



FUNCTIONAL LEARNING DEMO IX Private VLAN Training

Release 2020.0.1

RUPINDER RANDHAWA, Principal Product Manager, Interconnection

Hi, I'm Rupinder Randhawa and I'm a Principal Product Manager at Equinix. In this video I'm going to talk to you about Private VLANs and Equinix Internet Exchange. Equinix Internet Exchange, when configured, defaults to public VLANs. Some customers are requesting the ability to provision Private VLANs, or PVLANS, in order to obtain isolation from one virtual circuit to another for;

- Security
- Performance
- Monitoring

Multiple PVLANS are possible within a single IX port.
Extended (BMMR), Remote and Metro support is not enabled.

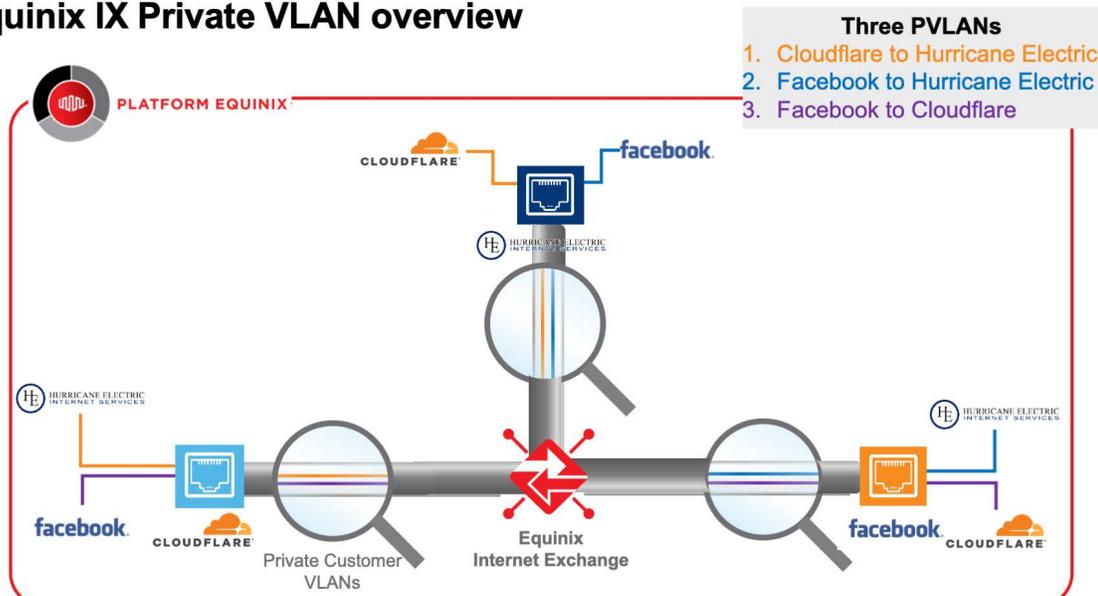
Support for PVLANS in IX was possible in the past through manual requests, but can now be supported with Siebel and NOCC.

Equinix IX private VLAN overview.

Here we have a logical diagram showing how three separate PVLANS could be configured. You'll see all three customers CloudFlare, Facebook and Hurricane Electric all have ports on our Equinix Internet Exchange platform. But instead of one shared public VLAN there are three separate private VLANs going from CloudFlare to Hurricane Electric, Facebook to Hurricane Electric and Facebook to CloudFlare.

These are three separate and individual connections giving a private connection between each participant.

Equinix IX Private VLAN overview





EQUINIX

Summary of VLAN Types

Public VLAN.

A public VLAN allows customers to receive all routes advertised publicly (MLPE).

Any routes Customer A shares with our MLPE Route Servers will be visible to all other customers that also peer with the route server.

Private VLAN.

Which was released in our February 2020 release. A private VLAN allows 2 companies connected to IX to share private routes which are not advertised publicly on the IX.

