iXorg

iXorg TestFest Fall Technical Conference

November 16ᵗʰ through November 20ᵗʰ 2024

Version 1.6   13ᵗʰ October 2024

iXorg TestFest Fall 2024 will be an in person conference held in Orlando.

Topics will include

  Xinuos Company and Product updates

  Proxmox standalone hypervisor, local storage cluster and HA cluster running Ceph

  2.5G and 10G networking, switches, WiFi 7

  Network diagnostics using tcpdump and Wireshark

  PiKVM remote access, DIY builds and control using TailScale VPN

  Business Discussions and iXorg Member Presentations

iXorg, Inc. will hold its Annual General Meeting

1 Presenters

Michael Brown

David Green

Doug Ritchie

2 Topics

2.1 Xinuos Update and Q&A

Xinuos Company Update, support for Kernel Virtual Machine based hypervisors.

2.2 Proxmox Virtual Environment

Proxmox VE is open source type 1 hypervisor using Kernel-based Virtual Machine technology hosted on a Debian based Linux. TestFest will setup three labs for testing, a standalone host with local storage, a cluster using both local and NAS storage and a HA cluster with distributed storage. A cluster can provide redundancy and along with live virtual machine migration between hosts can provide constant up time even when patching the hypervisor or applying firmware updates. For distributed storage Ceph is a filesystem suite supported on Proxmox with both CLI and GUI tools. The datastore provides block, filesystem and object storage, redundancy, thin provisioning, snapshots and online reconfiguration.

2.3 2.5G and 10G networking

With internet connections and WiFi data speeds available faster than 1 Gb moving up to a 10G speeds provides full bandwidth. The lab will set up one or more switches with 2.5 Gb ports and 10 Gb backbone.

2.4 WiFi 7

The lab will set up both WiFi for in room use and a LAN bridge for wired connections.

2.5 Remote access with Tailscale

Tailscale is a Wireguard based VPN that securely connects devices even to and from dynamic internet services without any special firewall or router configuration.

2.6 AGM

Tuesday afternoon will be iXorg's Annual General Meeting, with the Treasurer's Report, election for positions on the Board of Directors, and all other appropriate business that may come before us.

2.7 Member Presentations

Scheduled power control of USB drives to automatically switch media daily.

2.8 Business Discussions

3 Agenda

Times are EST.

Saturday November 16th

8:00 – Conference room available

8:30 – Initial set up of networking, infrastructure server, internet access and WiFi

10:30 – Break

11:00 – Set up Remote Keyboard Video Mouse

12:00 - Lunch

13:00 – Configure Proxmox hosts

15:00 – Break

15:30 – Set up and try Zoom

Sunday November 17th

8:00 – Room open

8:30 – Walk through of installing and configuring Proxmox

10:30 – Break

11:00 – Walk through of installing and configuring Ceph

12:00 – Lunch

13:00 – Remote backup using Tailscale

14:00 – Bare metal recovery

15:00 – Break

20:00 – Social Gathering

Monday November 18th

8:00 – Room open

8:30 – Zoom setup and check

8:45 – iXorg introductions

9:30 – Overview of Pi 4 and CM, build of Pi 4 kit PiKVM

10:30 – Break

11:00 – Test of remote Keyboard Video Mouse through Tailscale

12:00 – Lunch

13:00 – Xinuos update, KVM support for OSR6

14:00 – Group event

19:00 – Dinner out for attendees

Tuesday November 19th

8:00 – Room open

8:30 – Proxmox hands on lab, create, test, migrate VMs

9:30 – Proxmox HA

10:30 – Break

11:00 – Proxmox hands on lab, backup and restore

12:00 – Lunch

13:00 – Proxmox Software Defined Networking

14:00 – iXorg Inc, Annual General Meeting (AGM)

15:00 – Break

15:30 – Business discussions and member presentations

Wednesday November 20th

8:00 – Room open

8:30 – Network lab, WiFi 7, 10 Gb

9:30 – tcpdump and Wireshark

10:30 – Break

11:00 –

12:00 – Lunch

13:00 – Open labs

16:00 – Take down starts

18:00 – TestFest 2024 concludes