

AgileWeb!

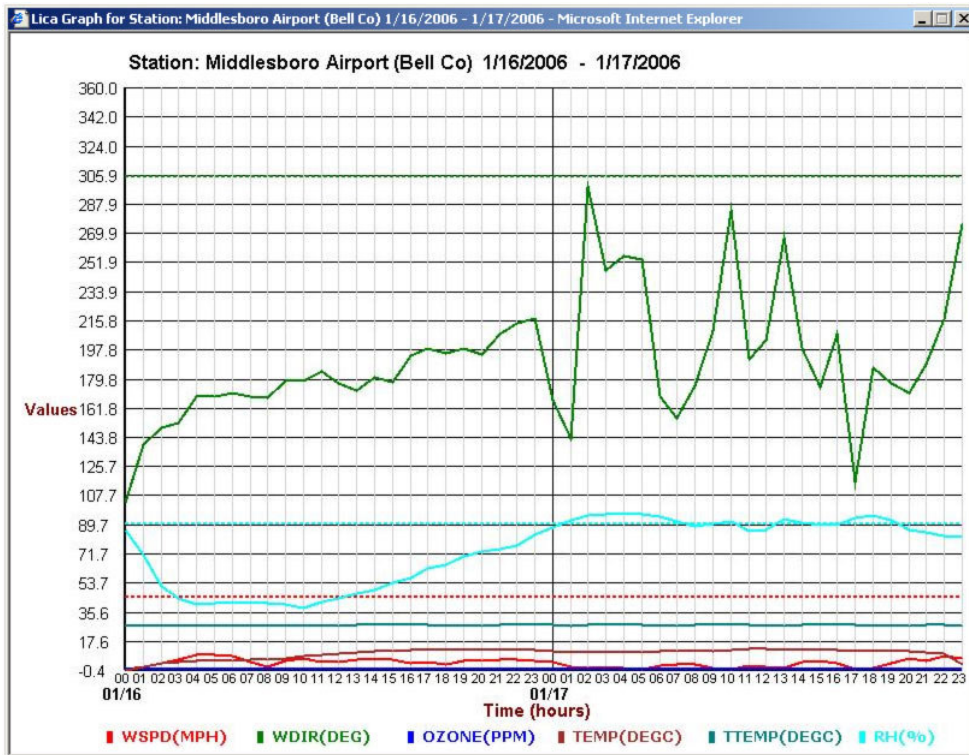
AgileWeb! allows any E-DAS user to quickly create and install a web site with both real-time and historical reporting/graphing capabilities. Any IIS/.NET capable web server can be set up in minutes and automatically uses the E-DAS configuration files to create the parameter list and site names.

The main page, seen below, exists as a single web control that can be installed within a frame set containing your logo, sidebars, and additional hyperlinks. Reports and graphs always spawn in new windows to take full advantage of the site visitor's screen resolution and limit scrolling.

The main page shows real-time data from the selected station, which can be switched using a simple pull-down box. The visitor to the site can also, from this screen, select tabular reports or charts of data from that site, or use the 'By Analyzer' tab to pull up a multi-site comparison chart of a single parameter.

The screenshot displays the AgileWeb! interface. At the top, there are two tabs: 'By Station' (selected) and 'By Analyzer'. Below the tabs, the 'Station' dropdown menu is set to 'Middlesboro Airport (Bell Co)'. To the right, the 'Start Date' is '1/8/2006' and the 'End Date' is '12/9/2006'. There are radio buttons for 'Table' (selected) and 'Graph'. A 'Generate Report' button is visible. On the left, a 'Parameters' list includes WSPD, WDIR, OZONE, TEMP, TTEMP, and RH. The main area shows two calendar grids for January 2006 and December 2006. On the right, there is a section titled 'what is AQI?' with real-time data: AQI: 190, Temperature: 28, Wind Chill: 22, Wind Speed: 15, and a 'Wind Direction' compass rose.

AgileWeb! can be combined with other functions of the Web Toolkit to create more real-time data pages, depending on the customer's particular design requirements. Agilaire can provide web development services, or the customer may elect to use their own web developer. All source code for the control is available upon request.



