

Introduction of ENOG and Echigo-IX

June 12, 2013

Echigo Network Operators' Group

About ENOG

- Echigo Network Operators' Group
 - Regional NOG in Niigata Prefecture Area
 - Echigo is the old name of Niigata
 - Established in January 2010
 - A trigger is the JANOG25 Meeting held at Niigata City
 - Held a Meeting Every Other Month
 - Anyone can join in, Anyone is welcomed

Features of Niigata

- Region of the Country's Leading

- Rice Producing
- Sake Brewing
- Heavy Snowfall



- 300km North from Tokyo

- Almost rural area
- Full of a sense of the seasons
- Very nice place to live ;)

Niigata Prefecture
is here!



Member of ENOG Steering Committee

Five ISP operators in Niigata Prefecture constitute a steering committee



Photos



Meeting



Social



Occasionally, meeting will be held at “Onsen Ryokan”

Echigo-IX

- Regional IX in Niigata Prefecture Area
 - Operated by ENOG committee
 - Part of the ENOG activities
 - Launched in September 2011
 - Decided to build the IX in ENOG9 Meeting of June 2011
 - Aimed to Contribute Local Revitalization
 - Activate Local Community, Activate Local Business

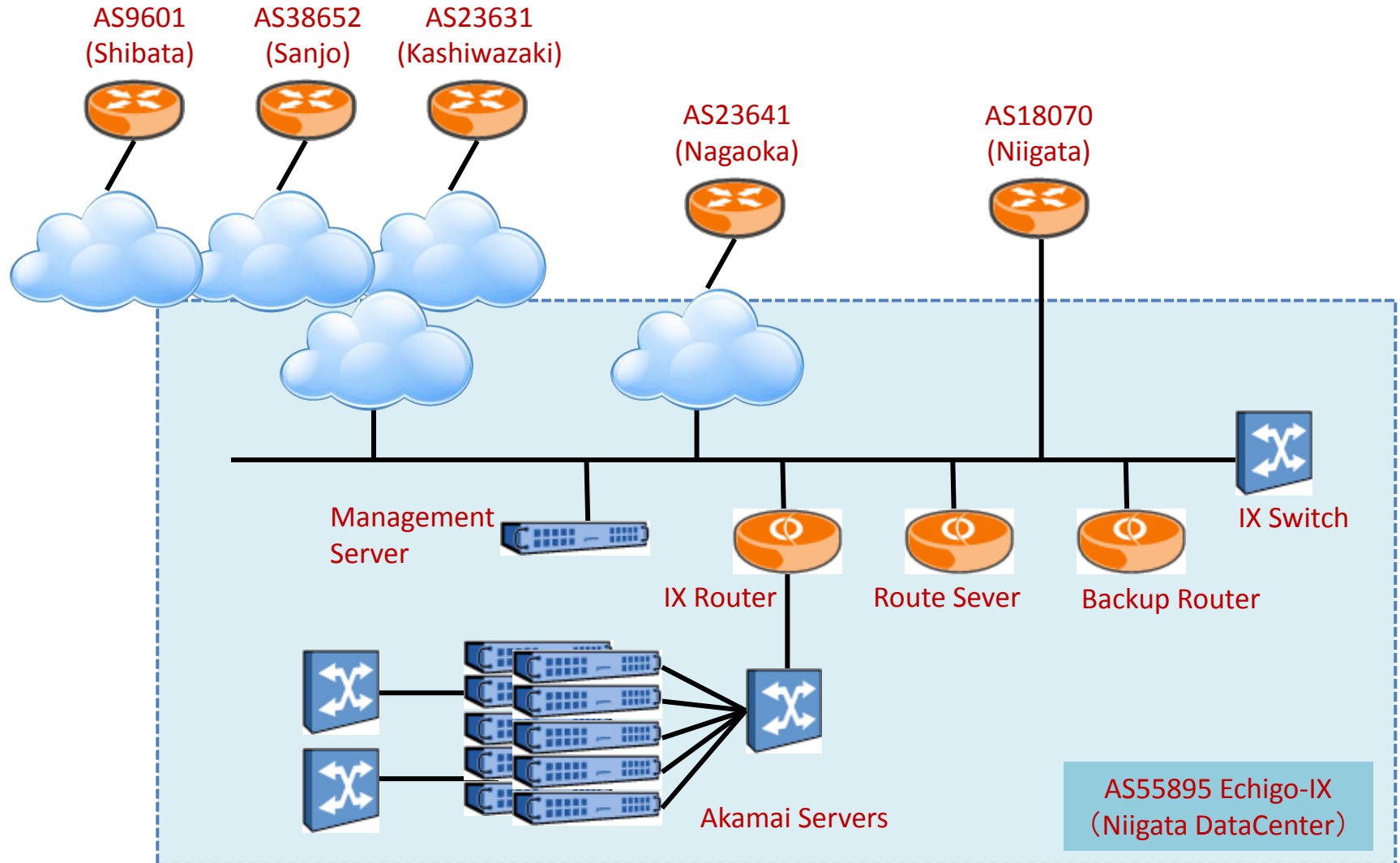
Features of Echigo-IX

- Route Server Service
 - Using Vyatta Software Router
- Ethernet WAN Connection
 - Having potential for distributed IX
 - IX Switch is installed only in Niigata City now
- Shared Use of CDN Cache Server
 - Akamai Accelerated Networks Program



