

OpenSUSE 13.2 - Using PUTTY and the script command to log sessions

The presentation will obtain the PUTTY client for Windows, setup a PUTTY session with OpenSUSE, setup the PUTTY log, and use the script command to log a session. PUTTY and the script command may be used separately.

Preuss
2/5/2015

The presentation log into the linux system (this is the class OpenSUSE 13.2).

Automatic Bridging Settings

Select the host network adapter(s) you want to automatically bridge:

- DW1501 Wireless-N WLAN Half-Mini Card
- Intel(R) 82579LM Gigabit Network Connection
- Microsoft Virtual Miniport Adapter

OK Cancel Help

Device status

- Connected
- Connect at power on

Network connection

- Bridged:
 - Replicate physical address
- NAT: Used to share
- Host-only: A private
- Custom: Specific vir
 - VMnet0
- LAN segment:
 -

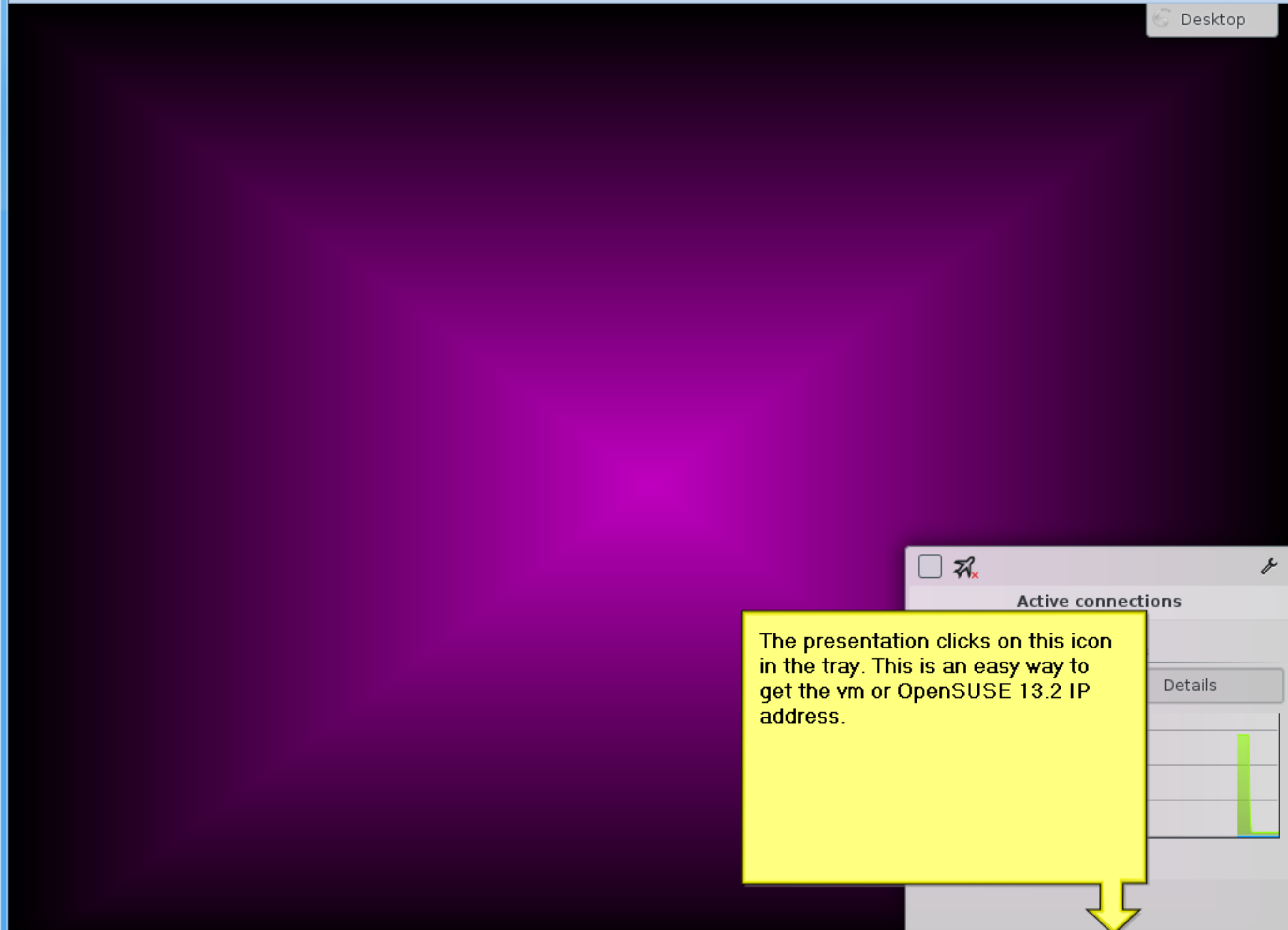
2. The presentation forces the virtual machine bridge mode to use the wired network adapter.

1. The presentation changes the network connection to bridged. The presentation is connected to a network that provides an IP address to all systems.

Note: NAT should work and does work for some people. It does not work for the presentation.

Add... Remove

OK Cancel Help



The presentation clicks on this icon in the tray. This is an easy way to get the vm or OpenSUSE 13.2 IP address.

Active connections

Details

- PuTTY (the Telnet and SSH client itself)
- PSCP (an SCP client, i.e. command-line secure file copy)
- PSFTP (an SFTP client, i.e. general file transfer sessions)
- PuTTYtel (a Telnet-only client)
- Plink (a command-line interface to the PuTTY back ends)
- Pageant (an SSH authentication agent for PuTTY, PSCP, PSFTP)
- PuTTYgen (an RSA and DSA key generation utility).

The presentation is now on the host Windows computer. This is a web page to download PUTTY.

