

607:YYYY:4001::/48 ?

～IPv6アドレスってどのあたりが使われているんでしたっけ～

佐藤秀樹

# 2018年6月のある日の経路

- dix-ieg#show ipv6 route
- IPv6 Routing Table - default - 51721 entries
- Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
- B - BGP, R - RIP, H - NHRP, I1 - ISIS L1
- I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary, D - EIGRP
- EX - EIGRP external, ND - ND Default, NDp - ND Prefix, DCE - Destination
- NDr - Redirect, O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1
- OE2 - OSPF ext 2, ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
- la - LISP alt, lr - LISP site-registrations, ld - LISP dyn-eid
- a - Application
- S ::/0 [1/0]
  - via Null0, directly connected
- B 607:YYYY:4001::/48 [20/0]
  - via FE80::XXXX:2, GigabitEthernet0/0/0
- B 2001::/32 [200/0]
  - via 2001:DC2:1000:6003::1

# 2018年6月のある日の経路

- dix-ieg#show ipv6 route
- IPv6 Routing Table - default - 51721 entries
- Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
- B - BGP, R - RIP, H - NHRP, I1 - ISIS L1
- I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary, D - EIGRP
- EX - EIGRP external, ND - ND Default, NDp - ND Prefix, DCE - Destination
- NDr - Redirect, O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1
- OE2 - OSPF ext 2, ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
- Ia - LISP alt, Ir - LISP site-registrations, Id - LISP dyn-eid
- a - Application
- S ::/0 [1/0]
- via Null0, directly connected
- B 607:YYYY:4001::/48 [20/0]
- via FE80::XXXX:2, GigabitEthernet0/0/0
- B 2001::/32 [200/0]
- via 2001:DC2:1000:6003::1

おや？

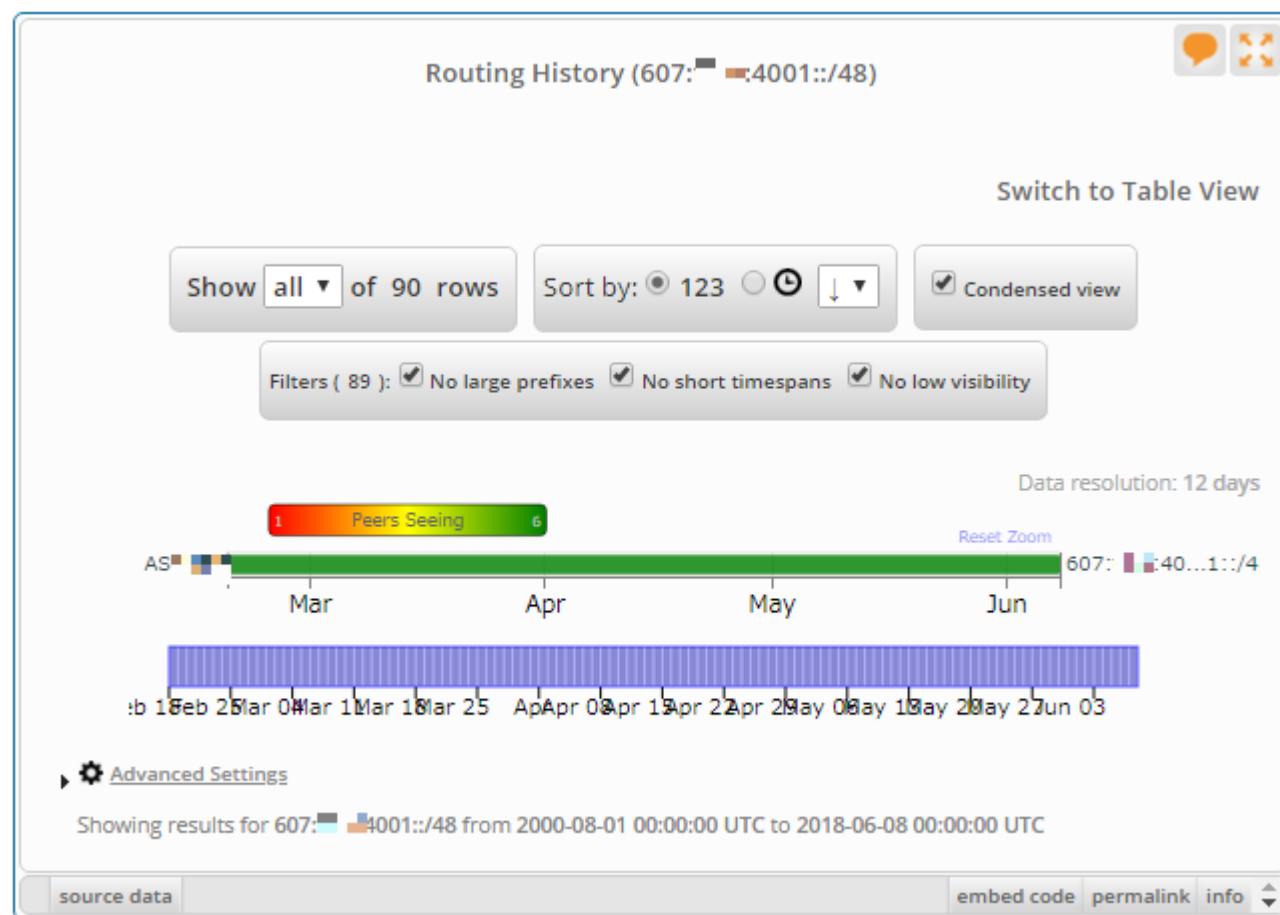
B 607:YYYY:4001::/48 [20/0]

