

# VyOSにバグ報告して 修正を取り込んでもらった話

JANOG35 Meeting ライトニングトーク

梅原 潤

# 自己紹介

- 梅原 潤(うめはら ひろし)
  - @zinrai
  - h.umehara@asahinet.com
- 朝日ネット
  - 1年目ぴちぴちの新人です。

# 目次

- いきさつ
- ハマった
- 修正した
- まとめ

# VyOS

- Linuxベース(Debian)のネットワークOS
- [http://vyos.net/wiki/Main\\_Page](http://vyos.net/wiki/Main_Page)

# VyOSでのVXLAN検証はこうして始まった

上司「VXLAN知ってる？」

自分「知らないです」

上司「VyOS知ってる？」

自分「Vyattaは使ったことがあります」

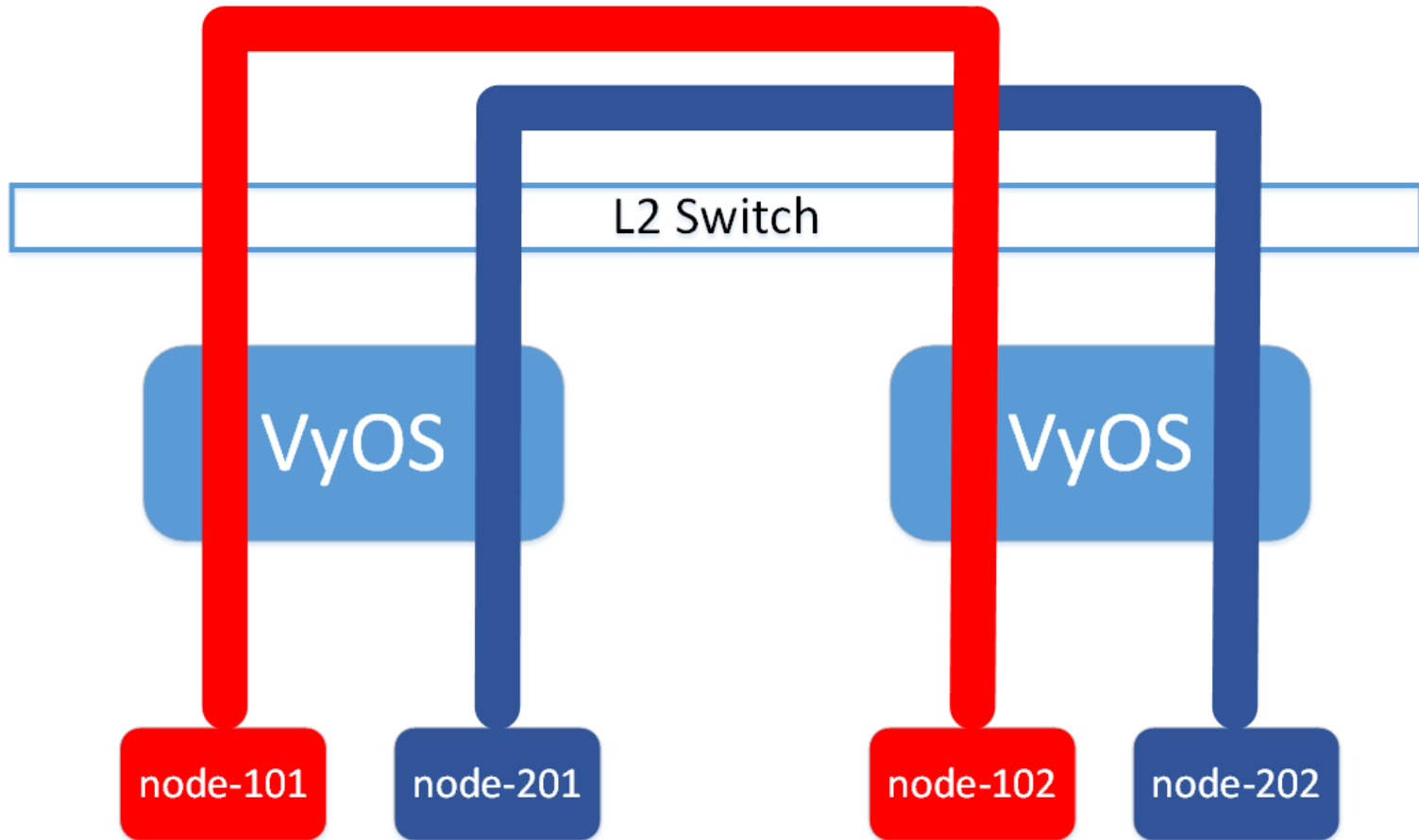
上司「VyOSでVXLAN使えるみたいだから使ってみて」

自分（ °Д° ）

# VXLAN

- ネットワークの上に論理的なL2ネットワークを構築する「オーバーレイ方式」のひとつ

# VXLAN検証の最小構成



Virtualbox 4.2  
VyOS 1.1.0

# VyOSでのVXLAN設定

- <http://vyos.net/wiki/VXLAN>
- VXLANを物理インタフェースに紐付けるオプション(devオプション)に苦しめられることになる。