LEGAL WARNING: Use of PuTTY, PSCP, PSFTP and Plink is illegal in countries where encryption is outlawed. I believe it is legal to use PuTTY, PSCP, PSFTP and Plink in England and Wales and in many other countries, but I am not a lawyer and so if in doubt you should seek legal advice before downloading it. You may find [this site](#) useful (it's a survey of cryptography laws in many countries) but I can't vouch for its correctness.

Use of the Telnet-only binary (PuTTYtel) is unrestricted by any cryptography laws.

There are cryptographic signatures available for all the files we offer below. We also supply cryptographically signed lists of checksums. To download our public keys and find out more about our signature policy, visit the [Keys page](#). If you need a Windows program to compute MD5 checksums, you could try the one at [this site](#). (This MD5 program is also cryptographically signed by its author.)

Binaries

The latest release version (beta 0.63). This will generally be a version I think is reasonably likely to work well. If you have a problem with the release version, it might be worth trying out the latest development snapshot (below) to see if I've already fixed the bug, before reporting it to me.

For Windows on Intel x86

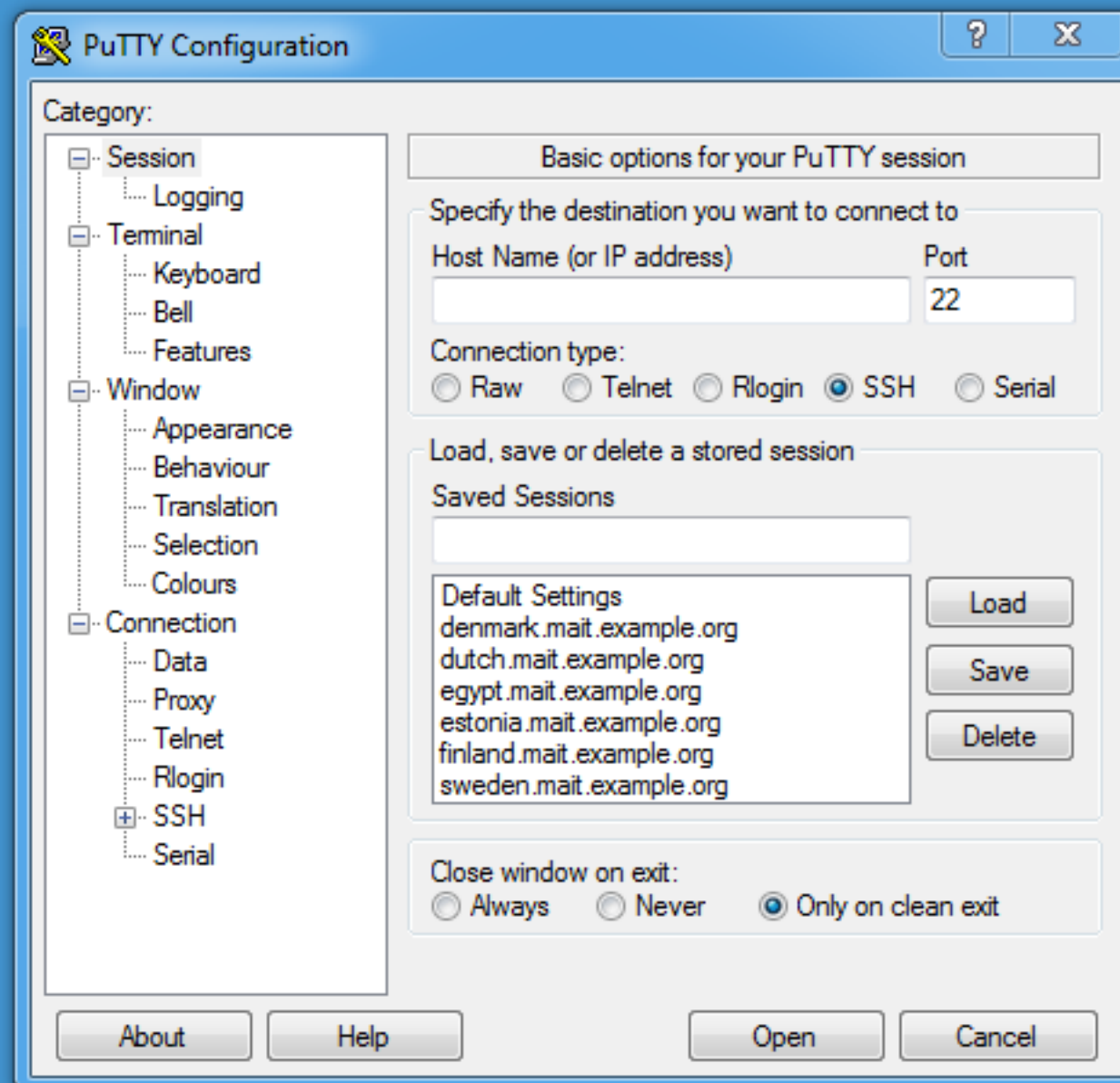
PuTTY:	putty.exe	(RSA sig)	(DSA sig)
PuTTYtel:	puttytel.exe	(RSA sig)	(DSA sig)
PSCP:	pscp.exe	(RSA sig)	(DSA sig)
PSFTP:	psftp.exe	(RSA sig)	(DSA sig)
Plink:	plink.exe	(or by FTP)	(RSA sig) (DSA sig)
Pageant:	pageant.exe	(or by FTP)	(RSA sig) (DSA sig)
PuTTYgen:	puttygen.exe	(or by FTP)	(RSA sig) (DSA sig)

This is the only file you need. The presentation will download the file to Windows.