IPv6 Prefix	Allocation	Reference	Notes
0000::/8	Reserved by IETF	[RFC4291]	[1] [2] [3] [4] [5] [6]
0100::/8	Reserved by IETF	[RFC4291]	0100::/64 reserved for Discard-Only Address Block [RFC6666]. Complete registration details are found in [ <a href="#">IANA registry iana-ipv6-special-registry</a> ].
0200::/7	Reserved by IETF	[RFC4048]	Deprecated as of December 2004 [RFC4048]. Formerly an OSI NSAP-mapped prefix set [RFC4548].
0400::/6	Reserved by IETF	[RFC4291]	
0800::/5	Reserved by IETF	[RFC4291]	
1000::/4	Reserved by IETF	[RFC4291]	
2000::/3	Global Unicast	[RFC4291]	The IPv6 Unicast space encompasses the entire IPv6 address range with the exception of ff00::/8, per [RFC4291]. IANA unicast address assignments are currently limited to the IPv6 unicast address range of 2000::/3. IANA assignments from this block are registered in [ <a href="#">IANA registry ipv6-unicast-address-assignments</a> ]. [7] [8] [9] [10] [11] [12] [13] [14] [15] [16]
4000::/3	Reserved by IETF	[RFC4291]	
6000::/3	Reserved by IETF	[RFC4291]	

割り当てられていない範囲です。

2000::から3fff:ffff:ffff:ffff:ffff:ffff:ffff:ffff  
までがつかわれています。

RIPE STATで確認してみます。  
それなりの期間この状態でした。



Routing Status (607: 4001::/48)

At 2018-06-07 08:00:00 UTC,  
607: 4001::/48 was 3% visible (by 6 of  
174 RIS full peers).

First ever seen announced by AS  on  
2018-03-01 16:00:00 UTC.

Originated by: AS 

No less-specific covering prefixes.

Advanced Settings

Showing results for 607: 4001::/48 as of 2018-06-07  
08:00:00 UTC

Latest available results are 25 hours old.

