MUUGLines

The Manitoba UNIX User Group Newsletter

Volume 35 No. 4, December 2022

Editor: Bradford C. Vokey

Next Meeting: December 13th, 2022 *** In Person Meeting! ***

Format: Round-Table, Lightning Talk, and Pot Luck

PLEASE
STAY HOME IF YOU ARE SICK

MUUG is happy to announce we are having an in person pot luck event!

We will continue the tradition of making the December meeting more of an informal, social gathering.

But please, stay home if you are sick.

We will also attempt to simulcast the live round-table and lightning talk over Big Blue Button for those that can't attend in person for any reason: `https://muug.ca/meet`

Bring your favorite gadget

SHOW
& TELL
Bring an Object
Share Its Story

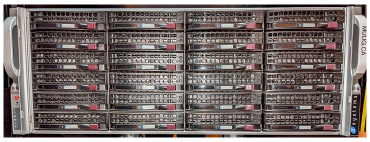
Bring your latest gadget to talk about— while everyone mingles, eats, and drinks.

This will be a pot-luck snack event

Pot Luck
Snacks

Members are encouraged to bring their own food to sample and share with others. Feel free to bring your own special drink as well – just remember that we don't have a liquor license!

Lightning Talk: MUUG Online Lore & History

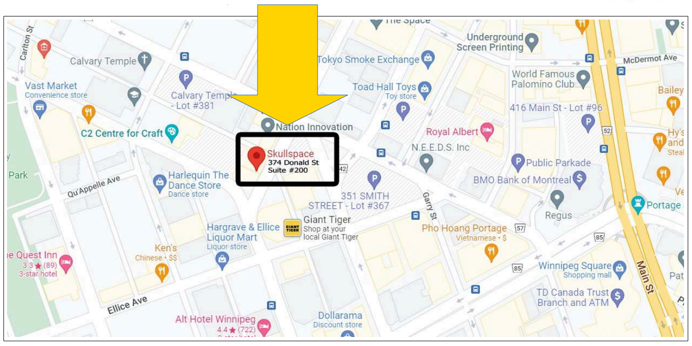


This month, our server committee will show off some quick LibreNMS stats and history of our latest MUUG Online 8.0 server, which is western Canada's largest and fastest open source software mirror.

Where to Find the Meeting:

NEW LOCATION

Skullspace, 374 Donald St - Suite #200


Skullspace
374 Donald St
Suite #200
Calvary Temple
Vast Market
C2 Centre for Craft
Nation Innovation
Tokyo Smoke Exchange
Toad Hall Toys
Underground Screen Printing
World Famous Palomino Club
416 Main St - Lot #96
Royal Albert
N.E.E.D.S. Inc
Public Parkade
BMO Bank of Montreal
Harlequin The Dance Store
Qu'Appelle Ave
351 SMITH STREET - Lot #367
Giant Tiger
Hargrave & Ellice Liquor Mart
Ken's
Pho Hoang Portage
Regus
Portage
Winnipeg Square
TD Canada Trust Branch and ATM
Ellice Ave
Alt Hotel Winnipeg
Dollarama
Garry St
Main St
McDermot Ave
Carlton St

This month we have moved to Skullspace, at 374 Donald St. We will be in room 200.

Please note that this location is not mobility accessible. There are 3 flights of stairs and it is 1.5 stories up.

Also note that the Winnipeg Jets have a home game on December 13th so downtown street parking will be scarce. One of the best blocks for street parking is Notre Dame after Hargrave. There is also lots of commercial parking in the area including right behind the Skullspace building.

The 66 bus route has a southbound stop on the same block of Donald (useful for departure) in front of the Yellow Dog Tavern. For arrival by bus, it's quite reasonable to walk from stops on Graham and Portage or if taking the 66 get off at northbound Smith at Portage or northbound King at Notre Dame.