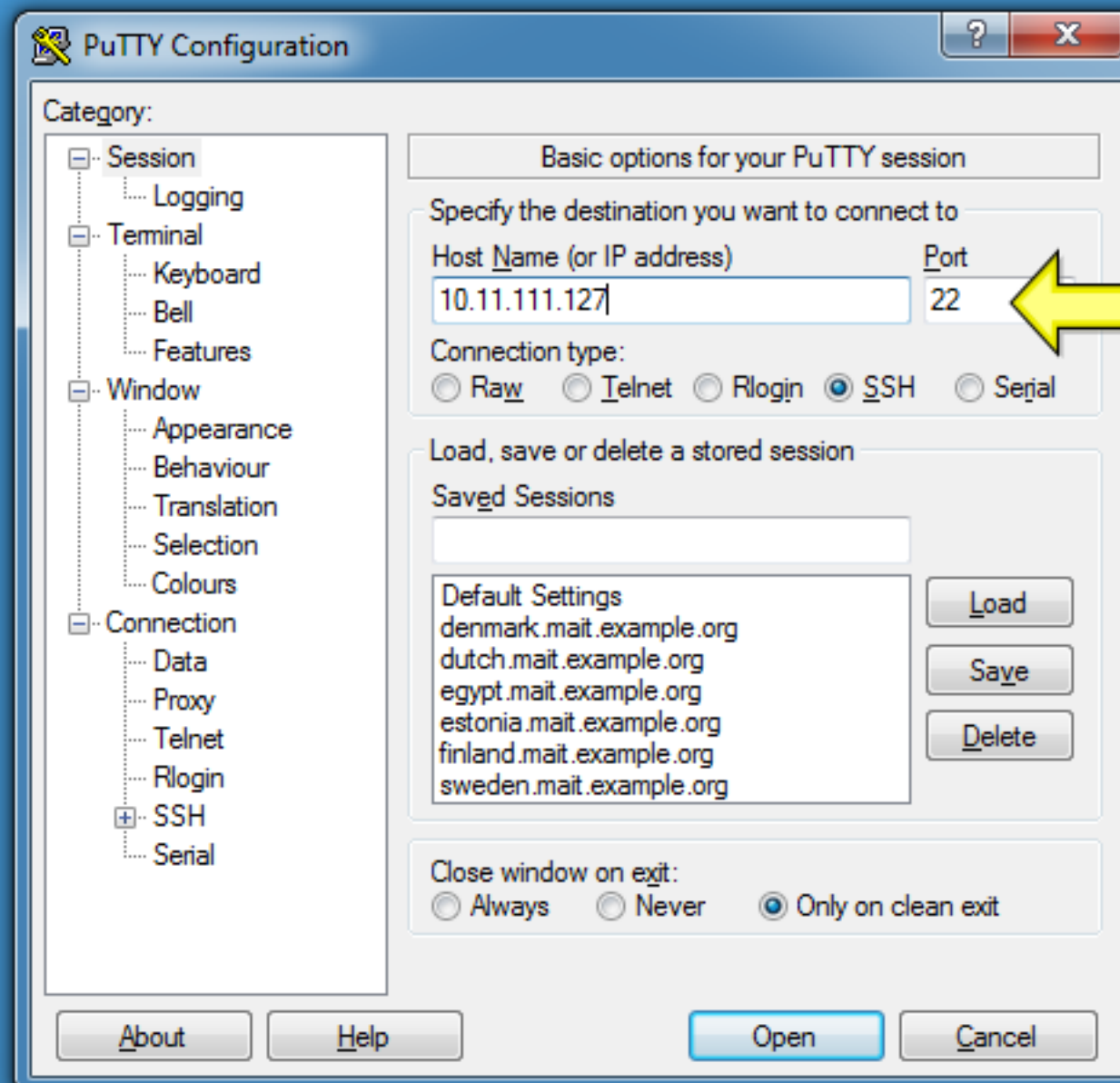
A .ZIP file containing all the binaries (except PuTTYtel), and also the help files

Zip file:	putty.zip	(or by FTP)	(RSA sig) (DSA sig)
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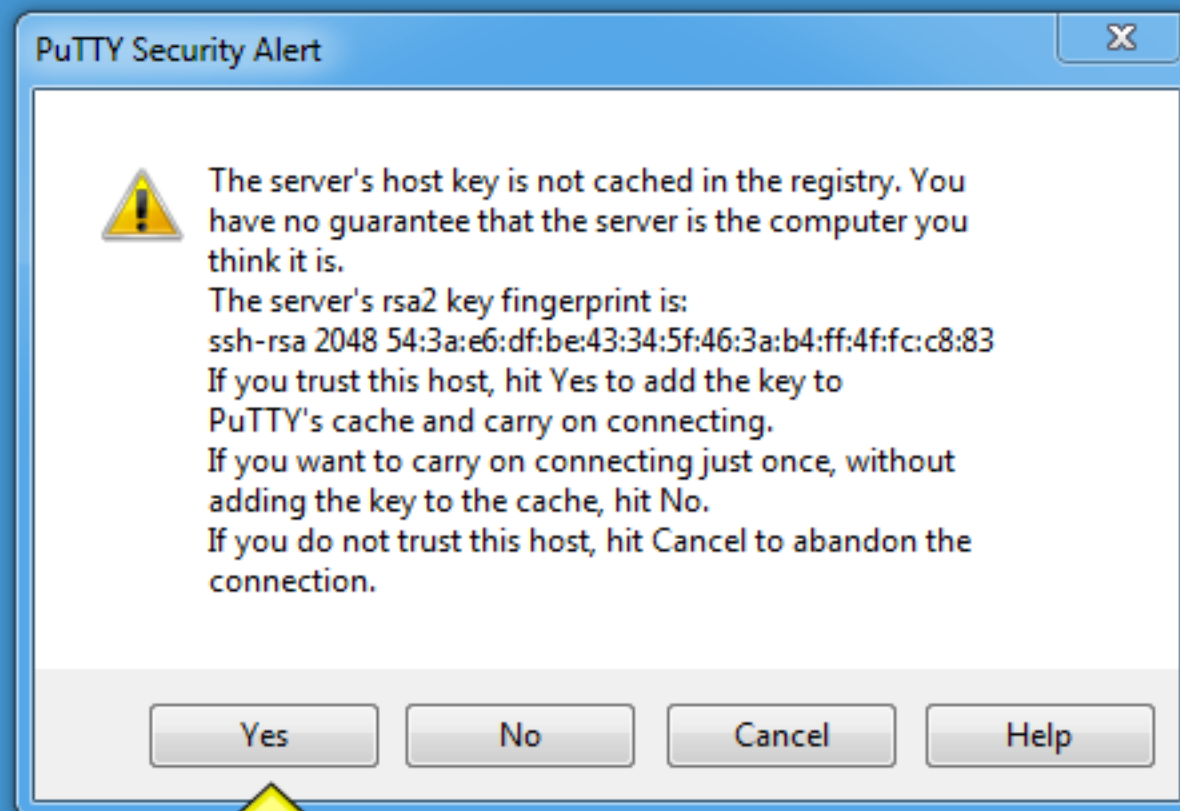
A Windows installer for everything except PuTTYtel