Both parties should confirm agreement to share private routes. VLAN ID on Customer A must match customer B.

Private VLAN should be reflected on both Customer A and B with the option to tie to Port OR LAG Group.

Product structure

Here in this table we show the product structure for this new product offering. The POF part number is IX00009.PROD. The POF name is Equinix Internet Exchange VLAN. Here we have two elements that make up this POF. The elements are IX00009.ELEM which is for the Internet Exchange VLAN and it defines whether it is a private VLAN or any other VLAN types in the future. There is also the element IX00009.NR and that corresponds to the installation fee that would be required to set up the VLAN. Note that the;

- Customer needs an IX port to have a Private VLAN
- Z-Side customer won't be able to terminate any de-install of Private VLAN
- No additional validations or LOA is required in Siebel
- Public VLANs are generic and conversion from Private to Public is not possible

Product Structure

POF Part #	POF Name	Element Part #	Product element	Attributes
IX00009.PROD	Equinix Internet Exchange - VLAN			
		IX00009.ELEM	Internet Exchange - VLAN	POF Name - Equinix Internet Exchange - Private VLAN
		IX00009.NR	Equinix Internet Exchange - VLAN – Installation Fee	

- Customer needs an IX port to have a Private VLAN
- Z-Side customer won't be able to terminate any de-install of Private VLAN
- No additional validations or LOA is required in Siebel
- Public VLANs are generic and conversion from Private to Public is not possible



Product attributes.

In this table we're showing the different attributes in this product offering. The two attributes are VLAN Type and POF Name. The Data Type for VLAN Type will be from a pick list. It is required and you can see the value shown when selected will equal private. The POF name will therefore become Equinix Internet Exchange Private VLAN. So let's walk through the quoting and ordering steps in Siebel starting with step number one.

Product Attributes

Attribute Name	Data Type	Required	UI	ReadOnly - Quote	ReadOnly - Order	ReadOnly - Fulfillment	Comments
VLAN Type	Pick List	Yes	Yes	No	Yes	Yes	Values = Reseller or Private
POF Name	System	Yes	Yes	Yes	Yes	Yes	POF Name = Equinix Internet Exchange - Private VLAN

