DMRAlert

VK-DMR Monitor and Alert

VK2BYI

DMRAlert is a Windows desktop application that scans the content of the Monitor page on the IPSC2-VKDMR website and alerts the user when one or more callsigns from a user-defined list are detected.

Chris Fredericks
chris@vk2byi.com.au

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Overview

VK-DMR Monitor and Alert (*DMRAlert*) is a Windows desktop application that scans the content of the *Monitor* page on the *IPSC2-VKDMR* repeater website and alerts the user when one or more callsigns from a user-definable list are detected. As callsigns from the list are detected on the dashboard, the corresponding rows in the display are highlighted and a voice announcement is made to alert the user to the presence of the monitored callsign. The voice announcements will be repeated at a specified interval while the calls remain visible in the display. As each highlighted call moves off the display due to inactivity, the announcements for that call will cease.

Features

- The callsigns to be monitored are maintained by the user in the *Monitored Callsigns* listbox in the application *Options* dialog.
- The interval between subsequent refreshes of the information being scanned on the *IPSC2-VKDMR* website is adjustable to a period of between 5 and 3600 seconds (1 hour). The display can also be manually refreshed at any time by clicking on a refresh button on the main window status bar.
- The interval between repeated alerts of the same callsign while it is visible in the grid details is adjustable to a period of between 1 and 15 minutes.
- The speech synthesizer voice used to announce the detection of a monitored callsign is selectable between all installed and enabled voice packages as managed in the Windows Speech settings.
- The rate and volume of the voice announcements are adjustable using DMRAlert *Options* dialog settings, as well as the ability to test the selected voice with a sample announcement.
- The voice announcements can be muted and unmuted at any time by alternately clicking on a mute audio button on the main window status bar.

NOTE: This is an ongoing piece of work and is not intended to be a commercial venture. *DMRAlert* is free to use although a small contribution to help defray the costs of web hosting, maintaining the software and adding new features, would be gratefully accepted.

System Requirements

DMRAlert is a Windows desktop application that has been designed to use the *Microsoft .NET Framework 4.7.2* which is supported by Microsoft to run on the following workstation operating systems:

- Windows 10
- Windows 8.1
- Windows 7 SP1

The *.NET Framework 4.7.2* was released on 2018-04-30 and may need to be downloaded and installed for some versions of the operating systems listed above unless it has been already installed by other .NET applications run on the workstation. If necessary, you can download the framework installed from Microsoft at https://dotnet.microsoft.com/download/dotnet-framework/net472.

Hardware Requirements[1]

|	
Processor:	1GHz (32-bit or 64-bit)
RAM:	512 MB
Disk space (minimum)	
32-bit:	4.5 GB
64-bit:	4.5 GB

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[1] The hardware requirements listed above are those specified by Microsoft for the .NET Framework 4.7.2 itself. The *DMRAlert* application shouldn't place any additional burden on these requirements.
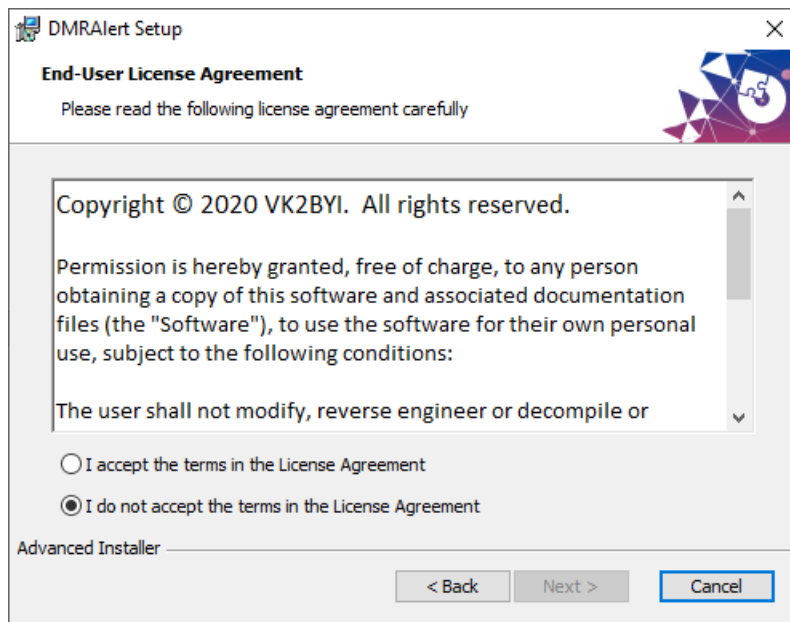
Installation

