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ICONTROL VM

COMPLETE VIRTUAL IMAGE VERSION OF ICONTROL END-TO-END FACILITY MONITORING

Quick Start Guide

M446-9105-101

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www.grassvalley.com

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iControl Installation on a VM

iControl VM is a complete version of the iControl software, packaged as a virtual image (OVA file). This Quick Start Guide is designed to help you get your iControl VM system up and running for the first time.

Installing an iControl image on a virtual machine is simple, and should not take more than ten to fifteen minutes. Except for one task, the entire installation process can be done within your hypervisor software. The task that requires going outside the hypervisor software involves configuring the virtual server's boot protocol over Linux. Follow the procedure, below, to install iControl on a virtual machine.

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Requirements

Before you begin, make sure you meet the following conditions:

- You have available the required iControl software image (OVA file). To acquire this file, contact *Grass Valley Technical Support* (see [Contact Us](#), on page 9).
- You have hypervisor software (for example VMware vSphere) already installed on your target machine (the machine you will install iControl VM on).
- You have a Windows PC or laptop, with a standard Web browser.

Client platform requirements

Memory	8 GB RAM
Processor	Intel Core i3 or better
Graphics Card	Optimized for NVIDIA or ATI GeForce or Radeon family with 1 GHz clock speed or faster, and minimum 128 MB memory.
Operating System	Windows 10, Windows 8, or Windows 7
Web browser	Microsoft Internet Explorer, Mozilla Firefox, or Google Chrome

- You have the appropriate client-side software installed on a client PC to communicate with the server's hypervisor software. In the procedure below, VMware vSphere Client is used to interface with VMware vSphere server-side software.

IMPORTANT

Although **OVA** is an open-standard VM format, to date, 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](#).

- You know what IP address to give your iControl virtual machine, as well as the correct network mask, and gateway address (contact your network administrator, if needed).
- Your target machine *hardware* specifications (for **EACH** virtual machine) are as follows:

Server platform requirements

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 <i>Write</i> speed: 30 MB/s Minimum <i>Read</i> speed: 60 MB/s (timing buffered disk reads)

Step 1: Creating the iControl Virtual Machine

To install an iControl OVA image on a VMware vSphere server

- 1 Open vSphere Client and connect to your Hypervisor host.
- 2 On the **File** menu, click **Deploy OVF Template**.
The **Deploy OVF Template** wizard appears, prompting you for the location of the file you wish to install.
- 3 Navigate to the desired OVA file on your local file system, and then click **Next**.
The **OVF Template Details** page appears, with information about the selected OVA file (e.g., download size, virtual machine size).
- 4 Click **Next**.
The **Name and Location** page appears, prompting you to enter a name for your virtual machine.
- 5 Type the desired name, and then click **Next**.
The **Storage** page displays the storage disks available on your host.
- 6 Select the appropriate destination storage for your virtual machine files, and then click **Next**.
The **Disk Format** page appears.
- 7 Select **Thick Provision Lazy Zeroed** and then click **Next**.
The **Network Mapping** page appears.
- 8 Set the appropriate mapping for your virtual machine's network adapters.
- 9 Click **Next**.
The **Ready to Complete** page appears.
- 10 Review the deployment settings, and then click **Next**.

A window appears, showing the OVA deployment progress, followed by a confirmation message once the deployment is complete.

- 11 Click **Close** to dismiss the confirmation message.

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

- 12 On the **View** menu, point to **Inventory**, and then click **Inventory**.
- 13 Your new virtual machine appears, in the vSphere Client inventory.
- 14 Right-click the virtual machine you just created, point to **Power**, and then click **Power On**.
- 15 Switch to the **Console** tab in the main pane. Wait until the virtual machine has completed its startup.

Once the operating system and application have loaded, a login prompt appears in the console window.

