

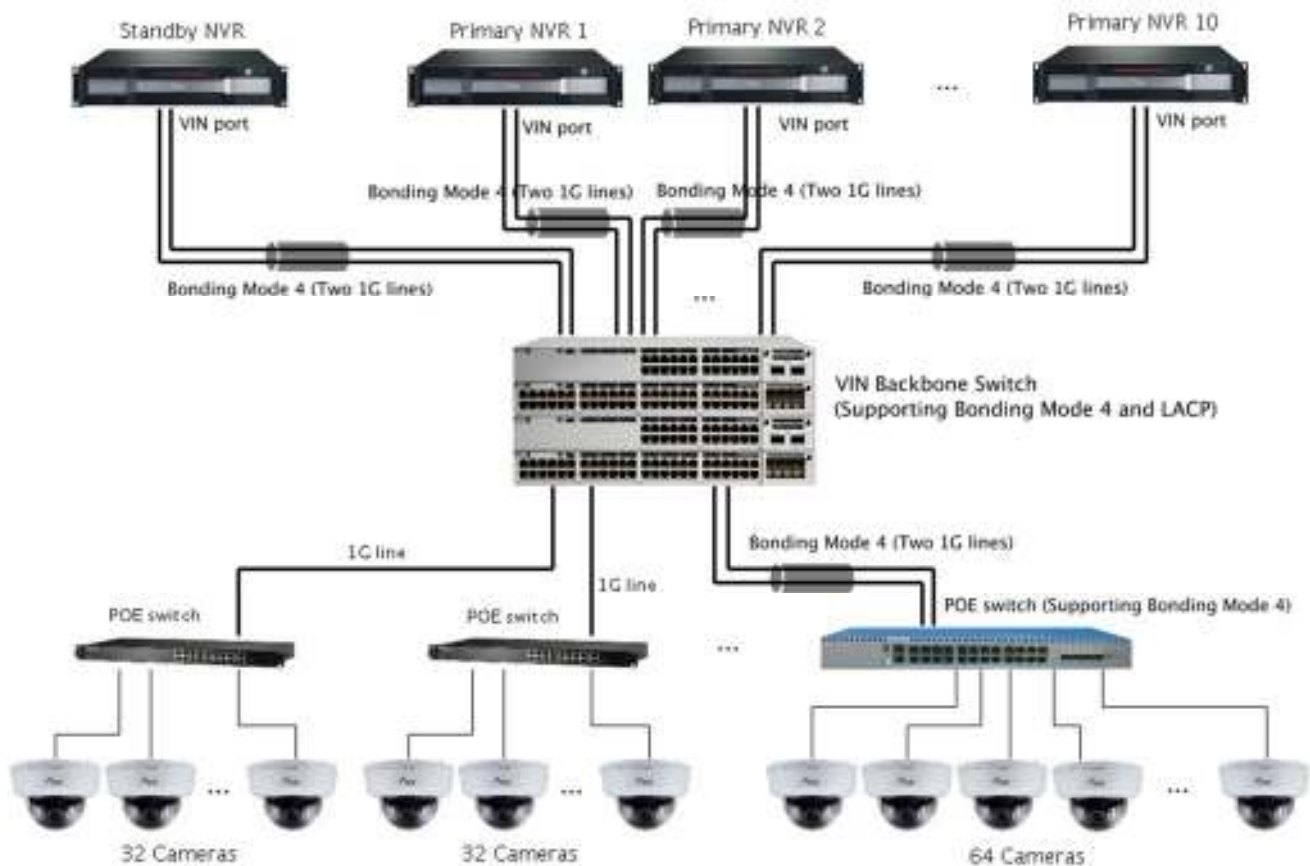
NVR Failover Manual

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1. NVR Failover Network Examples

1.1. NVR Failover Network Topology Example Diagram



Caution

- OEM and SW version of Primary NVR and Standby NVR should be the same.
- Up to 10 x Primary NVRs can be connected.
- VIN Interface type of the NVR must be set to “Bonding Mode 4”.
(VIN Interface type of NVR can be set at ; Menu > Network > VIN > Interface Type)
- The VIN Backbone Switch must support Bonding Mode 4 and LACP, and switching capacity must be greater than the number of Primary NVRs multiplied by 2 Gbps.
(Refer to Switch Manual for Bonding Mode 4 and LACP activation method of VIN Backbone Switch.)
- The VIN port and the VIN Backbone Switch of the NVR should connect two or more 1Gbps lines to Bonding Mode 4.
- POE switch with less than 32 cameras can connect to 1 1Gbps line. (Full-HD camera)
- A POE switch with more than 32 cameras should connect 1 Gbps line per 32 cameras to Bonding Mode 4.
(If 64 cameras are connected, two 1Gbps lines should be connected in Bonding Mode 4)

1.2. VIN Backbone Switch configuration example

1.2.1. DASAN V2624G-POE switch

In Console, enter the following commands.

```
enable
configure terminal
bridge
lacp aggregator 0-7
lacp aggregator distmode 0-7 srcmac
lacp port 1-28
lacp port activity 1-28 active
exit
exit
write memory
reload
```

Console output screen

```
SWITCH> enable
SWITCH# configure terminal
    SWITCH(config)# bridge
    SWITCH(bridge)# lacp aggregator 0-7
    SWITCH(bridge)# lacp aggregator distmode 0-7 srcmac
    SWITCH(bridge)# lacp port 1-28
    SWITCH(bridge)# lacp port activity 1-28 active
    SWITCH(bridge)# exit
    SWITCH(config)# exit
SWITCH# write memory
SWITCH# reload
```

- **Command**

- lacp aggregator 0-7
 - Aggregator 0-7 is enabled
- lacp aggregator distmode 0-7 srcmac
 - Set the packet distribution criterion of Aggregator 0-7 to source MAC address
- lacp port 1-28
 - Set Port no #1-28 to use as an aggregator member port
- lacp port activity 1-28 active
 - Set the operation mode of the aggregator member port on port no #1-28 to active.

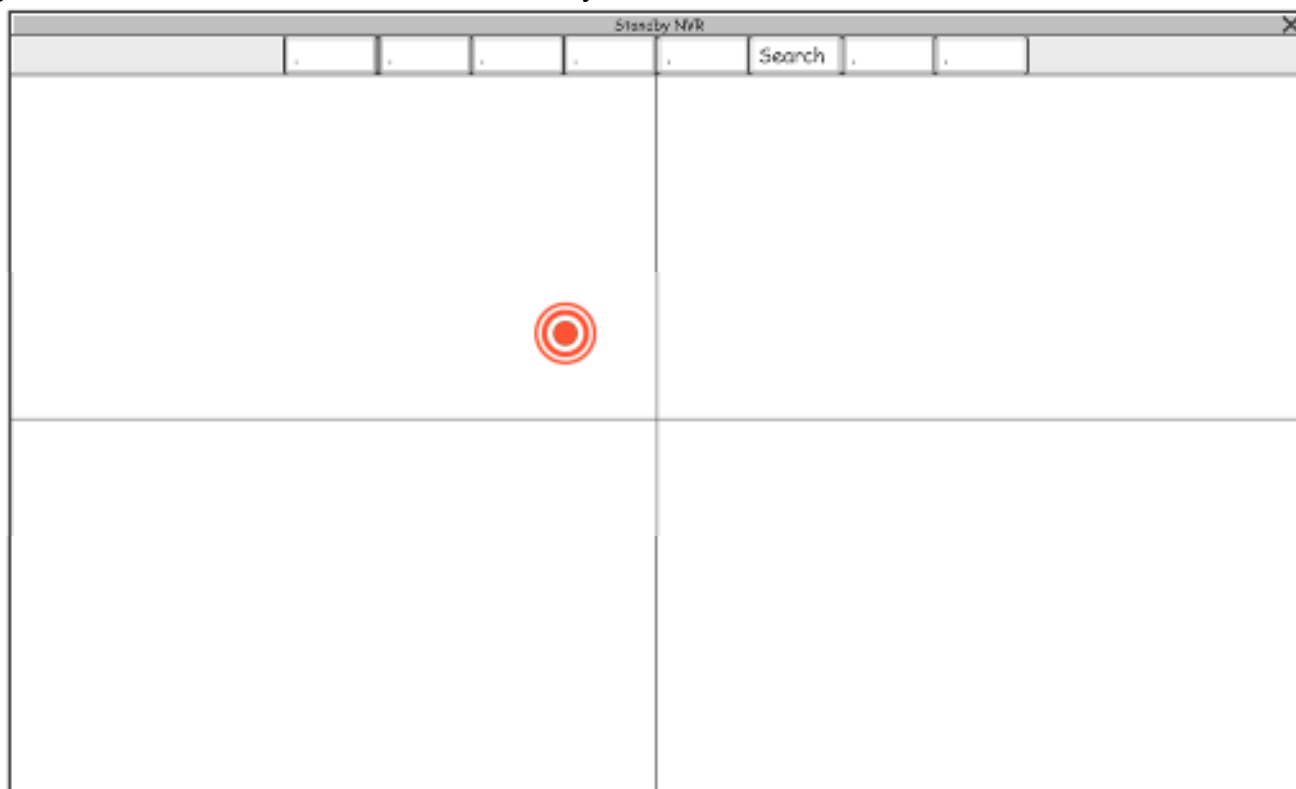
2. User Story

2.1. Register the Primary NVR

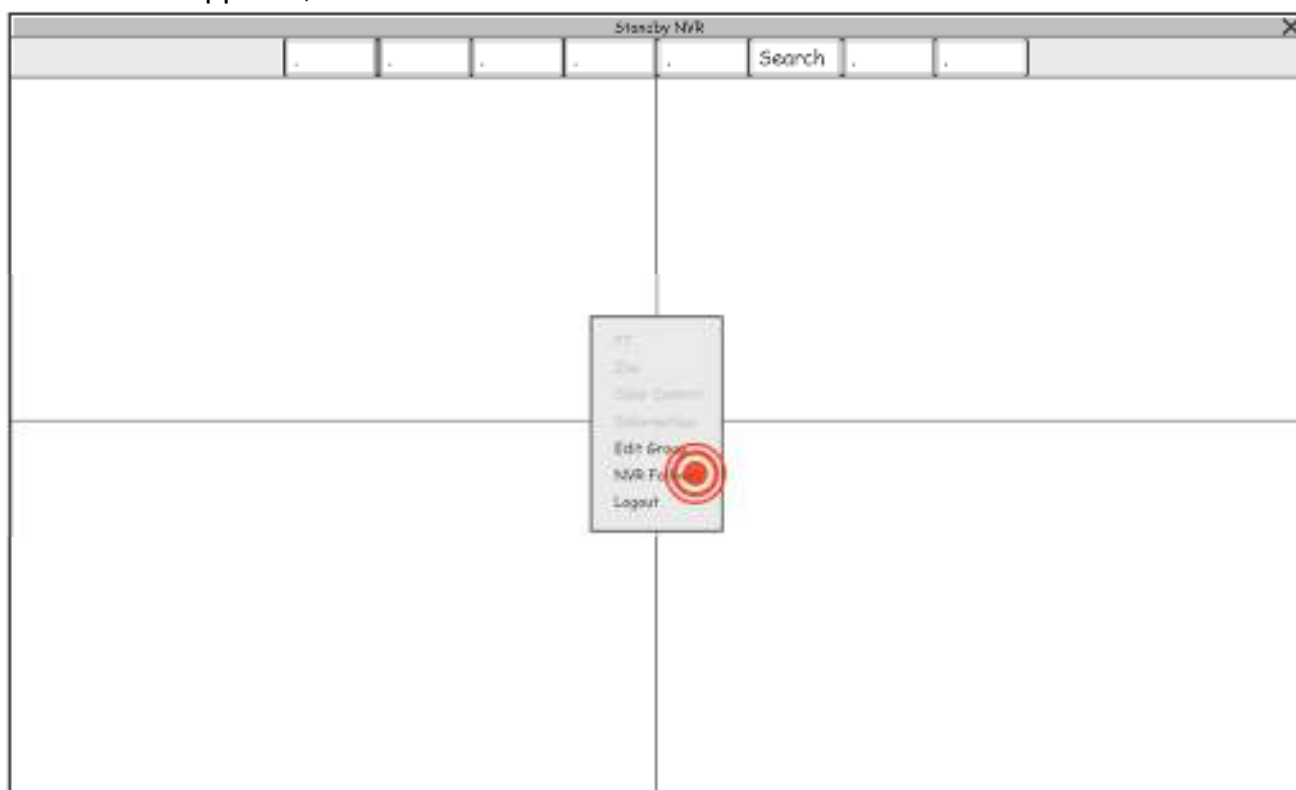
1. Right click on the 『Live View』 of the Standby NVR
2. Once the menu appears, select 『NVR Failover』.
3. 『NVR Failover』 window is popped up.
4. Click the 『Scan』 button
5. 『Device Scan』 window is popped up.
6. Click the 『Scan』 button.
7. The 『Scan』 button changes to the 『Stop』 button and the detected NVRs are displayed.
8. When the maximum scanning time is over or the 『Stop』 button is clicked, the 『Stop』 button is changed back to the 『Scan』 button and scanning is stopped.
9. Select the NVRs to register as 『Primary NVR』.
10. Click the 『Add』 button.
11. The 『Login』 window appears.
12. Enter the password and click the 『OK』 button.

(If all NVRs have same password, check 『Apply to All Device』.)
13. 『Device Scan』 window disappears and the information of the selected NVRs is displayed on the 『Monitoring』 list.
14. Click the 『Apply』 button.
15. Registration is completed.

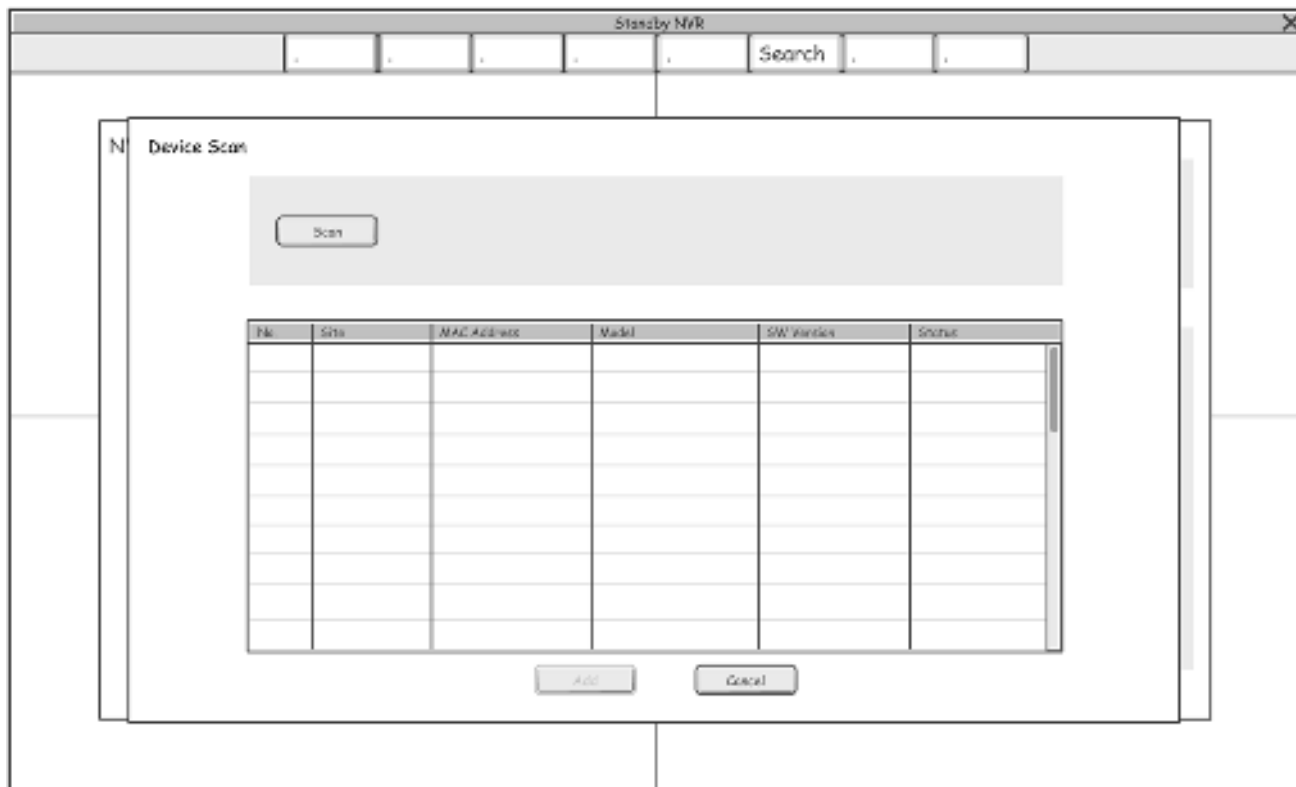
1. Right click on the 『Live View』 of the Standby NVR



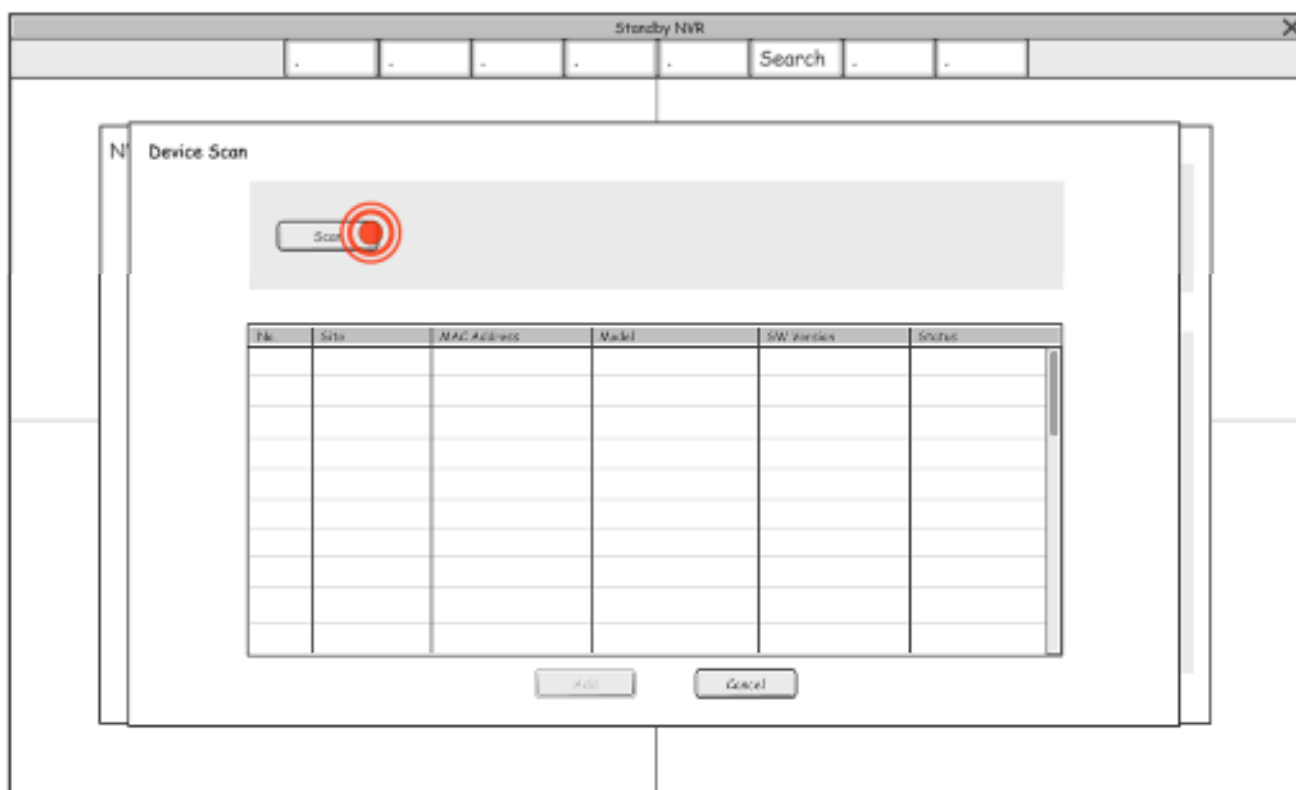
2. Once the menu appears, select 『NVR Failover』.



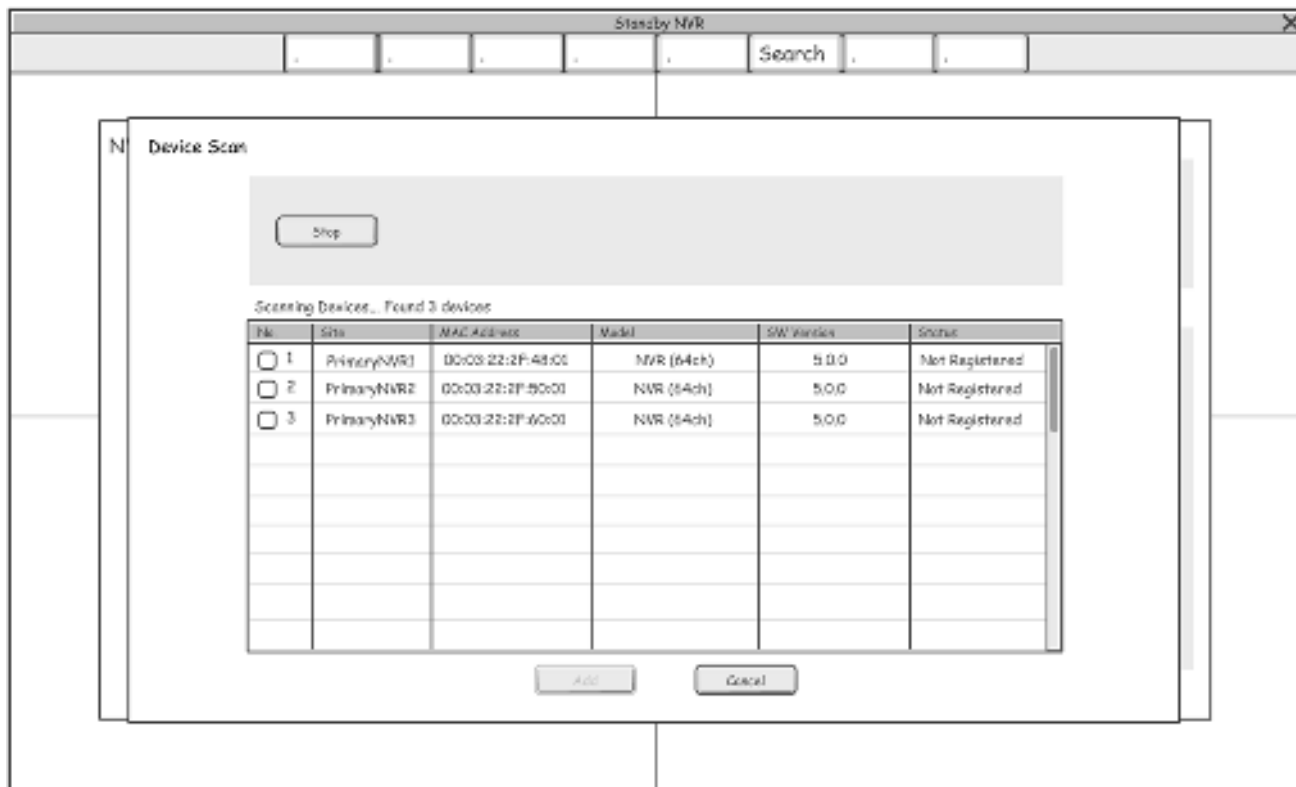
5. 『Device Scan』 window is popped up.