1. You can download the latest release of the *DMRAlert* installation program from the *DMRAlert* page at http://www.vk2byi.com.au/DMRAlert.
2. After you have downloaded the file, double-click on it to run the installation program.
3. When the installation wizard starts it will display the following prompt. Click the *Next* button:
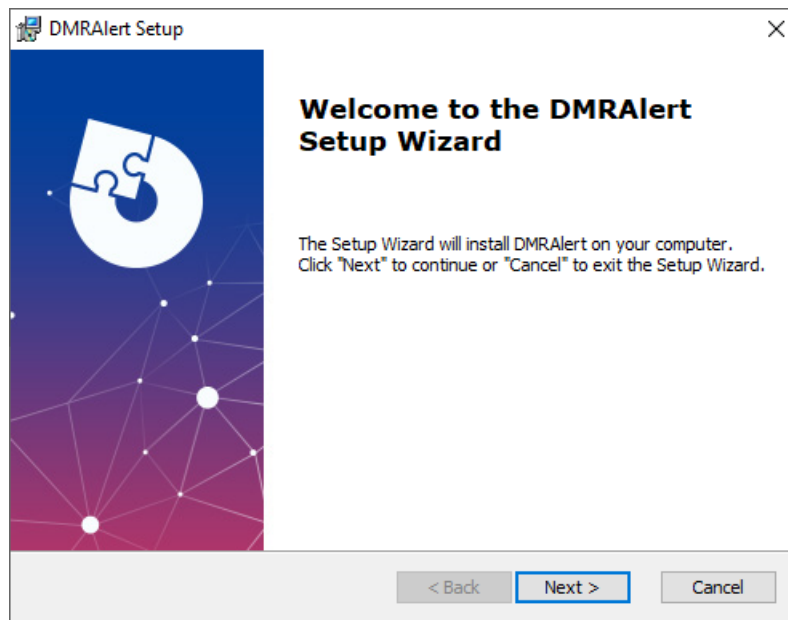

4. From the *Installation Type* dialog, you can normally leave the default setting *Everybody* selected if you want all users on the computer to be able to run *DMRAlert*. Alternatively, you can select the *Only for me* setting if you want only yourself to be able to run *DMRAlert*. Click the *Next* button to continue to the next step in the installation:
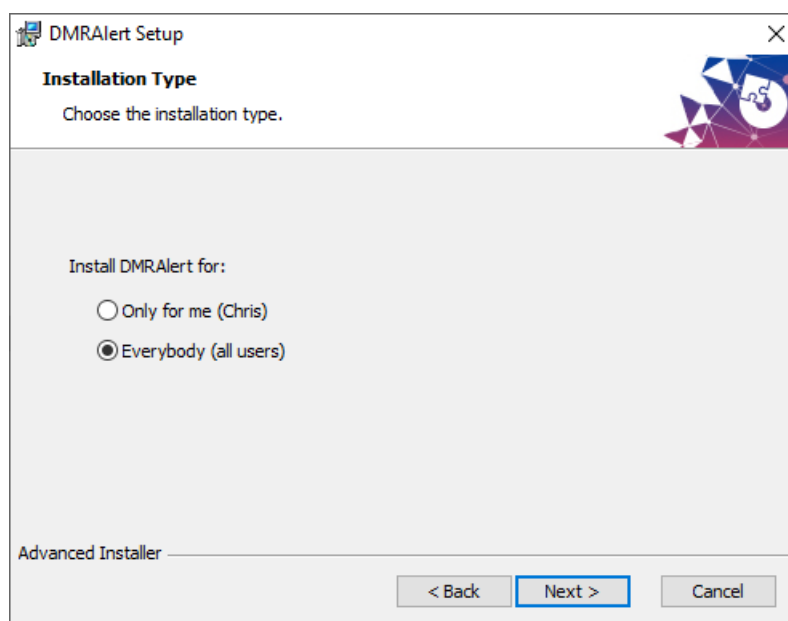
5. Read the license agreement and then click the *I accept the agreement* check box and click the *Next* button:

6. Read the release notes to see what has changed and then click the *Next* button:
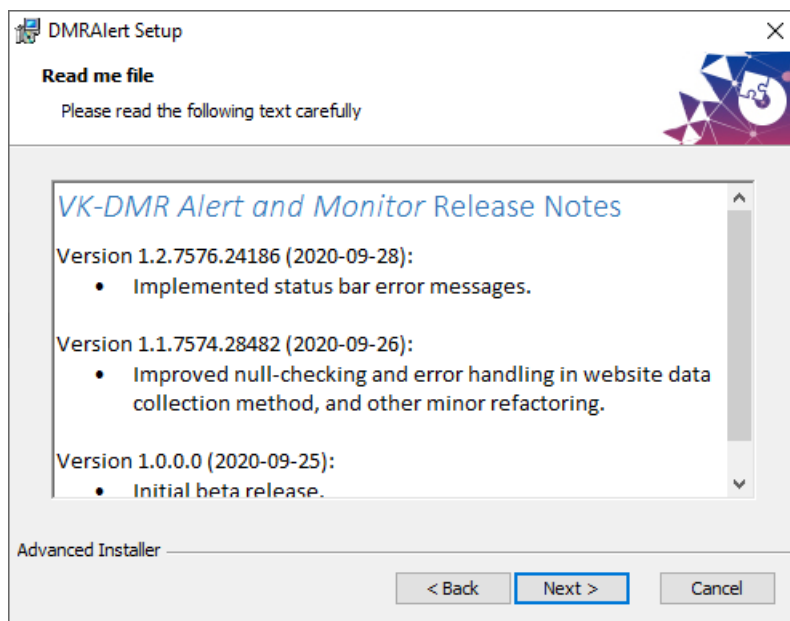
7. Use the recommended folder as the *Installation Folder* by clicking on the *Next* button:
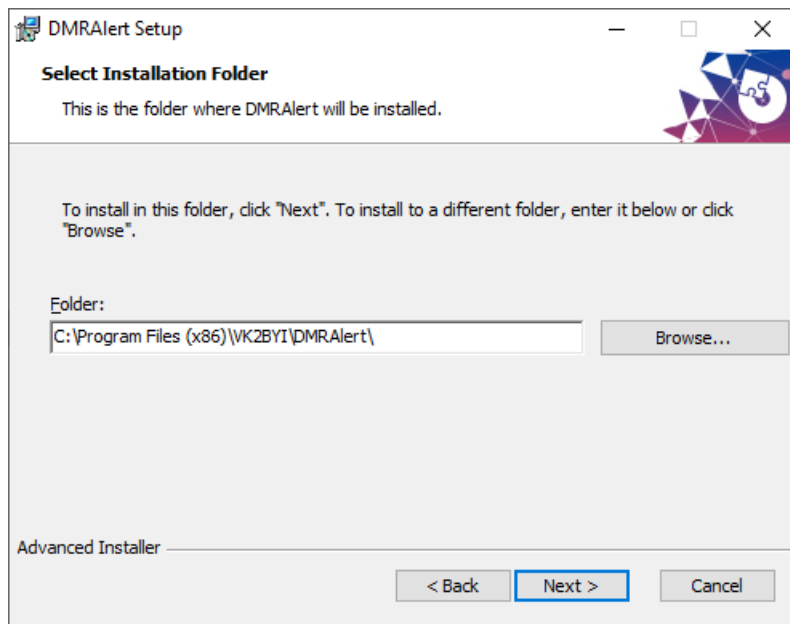
8. You can click the *Back* button if you wish to change any of the previous selections. Press the *Install* button when you are ready to install the application:
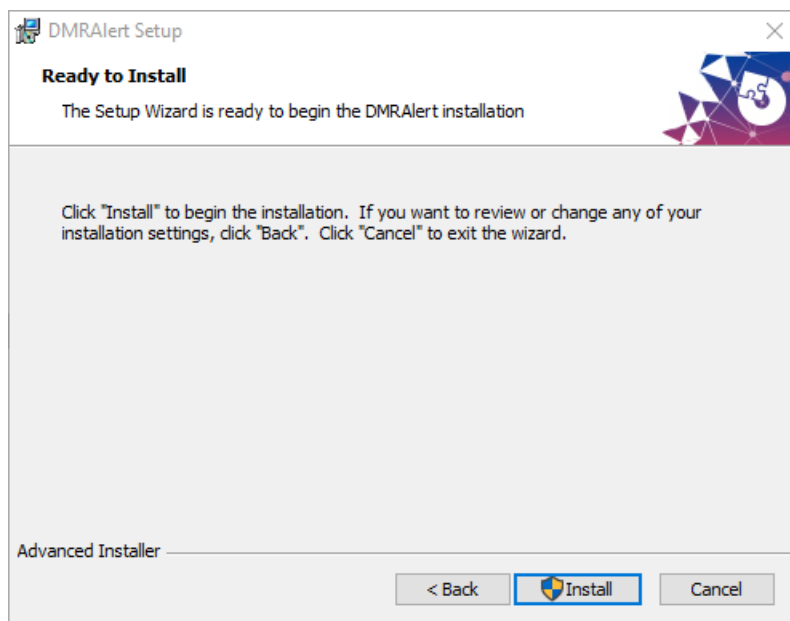
9. After the installation of the *DMRAlert* application completes, you can click the *Finish* button to exit the installation wizard:

Completing the DMRAlert Setup Wizard

Click the "Finish" button to exit the Setup Wizard.

< Back   Finish   Cancel
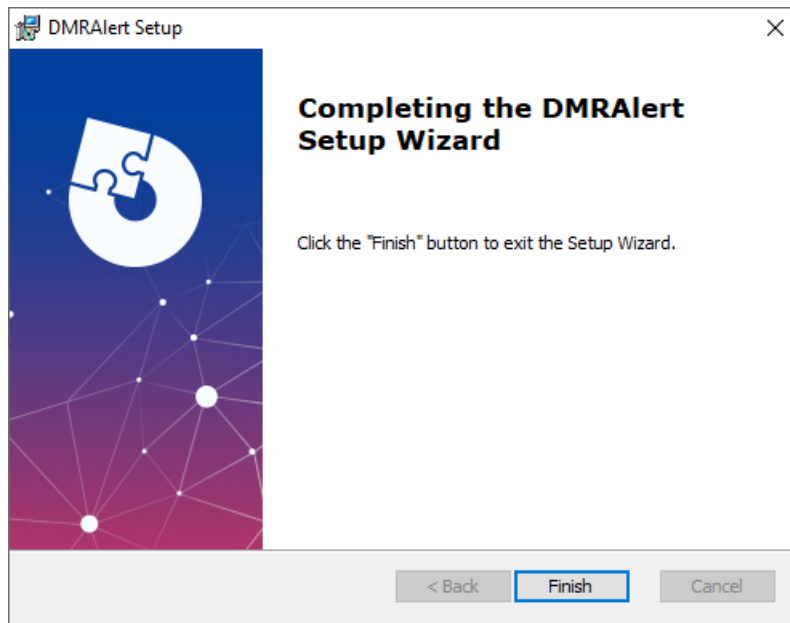
Getting Started

Click on the *VK-DMR Alert* desktop shortcut to start the application and once the main window is displayed, the grid will display the current content from the *Monitor* page on the *IPSC2-VKDMR* website:

NR	Hardware	Time	Seconds	Repeater	Call	Radio ID	Call	Alias	TS	TG	BER %	RSSI	Floor
1	MOT	2020-09-29 16:05:28	2.0	505236	VK2RWI	5050492	VK2FATS		2	505	0.0		D5BC9681
2	MOT	2020-09-29 16:05:18	7.0	505236	VK2RWI	5051120	VK2HG		2	505	0.0		75248A7C
3	MOT	2020-09-29 16:02:12	0.9	505223	VK2RHR	5052131	VK2NGL		1	1	0.0		F955E4E8
4	INT	2020-09-29 16:00:54	0.0	3804	REFL	5054025	VK4PY		2	3804	0.0		9FEA0A1A
5	INT	2020-09-29 16:00:22	34.2	19736		5052469	VK2YAD		2	505	0.0		5BF1CF47
6	INT	2020-09-29 15:59:13	63.0	19736		5051228	VK2ALE		2	505	0.0		4D93C649
7	INT	2020-09-29 15:57:25	100.8	19736		5052469	VK2YAD		2	505	0.0		CA387D3D
8	INT	2020-09-29 15:56:20	57.7	19736		5051228	VK2ALE		2	505	0.0		CB0E3102
9	INT	2020-09-29 15:56:17	1.0	19736		5051228	VK2ALE		2	505	0.0		352E0403
10	INT	2020-09-29 15:54:56	76.6	19736		5052469	VK2YAD		2	505	0.0		30421F24
11	INT	2020-09-29 15:54:53	1.0	19736		5052469	VK2YAD		2	505	0.0		DA482A4C
12	INT	2020-09-29 15:53:48	55.2	19736		5051228	VK2ALE		2	505	0.0		5D21F969
13	INT	2020-09-29 15:53:45	1.0	19736		5051228	VK2ALE		2	505	0.0		18830E32
14	INT	2020-09-29 15:52:33	66.2	19736		5052469	VK2YAD		2	505	0.0		06478E36
15	DMR+	2020-09-29 15:52:26	0.2	235165	GB7DS	2351837	M1TES		1	1	0.0		1217E52D
16	DMR+	2020-09-29 15:52:24	1.7	235165	GB7DS	2351837	M1TES		1	1	0.0		146B5B31
17	INT	2020-09-29 15:51:50	36.8	19736		5051228	VK2ALE		2	505	0.0		DBDD0653
18	INT	2020-09-29 15:51:48	1.0	19736		5051228	VK2ALE		2	505	0.0		F4925C09
19	INT	2020-09-29 15:51:05	37.8	19736		5052469	VK2YAD		2	505	0.0		C341C65C
20	INT	2020-09-29 15:50:30	28.2	19736		5051228	VK2ALE		2	505	0.0		58CA4626
21	INT	2020-09-29 15:50:27	1.0	19736		5051228	VK2ALE		2	505	0.0		62FECC03
22	INT	2020-09-29 15:49:46	37.1	19736		5052469	VK2YAD		2	505	0.0		C2F43A27
23	INT	2020-09-29 15:49:20	18.9	19736		5051228	VK2ALE		2	505	0.0		7587BF27
24	INT	2020-09-29 15:49:18	1.0	19736		5051228	VK2ALE		2	505	0.0		DA94B532
25	MOT	2020-09-29 15:48:57	0.5	505230	VK2RCV	5050585	VK2FSOL		2	3804	0.0		6C3C5AC7
26	INT	2020-09-29 15:48:12	1.4	19736		5051228	VK2ALE		2	505	0.0		602FB26D
27	INT	2020-09-29 15:48:04	5.1	19736		5051228	VK2ALE		2	505	0.0		0ADCF923
28	INT	2020-09-29 15:47:52	1.0	19736		5051228	VK2ALE		2	505	0.0		C5B06036
29	INT	2020-09-29 15:46:14	177.8	19736		5052469	VK2YAD		2	505	0.0		6513BB57
30	INT	2020-09-29 15:45:12	24.1	19736		5052469	VK2YAD		2	505	0.0		D1ABDA72
31	INT	2020-09-29 15:44:34	10.8	19736		5052469	VK2YAD		2	505	0.0		244B5137
32	INT	2020-09-29 15:43:33	20.9	19736		5052469	VK2YAD		2	505	0.0		C6D76854
33	INT	2020-09-29 15:43:18	3.6	19736		5052469	VK2YAD		2	505	0.0		D3A78870
34	INT	2020-09-29 15:42:58	292.3	19736		5051228	VK2ALE		2	505	0.0		A1146208
35	INT	2020-09-29 15:42:05	47.1	19736		5052469	VK2YAD		2	505	0.0		308CD043
36	INT	2020-09-29 15:41:51	10.3	19736		5052469	VK2YAD		2	505	0.0		D9F77D61
37	INT	2020-09-29 15:41:51	0.2	19736		5052469	VK2YAD		2	505	0.0		7329C918
38	INT	2020-09-29 15:41:00	45.3	19736		5051228	VK2ALE		2	505	0.0		56C2841C
39	INT	2020-09-29 15:40:08	0.0	19736		5052469	VK2YAD		2	505	0.0		7329C918
40	INT	2020-09-29 15:39:26	37.1	19736		5051228	VK2ALE		2	505	0.0		5E860320
41	INT	2020-09-29 15:39:04	18.0	19736		5052469	VK2YAD		2	505	0.0		6FB69026
42	INT	2020-09-29 15:38:52	8.3	19736		5051228	VK2ALE		2	505	0.0		6B060B2B
43	INT	2020-09-29 15:38:43	0.5	19731		5051257	VK3MDC		2	505	0.0		0EF9F262
44	INT	2020-09-29 15:38:32	14.8	19736		5052469	VK2YAD		2	505	0.0		2E0D3505
48	MOT	2020-09-29 15:37:12	3.4	505230	VK2RCV	5050585	VK2FSOL		1	9	0.0		EEA03F21
49	INT	2020-09-29 15:37:09	3.3	19736		5051228	VK2ALE		2	505	0.0		65A08C74

