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Host Example

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SECS Library

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This code example is distributed with the SECS Library. It demonstrates how a simple host application can be constructed. This simple example iterates through a few tests, sending S1F1s, S1F13s, S2F13s, and S2F15s.

```
/*Title:
          SECS Example Host
*Copyright: Copyright (c) 2002
*Author:
            Drake Woodring
*Author:
            Jim Redman
              ErgoTech Systems, Inc.
*Company:
*Description: This is the example host application for SECS/GEM
# SECS-GEM: True
# Test: True
# Not-To-JavaDoc: True
/* The contents of this file are confidental property of ErgoTech Systems, Inc.
* as described in the file "Ownership.txt". If you did not recieve a copy
* of that file please contact ErgoTech at +1 505 662 5156 or info@ergotech.com.
import com.ergotech.secs.*;
import java.util.Vector;
/** This is an example Host for either SecsI or HSMS connection. If the port
* (the first argumen) is less then 128, then it will create a SecsI connection
* otherwise it will create a HSMS connection.
public class ExampleHost {
 static public int messagePaceTime = 250; //in msec
 public static final String cvsRev = "CVS Info:$Revision: 1.10 $ $Date: 2003/08/06 16:16:25 $";
 static public void main (String args[]) {
 boolean HSMSTest = false;
 boolean runForever = true; // if true the simulator host runs forever, until stopped
 String hostname = "localhost";
 int portNumber = 5500;
 int deviceId = 1;
 SecsISessionManager sm;
 // Find the port Number and optionally the deviceId
 if (args.length > 0) {
  try {
    portNumber = Integer.valueOf(args[0]).intValue();
    if (args.length > 1) {
     deviceId = Integer.valueOf(args[1]).intValue();
    if (args.length > 2) {
     hostname = args[2];
```

} catch (Throwable e) {

```
System.out.println("Using the default port of "+portNumber);
 System.out.println("Connecting to port " + portNumber + " on device " + deviceId);
 WrapperInterface connectionWrapper:
 // Find out if we are SecsI or HSMS based on port number
 // This is a completely arbitrary distinction - we assume that any port
 // number less than 128 is SECSI
 if (portNumber < 128) {
  connectionWrapper = new SecslWrapper(portNumber, deviceId);
 } else {
  connectionWrapper = new HSMSActiveWrapper(portNumber, deviceId, hostname);
 // Configure the logger, and setting it to the wrapper
 LoggerInterface logger = new Logger("Equipment on " + String.valueOf(portNumber),
"Equipment On " + String.valueOf(portNumber));
 // logger.setDisplayBytes(true);
 logger.setDisplayMessages(true);
 logger.setDisplayEvents(true);
 connectionWrapper.setLogger(logger);
 // Make a connection to the Equipment
 if (connectionWrapper.connect()) {
  // At this point we can start sending messages
  try {
   // send out an S1F13 and wait until there is a response.
   // this is a GEM requirement. Our simulated equipment will return something.
   S1F14 s1f14 = null;
   do {
     System.out.println("Sending S1F13 Message");
           S1F13 s1f13 = new S1F13(new MDLN("Java"), new SOFTREV("1.1"));
     S1F13 s1f13 = new S1F13();
     s1f14 = (S1F14)s1f13.sendMessageAndWait();
   } while (s1f14 == null);
   System.out.println("Sending S1F1 Messages, without waiting for a reply");
   // send out some messages without waiting for a reply.
    sendS1F1s();
   //send out a set of S2F13s
   sendS2F13s();
   //send out a set of S2F15s
    sendS2F15s();
   while (runForever) {
   //send out an S1F1 without waiting for a reply
     System.out.println("Sending S1F1 Message");
     S1F1 s1f1 = new S1F1():
     s1f1.sendMessage();
    //send out a set of S2F13s (waiting for a reply)
   sendS2F13s();
   //send out a set of S2F15s (waiting for a reply)
    sendS2F15s();
   }
```

```
} catch (Throwable e) {
    System.out.println(e);
    e.printStackTrace();
 } else {
   System.out.println("Couldn't make connection to Equipment");
}
/** this sends some S1F1s without waiting for a reply */
 public static void sendS1F1s()
     throws SecsException {
    for (int scount = 0; scount < 10; scount++) {
     //pace the messages
     Thread myThread = Thread.currentThread();
try {
      Thread.sleep(messagePaceTime);
      } catch (InterruptedException e){
      // the VM doesn't want us to sleep anymore,
      // so get back to work
     System.out.println("Sending S1F1 Message");
     S1F1 s1f1 = new S1F1():
     s1f1.sendMessage();
    }
 }
/** this sends out S2F15s, waiting for a reply for each */
  public static void sendS2F15s()
   throws SecsException {
   SecsMsg msg, reply;
//pace the messages
for (int x = 0; x < 100; x++) {
    Thread myThread = Thread.currentThread();
try {
      Thread.sleep(messagePaceTime);
      } catch (InterruptedException e){
      // the VM doesn't want us to sleep anymore,
      // so get back to work
     System.out.println("Sending S2F15 Message number " + x + " to equipment");
     msg = new S2F15(new ECID("test" + x), new ECV(Math.random()));
     reply = msg.sendMessageAndWait();
  }
}
/** this sends out S2F13s, waiting for a reply for each */
  public static void sendS2F13s()
   throws SecsException {
   SecsMsg msg, reply;
   //pace the messages
for (int x = 0; x < 100; x++) {
    Thread myThread = Thread.currentThread():
try {
      Thread.sleep(messagePaceTime);
      } catch (InterruptedException e){
      // the VM doesn't want us to sleep anymore,
      // so get back to work
    System.out.println("Sending S2F13 Message number " + x + " to equipment");
    msg = new S2F13(new ECID("test" + x));
   reply = msg.sendMessageAndWait();
```

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}

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