Doors will be open starting at 7:15 pm with the meeting starting at 7:30 pm. After 7:45 pm the doors may be locked so you will need to call the Skullspace number (204-480-4092) and we'll answer and come down to let you in.

The latest meeting details are always at:

`https://muug.ca/meetings/`

Meet Your New Board

The MUUG Board for the 2022-2023 year was elected by acclamation at the November general meeting.

Your board now consists of 8 members:

1. Alberto Abrao
2. Chris Audet
3. Trevor Cordes
4. Gilbert Detillieux
5. Kevin McGregor
6. Tyhr Trubiak
7. Brad Vokey
8. Wyatt Zacharias

A big thank you to all the nominees who let their names stand for election and an even bigger thank you to Chris Audet for joining the board this year!

Board Positions

Your new board held their first board meeting on November 22nd, and for the 8th year in a row they elected the same executive officers.

President: Wyatt Zacharias
Vice-President: Trevor Cordes
Secretary: Gilbert Detillieux
Treasurer: Brad Vokey

BDFL
stands for
Benevolent Dictator For Life

Long live the BDFL!

We also appointed the following *unofficial officers*:

Social Media Ninja: Chris Audet
Door Prize Don: Trevor Cordes

Your **banking committee** continues to be:
Brad Vokey, Gilbert Detillieux and Kevin McGregor.

Your **server committee** is now:
Alberto Abrao, Adam Thompson (member), Trevor Cordes, and Wyatt Zacharias.

The new board looks forward to serving you over the next year. If you have any questions or requests, feel free to send an email to `<board@muug.ca>`.

Food Bank Donations Requested

As in previous years, we are combining our pot luck event with a food drive for Harvest Manitoba.

Any member who donates at least $1 or brings at least 1 food item will be given an entry into the door prize!

Top 10 Most-Wanted Food Items

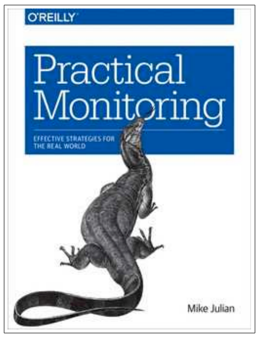
1. Canned Fruit
2. Canned Soup/Stew
3. Canned Tuna
4. Canned Vegetables
5. Pasta
6. Pasta Sauce
7. Rice
8. Peanut Butter
9. Baby Formula/Food
10. Instant Oatmeal

December Door Prizes:

Now that we are meeting back in person we have a physical tree book to give away! So along with our usual selection of e-books we will also give away:

Practical Monitoring

By: Mike Julian
Publisher: O'Reilly Media, Inc.
Release Date: December 5, 2017
Pages: 170



Do you have a nagging feeling that your monitoring needs improvement, but you just aren't sure where to start or how to do it? Are you plagued by constant, meaningless alerts? Does your monitoring system routinely miss real problems? This is the book for you.

Mike Julian lays out a practical approach to designing and implementing effective monitoring — from your enterprise application down to the hardware in a datacenter, and everything between. Practical Monitoring provides you with straightforward strategies and tactics for designing and implementing a strong monitoring foundation for your company.

This book takes a unique vendor-neutral approach to monitoring. Rather than discuss how to implement specific tools, Mike teaches the principles and underlying mechanics behind monitoring so you can implement the lessons in any tool.

MUUG Annual Financial Statements

By Bradford C. Vokey, MUUG treasurer

Here are your MUUG 2021-2022 annual financial statements.