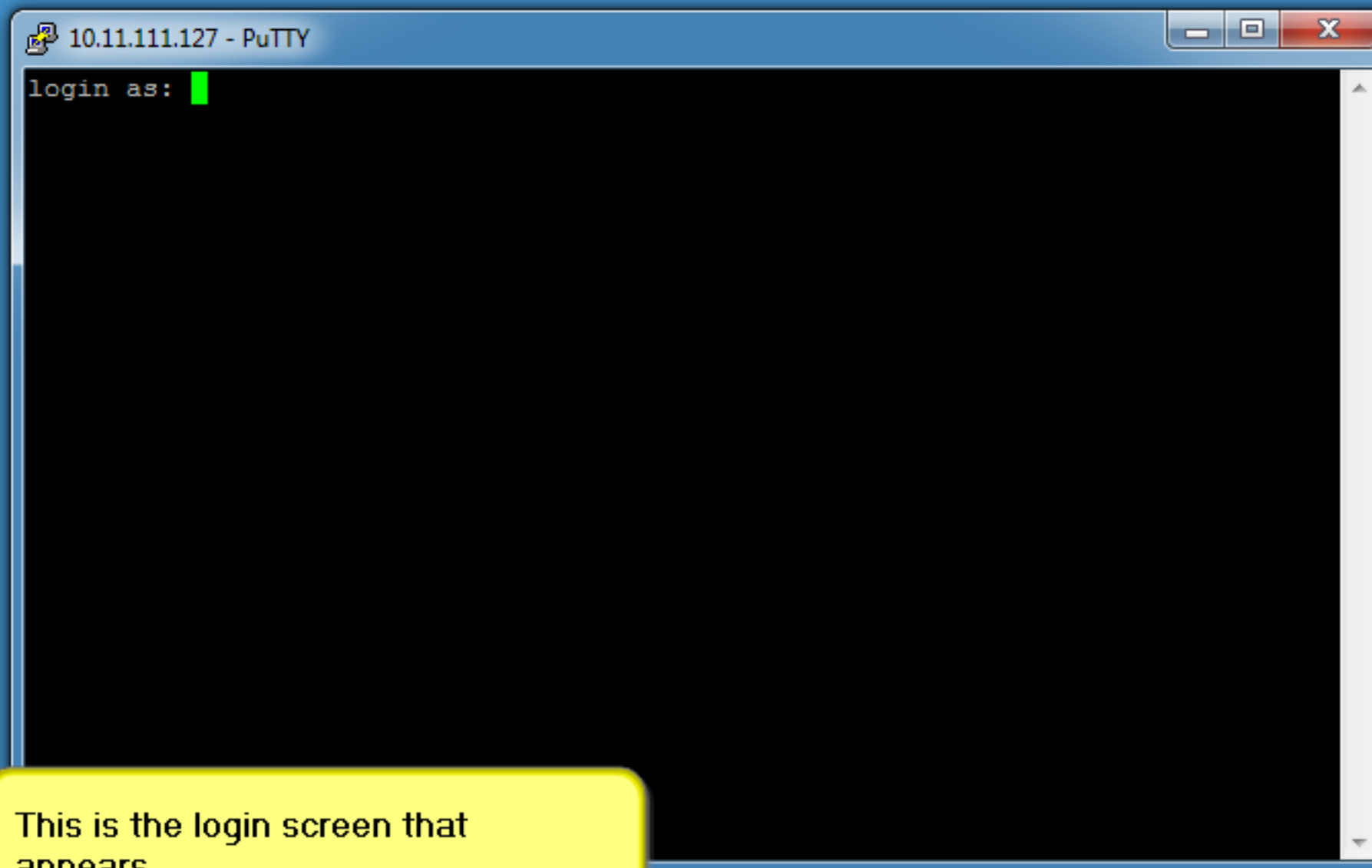
The presentation finds the download PUTTY file. The presentation double click on the Windows PUTTY program. This is the result.