## Configuration commands

```
interfaces
vxlan <vxlan[0-16777215]>
  vni <1-16777215> # Virtual Network Identifier (required)
  group <ipv4> # IPv4 Multicast group address (required)
  dev <dev> # IP interface for underlay of this vxlan overlay (optional)
```

dev <dev> # IP interface for underlay of this vxlan overlay (optional)



# devオプションが見当たらない

```
vyos@vyos# set interfaces vxlan vxlan0
```

Possible completions:

+ address IP address

> bridge-group Add this interface to a bridge group

description Description

> firewall Firewall options

group Multicast group address for this VXLAN interface [REQUIRED]

> ip IPv4 routing parameters

> ipv6 IPv6 routing parameters

mtu Maximum Transmission Unit (MTU)

> policy Policy route options

vni Virtual network identifier [REQUIRED]

# devはlinkに変更されたようだ

- <https://github.com/vyos/vyatta-cfg-system/pull/19>



upa commented on 23 Sep 2014

Ok, I wrote a new wiki page for vxlan <http://vyos.net/wiki/VXLAN> .



dmbaturin commented on 23 Sep 2014

Owner

Cool, thanks!

By the way, maybe change "dev" to "link"? This is what we have in pseudo-ethernet now.

change "dev" to "link"

# linkオプションも見当たらない

```
vyos@vyos# set interfaces vxlan vxlan0
```

Possible completions:

+ address IP address

> bridge-group Add this interface to a bridge group

description Description

> firewall Firewall options

group Multicast group address for this VXLAN interface [REQUIRED]

> ip IPv4 routing parameters

> ipv6 IPv6 routing parameters

mtu Maximum Transmission Unit (MTU)

> policy Policy route options

vni Virtual network identifier [REQUIRED]

# VyOS CLIの定義方法を調べた

- [http://vyos.net/wiki/CLI\\_internals](http://vyos.net/wiki/CLI_internals)

## CLI internals

---

There basically are three components that form VyOS CLI (command line interface):

- vbash
- completion rules
- templates

vbash is modified bash (Bourne shell). One of the most significant modifications is command completion from the first level (in usual bash completion works only when a command or it's part already typed).

Completion rules rely on bash programmable autocompletion mechanism. You can find the script at `/etc/bash_completion.d/20vyatta-cfg` Configuration mode "show", "set" and other commands are defined there, as well as many other things.

The templates is what is actually used to add new commands. They are located at `/opt/vyatta/share`. There are two `directories: vyatta-cfg/templates` for configuration mode templates and `vyatta-op/templates` for operational mode templates.

Templates are text files that contain tags. Tags for operational and configuration mode templates are different.

The commands are represented by `directories` under `templates/` containing `node.def` file. `node.def` is the template file. If command allows (or requires) subcommands (like "show interfaces ethernet"), those `subcommands are in node.tag` subdirectory. This is what actually is under `vyatta-op/templates`:

subcommands are in node.tag

directories: vyatta-cfg/templates

# vyatta-cfg/templatesを見てみた

```
vyos@vyos$ pwd  
/opt/vyatta/share/vyatta-cfg/templates/interfaces/vxlan
```

```
vyos@vyos# ls -l  
total 2  
drwxr-xr-x  2 root root  31 Oct  9 22:28 link  
-rw-r--r--  1 root root 1071 Oct  9 21:20 node.def  
drwxr-xr-x 12 root root  156 Oct  9 22:28 node.tag
```

ん？

(<sup>◦</sup>Д<sup>◦</sup>)・・・(つДС)コッコッ

# ディレクトリの位置間違っていない？

- 「subcommands are in node.tag」って書いてたよね。

```
vyos@vyos$ pwd
/opt/vyatta/share/vyatta-cfg/templates/interfaces/vxlan
```

```
vyos@vyos# ls -l
total 2
```

```
drwxr-xr-x 2 root root 31 Oct 9 22:28 link
-rw-r--r-- 1 root root 1071 Oct 9 21:20 node.def
drwxr-xr-x 12 root root 156 Oct 9 22:28 node.tag
```

