

# VIO UI Plugin Registration - Troubleshooting

## Introduction

Web client plugin registration include two parts:

- 1> VIO manager server: Register the plugin info to NGC
- 2> VIO UI plugin: Verify/connect to VIO manager server

## Prerequisite

### VC certificate

VIO manager server will verify the hostname and thumbprint of the VC certificate, thus the VC's certificate should be valid.

The minimum requirements for VC certificate

- a> If IP are used to access VC, then the subject alternative name (SAN) must contain the IP address
- b> If FQDN is used to access VC, then the subject alternative name(SAN) must contain the FQDN and **DNS server** must be configure properly that the VIO manager server can access the VC by FQDN.

### NTP

We should set the NTP server when deploy the VIO ova, the NTP server should be same as the VC's NTP server.

## Workflow of plugin registration

### VIO manager Server

- 1> Register OMS backend to VC server
- 2> Register OMS NGC plugin

### VIO UI plugin

#### Firstboot

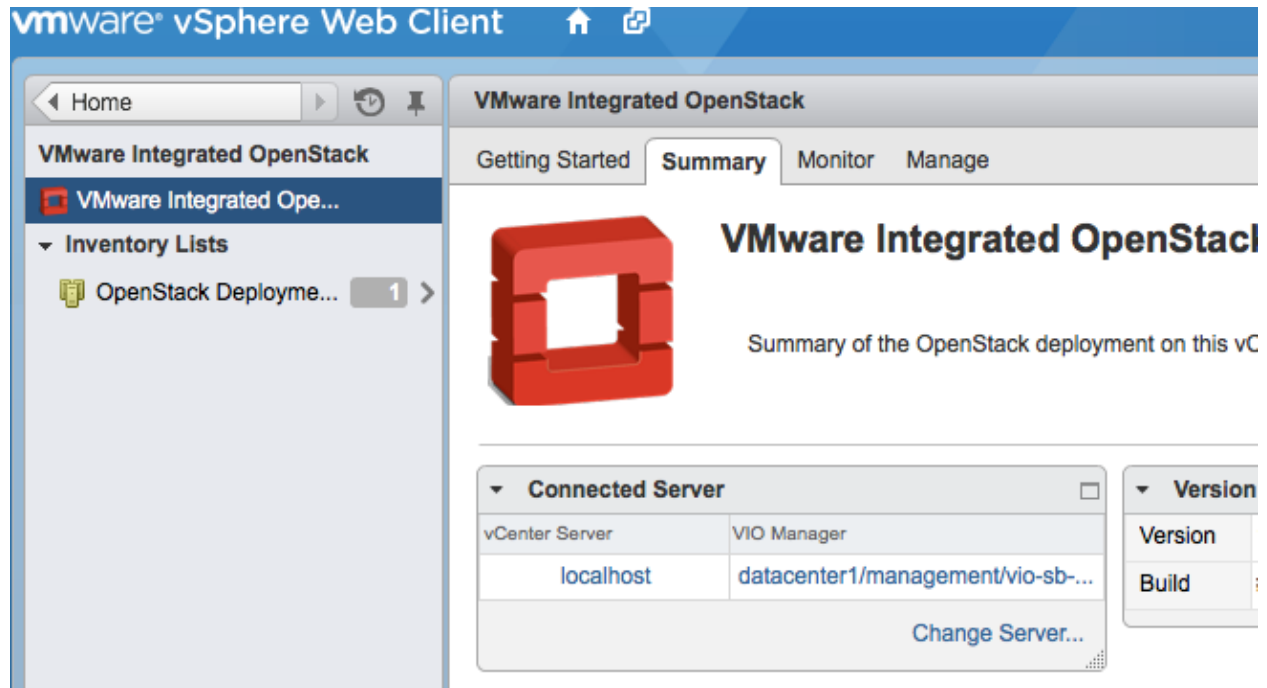
- 1> UI query VIO manager server IP by the VIO manager server's moid
- 2> UI check and verify VIO manager server's certificate
- 3> Save the IP & certificate info into VC database

## Everyboot:

- 1> Get VIO manager server IP from VC database
- 2> Get SSO token by /oms/sp/vcsso
- 3> Check VIO manager server connection by API “oms/api/status”

## Change VIO manager Server

In some case it will need to change the VIO server, this can be done as follow. The workflow in the backend is just as the Firstboot+Everyboot.



