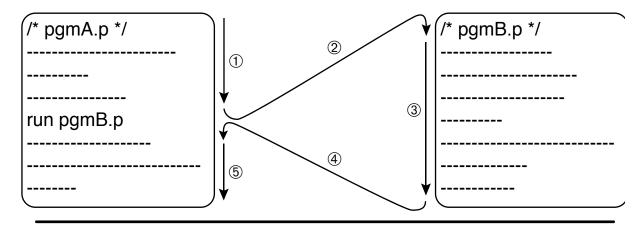
# **What are Persistent Procedures?**

# **MODAL**



## **MODELESS**

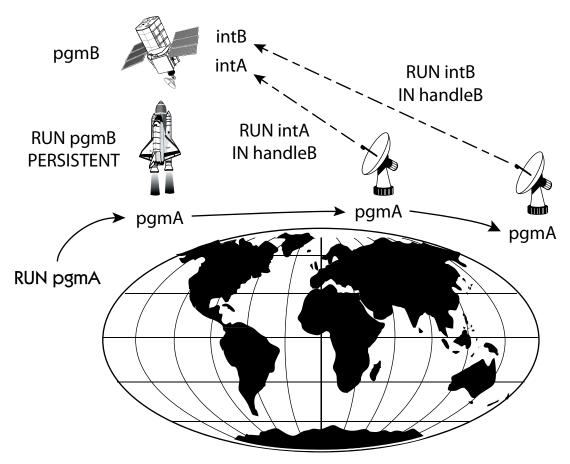


Figure 3-1: Modal vs. Modeless Procedures

## What are Persistent Procedures?

## **Nonpersistent Procedures**

- Nonpersistent procedures have all their resources (variables, windows, internal procedures, etc.) deleted from memory when the procedure ends.
  - ◆ In many cases, using nonpersistent procedures in event-driven programs can lead to undesirable results.

### **Persistent Procedures**

■ A persistent procedure is a procedure that stays resident in memory after it has finished running.

#### **Advantages**

- Using persistent procedures allows you to have multiple modeless windows or frames available at the same time.
- Other important characteristics of persistent procedures:
  - ◆ Don't use WAIT-FOR
  - Require an explicit deletion to be removed from memory
  - Allow their internal procedures, functions, and triggers to be run and fired at any time by other procedures
  - ◆ Can run internal procedures and fire triggers in other procedures
  - ◆ Resources are not destroyed when the procedure ends, so changes made to windows, variables, etc. can be retained for later use.
  - ◆ Available for character and GUI environments and all operating systems

### **Ways of Using Persistent Procedures**

- Refresh data displayed in an open window or frame
- Display multiple instances of the same window or frame with different data
- Place commonly used internal procedures in memory for rapid and easy access by many other procedures
- SmartObjects