Example Chart

Lica Data for Station: Middlesboro Airport (Bell Co) - Microsoft Internet Explorer

Address: http://localhost:2763/Aglaire_Lica/reports/TabularDisplay.aspx

Station: Middlesboro Airport (Bell Co) Excel Export

Time	WSPD (MPH)	WDIR (DEG)	OZONE (PPM)	TEMP (DEGC)	TTEMP (DEGC)	RH (%)
01/16/2006 - 00:00	0.1	104	0.047	-0.4	27.3	86.3
01/16/2006 - 01:00	1.6	139	0.047	1.6	27.2	71.2
01/16/2006 - 02:00	4.1	150	0.047	3.9	27.2	51.7
01/16/2006 - 03:00	6.5	153	0.047	5	27.3	44.2
01/16/2006 - 04:00	9.6	169	0.048	5.7	27.2	40.5
01/16/2006 - 05:00	8.9	169	0.048	5.7	27.2	41.3
01/16/2006 - 06:00	8.5	171	0.048	5.7	27.1	41.6
01/16/2006 - 07:00	4.9	169	0.047	6	27.2	41.2
01/16/2006 - 08:00	2	168	0.047	6.4	27.3	41.1
01/16/2006 - 09:00	5.7	179	0.048	7	27.3	40.3
01/16/2006 - 10:00	7	179	0.047	8.6	27.2	38.2
01/16/2006 - 11:00	4.7	185	0.047	9.2	27.2	42.1
01/16/2006 - 12:00	4.5	177	0.047	9.8	27.4	44.5
01/16/2006 - 13:00	6	173	0.047	10.7	27.6	46.9
01/16/2006 - 14:00	7	181	0.047	11.5	27.7	49.5
01/16/2006 - 15:00	6.4	178	0.047	11.8	27.7	53.5
01/16/2006 - 16:00	4	194	0.047	12.1	27.7	56.9
01/16/2006 - 17:00	5	199	0.047	12.1	27.7	62.5
01/16/2006 - 18:00	3.1	196	0.047	11.9	27.4	64.7
01/16/2006 - 19:00	5.4	199	0.047	12	27.3	70.4
01/16/2006 - 20:00	5.4	195	0.047	12.2	27.4	72.8
01/16/2006 - 21:00	6	208	0.047	12.3	27.5	74.6
01/16/2006 - 22:00	6.1	214	0.051	12.4	27.7	76.7
01/16/2006 - 23:00	5.5	217	0.071	12.1	27.6	83.6
01/17/2006 - 00:00	4.9	167	0.086	11.7	27.5	88.3
01/17/2006 - 01:00	2.1	143	0.095	11	27.4	92.8
01/17/2006 - 02:00	1.4	299	0.1	10.6	27.5	95.4
01/17/2006 - 03:00	1.5	247	0.102	10.8	27.7	96.1

Example Report

Installation:

I. Installing the Web Application

Unzip the Website into a directory of your choosing on the web server.

1. Go to the IIS Manager

- Right click on My Computer
- Select Manage
- Open Internet Information Services (IIS) Manager

2. Applications Pools - If you have an existing Web application is running ASP.NET 1.1 make sure to create a new application pool

- Right click on Application Pools
- Select new -> application Pool.
- Name that application pool ASP.NET 2.0

3. Create a new Website or Virtual Directory in IIS for this project depending on where it is being installed.

- Right click on Web Sites to create a new Website...
- Right click on the WebSite this Web application will belong to create a new Virtual Directory...

Home Directory Tab

- Set the Local Path to the root directory of this web application which contains the Default.aspx and web.config file
- Select the execute permissions Scripts only.
- Select the Application Pool ASP.NET 2.0

Click on the ASP.NET tab

- Make sure that the ASP.NET version of at least 2.0

Click on the Directory Security Tab

- Click on the edit button under Authentication and access control
- Check enable anonymous access
- Make sure that the user specified has access to the data files needed on the server. (site.dat, parm.dat, AQI.dat, and the access database(s)
- For security reasons this user account should not be an administrator or have many other permissions.

