UseCase_3_Sample_Platform_Configurations

TeamSTARS "tsWxGTUI_PyVx" Toolkit
with **Python** 2x & **Python** 3x based
Command Line Interface (CLI)
and **"Curses"**-based **"wxPython"**-style
Graphical-Text User Interface (GUI)

Get that cross-platform, pixel-mode "wxPython" feeling on platforms with:

- 64-bit processors, nCurses 6.x, 64-bit Python 3.6.x or later GUI applications and character-mode 256-/16-/8- color (xterm-family) and non-color (vt100-family) terminals and terminal emulators.
- 32-bit processors, nCurses 6.x/5.x, 32-bit Python 3.5.2 or earlier GUI applications and character-mode 16-/8-color (xterm-family) and non-color (vt100-family) terminals and terminal emulators.

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Readily available consumer-oriented configurations suitable for use as software & documentation development systems and as tag along "simulations" of customized application-specific embedded systems.

Hypervisor Virtual Machines (Table of Contents)

- A **Hypervisor** or **Virtual Machine Monitor** (**VMM**) is a piece of computer software, firmware or hardware that creates and runs virtual machines.
- A computer on which a Hypervisor is running one or more Virtual Machines is defined as a Host Machine.
- Each Virtual Machine is called a Guest Machine.
- The Hypervisor presents the Guest Operating Systems with a virtual operating platform and manages the execution of the Guest Operating Systems.
- Multiple instances of a variety of operating systems may share the virtualized hardware resources.
- **Parallels Desktop for Mac,** by Parallels, and **VMware Fusion,** by VMware are Hypervisors that provides hardware virtualization only for Macintosh Host computers with Intel x86 or x64 processors that are running Mac OS X. Each Virtual Machine can execute its own operating system, including versions of Microsoft Windows, Linux, BSD Unix, and MS-DOS.
- **VMware Workstation,** by VMware, is a Hypervisor that runs on x64 Host computers (an x86 version of earlier releases was available) running Linux or Microsoft Windows. Each Virtual Machine can execute its own operating system, including versions of Microsoft Windows, Linux, BSD Unix, and MS-DOS.

Budget Development Laptop and Pseudo "Embedded" System (Table of Contents)

- **1998 Dell Inspiron 7000 Hardware**
  - 366 MHz **Intel Pentium II** processor
  - 384 MB RAM
  - 15.6" **VGA** (640x480) / **SVGA** (1024x768) pixel LCD display
  - Two Interchangeable 32 GB (4200 RPM) ATA hard drives
    - **Microsoft Windows XP**
    - **Ubuntu Linux** 12.04 LTS
  - **Xircom** Ethernet and 3Com WiFi Wireless Plug-in Network adapters for **Microsoft Windows XP**
  - **Linksys** WiFi Wireless Plug-in Network adapter for **Ubuntu Linux** 12.04 LTS
- **Development / Pseudo (non-optimized) Embedded Software**
  - **Microsoft Windows XP Configuration**
    - Cygwin 1.7 (includes various GNU, Linux & Python components)
    - Office 2002
    - XEmacs
    - Python 2x & 3x
  - **Ubuntu Linux 12.04 LTS Configuration**
    - GNOME Desktop
    - LibraOffice
    - XEmacs
    - Python 2x & 3x

Professional Development Laptop and Guest "Embedded" System (Table of Contents)

- **2007 Apple MacBook Pro Hardware**
  - 2.33 GHz Intel Core 2 Duo processor
  - 4 GB RAM
  - 17" 1920x1200 pixel LCD display
  - 160 GB (5400 RPM) SATA 1.5 Gb/s internal hard drive
  - 1.5 TB (7200 RPM) SATA 3 Gb/s external hard drive
  - Ethernet Network Adapter
  - WiFi Wireless Network Adapter
- **Development / Embedded Software**
  - MAC OS X 10.7.5 Lion
  - Wing IDE 3-4
  - LibreOffice
  - Xemacs
  - Python 2x & 3x
- **Guest (non-optimized) Embedded Software**
  - **Parallels Desktop** 8 Hypervisor for running Guest OS:
    - Linux (Fedora 20 32-bit, OpenSuSE 12.2 32-bit, Scientific (CentOS) 6.4-6.5 64-bit, Ubuntu 12.04 32-bit) with Python 2.7 and 3.2 with Wing IDE 3, LibraOffice and XEmacs
    - Microsoft Windows (XP, 7, 8 & 8.1 each with Cygwin 1.7.8) with Wing IDE 3, AuthorIt-5, Office 2002 & XEmacs
    - Unix (PC-BSD 9.2-10.0, OpenIndiana 151a3 & OpenSolaris 11) with LibraOffice and Xemacs
  - **VMware Fusion** 7 Hypervisor for running Guest OS:
    - Linux (OpenSuSE 13.1)
    - Microsoft Windows (2000)

Professional Development Workstation and Guest "Embedded" System (Table of Contents)

- **2013 Apple iMac Desktop Hardware**
  - 3.5 GHz Intel Quad Core i7 processor
  - 16 GB RAM
  - 27" 2560x1440 pixel LCD display
  - 3 TB (7200 RPM) SATA 6 Gb/s internal hard drive with 128 GB Solid State Flash memory
  - Ethernet Network Adapter
  - WiFi Wireless Network Adapter
- **Development / Embedded Software**
  - MAC OS X 10.11 El Capitan
  - Wing IDE 5
  - LibreOffice
  - Microsoft Office for Mac 2011
  - Xemacs
  - Python 2x & 3x
- **Guest (non-optimized) Embedded Software**
  - **Parallels Desktop** 11 Hypervisor for running Guest OS:
    - Linux (Centos 7, Debian 8, Fedora 22, OpenSuSE 13.2, Scientific 7 & Ubuntu 14.04 LTS & 15.04) with Wing IDE 5, LibraOffice and XEmacs
    - Microsoft Windows (XP, 7, 8, 8.1 & 10) with Wing IDE 5, AuthorIt-5, Office 2002 & XEmacs
    - Unix (FreeBSD 11/PC-BSD 11, OpenIndiana 151a8 & OpenSolaris 11) with LibraOffice and Xemacs
  - **VMware Fusion** 7 Hypervisor for running Guest OS:
    - Linux (OpenSuSE 13.1)
    - Microsoft Windows (2000)