PEPID™ INTERNET Online

for any end-user with an internet connection

PEPID™ Online can be used by anyone with any Internet connection and a browser. Multiple concurrence product suites are just a click away. Benefits of PEPID Online include:

• Access anywhere with an Internet connection;
• Easy to setup and use—nothing to download or install;
• Any operating system can access PEPID—only requires a valid internet connection and a thin client web browser, like Internet Explorer;
• No installation of PEPID or 3rd party software;
• Not memory dependent; an unlimited number of PEPID products can be accessed simultaneously;
• Widely accessible to a larger number of customers;
• Automatically updated, so you always have the most current information available;
• No bandwidth limitations to get the updates;
• Architecture is open, reusable, and built on existing standards set by governing bodies such as the W3C and Microsoft;
• Full-screen viewing – the Alphabetical Index, medical content and calculators are all on one screen;
• Alphabetical Index is always available on screen;
• Print screen options - hardcopy can be produced anytime;
• Institutional Site Licenses available entire departments, hospitals, healthcare systems and schools.

Online is an excellent choice for institutions and educational settings where access on a workstation is required. PEPID supports auto-login for an entire site via IP authentication.

PEPID™ INTERNET Online Technology

Our online products are ideal for institutions and individual subscribers on wired and wireless PCs. It is also used to deliver PEPID to wireless PDAs. PEPID Online uses the following Internet implementation tools:

• ASP.Net
• ADO.Net
• Web services
• XML
• XSLT

INTERNET Online Implementation

• The PEPID Web server and PEPID Online Web application are deployed on the Internet. A client computer will make an HTTP request to the Web server. See Figure 1 below.
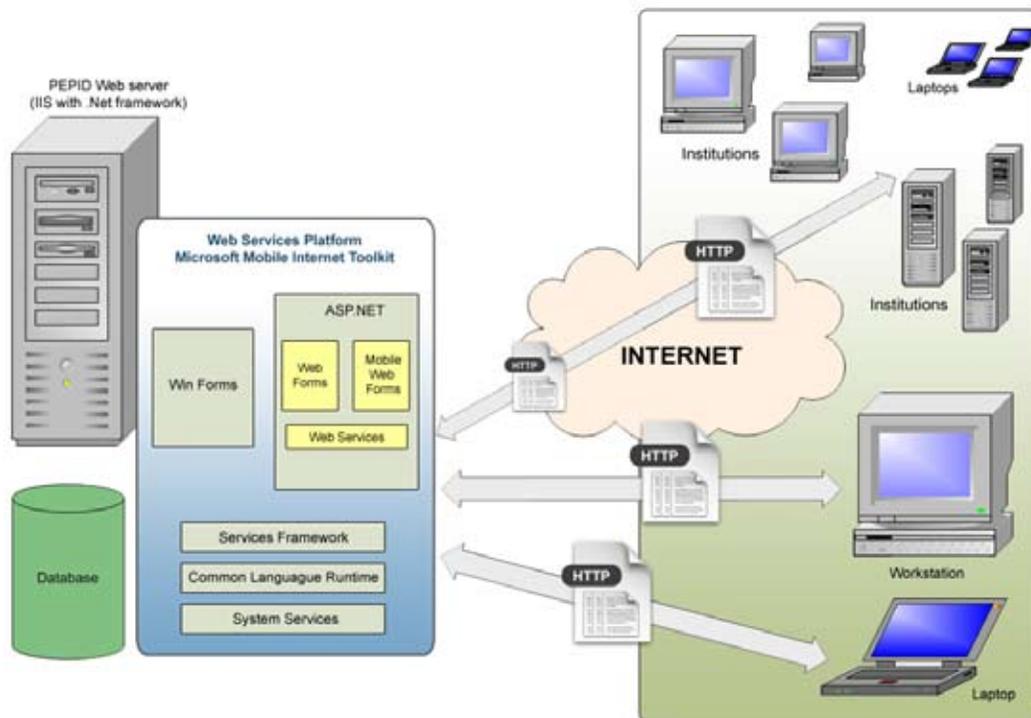