MUUG Income and Expenses

2021-2022 Season (2021-11-01 through 2022-10-31)

Income	
Membership Dues	
Current Year (2021/2022) Paid	800.00
Total Membership Dues	**800.00**
GIC, Savings, and Chequing Interest Income	**224.27**
Total Income	**1,024.27**
Expenses	
Advertising & Promotion *(see note 1)*	**290.30**
Bank Charges	
Bank of Montreal	15.00
PayPal	28.72
Square	2.64
Steinbach Credit Union	1.95
Total Bank Charges	**48.31**
Server Expenses	
Depreciation *(see note 2)*	439.18
Replacement Parts *(see note 3)*	142.86
Total Server Expenses	**582.04**
Meeting Expenses	
Board Meeting Snacks & Drinks	89.58
Door Prizes	88.15
Regular Meeting Snacks & Drinks	1.99
MUUG Summer BBQ Food & Drinks	127.38
Total Meeting Expenses	**307.10**
Other Expenses	
Printing Costs	0.72
Total Other Expenses	**0.72**
Total Expenses	**1,228.47**
Total Deficit	**-204.20**

Note 1: *Advertising and Promotion consisted of:*
- 1 year of Meetup.com ($197.88 US).

Note 2: *Computer equipment has been recorded at a cost of $2,195.90 and is straight line depreciated at an expense of $439.18 per year for 5 years until 2025/2026.*

Note 3: *Replacement parts for the old server (v7.0) consisted of:*
- one 4TB Toshiba N300 SATA HDD

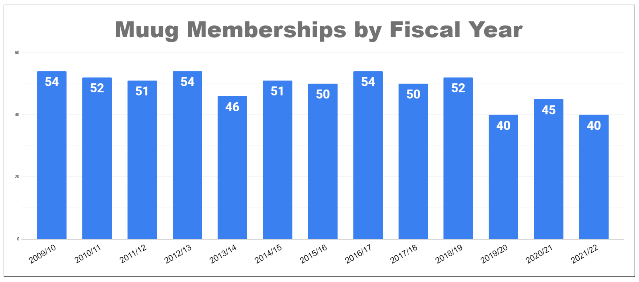
MUUG Balance Sheet

as at 2022-10-31

Assets	
Bank and Cash Accounts	
Chequing Accounts	407.08
Savings Accounts	2,900.46
Guaranteed Investment Certificates	9,819.64
PayPal Account	344.76
Total Bank and Cash Accounts	**13,471.94**
Other Assets	
Computer Equipment	1,756.72
Steinbach Credit Union Share	5.00
Total Other Assets	**1,761.72**
Total Assets	**15,233.66**
Liabilities	
Prepaid Membership Dues	**120.00**
Owed to Members	
Trevor Cordes	138.00
Bradford Vokey	226.21
Total Owed to Members	**364.21**
Total Liabilities	**484.21**
Net Worth	**14,749.45**

We ended the year with a $204 deficit.

Your board is continuing to slowly and carefully use our built up surplus to help serve the *nix and open source community here in Manitoba.



Membership decreased by 5 members last year. We are back to having a total of 40 paying members.

Thanks to all the members who have continued supporting us through the pandemic.

If your MUUG membership has lapsed, please help support us by renewing today! Payment can be made via e-transfer, credit card, or PayPal here:

`https://muug.ca/about.php#payment`

New Metric Prefixes Approved

On Novemer 18th, The 27th General Conference on Weights and Measures introduced four new prefixes to the International System of Units, or metric system.

Two added to the top of the measurement range:
ronna (27 zeroes after the first digit)
quetta (30 zeroes)

and two added to the bottom:
ronto (27 zeroes after the decimal point)
quecto (30 zeroes)

Yotta (24 zeroes) was the previous largest prefix in the metric system before the new additions.

The new prefixes come at a time when scientists and industries are dealing with data that need measurements going beyond the current range.