## Troubleshooting

### (1)Users can't see the VIO plugin in the Web Client after deploying the VIO ova.

Note: To trigger the auto registration of VIO plug-in, users needs to logout and re-login after ova deployment is completed and VIO vAPP has started.

The invalid VC certificate usually causes this issue, the follow steps can be used to identify it  
a> Login to VIO manager server and run “service oms status” to check whether the VIO manager server has successfully startup.

b> If we see error log in /var/log/oms/oms.log

- If we see this error message: *com.vmware.aurora.vc.vcservice.VcService: Failed Extension registration to https://ip/vsm/extensionService*

we should check VC certificate (method include at the end of the docs)to see if the subject alternative name field to make sure it contain the IP address

- If we see this error message: `com.vmware.aurora.vc.vcservice.VcService: Failed Extension registration to https://fqdn/vsm/extensionService`

we should check VC certificate <sup>1</sup> to make sure the subject alternative name field contains the FQDN, and also we make sure the **DNS** is properly configured that the VIO manager server can access the VC by the FQDN.

### **Solution:**

1> Ether visitor <https://vcip:5480/#core.Login> to regenerate the SSL certificate or replace the Vcenter Certificate to a valid one.

2> Restart the VIO virtual appliance (vApp) in vSphere web client.

If above solution doesn't work. The other possibility is vsphere client service doesn't reload the registered plug-in, from VC content view you can see the plugin is registered like below to confirm.

1. go to [https://VC\\_IP](https://VC_IP) →
2. click "Browse objects managed by vSphere"
3. click content
4. click ExtensionManager
5. make sure "extensionList["com.vmware.openstack.ui"]" & extensionList["com.vmware.openstack.vcext.instance-xxx"] exist.

The solution is logout the from the VC then restart the vsphere client service, For VCVA, you can either do this through [https://VC\\_IP:5480](https://VC_IP:5480) or ssh into VC to "service vsphere-client restart".

### **(2) I can't see the "Deployment Openstack" Option**

This usually happens you used to have a VIO, then later on you make some change to your system that makes the Web client plugin lost connection to the VIO manager server.

### **Solution:**

In the "Getting started" page click connect to management server to reconnect to the VIO management server.

### **(3) VIO works before, but after VC certificate changes, it stops from working**

In this case, OMS extension registration to VC will fail, and UI plugin will popup an error box like "vc initialisation failure". The error log from `/var/log/oms/oms.log` is like "inherited from com.vmware.vim.binding.vim.fault.InvalidLogin: Cannot complete login due to an incorrect user name or password."

### **Solution:**

This is a known issue in VC, and the solution is to edit `/opt/vmware/vio/etc/omjs.properties` and change `"oms.extension.registered = false"`. After that, restart VIO virtual appliance (vApp) in vSphere web client