Fig. 1-PEPID Online Web: Application Architecture

• The HTTP request will be processed on the server.
• ASP.Net on the web server extends the .NET Framework Machine.config and web.config files.
• The request to the database is sent through ADO.Net.
• The URL from the HTTP request is used to locate the corresponding Web page which will have a .aspx file extension. The first time an ASPX page is accessed, the page will be compiled. After the ASPX page has been compiled it is instantiated. The business logic contained on the ASPX page is then executed. The business logic includes Medical content retrieval, Drug Interactions, or performing medical or weight-base dosing calculations.
• The security mechanism is implemented by assigning each user the unique ID stored in the database. Large institutions can access the products without logging-in, just based on their IP-address.
• Application allows simultaneous access for hundreds of concurrent users logged in through one account, which is used for large institutions.
• The user interface is designed as a three-frames HTML frameset, which allow having simultaneous access to the logically connected information: Alphabetical Index, Medical and Pharmacological content and Calculators. See Figure 2 right.
• Alphabetical Index is organized as a list of keywords and stored in the separate table of the database. ADO. Net retrieves list of index ID along with Index name and displays the entries in the alphabetical order in the left frame of the screen. Using ADO.Net Recordset. Move property can move to the next or previous page while a user is looking for the particular entry. Search functionality is also implemented.
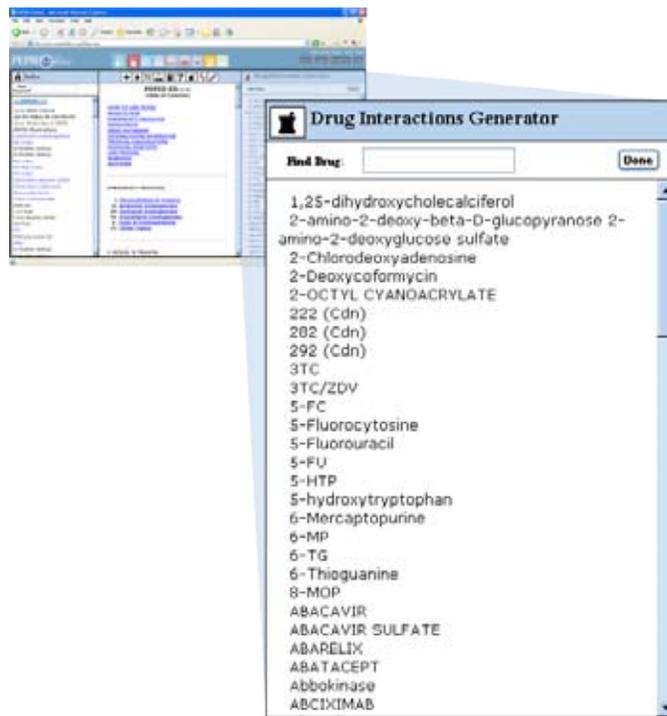
Fig. 2-PEPID™ Online: Drug Interactions Generator

- The Medical and Pharmacological content is stored as a string in the database field. The application generates HTML page on the fly by converting the string to HTML, then formatting it and partly modifying HTML based on the business logic.
- Medical Calculators application works with XML files: validate XML and transfer XML data to HTML page. The units are displayed whether in US or in SI units based on the computer's IP address or country selected by a user when she creates an account.
- Weight-Base Dosing Calculator is a sophisticated multi-page application.
- The Conversion Calculator re-calculates values based on user preference for American or SI units.

- Drug Interactions Generator includes over 5,500 drugs and allows users to determine single and multiple drug interaction, level of danger, etc.
- Medical Illustrations are shown in the right frame on the screen, the content is generated on the fly, that provide improving performance by reducing download time. No additional request to server is required.
- Notes can be created as institutional or personal notes. Notes are sent to the database using ADO.Net.
- The mark-up language (HTML) is then encapsulated in an HTTP response and returned to the requesting client machine.
- ASP.Net extends the .Net Framework to target multiple client machines from a single PEPID Online Web application.
- XML Web services provide a viable solution for enabling data and system interoperability. Web services use XML-based messaging as a fundamental means of data communication to help bridge the differences that exist between systems that use incongruent component models, operating systems, and programming languages.
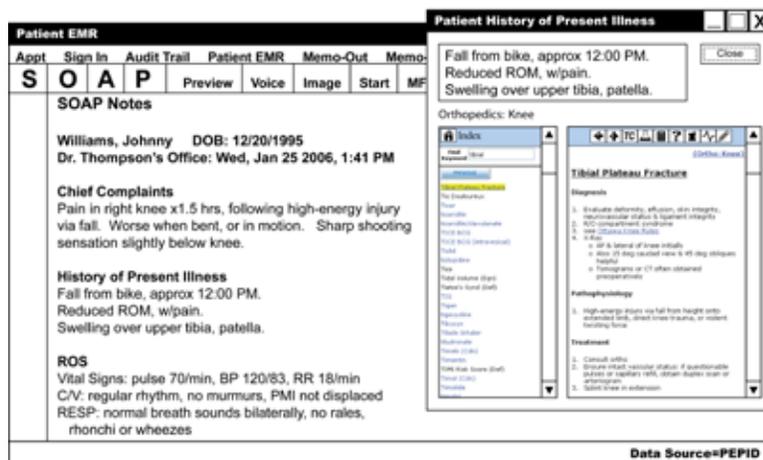

Fig. 3-Example of how PEPID Internet Online is fully integrated into your patient medical record system

PEPID™ INTERNET Online Solutions

The everywhere solution to your clinical information needs. Access PEPID anytime, anywhere with a desktop, laptop, mobile cart or a wireless handheld device—just connect to the Web.