iControl

Signal and facility monitoring

iControl VM Quick Start Guide

M446-9105-100

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iControl Installation on a VM

The installation of an iControl image on a virtual machine is very simple to do. As long as the requirements, above, are met, the whole process shouldn't take more than ten to fifteen minutes.

Except for one task, the entire installation process can be done within your hypervisor software's native GUI. The task that requires going outside the GUI involves configuring the virtual server's boot protocol over Linux. Follow the procedure, below, to install iControl on a virtual machine.

> **IMPORTANT:** Although **OVA** is an open-standard VM format, to date, Grass Valley has only qualified the OVA standard using *VMWare* hypervisor software. Additionally, Grass Valley only supports installing iControl on VMWare-qualified hardware platforms.
>
> For details concerning supported hardware platforms, see the VMWare Compatibility Guide.

> **Note:** The following procedure uses VMware vSphere as a hypervisor program.

REQUIREMENTS

Make sure you meet the following conditions before beginning this procedure:

- You have available the required iControl software image (0VA file). To acquire this file, contact *Grass Valley Technical Support* (see).

- You have hypervisor software (for example VMware vSphere) already installed on your target machine (the machine you will install iControl on).


REQUIREMENTS (*Continued*)

Make sure you meet the following conditions before beginning this procedure:
- You have the appropriate client-side software installed on a client PC to communicate with the server's hypervisor software. In the procedure of this guide, the VMware vSphere Client is used to interface with VMware vSphere server-side software.

- You know what you would like the IP address to be of your iControl virtual machine, as well as the correct network mask, and gateway address before you begin this procedure. See your network administrator.

- Your target machine *hardware* specifications (for **EACH** virtual machine) are as follows:

  - **CPU**: 1 socket - 4 cores at 2.2 GHz each (5.0 GHz reserved)
  - **Memory**
    - Minimum capacity: 8 GB (all reserved)
    - Minimum RAM speed: 1600 MT/s
  - **Hard drive**
    - Minimum capacity: 100 GB
    - Minimum **Write** speed: 30 MB/s
    - Minimum **Read** speed: 60 MB/s (timing buffered disk reads)

To install an iControl OVA image on a VMware vSphere server

1. In your client program's main window, on the **File** menu, click **Deploy OVF Template**, browse and select the desired OVA file on your local file system, and then click **Next**.
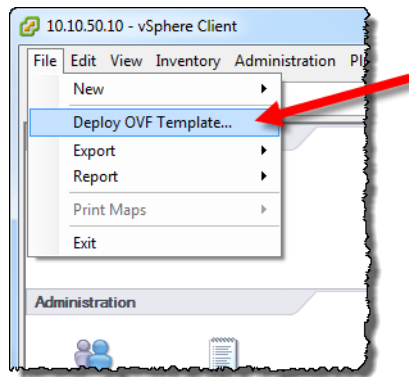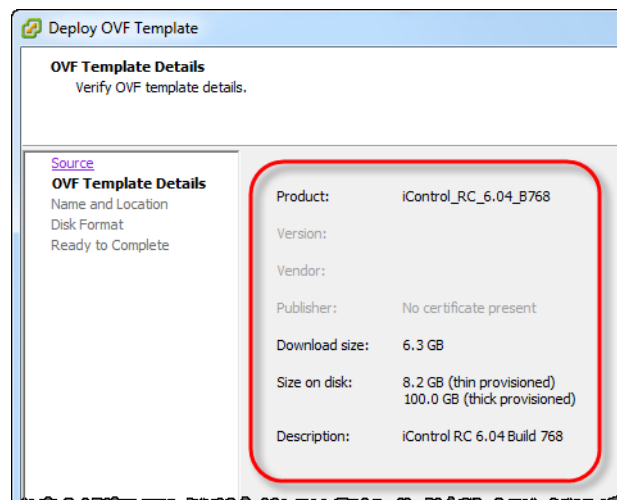

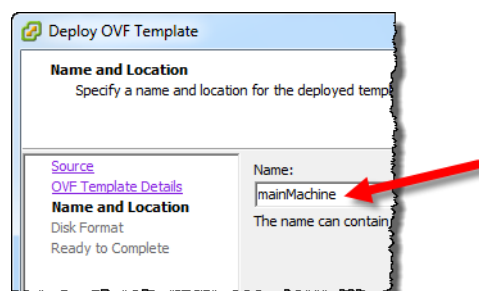*VMware vSphere Client—Opening an OVA file*
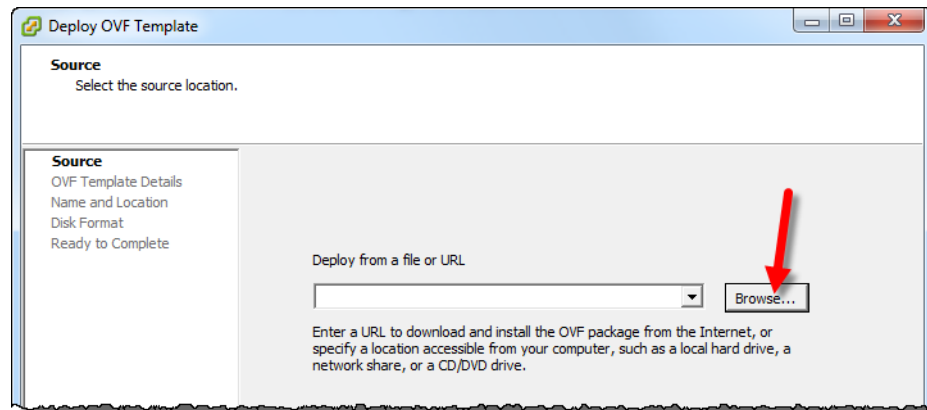
Browsing for a storage path for the virtual machine