- 16 Log on to your virtual iControl Application Server with the following credentials:

- Login: root
- Password: icontrol

- 17 Navigate to the `network-scripts` directory, by typing the following command:
`cd /etc/sysconfig/network-scripts`

- 18 List the files in the `network-scripts` directory, by typing the following command:
`ls`

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

```
[root@RedKnight ~]# cd /etc/sysconfig/network-scripts
[root@RedKnight network-scripts]# ls
ifcfg-eth0    ifdown-ipv6    ifup          ifup-plip      ifup-wireless
ifcfg-eth1    ifdown-isdn    ifup-aliases ifup-plusb     init.ipv6-global
ifcfg-lo      ifdown-post    ifup-bnep     ifup-post      net.hotplug
ifdown        ifdown-ppp     ifup-eth      ifup-ppp       network-functions
ifdown-bnep   ifdown-routes ifup-ippp     ifup-routes    network-functions-ipv6
ifdown-eth    ifdown-sit     ifup-ipv6     ifup-sit       route-eth0
ifdown-ippp   ifdown-tunnel ifup-isdn     ifup-tunnel
[root@RedKnight network-scripts]# _
```

- 19 Open the `ifcfg-eth0` file for editing in `vi`, by typing the following command:
`vi ifcfg-eth0`

The `ifcfg-eth0` file opens in `vi`.

```
DEVICE=eth0
TYPE=Ethernet
ONBOOT=yes
NM_CONTROLLED=yes
BOOTPROTO=none
IPADDR=10.0.3.6
NETMASK=255.255.0.0
```

- 20 Switch to `vi`'s *insertion* mode by pressing the `i` key.

- 21 Edit the following parameters:

```
ONBOOT=yes
BOOTPROTO=static
IPADDR=<the assigned IP address>
NETMASK=<the assigned network mask>
GATEWAY=<the assigned gateway address>
```

- 22 After making the required changes to the `ifcfg-eth0` file, switch to *vi's command* mode by pressing the Esc key.
- 23 Save your changes, and then exit vi, by typing the following command:
`ZZ`

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

- 24 Restart the virtual machine by typing the following command:
`reboot`

The virtual machine restarts.

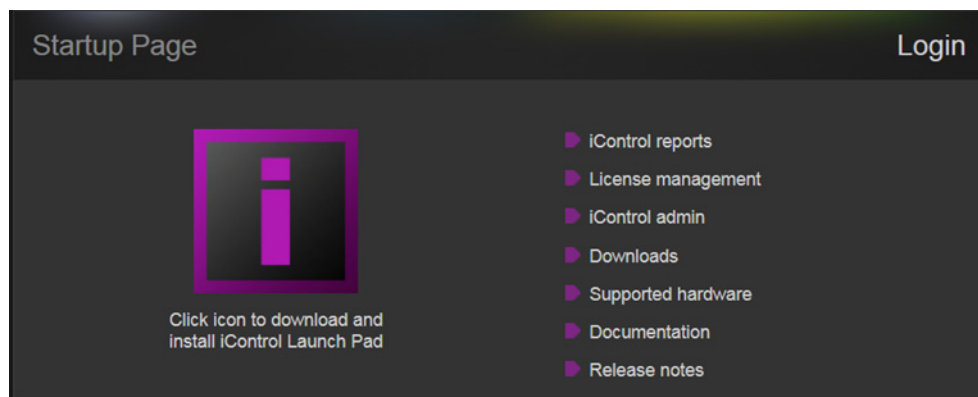
Note: From this point on, to change the virtual Application Server's IP address, you do not need to use a Linux shell. Instead, you can do so from iControl admin's *Network interfaces* page (see [step 7–step 9](#), under [System Verification](#), below).

Step 2: System Verification

To verify that the OVA file installation was successful

- 1 Open a Web browser window and enter the virtual machine's IP address in the address bar.

The iControl Startup page appears.



- 2 Click the large **i** icon.

The browser prompts you to save an executable file to your hard drive (`iControl17.30-windows32-online.exe1`). This file is an online installer, which will download iControl Launch Pad and other companion elements from your virtual Application Server, and install them. Some browsers may allow you to run the file directly. Depending on your browser's security features, warnings may appear, which you may safely dismiss.


- 3 Unless your browser let you run the file (and you chose to do so), navigate to the location where you saved the installer file and open it.

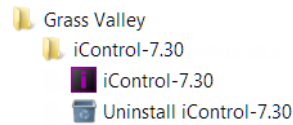
More security warnings or prompts may appear, which you may safely dismiss or accept.

1. Installers for Linux or Mac OS X are not yet available.

A window appears, showing the download and installation progress.