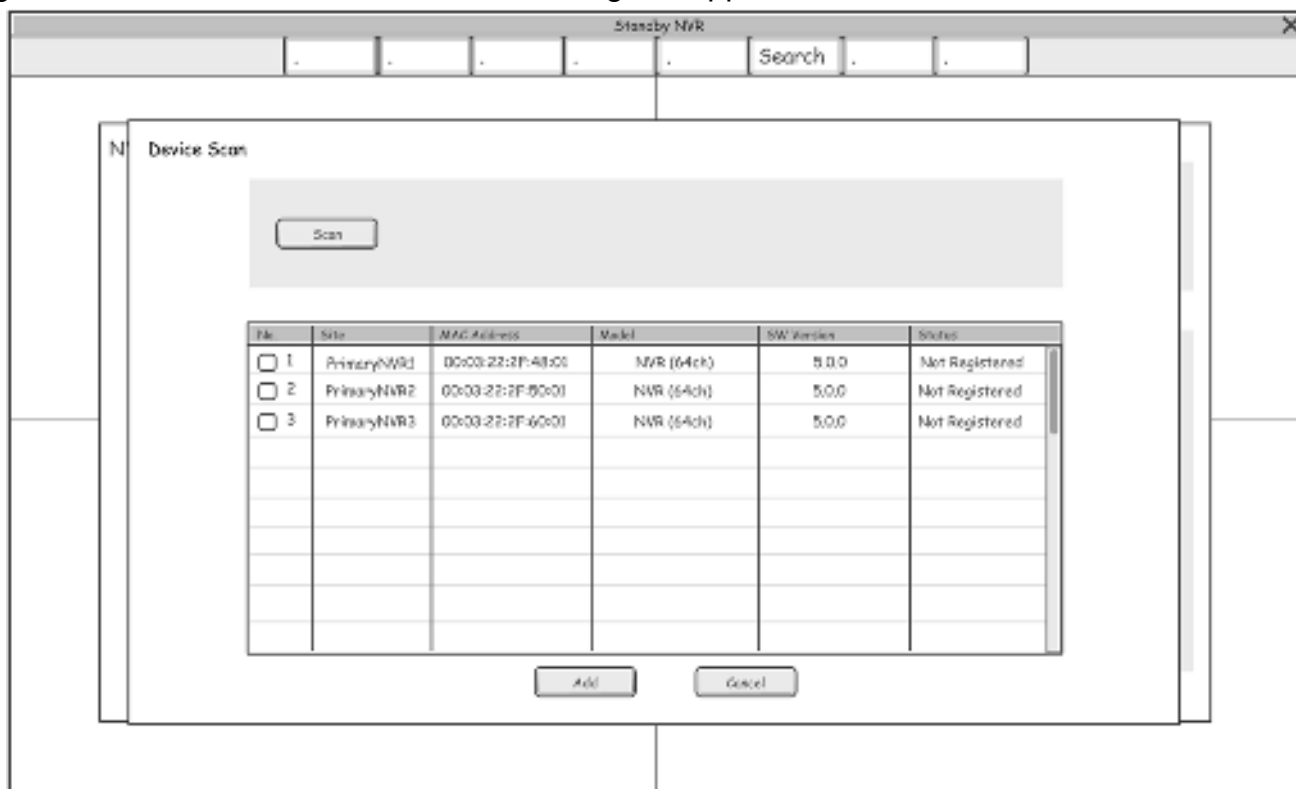
6. Click the 『Scan』 button.



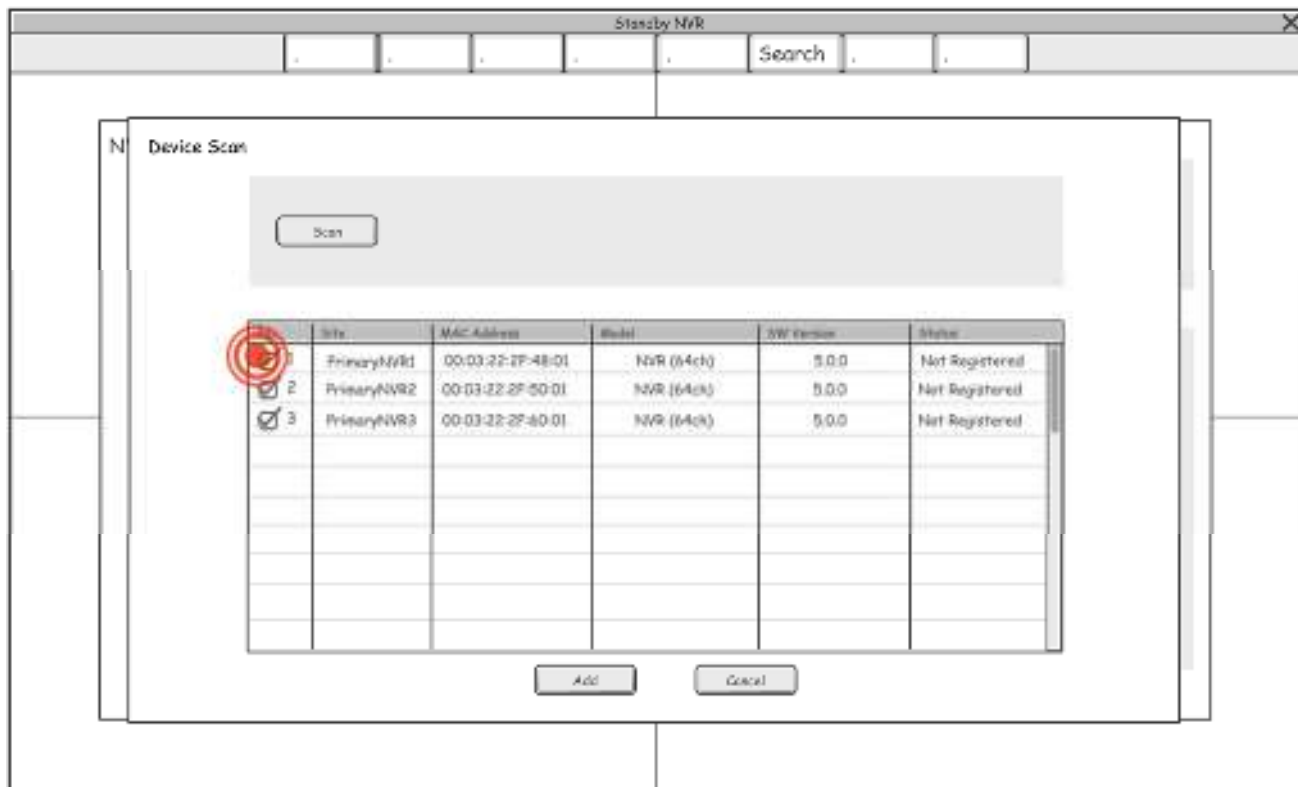
7. The 『Scan』 button changes to the 『Stop』 button and the detected NVRs are displayed.



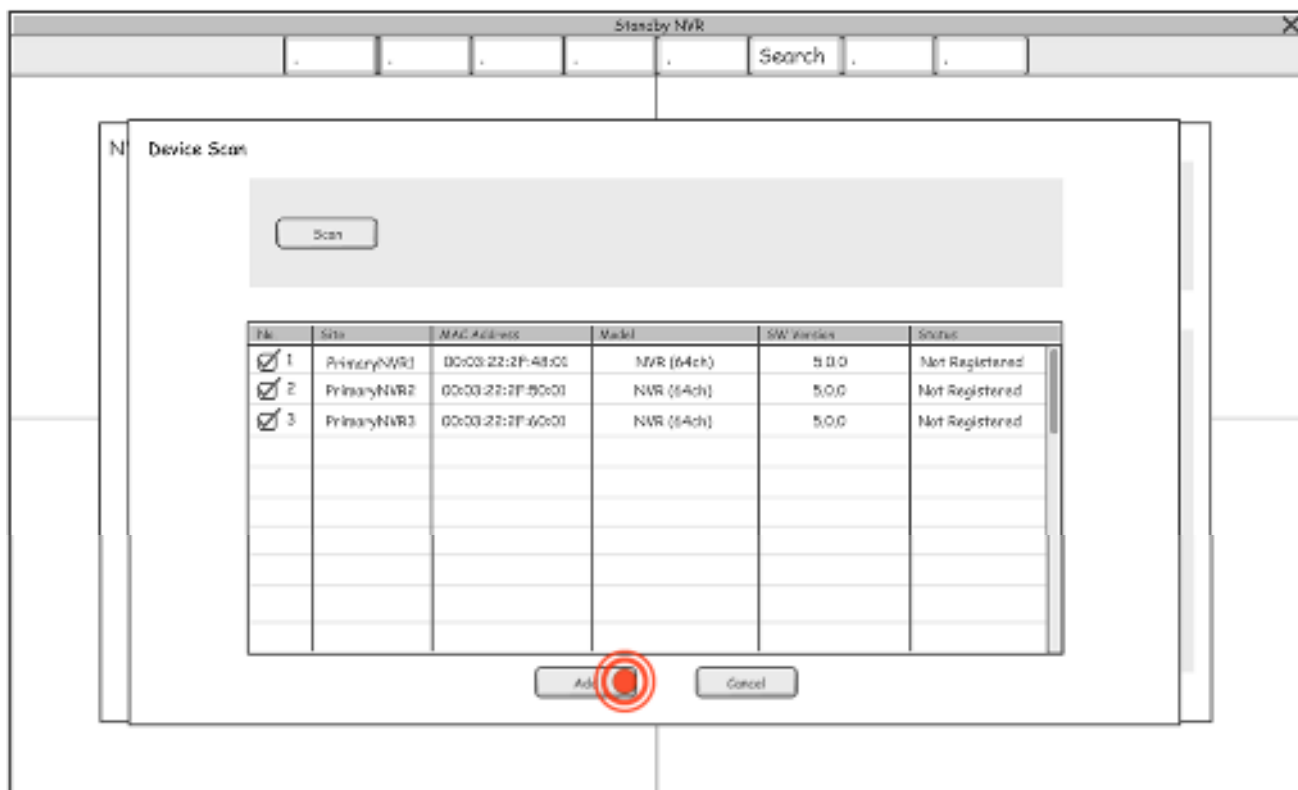
8. When the maximum scanning time is over or the 『Stop』 button is clicked, the 『Stop』 button is changed back to the 『Scan』 button and scanning is stopped.



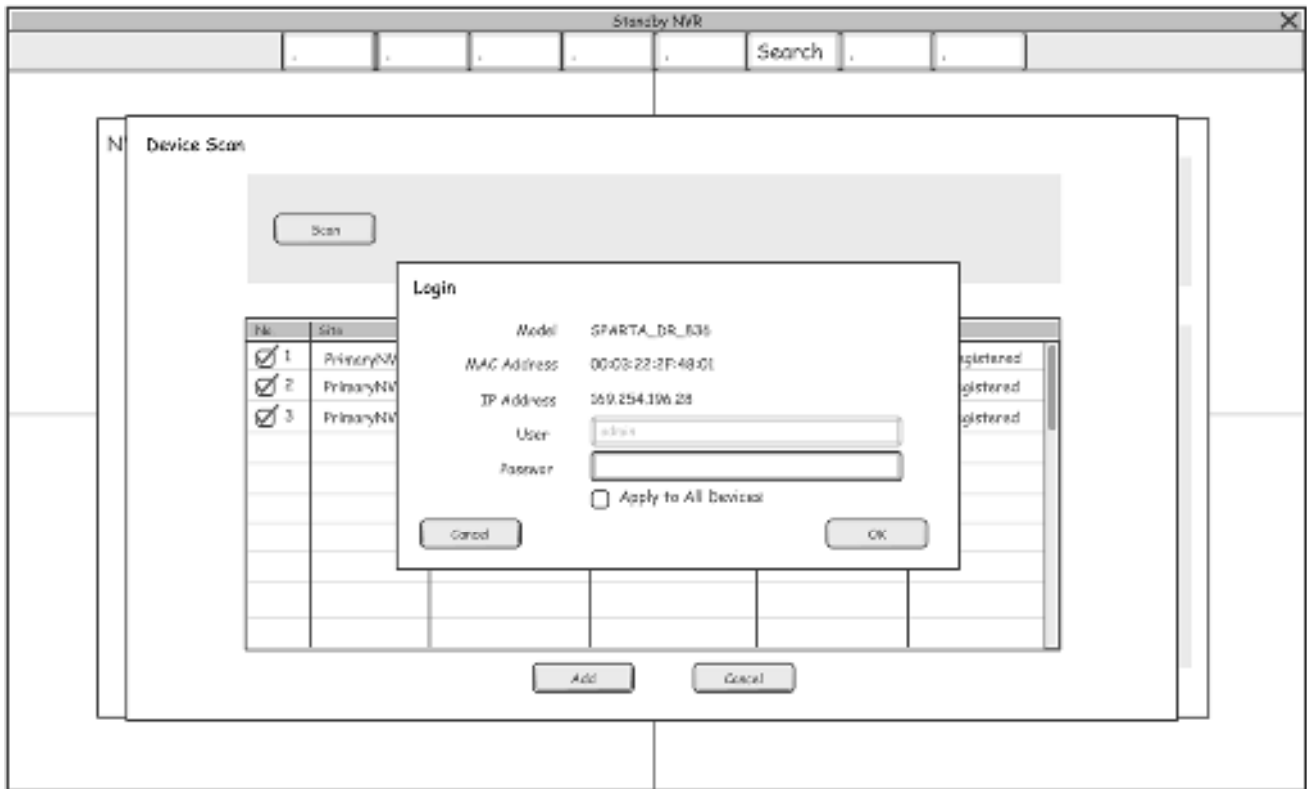
9. Select the NVRs to register as 『Primary NVR』.



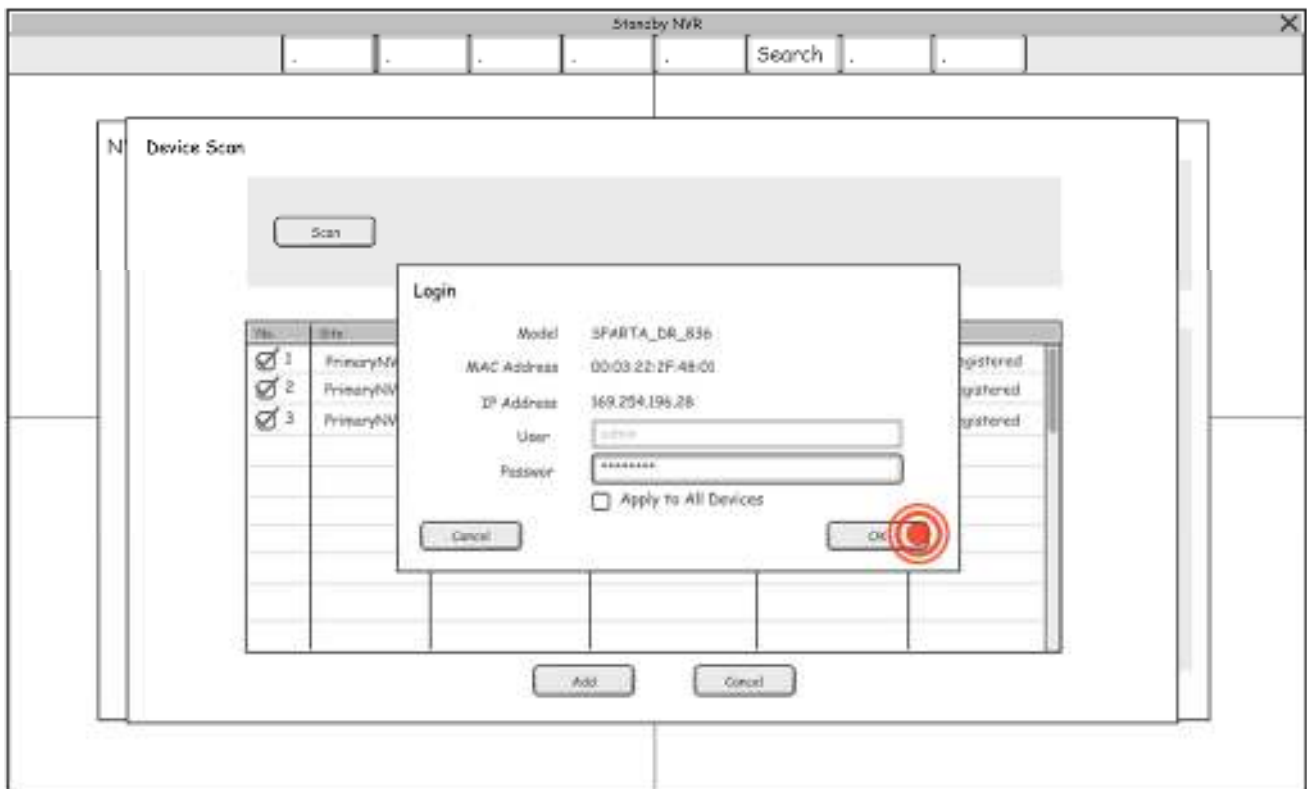
10. Click the 『Add』 button.



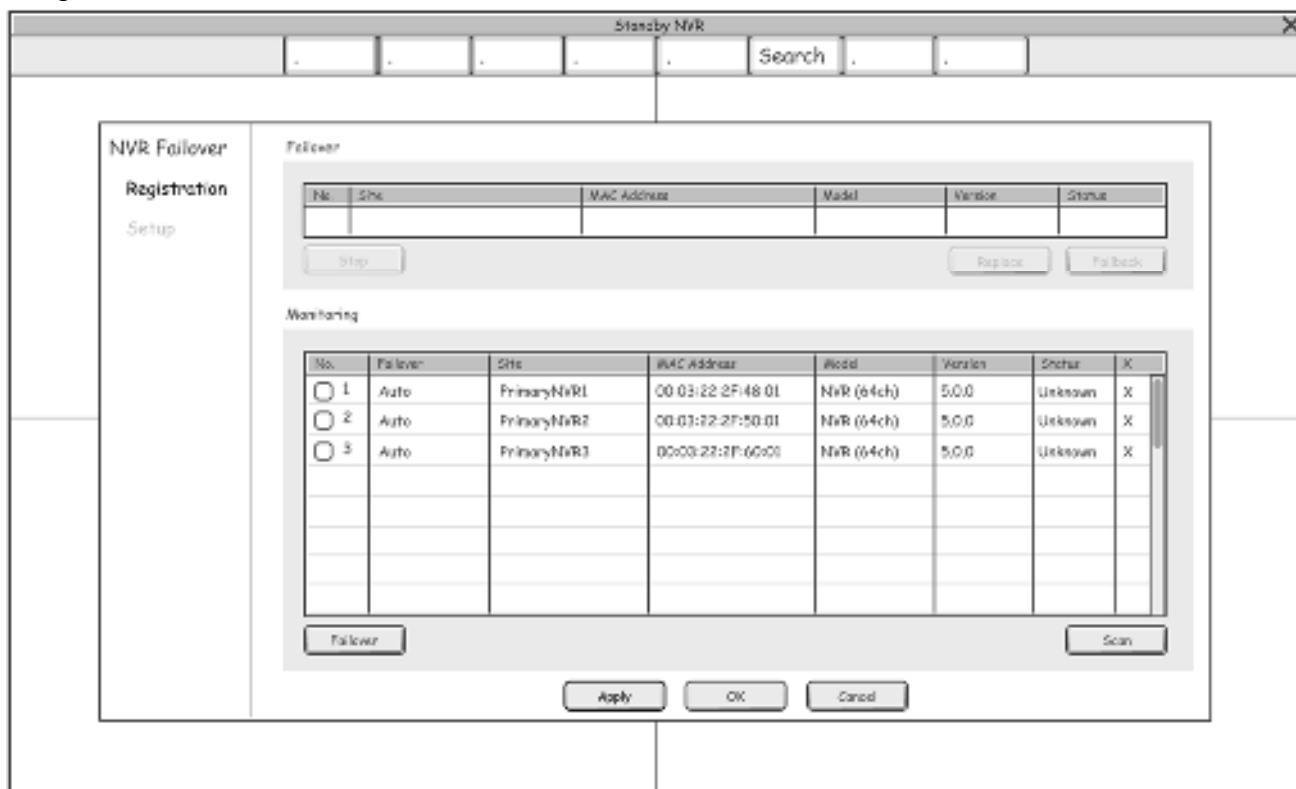
11. The 『Login』 window appears.



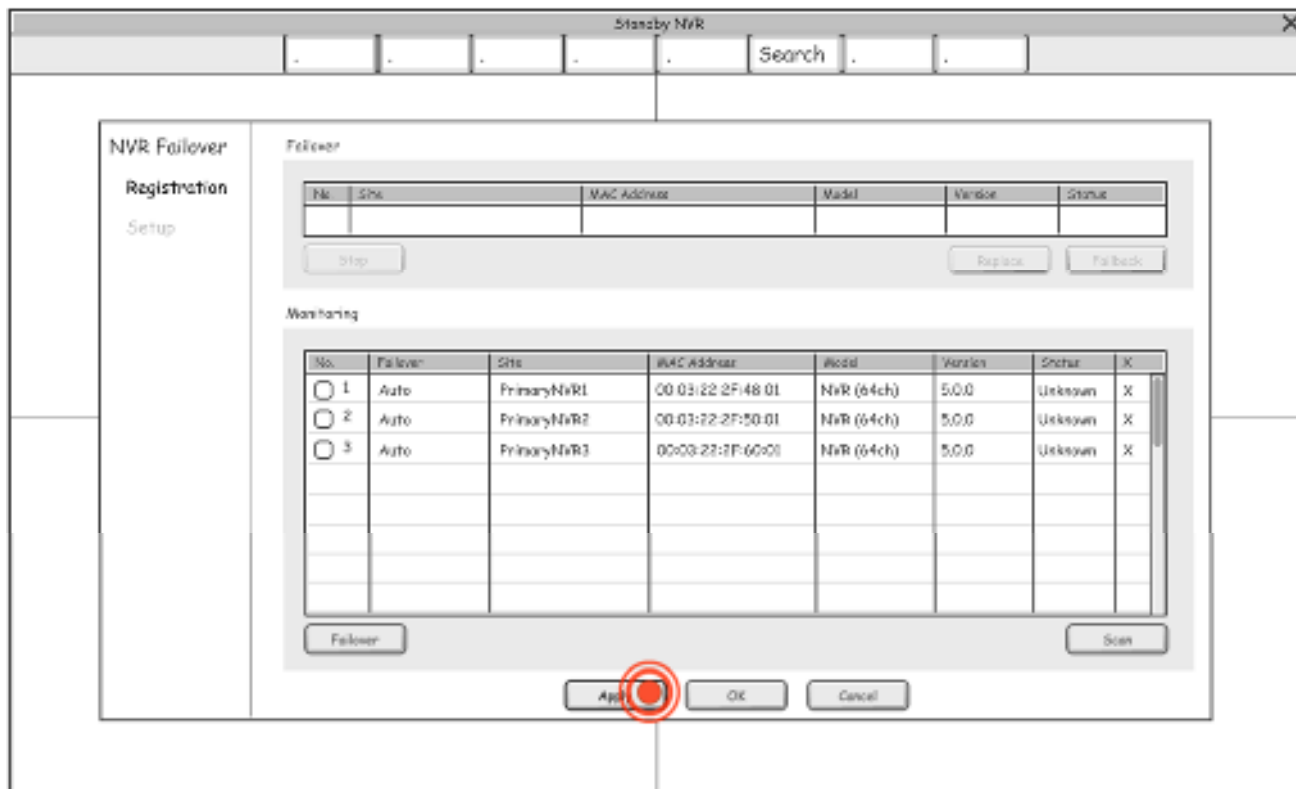
12. Enter the password and click the 『OK』 button. (If all NVRs have same password, check 『Apply to All Device』.)



13. 『Device Scan』 window disappears and the information of the selected NVRs is displayed on the 『Monitoring』 list.



