Gmail

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imonitor Newsletter 11-1-2020 -plot improvements, next tasks.

John Loop <jdloop@johnloop.com> Sat, Oct 31, 2020 at 11:50 AM
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Dear imonitor users, potential users, former users, and interested parties:

Summary for those of you new to this newsletter:

> ***I am working on a project on Internet [and local network] monitoring, and have a small device [raspberry pi] which I can deploy to perform this service. I have 23 "guinea pigs" deployed. I initially targeted the service to users on the mountain in Jasper GA (windstream ISP), but it is applicable universally, and I have "customers" across the country on Windstream, ATT, Spectrum, Comcast, CenturyLink, and several other ISPs. It spans all access technologies from ADSL, VDSL, WADSL, cable and fiber.***

Let me know if you interested. OR..... preferably, you can purchase a raspberry pi 3B or 3B+ and I can share you a microSD image! All you have to do

is burn the image [or I can do it for you and send it to you!], insert in the pi and plug it into your network! Nerds might be interested in this alternative. You will get LOTs of info about your network!! Here is a pi you can order:

https://www.amazon.com/gp/product/B07BLRSKBV/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1

As usual, ***I am extremely grateful for the use of your ISP connection to develop this service across many ISPs.*** It has been invaluable, and much fun.

As always, you can refer to the main information page at https://johnloop.com/imonitor/imonitor.html There are images of the web site, email, plots, etc.

There is a new "quick intro" doc at https://johnloop.com/imonitor/QuickManual.pdf [also attached to this email]

Newsletter 11-1-2020 *previous newsletter https://johnloop.com/imonitor/newsletter8-1-2020.pdf*

I continue to do "end of project" tasks, while continuing to add tweaks. Not sure this project will ever actually end :-) Too much fun!

The **SPECIFIC** news items:

1. The combined plot [via daily email or via "plotit" on webpage] has been enhanced to show [far away -deep- ICMP] ping timeouts, thus giving three different indications of problems --tcp SYN timeouts, [near end] ICMP timeouts, [far away] ICMP timeouts. An "offline" plot point is thus plotted above these if simultaneous near ICMP and TCP timeouts are experienced. I have attached an example plot [2nd att] which shows a hard outage at Niel's place as Hurricane Zeta went thru 10-29. Notice the how the service got progressively worse from about 11AM until offline "declared" about 15:00. Notice the DNS queries to the router were still working [Niel never lost power].

2. Besides the graphical "plotit" to do the "till now" plot [via the rpi web page], there is a cmd line option "callROOTcreateRTplot.sh <VERTICALSCALE>.

3. "pihole" continues to amaze me in showing the ***flood*** of DNS activity generated by a network. Just point your DNS server to your rpi, and be amazed. There is no effect on your network [other than to show you the DNS queries]. You will have to turn off DOH in FFOX and Chrome to see browser activity. Otherwise you can separate it out! The daily email has a link to it and info.

4. I am soliciting comments/request and information for going forward with the pi4B implementation. Please comment if you can. Do you think this is worthwhile? Anything "network-wise" that would be good to monitor?

The **GENERAL** news items:

1. I have "generic" versions of the rpi which do not require a management channel [absolutely no contact with me]. If you have a raspberry pi3B or 3B+

I can share these to you and you can burn an image and you are up and running [or I can send you one]. These do not interfere with the normal raspberry pi distributioon - it is all there. Just don't mess with the existing scripts [or reburn the image if you break it]. The pi will check in once a month to see if there is a new version -and this will be indicated on the rpi web page [management section]. I will also continue to offer "managed" versions to allow coupling to the development. I can share either of these to you on googledrive if you ask.

Please pass this news to anyone who might appreciate a passive, standalone "Internet monitoring tool," i.e. no subscriptions, web sites

2. microSD vs SSD -worries about microSD longevity, boot from USB SSD. pi4B will support USB boot from SSD. I have made many small changes to the scripts to minimize the "flogging" that the OS and scripts give the microSD, hopefully prolonging its life. MicroSD cards are really intended for static storage - camera images e.g. and not for running an OS which requires continuous writing.

3. mgmt versions -there are 3 ways to operate the rpi imonitor

a. fully managed [STANDALONE=OFF]: I have access to your rpi and manage all updates; daily email possible
b. partial managed [STANDALONE=ON]: I do not have access to your rpi; customer does updates; daily email possible
c. fully independent [generic "imonitorg"]: no access by me to your pi, or you to my server; daily email possible via gmail relay; updates via new microSD image
--you are the one who controls the STANDALONE setting.

4. I have attached the latest "manual [1st att]," an image of the web page [3rd att][available on your local network only], and the email you receive each day [4th att] if you deploy the rpi on your network.

