



USA & Canada (800) 421-1587 & (800) 392-0123
(760) 438-7000 - Toll Free FAX (800) 468-1340
www.ieib.com

**IEI eMerge™
and
Dedicated Micros
Digital Video Recorder**

Install, Setup, and Integration Guide

Version 3.0 and above

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DVR Features Requirements List

The hardware, software, and licenses required for your IEI eMerge™ digital video recording features are listed below.

In addition to those items it will be necessary for you to have:

- Physical access to the Network Controller and permission to shutdown the security system, and restart it.
- Login username and password to the Network Controller with setup privileges.

Hardware

At this release the DVR feature is tested to work with the following devices:

- **Dedicated Micros DVR DS2 or DV-IP.**
- **IEI eMerge:** Version 2.5 or higher.
- **PC with Windows XP Pro SP2:** You will need an administrative account on the PC in order to install software.

Software and Licenses

- **IEI VMS license file:** In new systems this feature is already enabled in the I-button. To enable the Video Management System feature in existing systems upload and apply the file ibutton.lic to the Network Controller. Obtain this file from IEI. You will need to provide the iButton Serial Number from the [Support/Utility : About](#) page of the security application.
- **Browser:** Any Java compatible browser should work. We have tested with Internet Explorer V6 SP2 or higher and Firefox 1.0 or higher.
- **Java:** Version 6 Update 3 is recommended. **NOTE:** ActiveX can also deliver polled jpeg images but Internet Explorer is required for this.

Upgrading eMerge Systems for Video Management

NOTE: If you are doing DVR Setup on a system that already has a “VMS” license and is version 2.5 or higher, skip this page and begin on the next page at “**Dedicated Micros DVR and IEI eMerge Integration.**”

How do I check a system for a VMS license and version number?

1. In the IEI Security Application select **Support/Utility : About**.
2. Look next to **Software Version** for the version number. If the version is V_2_2 or lower you will have to upgrade the IEI eMerge software. Call Support at 508 663-2505.
3. In the **Licenses** list look for **VMS**.

If VMS is in the list skip the remainder of this page.

If “VMS” is not in the list then this system is not yet licensed for the video management feature. You will need to procure from IEI a license file enabled for VMS. Then proceed with the steps below to apply the license file.

Backup Network Controller database and save to PC

4. Log in to the Security Application.
5. Select **Administration : Utilities : Backup System**.
6. In the **Backup Database** section enter an explanatory comment about this backup. This comment will later appear above under **Existing Backups**.
7. Click **Full Backup** and the current security database is copied to ROM and the compact flash on the Network Controller, and to the network storage location (local share) if one is configured.

NOTE: The Controller may require several minutes to complete this operation.

8. When this new backup appears in the **Existing Backups** section click the **get** link.
9. In the **File Download** dialog click **Save**.
10. In the **Save As** dialog browse to the location where you wish to save this backup.
11. Click **Save**.

Apply the VMS feature license file

12. Log in to the Security Application.
13. Select **Setup : Site Settings : Add Software Licenses**.
14. Browse to the VMS enabled license file (ibutton.lic) and click **Save**.

NOTE: This step both uploads and applies the license file. When the process is complete the system returns a message to the user about the success/failure of the licensing process.

15. Log out of the Security Application.

NOTE: All users must log out so that the application of updates will be completed.

16. Log back in to the Security Application and select **Support/Utility : About**.
17. In the **Licenses** list look for **VMS**. The presence of the word **VMS** confirms the successful application of the license file.

Dedicated Micros DVR and IEI eMerge Integration

1. Complete the Setup of the Dedicated Micros DVR

Refer to the Dedicated Micros documentation for all phases of the installation and setup of the Dedicated Micros DVR, cameras, motion detection, and events.

Verify that the DVR is functioning correctly on its own before proceeding to the integration steps below.

NOTE: You must set up the Dedicated Micros DVR and the IEI eMerge on the same subnet. If they are on separate subnets they will not be able to communicate with each other.

Both the DM DVR and the eMerge default to web port 80.