# node.tagへ移動させてみた

```
vyos@vyos$ pwd
/opt/vyatta/share/vyatta-cfg/templates/interfaces/vxlan
vyos@vyos$ sudo mv link node.tag/
vyos@vyos$ ls -l node.tag
total 4
drwxr-xr-x 2 root root 31 Oct 9 22:28 address
drwxr-xr-x 5 root root 73 Oct 9 22:28 bridge-group
drwxr-xr-x 2 root root 31 Oct 9 22:28 description
drwxr-xr-x 5 root root 65 Oct 9 22:28 firewall
drwxr-xr-x 2 root root 31 Oct 9 22:28 group
drwxr-xr-x 10 root root 206 Oct 9 22:28 ip
drwxr-xr-x 8 root root 153 Oct 9 22:28 ipv6
drwxr-xr-x 2 root root 4096 Oct 30 05:21 link
drwxr-xr-x 2 root root 31 Oct 9 22:28 mtu
drwxr-xr-x 4 root root 62 Oct 9 22:28 policy
drwxr-xr-x 2 root root 31 Oct 9 22:28 vni
```



# linkオプションが見えるようになった

```
vyos@vyos# set interfaces vxlan vxlan10
```

Possible completions:

- + address IP address
- > bridge-group Add this interface to a bridge group
  - description Description
- > firewall Firewall options
  - group Multicast group address for this VXLAN interface [REQUIRED]
- > ip IPv4 routing parameters
- > ipv6 IPv6 routing parameters
- link Underlay device name of this VXLAN interface**
- mtu Maximum Transmission Unit (MTU)
- > policy Policy route options
  - vni Virtual network identifier [REQUIRED]

# バグ報告

- [http://bugzilla.vyos.net/show\\_bug.cgi?id=381](http://bugzilla.vyos.net/show_bug.cgi?id=381)

## **Bug 381 - VxLAN's "link" option does not work**

**Status:** RESOLVED FIXED

**Product:** VyOS

**Component:** CLI

**Version:** helium

**Hardware:** All All

**Importance:** --- major

**Target Milestone:** 1.1.1

**Assigned To:** SO3Group maintainers

**Reported:** 2014-10-30 07:28 UTC by zinrai

**Modified:** 2014-10-30 08:42 UTC ([History](#))

**CC List:** 1 user ([show](#))

**See Also:**


**Implementation difficulty level:** ---

**Why the bug appeared:** Implementation mistake

# Pull Request


- <https://github.com/vyos/vyatta-cfg-system/pull/29>

vyatta-cfg-system: fix for unusable "link" option #29

 Merged **dmbaturin** merged 1 commit into `vyos:helium` from `zinrai:helium` on 30 Oct 2014

 Conversation **5**  Commits **1**  Files changed **1**



**zinrai** commented on 30 Oct 2014 

In the initial state, the "link" option was not usable, so I moved the "link" directory under "node.tag". Afterwards, the "link" option became usable.

# Merge

- <https://github.com/vyos/vyatta-cfg-system/pull/29>



zinrai commented on 30 Oct 2014



I just registered the bug on Bugzilla : [http://bugzilla.vyos.net/show\\_bug.cgi?id=381](http://bugzilla.vyos.net/show_bug.cgi?id=381)



dmbaturin commented on 30 Oct 2014

Owner

Cool, thanks!



dmbaturin merged commit `e8f01f4` into `vyos:helium` from `zinrai:helium` on 30 Oct 2014

Revert



dmbaturin closed this on 30 Oct 2014

# メンテナンスリリースで修正が取り込まれた

- VyOS 1.1.1 ( 2014年12月8日 )
- [http://vyos.net/wiki/1.1.0/release\\_notes#1.1.1](http://vyos.net/wiki/1.1.0/release_notes#1.1.1)

<a href="#">Bug #355</a>	Enhancement	vyatta-cfg-system: set default vyos password hash to sha-512 when reset	Alex Harpin
<a href="#">Bug #364</a>	Minor	ppp potential local privilege escalation CVE-2014-3158	Toni Cunyat
<a href="#">Bug #381</a>	Major	VxLAN's "link" option does not work	Hiroshi Umehara

Bug #381 Major VxLAN's "link" option does not work  
Hiroshi Umehara

# まとめ

- 心置きなくVXLANと戯れてください  
(私のおかげです!!)
- 新しい技術に対応した機器を揃えずに試すことができる
- 皆さんもどんどん使ってバグ報告しましょう
  - バグ報告はBugzilla
  - Pull RequestはGithub