14. Click the 『Apply』 button.



15. Registration is completed.

Standby NVR

Search

NVR Failover

Registration

Setup

Failover

No.	Site	MAC Address	Model	Version	Status

Stop

Replace

Failback

Monitoring

No.	Failover	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00:03:22:2F:48:01	NVR (64ch)	5.0.0	Normal	X
☐ 2	Auto	PrimaryNVR2	00:03:22:2F:50:01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00:03:22:2F:60:00	NVR (64ch)	5.0.0	Normal	X

Failover

Scan

Apply

OK

Cancel

2.2 Deregister the Primary NVR from the NFO Monitoring Target list.

Conversation

- User can deregister the Primary NVR from the watch list in the Standby NVR

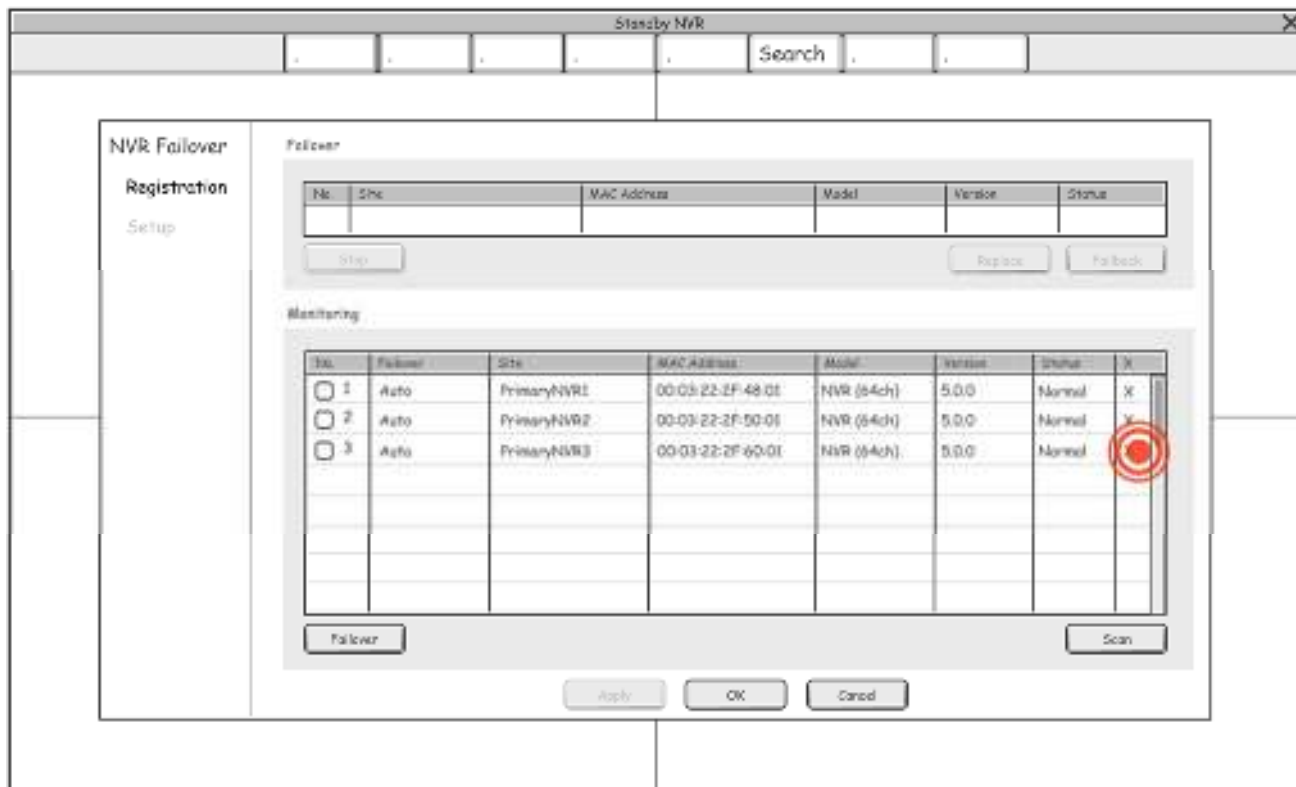
Scenarios

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. Click "X" to deregister the NVR in the 『Monitoring』 list.
3. Click 『OK』 button to confirm.
4. Click 『Apply』 button to save the changes.
5. Deregistration is completed

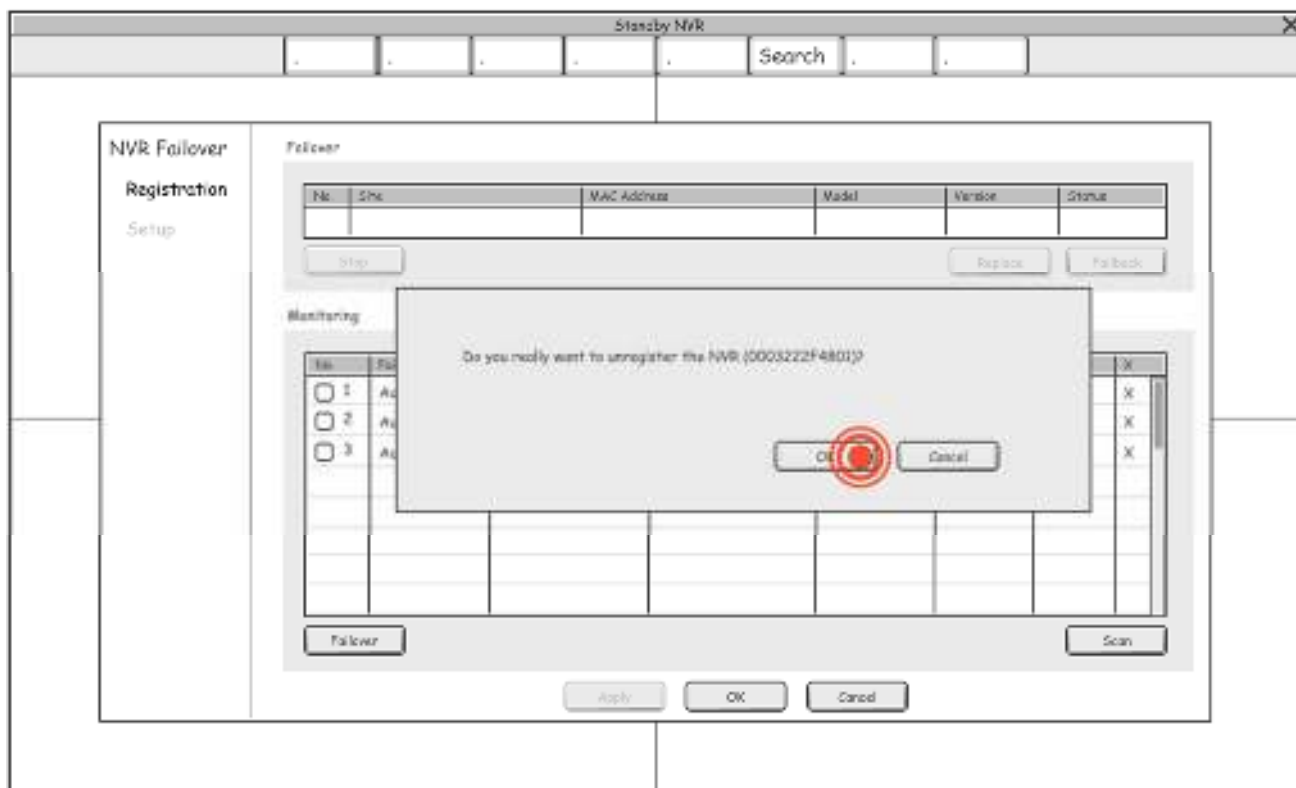
1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.

The screenshot shows the 'Standby NVR' window. The 'Registration' section is currently active, showing a table with columns: No., Site, MAC Address, Model, Version, and Status. Below this table are buttons for 'Stop', 'Replace', and 'Failback'. The 'Monitoring' section is also visible, showing a table with columns: No., Failover, Site, MAC Address, Model, Version, Status, and X. This table contains three entries for PrimaryNVR1, PrimaryNVR2, and PrimaryNVR3, all with 'Auto' failover and 'Normal' status. At the bottom of the window, there are buttons for 'Failover', 'Scan', 'Apply', 'OK', and 'Cancel'.

2. Click "X" to deregister the NVR in the 『Monitoring』 list.



3. Click 『OK』 button to confirm.



4. Click 『Apply』 button to save the changes.

Standby NVR

Search

NVR Failover

Registration

Setup

Follower

No.	Site	MAC Address	Model	Version	Status

Stop Replace Fail back

Monitoring

No.	Follower	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00 03:22:2F:48 01	NiR (64ch)	5.0.0	Normal	X
☐ 2	Auto	PrimaryNVR2	00 03:22:2F:50 01	NiR (64ch)	5.0.0	Normal	X

Follower Scan

Apply OK Cancel

5. Deregistration is completed

Standby NVR

Search

NVR Failover

Registration

Setup

Follower

No.	Site	MAC Address	Model	Version	Status

Stop Replace Fail back

Monitoring

No.	Follower	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00 03:22:2F:48 01	NiR (64ch)	5.0.0	Normal	X
☐ 2	Auto	PrimaryNVR2	00 03:22:2F:50 01	NiR (64ch)	5.0.0	Normal	X

Follower Scan

Apply OK Cancel

2.3 Configure the Check Interval, Setup Backup Interval, and Auto Failover Threshold.

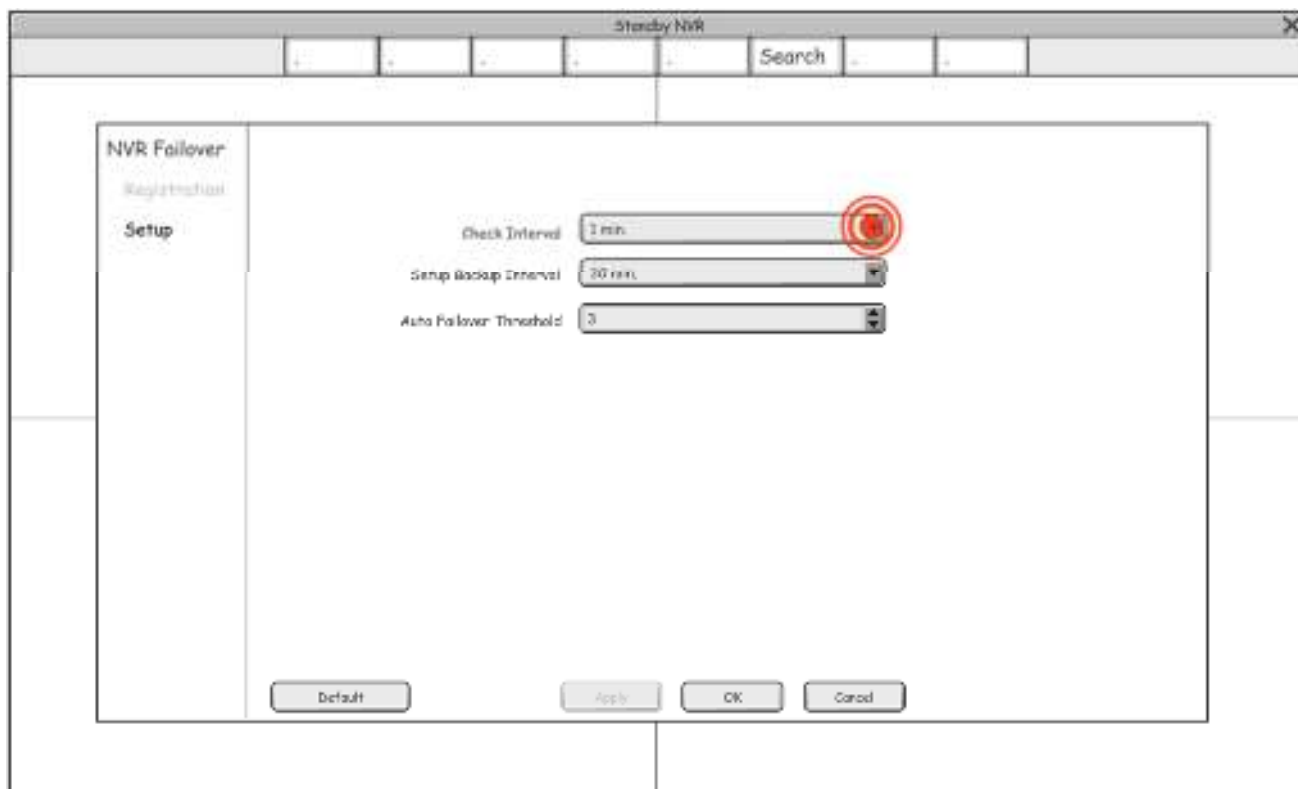
Conversation

- User can Change the Check Interval, Setup Backup Interval, and Auto Failover Threshold in the Standby NVR.
 - Check Interval: The interval of checking the status of the registered Primary NVR
 - Setup Backup Interval: The interval of backup the setting of the registered Primary NVR
 - Auto Failover Threshold: Number of consecutive failures to set failover to start automatically when Failover Mode is Auto

Scenarios

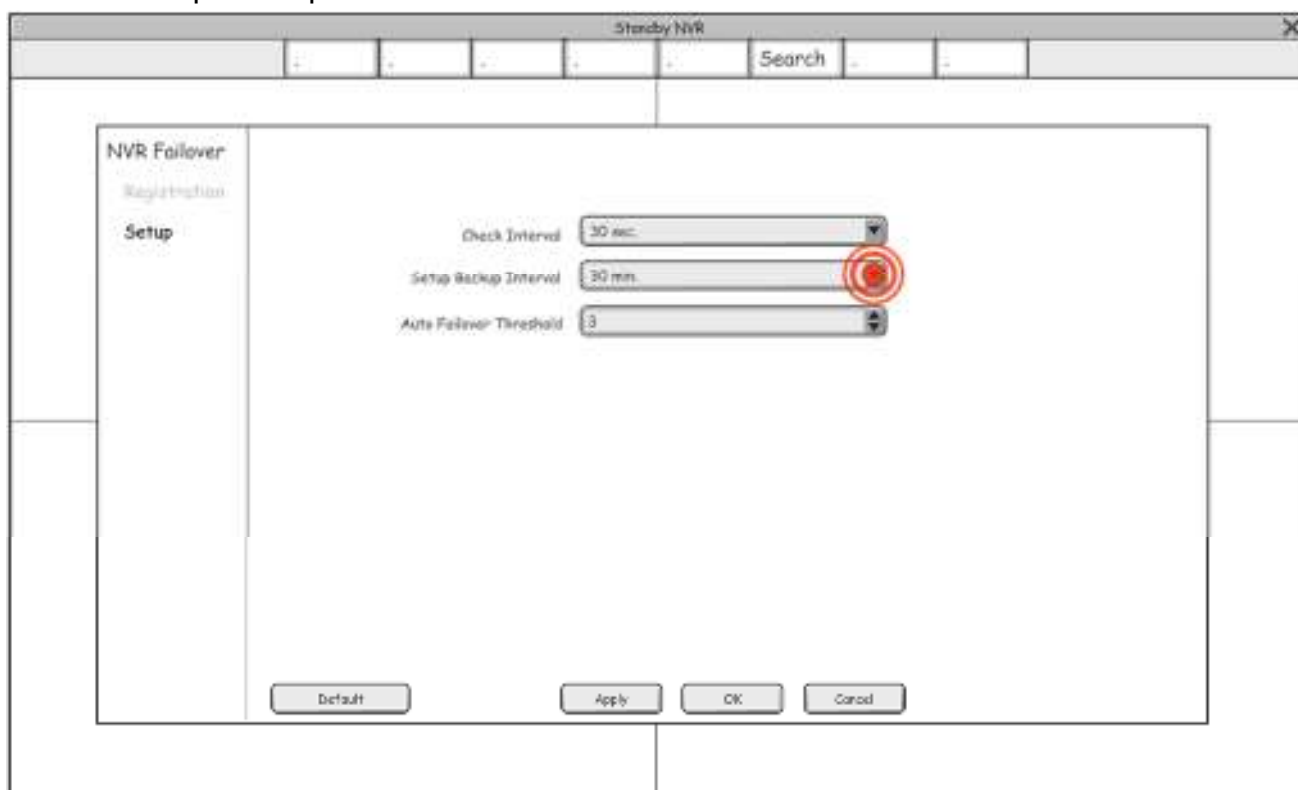
1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. Move to 『Setup』 page.
3. Select the 『Check Interval』.
4. Select the 『Setup Backup Interval』.
5. Select the 『Auto Failover Threshold』.
6. Click the 『Apply』 button.
7. Setup is completed.

3. Select the 『Check Interval』.



The screenshot shows the 'Standby NVR' configuration window. On the left, there is a sidebar with 'NVR Failover' and 'Registration' tabs, and a 'Setup' button. The main area contains three settings: 'Check Interval' set to '1 min.', 'Setup Backup Interval' set to '20 min.', and 'Auto Failover Threshold' set to '3'. The 'Check Interval' dropdown menu is highlighted with a red circle. At the bottom, there are buttons for 'Default', 'Apply', 'OK', and 'Cancel'.

4. Select the 『Setup Backup Interval』.



The screenshot shows the 'Standby NVR' configuration window. On the left, there is a sidebar with 'NVR Failover' and 'Registration' tabs, and a 'Setup' button. The main area contains three settings: 'Check Interval' set to '30 sec.', 'Setup Backup Interval' set to '20 min.', and 'Auto Failover Threshold' set to '3'. The 'Setup Backup Interval' dropdown menu is highlighted with a red circle. At the bottom, there are buttons for 'Default', 'Apply', 'OK', and 'Cancel'.

5. Select the 『Auto Failover Threshold』.

The screenshot shows the 'Standby NVR' configuration window. On the left, there is a sidebar with 'NVR Failover' selected, containing 'Registration' and 'Setup' options. The 'Setup' option is active. The main area displays three settings: 'Check Interval' set to '30 sec.', 'Setup Backup Interval' set to '10 min.', and 'Auto Failover Threshold' set to '3'. The 'Auto Failover Threshold' dropdown menu is highlighted with a red circle. At the bottom, there are four buttons: 'Default', 'Apply', 'OK', and 'Cancel'.

6. Click the 『Apply』 button.

This screenshot is identical to the previous one, showing the 'Standby NVR' configuration window with the 'Auto Failover Threshold' set to '3'. In this step, the 'Apply' button at the bottom is highlighted with a red circle, indicating the next action to be taken.

7. Setup is completed.

The screenshot shows a software window titled "Standby NVR" with a close button (X) in the top right corner. Below the title bar is a search bar with the text "Search" and several empty input fields. The main content area is divided into a left sidebar and a right pane. The sidebar has a header "NVR Failover" and two sub-headers: "Registration" and "Setup". The "Setup" sub-header is selected. The right pane displays three configuration items, each with a label and a dropdown menu:

- Check Interval: 30 sec.
- Setup Backup Interval: 10 min.
- Auto Failover Threshold: 1

At the bottom of the right pane, there are four buttons: "Default", "Apply", "OK", and "Cancel".

2.4 Start Failover manually on failed Primary NVR.

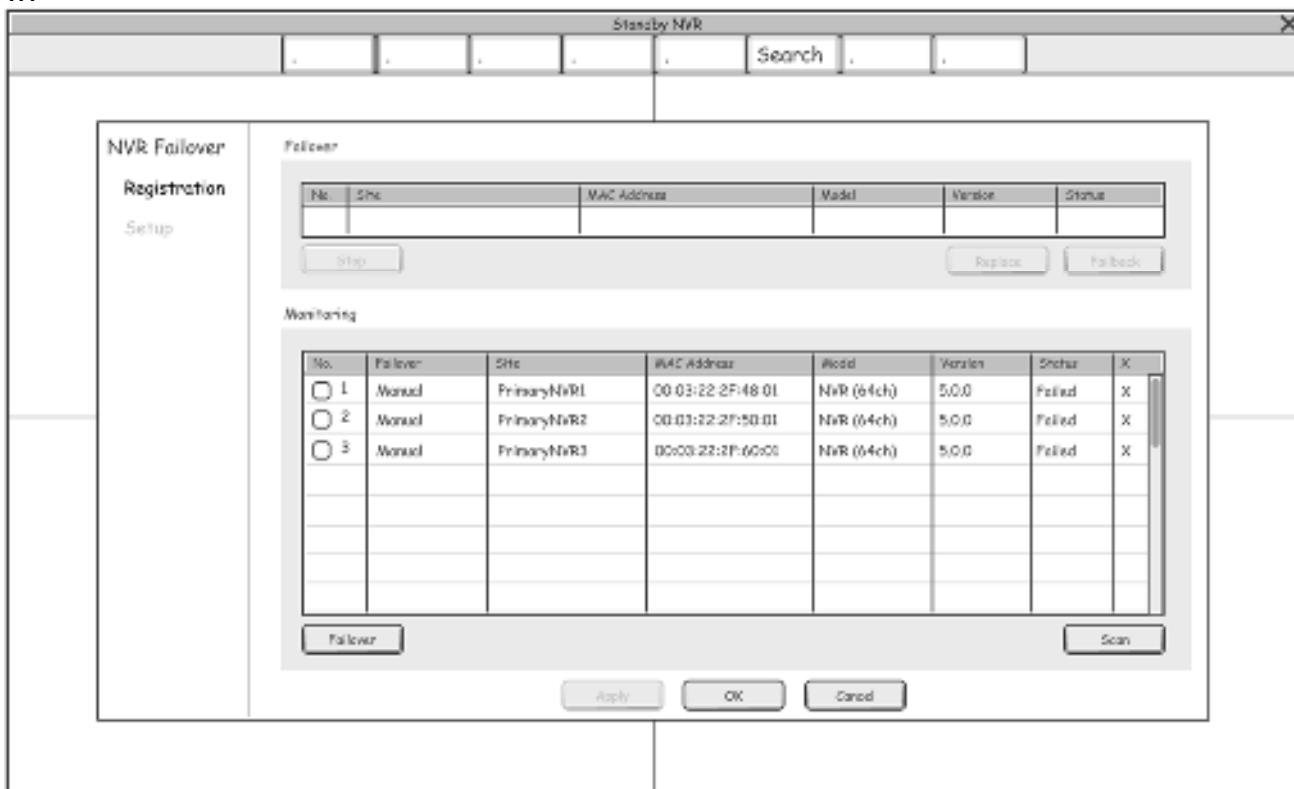
Conversation

- User can manually start Failover for a failed Primary NVR in the Standby NVR.

Scenarios

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. Select a 『Primary NVR』 to failover.
3. Click the 『Failover』 button.
4. Click the 『OK』 button to confirm.
5. Failover starts.

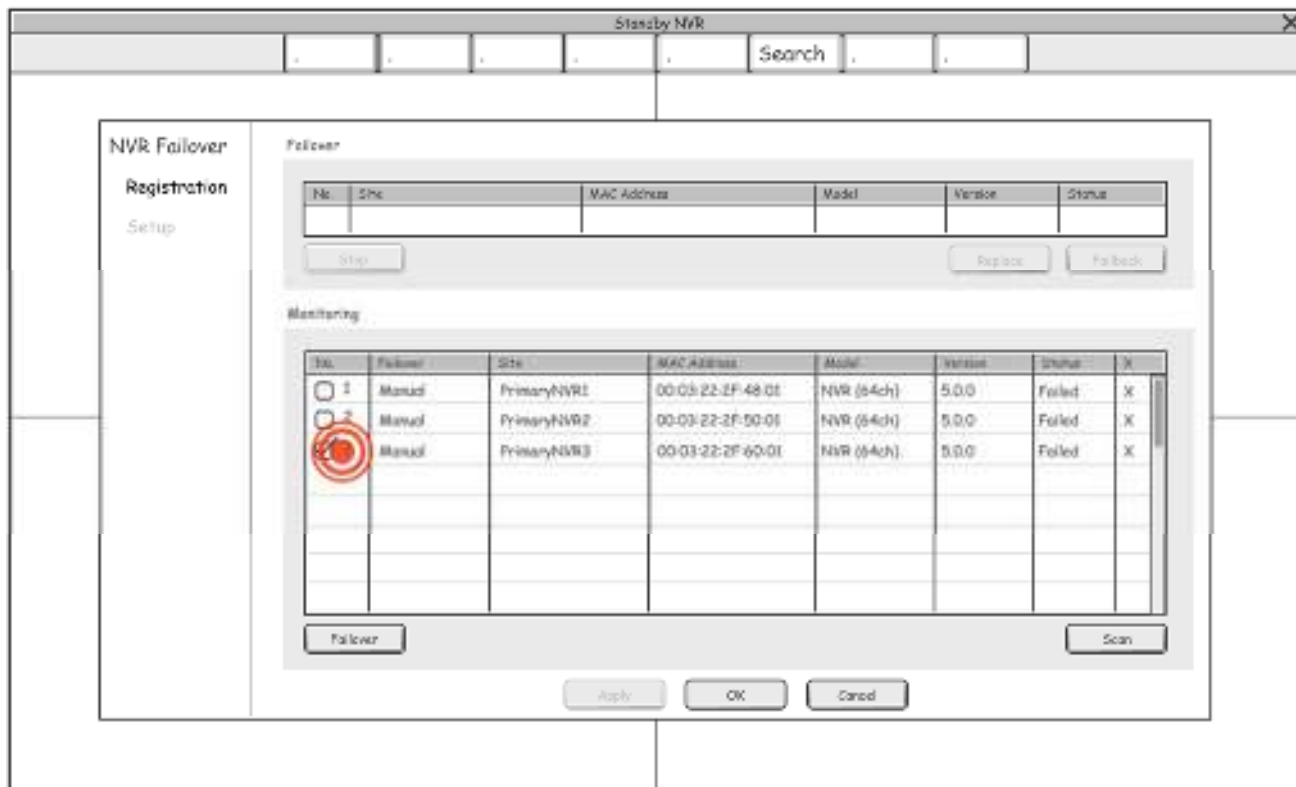
1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.