> *"The change was largely driven by the growing requirements of data science and digital storage, which is already using prefixes at the top of the existing range (yottabytes and zettabytes), for expressing huge quantities of digital information,"*
> *- National Physical Laboratory*

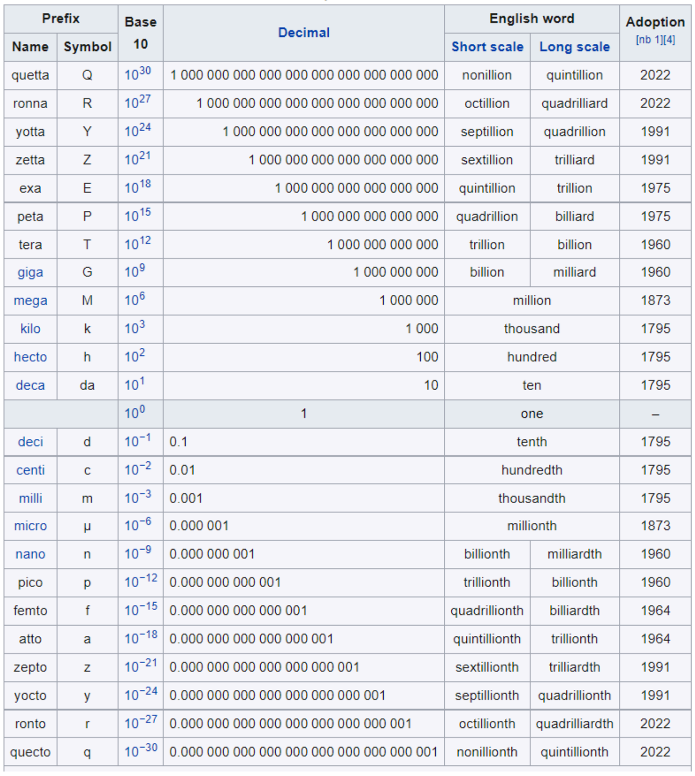
The world is projected to generate about 175 zettabytes (21 zeroes) of data by 2025, according to the market research group International Data Corporation.

The prefixes for small numbers (ronto and quecto) will be useful for quantum science and particle physics, the NPL said. An electron's mass can be said to be about 1 rontogram rather than 0.001 yoctograms (the smallest prefix before the new additions).

"R" and "Q" represent ronna and quetta while "r" and "q" represent ronto and quecto. Brown told The Associated Press these letters were chosen because they were not already in use by other prefixes.

An earlier proposal for a 10^{27} sized unit called ***hella*** failed because new entries now have to start with a unique letter *(stupid "hecto")*.

Too bad because "hellabytes" would have made an awesome name for big units of data!



Prefix		Base 10	Decimal	English word		Adoption [nb 1][4]
Name	Symbol			Short scale	Long scale	
quetta	Q	10^{30}	1 000 000 000 000 000 000 000 000 000 000	nonillion	quintillion	2022
ronna	R	10^{27}	1 000 000 000 000 000 000 000 000 000	octillion	quadrilliard	2022
yotta	Y	10^{24}	1 000 000 000 000 000 000 000 000	septillion	quadrillion	1991
zetta	Z	10^{21}	1 000 000 000 000 000 000 000	sextillion	trilliard	1991
exa	E	10^{18}	1 000 000 000 000 000 000	quintillion	trillion	1975
peta	P	10^{15}	1 000 000 000 000 000	quadrillion	billiard	1975
tera	T	10^{12}	1 000 000 000 000	trillion	billion	1960
giga	G	10^{9}	1 000 000 000	billion	milliard	1960
mega	M	10^{6}	1 000 000	million		1873
kilo	k	10^{3}	1 000	thousand		1795
hecto	h	10^{2}	100	hundred		1795
deca	da	10^{1}	10	ten		1795
		10^{0}	1	one		–
deci	d	10^{-1}	0.1	tenth		1795
centi	c	10^{-2}	0.01	hundredth		1795
milli	m	10^{-3}	0.001	thousandth		1795
micro	μ	10^{-6}	0.000 001	millionth		1873
nano	n	10^{-9}	0.000 000 001	billionth	milliardth	1960
pico	p	10^{-12}	0.000 000 000 001	trillionth	billionth	1960
femto	f	10^{-15}	0.000 000 000 000 001	quadrillionth	billiardth	1964
atto	a	10^{-18}	0.000 000 000 000 000 001	quintillionth	trillionth	1964
zepto	z	10^{-21}	0.000 000 000 000 000 000 001	sextillionth	trilliardth	1991
yocto	y	10^{-24}	0.000 000 000 000 000 000 000 001	septillionth	quadrillionth	1991
ronto	r	10^{-27}	0.000 000 000 000 000 000 000 000 001	octillionth	quadrilliardth	2022
quecto	q	10^{-30}	0.000 000 000 000 000 000 000 000 000 001	nonillionth	quintillionth	2022