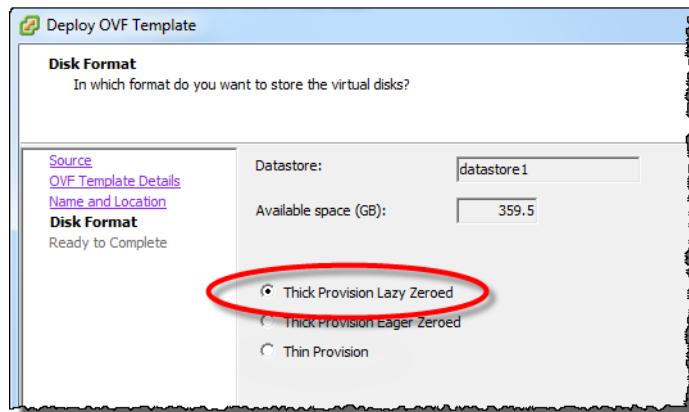SYSTEM RESPONSE: Details about the OVA file appear.

Pre-installation confirmation message indicating OVA file meta-data

2. Click **Next**.

3. On the **Name and Location** pane, type the name you would like to give to the virtual machine you are creating, and then click **Next**.

4. On the **Disk Format** pane, select **Thick Provision Lazy Zeroed** and then click **Next**.

5. On the **Ready to Complete** pane, verify the displayed deployment settings are correct.

If you are satisfied the settings are correct, click **Finish**.

