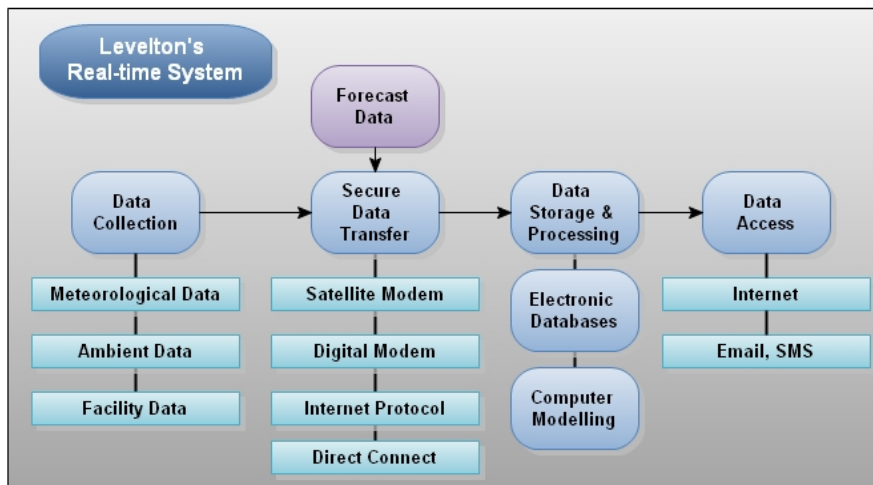


Technological advances have allowed automated real-time systems to become an affordable and integral part of today's modern and fast paced world. Levelton Consultants Ltd. has developed state-of-the-art automated real-time systems for a variety of applications from environmental projects to building monitoring to construction and materials testing. These systems seamlessly integrate the many complex components into automated real-time system. Information is displayed in real-time via the internet on secure and easy to use web pages, and automated messages can be sent by email and / or text messaging to alert the user(s) with critical information.

## Overview of Levelton's Real-time System



### Real-time Services

Levelton's expertise allows for quick and cost-effective implementation of real-time services which can be adapted and customized to suit a variety of applications, such as:

#### Meteorological Monitoring

Standard meteorological monitoring stations and networks to more advanced equipment such as SODAR (*sonic detection and ranging*)

#### Ambient Air Quality Monitoring

Criteria Air Contaminants (CAC) monitoring stations and networks, such as Sulphur Dioxide (SO<sub>2</sub>) and Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)

#### Facility / Building Monitoring

Wireless moisture, relative humidity and temperature monitoring in walls and roofs

#### Meteorological Modelling

State-of-the-science meteorological model CALMET (a diagnostic 3-dimensional meteorological model)

#### Dispersion Modelling

From simple (SCREEN3) to advanced (CALPUFF) models, from single source non-variable emissions to multiple-sources with variable emissions, such as:

- Temporary and well test flaring
- Emergency response planning
- Permanent Facilities

#### Forecast Data

Use of real-time forecast data to enhance meteorological and dispersion modelling

#### Custom Applications

Solutions to link remote data with the web and customize client interfaces with secure logins

## Technology

Levelton's diverse range of industry leading professionals use a range of technologies to provide the best solutions for your application. Our engineers, scientists and technicians have experience working with a range of monitoring equipment, communications equipment, computer models and software, such as:

### Monitoring Equipment

- Wireless monitoring equipment
- Meteorological and ambient air monitoring instrumentation
- Laboratory equipment

### Communications Equipment

- Digital / analog cellular modems
- Satellite modems
- Internet communication (IP)

### Web Interface

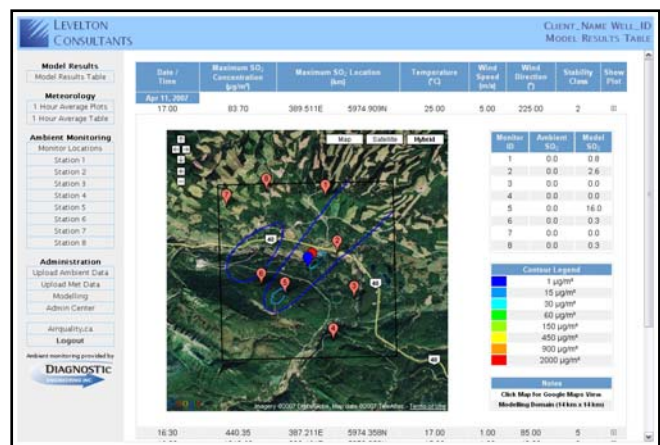
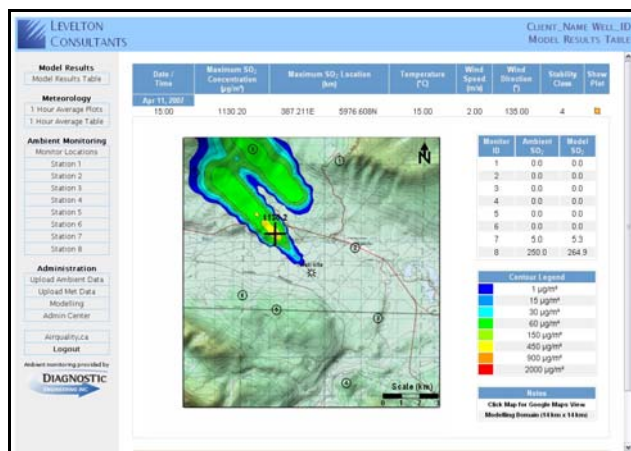
Secure custom websites that are intuitive and easy to use. We have integrated the best internet technologies into our websites, such as Google Maps for contour plotting and mapping.

### Computer Models

- Refined: CALMET / CALPUFF
- Standard: ISC / RTDM
- Dense Gas: SLAB, EUB SLAB, DEGADIS
- Road Models: CALINE3
- Screening: SCREEN3

### Software

- Programming: Visual Basic, .NET, C++, Python, PHP, FORTRAN, MATLAB, Labview
- Databases: Access, SQL Server, MySQL
- GIS: ESRI ArcGIS
- Platforms: Windows, Macintosh, Linux / Unix



### Benefits

- Real-time monitoring, data processing and modelling
- Access to secure real-time information 24 / 7 via the internet
- Automated warning system to send messages by email or text messaging
- Off the shelf and customizable solutions using a wide range of technologies
- Secure, easy to use, personalized website