Thunderbird 102 now seems stable (and supported) enough to use

On August 23rd Thunderbird 102.2.0 was released as the stable recommended auto-upgrade from version 91.

As any experienced Thunderbird user knows, ***you never upgrade to a new major version*** until you test and evaluate how well all your add-ons work with it first!

This author is happy to announce that as of 102.5.0 (released on November 15th) it now seems safe to do so - at least for the many add-ons used by this author.

There are some growing pains with the new 102 version. Most notably is the highjacking of shortcut keys `<alt>1` through `<alt>5` for Thunderbird's new Mail/Address Book/Calendar/Tasks/Chat "Spaces" idiom. Luckily the popular QuickFolders add-on can now be configured to use `<ctrl>1` through `<ctrl>5` to access your first 5 "pinned" quick folders. But wow, muscle memory relearning sure does hurt your brain!

Download and try the latest Thunderbird here:
`https://www.thunderbird.net`

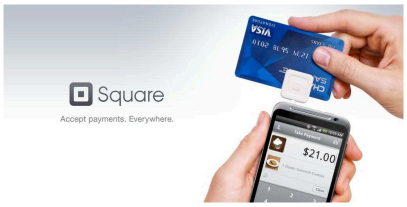
Fedora 37 released

Fedora 37 was released on 15th November 2022 after a series of delays.

Top new features:

- Linux Kernel 6.0
- Gnome 43
- KDE Plasma 5.26 (animated wallpaper!)
- Xfce 4.16
- MATE 1.24
- LXQt 1.1.0
- A preview image of the new web-based installer
- The SDDM display manager defaults to Wayland (in KDE Plasma and others)
- Official Raspberry Pi 4 support
- Fedora Core OS becomes the official flavour
- Key packages dropping 32-bit support
- And associated toolchain and programming language updates.

$1,000 worth of Free Credit Card Processing!



Sign up with Square (the credit card processor that MUUG uses) and both you and MUUG will receive $1,000 in free processing for the next 6 months (180 days).

You must use the following referral link to receive the credit:

https://squareup.com/i/MANITOBAU1

Help us promote this month's meeting, by putting this poster up on your workplace bulletin board or other suitable public message board:

https://muug.ca/meetings/MUUGmeeting.pdf

Certain CPUs no longer supported in RHEL 9

by Chris Audet

I use Proxmox for home labbing. The default settings when creating a new Linux VM in Proxmox will use the "kvm64" CPU model, but in RHEL 9 using this virtual CPU causes a kernel panic. Ran into the same problem trying to install RHEL 9 on an old Pentium E5200 computer, it kernel panics.

It turns out that RHEL is adjusting their baseline for minimum support CPU. I found the linked write up pretty interesting, they do a pretty good job of explaining why virtual CPU models like kvm64 and qemu64 should be deprecated for security reasons.

