Spice Status Report 2012

Open remote computing

Presented by

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Todays Topics

- Spice Introduction

- New Features:

    - Native USB support

    - Seamless Migration

    - Xrender and Xrandr support

    - Spice-gtk as default client

- Future

- Demo

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Spice Introduction

What is Spice?

- An Open Remote Computing / Virtual Desktop Interface protocol

- Free LGPL implementation

- Remote display through paravirtual graphics

- Additional channels for:

  - Input (keyboard and mice)

  - Sound (playback and recording)

  - Smartcard & USB Redirection

  - Future extensions

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Native USB support

Native USB Support

- Full FOSS USB device redirection solution

- Supports all USB-1 and USB-2 devices, including webcams / audio devices, etc.

- No guest side software needed, emulates standard UHCI + EHCI USB controllers

- USB traffic over standard Spice channel, allows full separation of Guest and Client networks

- Host side filtering of which devices may be redirected

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Seamless Migration

Seamless Migration

- Non seamless: the client automatically disconnects and reconnects on migration, loosing all client side state

- Seamless: the client keeps all state, keeping all spice channels open and "transparently" switching them from one host to the other

- Means no more dropping of stored surfaces, leading to a much smoother transation

- Must have feature to allow USB-devices to stay redirected over a migration

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Xrender and Xrandr support

Xrender and Xrandr

- Support for Xrender accelleration
- Support for multiple monitors on one qxl device
- Xorg qxl driver now fully supports Xrandr:
  - Supports arbitrary resolutions
  - Supports dynamically adding monitors
  - Linux agent has been modified to use these

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Spice-gtk as default client

Spice-gtk as default client

- Support for controller and foreign-menu interfaces for xpi / activex usage

- Support for: Native USB, Seamless Migration, Dynamic Monitors

- spicec client now deprecated, fully replaced by remote-viewer (part of virt-viewer)

- Single code base for Windows and Linux client

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Future

Future

- KMS driver

- Make more client-devices available inside the guest:
    - Storage (MTP?)
    - Webcams (as UVC device inside the guest)
    - Printers

- Multiple clients viewing 1 guest (*)

- 3D acceleration

- Support for Opus audio codec

- Rootless windows / Desktop Integration

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*) Already there, set SPICE_DEBUG_ALLOW_MC before starting qemu to enable, experimental!

Demo

Questions?

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