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iControl 8 VM

IC-VM-V8

Quick Start Guide

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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 , on page 14).
- 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, with a Web browser (Microsoft Internet Explorer or Google Chrome). See the *iControl Release Notes* for the system requirements.
- 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).

- You cannot mix virtual machines with physical Application Servers when using a configured Redundancy Group of Application Servers. For example, you cannot use virtual machines in the role of *Backup* for a physical machine or vice versa.
- Your target machine *hardware* specifications (for **EACH** virtual machine) are as follows:

Server platform requirements

CPU	<ul style="list-style-type: none">• 2 Socket - 4 cores, 64-bit• 1 socket 8 cores, 64-bit
Memory	Minimum capacity: 16 GB (all reserved) Recommended: 32 GB
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 such as 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 If required, change the hostname in the `/etc/sysconfig/network` file.
This step can also be performed in the web interface.
- 20 Open the `ifcfg-eth0` file for editing, by typing the following command:
`vi ifcfg-eth0`

The `ifcfg-eth0` file opens.

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

- 21 Switch to *insertion* mode.
- 22 Edit the following parameters:
 - `ONBOOT=yes`
 - `BOOTPROTO=static` or `=none`
 - `IPADDR=<the assigned IP address>`
 - `NETMASK=<the assigned network mask>`
 - `GATEWAY=<the assigned gateway address>`
- 23 After making the required changes to the `ifcfg-eth0` file, switch to *command* mode.
- 24 Save your changes and exit your editor.
- 25 Restart the network service.

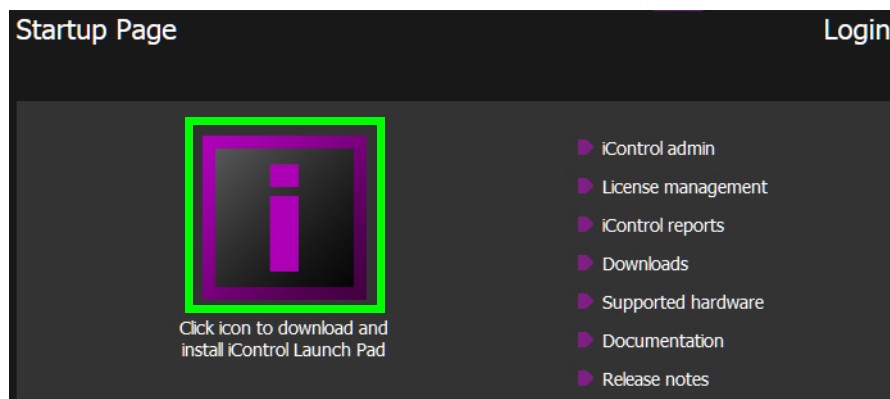
Note: From this point on, to change the virtual Application Server's IP address, you do not need to use a Linux shell. Instead, you can do so from iControl admin's *Network interfaces* page (see [step 7–step 9](#), under [System Verification](#), below).

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.

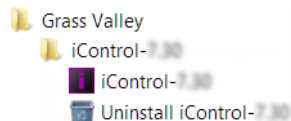
- 3 Unless your browser let you run the file (and you chose to do so), navigate to the location where you saved the installer file and open it.

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

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**).



1. Installers for Linux or Mac OS X are unavailable. See [Requirements](#), on page 3.


- 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, and can be launched from the  shortcut that was added to your desktop, Apps view, or Start screen (see [At the end of the installation process](#), on page 6), 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.

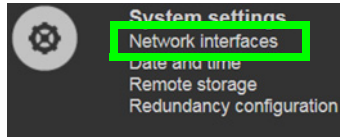


- 6 Verify that the *Densité Manager* native to the virtual Application Server you just created also exists: in the Managers folder, locate the Densité Manager that matches your Application Server's host name.



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 (see [Opening iControl admin](#), on page 9).
- 8 In the *iControl admin* page, under **System settings**, click **Network interfaces**.



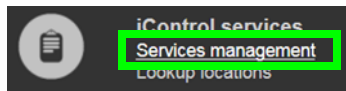
The *Network interfaces* page appears.

- 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 4).