Two new Attributes

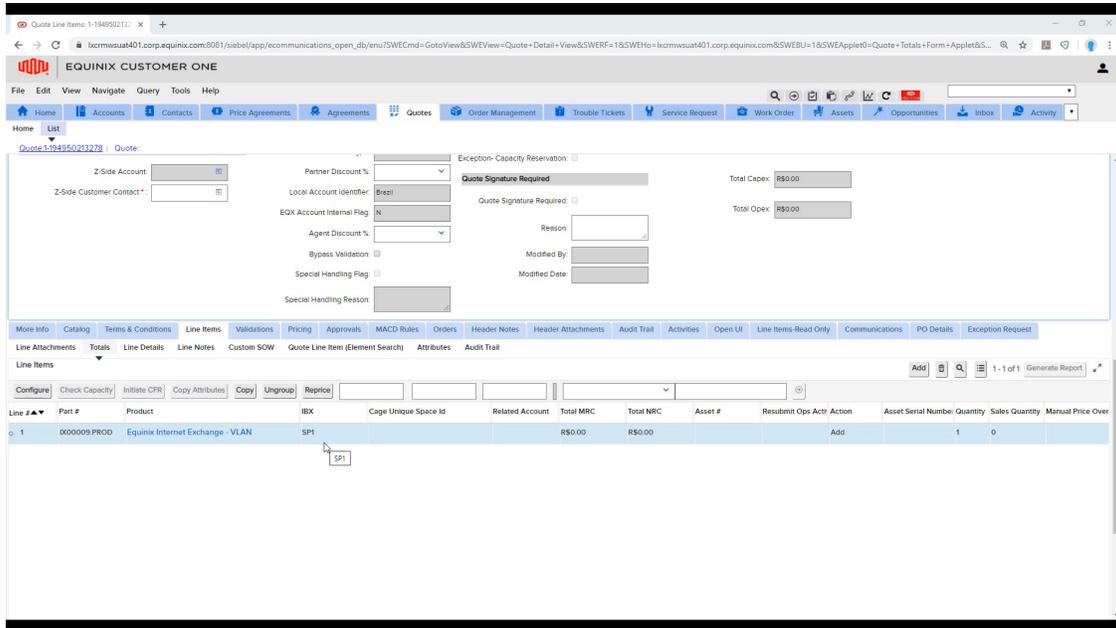
- VLAN Type
- POF Name

VLAN Type

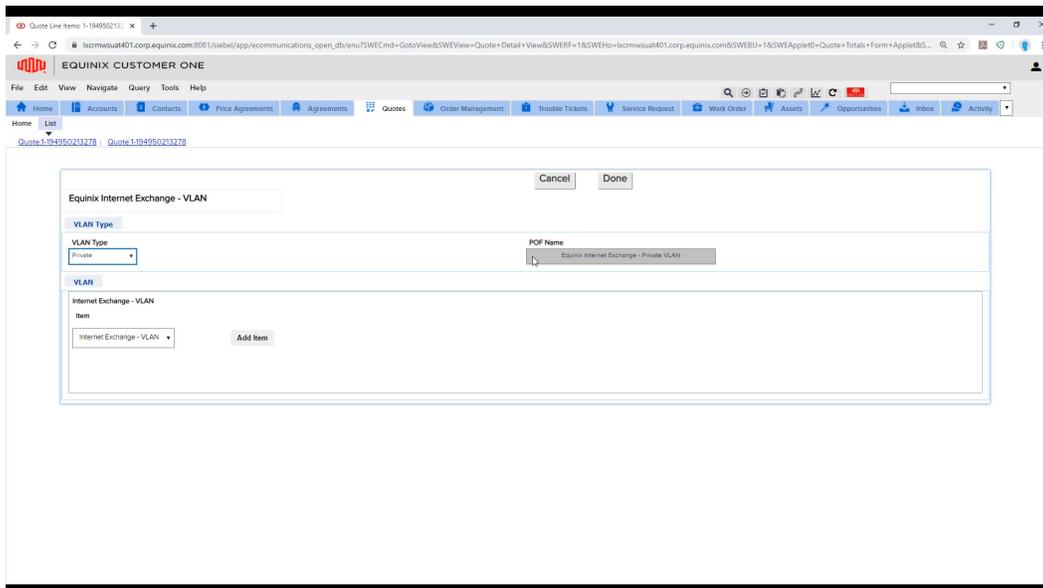
- Here is where you select **Private**



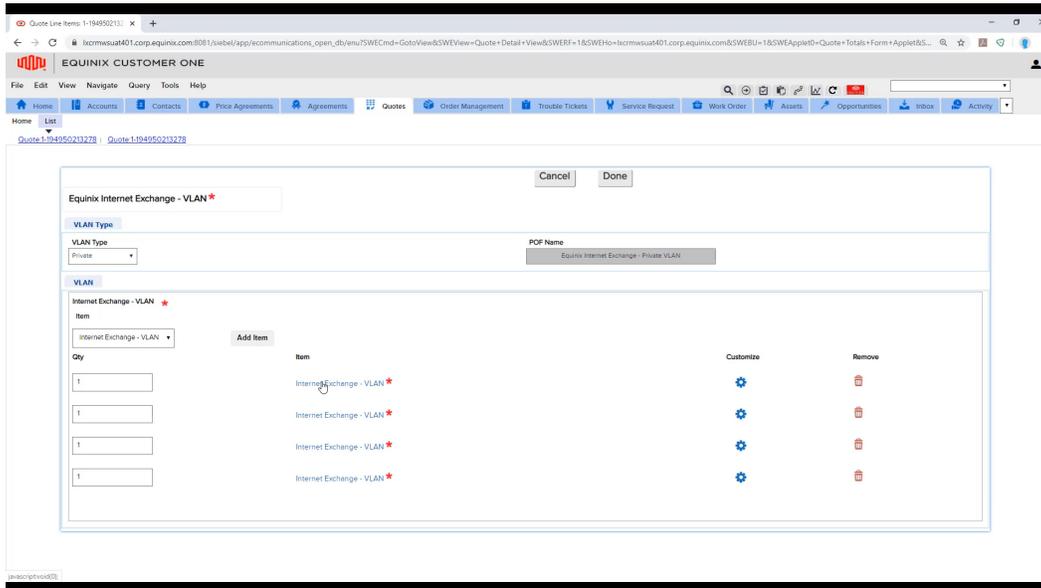
Step 1. Start by ordering an Equinix internet exchange VLAN which is IX00009.PROD and select configure.



