ISY-994iZ Series – OpenADR Configuration Guide

1) ISY Installation

a) Connect one of the included Cat5e cable to ISY's **Network** Port and to your network hub. **Note**: the network must ***initially*** be DHCP enabled.

b) [Optional] Connect the second included Cat5e cable to ISY's **Port A** and the other end to the PLM
Note: If your PLM is model number 2413S, you do need a power supply (not included)

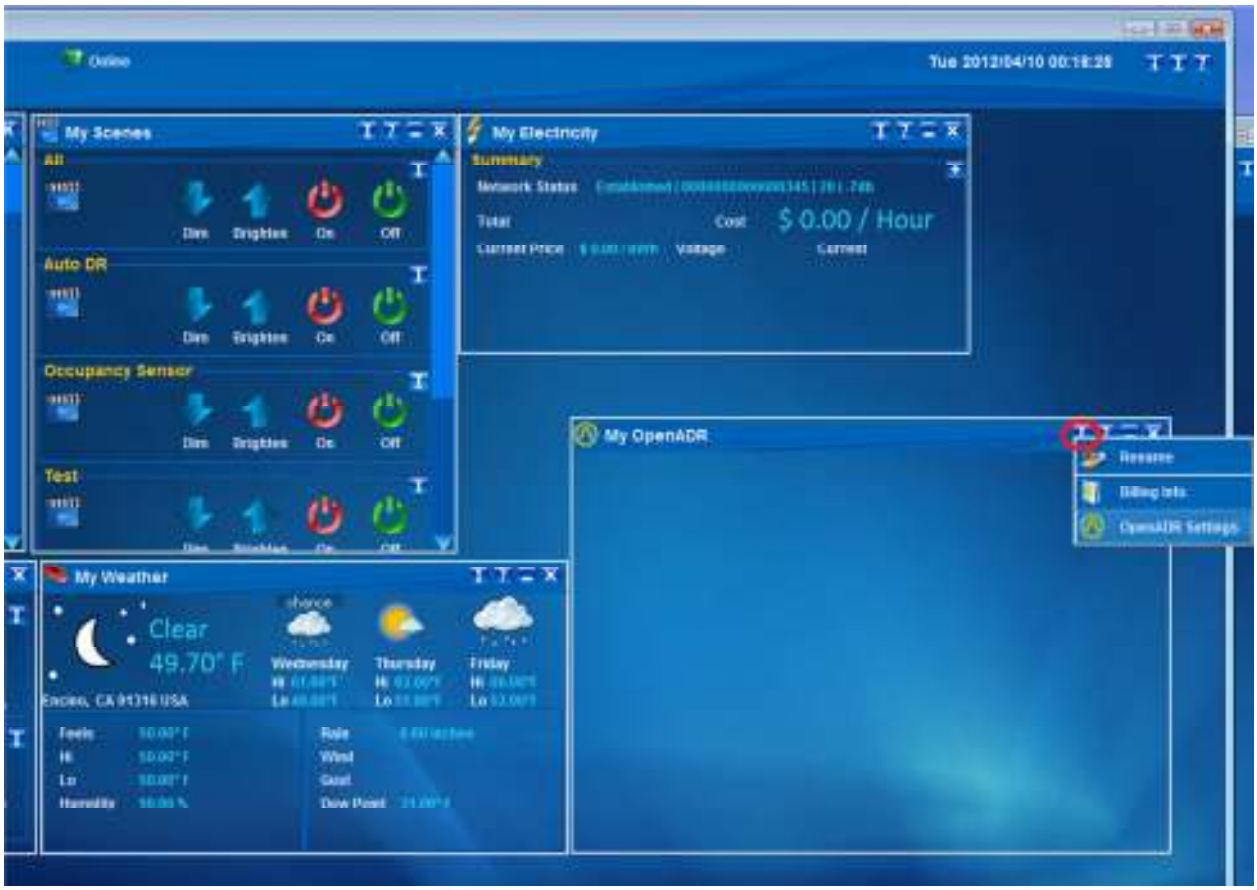
c) If you do not have Java installed, please install the latest for your platform. You may find the latest Java downloads at **http://www.java.com/getjava** **.** Please choose the latest JRE for your platform