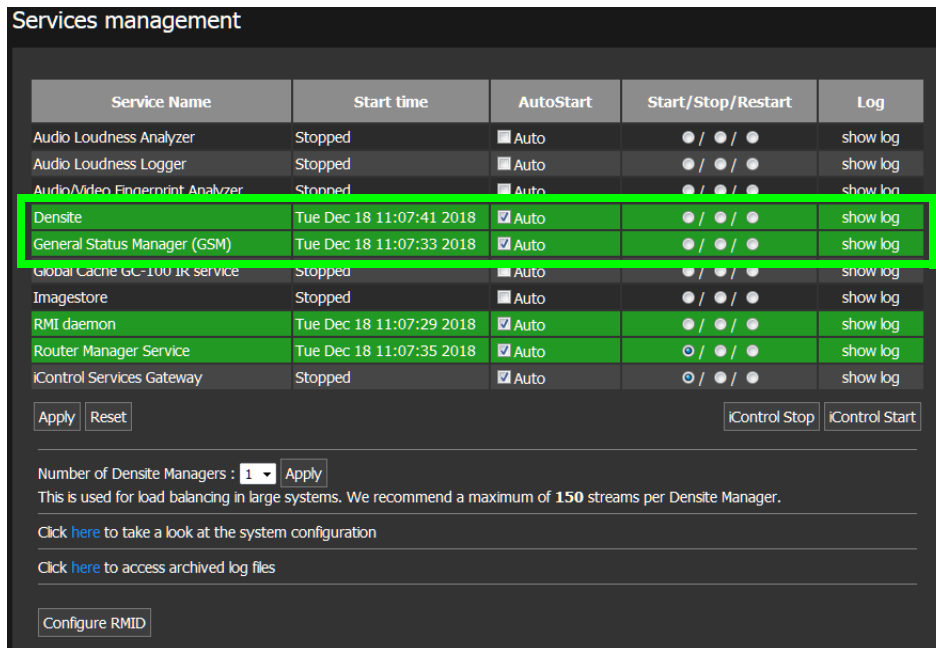
Verifying the GSM and Densité Manager Status

To verify GSM and Densité Manager Status

- 1 Open the *iControl admin* page (see [Opening iControl admin](#), on page 9).
- 2 In *iControl admin*, under **iControl services**, click **Services management**.



The *Services management* page appears.



Service Name	Start time	AutoStart	Start/Stop/Restart	Log
Audio Loudness Analyzer	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
Audio Loudness Logger	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
Audio/Video Fingerprint Analyzer	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
Densité	Tue Dec 18 11:07:41 2018	<input checked="" type="checkbox"/> Auto	● / ● / ●	show log
General Status Manager (GSM)	Tue Dec 18 11:07:33 2018	<input checked="" type="checkbox"/> Auto	● / ● / ●	show log
Global Cache GC-100 IR service	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
Imagstore	Stopped	<input type="checkbox"/> Auto	● / ● / ●	show log
RMI daemon	Tue Dec 18 11:07:29 2018	<input checked="" type="checkbox"/> Auto	● / ● / ●	show log
Router Manager Service	Tue Dec 18 11:07:35 2018	<input checked="" type="checkbox"/> Auto	○ / ● / ●	show log
iControl Services Gateway	Stopped	<input checked="" type="checkbox"/> Auto	○ / ● / ●	show log

Apply Reset iControl Stop iControl Start

Number of Densité Managers : Apply

This is used for load balancing in large systems. We recommend a maximum of 150 streams per Densité Manager.

[Click here](#) to take a look at the system configuration

[Click here](#) to access archived log files

Configure RMID

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.

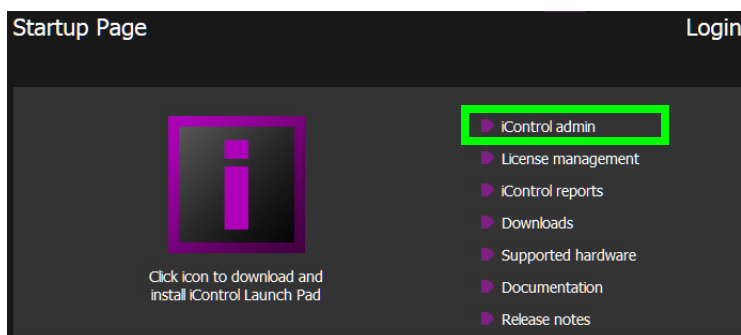
- 3 If the Densité Manager service or the GSM are not enabled, start them as follows:
 - a In the **Start/Stop/Restart** column, click the first button (corresponding to a *Start* action).
 - b In the **Autostart** column, click to put a check mark in the **Auto** box.
 - c Click **Apply**, at the bottom 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 4). 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

