



APPENDIX **A**

Sample Client Program in Java

The following text is a client program in Java that completes the basic functions in Cisco License Manager. When you connect to Cisco License Manager, you must provide the following information:

- IP address of Cisco License Manager host
- Login name, password, port, and prompt

```
package com.cisco.nm.clm.sdk;

import com.cisco.nm.clm.common.*;
import com.cisco.nm.clm.sdk.LicenseManager;
import com.cisco.nm.clm.sdk.LicenseManagerTest.MyIDStatusListener;

import java.rmi.RemoteException;

public class CLMClientSample {

    // Listener for asynchronous calls to receiving IDStatus.
    public class MyIDStatusListener implements IDStatusListener {
        public void onStatus(String request_id, IDStatus status) {
            System.out.println("Received status for request " + request_id);
        }
    }

    public static void main(String[] args) {

        .
        .
        .

        // Create an instance of LicenseManager.
        LicenseManager lm_instance = new LicenseManager();

        try {
            // login to the LM server located in the same host
            // with no session timeout.
            EulaInfo eula= new EulaInfo();
            eula. I_have_read_and_I_accept_this_EULA=true;
            UserToken token = lm_instance.login("admin", "cisco",
                "localhost", 1099, 0, eula);

            // Create a devices using IP address.
            String[] dev_ips = {"192.168.98.120"};
            DeviceStatus dev_status =
```

```

        lm_instance.createDevicesByIPAddr(token, dev_ips);
        Device device = dev_status.getDeviceStatusItems()[0].getDevice();

        // Create a PAK object.
        String[] pak_ids = {"1XSAU930025"};
        PAKStatus pak_status = lm_instance.createPAKs(token, pak_ids);

        // Download PAK information from Cisco.
        MyIDStatusListener my_listener = new MyIDStatusListener();
        String req_id = lm_instance.asyncDownloadPAKInfo(token, pak_ids,
            my_listener);

        // Wait a while for PAK info download to complete....
        .
        .
        .

        // Read the PAK objects.
        pak_status = lm_instance.readPAKs(token, pak_ids);
        PAK pak = pak_status.getPAKStatusItems()[0].getPAK();

        // Prepare License request using the SKU list in the PAK object.
        LicenseRequest[] lic_req = new LicenseRequest[1];
        lic_req[0] = new LicenseRequest();
        lic_req[0].setSKUSelection(pak.getSKUList());
        lic_req[0].setDeviceID(device.getDeviceID());

        // Obtain license.
        req_id = lm_instance.asyncObtainLicense(token, lic_req, my_listener);

        // Assume we have 2 license obtained and stored in
        // the data storage, we can deploy them to the device.
        String[] lic_ids = {"lic00001", "lic00002"};
        req_id = lm_instance.asyncDeployLicenses(token, lic_ids, my_listener);

    } catch (RemoteException ex) {
        ex.printStackTrace();
    }
}
}

```