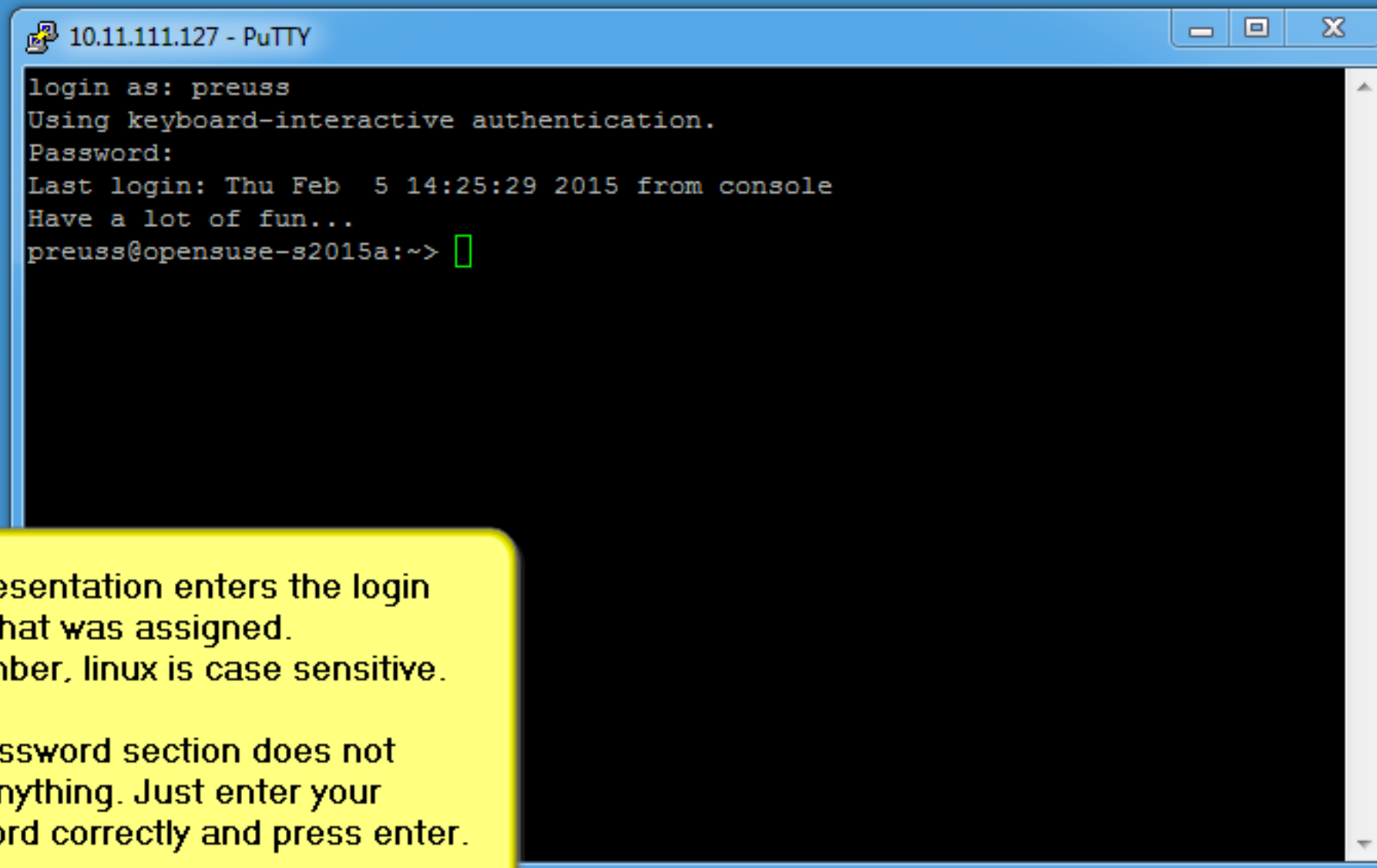
The presentation puts the IP address of the OpenSUSE 13.2 or other Linux host in the Host Name box. The presentation leaves the Port at 22. The presentation clicks the open button.



This is the first time connect message. The presentation knows this is the correct computer, the OpenSUSE 13.2 image or other Linux vm. The presentation selects the Yes button.



This is the login screen that appears.

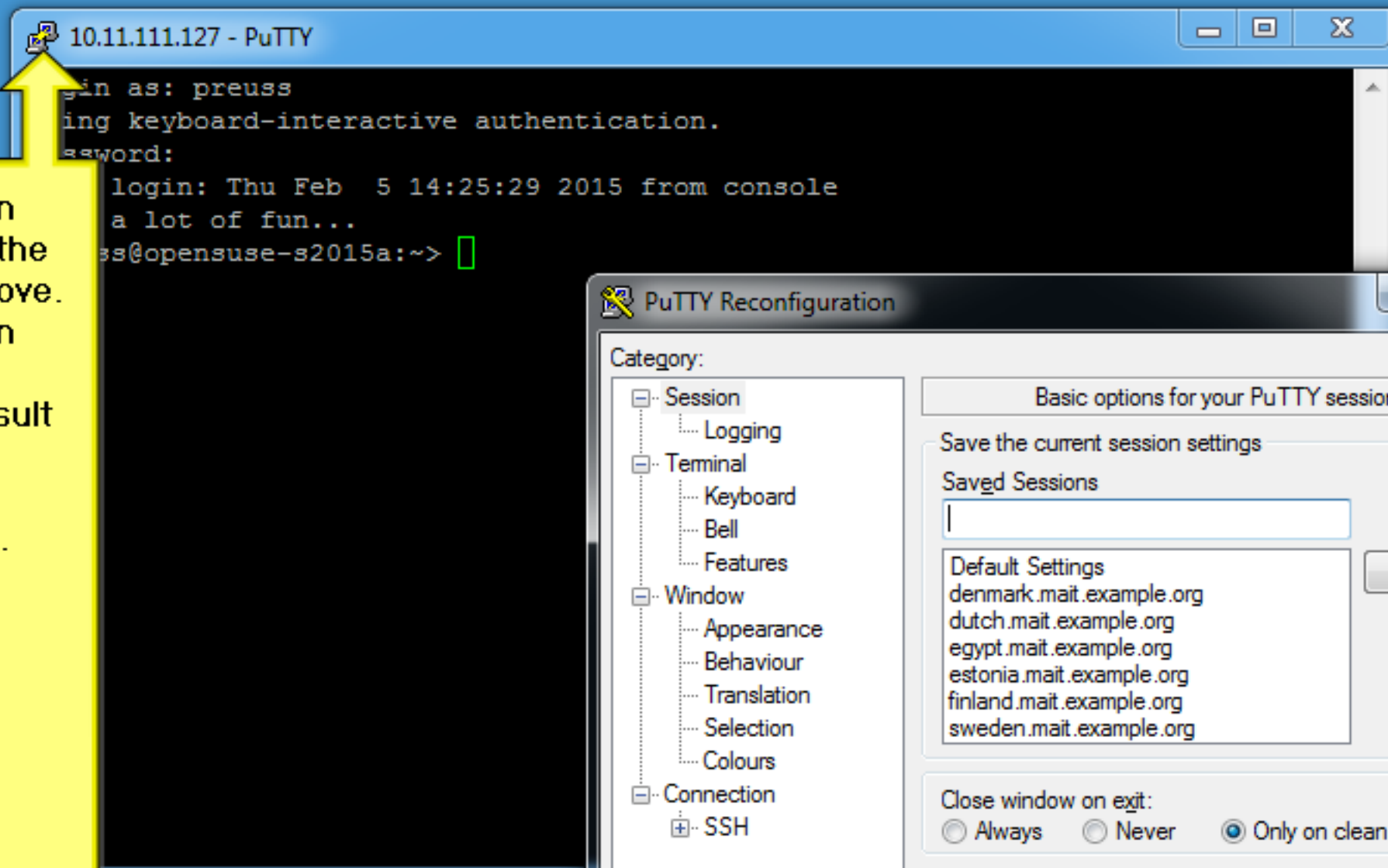


```
10.11.111.127 - PuTTY
login as: preuss
Using keyboard-interactive authentication.
Password:
Last login: Thu Feb  5 14:25:29 2015 from console
Have a lot of fun...
preuss@opensuse-s2015a:~> █
```