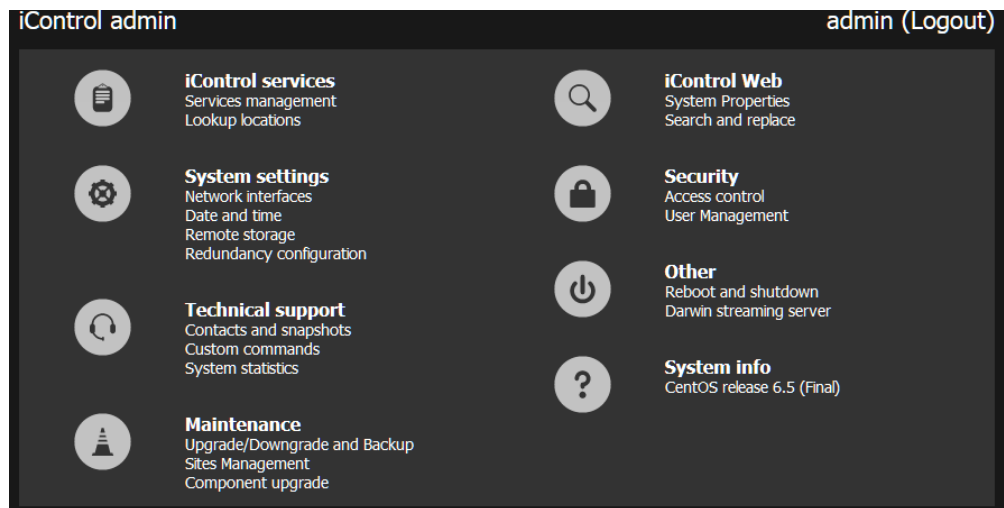
- 1 On your client PC, open a browser window, and then type your Application Server's IP address, in the address bar.

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.

Step 4: About Grass Valley's iControl Documentation

This section shows the iControl product documentation set so as to help you find the documentation you need when using iControl VM.

What Documentation Types are Available?

Grass Valley supports iControl with a range of documentation that targets users with content that is adapted to their needs and objectives.

Document Type	Contains
Release Notes	<ul style="list-style-type: none"> Identify known limitations Identify software fixes Identify new features
Datasheet	<ul style="list-style-type: none"> Provide the necessary information to a decision maker to make a good buying decision Provides an overview of a product's features and benefits Evaluate a product's suitability to an application
User's Manual	<ul style="list-style-type: none"> Configure and use the iControl VM software
Quick Start Guide	<ul style="list-style-type: none"> Essential procedures make a system operational


Accessing the iControl VM Product Documentation & Software Upgrades

All product documentation and software are available for download from the Grass Valley website (www.grassvalley.com). You must first have a login to the Grass Valley website to access all available documentation and software; see <https://www.grassvalley.com/account> to do so.

Product Documentation Download

Proceed as follows.

- 1 Open the iControl product documentation library through any one of the following methods. You can scan the QR code with a camera-equipped smartphone that has a QR code reader app to access the webpage directly.

iControl Product Documentation Library URL / Hyperlink	QR Code
https://www.grassvalley.com/docs/icontrol/	





- 2 Click the link for your product.



Enterprise Routing Switchers
Networking - Control & Monitoring Products
iControl
Control Application Server
Control Audio Video Fingerprints
Control Edge
Control Headend
Control Incoming Feeds
Control Loadless Monitoring

Click the link for your product

- 3 Choose the latest document version available. Look for the latest version number or publication date. For example, a document shown as v7.40 is more recent than a document shown as v7.30.

	iControl v7.40 User Guide (M226-9900-295) File size: 38.0 MB, posted Apr 09 2018	Highest version number Most recent date
	iControl v7.30 User Guide (M226-9900-294) File size: 53.4 MB, posted Mar 15 2017	
	iControl v7.20 User Guide (M226-9900-293) File size: 54.3 MB, posted May 25 2016	Previously released versions
	iControl v7.10 User Guide (M226-9900-292) File size: 45.5 MB, posted Jan 25 2016	

- 4 Download and read the release notes for the latest product information. The latest software is available under *Software Downloads*.

Product Software Upgrades

Product software upgrades are provided through Technical Support. See [Grass Valley Technical Support](#), on page 14.

See the iControl Release Notes for how to install the software upgrade.



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, 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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