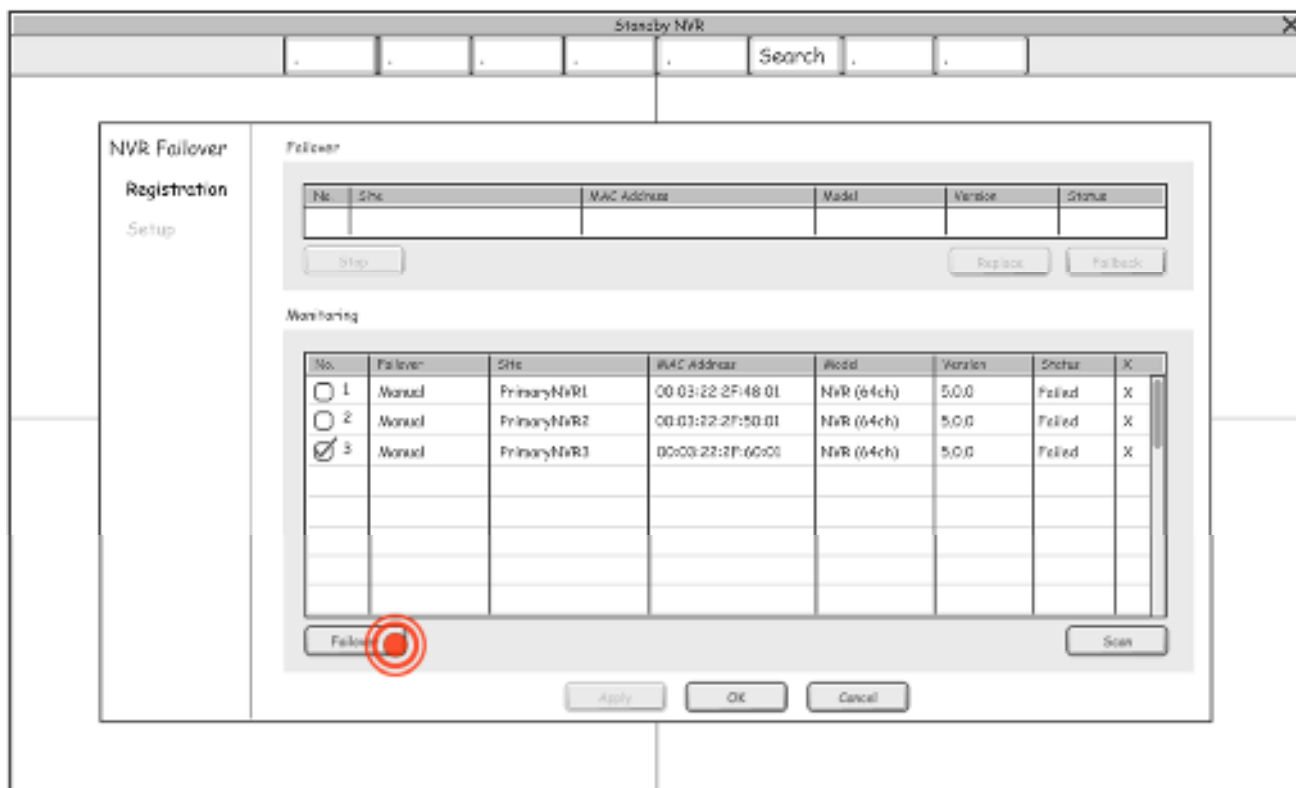
The screenshot shows the 'NVR Failover' window. The 'Monitoring' table contains the following data:

No.	Fallover	Site	MAC Address	Model	Version	Status	X
☐ 1	Manual	PrimaryNVR1	00 03:22:2F:48 01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Manual	PrimaryNVR2	00 03:22:2F:50 01	NVR (64ch)	5.0.0	Failed	X
☐ 3	Manual	PrimaryNVR3	00 03:22:2F:60 01	NVR (64ch)	5.0.0	Failed	X

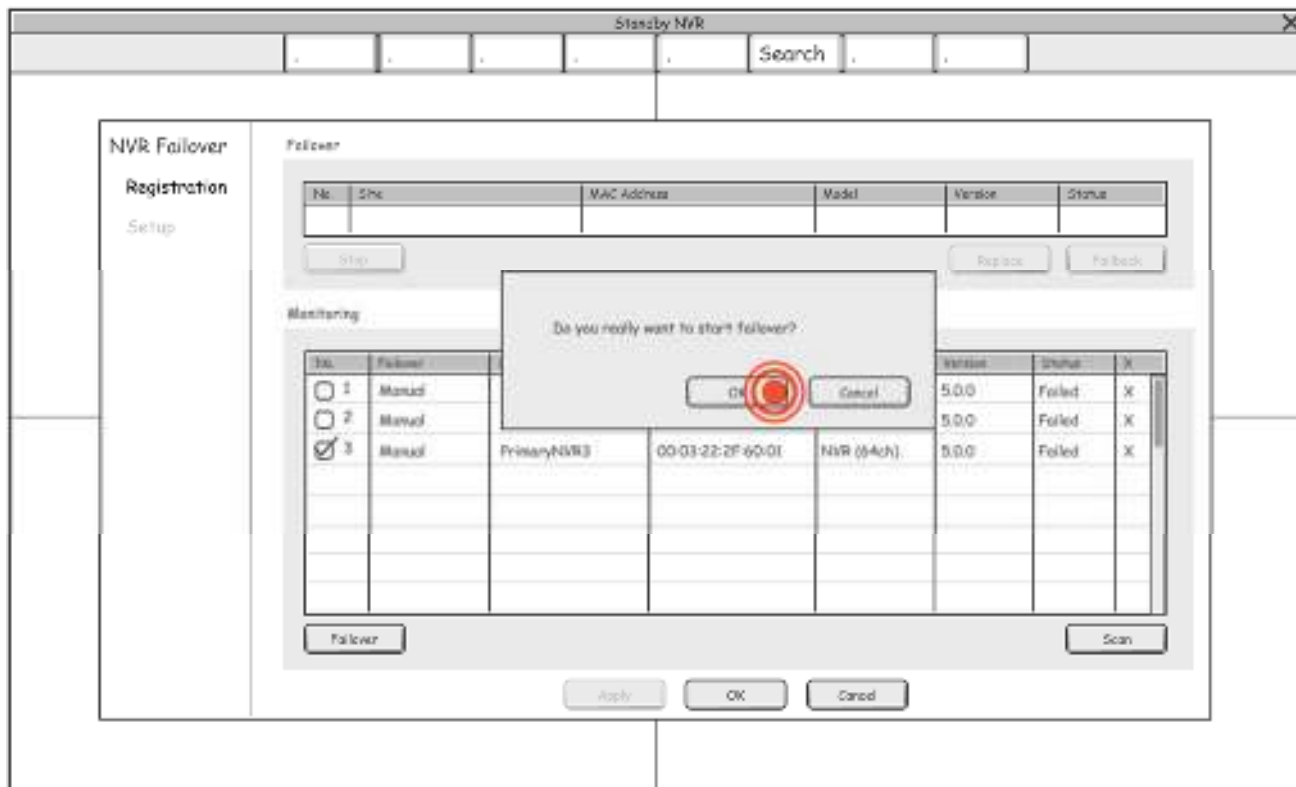
2. Select a 『Primary NVR』 to failover.



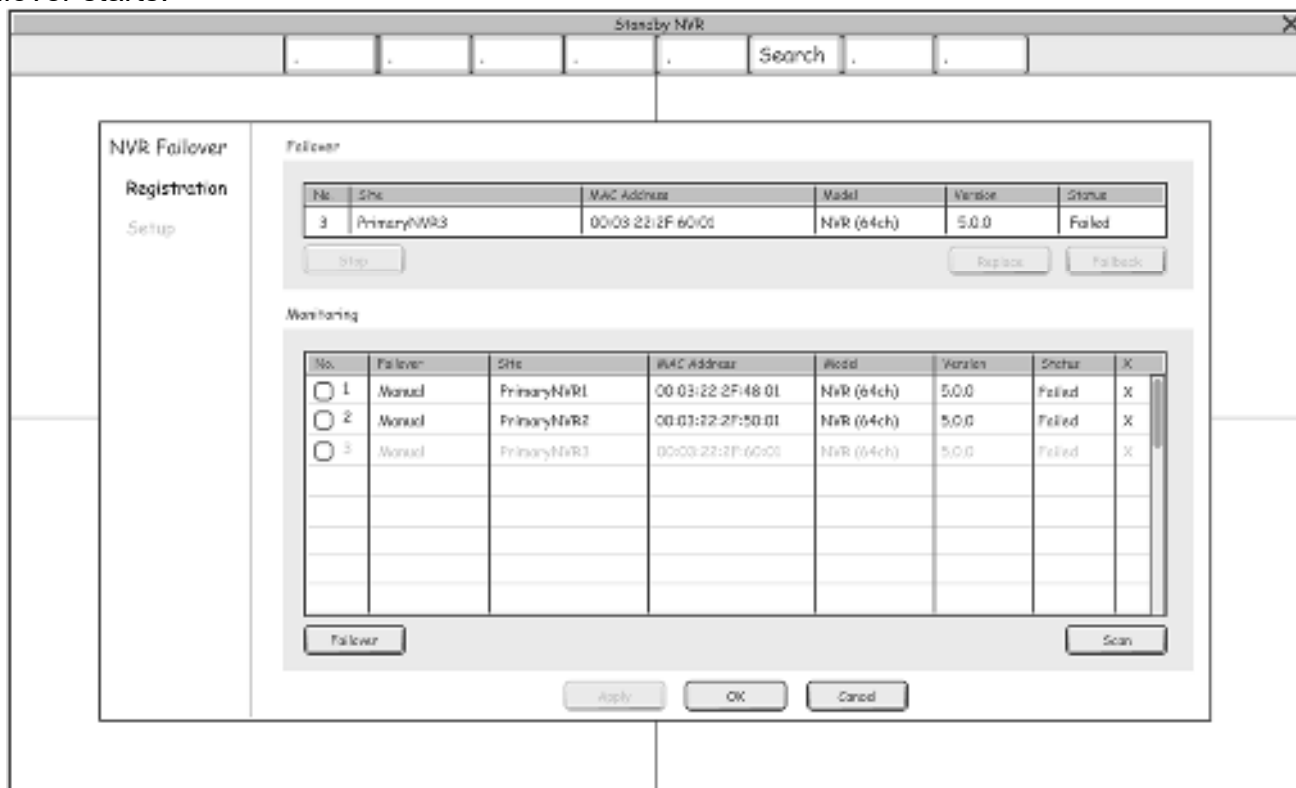
3. Click the 『Failover』 button.



4. Click the 『OK』 button to confirm.



5. Failover starts.



2.5 Stop running NVR Failover.

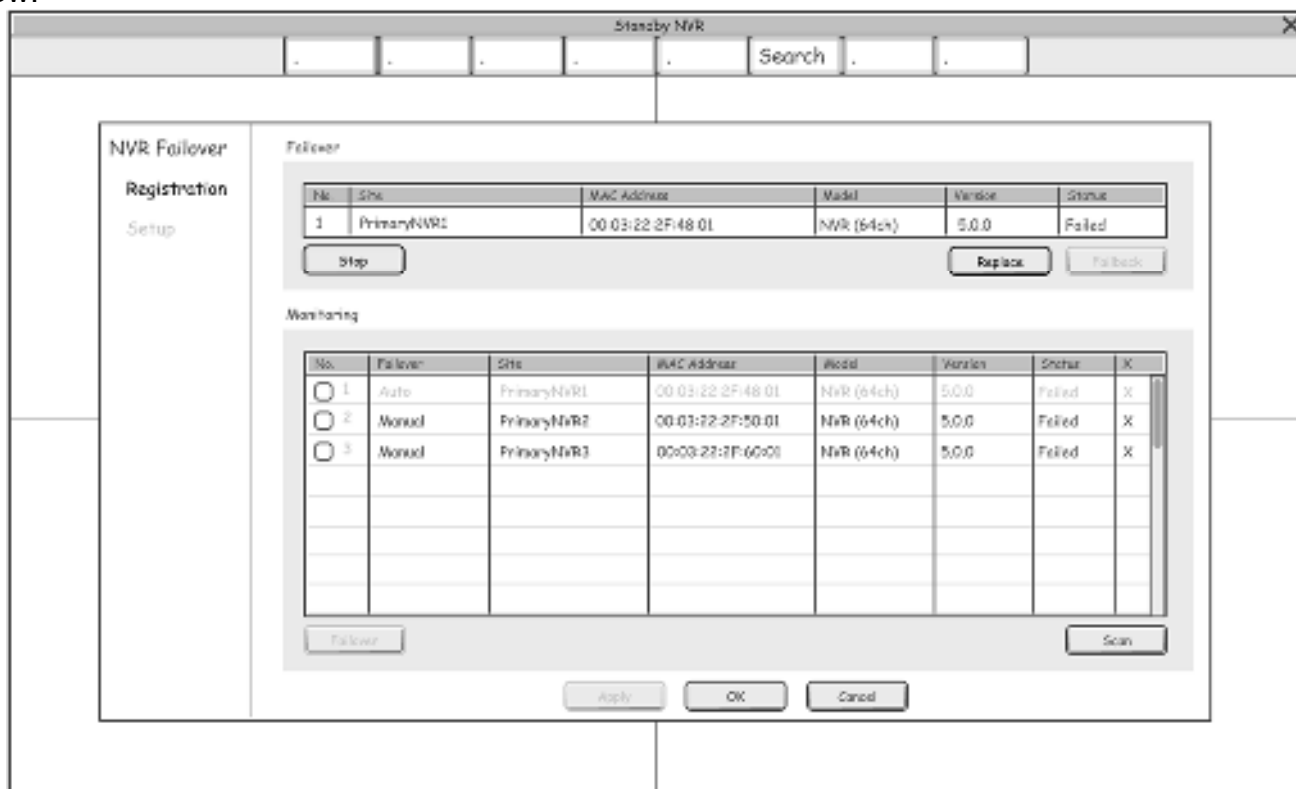
Conversation

- User can stop the failover that is running on the Standby NVR

Scenario

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. Click the 『Stop』 button.
3. Click the 『OK』 button to confirm.
4. Failover is stopped

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.



Standby NVR

Search

NVR Failover

Registration

Setup

Failover

No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00 03:22 2F:48 01	NVR (64ch)	5.0.0	Failed

Stop Replace Fail back

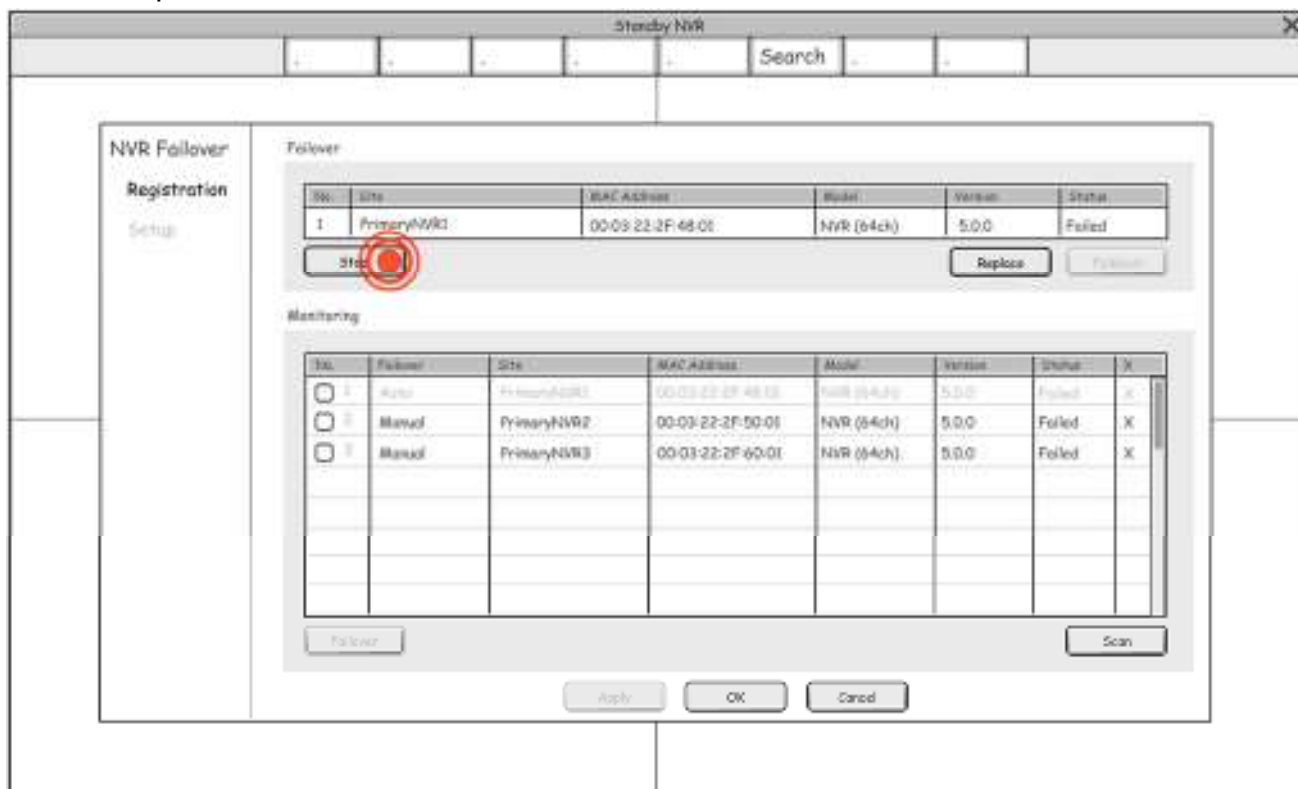
Monitoring

No.	Failover	Site	MAC Address	Model	Version	Status	Check	X
☐ 1	Auto	PrimaryNVR1	00 03:22 2F:48 01	NVR (64ch)	5.0.0	Failed		X
☐ 2	Manual	PrimaryNVR2	00 03:22 2F:50 01	NVR (64ch)	5.0.0	Failed		X
☐ 3	Manual	PrimaryNVR3	00 03:22 2F:60 01	NVR (64ch)	5.0.0	Failed		X

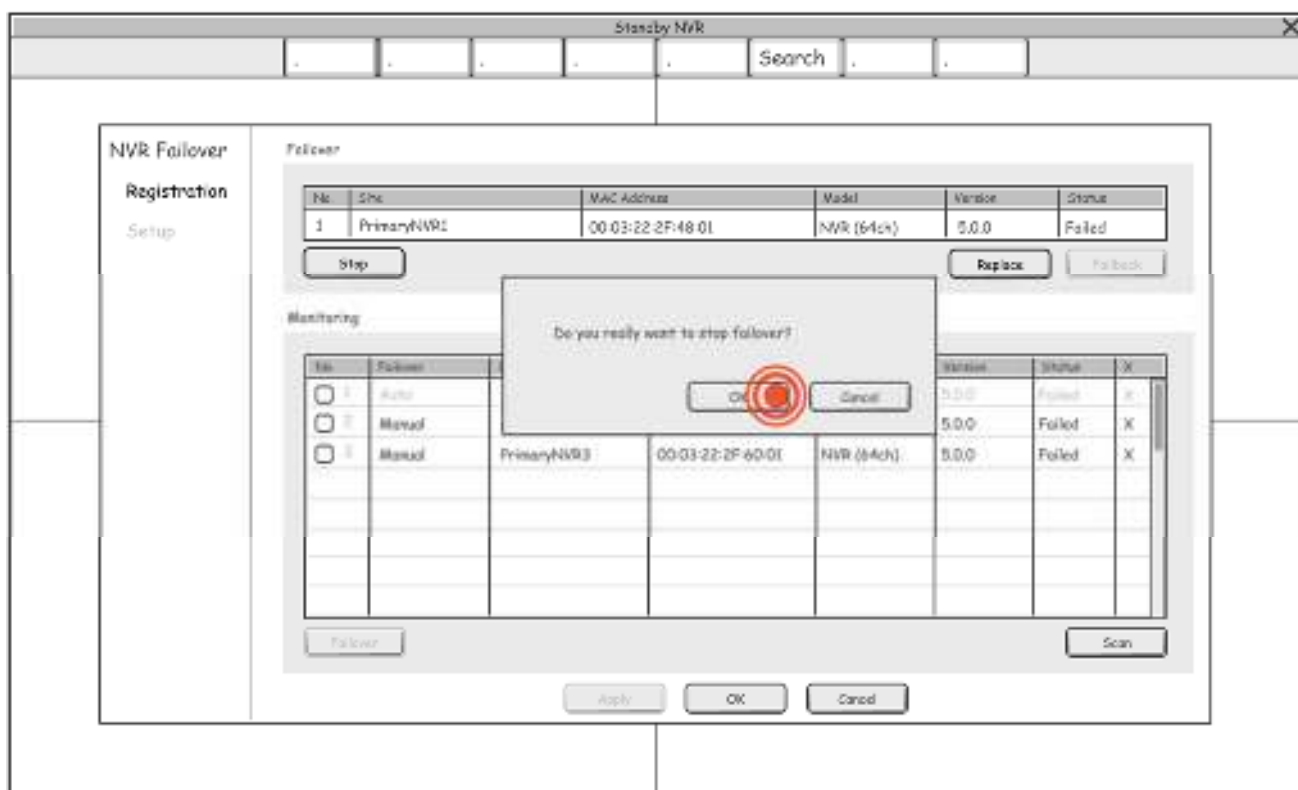
Failover Scan

Apply OK Cancel

2. Click the 『Stop』 button.



3. Click the 『OK』 button to confirm.



4. Failover is stopped

Standby NVR

Search

NVR Failover

Registration

Setup

Failover

No.	Site	MAC Address	Model	Version	Status

Stop Replace Failback

Monitoring

No.	Failover	Site	MAC Address	Model	Version	Storage	X
☐ 1	Manual	PrimaryNVR1	00:03:22:2F:48:01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Manual	PrimaryNVR2	00:03:22:2F:50:01	NVR (64ch)	5.0.0	Failed	X
☐ 3	Manual	PrimaryNVR3	00:03:22:2F:60:01	NVR (64ch)	5.0.0	Failed	X

Failover Scan

Apply OK Cancel

2.6 Check the Failover operation and status information of NFO Failover Target in NFO Monitoring Target list.

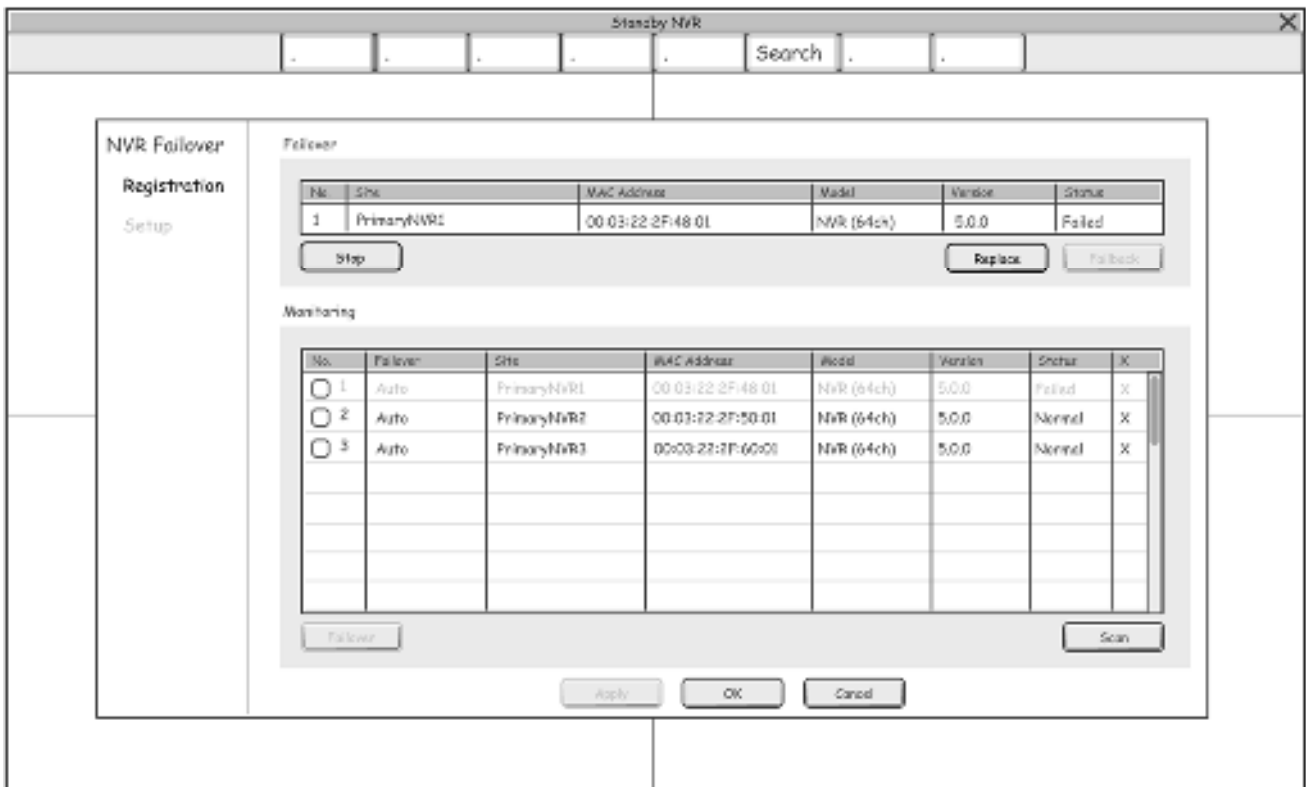
Conversation

- User can check the failover operation status and status information of the primary NVRs registered in the Watch list in the standby NVR.