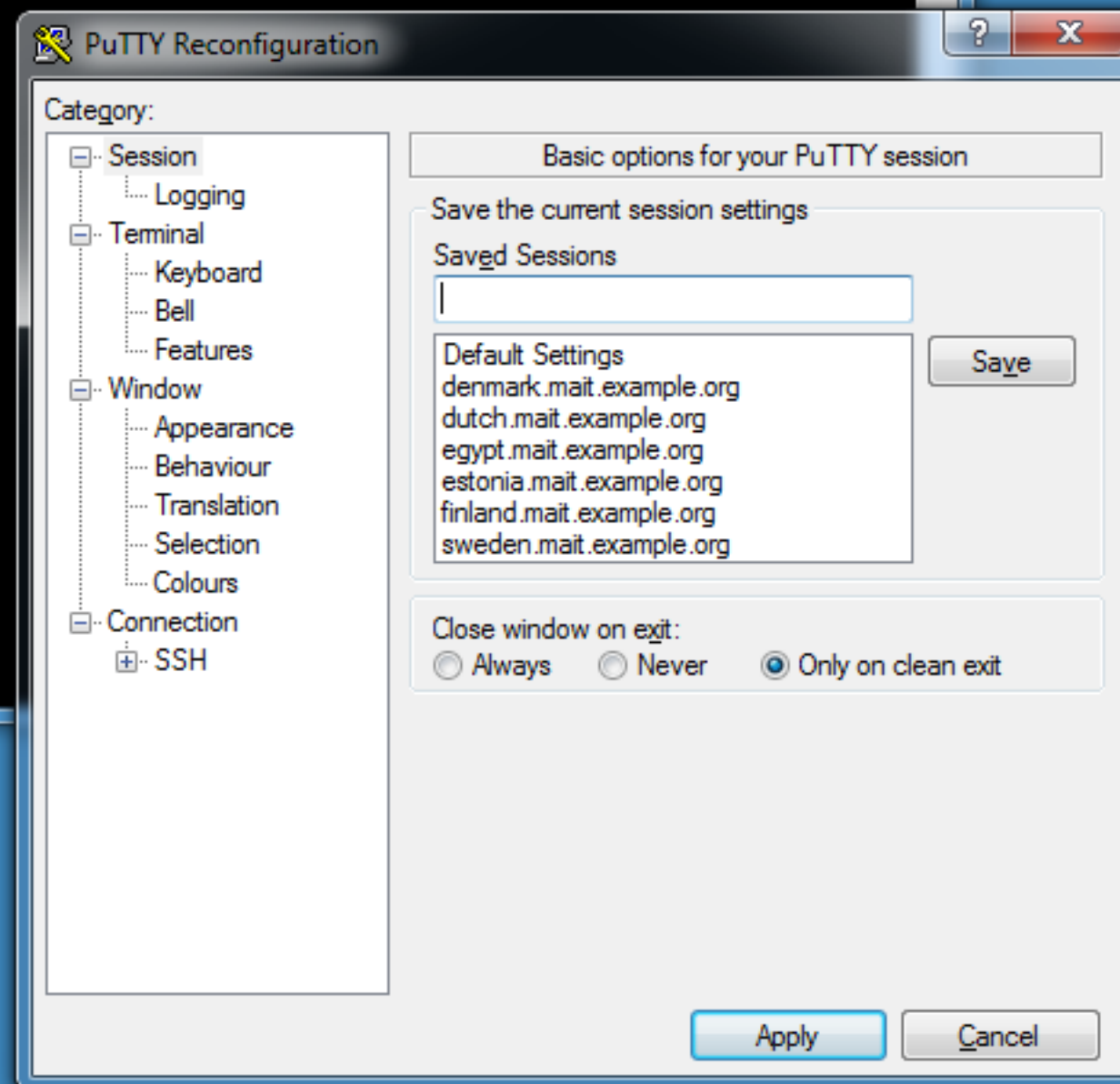
The presentation enters the login name that was assigned. Remember, linux is case sensitive.

The password section does not echo anything. Just enter your password correctly and press enter.

This is what success looks like.