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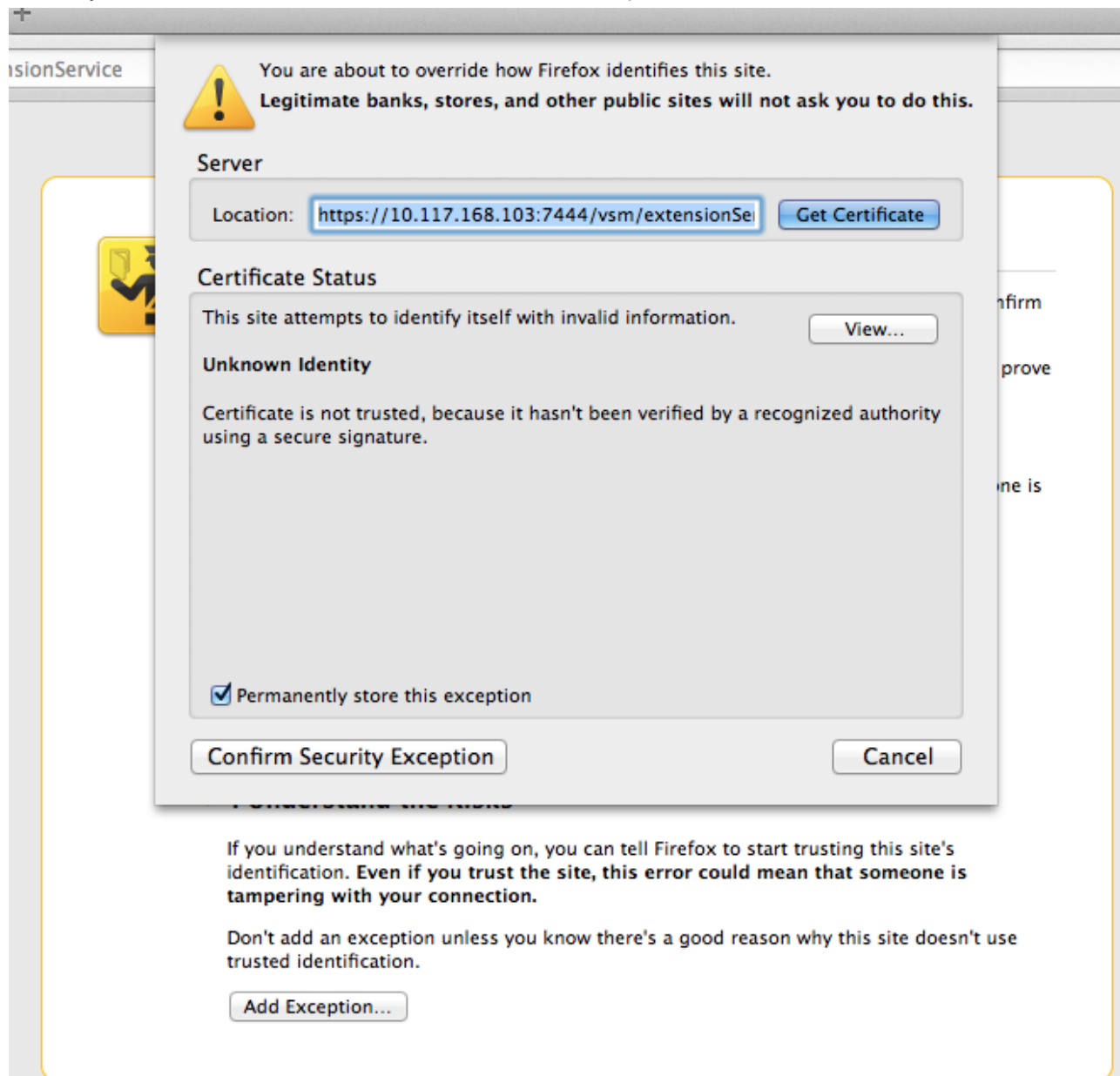
<sup>1</sup> Refer to "How to check VC SAN name" at the bottom.