https://bugzilla.redhat.com/show_bug.cgi?id=206083

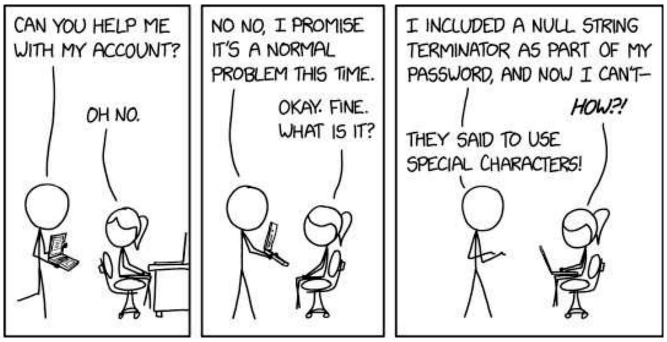
Hack your Sony camera with telnet

According to Venn Stone, technical producer over at LinuxGameCast, the Sony a5000 is still a solid option for those looking to shoot 1080p video despite being released back in 2014. But while the camera is lightweight and affordable, it does have some annoying quirks — namely an overlay on the HDMI output that can’t be turned off using the camera’s normal configuration menu. But as it so happens, using some open source tools and the venerable telnet, you can actually log into the camera’s operating system and fiddle with its settings directly.

You can read about his hacking adventures here:

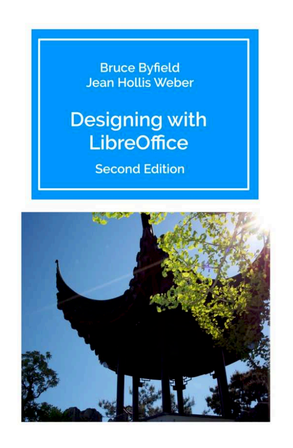
https://hackaday.com/2022/11/25/telnet-gets-stubborn-sony-camera-under-control/
https://linuxgamecast.com/2022/11/sony-a5000-clean-hdmi-hack-power-off-bypass/

Account Problems


CAN YOU HELP ME WITH MY ACCOUNT?
OH NO.
NO NO, I PROMISE IT'S A NORMAL PROBLEM THIS TIME.
OKAY. FINE. WHAT IS IT?
I INCLUDED A NULL STRING TERMINATOR AS PART OF MY PASSWORD, AND NOW I CAN'T—
HOW?!
THEY SAID TO USE SPECIAL CHARACTERS!

https://xkcd.com/2700/

Second edition of *Designing with LibreOffice* available for free download



Bruce Byfield and Jean Hollis Weber announce the second edition of Designing with LibreOffice.

The book is available as an .ODT or .PDF file under the Creative Commons Attribution/Sharealike License version 4.0 or later from

https://designingwithlibreoffice.com/

The first edition was published in 2016, and was downloaded over thirty-five thousand times. Michael Meeks, one of the co-founders of LibreOffice, described the first edition as

> *"an outstanding contribution to help people bring the full power of LibreOffice into their document."*

Similarly, free software author and journalist Carla Schroder wrote,

> *"Designing With LibreOffice teaches everything you need to know about document production.... suitable for beginners to wizened old pros, who will probably discover things about LibreOffice that they didn't know."*

The second edition updates the original, removing outdated information and adding updated screenshots and new information about topics such as Harfbuzz font shaping codes, export to EPUB formats for ereaders, the Zotero extension for bibliographies, and Angry Reviewer, a Grammarly-like extension for editing diction. In the future, the writers plan to release other editions as necessary to keep Designing with LibreOffice current.

https://designingwithlibreoffice.com/2022/11/14/second-edition-of-designing-with-libreoffice-available-for-free-download/

Share Your Thoughts

WE WANT TO HEAR FROM YOU!

Please email MUUG with your comments and suggestions regarding the newsletter and the meetings. Whether it's criticisms or commendations, we want to hear from you. Specifically, what sort of material would you like to see and/or hear about.

Send an email to: board@muug.ca.

A big thanks to Les.net for providing MUUG with free hosting and all that bandwidth! Les.net (1996) Inc. is a local provider of VoIP, Internet and Data Centre services. Contact **sales@les.net** by email, or +1 (204) 944-0009 by phone.

MUUG would like to thank Michael W. Lucas for donating one of his ebooks every month as a door prize. You can view and purchase his tech books here:

https://www.tiltedwindmillpress.com/product-category/tech/

Except where otherwise noted, all textual content is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

https://creativecommons.org/licenses/by-sa/4.0/