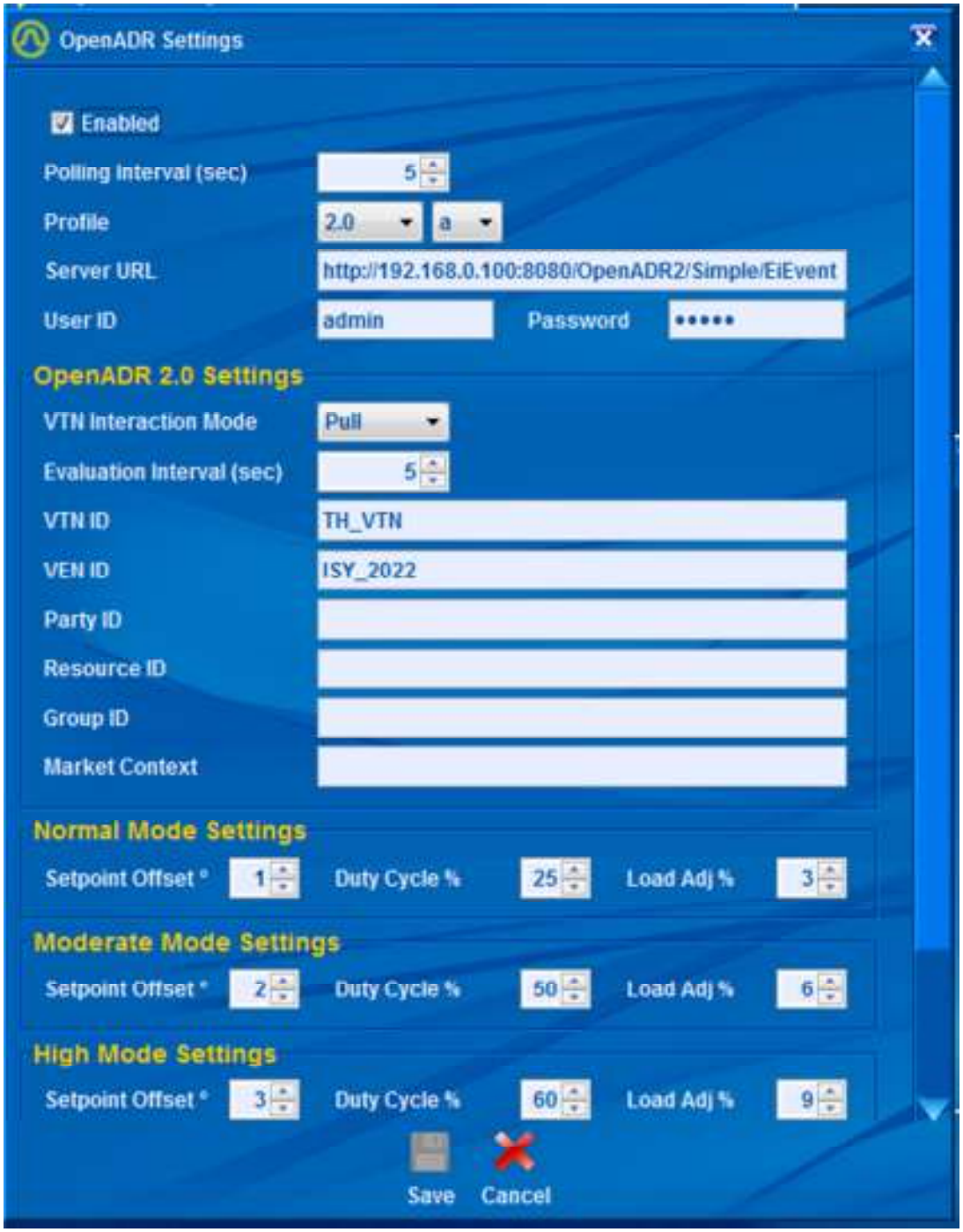
d) Go to **http://isy.universal-devices.com/99i/zs/dashboard.jnlp** ; when prompted to authenticate, enter **admin** for both user-id and password

