



Endura



VideoXpertTM

Migrating Endura to VideoXpert 3.X

Version 1.0

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Introduction

The main objective of this document is to provide the steps needed to migrate a 2.x Endura system into VideoXpert 3.x

Important Notes

- Obsolete products are not supported. A list of obsolete products can be found on the Pelco [Product Lifecycle](#) page.
- All network switches must support Multicast in a pre-existing Endura system environment. For assistance with the network design and programming, see the [Pelco Professional Services](#) offer.
- VideoXpert Core (VxCore), Media Gateway, Storage (VxS) and Accessory Servers may require a permanent static IP address.
- An NTP server is required.
- Direct migration from a SM5000 database is only supported via professional services (SM5200 migration is supported).
- VideoXpert supports ONVIF compliant cameras and encoders via VxS (NSM5200s cannot be used for this).
- Do not install VideoXpert OpsCenter (VxOpsCenter) on any hardware that has the VxCore or Media Gateway services installed on it.
- NSM5200 audio recording supports continuous recording only.
- VideoXpert supports ONVIF Profile S compliant cameras and encoders via the VxS (NSM5200s cannot be used).
- VideoXpert can support NIC Teaming in “Standby” mode, but the use of “Load Balancing” mode is not recommended. Using Load Balancing could result in out-of-order packet delivery and unpredictable system stability. When using NIC Teaming, it is important that you consult your network administrator prior to enabling the feature on the Windows Server because additional network switch configuration might be necessary. VideoXpert does not support multiple IP addresses enabled on the same device, at the same time.

Endura Hardware That Is Not Supported In VideoXpert

- | | |
|--------------------------|-------------------------------------|
| • UDI5000-CAM | Universal Device Interface - Camera |
| • UDI5000-MTRX | Universal Device Interface - Matrix |
| • VCD5xxx | Video Console Display |
| • NET5402R-HD, NET5301R | Decoders |
| • DVR5300 | Digital Video Recorder |
| • SEB5100 | Storage Expansion Box |
| • NVR5100 | Network Video Recorder |
| • WS5070, WS5060, WS5050 | Workstation |
| • GW5000 | Endura Web Services Gateway |

The following Endura Hardware part numbers can be migrated and used in VideoXpert:

- WKS5080
- NSM5300
- NSM5200
- KBD5000



Software Prerequisites

- SM5200 must be at version 1.5.0.0063 or higher for database migration
- NSM5200 must be at version 02.04.04.0009 or higher
- NSM5300 must be at version 02.05.0029
- NET5500's must be at version 2.1.9.2 or higher
- Third party cameras must have updated firmware from the manufacturer

Hardware Prerequisites

- Endura NSM5200 and NSM 5300 recorders can be repurposed for use with VideoXpert Enterprise without any additional hardware changes.
- Endura NSM5300 recorders can be converted into a VxS recorder (Optional). This requires additional hardware and software modifications. Please contact Pelco Professional Services or your Sales Representative.
- Endura WS5070 Workstation hardware is NOT supported for use with VideoXpert Enterprise.
- Endura WS5080 Workstation hardware can be repurposed for use as a VxOpsCenter. For optimal performance, 16 GB of memory is recommended.
 - Use for a single monitor.
 - Installing VxToolbox on the VxOpsCenter will prohibit optimal performance.

Licensing

- Endura NSM5200 recorders require additional licenses for use with VideoXpert Enterprise. Proper licensing is required to be fully functional after the 90-day grace period. The part number listed below includes a license for a single NSM5200, 100 camera licenses, and 100 (1yr) camera supplemental licenses. Please contact Pelco Order Management for pricing.
 - E1-NSM-1UP
- Endura NSM5300 recorders require additional licenses for use with VideoXpert Enterprise. Proper licensing is required to be fully functional after the 90-day grace period. The part number listed below includes a license for a single NSM5300, 100 camera licenses, and 100 (1yr) camera supplemental licenses. Please contact Pelco Order Management for pricing.
 - E1-NSM-1UP
- WS5080 Workstations converted to VxOpsCenter do not require any additional licensing.
- VideoXpert 3.x requires licenses for VideoXpert 3.x Integrations. Please contact Pelco Order Management for pricing and a complete list of licenses available.
 - Pelco ASCII Integration: VX-ASCII
 - Johnson Controls P2000: INT-JCI
 - Software House C CURE: INT-CCURE

Integrations

- For pre-existing third-party integrations with Endura, please visit our [Partner's First](#) site for a list of compatible VideoXpert 3.x integrations.