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Echigo-IX Network



IX Facilities and Operation

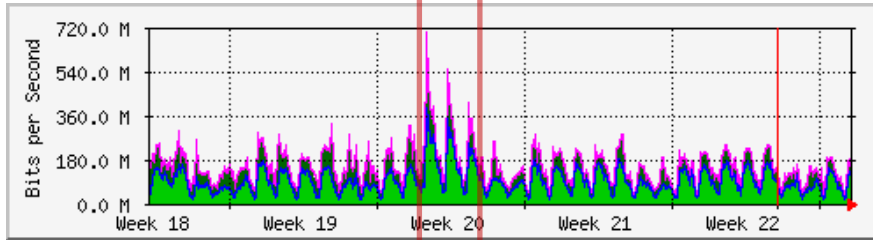
- Potluck Party Method !
 - AS9601 IPv4/IPv6, WAN
 - AS18070 Datacenter, Switch, WAN
 - AS38652 Router
 - AS23641 ASN
 - AS23631 Sever
 - Everyone BGP Transit, Operation
- There is no budget for this project
 - No income, No expenses

Akamai CDN on Echigo-IX

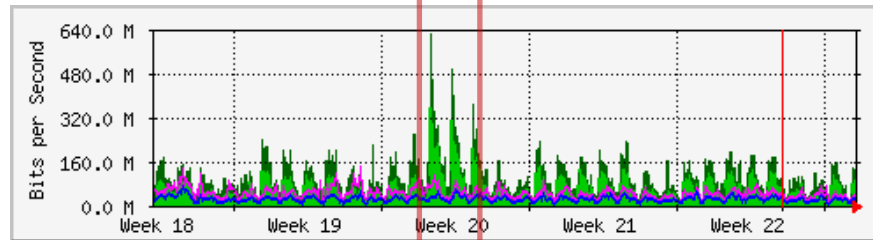
- Get Together, Share the effect
 - By shared use scheme, small local ISPs will be able to take advantage of CDN cache
 - Improve service quality by low latency
 - Cost saving by transit traffic suppression
- Rediscovery of the Regional IX Existence Value?
 - Actually, inner-regional traffic is very very small...

Traffic Graphs

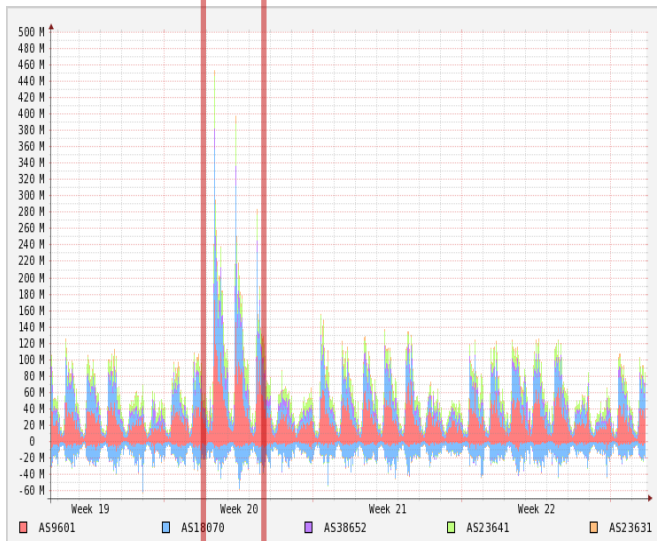
Windows Update
May 15, 2013



IX Switch - Total



IX Router - Interface for Akamai Servers



IX Router - Traffic Flow of Each AS, In/Out

In The Future?

- Increase the member
 - Cable Operators, Universities, xSPs...
- Install Another CDN Cache
 - Google Global Cache or anything like that
- Do More Interesting Activities
 - Experimental Projects
 - Alliance with Other Regions

Thank You!

- See Also
 - ENOG
 - <http://enog.jp/>
 - Echigo-IX
 - <http://www.echigo-ix.jp/>



Ai Echigoya
Official Character of the Echigo-IX