Step 2. From the VLAN type pull down menu select private and then POF name will Auto populate with Equinix Internet Exchange private VLAN.

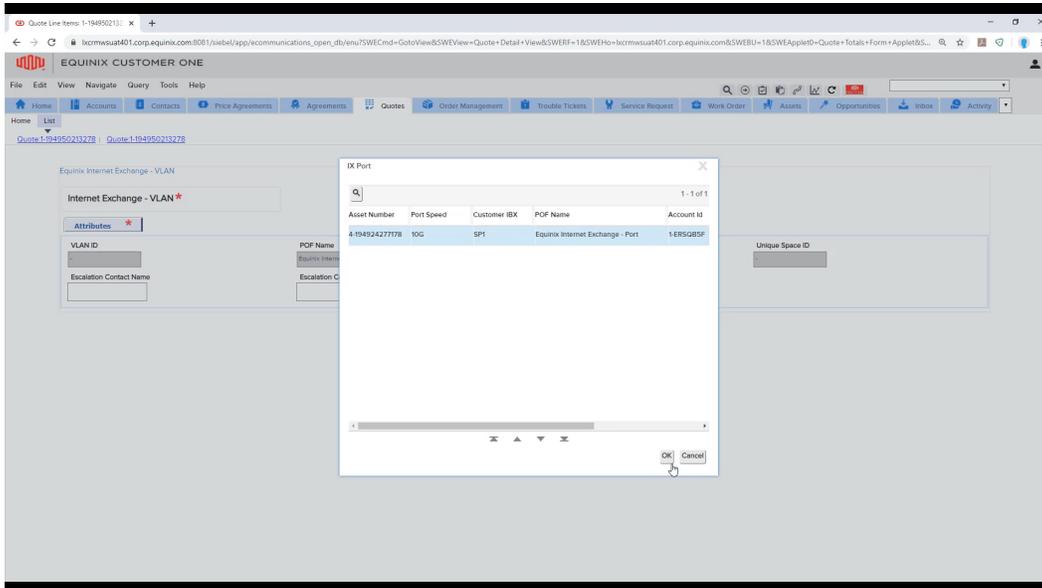


Step 3. You can now add items multiple times. These are the POEs.