Scenarios

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. User can check on the information of failed Primary NVR in the 『Failover』 list.
3. User can check on the status of the registered Primary NVRs in the 『Monitoring』 list.

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.

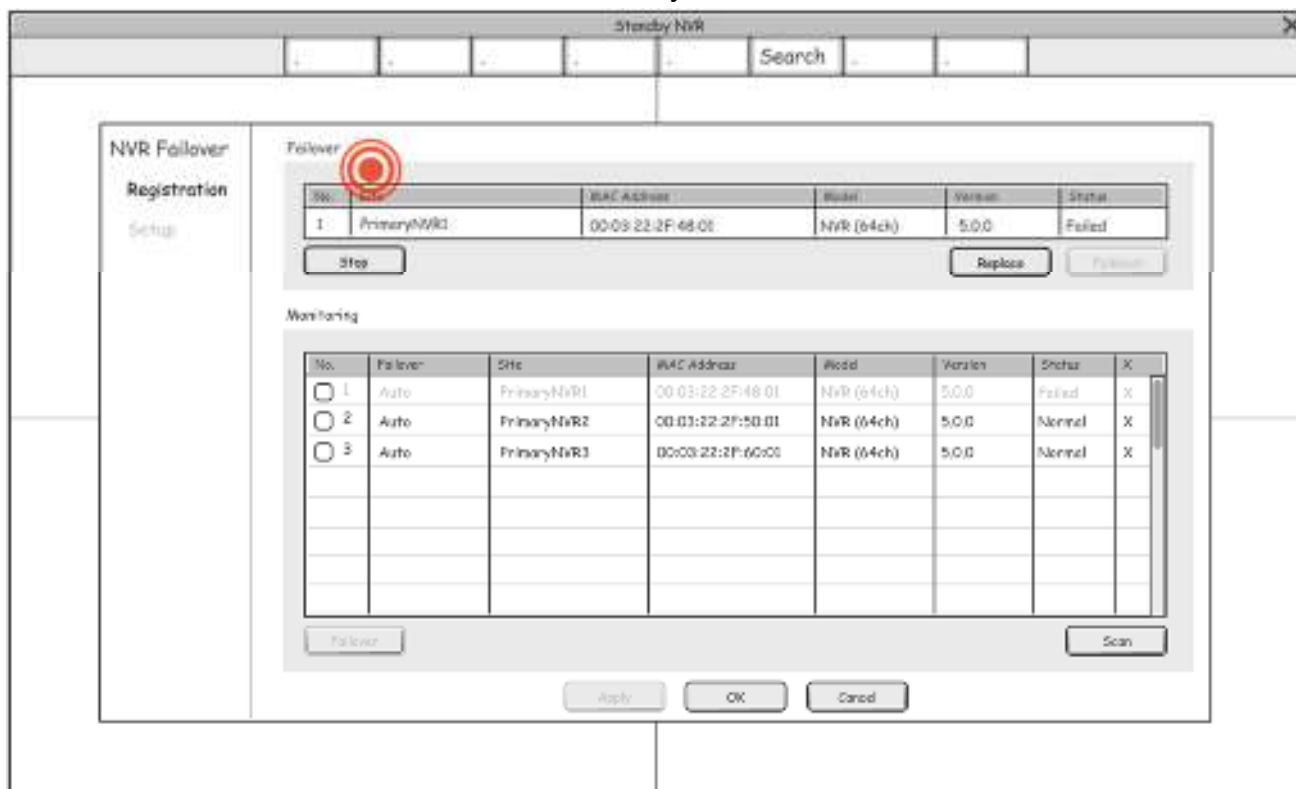


The screenshot shows the 'Standby NVR' window with the 'NVR Failover' section active. The 'Failover' section displays a table with one entry: PrimaryNVR1, which is 'Failed'. The 'Monitoring' section displays a table with three entries: PrimaryNVR1 (Failed), PrimaryNVR2 (Normal), and PrimaryNVR3 (Normal). The 'Status' column in the Monitoring table has a red 'X' icon for failed entries and a green checkmark for normal entries.

No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00 03:22 2F:48 01	NVR (64ch)	5.0.0	Failed

No.	Failover	Site	MAC Address	Model	Version	Shetar	X
☐ 1	Auto	PrimaryNVR1	00 03:22 2F:48 01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Auto	PrimaryNVR2	00 03:22 2F:50 01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00 03:22 2F:60 01	NVR (64ch)	5.0.0	Normal	X

2. User can check on the information of failed Primary NVR in the 『Failover』 list.



The screenshot shows the 'Standby NVR' window. On the left, there is a sidebar with 'NVR Failover', 'Registration', and 'Setup'. The main area is divided into two sections: 'Failover' and 'Monitoring'. The 'Failover' section contains a table with the following data:

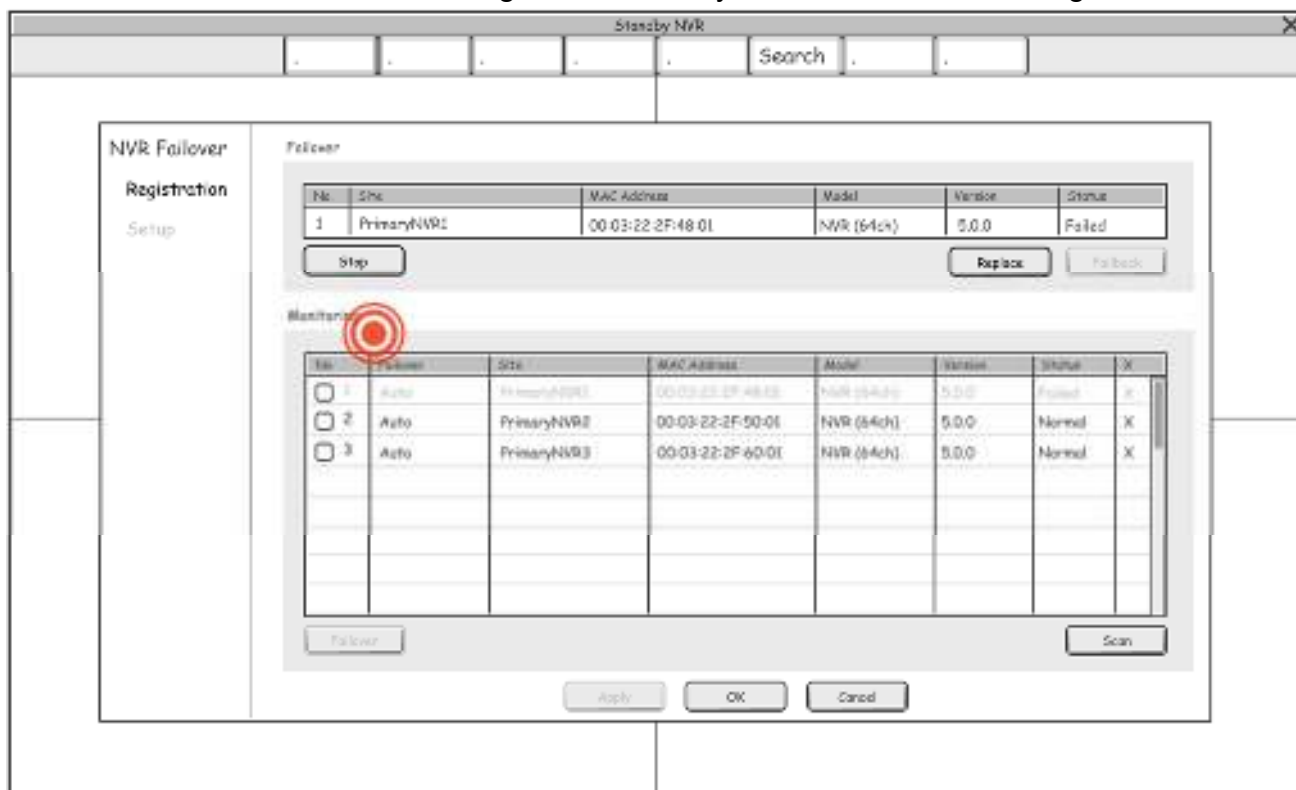
No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed

Below the table are buttons for 'Stop', 'Replace', and 'Fail back'. The 'Monitoring' section contains a table with the following data:

No.	Failover	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Auto	PrimaryNVR2	00-03-22-2F-50-01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00-03-22-2F-60-01	NVR (64ch)	5.0.0	Normal	X

At the bottom of the 'Monitoring' section are buttons for 'Failover' and 'Scan'. At the very bottom of the window are 'Apply', 'OK', and 'Cancel' buttons. A red target icon is placed over the first row of the 'Failover' table.

3. User can check on the status of the registered Primary NVRs in the 『Monitoring』 list.



The screenshot shows the 'Standby NVR' window. On the left, there is a sidebar with 'NVR Failover', 'Registration', and 'Setup'. The main area is divided into two sections: 'Failover' and 'Monitoring'. The 'Failover' section contains a table with the following data:

No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed

Below the table are buttons for 'Stop', 'Replace', and 'Fail back'. The 'Monitoring' section contains a table with the following data:

No.	Failover	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Auto	PrimaryNVR2	00-03-22-2F-50-01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00-03-22-2F-60-01	NVR (64ch)	5.0.0	Normal	X

At the bottom of the 'Monitoring' section are buttons for 'Failover' and 'Scan'. At the very bottom of the window are 'Apply', 'OK', and 'Cancel' buttons. A red target icon is placed over the first row of the 'Monitoring' table.

2.7 Failback NVR _ Return the repaired Primary NVR.

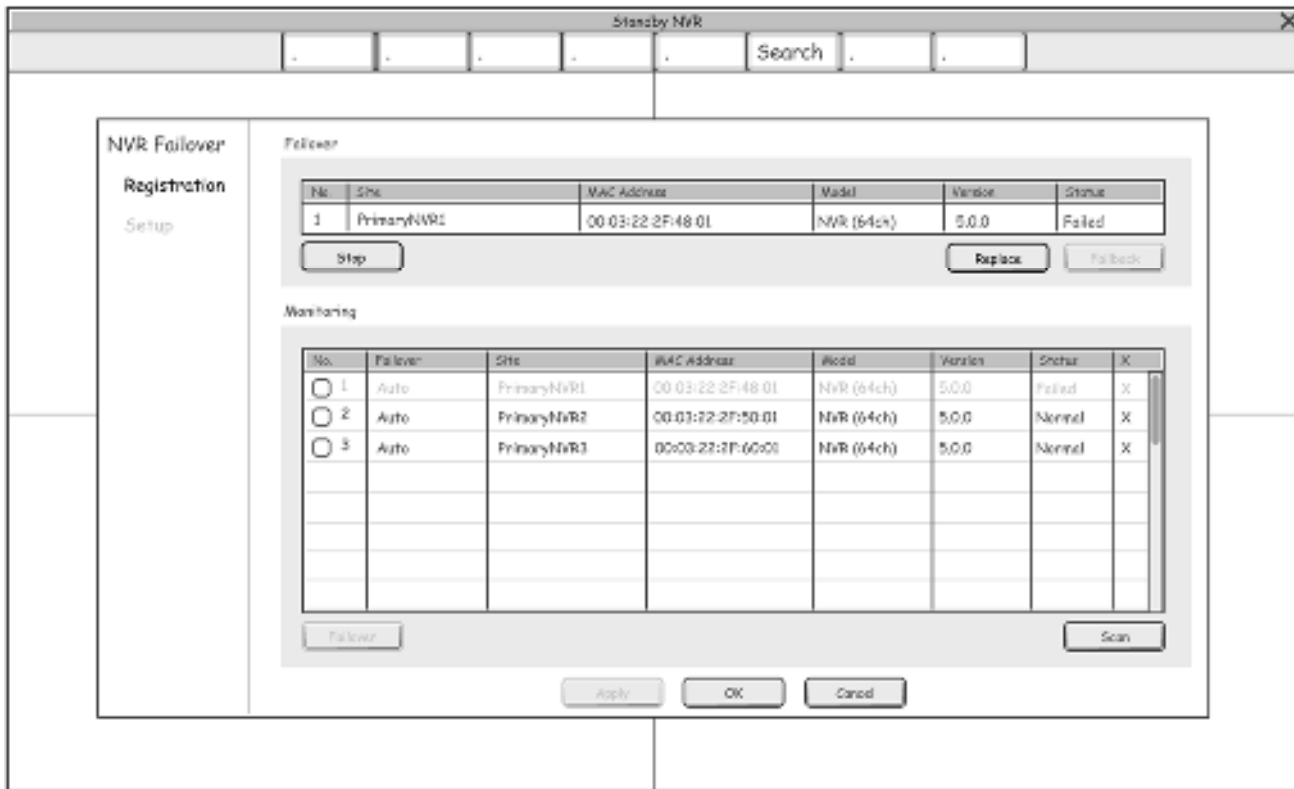
Conversation

- User can stop the failover in the Standby NVR and return the repaired NVR to the Primary NVR.

Scenarios

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. After the failed Primary NVR is repaired, the status of the NVR is displayed as 『Normal』 NVR in the 『Failover』 list.
3. Click the 『Failback』 button.
4. Click 『OK』 button to confirm.
5. Failback is completed.

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.

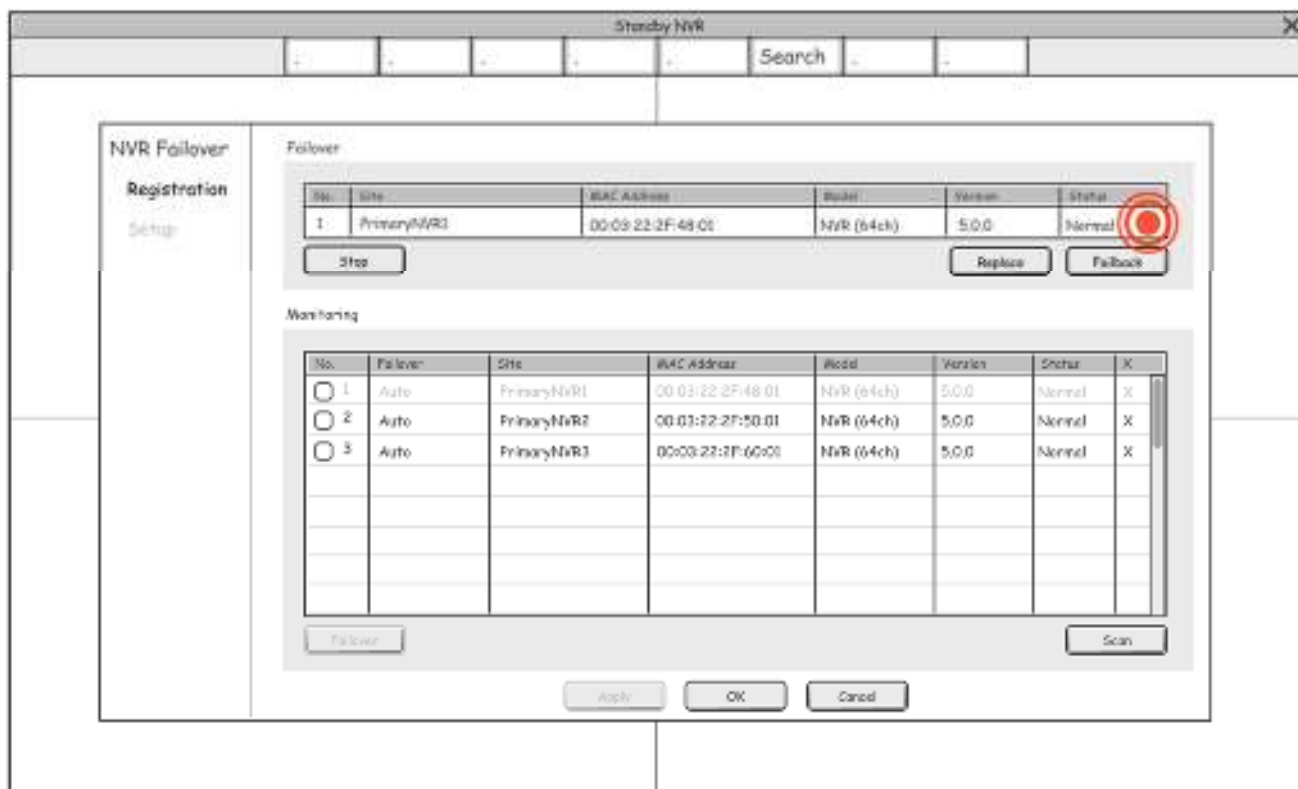


The screenshot shows the 'NVR Failover' window with the 'Failover' tab selected. The window has a title bar 'Standby NVR' and a search bar. The 'Failover' section contains a table with columns: No., Site, MAC Address, Model, Version, and Status. Below the table are buttons for 'Stop', 'Replace', and 'Failback'. The 'Monitoring' section contains a table with columns: No., Failover, Site, MAC Address, Model, Version, Status, and X. Below the table are buttons for 'Failover' and 'Scan'. At the bottom of the window are buttons for 'Apply', 'OK', and 'Cancel'.

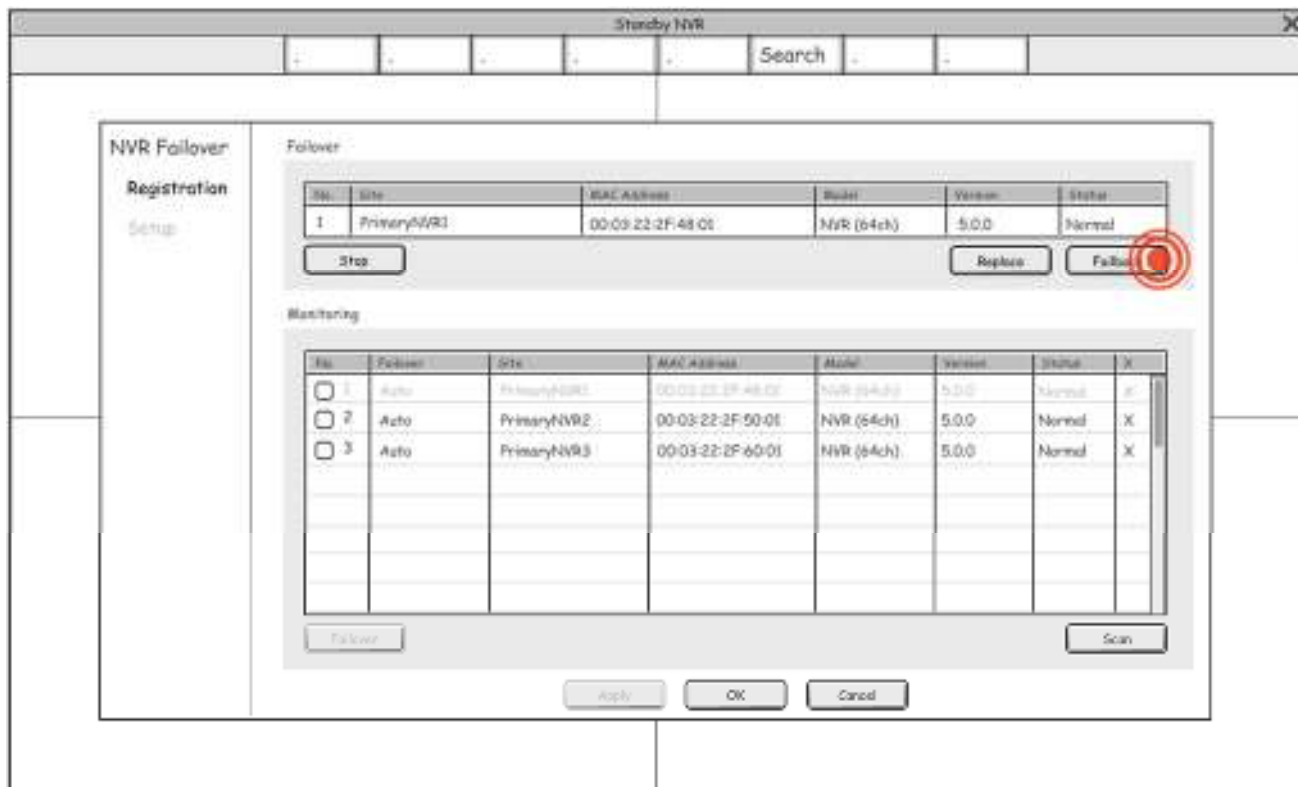
No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00 03:22:2F:48 01	NVR (64ch)	5.0.0	Failed

No.	Failover	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00 03:22:2F:48 01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Auto	PrimaryNVR2	00 03:22:2F:50 01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00 03:22:2F:60 01	NVR (64ch)	5.0.0	Normal	X

2. After the failed Primary NVR is repaired, the status of the NVR is displayed as 『Normal』 NVR in the 『Failover』 list.



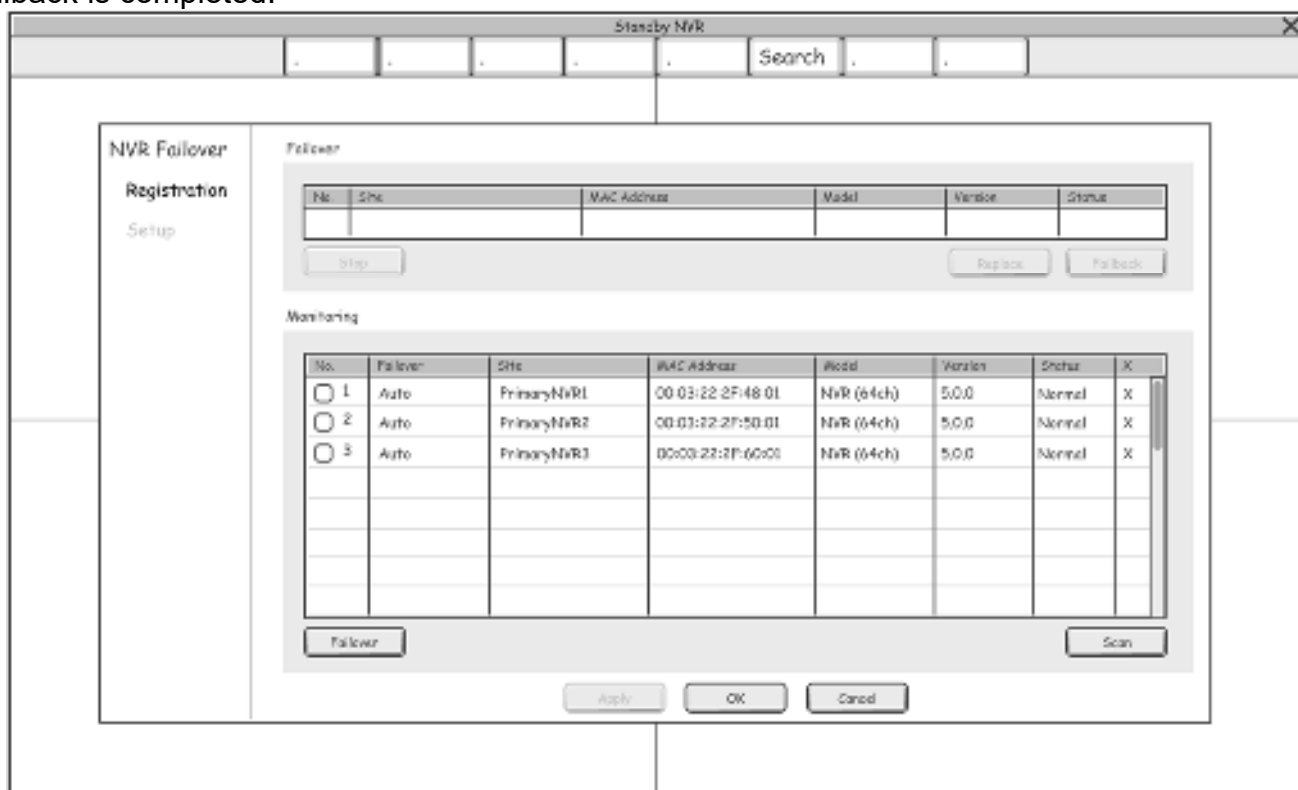
3. Click the 『Failback』 button.