5. The daily summary plot [which looks like att 2, except for 24 hrs], which is perhaps the quickest way to gauge your Internet connection. Explanations for this plot are here: https://johnloop.com/customerplots/customerplots.html Other plots are available via the web page, including archives of speedtests, ping delays, offline times, etc. etc.

6. pi4B: I will begin implementing the imonitor on the pi4. I hope to do a few changes here

a. provide the option to copy the microSD to a USB drive and boot from that.

b. investigate adding "Princeton IOT inspector" software to monitor IOT.

7. I encourage you to check out pihole on the rpi. This allows you to monitor all DNS activity from [selected] devices on your network. There is a link in the daily email.

8. Here is the latest on all the raspberry pi's participating in this trial. "G3B, G3B+" are the generics -unmanaged. You can see the daily plots of the managed pis by going to https://johnloop.com/imonitor/customerplots/ and selecting the top link. There is an explanation of the plot on that page.

pi	name	ISP	Loc	Tech	Speed Mbs down/up	eth/wifi	

1	John	Spectrum	HerFL	Cable	300/40	both	
2	Diana	SpanForkCity	UT	municable	90/90	eth	
3	Lucie	Windstream	JpGA	VDSL	40/4	both	
4	Joe	Comcast	DenCO	Cable	70/6	both	
5	John	Spectrum	HerFL	Cable	300/40	wifi	
6	Rick	SvcElectric	NJ	Eth	12/5	eth	
7	Phil	ATT	BishGA	VDSL	26/4	both	
8	KevL	Comcast	AtlGA	Cable	90/40	eth	
9	Mark	Windstream	JpGA	VDSL	26/4	eth	
10	Fred	Comcast	EsPkCO	Cable	90/24	eth	
11	Mike	Spectrum	StPeteFL	Cable	40/12	eth	
12	Phil	Mediacom	PerdAl	cable	26/12	eth	
13							
14	Matt	ATT	AtlGA	Fiber	90/40	eth	
15							
20	John	Spectrum	HerFL	cable	300/40	eth	
21	Jerry	Spectrum	RichTX	cable	230/12	eth	
22	Chly	ATT	DekGA	fiber	300/280	eth	
23	KenF	ATT	Frisco TX	VDSL	50/10	eth0	
24	Niel	CenturyLink	RolsNC	ADSL	6/.6	eth	
25	KenS	Comcast	BldrCO	Cable	300/30	eth	
26	Fred	Comcast	BldrCO	Cable	80/4	eth	
27	Lou	LongmontMuni	LgMtCO	munifiber	300/280	eth	
28	KevB	ATT	PtCtyGA	fiber	30/2	eth	

29	Tom	Rise Broadband	Winston CO	WADSL	22/4	eth	
G3B	John	Spectrum	HerFL			eth	
G3B+	John	Spectrum	HerFl			eth	
GeB+	Fred	Comcast					
100	Scott	SmBB	GrVyCA	WADSL	12/3	eth	

John Loop

Previous newsletter 8-1-2020

I continue to do "end of project" tasks, while continuing to add tweaks. Not sure this project will ever actually end :-) Too much fun! The biggest news items:

1. I have "generic" versions which do not require a management channel [absolutely no contact with me]. If you have a raspberry pi3B or 3B+ I can share these to you and you can burn an image and you are up and running. These do not interfere with the normal raspberry pi distributioon - it is all there. Just don't mess with the existing scripts [or reburn the image if you break it]. The pi will check in once a month to see if there is a new version -and this will be indicated on the rpi web page [management section]. I will also continue to offer "managed" versions to allow coupling to the development. I can share either of these to you on googledrive if you ask.

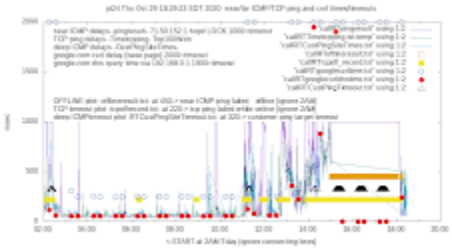
2. To further accomodate the "standalone [non managed]" pi, there is a way to use [your] existing gmail account as a relay so you can still get the daily email ***to any email address*** you want. You will need to enable 2FA on the gmail site and get a key, and then fill out management fields in the rpi web page with these gmail credentials [the pi uses your gmail-supplied key, not your gmail passwd!]

3. I added an ability to create a second realtime plot besides the one mentioned in #2 below. This will do a 1 minute blast of 60 pings to your ICMP target and plot it.

4. I am experimenting with ipv6, so you may see occasional glitches in access, etc.

5. I have attached the latest "manual," an image of the web page [available on your local network only], and the email you receive each day.

4 attachments



GoodSamplepi24-10-29-2020A.png
26K

QuickManual.pdf
142K

RaspBerryPiWWW.pdf
628K

dailyemail.pdf
159K