If the settings are *not* correct, click **Back** to return to the desired pane and then make the necessary corrections.
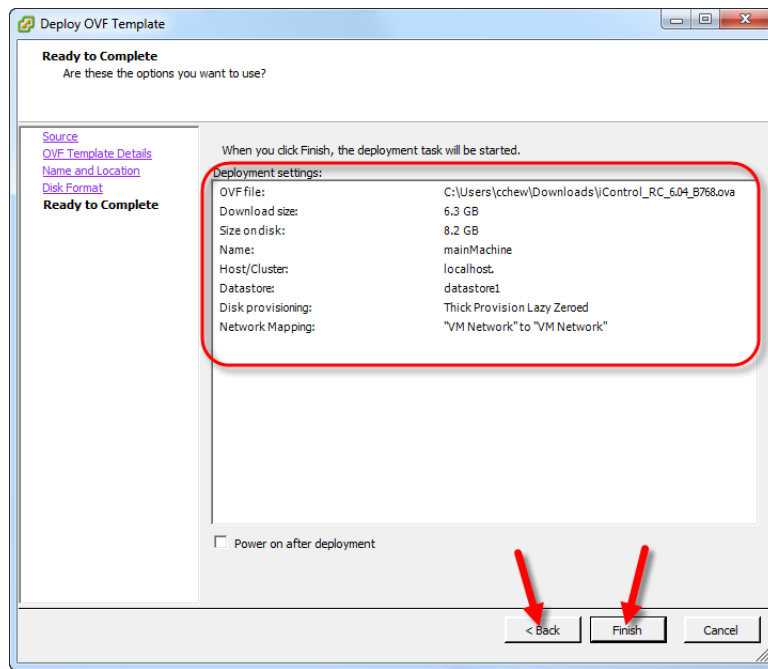
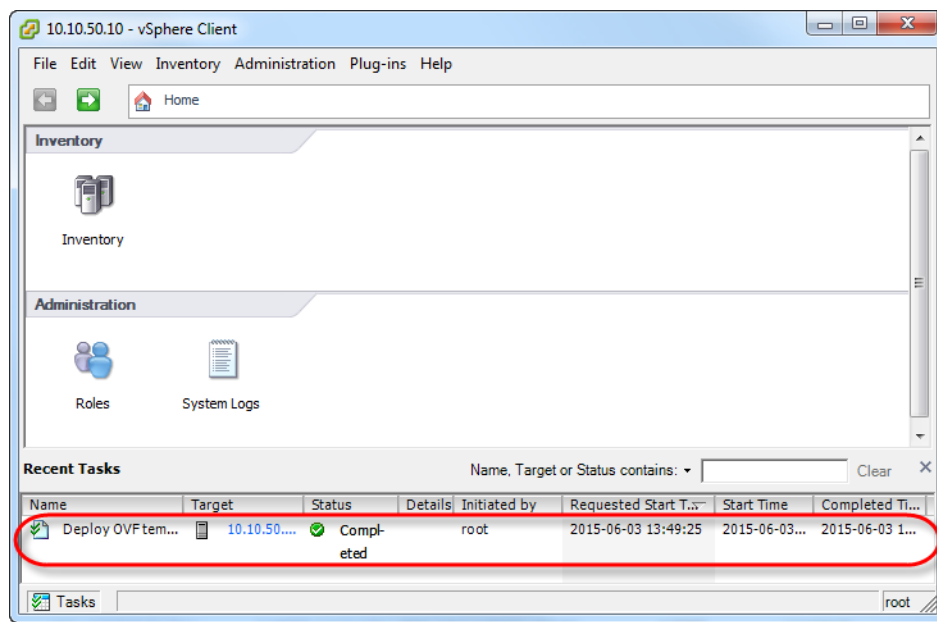*SYSTEM RESPONSE:* After clicking **Finish**, a progress window appears.
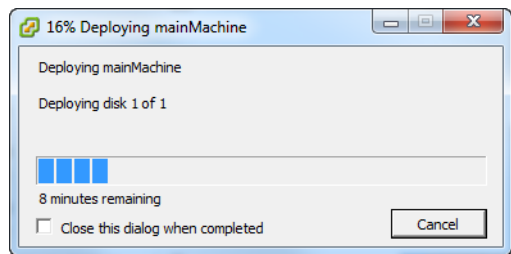
SYSTEM RESPONSE: When the deployment is complete a confirmation message appears.
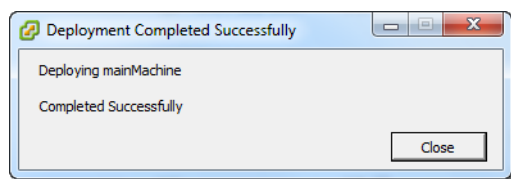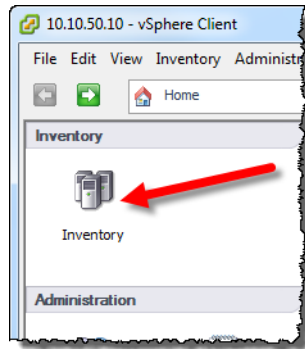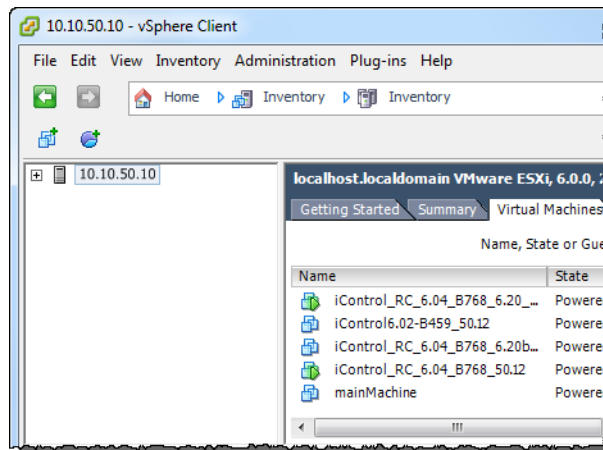

6. Click **Close**.

   SYSTEM RESPONSE: In the main *vSphere Client* window, in the **Recent Tasks** area, the status of the recently completed deployment task appears.
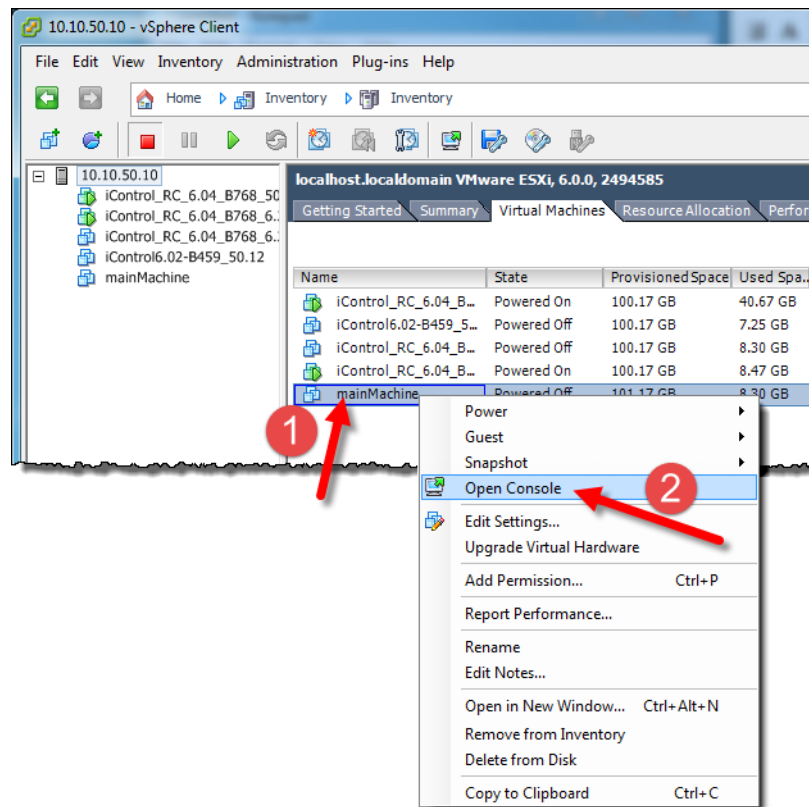