4. Click 『OK』 button to confirm.



5. Failback is completed.



2.8 Replace the failed Primary NVR with a new Primary NVR.

Conversation

- User can stop the failover and replace the failed Primary NVR with a new one.

Scenarios

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. Click the 『Replace』 button.
3. 『Device Scan』 window is popped up.
4. Click the 『Scan』 button.
5. The 『Scan』 button changes to the 『Stop』 button and the detected NVRs are displayed.
6. When the maximum scanning time is over or the 『Stop』 button is clicked, the 『Stop』 button is changed back to the 『Scan』 button and scanning is stopped.
7. Select a NVR to register as a replacement 『Primary NVR』.
8. Click the 『Add』 button.
9. The 『Login』 window appears.
10. Enter the password and click the 『OK』 button.
11. Click 『OK』 button to confirm replacement.
12. Replacement is completed.

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.

Standby NVR

Search

NVR Failover

Registration

Setup

Follower

No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00 03 22 2F 48 01	NVR (64ch)	5.0.0	Failed

Stop Replace Fail back

Monitoring

No.	Follower	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00 03 22 2F 48 01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Auto	PrimaryNVR2	00 03 22 2F 50 01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00 03 22 2F 60 01	NVR (64ch)	5.0.0	Normal	X

Failover Scan

Apply OK Cancel

2. Click the 『Replace』 button.

Standby NVR

Search

NVR Failover

Registration

Setup

Follower

No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00 03 22 2F 48 01	NVR (64ch)	5.0.0	Failed

Stop Replace Fail back

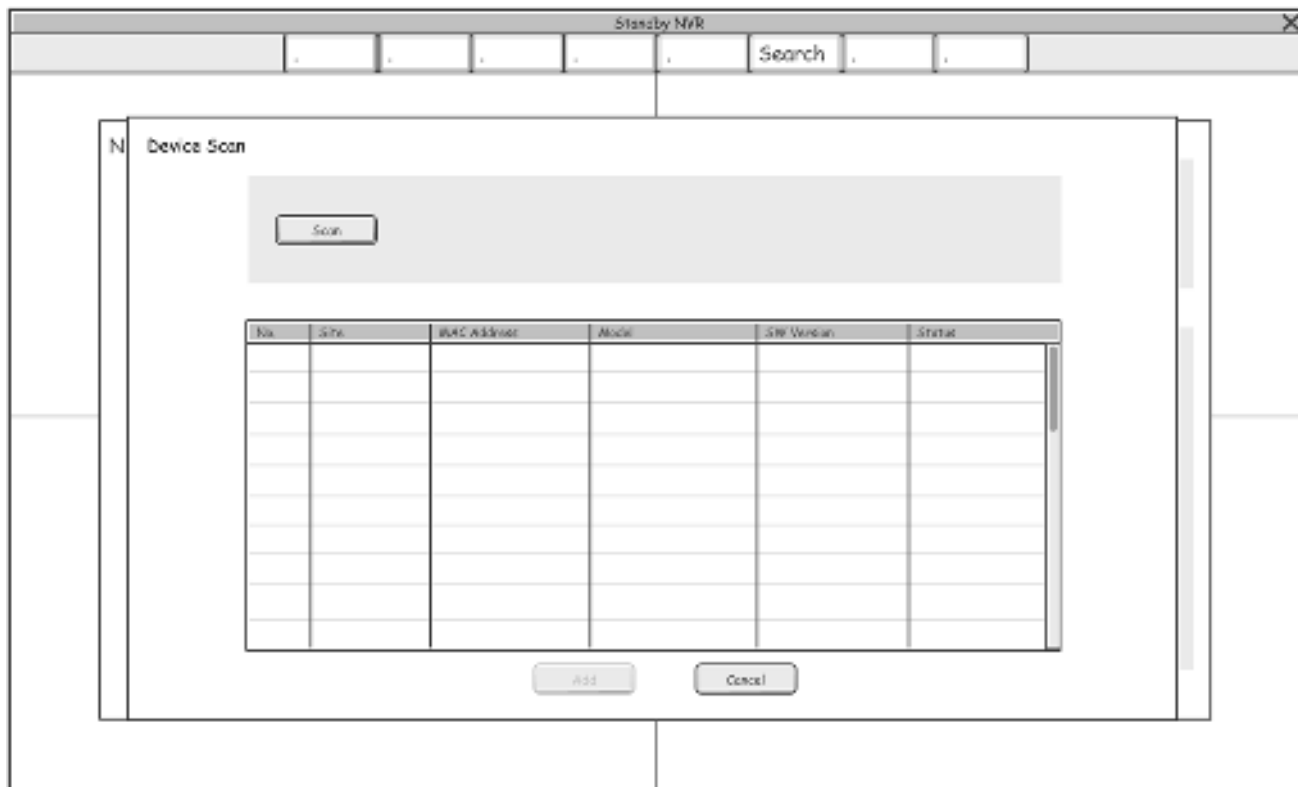
Monitoring

No.	Follower	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00 03 22 2F 48 01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Auto	PrimaryNVR2	00 03 22 2F 50 01	NVR (64ch)	5.0.0	Normal	X
☐ 3	Auto	PrimaryNVR3	00 03 22 2F 60 01	NVR (64ch)	5.0.0	Normal	X

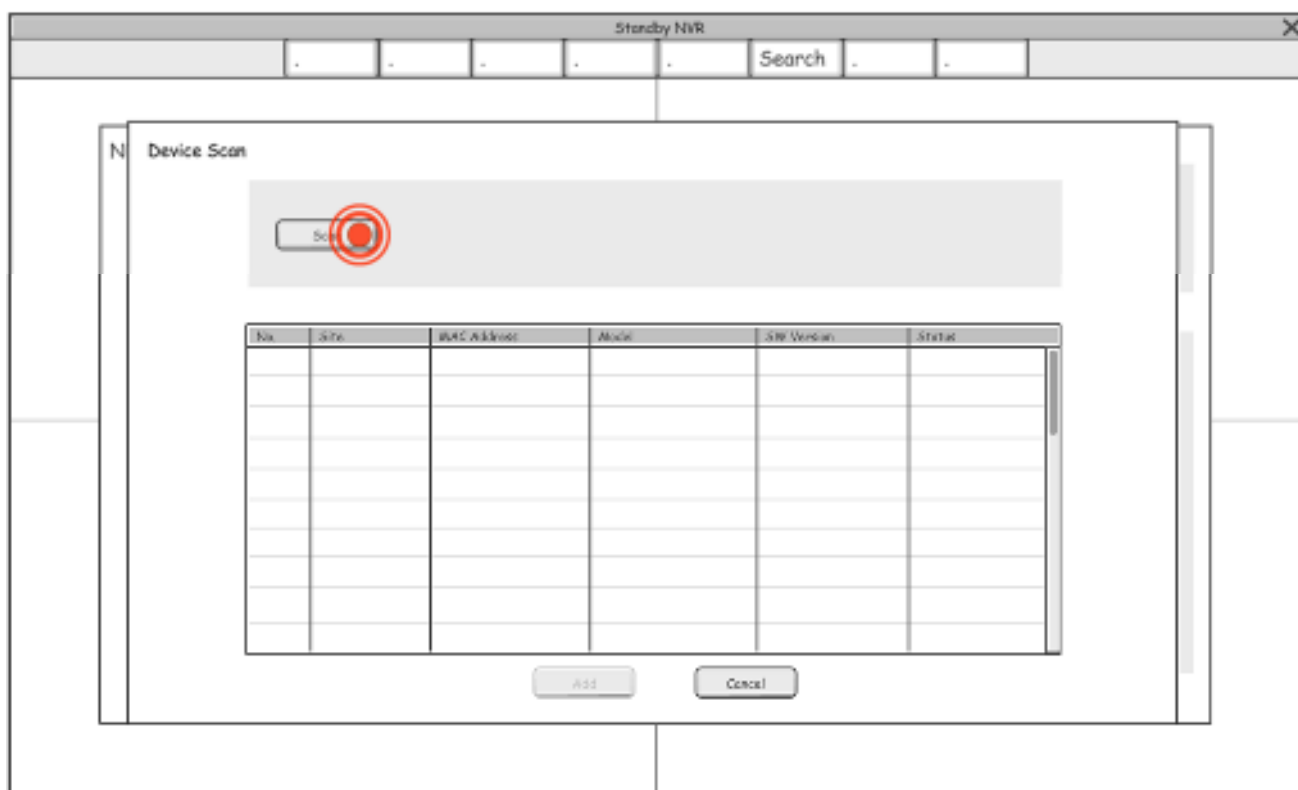
Failover Scan

Apply OK Cancel

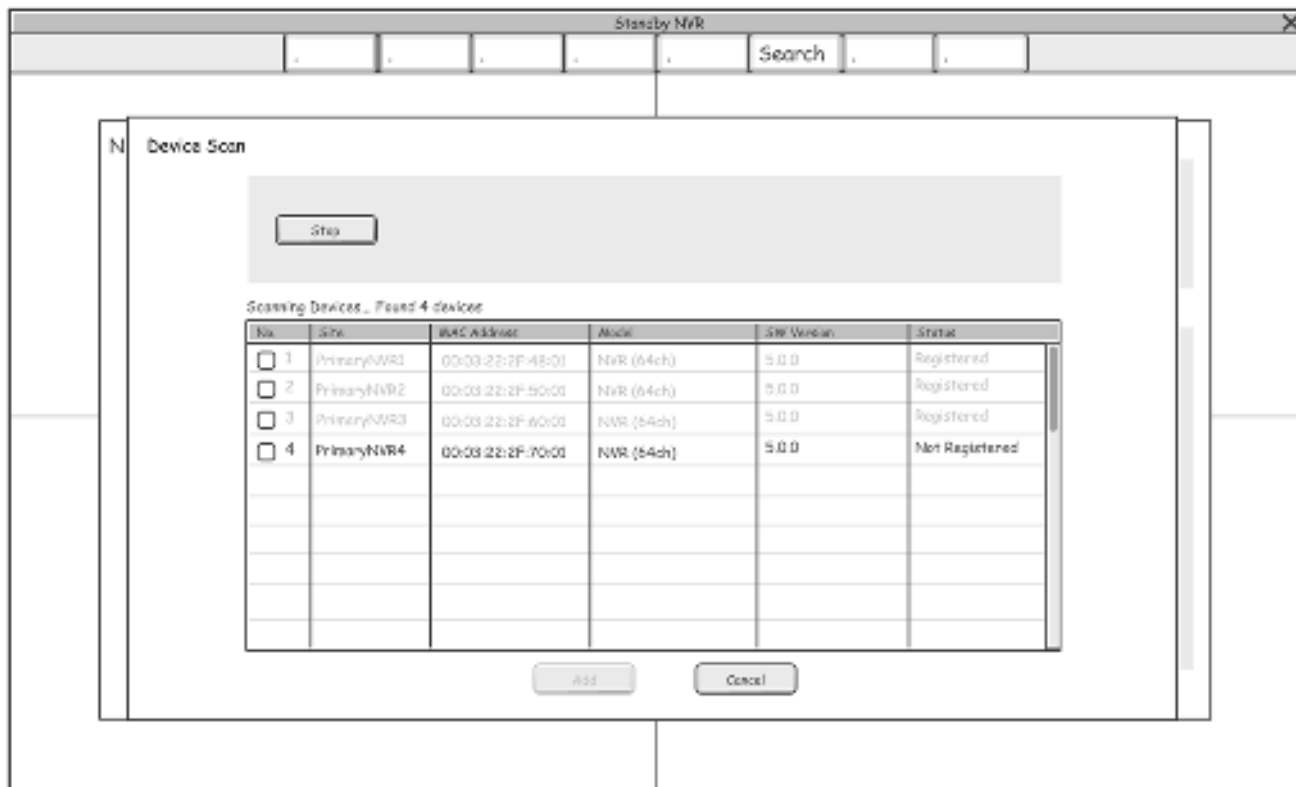
3. 『Device Scan』 window is popped up.



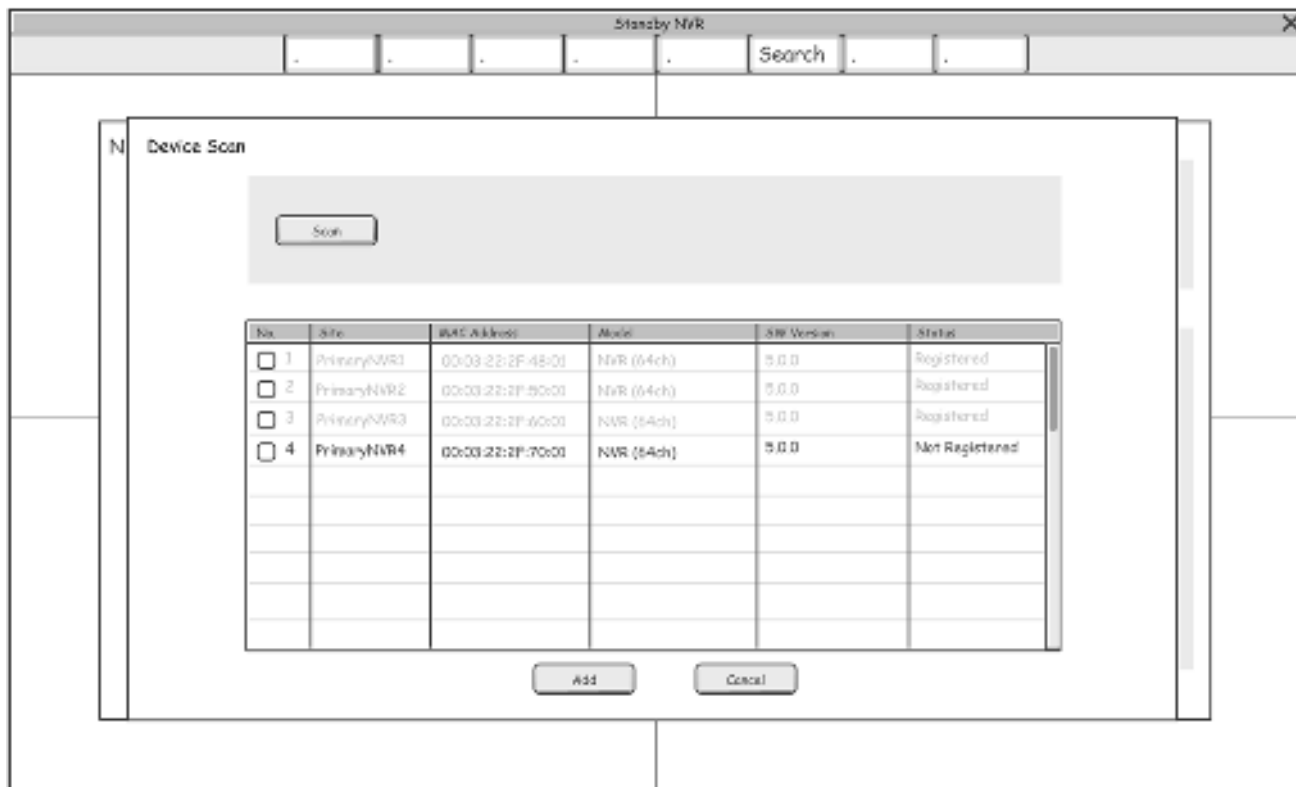
4. Click the 『Scan』 button.



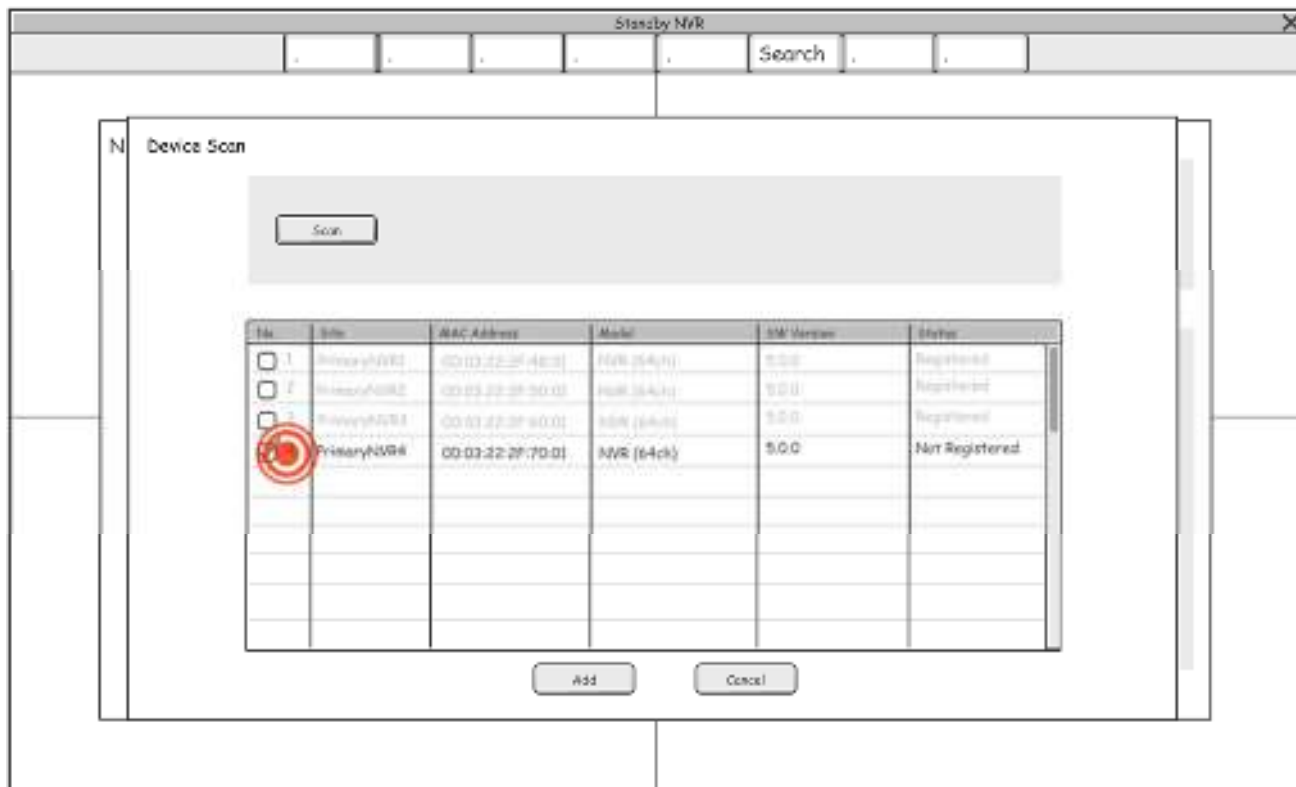
5. The 『Scan』 button changes to the 『Stop』 button and the detected NVRs are displayed.



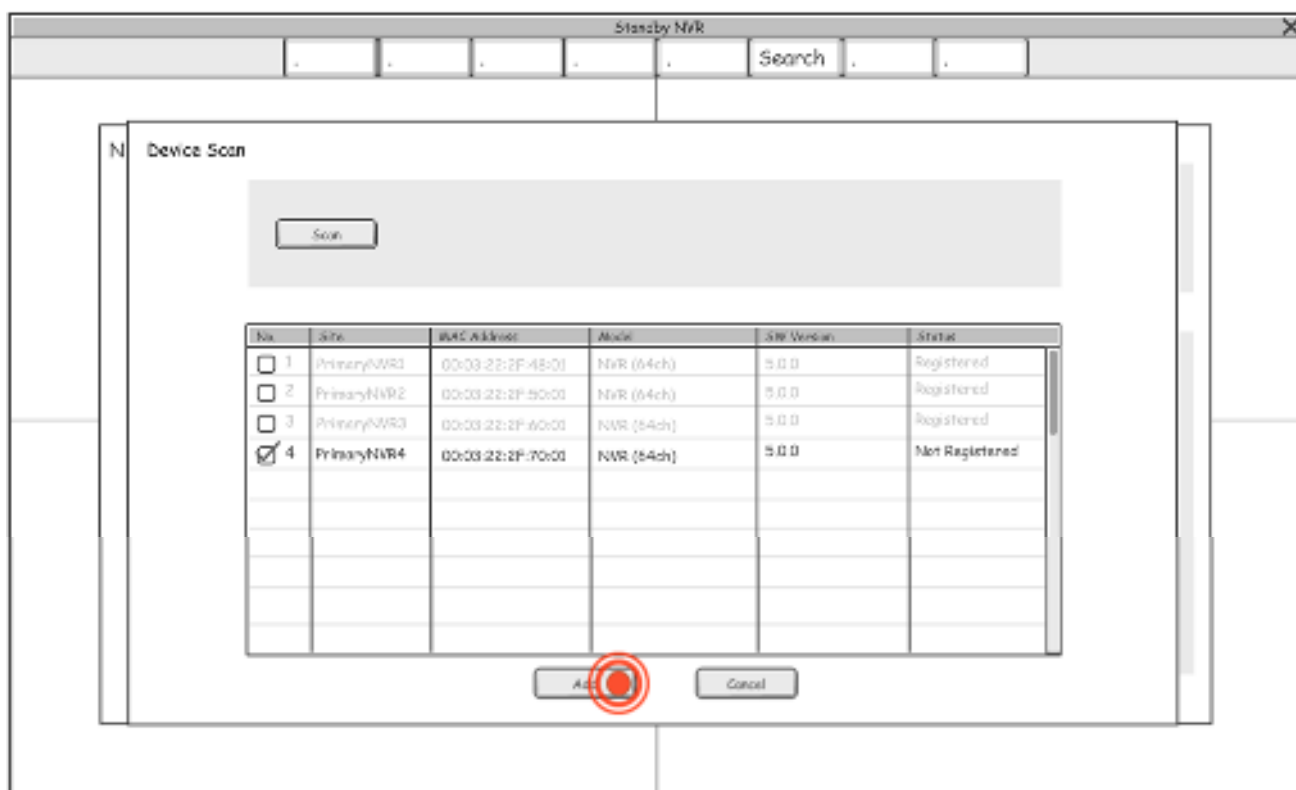
6. When the maximum scanning time is over or the 『Stop』 button is clicked, the 『Stop』 button is changed back to the 『Scan』 button and scanning is stopped.