2) Configure OpenADR

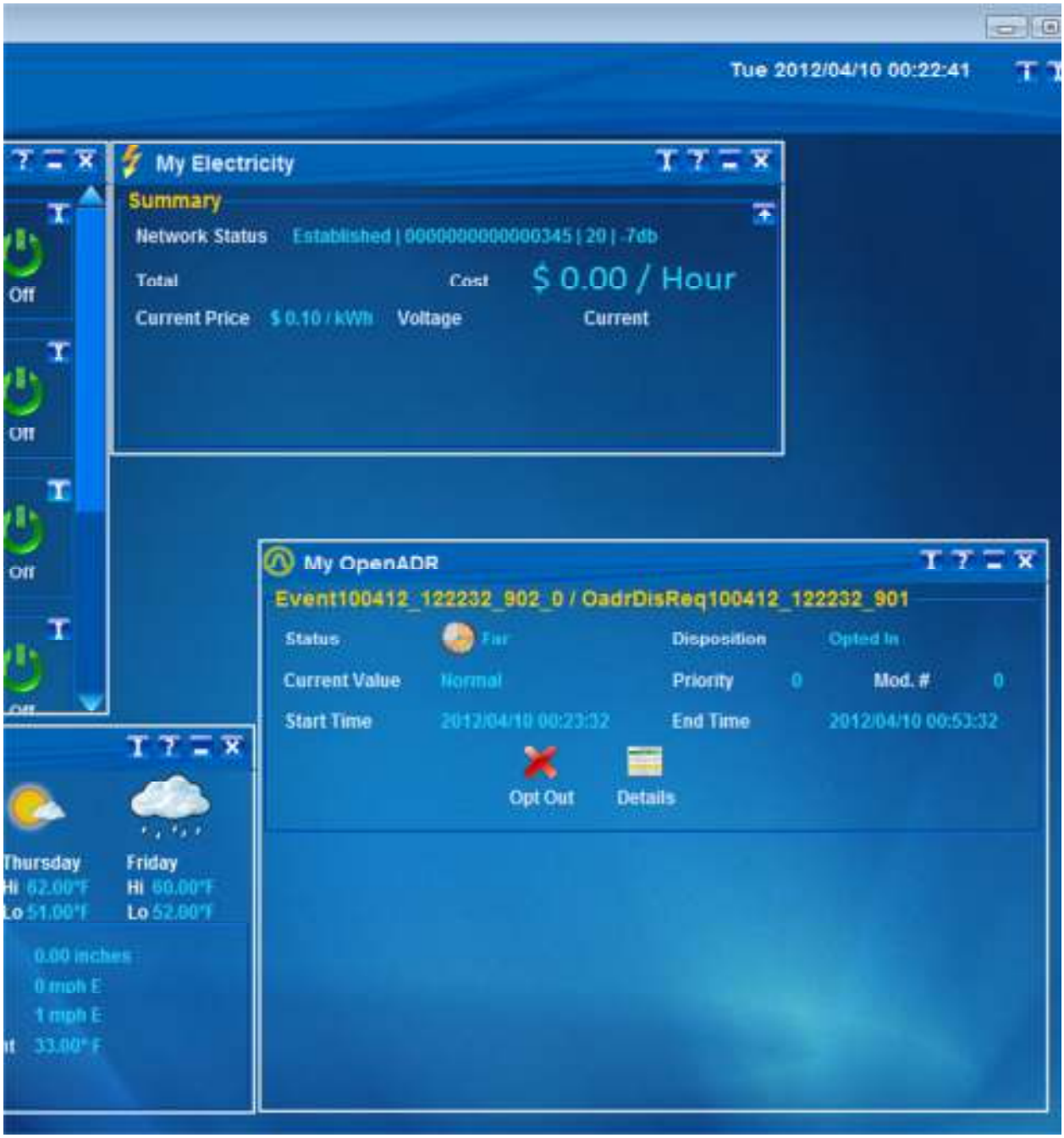
a) Activate My OpenADR Portlet

b) Adjust OpenADR Settings




OpenADR Settings
Enabled
Polling Interval (sec)
5
Profile
2.0
a
Server URL
http://192.168.0.100:8080/OpenADR2/Simple/EiEvent
User ID
admin
Password
OpenADR 2.0 Settings
VTN Interaction Mode
Pull
Evaluation Interval (sec)
5
VTN ID
TH_VTN
VEN ID
ISY_2022
Party ID
Resource ID
Group ID
Market Context
Normal Mode Settings
Setpoint Offset °
1
Duty Cycle %
25
Load Adj %
3
Moderate Mode Settings
Setpoint Offset °
2
Duty Cycle %
50
Load Adj %
6
High Mode Settings
Setpoint Offset °
3
Duty Cycle %
60
Load Adj %
9
Save
Cancel

c) Issue an Event
d) Check the OpenADR Portlet
e) Click on Details to see full event details