4. Double-click on "ASPAJAXExtSetup" to install AJAX on the web server

5. Set the "what is AQI?" link to your own AQI explanation page:
- Edit the following file in a text editor. \Controls\AQIControl.ascx
 - Find the line below:

```
<asp:HyperLink ID="HyperLink1" runat="server"  
  CssClass="AQI_Link" NavigateUrl="/default.htm">what is  
  AQI?</asp:HyperLink>
```

Modify this attribute:

```
NavigateUrl="<your choice of url>"
```

II. Configuration:

Edit the web.config file (the bottom of the page, the lines without the "*" preceding) for all settings as appropriate to your system.

The following documentation is provided inline in the web.config file.

```
***** Configuration Guide *****
*
* Each of these key value pairs must be configured for this website to function properly.
*
* 1. configPath - specifies the directory containing the site.dat, parm.dat, and AQI.dat files
*
*     <add key="configPath" value="<Path>"/>
*
*****
*
* 2. AccessConnectionString - specifies the full pathname of the Access database used for hourly parameter values with Average Table
*
*     <add key="AccessConnectionString" value="Provider=Microsoft.Jet.OLEDB.4.0; User Id=; Password=; Data Source=<PathName>"/>
*
*****
*
* 3. AQIConnectionString - specifies the full pathname of the Access database with the hourly AQI values with AQI table in it
*
*     <add key="AQIConnectionString" value="Provider=Microsoft.Jet.OLEDB.4.0; User Id=; Password=; Data Source=<PathName>"/>
*
*****
*
* 4. WINDGRAPHIMAGE - specifies values needed for the Wind Angle display.
*
*     imagePathName      = the website relative pathName to the background image that the wind line is drawn on
*     CenterPointx       = the x offset of the point the line will start from
*     CenterPointy       = the y offset of the point that line will start from
*     radius              = the length of the line
*     width               = line thickness
*     color               = color of the line
*
*     <add key="WINDGRAPHIMAGE" value="<imagePathName>,<CenterPointx>,<CenterPointy>,<radius>,<width>,<color>" />
*
*     example: <add key="WINDGRAPHIMAGE" value="..\images\Wind_Rose3.jpg,98,106,70,3,red"/>
*
*****
*
* 5. AQI_PARMS - the parameter names matched against for the side panel
```

```

*
*      Important: These parameter names must be the same across all stations for the AQI display to work
*
*      <add key="AQI_PARMS" value="<temperature C>,<windspeed KPH>,<winddirection DEG>" />
*
*      example: <add key="AQI_PARMS" value="TTEMP,WSPD,WDIR" />
*
*      Note: Windchill Calculation = 0.045 * ( 5.27 * SQRT( windspeed kph ) + 10.45 - 0.28 * ( windspeed kph ) ) * (Temp C - 33 ) +
33
*
*****
*
*      6. LIMITS - any number of parameter names and their limits that will show up on graphs as dotted lines
*
*      <add key="LIMITS" value="<parm1>,<parm1 limit>,<parm2>,<parm2 limit>,<parm3>,<parm3 limit>" />
*
*      example: <add key="LIMITS" value="NO2,0.4,OZONE,0.4,TEMP,35.5" />
*
*      7. GRAPH_LIMIT_LEGEND_TEXT - the text shown to the right of the dotted lines in the legend
*
*      <add key="GRAPH_LIMIT_LEGEND_TEXT" value="Limit"/>
*
*****
-->

<!-- Start Configuration Area -->
<add key="configPath" value="C:\AgilaireData\"/>
<add key="AccessConnectionString" value="Provider=Microsoft.Jet.OLEDB.4.0; User Id=; Password=; Data Source=C:\AgilaireData\ESCDATA.mdb"/>
<add key="AQIConnectionString" value="Provider=Microsoft.Jet.OLEDB.4.0; User Id=; Password=; Data Source=C:\AgilaireData\EsDtBase.mdb"/>
<add key="WINDGRAPHIMAGE" value="..\images\Wind_Rose3.jpg,98,106,70,3,red"/>
<add key="AQI_PARMS" value="TTEMP,WSPD,WDIR"/>
<add key="AQI_LIMITS" value="WSPD,45,WDIR,305,RH,90"/>
<add key="GRAPH_LIMIT_LEGEND_TEXT" value="Limits"/>
<!-- End Configuration Area -->

```