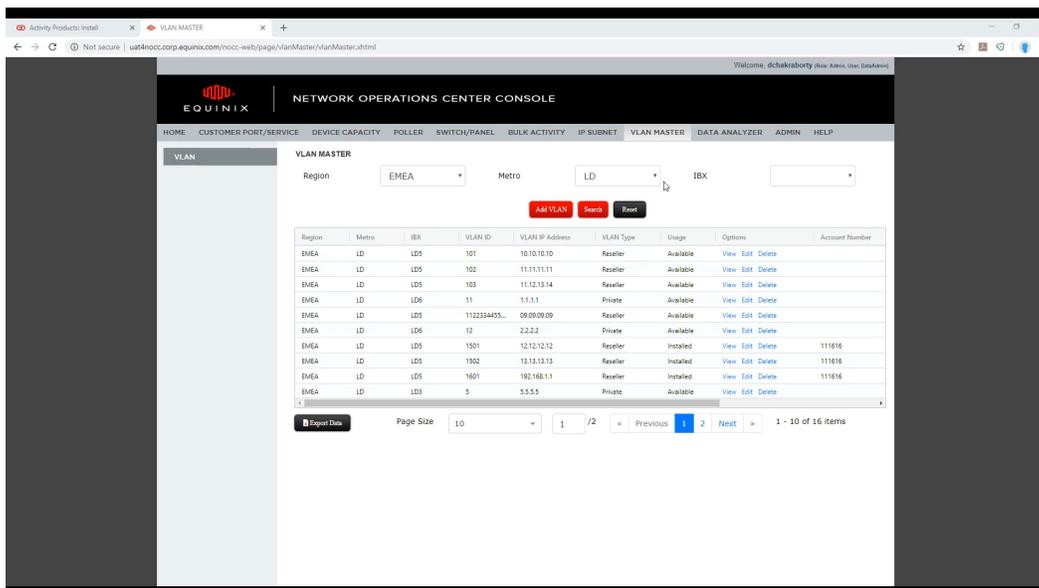


Step 4. Selecting a single POE item Internet Exchange VLAN will bring you to this detail screen. Select the private VLAN info pulldown button.

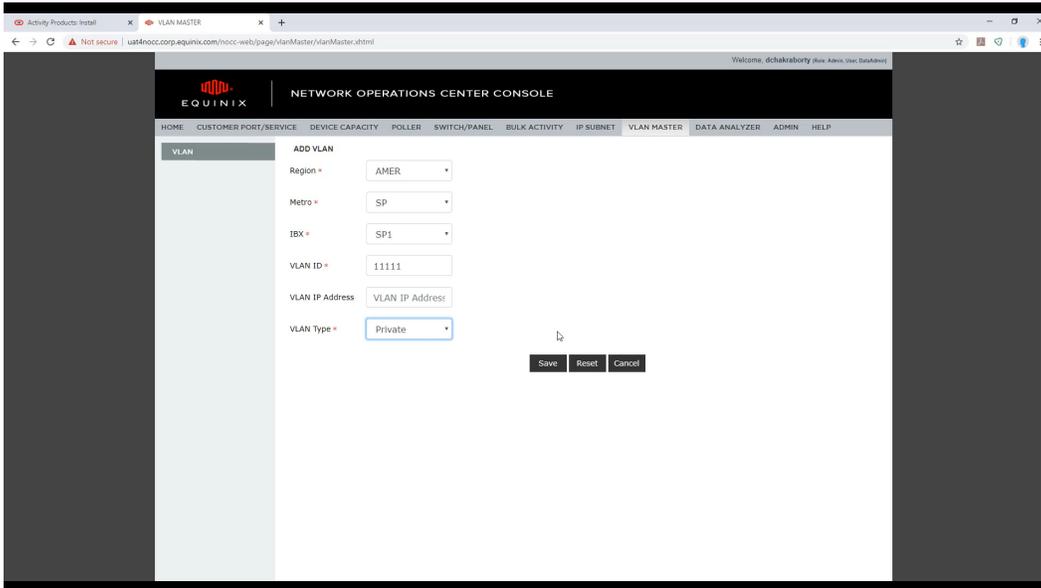
Step 5. Select the asset from your list that will be the Equinix Internet Exchange port in which the private VLAN will be provisioned.



