WSPECEM

A Spectrum emulator

A brief introduction to interpretative emulation theory

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Project Goals

- Execute all Spectrum programs
- Minimize program errors
- Ease of use for the final user
- Able to recognize several snapshot formats
- Capable of reading real tapes

Description

- Emulates Spectrum 48K under Windows
- Supports all snapshot formats
- Joystick, keyboard, screen, sound and tape support
- Full 32-bit program under 95/NT
- Automated Setup utility and online help

FOR MORE INFO...

Access the emulator site at http://www.idt.ipp.t/~rff-ribe/

Read the WSpecEm's help file

WSpecEm vs other emulators

- Strengths
  - runs under Windows
  - compatibility with original Spectrum
  - easy of use
- Weaknesses
  - speed in slow machines
  - lack of Spectrum 128K emulation
  - does not emulate screen scanning

Current Status

- Large user base
  - published into at least 2 magazines
  - uncountable e-mail messages received
- Project status
  - 16-bit and 32-bit version
  - uses WinG and DirectDraw
  - own WEB and ftp site 
  - experimental WAVE sound code

Uses for emulation

- Run incompatible software in a radically different machine
- Debug software
- Cheap way to learn different architectures
- Data transfer trough obsolete hardware

Emulator types

- Hardware emulators
- Hardware and software emulators
- Software emulators

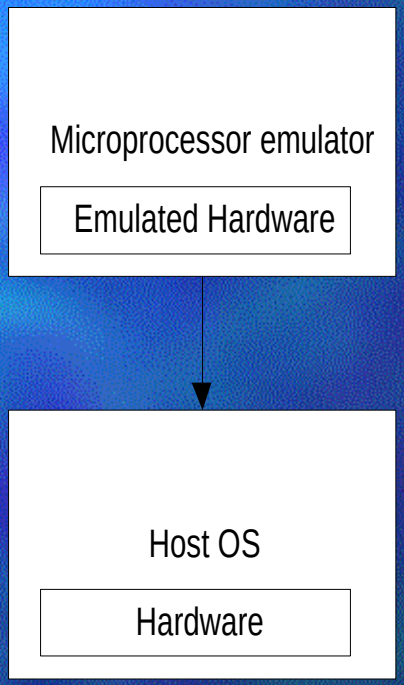
Emulation by software

- OS emulation
  - emulates OS calls, possibly with the same microprocessor in a different machine
- Machine emulation
  - interpretative emulation
  - binary code recompilation
  - dynamic code recompilation

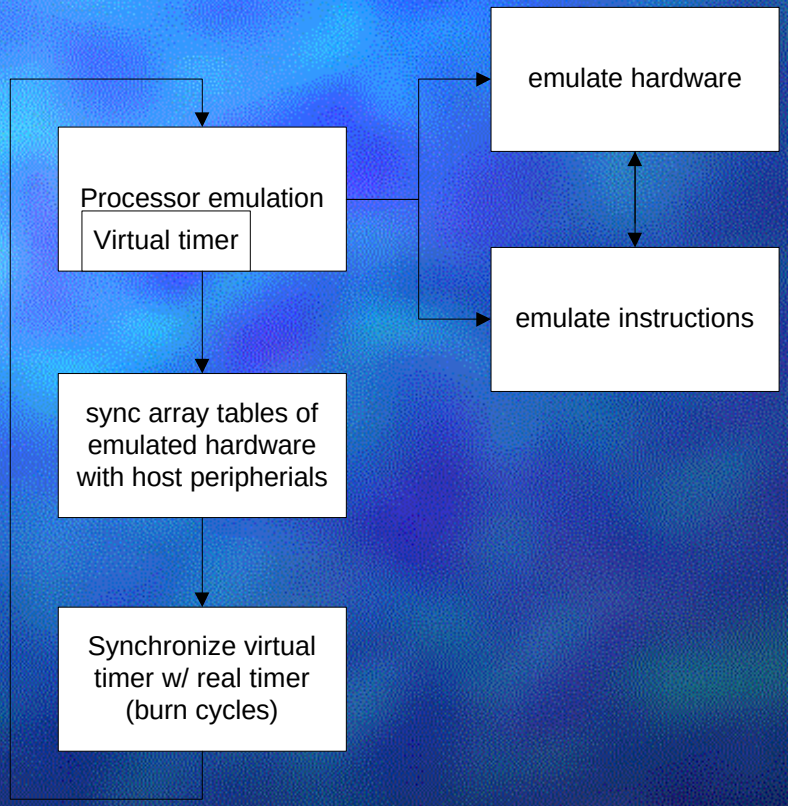
Machine emulation

Emulated Machine

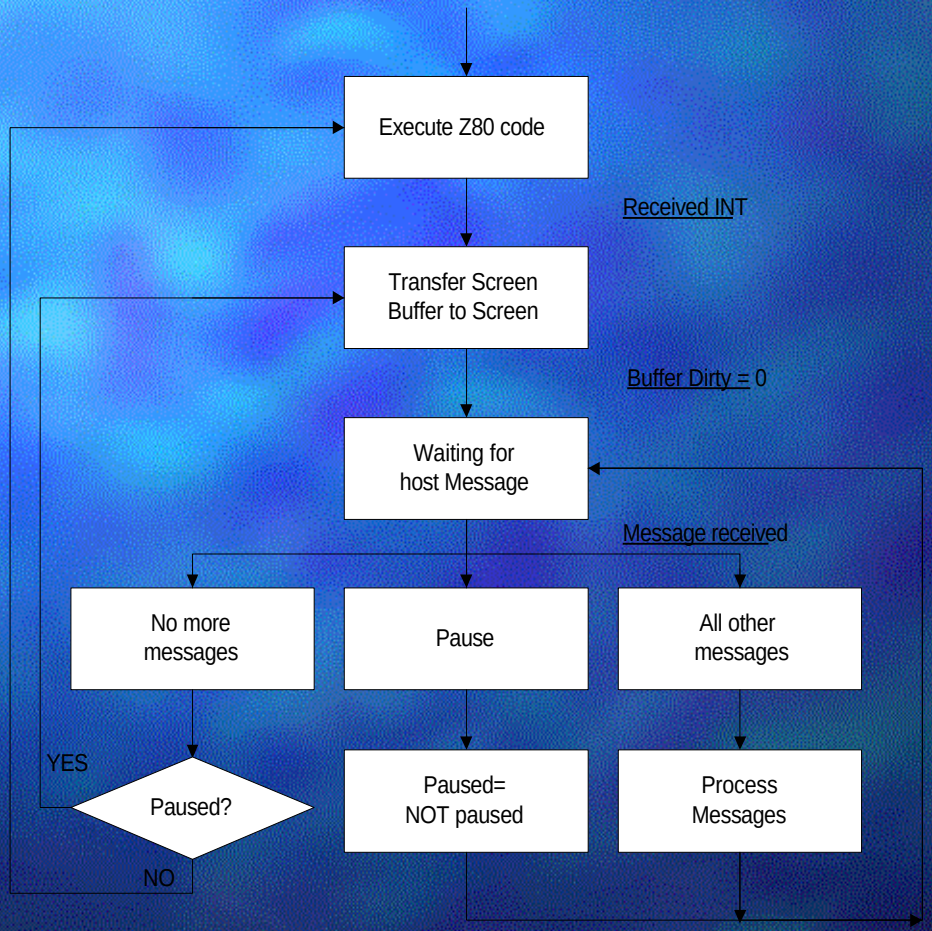
Host Machine



Interpretative emulation



Emulator main cycle



Execute() service chart