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## NV9000 Upgrade Procedure from Windows Embedded XP to Windows 10 LTSC OS

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# APPLICATION NOTE



## Overview

Thank you for upgrading to the latest version of NV9000 software, now running on the Windows 10 operating system. The NV9000 control software is migrating from the 32-bit embedded XP operating system to the 64-bit Windows 10 Long Term Service Branch (LTSB) OS. This will provide the following benefits:

- Security and management tools that are familiar to IT managers, including Windows Defender and the latest Microsoft service packs
- Streamlined code base for faster system response times and additional performance stability
- High performance operating system platform for future development

The purchasable upgrade will be presented in the form of hard disk drives and drive trays, or whole sleds in the case of the NV920 platform, shipped imaged with the latest control software.

## Implementation

The following steps will assist in the upgrade process. Upgrading one system controller at a time will allow you to safely gauge the upgrade success (redundant systems only).

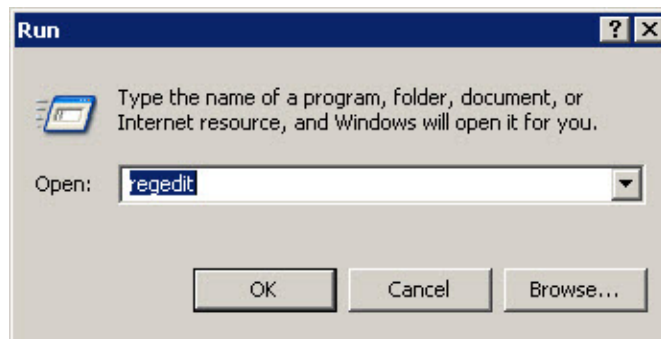
### Preparation from your old system

#### 1. Export your current NV9000 SE-Utilities configuration.

- Read the configuration from your control system under System Management
- Note your installed licenses
- Export To Zip Archive... by selecting from File to store external to your controller

#### 2. Export your NVISION registry settings off of your NV9000 controller

- Type `regedit` into the Run... field in the Windows Start
- Right-click on the NVISION folder under `HKEY_LOCAL_MACHINE\SOFTWARE\NVISION` and select Export
- Move that .reg file off of the NV9000



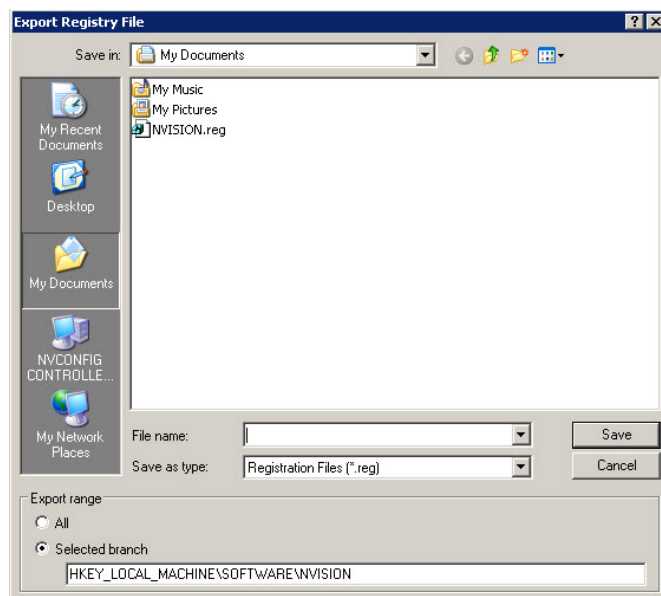
#### 3. Export your current IP configuration

- Open a `cmd.exe` prompt by typing `cmd` into the Run... field under Windows Start from step 2 above
- Type `netsh interface dump > C:\IPConfig.txt` and transfer your current IP address usage to a text file
- Move the IPConfig.txt file from the C:\ drive off of the NV9000

#### 4. Power down your inactive controller or NV920 sled (redundant systems only)

- Verify which system is inactive on System Management page in SE or front panel on the NV920

#### 5. Remove both drives from your powered down NV960 system, or the NV920 sled



**6. Insert the new drives, or NV920 sled, into your controller**

- The license is installed on the principal drive, but verify the part numbers below:
  - SV1255-00 Primary FR0040-30
  - SV1255-10 Primary FR0040-40
  - SV1256-00 Secondary FR0040-30
  - SV1256-10 Secondary FR0040-40
  - SV1257-00 Logging Drive FR0040-30
  - SV1257-10 Logging Drive FR0040-40
  - SV1258-00 Primary NV920 (Left Slot)
  - SV1259-00 Secondary NV920 (Right Slot)
- Power up the controller or NV920 sled

**7. Set up IP addresses based on the information retrieved in step 3 above**

- Transfer the IPConfig.txt file onto C:\ drive of your Windows 10 system
- Open up a command prompt by typing `cmd` into the search field
- Type in the following command to import your interface settings:
  - `netsh -f C:\IPConfig.txt`

**8. Verify IP address settings**

- Click on the Control Panel Desktop
- Select Network and Sharing Center
- Click on Change Adapter Settings
- Edit and enable adapters to the desired IP v4 address

**9. Import your registry settings**

- Move your \*.reg file onto the Windows 10 controller
- Right-click and Run as Administrator on the \*.reg file to import the registry settings
  - You will be asked if you are sure you want to add the files
- Type `regedit` into the Search window under the Windows logo in the bottom left corner
- Click on the regedit Run Command to verify that the registry settings imported correctly

**10. Write your NV9000 SE-Utilities configuration to the Windows 10 system**

- You will need to use version 6.8.0 or newer of SE-Utilities
- The latest version of SE-Utilities installer will be loaded in your E:\Software folder
- If you are upgrading the primary NV9000/NV920, then the latest SE-Utilities will already be installed
- You may need to add your control system by click on the System and then Add ControlSystem
  - Only add the CONTROL NET IP of the system that you are working on to avoid writing to the active control system
- You will need to import your configuration from Zip... under File in SE-Utilities
- Verify that your licenses are displaying under the licenses header on the system management status page
  - If you are missing licenses, check your system log to see if they are displaying as “licensed” after startup, or contact support
- Verify that the control software is stopped under System Management
- Now you should be able to write the configuration to just the inactive NV9000 controller, calculating tie-lines, if utilized.
- Now right-click on your control system and add the other NV9000 controller’s CONTROL NET IP after checking the Redundant box
- The other control system should display as active, indicated by a green light next to the controller number
- Start the control software of the Windows 10 controller by clicking the start button

## 11. Force a failover to the inactive controller to test functionality

- Hold down the CTRL and Alt keys on your keyboard while clicking in the Yellow outlined oval beside the inactive controller
- This will force a manual override that should display under the Controller Faults on the system management status page
- Verify functionality by running for some time:
  - Check that panels work and status is updating correctly
  - Verify any serial communication and external interfaces
  - Check system logs in SE-Utilities for any errors

## 12. If you are satisfied with communication, then stop the control software on the inactive system and shut down that controller

- Communicate any issues to technical support team

## 13. Repeat the steps 2-11 above on the powered down controller