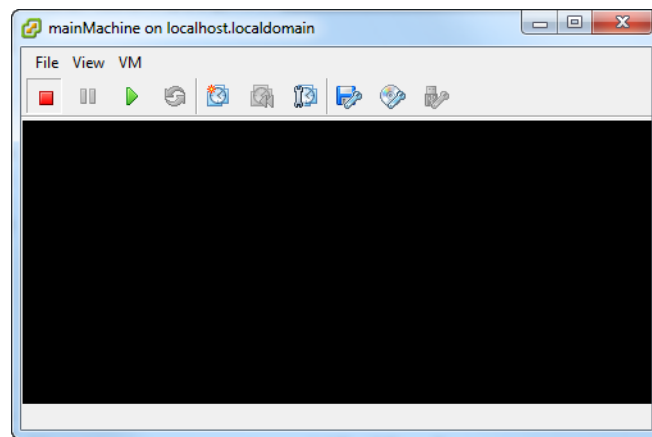7. Click the *Inventory* icon.

*SYSTEM RESPONSE:* A list of virtual machines appears.

8. In the **Virtual Machines** pane, right-click the virtual machine you just created, and then click **Open Console**.
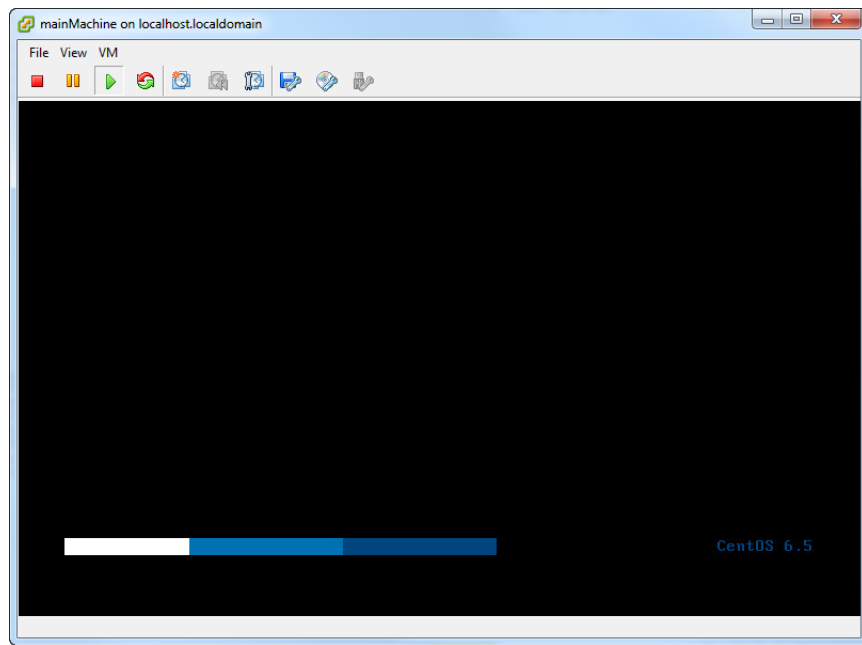
SYSTEM RESPONSE: A secure shell (SSH) console appears.

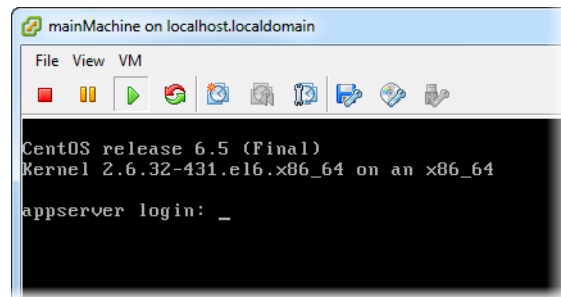9. In the main *vSphere Client* window, select the virtual machine you created, point to **Power**, and then click **Power On**.