The presentation single clicks on the small picture above. The presentation selects change settings. The result is shown in the PuTTY Reconfiguration.



```
10.11.111.127 - PuTTY
login as: preuss
Using keyboard-interactive authentication
Password:
Last login: Thu Feb  5 14:25:29 2015
Have a lot of fun...
preuss@opensuse-s2015a:~> █
```

1.
The presentation selects Printable output.

Options controlling session logging

Session logging:

- None
- Printable output
- All session output
- SSH packets
- SSH packets and raw data

Log file name:

(Log file name can contain &Y, &M, &D for date, &T for time, and &H for host name)

What to do if the log file already exists:

- Always overwrite it

2.
The presentation selects the Browse button.

```
10.11.111.127 - PuTTY
login as: preuss
Using keyboard-interactive authentication.
Password:
Last login: Thu Feb  5 14:25:29 2015 from console
Have a lot of fun...
preuss@opensuse-s2015a:~>
```

PuTTY Reconfiguration

Select session log file name

Libraries Documents

Documents library

cscil110	temp
Custom Office Templates	test_cscil110
Fax	Virtual Machines
GroupWise	wink
My Data Sources	XP_lego_s2015
My Safes	aalbatross_backup.asc
My Scans	BE9EF8C36996AA034E11530146A366B22F75AF3D
My Shapes	compare_two.bat
Old_iFolder	cpu_rpt01.bat
Scanned Documents	cscil110_grader.xlsx

File name: linux_putty_log04.txt

Save as type: All Files (*.*)

Save Cancel

The presentation selects a folder on the Windows machine and a file name. Remember, Windows really does prefer the filename to end in .txt

```
10.11.111.127 - PuTTY
login as: preuss
Using keyboard-interactive authentication.
Password:
Last login: Thu Feb  5 14:25:29 2015 from console
Have a lot of fun...
preuss@opensuse-s2015a:~> █
```

PuTTY Reconfiguration

Category:

- Session
 - Logging
- Terminal
 - Keyboard
 - Bell
 - Features
- Window
 - Appearance
 - Behaviour
 - Translation
 - Selection
 - Colours
- Connection
 - SSH

Options controlling session logging

Session logging:

- None
- Printable output
- All session output
- SSH packets
- SSH packets and raw data

Log file name:

C:\Users\preuss\Documents\linux_putty

(Log file name can contain &Y, &M, &D for date, &T for time, and &H for host name)

What to do if the log file already exists:

- Always overwrite it
- Always append to the end of it
- Ask the user every time
- Flush log file frequently

Options specific to SSH packet logging

- Omit known password fields
- Omit session data

The presentation is happy with the logging configuration. The presentation selects Apply.

```
10.11.111.127 - PuTTY
drwxr-xr-x 1 preuss users 184 Dec 29 10:36 Desktop
drwxr-xr-x 1 preuss users 56 Feb 3 15:58 Documents
drwxr-xr-x 1 preuss users 430 Dec 29 13:43 Downloads
lrwxrwxrwx 1 preuss users 10 Feb 5 12:43 hosts -> /etc/hosts
-rw-r--r-- 1 preuss users 9503 Feb 5 14:33 libre_writer_test01.odt
-rw-r--r-- 1 preuss users 11079 Feb 5 14:30 libre_writer_test01.pdf
-rw-r--r-- 1 preuss users 0 Feb 5 13:44 log_test03.txt
drwxr-xr-x 1 preuss users 0 Dec 29 10:36 Music
-rw-r--r-- 1 preuss users 862 Jan 29 13:09 new_doc.txt
drwxr-xr-x 1 preuss users 64 Feb 3 16:10 noaa_data
-rwxrwxrwx 1 preuss users 948 Jan 9 13:18 notes.txt
drwxr-xr-x 1 preuss users 0 Dec 29 10:36 Pictures
drwxr-xr-x 1 preuss users 0 Dec 29 10:36 Public
drwxr-xr-x 1 preuss users 20 Dec 29 10:31 public_html
drwxr-xr-x 1 preuss users 418 Jan 19 11:41 scripts
drwxr-xr-x 1 preuss users 174 Jan 19 13:04 setup
-rw-r--r-- 1 preuss users 497640 Jan 27 13:48 snuffly02.txt
drwxr-xr-x 1 preuss users 0 Dec 29 10:36 Templates
-rw-rw-r-- 1 preuss preuss 4481 Jan 27 13:37 test01.txt
-rw-rw-r-- 1 preuss preuss 10297 Jan 22 19:06 test_csci1110.odt
-rw-r--r-- 1 preuss users 9246 Jan 22 19:06 test_csci1110.pdf
-r-xr----- 1 albatross01 users 1032 Jan 20 19:51 test.txt
drwxr-xr-x 1 preuss users 0 Dec 29 10:36 Videos
preuss@opensuse-s2015a:~>
```

The presentation enters commands on the OpenSUSE 13.2 or Linux command line.

- ★ Favorites
 - Desktop
 - Downloads
 - ownCloud
 - Recent Places
- Libraries
 - Documents
 - ifolder
 - Music
 - Pictures
 - Videos
- Computer
 - Local Disk (C:)
- Network

Documents library

Includes: 2 locations

Arrange by: Folder

The presentation finds the PUTTY log file on the Windows machine. Note is it the same name you gave it at the beginning of the session.

- document01.pdf
- fc_result.txt
- file_icacls.bat
- file01.txt
- Firewall Checklist.doc
- HP5simx.txt
- info.txt
- informatic_demo_02.xlsx
- Informatics_demo_01.xlsx
- interstate-notes.rtf
- linux_putty_log04.txt
- linux_test02.txt
- mail_merge_lab.pdf
- my_certs.txt
- Product_graph_demo_01.xlsx
- products.bat
- Program Plans 10252013.doc
- Program-info.txt
- putty_log_01.txt
- script.txt
- secret-key-AA3C70D9.asc
- secret-key-DECE3BF9.asc
- snuffy.txt
- Telecommunication Breakfast names.doc
- temp.txt
- test_lab03.txt
- Web Site Issues fall 2014.doc