# Reference

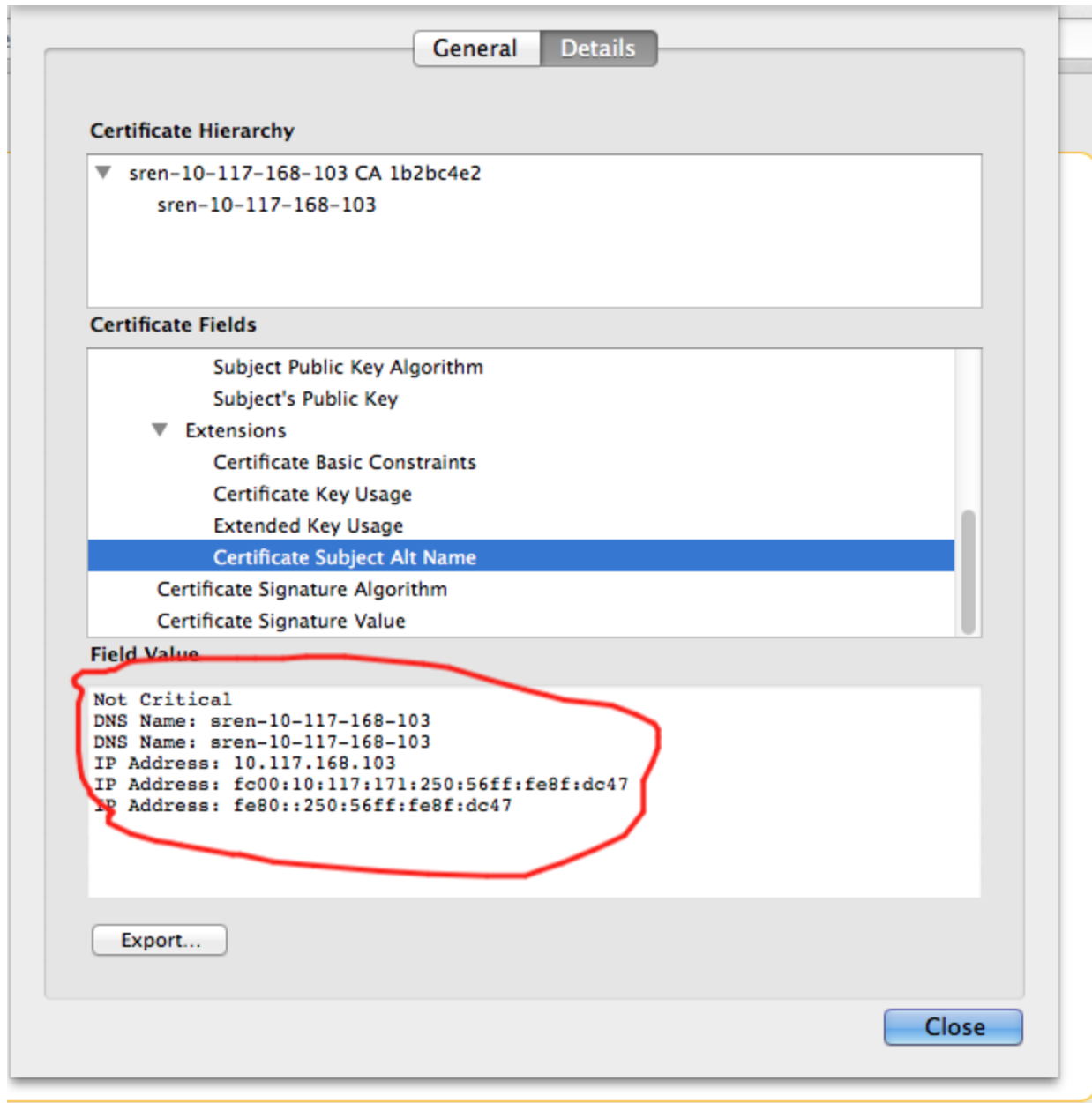
## 1. How to check VC SAN name.

If you can access the certificate file directly , you can just view it. Otherwise there is a simply way.

- Open Firefox(or chrome)
- input <https://ip/vsm/extensionService> ( or change the ip to fqdn)
- you will see Connection is Untrusted , click "Add Exception"



- click view



2. In VC6.0, the registered plug-in is located here.

```
/etc/vmware/vsphere-client/vc-packages/vsphere-client-serenity # ls
com.vmware.openstack.ui-1.0.0.2578504  com.vmware.vShieldManager-6.1.3.2539574
org.os.vmw.plugin-1.0.0.2578504
```