<Right-click your virtual
machine, point to **Power**, then
click **Power On**.>
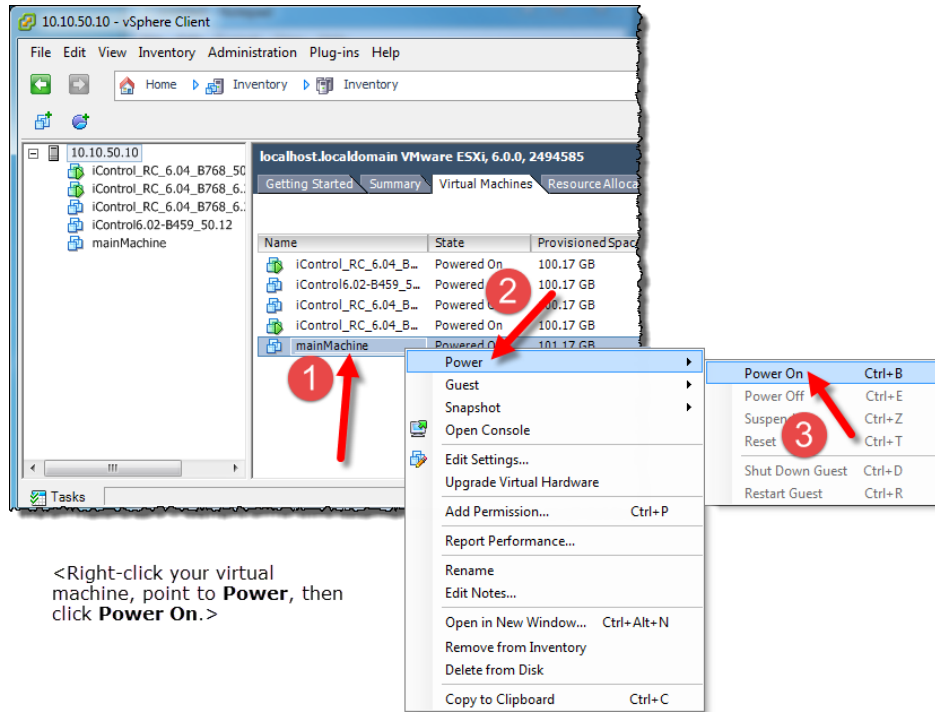
SYSTEM RESPONSE: In the secure shell, a progress bar follows the bootup process of the iControl virtual machine.

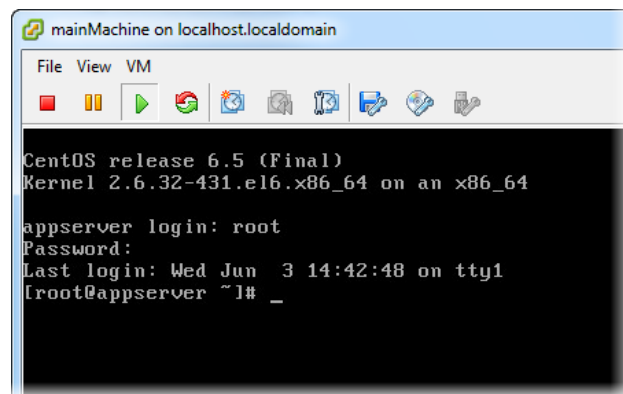*Progress displayed of iControl virtual machine boot-up*

iControl server login

10. Log on to the iControl virtual machine using the root credentials, as follows:

   - Login ID: `root`

   - Password: `icontrol`

   SYSTEM RESPONSE: The Linux shell prompt appears.

11. Navigate to the `network-scripts` directory, by typing the following command:

   `cd /etc/sysconfig/network-scripts`

12. List the files in the `network-scripts` directory, by typing the following command:

   `ls`

   SYSTEM RESPONSE: The system should return a list of files like the following.

13. Open the `ifcfg-eth0` file for editing in *vi editor*, by typing the following command:

    `vi ifcfg-eth0`

    SYSTEM RESPONSE: The `ifcfg-eth0` file opens in *vi editor*.

> **IMPORTANT:** If you are satisfied with the network settings currently reflected in the
> `ifcfg-eth0` file (including the factory-default IP address of `10.0.3.6`), then
> you have finished your installation of iControl.
>
> If you are **NOT** satisfied with the network settings—as they are reflected in
> the `ifcfg-eth0` file—continue this procedure at step 14.

14. Switch to *vi editor's Insertion* mode by hitting the **i** key.

15. Edit the following fields of the `ifcfg-eth0` file as follows:

    - `ONBOOT=yes`

    - `BOOTPROTO=static`

    - `IPADDR=<*****the assigned IP address *****>`

    - `NETMASK=<*****the assigned network mask*****>`

    - `GATEWAY=<*****the assigned gateway address *****>`

16. After making the required changes to the `ifcfg-eth0` file, switch *vi editor* to *Command* mode by hitting the **Esc** key.

17. Save changes to the file and then exit *vi editor* by typing the following command:

    `ZZ`

    Note: This command *MUST* be in upper case.

    ---

18. Reboot the virtual machine by typing the following command:

    `reboot`

    SYSTEM RESPONSE: The virtual machine reboots.

    Assuming you configured a static IP address for your iControl virtual machine, you may now proceed to step 22 following the reboot.

    If for some reason you configured a *dynamic* (DHCP) address for your iControl virtual machine, perform the remaining steps of this procedure.

19. After the virtual machine reboots, type your login information.

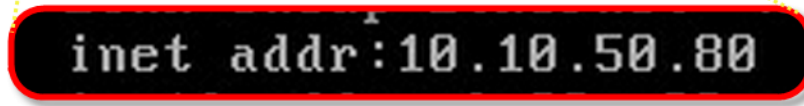20. Verify network settings by typing the following command:

    `ifconfig eth0`

    SYSTEM RESPONSE: The system returns network settings for *eth0*.