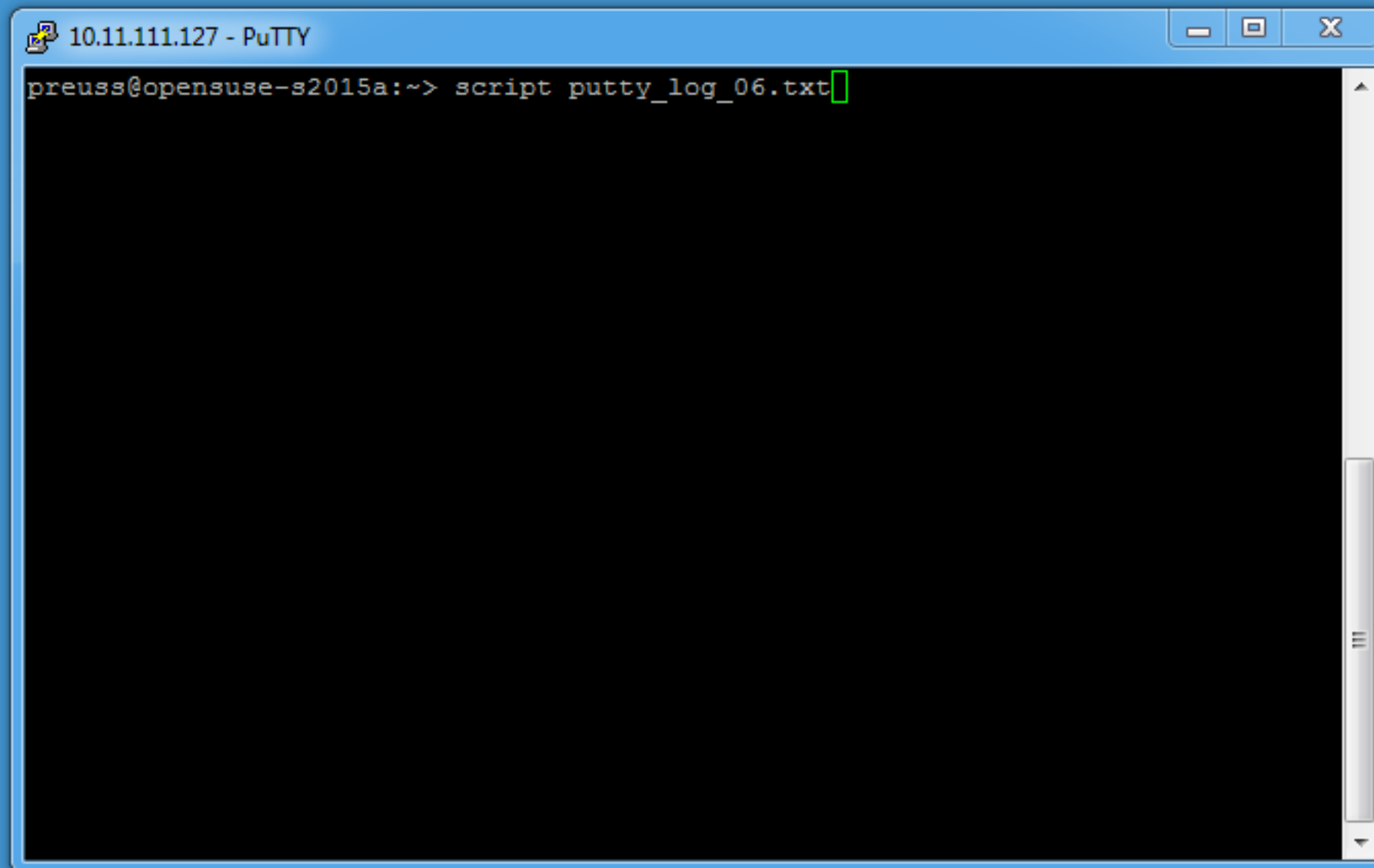

```
-rw-r--r-- 1 preuss  users  9246 Jan 22 19:06 test_csci1110.pdf
-r-xr----- 1 albatross01 users  1032 Jan 20 19:51 test.txt
drwxr-xr-x 1 preuss  users    0 Dec 29 10:36 Videos
preuss@opensuse-s2015a:~> ls
baseline      Music      snuffy02.txt
bin           new_doc.txt Templates
Desktop       noaa_data  test01.txt
Documents     notes.txt  test_csci1110.odt
Downloads     Pictures   test_csci1110.pdf
hosts         Public     test.txt
libre_writer_test01.odt public_html Videos
libre_writer_test01.pdf scripts
log_test03.txt  setup
preuss@opensuse-s2015a:~> most hosts
#
# hostsThis file describes a number of hostname-to-address
#mappings for the TCP/IP subsystem. It is mostly
#used at boot time, when no name servers are running.
#On small systems, this file can be used instead of a
#"named" name server.
# Syntax:
#
# IP-Address Full-Qualified-Hostname Short-Hostname
#
```

This is an example of content in the
PUTTY log file on Windows.



A screenshot of a PuTTY terminal window. The title bar reads "10.11.111.127 - PuTTY". The terminal content shows a shell prompt "preuss@opensuse-s2015a:~>" followed by a green cursor. The terminal area is otherwise empty.

The presentation will create a log file only on OpenSUSE 13.2 or Linux.

A screenshot of a PuTTY terminal window. The title bar at the top reads "10.11.111.127 - PuTTY" and includes standard window control buttons (minimize, maximize, close). The terminal area has a black background with white text. The prompt "preuss@opensuse-s2015a:~>" is followed by the command "script putty_log_06.txt" with a green cursor at the end of the line. The rest of the terminal is empty.

```
preuss@opensuse-s2015a:~> script putty_log_06.txt
```

The command is script. The presentation enters the information shown on the command line. Remember, script is the command and putty_log_06.txt is the file name. You may choose another filename.

The results of the script command are on the OpenSUSE 13.2 or Linux system. The file is in the folder/directory where you started the program.

The presentation could copy this file to Windows for additional work.

- putty_log_06.txt
- snuffy02.txt
- test01.txt
- test.txt
- test_csci1110.odt
- test_csci1110.pdf