OpenADR Event Details

Event100412_122232_902_0 / PING_OadrDisReq100412_122322_205

Status	Active	Disposition	Opted In	Response Type	Always
Priority	0	Mod. #	0	Created Time	2012/04/10 00:22:32
Notification Time	2012/04/10 00:22:32	Ramp Up Time	2012/04/10 00:23:32	Recovery Time	2012/04/10 00:53:32
Start Before	0 (seconds)	Start After	0 (seconds)	Duration	1800 (seconds)
Start Time	2012/04/10 00:23:32	Actual Start Time	2012/04/10 00:23:32	End Time	2012/04/10 00:53:32
VTN Comment					
Market Context	http://MarketContext1				

Opt Out

Current Value

ID	N/A	Type	float	Value	1.000000	Mode	Moderate

Signal

ID	String	Type	level	Name	sample

Intervals

ID	Duration	Start Time	End Time	Type	Value	Mode
0	900 (seconds)	2012/04/10 00:23:32	2012/04/10 00:38:32	float	1.000000	Moderate
1	900 (seconds)	2012/04/10 00:38:32	2012/04/10 00:53:32	float	2.000000	High

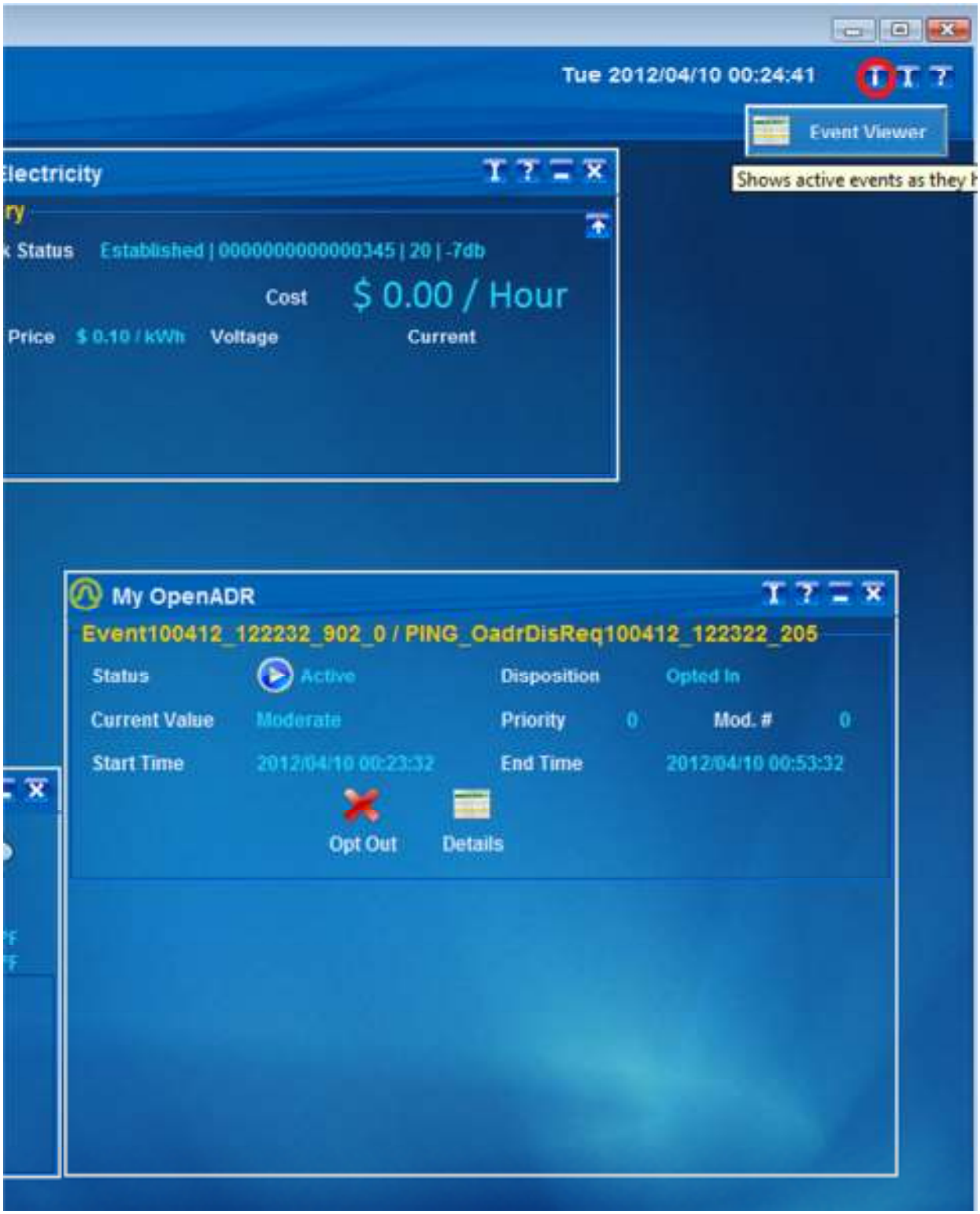
Targets

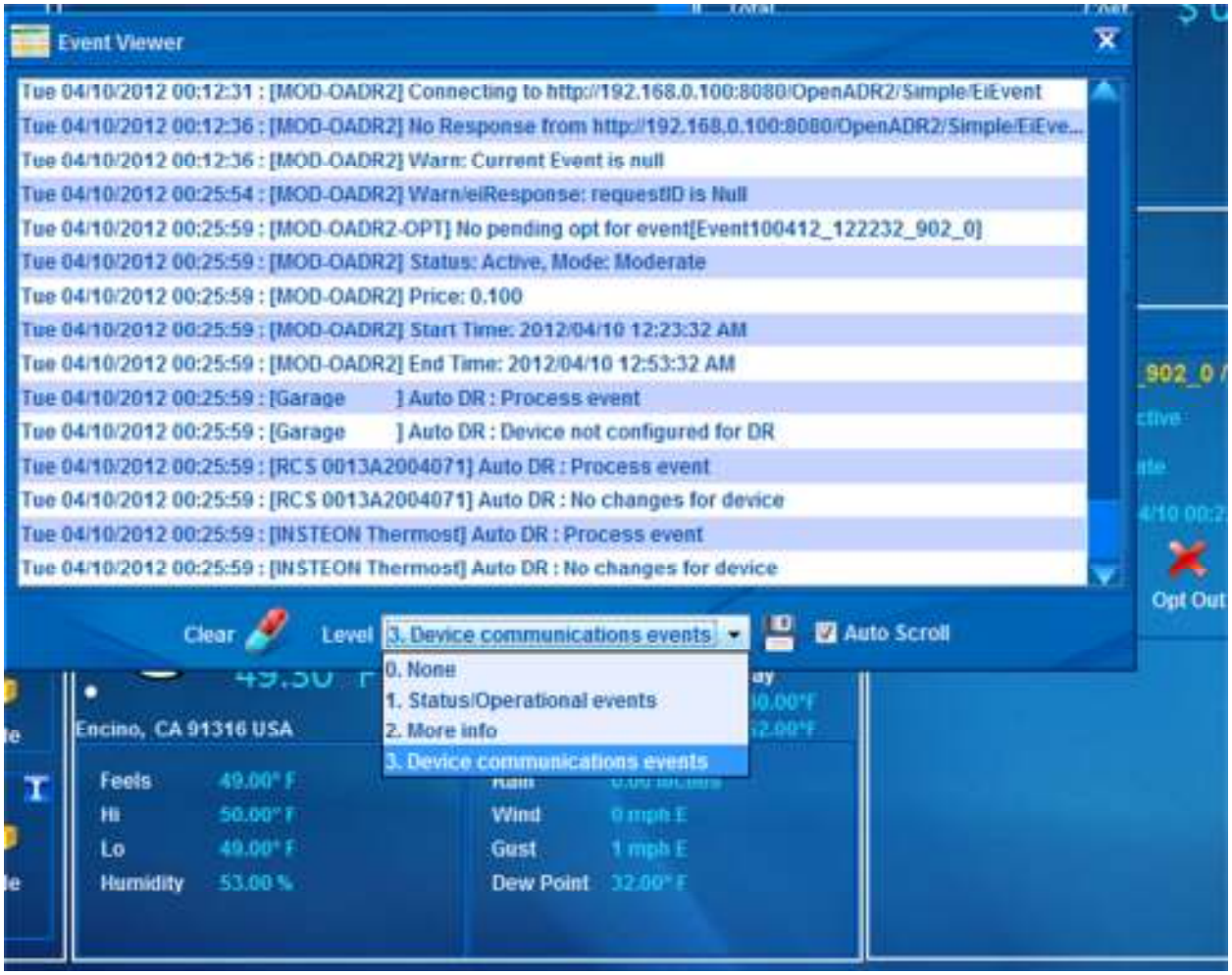
Groups

Resources

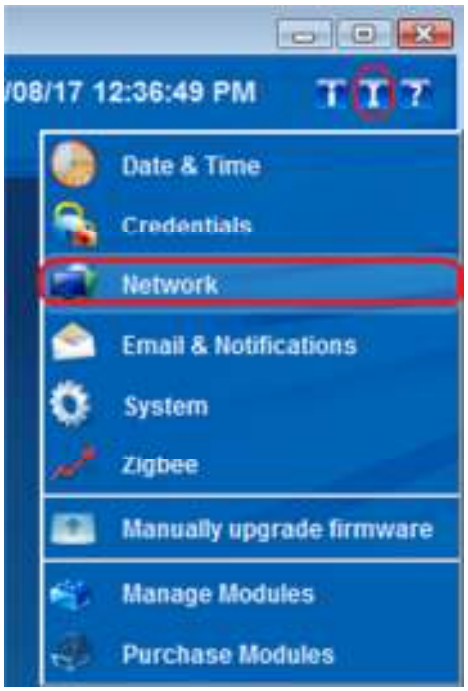
Cancel

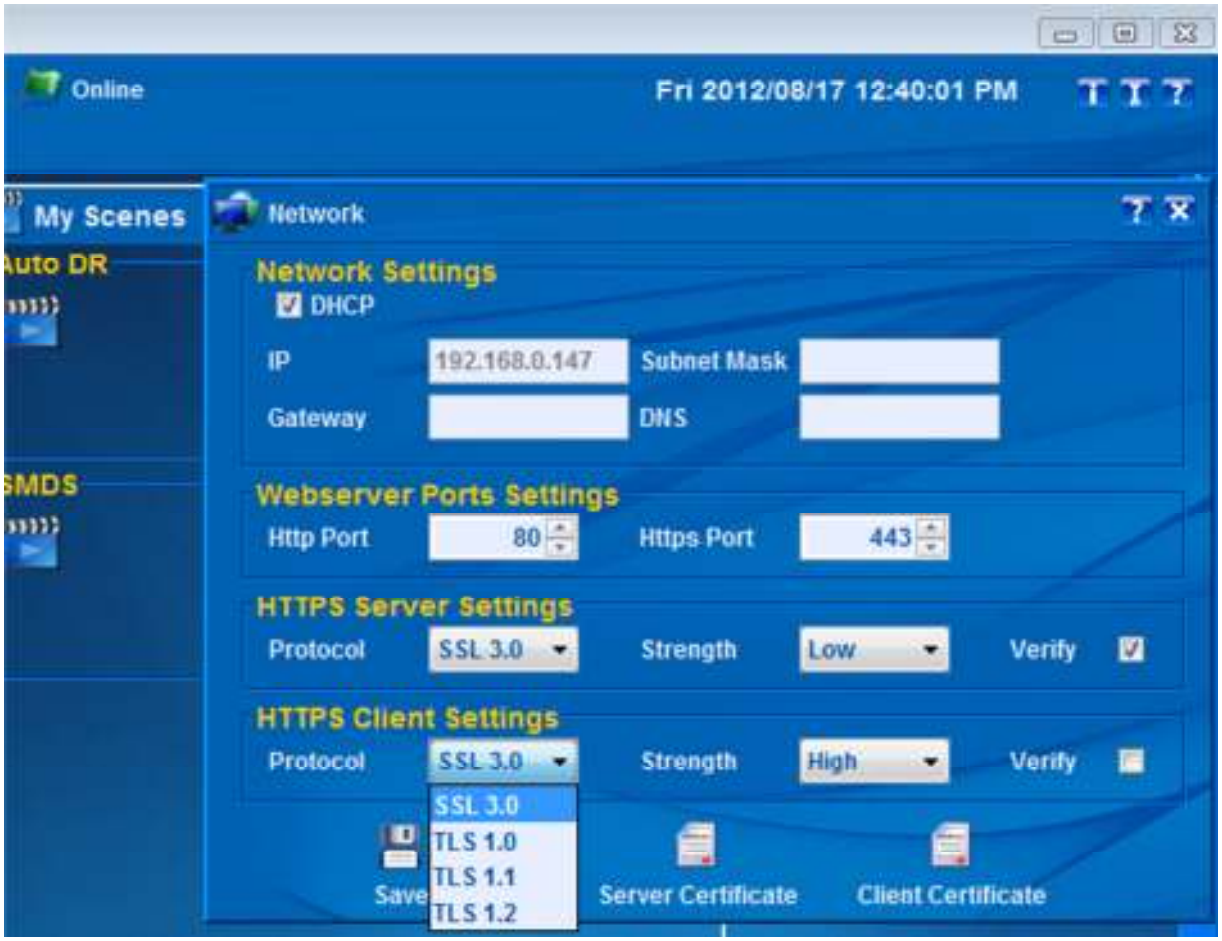
f) Use the Event Viewer to see the operational status of ISY and OpenADR events




