CS 535 Object-Oriented Programming & Design Fall Semester, 2013 Doc 4 Starting VisualWorks Sept 3 2013

Copyright ©, All rights reserved. 2013 SDSU & Roger Whitney, 5500 Campanile Drive, San Diego, CA 92182-7700 USA. OpenContent (http:// www.opencontent.org/openpub/) license defines the copyright on this document.

Reference

VisualWorks Application Developer's Guide, doc/AppDevGuide.pdf in the VisualWorks installation. Chapter 1 The VisualWorks Environment.

Learning Smalltalk

Smalltalk language syntax

Smalltalk Programming Environment

Smalltalk Class Library

Object-oriented thinking

This is the hardest part

Smalltalk culture

Versions of Smalltalk

VisualWorks

Squeak

Pharo

VisualAge for Smalltalk

Dolphin

Smalltalk X

Smallscript (.NET Smalltalk)

Amber

Bytecode & VMs

Smalltalk is compiled to a bytecode for a virtual machine

VisualWorks has VM's for: Windows Macintosh Unix/Linux

VisualWork's virtual machine (VM) uses a JIT to compile bytecodes

Parts of VisualWorks

Executable Virtual Machine (visual, visual.exe) This is the VM that interprets Smalltalk bytecode

visual.sou

Source code for most of class library

visual.cha

Source code for changes & new classes Does not exist until after you first use VisualWorks

visual.im

Bytecode of sources that are executed

At first the image will appear to be an IDE for Smalltalk

Download Visualworks

Follow instructions at:

http://www.cincomsmalltalk.com/main/products/visualworks/download/

Starting VisualWorks on Windows

visual.exe - in bin directory of VisualWorks installation

visualnc.im - in image directory

Method 1

Drag and drop the image file on the Visual application or visual.exe

Method 2

Double click on the image file

The first time you do this you may get a dialog asking for the application to run the image. Select visual. You will have to find it first. It is in the bin directory.

Locked Image Problem - Mac & PC

visualnc.im file is read only

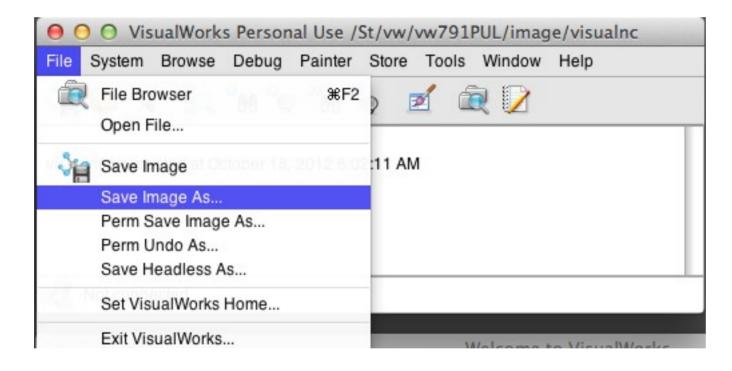
Will not be able save changes

Need to make a read/write copy

One Way to make Read/Write Copy

Start VisualWorks

Save Image As...



The saved image should be read/write

Mac Mountain Lion Security Issue

After mounting ISO clicking on



Results in error message like:

\sim	"New App" is damaged and can't be		
	opened. You should move it to the Trash		
	Safari downloaded this file on July 30, 2012 from www.example.com.		
?)			

Mac Mountain Lion Security Issue

Need to change Security Setting then can run installer

	General FileVault Firewall	Privacy
A login password	has been set for this user Chan	ge Password
Require pa	assword immediately ‡ after sl	eep or screen saver begins
Show a me	essage when the screen is locked	Set Lock Message
Disable au	tomatic login	
Allow application	s downloaded from:	
O Mac App S	itore	
Mac App S	tore and identified developers	
Anywhere		

Starting VisualWorks on Macintosh

Method 1

Drag and drop the image file on the visual application

Method 2

Double click on the image file

Starting VisualWorks with UNIX command line

Type:

visual imageFilename &

where you need to replace imageFilename with the actual name of the image file you wish to run

Your path has to be set to include the program visual

The Desktop short cut

Installer creates a desktop short cut to launch VisualWorks Smalltalk

Avoid using it

Will cause you problems later

The Desktop short cut

Select: Typically Installed Components
1.0Mb
210.2Mb
0.4Mb
9.1Mb
1.2Mb
18.2Mb 4.4Mb
Space required: 720.0M

Do not select this option

Windows on Startup

Launcher

Workspace

\varTheta 🔿 🔿 VisualWorks Personal Use /St/vw/vw791PUL/image/CS535Base	\varTheta O O Welcome to VisualWorks	
File System Browse Debug Painter Store Tools Window Help	Page Edit Smalltalk Options Help	
∛a Ç 🛠 🔍 °n °o "n "o 🗹 🔍 📝		
	Getting Started Overview Features Introduction Variables	
visualnc.im created at October 18, 2012 8:02:11 AM	Introduction to VisualWorks Smalltalk	4
/St/vw/vw791PUL/image/CS535Base.im created at September 2, 2013 3:22:26 PM	Copyright © May 2003, Ivan Tomek (references updated 2011 by Niall Ross)	0
	(Please send comments, suggestions, and corrections to ivan.tomek@acadiau.ca,	т
	www.).	
	Disclaimer: This is an unsolicited contribution and not an official component of the	
Not connected	environment. All errors and inconsistencies are mine and I do not assume any legal	
	responsibility for them.	1
	Preface	I
	This Workspace introduces the main concepts of Smalltalk in general, and VisualWorks	
	Smalltalk in particular. It explains the language, the environment, its essential	
	components, and the principles of developing a complete Smalltalk application. The	
	text is interactive and you can edit it, execute all examples, modify them, and add and	
	execute your own code.	
	I use the following colors to emphasize different types of information:	Ŧ
	Text or Smalltalk code	II

Demo