

Internet WEB Site System Prepared for National & Regional AQM Networks

Envista WEB is designed to allow you to publish your environmental data which has been captured using Envista ARM environmental data management software onto the World Wide Web.

Designed especially with the needs of public bodies and other agencies with a responsibility for environmental monitoring and reporting, Envista WEB provides a



Figure 1 - Envista WEB Edition Overview

Visitors to the web site are presented with the welcome screen, tailored to your choice of language. The site employs frames to provide a consistent look and feel throughout the site, a top banner contains the site title. The menu frame on the left hand side plus The News and Links frames on the right hand side can be configured by the site administrator.

MAIN SOFTWARE FEATURES

- Microsoft ASP. Net application for Windows Server 2003, 2003 WEB Edition, XP Pro. and Windows Vista..
- Windows 2000/2003, Linux and Solaris database servers.
- SQL Server 2005 or Oracle9i/10g DB.
- Multithreaded communication with data loggers and instruments.
- Off the shelf Internet/Intranet web site
- Multi-lingual design.
- Multi-document interface.
- Completely menu-driven.
- Designed for National/State AQM Network
- Drill down to regional and site specific displays.
- Dynamic Tabular displays
- GIS Navigation map (SHP Format).
- Station Dash Board (On Line Gauges)
- On-Line data transfer from Envista ARM via LAN/WAN or FTP
- Data analysis and reporting
- Download reports as ASCII, Excel, Word and PDF Files.
- General information screens
- Download area of monthly and annual reports.
- Links to Environmental Monitoring and Information sites
- Complete administration tools

GIS NAVIGATION MAP

A GIS multi Vector (SHP) map can be displayed of the entire area covered by the environmental monitoring stations, Point, Polygon and Line SHP file supported. The Station location layer is a Point SHP vector map. The Software support also Microsoft Virtual Earth as Map Back ground.



Figure 2 – Virtual Earth GIS Navigation Map

If the mouse is left above a 'Index-spot' without being clicked, a small information screen will be displayed with information regarding the site. By clicking on a station 'Index-spot', the display will then switch to an site board for the selected station.



Figure 3- Station Board Current Data

DYNAMIC DISPLAYS

The following *Dynamic* displays are available:

- Tabular: Display current data for one or more stations in tabular format. The Web administrator can set up to 20 tables.
 Direct Station Board access by pressing the station name.
- Station Board: Current received data and Index Gauge display.
- Navigation GIS Map: GIS interface for Navigation purpose and current AQI status. The Surfer can move the map zoom in and out and change map resolution.

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Figure 4 – Dynamic Tabular Display

REPORTS & ANALYSIS

By using this feature, the user can produce text and graphical reports.

- Station Data Report –Standard tabular and graphical reports for Station values. Day, week, month and user defined (periodic) report intervals are supported. Stored data values may be averaged before being reported. Values reported may be filtered.
- Monthly Matrix Monthly Summary by Hour and by Day
- 2Y Time Plot Two parameters plotted against time.
- XY Time Plot Correlation between two parameters.
- Wind & Pollution Rose Joined pollution concentration, wind direction and Speed relative frequency.
- Group Report that reflects a group of monitors related to one or more stations as set up by the user.
- Histogram The frequency of occurrence for various ranges of a monitor's value.
- Index Performance of the Air Quality Indexes value for a station or several stations.







The user can select the following *analysis* features:

- Analysis period of day, week, month, or year.
- Average Type Mean, Running, Running Forward, Maximum and Minimum.
- Data average interval of 1min,5min,6min,10min, 15min,30min,1hr,3hr,6hr,8hr,12hr, or 24hr.
- Output to display, printer, or file (XLS, WMF, JPG and BMP format).



Figure 7 – Wind Rose display

OPERATIONAL & INFORMATION REPORTS

Only authorized user can use this feature, after login the user can view the operational quality of the network.

- Calibration –Analyzers 2 Point, 3 Point and Multi-Points Calibration reports.
- Status Gives information about % of the data with various status codes.
- Diagnostic Report Diagnostic information collected from smart analyzers.
- Digital Monitor Reports on monitor status alarms based on the digital status information retrieved from smart analyzers with serial or TCP/IP interfaces.
- Digital I/O Reports on digital I/O changes based on the digital input information retrieved from the digital I/O of data loggers
- Power Off Station power failure report
- Missing Data Display every time that a monitor has not received data.
- Log Book Display collected technician write notes related to analyzers services, and let the user to see these notes as a report.
- Station Information Reports about the measurements in each station sort by station or Monitor type
- Contacts Display Technicians responsibilities stations sort by Technician name or Region

Figure 6 – Station Parameters Graphics



WEB MANAGER

Web Manager is the Envista ARM Web Edition site content management program. It allows users with no web programming or administration experience to configure and manage the Envista ARM website. The finished website product includes access to measured data and the Air Quality Indexes derived from the measurements.

Only Envista users with administrator level can access to Web Manager Program and update or modify the web site.

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Figure 9– WEB Manager Dynamic Tabular Setting

By using the WAB Manager the Administrator can setup the complete WEB Site. The Following settings are available:

- Dynamic Tabular structure
- Pollutants Group settings for Group reports.
- Reports available for Public.
- GIS Map settings and defaults.
- Look & Feel Colors, Fonts and background.
- Loading Preset menu design colors.



Figure 10- WEB Manager Preset loading

- Setup the languages available for the site.
- News Messages add and delete..
- Web Site Links.
- Information Screens.
- Insert files to the Publications area.
- Station Images locations.
- Station area image maps.

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