Network settings for the eth0 port of the virtual Application Server (IP address highlighted)

Note: From this point on, to change the virtual Application Server's IP address, you do not need to do so in a Linux shell. Instead, you can do so from the *iControl— Network interfaces* page. To navigate to this page, perform the sub-procedure within step 23.

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21. In a browser, navigate to the your iControl virtual machine by typing the virtual machine's IP address.
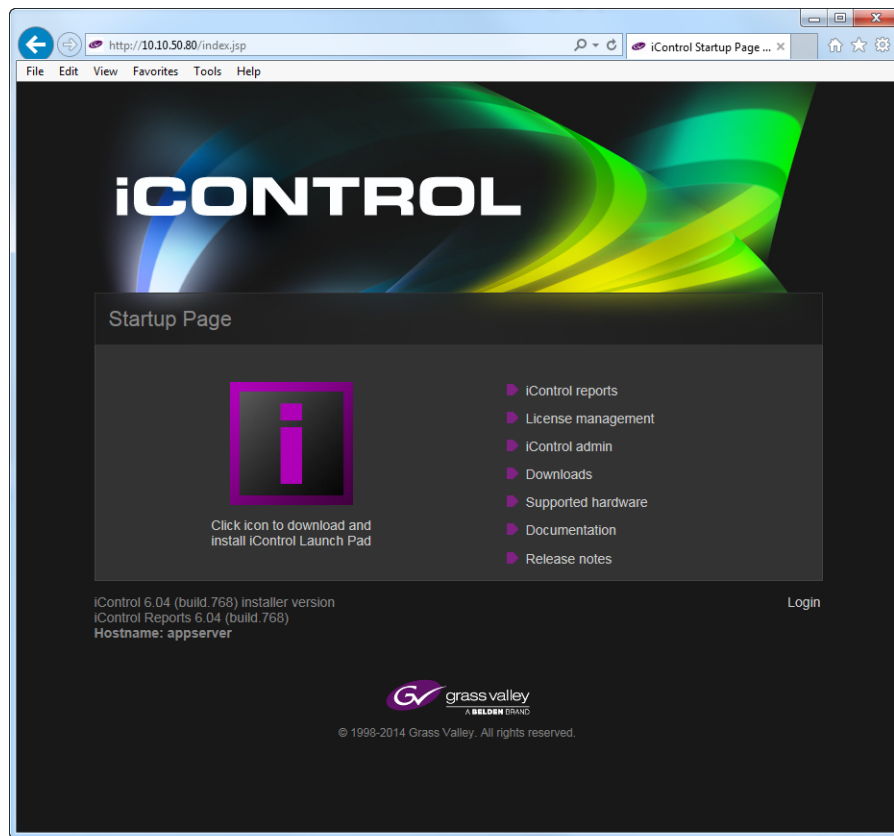
> **IMPORTANT: New iControl installations have trial licenses for options**
>
> All new iControl installations come with trial versions of licensed software options. The trial period for all options, once the trial clock begins, is thirty (30) days. After thirty days of trial activation, you will lose functionality of these options unless you purchase licenses. See the *iControl—License Management* page to purchase licenses.

22. Verify the `OVA` file installation was successful by performing the following sub-steps:

   a) On the *iControl—Startup* page of the newly created virtual machine, click the huge **i** icon.

       iControl Launch Pad appears. If the iC Navigator, iC Web, and iC Creator buttons on **Launch Pad** are greyed out, the installation did not complete successfully and you should restart the procedure from step 1.

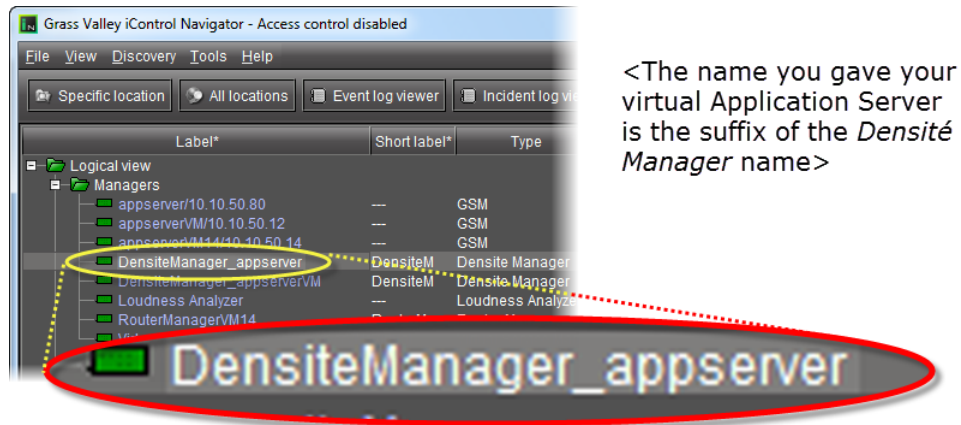   b) On **Launch Pad**, click the iC Navigator link.