VK-DMR Monitor and Alert — File Settings Help

46 row(s)

At the bottom of the main window on the status bar there is a message panel at the left-hand end of the status bar which displays the number of rows currently being displayed, and at the right-hand end of the status bar are the speech synthesizer voice *Mute* and manual grid *Refresh* buttons.

🔊 Clicking the *Mute* button will alternate between the voice being muted and unmuted.

🔄 Clicking the *Refresh* button will manually refresh the grid control content.

There is also a message panel in the middle of the status bar that is used to display errors that may result during refreshes caused by external sources. These messages are displayed in red and are cleared by clicking on the message. Refer to *Refresh Exceptions* for further details.

Application Settings

Select *Options…* from the *Settings* menu to open the *Options* dialog:
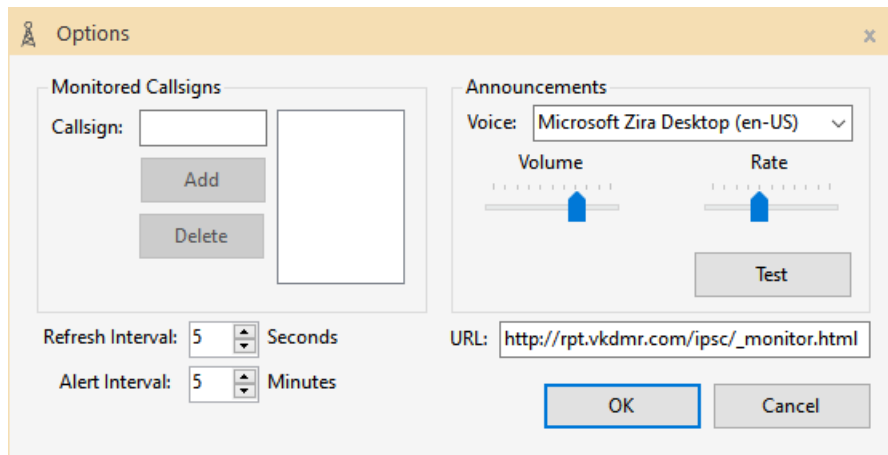
To add a callsign to the list of stations to be monitored, enter the call in the *Callsign:* text box and click the *Add* button. As each call is added, it will be appended to the listbox control just to the right of the *Add* and *Delete* buttons.

