

“The Network is the Computer”

Advanced RMI or
Passing Behavior

The Client Passes HardWork to a Remote Object

```
import java.rmi.*;
import java.math.*;
public class ComputeClient {
    public static void main(String args[]) {
        if(System.getSecurityManager() == null) {
            System.setSecurityManager(new RMISecurityManager());
        }
        try {
            String name = "//localhost/Compute";
            Compute comp = (Compute) Naming.lookup(name);
            HardWork task = new HardWork();
            BigInteger bi = (BigInteger) (comp.executeTask(task));
            System.out.println("The result is " + bi);
        }
        catch(Exception e) {
            e.printStackTrace(); }}}}
```

HardWork implements Task

```
import java.math.*;

public class HardWork implements Task {

    public Object execute() {

        BigInteger sum = new BigInteger(""+0);

        for(int j = 0; j < 1000; j++ ) {

            BigInteger x = new BigInteger(""+j);
            sum.add(x);
        }
        return sum;
    }
}
```