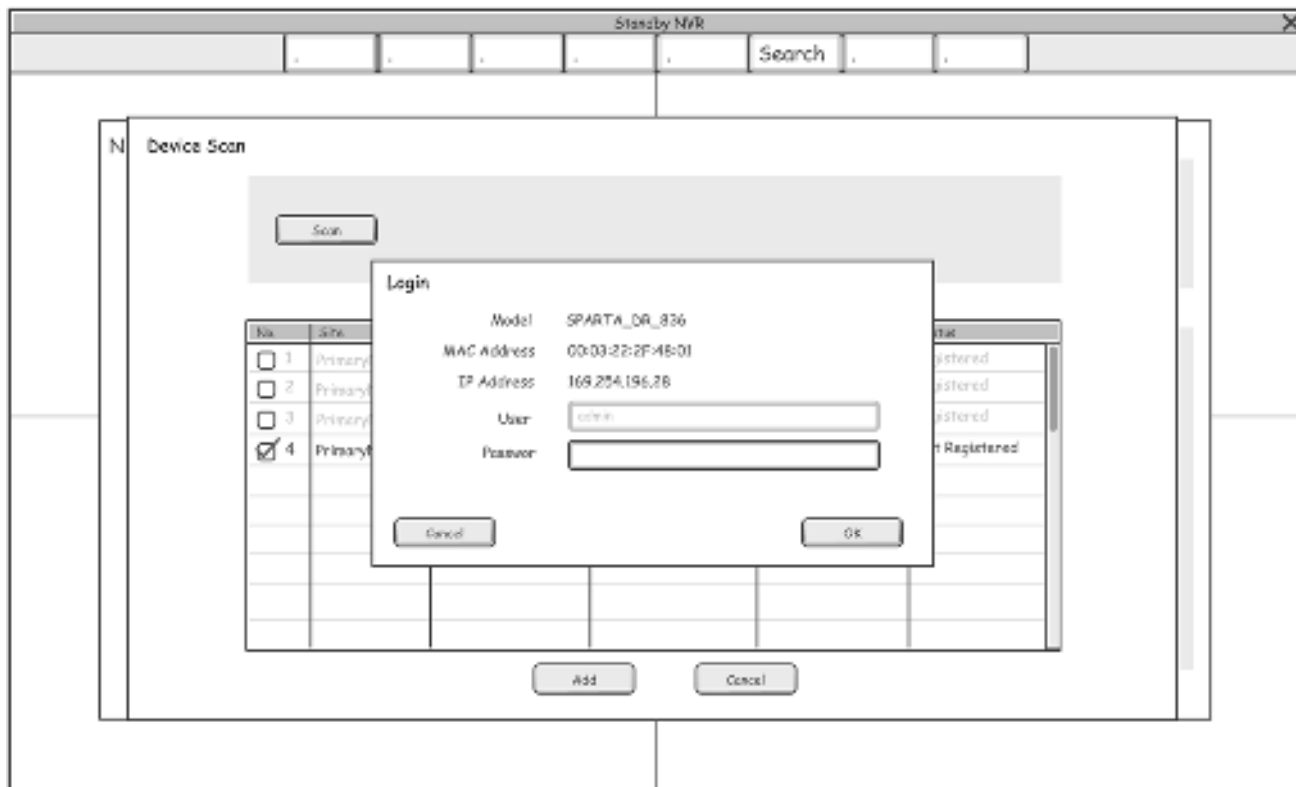
7. Select a NVR to register as a replacement 『Primary NVR』.



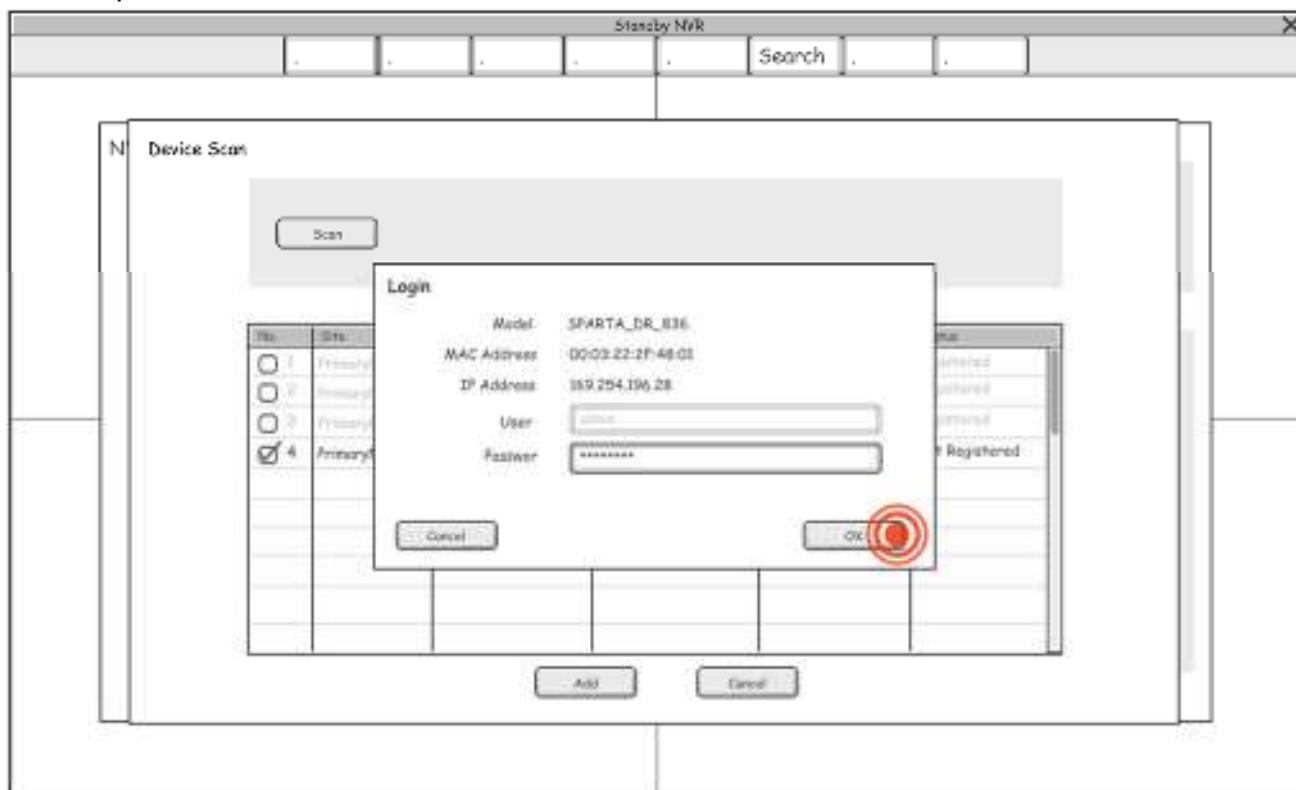
8. Click the 『Add』 button.



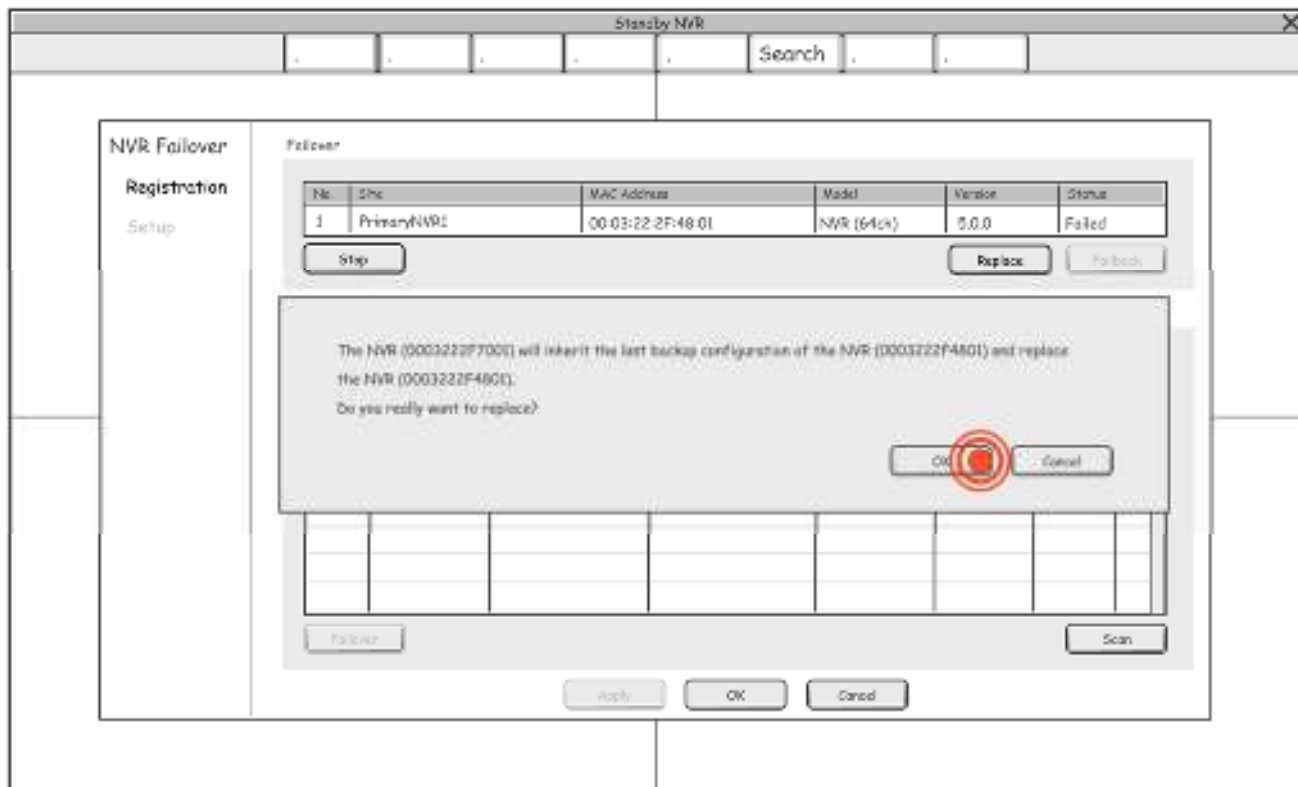
9. The 『Login』 window appears.



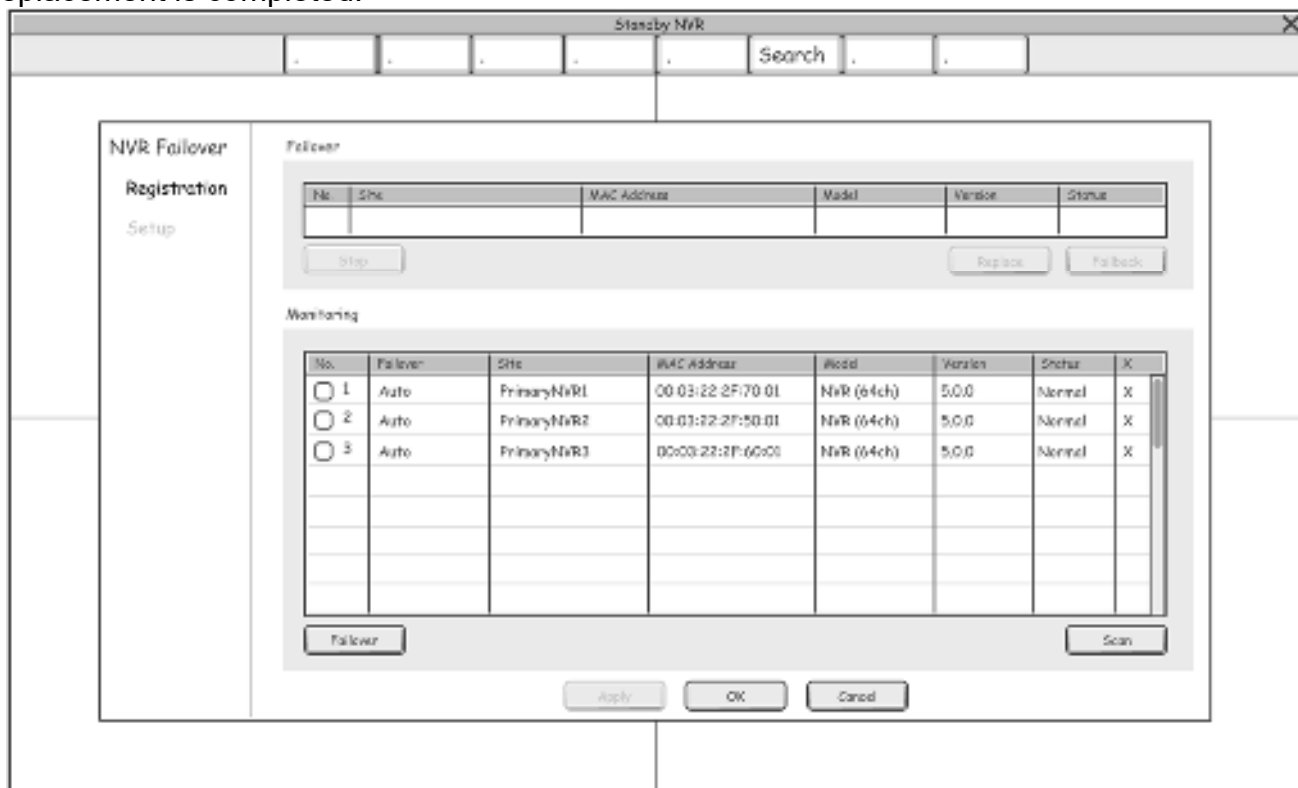
10. Enter the password and click the 『OK』 button.



11. Click 『OK』 button to confirm replacement.



12. Replacement is completed.



2.9 Manual NVR Failover Operation

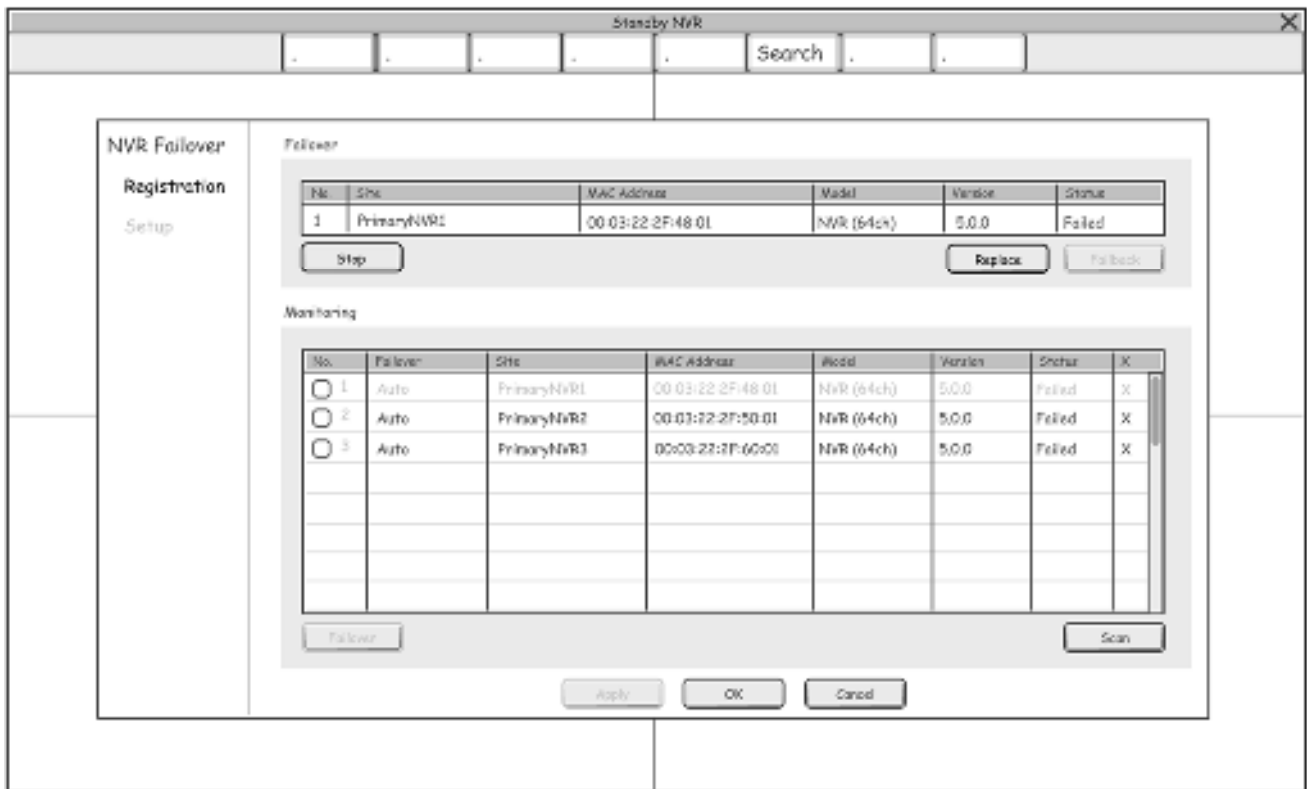
Conversation

- This User Story shows a case when three Primary NVRs fail and one of them is performing Failover, the user manually stops it and start Failover to another failed 'Primary NVR'

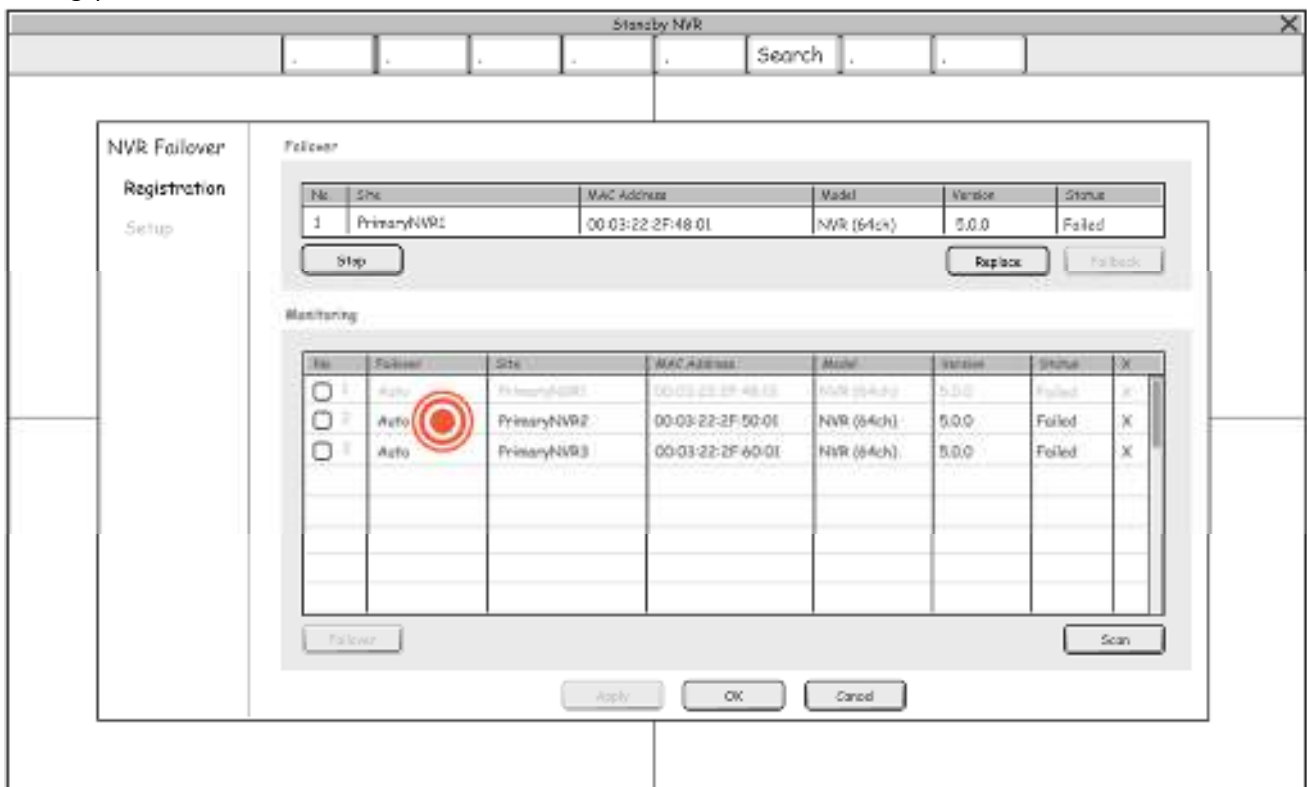
Scenarios

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.
2. Click 『Auto』 to change the mode to 『Manual』. (『Failover』 mode is not changed during the 『Failover』 is running.)
3. Click the 『Apply』 button to save the changes.
4. Click the 『Stop』 button.
5. Click the 『OK』 button to confirm.
6. Failover is stopped. (『Failover』 mode of the stopped 『Primary NVR』 is changed to 『Manual』)
7. Select the 『Primary NVR』 to perform the 『Failover』.
8. Click the 『Failover』 button.
9. Click the 『OK』 button to confirm.
10. Failover starts and the NVR information is displayed on the 『Failover』 list.

1. Right click on the 『Live View』 of the 『Standby NVR』, and select 『NVR Failover』 to popup the window.



2. Click 『Auto』 to change the mode to 『Manual』. (『Failover』 mode is not changed during the 『Failover』 is running.)



3. Click the 『Apply』 button to save the changes.

The screenshot shows the 'Standby NVR' window. On the left, there is a sidebar with 'NVR Failover', 'Registration', and 'Setup'. The main area is divided into 'Follower' and 'Monitoring' sections. The 'Follower' section contains a table with one entry: No. 1, Site: PrimaryNVR1, MAC Address: 00-03-22-2F-48-01, Model: NVR (64ch), Version: 5.0.0, Status: Failed. Below this table are 'Stop', 'Replace', and 'Follow' buttons. The 'Monitoring' section contains a table with three entries, all with Status: Failed. At the bottom of the window, there are 'Apply', 'OK', and 'Cancel' buttons. The 'Apply' button is highlighted with a red circle.

No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR1	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed

No.	Follower	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR1	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Manual	PrimaryNVR2	00-03-22-2F-50-01	NVR (64ch)	5.0.0	Failed	X
☐ 3	Manual	PrimaryNVR3	00-03-22-2F-60-01	NVR (64ch)	5.0.0	Failed	X

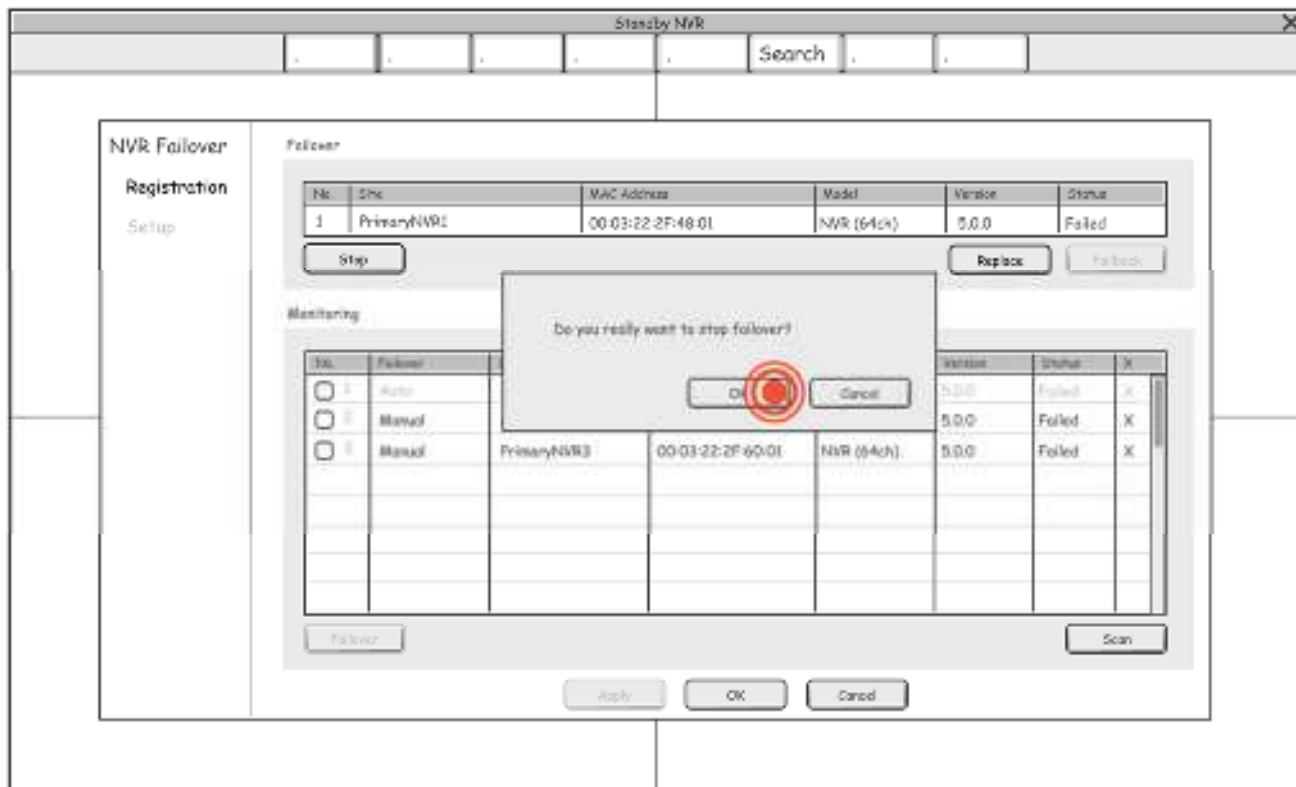
4. Click the 『Stop』 button.