To delete a call from the list, select the callsign and press the *Delete* button. If you wish to delete multiple callsigns, press and hold the *Ctrl* key as you select the items in the listbox control before pressing the *Delete* key.

The interval in seconds between each automatic refresh of the grid content, is adjustable between 5 seconds and 3600 seconds (1 hour) by clicking on the small up and down arrows in the *Refresh Interval:* control. You can also type a value in the textbox between 1 and 3600. The default value for this setting is 5 seconds.

The interval in minutes between repeated alerts of the same monitored callsign while it is visible in the grid, is adjustable between 1 and 15 minutes by clicking on the small up and down arrows in the *Alert Interval:* control. You can also type a value in the textbox between 1 and 15. The default value for this setting is 5 minutes.

The speech synthesizer voice used for announcements made when a monitored callsign is detected, can be selected from the installed and enabled voice packages managed in the Windows Speech settings. Refer to the Microsoft Windows documentation for further details.

The volume and rate of the speech synthesizer voice can be adjusted using the *Volume* and *Rate* slider controls. Clicking on the *Test* button will play a sample alert using the current *Voice*, *Volume* and *Rate* settings to assist your selection of suitable settings.

The *URL* textbox contains the URL for the VKDMR IPSC monitor page (raw HTML data). The default value is the appropriate value as at the time of writing, but can be changed by the user in the future if required.

Clicking the *OK* button will close the *Options* dialog and save the updated settings to the application settings file typically located in the following location:

> C:\Users*<your username>*\AppData\Roaming\VK2BYI\DMRAlert\settings.config

Clicking the *Cancel* button will close the *Options* dialog and discard any changes made to the application settings.

The speech synthesizer voice can also be alternately muted and unmuted by selecting *Mute Announcements* from the *Settings* menu. When the state of the voice is changed via *Mute Announcements* on the *Settings* menu, the state of status bar *Mute* button is also updated to match - and vice versa.

Check for Updates

Select the *Check for Updates…* option item from the *Help* menu to determine if a new release of *DMR Alert* is available. If a newer version is available, you will be guided through the process to update the installation to that version.

Application Exceptions

Any abnormal exceptions that occur in the *DMR Alert* application are captured and displayed in a popup message box to inform the user who then needs to press the *OK* button to close the popup. Further details of the exception are also written to an exception log typically located in the following location:

> C:\Users*<your username>*\AppData\Roaming\VK2BYI\DMRAlert\Exception *yyyy-mm-dd*.log

As corrective maintenance results in new releases of *DMR Alert*, the occurrence of most abnormal exceptions will diminish.
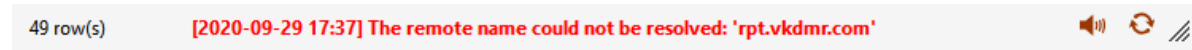
Refresh Exceptions

However, exceptions occurring while refreshing data can always be caused by environmental or equipment problems such as temporary internet service provider outages etc. During such events, exception messages displayed in popup message boxes could occur as often as every 5 seconds (depending upon the *Refresh Interval* and outage duration), requiring the user to dismiss each one with the *OK* button until such time as the problem is resolved.

Instead, exceptions during a data refresh are handled differently. If any errors occur while polling the *IPSC2-VKDMR* website, *DMR Alert* will still append a record to the exception log but will only

display the most recent error message on the status bar. This allows the refresh polling to continue without user intervention.

For example, by disconnecting the WiFi connection between my computer and the router, the following error message was displayed:

49 row(s)   [2020-09-29 17:37] The remote name could not be resolved: 'rpt.vkdmr.com'

As soon as the WiFi connection was restored, refreshing of the data resumed, and the application continued as normal. Any error messages displayed this way can be cleared by clicking anywhere on the red text.

The details of all exceptions are captured in the exception log and if an outage duration was significant, the number of exceptions logged may be significant as well. You might want to review and delete any unwanted exception records created during such an event.