Event Viewer
Tue 04/10/2012 00:12:31 : [MOD-OADR2] Connecting to http://192.168.0.100:8080/OpenADR2/Simple/EiEvent
Tue 04/10/2012 00:12:36 : [MOD-OADR2] No Response from http://192.168.0.100:8080/OpenADR2/Simple/EiEve...
Tue 04/10/2012 00:12:36 : [MOD-OADR2] Warn: Current Event is null
Tue 04/10/2012 00:25:54 : [MOD-OADR2] Warn/eiResponse: requestID is Null
Tue 04/10/2012 00:25:59 : [MOD-OADR2-OPT] No pending opt for event[Event100412_122232_902_0]
Tue 04/10/2012 00:25:59 : [MOD-OADR2] Status: Active, Mode: Moderate
Tue 04/10/2012 00:25:59 : [MOD-OADR2] Price: 0.100
Tue 04/10/2012 00:25:59 : [MOD-OADR2] Start Time: 2012/04/10 12:23:32 AM
Tue 04/10/2012 00:25:59 : [MOD-OADR2] End Time: 2012/04/10 12:53:32 AM
Tue 04/10/2012 00:25:59 : [Garage] Auto DR : Process event
Tue 04/10/2012 00:25:59 : [Garage] Auto DR : Device not configured for DR
Tue 04/10/2012 00:25:59 : [RCS 0013A2004071] Auto DR : Process event
Tue 04/10/2012 00:25:59 : [RCS 0013A2004071] Auto DR : No changes for device
Tue 04/10/2012 00:25:59 : [INSTEON Thermost] Auto DR : Process event
Tue 04/10/2012 00:25:59 : [INSTEON Thermost] Auto DR : No changes for device
Clear
Level
3. Device communications events
Auto Scroll
0. None
1. Status/Operational events
2. More info
3. Device communications events
Opt Out
Encino, CA 91316 USA
Feels 49.00° F
Hi 50.00° F
Lo 49.00° F
Humidity 53.00 %
Wind 0 mph E
Gust 1 mph E
Dew Point 32.00° F

3) **Configure Network Security**





Protocol: A maximum protocol level supported by client or server. Please note that if you use TLS 1.2 and if the peer is requesting TLS 1.0, then ISY will downgrade to TLS 1.0.

Strength: The symmetric key strengths. Each strength has an ordered/priority list of cipher suites that ISY will use to determine its operations. The priority is from high to low (top to bottom):

High:

```
SSL_RSA_WITH_AES_128_SHA2
SSL_RSA_WITH_AES_256_SHA2
SSL_RSA_WITH_AES_128_SHA
SSL_RSA_WITH_AES_256_SHA
```

Medium:

```
SSL_RSA_WITH_AES_128_SHA
SSL_RSA_WITH_AES_256_SHA
SSL_RSA_WITH_RC4_128_SHA
SSL_RSA_WITH_RC4_128_MD5
```

Low:

```
SSL_RSA_WITH_RC4_128_MD5
SSL_RSA_WITH_RC4_128_SHA
SSL_RSA_WITH_AES_128_SHA
```

Verify: Whether or not client/server authentication should be performed on the peer.