At the end of the installation process:

- If you have Windows 7, or Windows 10, shortcuts () are added to your desktop and to the Start menu (under **All Programs**).




- If you have Windows 8.1, or Windows 8, iControl Launch Pad will appear on your desktop, in the Apps view with all the other applications on your PC (Windows 8.1), or in your Start screen (Windows 8).

Once the installation has completed, iControl Launch Pad appears.



Depending on your Windows Firewall settings, a security alert may appear.

- Click **Allow access** to unblock the application.

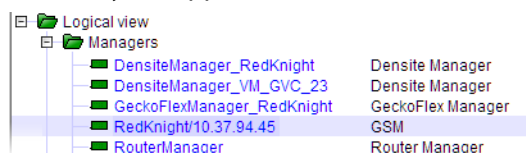
Note: Once it has been installed from the Application Server, iControl Launch Pad remains on your PC or laptop, and can be launched from the  shortcut that was added to your desktop, Apps view, or Start screen (see [page 5](#)), or from the Start menu. Whenever you install a new version of iControl on the Application Server, the next time you open iControl Launch Pad, a message will notify you that an update is available from the Application Server.

4 In iControl Launch Pad, click the iC Navigator button.



iC Navigator appears.

5 Verify that the *GSM service* native to the virtual Application Server you just created exists: in the **Logical View** tab, expand the Managers folder, and locate the GSM that matches your Application Server's host name and IP address.

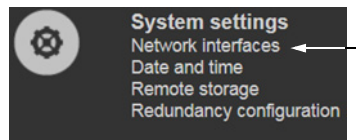


- 6 Verify that the *Densité Manager* native to the virtual Application Server you just created also exists: in the Managers folder, locate the Densité Manager that matches your Application Server's host name.



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 *Services management* page (see [Verifying the GSM and Densité Manager Status](#), below).

- 7 Open *iControl admin* on your client PC or laptop (see [Opening iControl admin](#), on page 7).
- 8 In the *iControl admin* page, under **System settings**, click **Network interfaces**.



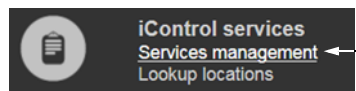
The *Network interfaces* page appears.

- 9 Make sure the network configuration (done earlier, in a Linux shell) is correctly reflected on the *Network interfaces* page. If it is not, you can try adjusting the network settings from this page, or else start over (see [Step 1: Creating the iControl Virtual Machine](#), on page 2).

Verifying the GSM and Densité Manager Status

To verify GSM and Densité Manager Status

- 1 Open the *iControl admin* page (see [Opening iControl admin](#), on page 7).
- 2 In *iControl admin*, under **iControl services**, click **Services management**.



The Services management page appears.

Service Name	Description	Start time	AutoStart	Start/Stop/Restart	Log
Audio/Video Fingerprint Analyzer	Provides support for distributed and multi-point content fingerprint analysis (e.g. lip-sync detection)	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
Bridgetech VBC service	Start Bridgetech VBC service.	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
CDMP	CDMP Service . Supports multiple instances for load balancing	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
Densité	Densité Manager . Module which starts and stops densité communicators. Supports multiple instances for load balancing	Fri Jan 20 12:13:17 2017	<input checked="" type="checkbox"/> Auto	● / ● / ●	show log
ETL2745	ETL2745 Manager . Module which starts and stops ETL2745 service.	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
GeckoFlex	GeckoFlex Manager. Module which starts and stops GeckoFlex Manager.	Fri Jan 20 12:13:19 2017	<input checked="" type="checkbox"/> Auto	● / ● / ●	show log
General Status Manager (GSM)	Application which dispatches alarm messages and events	Fri Jan 20 12:13:10 2017	<input checked="" type="checkbox"/> Auto	● / ● / ●	show log
GlobalCache GC100 IR service	Start GlobalCache GC100 IR services.	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log

