

Description: Guide to use AlarmWorX32 Multimedia to work in a GENESIS32 v9 Redundancy Environment
OS Requirement: Win 2000, XP Pro, Server 2003, Vista, Server 2008, Windows 7
General Requirement: GENESIS32 V9 with Redundancy

Introduction

ICONICS provide Redundancy for GENESIS32 Modules via DataWorX32 Professional edition. You can configure a set of servers as a node pair to work as Primary and Secondary Servers. GENESIS32 Clients like GraphWroX32, AlarmWorX32, and TrendWorX32 will automatically switch from Primary to Secondary server, if the Primary fails. Users also wanted to have similar function for Multimedia Alarming. You may install MMX on both Primary and Secondary servers but this may lead to activate dual actions in case of alarm. (You may be getting two text messages or two faxes, one from each server).

Here we discuss a workaround that can provide a certain level of redundancy among Multimedia servers in case of failure of Primary server.

Configuration

1. Install AlarmWorX32 Multimedia on both the Primary and Secondary Redundant Servers.

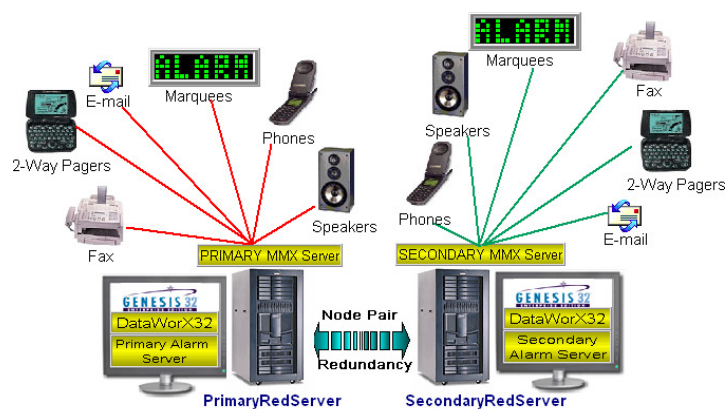


Figure 1 - System Configuration

2. On both multimedia servers set the Node name in the Alarm Subscription to the primary redundant server.

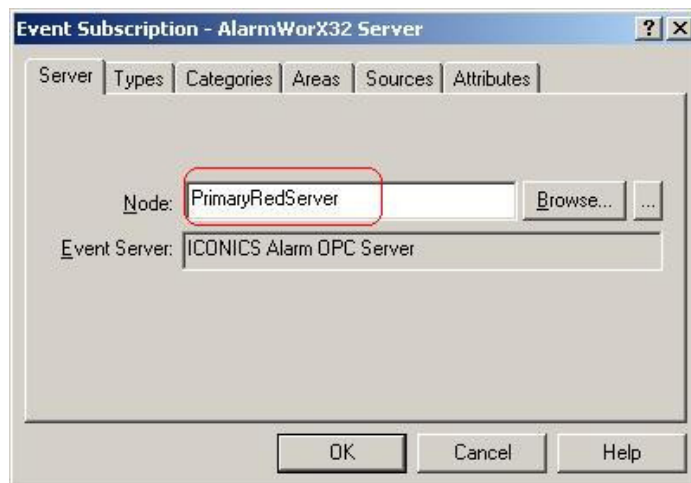


Figure 2 - Alarm Subscription Set to Primary Server

3. On the primary multimedia server, configure alarm filters to include a condition that only pass those alarms that are generated from Primary Redundant Alarm Server. For example, an alarm filter on the Primary multimedia server can be:

```
x= like({{Source}},$"MMXRadiationLevel"$,0) && (like({{Server Node}},"PrimaryRedServer",0))
```

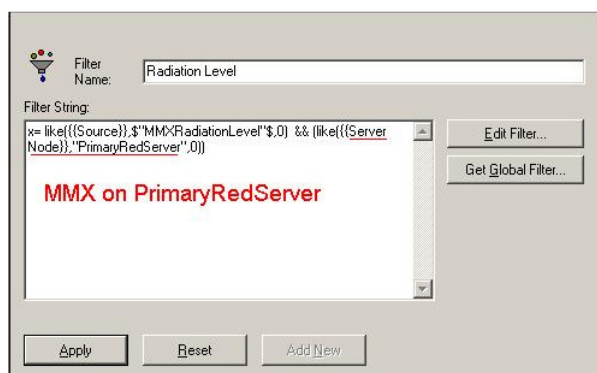


Figure 3 - Filter on Primary Multimedia Server

4. Similarly filters on the secondary multimedia server should include a condition to only pass those alarms that are generated from Secondary Redundant Alarm Server. An alarm filter on the secondary may look like:

```
x=like({{Source}},$"MMXRadiationLevel"$,0) && (like({{Server Node}},"SecondaryRedServer",0))
```

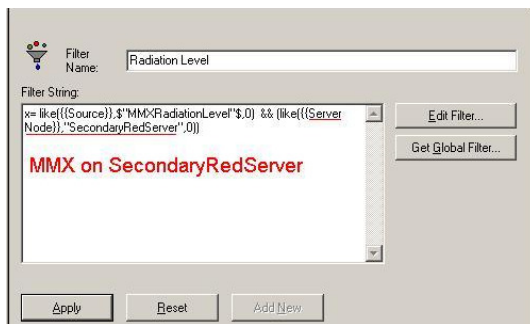


Figure 4 - Filter on Secondary Multimedia Server

5. The remaining multimedia configuration does not need any additional configuration for redundancy.

Both multimedia servers will be running at all times, but normally only one multimedia server will be active at a time and the filter will only pass Alarms from the active Alarm server.

Redundancy Scenarios

Below is a walkthrough of what happens.

1. The Primary Alarm Server is running as normal. The alarms will be sent out from the primary multimedia server. If the Secondary Alarm Server breaks down at any point, you will not notice a change. The primary Alarm and multimedia server will remain active and process all alarms.
2. The Primary Alarm Server goes down. If the primary Alarm server is down and both the redundant server are still able to communicate with each other, then the Backup Alarm server will become active. The filtering in the multimedia server will then trigger the secondary multimedia server to be active. All NEW alarms will be processed by the backup Alarm server.
3. The Primary Alarm Server comes back after being down. When the primary alarm server becomes active again, everything will resume working as described in step 1.
4. Communication link break between both servers. In this case, both Alarm Servers on Primary and Backup redundant servers will become active, and therefore both multimedia servers will also become active. This will cause alarm notification from both multimedia servers.