The screenshot shows the 'Standby NVR' window. The 'Follower' section table now shows 'PrimaryNVR3' as the site. The 'Stop' button is highlighted with a red circle. The 'Monitoring' section table remains the same as in the previous screenshot.

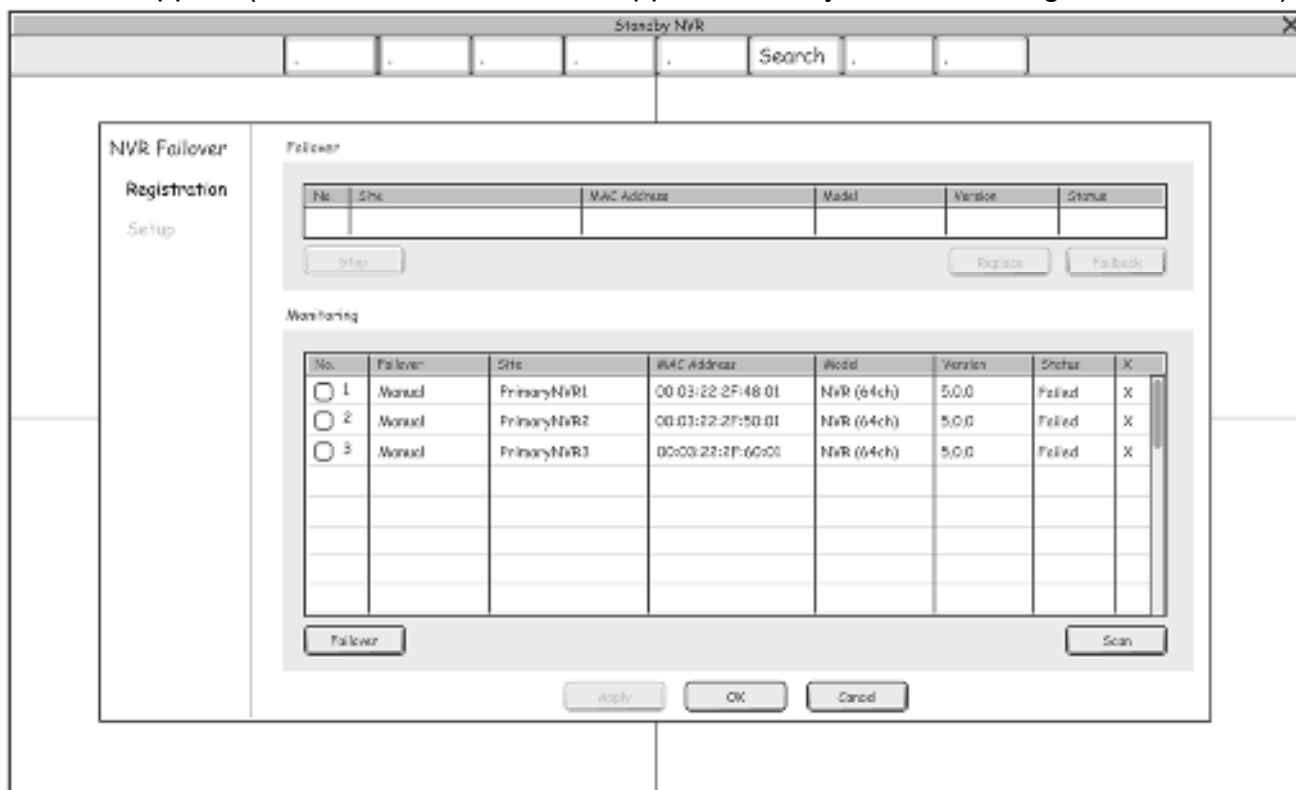
No.	Site	MAC Address	Model	Version	Status
1	PrimaryNVR3	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed

No.	Follower	Site	MAC Address	Model	Version	Status	X
☐ 1	Auto	PrimaryNVR3	00-03-22-2F-48-01	NVR (64ch)	5.0.0	Failed	X
☐ 2	Manual	PrimaryNVR2	00-03-22-2F-50-01	NVR (64ch)	5.0.0	Failed	X
☐ 3	Manual	PrimaryNVR3	00-03-22-2F-60-01	NVR (64ch)	5.0.0	Failed	X

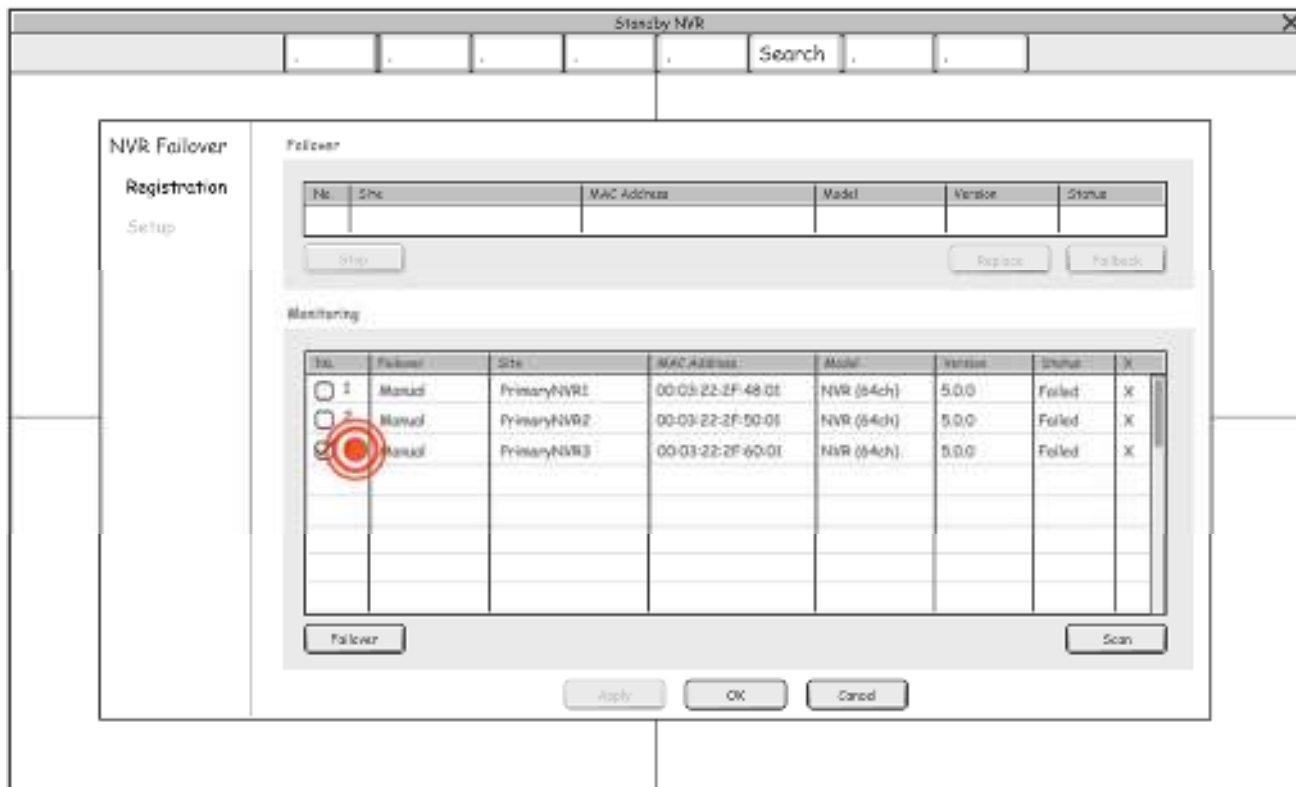
5. Click the 『OK』 button to confirm.



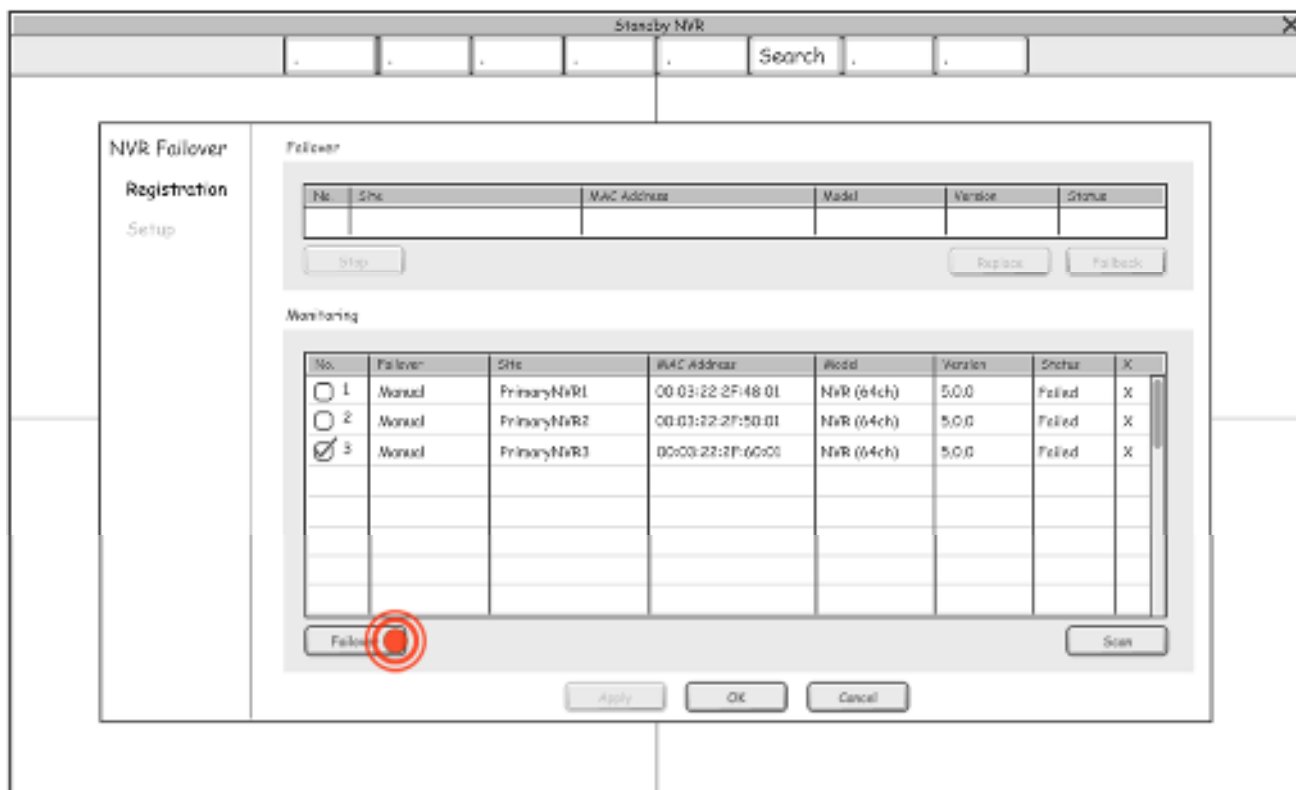
6. Failover is stopped. (『Failover』 mode of the stopped 『Primary NVR』 is changed to 『Manual』)



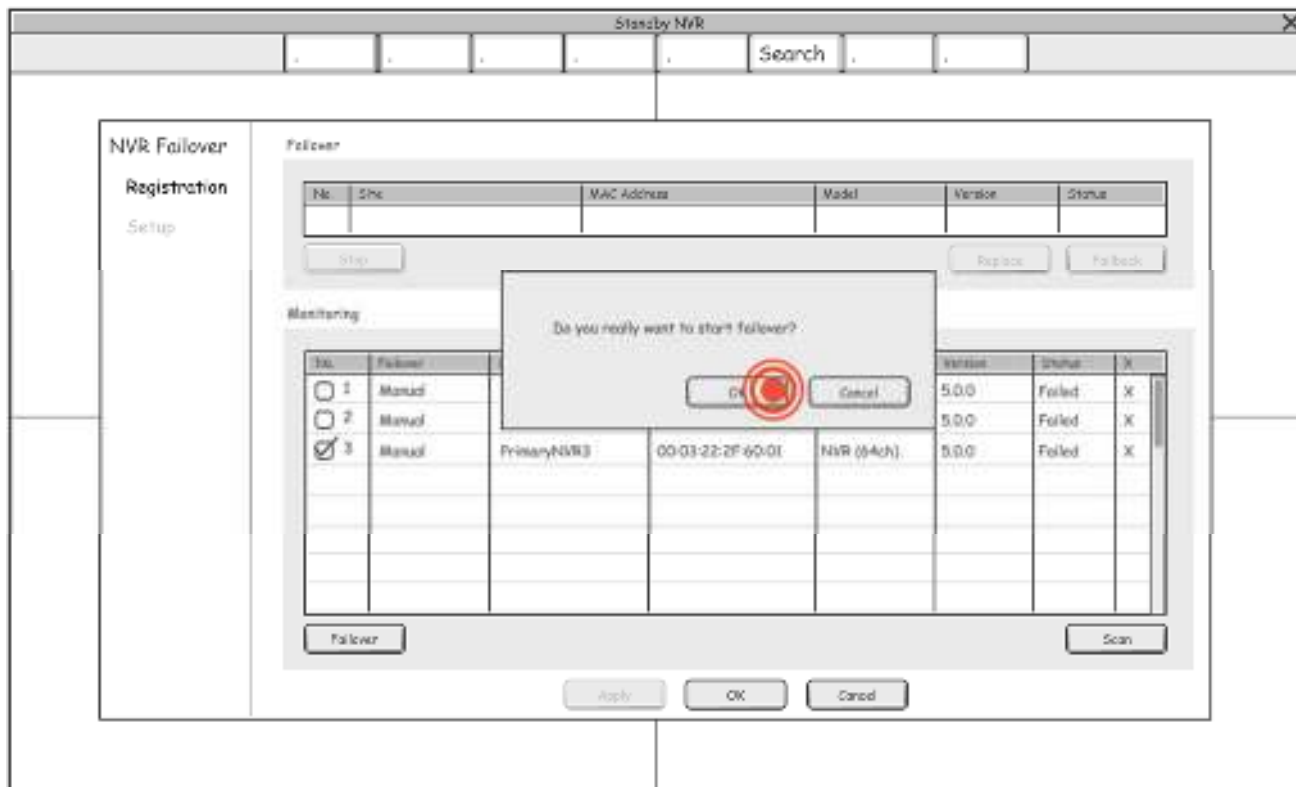
7. Select the 『Primary NVR』 to perform the 『Failover』.



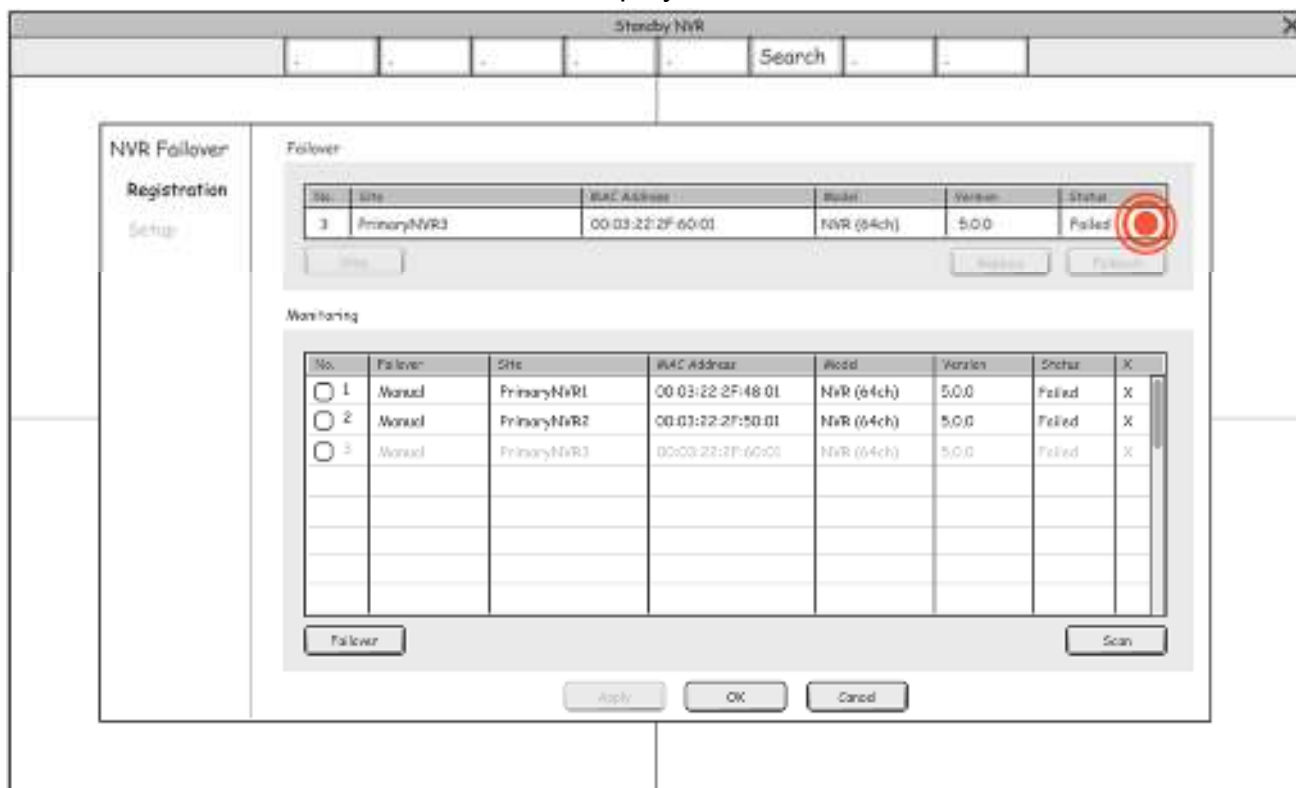
8. Click the 『Failover』 button.



9. Click the 『OK』 button to confirm.



10. Failover starts and the NVR information is displayed on the 『Failover』 list.



2.10 Retrieve recorded NVR Failover Record Data from Standby NVR.

Conversation

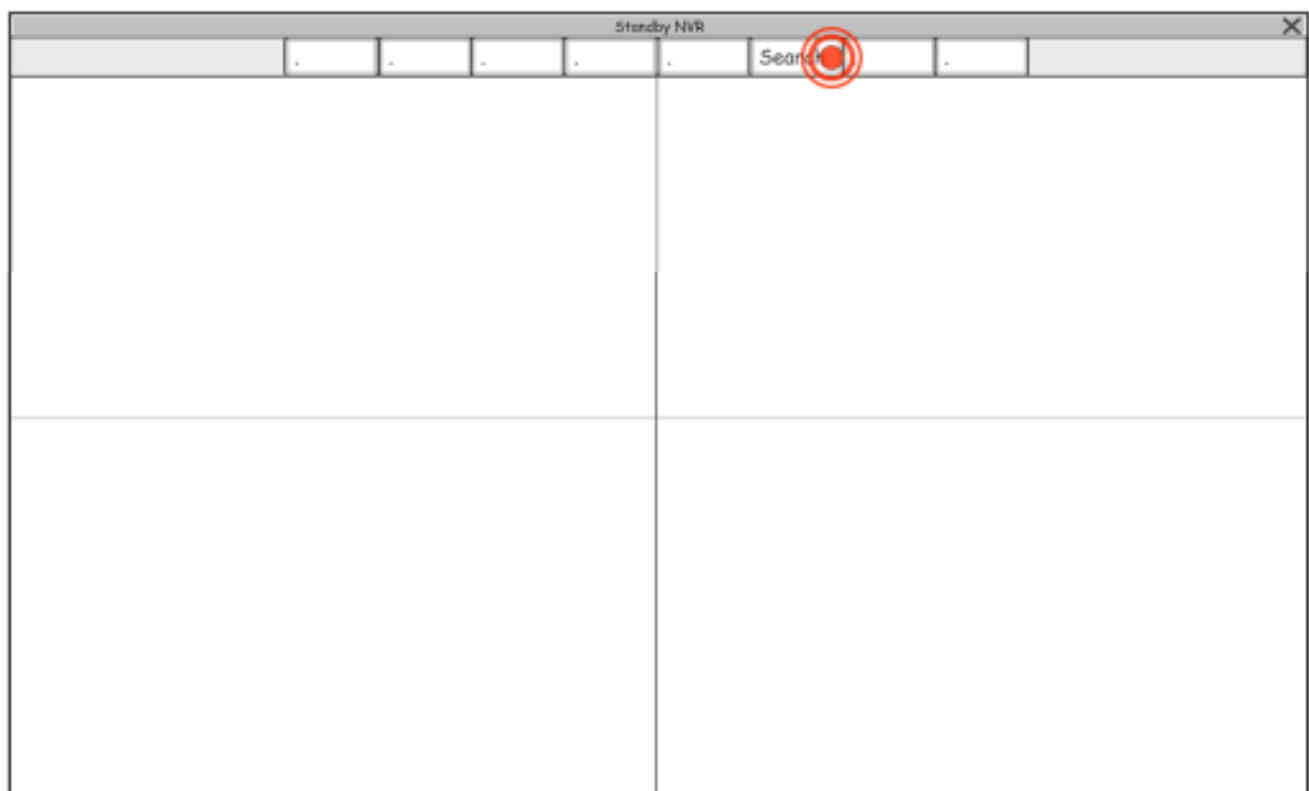
- User can retrieve recorded NVR Failover Record Data from Standby NVR.

Scenario

1. Click the 『 Search 』 menu.

- Search data recorded by 『 Failover 』 in the same way as retrieving recorded data in the NVR.

1. Click the 『 Search 』 menu.



- Search data recorded by 『 Failover 』 in the same way as retrieving recorded data in the NVR.

3. Glossary

3.1. Glossary Grid

Name	Aliases	Description
NFO	NVR Failover	Service to automatically replace Standby NVR if Primary NVR fails
NFO Failover Target	NVR Failover Target	Primary NVR to which the standby NVR is failover
NFO Manager	NVR Failover Manager	Software that manage the NVR Failover service
NFO Monitoring Target	NFO Monitoring Target	It is the Primary NVR that is monitored for normal operation. If it does not operate normally, it becomes the NFO Failover Target.
NFO Record Data	NVR Failover Record Data	Alternate recorded data from Standby NVR * Video / Voice / Event / VA
NFO Record Metadata	NVR Failover Record Metadata	Information about alternative recording material recorded by the Standby NVR * Alternative recording period * Replaced NVR information (Primary NVR) * Replacement NVR information (Standby NVR)
NFO Record Period	NVR Failover Record Period	The period for which the Standby NVR has been recorded
NVR	Network Video Recorder	A device that receives and records video through an IP network
NVR Failback	NVR Failback	The Primary NVR that has been replaced by the Standby NVR is repaired and returned
NVR Replace	NVR Replace	Replacing the primary NVR with a new one
Primary NVR	Primary NVR	Normally running NVR
SFO	Smart Failover	Function to recover recorded data using SD card installed in camera
Standby NVR	Standby NVR	NVR that replaces Primary NVR if it fails
VIN	Video In Network	Communication network for connection with video equipment such as camera
VIN2	Video In Network 2, Second Video In Network, Third-party Video In Network, 2nd Video In Network, 3rd-party Video In Network	Communication network for connection with third party video equipment
WAN	Wide Area Network	Communication network for connecting with other devices such as email server, PC, smart phone