If both the eMerge and DM DVR are behind a NAT router with port forwarding you will have to change the web port for the eMerge. (Earlier versions of the DM DVR did not allow web port 80 to be changed. More recent versions do allow this.)

If both the eMerge and DM DVR are behind a router that does port mapping then web port numbers need not be changed.

To change the web port for the eMerge select **Setup : Site Settings : Network Controller** and click the link for **Initmode Settings**. On the Initmode page change the **Web Server Port** in the **Web Server Settings** section. Click **Save** and then click **Reboot**.

We strongly recommend that the network administrator be involved in port setup and forwarding.

2. Point the IEI eMerge to the Dedicated Micros DVR

Configure the Dedicated Micros DVR in the IEI eMerge

1. In the eMerge Security Application select **Setup : Cameras : Configure DM DVR**.
2. In the **DVR IP Address** text box enter the IP address of the DVR and click **Check Connection**.

NOTE: The **Discovered Information** section will automatically fill in.

3. In the **Name** field enter a name for this DVR.
4. The **DVR HTTP port** and **DVR FTP port** fields default to 80 and 21 respectively. These need not be changed unless the network administrator specifies other port numbers.

NOTE: We strongly recommend that the DM DVR default http port of 80 not be changed. To avoid port conflicts with the eMerge change the eMerge web port as indicated in the note above.

5. The **DVR FTP username** and **DVR FTP password** fields default to "dm" and "ftp" respectively. These need not be changed unless the FTP username and FTP password were changed during the DVR setup.

NOTE: In more recent versions of the DM DVR the FTP username defaults to "dmftp."

6. The **DVR WEB or VIDEO username** and **DVR WEB or VIDEO password** fields default to "dm" and "web" respectively.

NOTE: If you create a Video account in the Dedicated Micros Administrator you will need to use this username and password here.

7. In addition, the first time you monitor a camera you will be required to login by entering this username and password. This is required only once per browser session.
8. Click **Save**.
9. Click the **List VMS Cameras** link at the bottom of the **Discovered Information** section. A list of cameras appears.
10. Verify that the camera list is correct and complete. These cameras were previously set up during the configuration of the DVR through its own web UI.

NOTE: If you change any camera names here you will have to click **Save** for these changes to be communicated back to the DM DVR.

Configure optional settings

1. **Public IP Address:** This IP address automatically fills in when you save a new DVR configuration.

NOTE: If this address is on another subnet or behind a firewall you may have to change this to the external public address of the router or firewall. The network administrator will have to setup the port translation for communications and video to and from this address.

2. **Public HTTP port:** This port number defaults to 80. Do not change.

NOTE: The eMerge also defaults to web port 80. Since the eMerge and the DM DVR are on the same subnet you will have to change the web port for the EMerge. To do this select **Setup : Site Settings : Network Controller** and click the link for **Initmode Settings**. On the Initmode page change the **Web Server Port** in the **Web Server Settings** section. Click **Save** and then click **Reboot**.

3. **Combine VMD events arriving within seconds:** Video Motion Detection (VMD) events occurring within the specified number of seconds are combined into one network controller event.

Example: If you set this field to 60 seconds, then additional motion detection events will not be reported to the network controller unless at least 60 seconds has passed since the last motion detection on that camera.

4. **Use Java applet for live video:** Place a check in this box to use the DVR Java applet for viewing live streaming video. If there is no check in this box then JPEG images are delivered once per second.

NOTE 1: Using live streaming video consumes considerable network bandwidth.

NOTE 2: When you view a camera using the Java applet you will be asked to allow the applet signed by "john ellison" to run on your computer.

NOTE 3: To use this applet your computer must have the Java™ 2 Runtime Environment version 1.4.2 or version 5.0. You can download this from <http://java.sun.com/j2se/1.4.2/download.html>.

5. **Deliver Events to the Network Controller:** Place a check in this box for DVR events to be delivered to the network controller.
6. **Deliver recording actions as Virtual Alarms:** Place a check in this box for any recording action to be reported to the Dedicated Micros DVR as a virtual alarm. The DM DVR will then execute its virtual alarm as configured in the DM DVR interface.

7. **Configure directly:** Click this link to display the DVR's own web UI in a separate browser window. You will then have to login using the administrator username and password for the DVR.
8. Click **Save**.