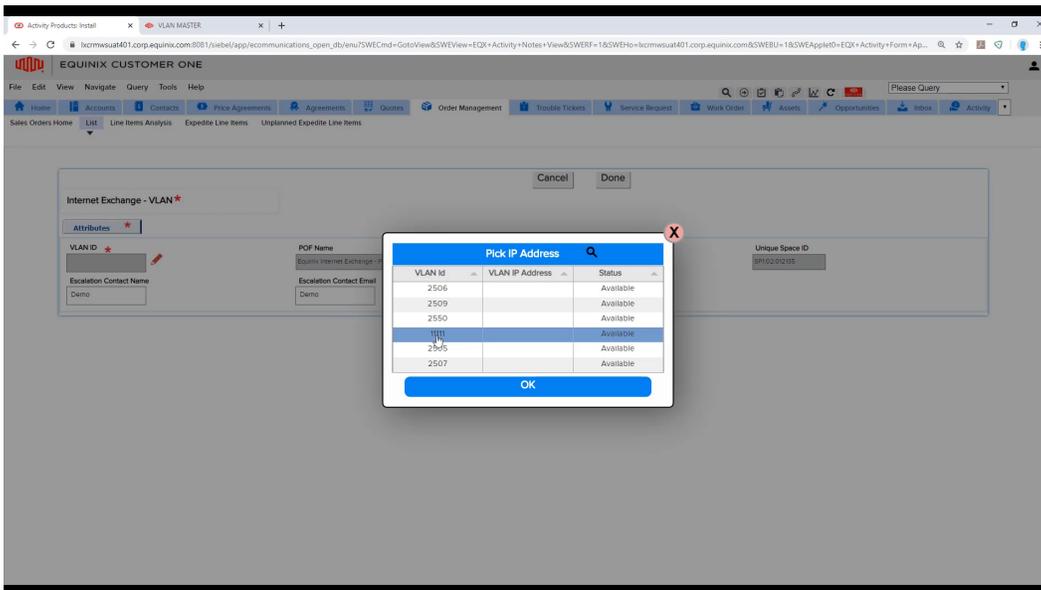
Step 6. Net Ops, using the network operation center console, will use VLAN master to create the VLAN ID number.



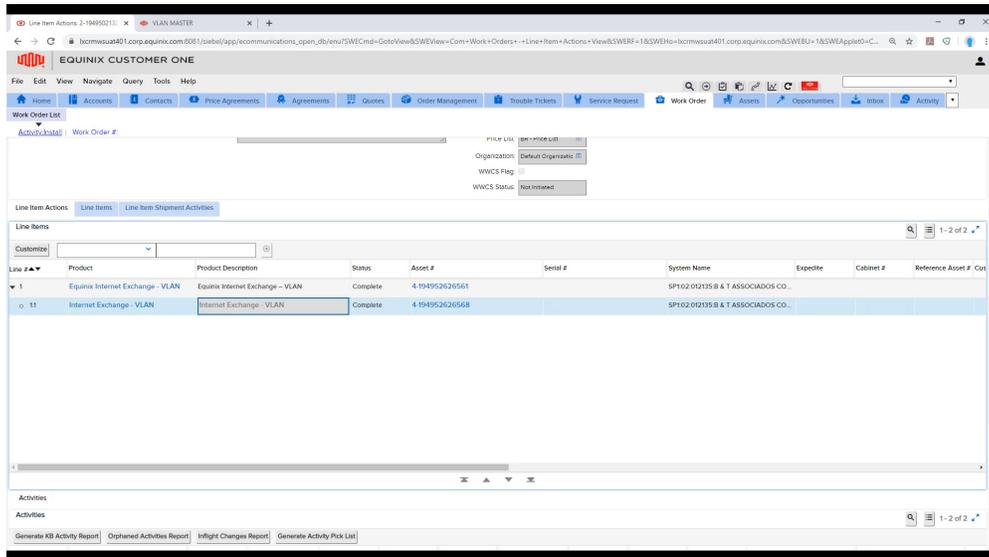
Step 7. They select add VLAN in order to enter location details, ID number, and VLAN type.



Step 8. That VLAN ID can now be selected from the VLAN ID pick applet.



Step 9. That completes the entries. once assetized all details will be available in Siebel and NOCC.



The IX portal and ECP will be updated later in 2020 to enable online ordering and monitoring of VLAN traffic. That concludes our learning demo on how to order an Equinix Internet Exchange private VLAN. Thanks for watching