



Multimedia Alarm Management

APPLICATIONS NOTE

August 2004



Description: Guide to configuring and running AlarmWorX32 Multimedia.

OS Requirement: The operating system required is Windows XP/2000/NT/2003.

General Requirement:

AlarmWorX32 Multimedia 8.0 for Windows XP, NT, 2000 adds multimedia capabilities to your OPC Alarm & Event Servers. Alarm notifications can be sent by multimedia agents for email, sound, text to speech, marquee windows, phone, etc. The necessary equipment and OPC servers for your application should be installed.

Capabilities

The AlarmWorX32 Multimedia Server subscribes to alarm and event servers and filters those alarms on which multimedia alarming is required. The Multimedia Server then triggers the appropriate multimedia agent, which performs the actual notification.

AlarmWorX32 Multimedia provides the following capabilities:

- Multimedia alarm notification
- Configurable media templates
- Configurable Personnel Schedules
- Alarms subscription to Alarm & Event servers on the local computer on the intranet/internet
- Alarms notification to multimedia agents on the local computer or to agents on the intranet/internet

First glance

AlarmWorX32 Multimedia 8.0 installs with a fully working example project. To explore the project click **Start → Programs → ICONICS GENESIS-32 → AlarmWorX32 → Multimedia Demo**. The ICONICS Alarm Server is used in this example to initiate the alarm. AlarmWorX32 Multimedia is configured to listen to the alarms and notify the user(s) through the configured multimedia agent(s).

Configure your own project

To configure multimedia alarm notification from the beginning, please perform the following:

1. Click **Start → Programs → ICONICS GENESIS-32 → AlarmWorX32 → Multimedia Configurator**.
2. Select **File→New** in order to make a new configuration.
3. The **Media Configuration Database Wizard** will guide you through setting up a new MSDE database.
4. Select **File → Make Active** in order to ensure that your new configuration becomes Active.

Subscriptions

A subscription defines a connection to the alarm server. It specifically describes in which alarms the multimedia component is interested.

1. Select **Alarm Inputs → OPC Subscriptions** from the tree control.
2. Click the **Subscribe/Edit** button.

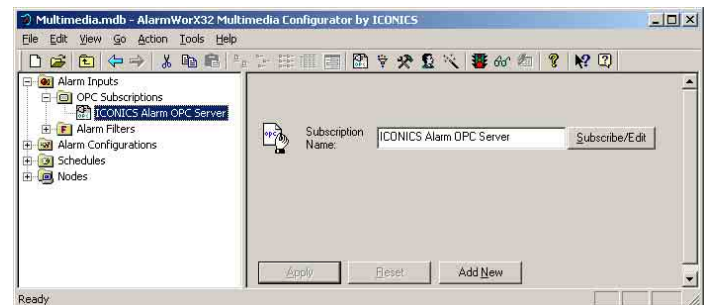


Fig. 1: Subscribe to an OPC Alarm Server

3. Verify that the subscription contains your required settings (priorities, areas, categories etc). You may want to have an **Area** in your Alarm Server to which you subscribe. This would ensure that we only receive the relevant multimedia alarms.

Filters

Filters allow you to filter an alarm subset. You can make filters that filter only a specific alarm tag or a group of alarms.

1. Select **Alarm Inputs → Alarm Filters** from the tree control.
2. Right-click on **Alarm Filters** and select **New → Alarm Filter**.
3. In order to get all alarms you can specify:
Filter Name: **MyFilter**
Filter String: **x= like({{Source}}, \$"*" \$,0)**
4. The alarm **Source** (alarm tag name) is evaluated by the filter. **MyFilter** allows any alarm source through the filter by using wildcard characters.
5. An example of a more precise filter:
x= like({{Source}}, \$"FireAlarm" \$,0)



Media Templates

Media templates describe the format of the alarm notification message.

1. Select **Alarm Configurations** → **Media Templates** from the tree control.
2. Right-click on **Media Templates** and select **New** → **Media Template**
3. Specify a name **my Sound Speech** and select the Template Type **Sound / Text-To-Speech**.
4. Click the **Insert...** button and select the Field Type **Text**.
5. Type the Text String **Attention Please...** and click the **Insert** button.
6. Click the **Insert...** button and select the Field Type **Alarm Field**.
7. Select the Field Name **Time** and click the **Insert** button.
8. Click the **Insert...** button and select the Field Type **Alarm Field**.
9. Select the Field Name **Message** click the **Insert...** button and click **Apply**.

