URL

URL stands for **Uniform Resource Locator**. A URL is a formatted text string used by Web browsers, email clients and other software to identify a *network resource* on the Internet. Network resources are files that can be plain Web pages, other text documents, graphics, or programs.

URL strings consist of three parts (*substrings*):

- network protocol

- host name or address

- file or resource location

These substrings are separated by special characters as follows:

protocol :// host / location

URL Protocol

The 'protocol' substring defines a network protocol to be used to access a resource. These strings are short names followed by the three characters '://' (a simple naming convention to denote a protocol definition).

 Typical URL protocols include

- *http://*
- *ftp://*
- *mailto://*

URL Host

The 'host' substring identifies a computer or other network device. Hosts come from standard Internet

databases such as DNS and can be names or IP addresses.

For example,

compnetworking.about.com is the host for this Web page.

URL Location

The 'location' substring contains a path to one specific network resource on the host. Resources are normally located in a host directory or folder.

For example,

/od/internetaccessbestuses/bldef-url.htm is the location of this Web page including two subdirectories and the file name.

When the location element is omitted such as in *http://compnetworking.about.com/*, the URL conventionally points to the root directory of the host and often a home page (like 'index.htm').

Absolute vs. Relative URLs

Full URLs featuring all three substrings are called *absolute* URLs. In some cases such as within Web pages, URLs can contain only the one location element. These are called *relative* URLs. Relative URLs are used for efficiency by Web servers and a few other programs when they already know the correct URL protocol and host.