SYSTEM RESPONSE: iC Navigator appears.

c) Verify that the *GSM service* native to the virtual Application Server you just created
    exists.
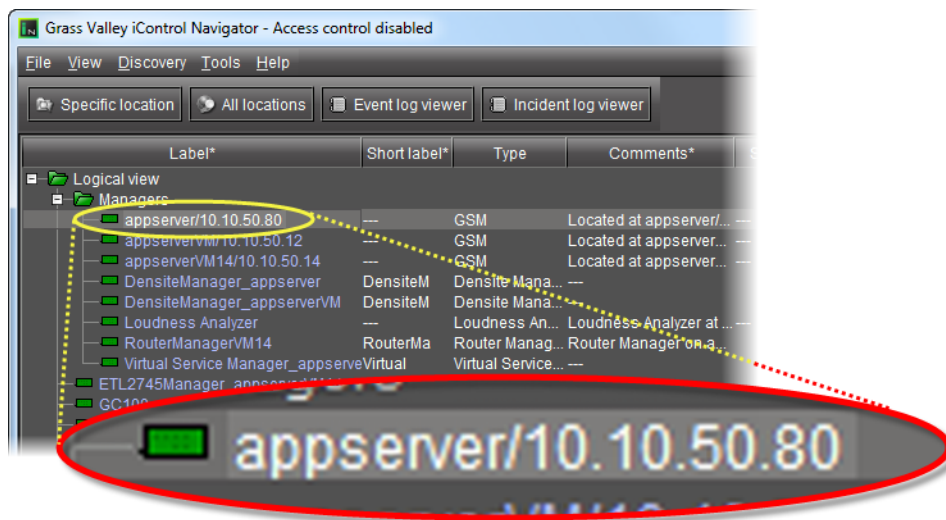
d) Verify that the *Densité Manager* native to the virtual Application Server you just created
    exists.

<The name you gave your virtual Application Server is the suffix of the *Densité Manager* name>

e) If either the GSM or the Densité Manager belonging to the new virtual Application Server is not visible, make sure the services for each is enabled on the *iControl—Services management* page.

*SYSTEM RESPONSE:* Services on this page display as green if they are enabled.

*Enabled (green) Densité and GSM services on the **iControl—Services management** page*

If starting these services on the *iControl—Services management* page still does not rectify the problem, try performing the procedure again from the beginning (step 1). You may also want to try recopying the OVA file from its source, as your local copy may have become corrupted.

23. Verify the network configuration (done earlier, in a Linux shell) is correctly reflected on the *iControl—Network interfaces* page by performing the following sub-steps:

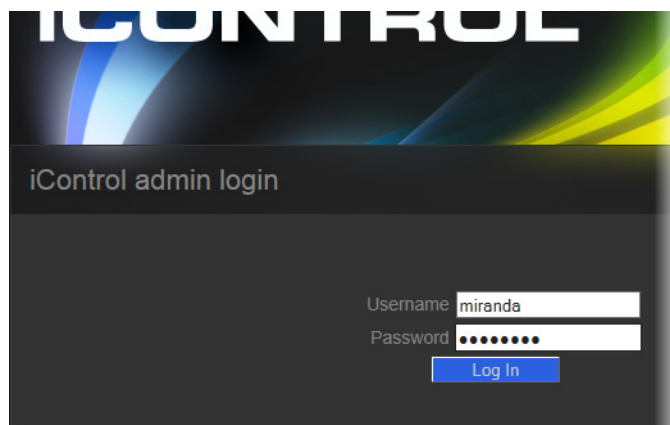a) On the *iControl—Startup* page of the newly created virtual machine, click **iControl— admin**.
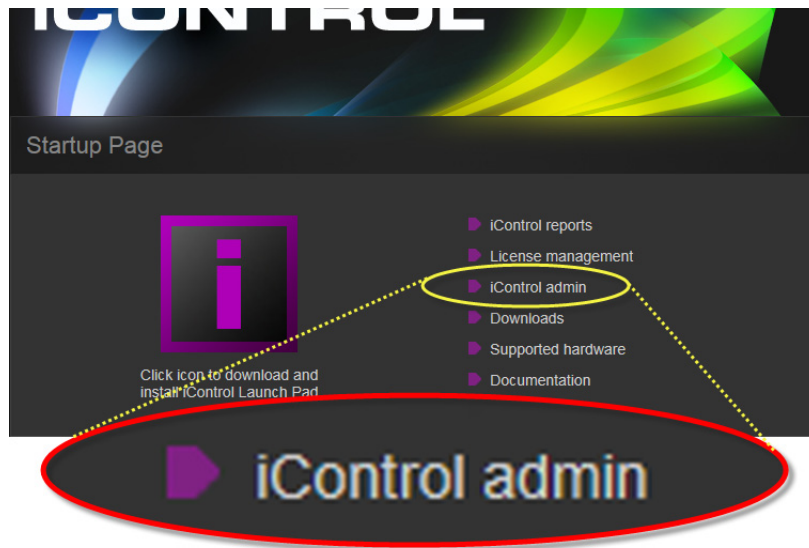
The *iControl—admin login* page appears.