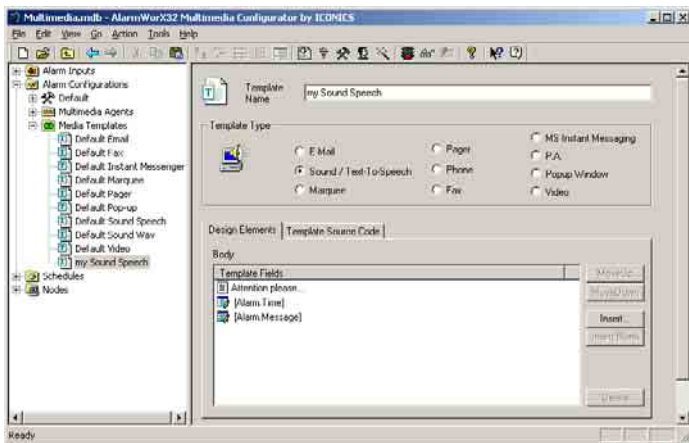


Fig. 2: Multimedia template

Multimedia Agents

Multimedia agents perform the actual alarm notification.

1. Select **Alarm Configurations** → **Multimedia Agents**, → **Sound / Text-To-Speech** from the tree control.
2. Click the **General Settings...** button and specify Mary's voice.



Fig. 3: Text to speech configurator

3. Expand the branch under the **Sound / Text-To-Speech** tree and verify the settings of the **Local Sound Card**.
4. The **Node to Play Sound On** should be kept blank. This way the sound agent will speak through the speakers of your local computer. The **Template Name** can be set to **my Sound Speech**. **Apply** the changes and click the **TEST** button to hear the voice speak.

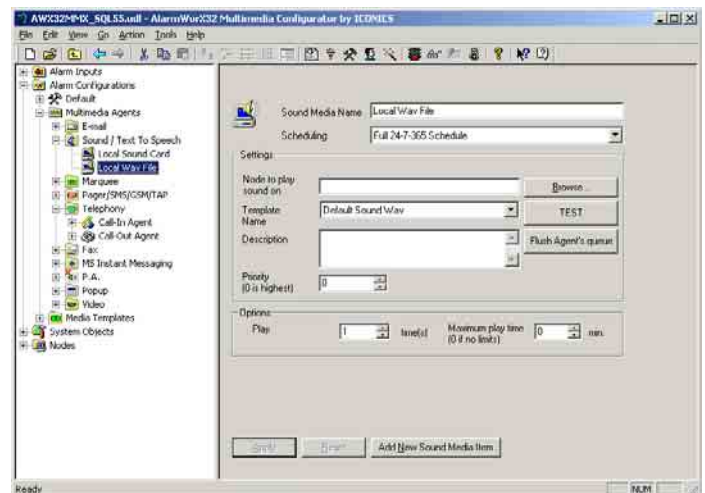


Fig. 4:Text to speech multimedia Agent settings

Alarm Action Sets

The alarm action set specifies the alarm action to be performed.

1. Select from the left tree **Alarm Configurations, Default**.
2. Right-Mouse click on **Default** and select **New, Alarm Action Set** and specify:

Action Set Name:	Speak to Me
Filter to use:	myFilter
Action destination:	Local Sound Card

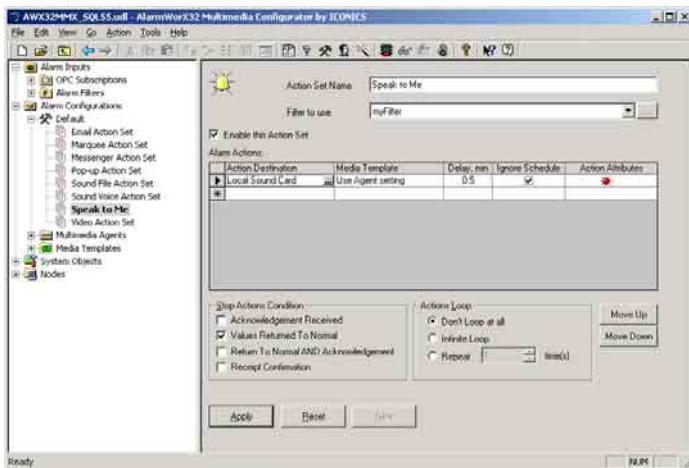


Fig. 5: Alarm Action set

3. Please delete the action sets you do not plan to use. For example: e-mail, messenger, and video. Simply select them and hit the **DEL** key. You can always add new actions at a later stage.

Runtime

Click the traffic light to start the AlarmWorX32 Multimedia Server. A green light indicates that the server is running. Your sound card should play the wave files once an alarm occurs. The server can also be started as a Windows NT/2000 service or by using the ICONICS system tray GenTray.

Internet/Intranet

In order to allow intranet/internet based alarm subscriptions or alarm notification you will need to configure either Microsoft DCOM or ICONICS GenBroker. Please refer to the GenBroker configuration for further details.