Preparing For The Migration

- It is recommended that you clean up the users and roles in the System Manager (SM) database prior to migrating (that is, delete any invalid user or role).
- It is recommended that you perform an SM Backup on the Endura System before any changes are made.
- The migration process transfers usernames, roles, permissions, associations, camera names, camera numbers, groups, and locations.
- VideoXpert requires that passwords be a minimum of 8 characters long. If an Endura user's password is less than 8 characters, their password will be appended with 1s until it reaches 8 characters. For example, a password of "ABC" would become "ABC11111" during the migration process. Users with passwords appended this way will be required to change their password upon logging into VideoXpert.
- Locations and Groups become Tags in VideoXpert. For example, a camera that was assigned to the "PTZ Cameras" Group in the "Casino Floor" Location in an Endura environment will become a camera that is assigned to the "PTZ Cameras" and "Casino Floor" Tags in VideoXpert.
- After installing VxCore, confirm that all devices can be seen on the Devices tab and they are commissioned. They will have the default naming convention. After they appear, proceed with the migration. Devices will be properly named after this.

Reminder:
Ensure all devices are Commissioned

Migration Procedure

1. Download the 3.x migration tools below and copy them to the desktop of any OpsCenter / Workstation currently connected to the Endura System. In this example, the IP address of the SM5200 is 10.221.88.140.

- a. sm_export: <https://www.pelco.com/wp-content/uploads/2020/05/Endura-System-Manager-DB.zip>
- b. ve_import-v2.exe: <https://www.pelco.com/wp-content/uploads/2020/05/Endura-Export-DB-to-VideoXpert-DB.zip>
- c. as_import.exe: <https://www.pelco.com/wp-content/uploads/2020/05/Optional-Accessory-Server.zip>

2. Export the SM5200 database

- a. To open a Command Prompt window, click Windows **Start**. In the Windows search field type cmd and press **Enter**.
- b. Type cd desktop and press **Enter**.
- c. Type sm_export.exe -s [SM5200_IP_Address] and press **Enter**.

Note: The Tab button can be used to auto fill the file name when typing in the name of the SM Export Tool.

Example Command: sm_export.exe -s 10.221.88.140

```
C:\Users\pelco>cd desktop
C:\Users\pelco\Desktop>sm_export.exe -s 10.221.88.140
```

If this is not done correctly, the SM Export Tool will create four files on the desktop:

- i. export_[SM5200_IP_Address].sql file
- ii. migrate_[SM5200_IP_Address].json file
- iii. dhcpd.conf file
- iv. dhcpd.leases file



3. Import the SM5200 Database into VideoXpert.

a. Type `ve_import.exe [Core_IP_Adress] [Core_Username] [Core_Password] [migration_file]` and press **Enter**.

Note: The password must be at least 8 characters long.

Note: The Tab key can be used to auto-fill the file name when typing in the name of the VideoXpert Import Tool.

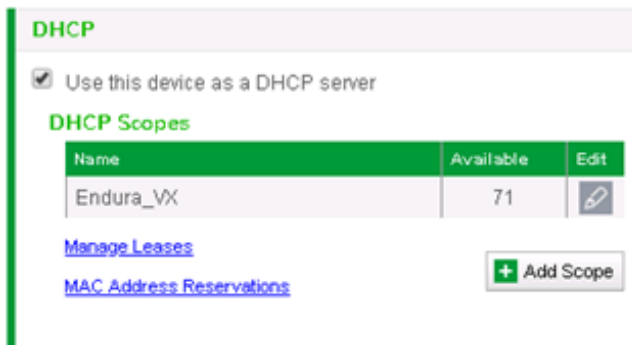
Example Command: `ve_import.exe 10.221.88.150 admin Pel2899100 migrate_10.221.88.140.json`

```
C:\Users\pelco\Desktop>ve_import-v2.exe 10.221.88.150 admin Pel2899100 nigrate_10.221.88.140.json
Loading tasks from export file
Starting import, 72 tasks to be performed
11.1% of tasks completed. Estimated completion in 0:00:09
22.2% of tasks completed. Estimated completion in 0:00:07
33.3% of tasks completed. Estimated completion in 0:00:07
43.1% of tasks completed. Estimated completion in 0:00:05
54.2% of tasks completed. Estimated completion in 0:00:05
65.3% of tasks completed. Estimated completion in 0:00:03
75.0% of tasks completed. Estimated completion in 0:00:02
86.1% of tasks completed. Estimated completion in 0:00:01
97.2% of tasks completed. Estimated completion in 0:00:00
Import complete. (Elapsed time 0:00:11)
72 Tasks attempted, 72 completed - Warnings: 30 Errors: 0. Please review log file for more details
```

b. Login to VxOpsCenter to verify that all camera names and numbers have imported properly.

