Installing and Using the SnapshotCM GUI on Linux

SnapshotCM provides full functionality via an easy-to-use, full featured GUI running on Windows. This note describes how to install and run that same GUI on x86 systems running Linux.

Overview

The SnapshotCM GUI on Linux makes use of Wine, an open-source implementation of the Win32 API for x86 based systems. The basic plan is to:

1. Install the SnapshotCM native clients
2. Install and configure wine
3. Install the SnapshotCM GUI components into wine
4. Integrate the SnapshotCM GUI into the Linux desktop.

This documentation was tested using Wine 1.2 and SnapshotCM 1.85.1.7 running on the Ubuntu 10.04 LTS Linux distribution released May, 2010. We used the GUI components from SnapshotCM 1.85.1.7 built for Windows NT.

Install the SnapshotCM Clients

If you haven't already done this, see http://www.truebluesoftware.com/docs/Admin.html#UnixInstall. You will need the latest version of the clients for your platform.

Install Wine

On Ubuntu, we used the Synaptic Package Manager to install wine version 1.2.

Note for Fedora 13:

- Install "wine-1.3.7-2.fc13 (x86_64)" package.
- Run "Wine Configuration" application.
- Follow install directions below, except put files in "Program Files (x86)" and edit script accordingly.
- Create Application launcher to invoke the "truecm.sh" script.

If you try it with other Linux distributions or versions of wine, let us know.

Configure Wine

Run the following commands to configure the Wine file system mappings:

```
mkdir –p "${WINEPREFIX:-$HOME/.wine}/dosdevices"
mkdir –p "${WINEPREFIX:-$HOME/.wine}/drive_c/Program Files/True Blue Software/SnapshotCM"
ln –s ../drive_c "$(WINEPREFIX:-$HOME/.wine}/dosdevices/c:"
ln –s / "$(WINEPREFIX:-$HOME/.wine}/dosdevices/z:"
```

Notes:

- ➔ The $WINEPREFIX environment variable defines where Wine configuration and windows files are stored. It defaults to $HOME/.wine, which is duplicated in the above commands.
- ➔ The dosdevices subdirectory contains an entry for each file system you want to appear in wine applications. Typically it contains two entries, c: and z:, where c: is a symbolic link to ../drive_c and z: is a symbolic link to /. By editing these symbolic links and adding new ones, you can configure which parts of your Linux file system are visible to wine applications.

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➔ The drive_c directory hierarchy will be populated with additional windows files once you start a windows program using wine. This is the directory hierarchy into which to install the SnapshotCM GUI components.

Install the SnapshotCM GUI into Wine

1. Download and unpack the http://www.truebluesoftware.com/eval/SnapshotCM.1.85.1.7.wine.tar.gz package into the $WINEPREFIX/drive_c/Program Files/True Blue Software/SnapshotCM directory:

```
mkdir –p "${WINEPREFIX:-$HOME/.wine}/drive_c/Program Files/True Blue Software/SnapshotCM"
cd "${WINEPREFIX:-$HOME/.wine}/drive_c/Program Files/True Blue Software/SnapshotCM"
gunzip <SnapshotCM.1.85.1.7.wine.tar.gz | tar xvf  –
```

   which should install the following files from the Windows NT version of SnapshotCM:

   cmclient.dll cmdbcl.dll libcm.dll libgui.dll NSViews.dll mfc42.dll truecm.exe

   plus a copy of the "truecm.sh" script to start the SnapshotCM GUI using wine.

2. Run the truecm.sh script. It should start the GUI after a few seconds. If there are errors, check the WINE.out file.

   Script notes (check here if you experience problems):

   ➔ The truecm.sh script contains commands to start the SnapshotCM GUI using wine. If you didn't install into the default wine location, you will need to edit the DIR variable in the script to set the correct path to the truecm.exe file. You may also need to set the script mode to 755.

   ➔ The SNAPSHOTCM_WMAP environment variable tells the GUI to use the standard Linux location to find the workspace mappings file.

      - Note that non-Windows builds of SnapshotCM ignore any Windows drive prefix in the workspace path. This way, paths written by the GUI (which will contain a drive prefix) will not confuse the native programs.
      - In a similar way, if all unix workspaces are sym linked into the drive_c hierarchy such that the full path name is unchanged, then the GUI will understand existing workspaces without a drive prefix. Example: For workspaces under /work, run "ln –s /work drive_c/work".
      - New in 1.85.2+ GUI versions (not in the described 1.85.1.7 bits): If a workspace location does not have a drive prefix, is not a network path (starting with "//"), and is not accessible to the GUI run-time as is (that is, it is not accessible through drive_c), it is prefixed with "z:" (which we assume is linked to "/"). This way, your Linux mappings should work directly without change.

   ➔ The SNAPSHOTCM_DISABLE_ADS environment variable tells the GUI to use the non-ADS location for workspace cache files, so the native CLI and GUI will share cache files.

Integrate the SnapshotCM GUI into the Desktop

We suggest that you add a menu to invoke the truecm.sh script. Typically, you will find an Edit Menus link or a Create Launcher link or something of that ilk by right-clicking the desktop or the system menus.

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Known Problems

- The default value for end-of-line mode in new workspaces is derived from the most used mode in all workspace mounts. If there is no majority use (or no workspaces at all), the default in the GUI will fall back to windows mode, while the CLI defaults match that of the OS platform.
- Built-in file diff and merge do not work (CreateProcess redirection issues in wine emulation). However, external diff and merge do work, including tkdiff if you've installed that on your linux system.
- Default actions on files are not implemented (no associations).
- On-line help does not display (may help to install the help file).
- WB: Mount point overlay not shown on icons, neither is overlay on locked files.
- PB Tree View: Tooltips on tree items not shown (they are shown in graph).
- PB Tree View: Selecting SS to promote sometimes moves selection to last SS.
- Workspace refresh on file system change *mostly* works.
- Let us know of any others you find.

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