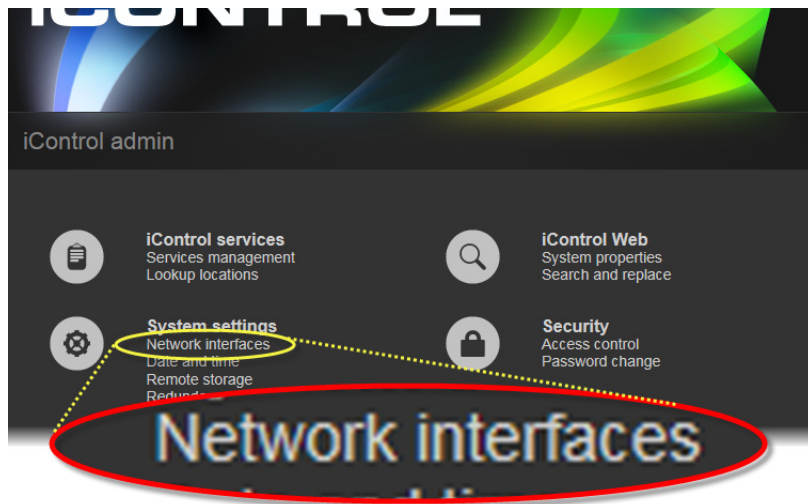b) Type your login credentials and then click **Log In**.

Use the following credentials:

- User name: `miranda`
- Password: `icontrol`

SYSTEM RESPONSE: The *iControl—admin* page appears.

c) Click **Network interfaces**, under **System settings**.

SYSTEM RESPONSE: The *iControl—Network interfaces* page appears.

d) Make sure the network settings are as expected. If they are not, you can try adjusting the network settings in the GUI, or else restarting this procedure from step 1.
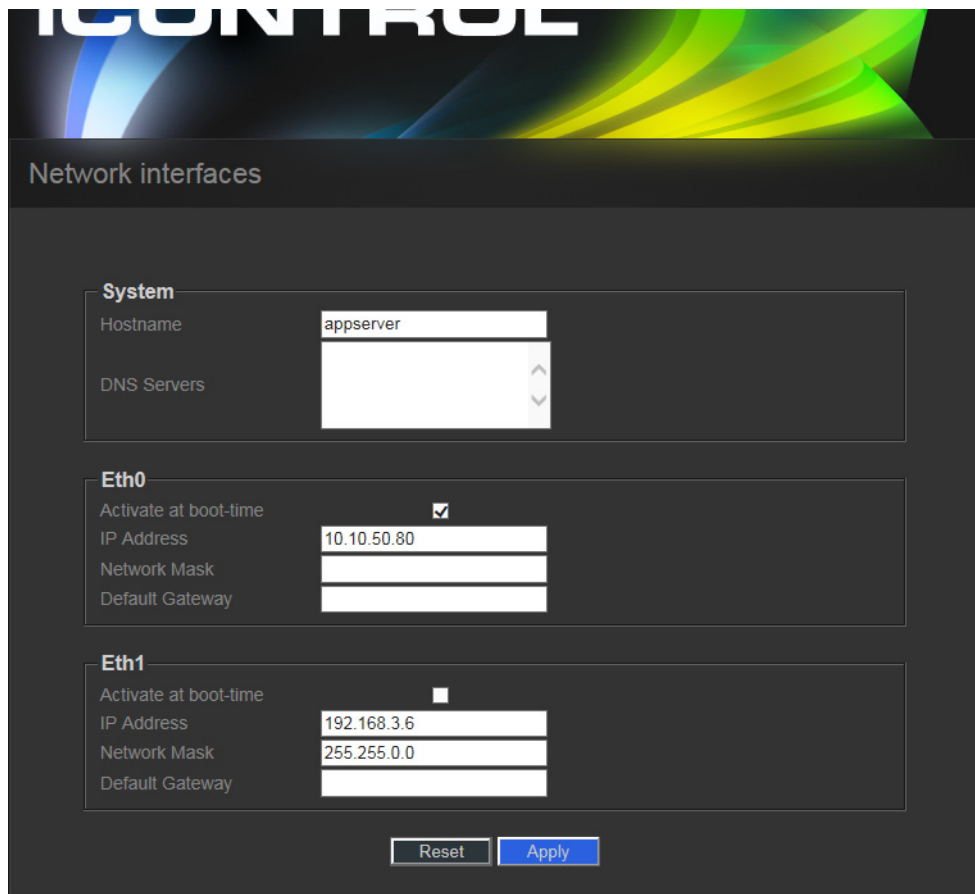
Contact Us

Grass Valley Technical Support

For technical assistance, contact our international support center, at
1-800-547-8949 (US and Canada) or +1 530 478 4148.

To obtain a local phone number for the support center nearest you, please consult the
Contact Us section of Grass Valley's website (`www.grassvalley.com`).

An online form for e-mail contact is also available from the website.

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