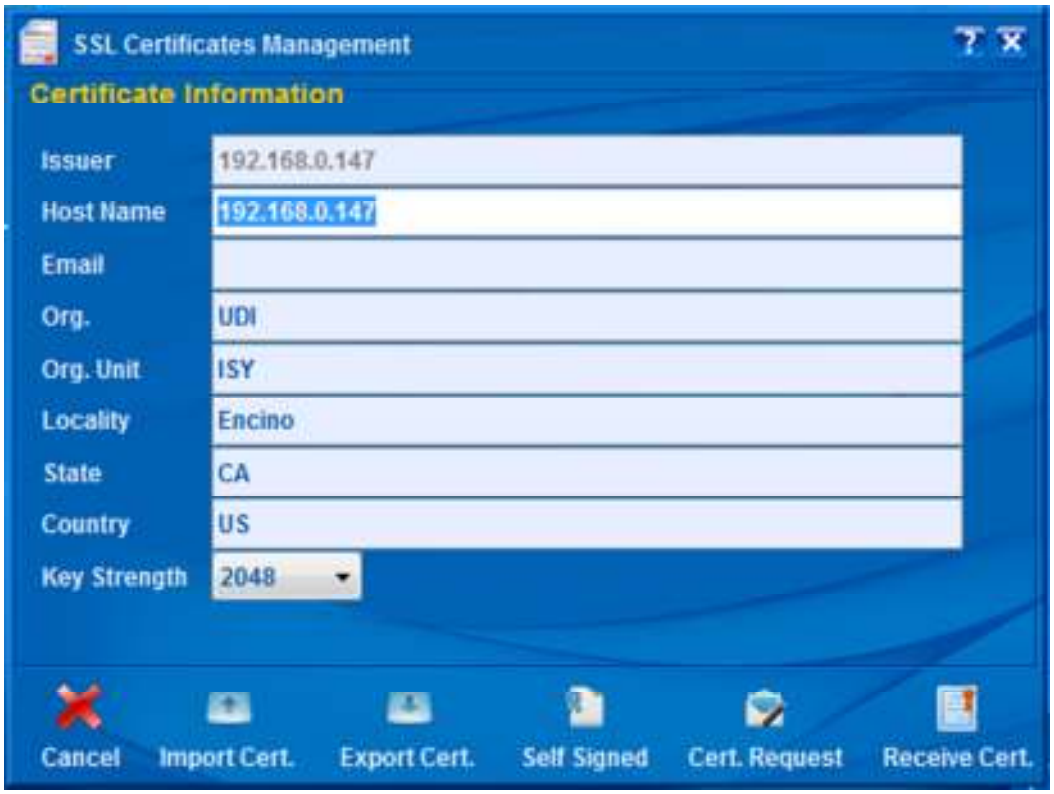
4) Certificate Management

The operations for Server Certificates and Clients Certificates are identical. As such, in this section only Server Certificates are discussed.

In the Network Dialog (see section 3), click on the Server Certificate. You will be prompted by:

Yes: This will load the certificate store from ISY for which you must have a valid password that you had setup before.

No: This will recreate a new certificate store and overwrites any previous certificate information. The requested password is the password you would like to use to access the store in the future (see Yes).



Import Cert.: If you have a PKCS12 (pfx) format file which includes both the Certificate as well as the Private Key, then choose this option import both. ISY will be rebooted for the changes to take effect.

Export Cert.: Use this button to export an existing certificate in PEM format.

Self Signed: If you wish to create a self signed certificate, make sure to enter and/or update (in case you are working on an existing certificate) all the necessary information in the fields and ***then*** click on the **Self Signed** button.

Cert. Request: If you wish to have your certificate signed by a CA, you need to create a CSR. To create a CSR, make sure to enter and/or update (in case you are working on an existing certificate) all the necessary information in the fields and ***then*** click on the **Cert. Request** button.

Receive Cert.: If you have already made a Cert Request and have now been given an actual certificate based on your Cert Request (CSR), then click on the **Receive Cert** button to import the Certificate into ISY.