4. (Optional) Import DHCP Configuration and Leases Files: If a DHCP server other than the SM5200 or VideoXpert Accessory server is being used, then skip this section.

a. Ensure that the DHCP Service on the SM is no longer running before moving onto the DHCP Import. This can be done by logging into the SM5200 webpage and unchecking the option to “Use this device as a DHCP server”.



b. Verify that the IP Helper Address on your switches reflect the new DHCP Server Address to ensure full functionality.

c. Open the Command Prompt window on your system as administrator.

d. In the Command Prompt window, type the following command to import the DHCP Conf file:

`as_import.exe -s [AccessoryServer_IP_Address] --confinputfile [Migration_conf_file]`

Example Command: `as_import.exe -s 10.221.88.153 --confinputfile dhcpd.conf`

```
C:\Users\pelco\Desktop>as_import.exe -s 10.221.88.153 --confinputfile dhcpd.conf
```

e. In the Command Prompt window, type the following command to Import the DHCP Lease file:

`as_import.exe -s [AccessoryServer_IP_Address] --leaseinputfile [Migration_lease_file]`

Example Command: `as_import.exe -s 10.221.88.153 --leaseinputfile dhcpd.leases`

```
C:\Users\pelco\Desktop>as_import.exe -s 10.221.88.153 --confinputfile dhcpd.leases
```



f. Login to the Accessory Server Web UI, enable DHCP, and verify that the information has been migrated properly. Each scope will need to be manually entered. Refer to the SM5200 webpage for network scope values.

The screenshot shows the PELCO VideoXpert Accessory Server web interface. At the top, there are tabs for 'Status', 'Maintenance', and 'Configure'. Below the tabs, the 'Service Status' section displays the following information:

- Arbiter:** mongod stop/waiting
- Load Balancer:** running
- NTP:** * NTP service is running
- DHCP:** isc-dhcp-server start/running, process 18719

Below the service status, there is a table titled 'DHCP Leases' with the following columns: MAC, IP **, Hostname **, Valid until, and Manufacturer. The table contains 15 rows of data:

MAC	IP **	Hostname **	Valid until	Manufacturer
00:04:7d:00:5c:4f	10.221.88.238	-NA-	2020-03-25 23:02:38	Pelco
00:04:7d:0d:85:49	10.221.88.195	SC10N-D370787	2019-04-01 08:04:56	Pelco
00:04:7d:0d:9c:90	10.221.88.224	SC10N-F320272	2019-04-01 08:04:52	Pelco
00:04:7d:0d:9c:a9	10.221.88.194	SC10N-F320297	2019-04-01 08:04:58	Pelco
00:04:7d:0d:9c:ae	10.221.88.241	SC10N-F320302	2019-04-01 08:05:09	Pelco
00:04:7d:0d:9c:b5	10.221.88.181	SC10N-F320309	2019-04-01 08:05:14	Pelco
00:04:7d:0d:a5:df	10.221.88.210	-NA-	2019-04-02 09:16:25	Pelco
00:04:7d:0d:ba:f8	10.221.88.201	SC10N-G151624	2019-04-01 08:04:54	Pelco
00:04:7d:0d:e5:63	10.221.88.247	IMM12018-8BASE-	2019-03-31 09:06:38	Pelco
00:04:7d:0e:1d:03	10.221.88.232	IMM12036-E-8AS	2019-03-31 09:56:21	Pelco
00:04:7d:0e:55:96	10.221.88.246	SC20N-H211428	2019-04-01 08:05:00	Pelco
00:04:7d:0e:7b:90	10.221.88.192	D6220-H450458	2019-04-02 04:57:42	Pelco
00:04:7d:33:07:92	10.221.88.190	IF5200N-4D0C1611	2019-04-02 05:03:02	Pelco