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

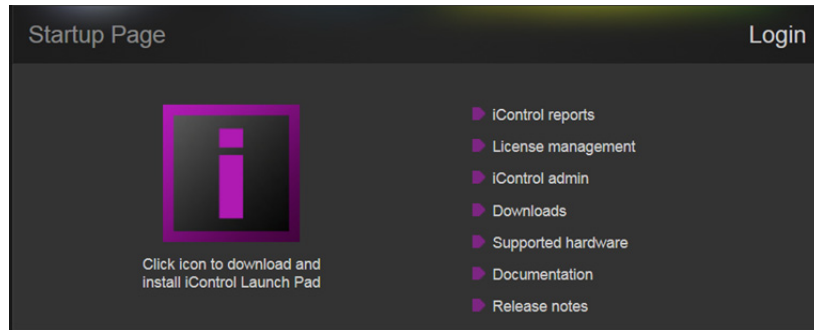
All iControl services available on your virtual Application Server are listed in a table, one service per row. Active services appear against a green background.

- 3 If the Densité Manager service or the GSM are not enabled, start them as follows:
 - a In the **Start/Stop/Restart** column, click the first button (corresponding to a *Start* action).
 - b In the **Autostart** column, click to put a check mark in the **Auto** box.
 - c Click **Apply**, at the bottom of the Services table.
- 4 If these services still fail to start, try installing the OVA image again from the beginning (see [Step 1: Creating the iControl Virtual Machine](#), on page 2). You might also want to try recopying the OVA file from its source, as your local copy may have become corrupted.

Opening iControl admin

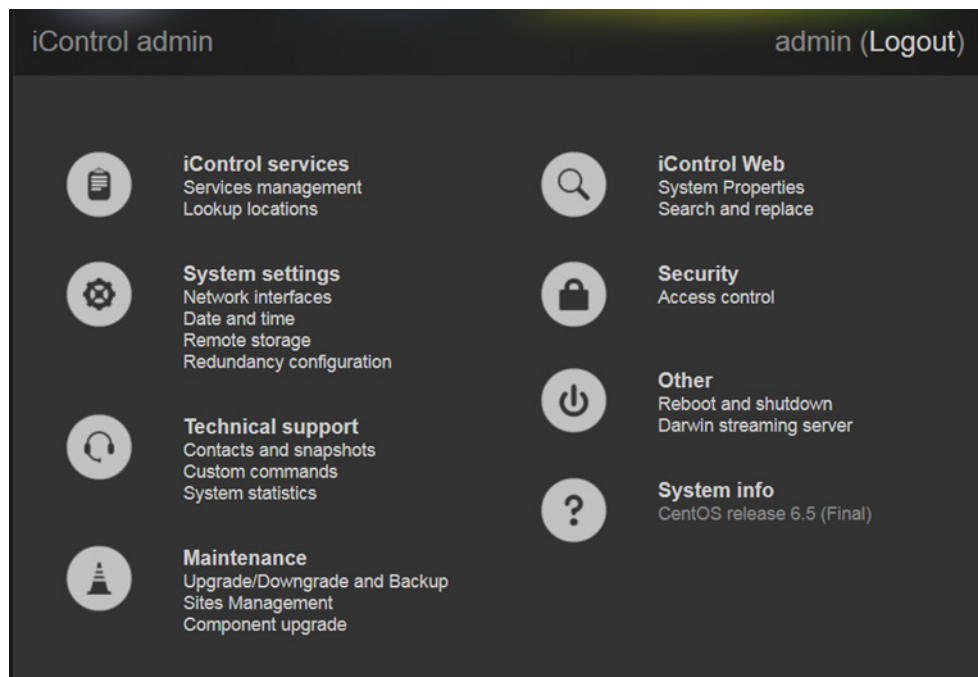
To open iControl admin

- 1 On your client PC, open a browser window, and then type your Application Server's IP address, in the address bar.
The iControl Startup page appears.



- 2 Click **iControl admin**.
The system prompts you for a user name and password.
- 3 Type the following credentials, and then click **Log in**.
 - User name: admin
 - Password: icontrol

The iControl admin page appears.



Step 3: License Activation

All new iControl installations come with trial versions of licensed software options. The trial period for all options, once the trial clock begins, is 30 days. After 30 days of trial activation, you will lose functionality of these options unless you purchase licenses. Refer to the *License Management* chapter of the iControl User Guide (available from the Documentation link on the Application Server's Startup page, and from the Documentation Library section of Grass Valley's website) for more information.



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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