3. Verify Live Video from the IEI eMerge Interface

Verify that you can see Dedicated Micros video from the EMerge interface

1. Select **Monitor : Cameras**.
2. Select a camera connected to the Dedicated Micros system.
3. Click in the monitor window to activate the Java control.
4. A Security Warning dialog appears asking if you wish to run the application from the **Publisher: john ellison**. Click **Run**.
5. Verify that you can see live video from this Dedicated Micros connected camera.

4. Set up Video Motion Detection from Dedicated Micros

Verify that Dedicated Micros Video Motion Detection triggers IEI eMerge events

First, ensure that you have configured Video Motion Detection events on the Dedicated Micros DVR system.

1. Select **Setup : Alarms : Events** and define an eMerge event.
2. Select **Setup : Alarms : Virtual Inputs** and assign your eMerge event to a Dedicated Micros connected camera **Video Motion Event**. Make sure the **Virtual Input** is either **Always Armed** or using a currently active time specification. Also verify that both the **Virtual Input** and the **Video Motion Event** are **Enabled**.
3. Select **Monitor : Monitoring Desktop** and create motion on that camera.
4. Verify that your eMerge event was triggered.

5. Setup Video Recording Actions from the IEI eMerge

Verify that IEI eMerge events trigger video recording

1. Select **Setup : Alarms : Events** and define an eMerge event with a **Record Video** action. Be sure to select a Dedicated Micros connected camera.
2. Assign a trigger to this record video event. You can select **Setup : Alarms : Inputs** and assign the event to the **Off-normal Event**, or you can select **Setup : Access Control : Portals** and assign the event to the **System-wide : Held** state of a portal.
3. Select **Monitor : Monitoring Desktop** and trigger the event. (Hold the portal open or set the input into an alarm state.)
4. Verify that the event was triggered and click the video icon in the Activity Log to view the recorded video.

Digital Video Recording Troubleshooting

Video from the DS2 Cameras is not viewable

- Ensure that the video is viewable on the DS2 **“Live View”** page.
 1. If the DS2 web page does not come up, you may have a network connectivity problem, or an IP addressing problem.
 2. If the DS2 web page comes up, but no video shows:
 - Ensure that the camera is properly connected to the DVR and to an appropriate power source.
 - You may need to install the latest Java Runtime Environment (JRE).

- If the video is visible from the DS2 directly, but not through the IEI eMerge interface, then verify the setup on the eMerge.
 1. Select **Setup : Cameras : Configure DM DVR**.
 2. Ensure that the **DVR IP Address**, HTTP and FTP port numbers, user names, and passwords are correctly entered.
 3. If you are using a firewall or router, ensure that the **Public IP Address** and **Public HTTP Port** are correctly entered.
 4. Click **Save**.

Video Motion Detection is not working

- Ensure that Video Motion Detection (VMD) is enabled for cameras on the DS2.
- Ensure that Alarm/VMD Reporting on the DS2 is enabled and that the correct IP address is entered for the IEI eMerge.
- Ensure that VMD events are being created on the DS2 by checking the DS2 Logfile.
- Check that the eMerge is configured to receive VMD events from the DS2:
 1. Select **Setup : Cameras : Configure DM DVR**.
 2. In the Settings section be sure that there is a check in the box **“Deliver Events to the network controller.”**
 3. Click **Save**.

Video Recording Actions are not working

Check the eMerge Activity Log to ensure that events are being created.

1. If events are not being created:

Select **Setup : Alarms : Events**.

In the **Events** section at the top ensure that the **Enabled** check box is checked.

In the **Triggers** section at the bottom ensure that the appropriate trigger is listed. If none is listed you must configure a system resource to trigger your event. Events can be triggered by Inputs, Virtual Inputs (Cameras), Temperature Inputs, Alarm Panels, or Portals going into an alarm state.

2. If events are being created but no video is recorded:

Select **Setup : Alarms : Events**.

In the **Actions** section check that there is a **Record Video** action, that the **Enabled** check box is checked, and that the correct camera is selected for that action.

Click **Save**.