Results exclude routes with very low  
visibility (less than 3 RIS full-feed peers  
seeing).

source data embed code permalink info

どうやらタイプされていそう。

607:4001::/48 Search

**Related Resources**

AS

607:4001::/48 is announced by AS

2607:4001::/48 Search

**Related Resources**

AS

2607:4001::/48 is announced by AS

2607::/32

 Routed, less specific prefix to 2607:4001::/48 Geol

# Peering DBでコンタクト先を発見

The screenshot shows two parts of the PeeringDB interface. The top part is a modal window titled "Contact Information" with the message: "Some of this network's contacts are hidden because they are only visible to authenticated users and you are currently not logged in." The bottom part is a table titled "Contact Information" with columns for Role, Name, Phone, and E-Mail. It lists two entries: "NOC" and "Policy". Each entry has a small icon next to the name.

Role	Name	Phone	E-Mail
NOC	[Icon]	[Icon]	[Icon]
Policy	[Icon]	[Icon]	[Icon]

登録されているコンタクト情報を、アカウントを持っている方だけに表示させる機能があります。

# 連絡後すみやかに修正いただきました

差出人 Network Operations  ★  
件名 RE: RIPE stat says AS  originating 607: :4001::/48  
宛先 (自分) <hideki@nic.ad.jp>★  
Cc peering@nic.ad.jp <peering@nic.ad.jp>★

2018/06/09 5:41

Hi Hideki,  
This should be fixed now. Can you please confirm?



-----Original Message-----  
From: Hideki Sato <[hideki@nic.ad.jp](mailto:hideki@nic.ad.jp)>  
Sent: Friday, June 8, 2018 3:20 AM  
To: Network Operations   
Cc: [peering@nic.ad.jp](mailto:peering@nic.ad.jp)  
Subject: Re: RIPE stat says AS  originating 607: :4001::/48

CAUTION: This email is from an external source. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I realized that you have 2607::/32 so I assume that there is a typo...

On 2018/06/08 18:07, Hideki Sato wrote:

Hello .

I am Hideki Sato from JPNIC. I just wanted to inform you about 607:  4001::/48 prefix.  
I observed 607::4001::/48 route on BGP and RIPE stat says that you, AS  are stated originating the prefix from this March.  
As you know the prefix is reserved by IETF so I suspect that it might be something wrong on your network.

Best Regards,  
Hideki Sato

# ところでJC1006では

## 3-1-2. 経路フィルタ

### 3-1-2-1. Ingress の Prefix フィルタ

#### [1] 以下の Special-Use Prefix を reject する

- デフォルト : ::/0 exact
- 予約済みアドレス (元 IPv4 互換アドレス) : ::/96 or longer
- 未指定アドレス : ::/128 exact
- ループバックアドレス : ::1/128 exact
- IPv4 射影アドレス : ::ffff:0:0/96 or longer
- トラフィック破棄専用 (Discard-Only) アドレス : 100::/64 or longer
- ベンチマークテストアドレス : 2001:2::/48 or longer
- ドキュメントアドレス : 2001:db8::/32 or longer
- ユニークローカルアドレス : fc00::/7 or longer
- リンクローカルアドレス : fe80::/10 or longer
- 予約済みアドレス (元サイトローカルアドレス) : fec0::/10 or longer
- マルチキャストアドレス : ff00::/8 or longer

#### [2] 自 AS で持っている Prefix を reject する

(例) 自 AS で持っている Prefix を 2001:db8::/32 と仮定した場合、2001:db8::/32 or longer を reject する

64:ff9b::/96も入っていませんでした

# 2000::/3以外の経路を受け取る必要は？

- 2000::/3以外はかなり長期間不要かもしれない
  - 2000::/3(3fff:ffff:ffff:ffff:ffffまで)でIPv6の1/8をカバー
    - 42.5澗
  - 2c00::/12が2006年10月にAFRINICに割り当てられてから、新たな割り当て無し。
  - IRRを見るべき？ bogonは？？？
  - 経路障害向けにはJPNIC経路奉行のご利用と

