**Patch**: 0b7c63ad7610f6641e5c3142c95791cd42247976

**Comments**:

plugin: force a refresh of port db object

When the allowed address pairs db objects are created for a port nothing is

refreshing the parent port db object. This means that accessing that attribute

like 'port\_db.allowed\_address\_pairs' will only work if it is being accessed for

the first time \*after\* the allowed address pair objects have been created. If

something causes that object to populate that field before the address pairs

objects are created then it will also report an empty list.

**Patch fixes**:

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| --- |
| def \_create\_port\_db(self, context, port):  …  self.mechanism\_manager.create\_port\_precommit(mech\_context)  self.\_setup\_dhcp\_agent\_provisioning\_component(context, result)  # TODO(alegacy): this refresh is needed because otherwise the  # allowed\_address\_pairs attribute of the DB object will not be  # automatically updated if anything causes the DB object to be  # re-read before this point. This is needed because the VLAN code  # is re-reading the port object and causing the  # allowed\_address\_pairs to be returned as an empty list.  context.session.add(port\_db)  context.session.refresh(port\_db)  resource\_extend.apply\_funcs('ports', result, port\_db)  return result, mech\_context |

**POC Steps**:

1. Add log debug code to check (print out) the port\_db without patch fix applied (e.g. before add/refresh operation), like below:

|  |
| --- |
| def \_create\_port\_db(self, context, port):  attrs = port[port\_def.RESOURCE\_NAME]  with db\_api.context\_manager.writer.using(context):  dhcp\_opts = attrs.get(edo\_ext.EXTRADHCPOPTS, [])  **port\_db = self.create\_port\_db(context, port)**  …  **LOG.debug("###### port\_db1 is '%s'", port\_db.allowed\_address\_pairs)**  result[addr\_apidef.ADDRESS\_PAIRS] = (  self**.\_process\_create\_allowed\_address\_pairs**(  context, result,  attrs.get(addr\_apidef.ADDRESS\_PAIRS)))  **LOG.debug("###### port\_db2 is '%s'", port\_db.allowed\_address\_pairs)**  self.\_process\_port\_create\_extra\_dhcp\_opts(context, result,  dhcp\_opts)  kwargs = {'context': context, 'port': result}  registry.notify(  resources.PORT, events.PRECOMMIT\_CREATE, self, \*\*kwargs)  self.mechanism\_manager.create\_port\_precommit(mech\_context)  self.\_setup\_dhcp\_agent\_provisioning\_component(context, result)  **# comments out patch 0b7c63a**  #context.session.add(port\_db)  #context.session.refresh(port\_db)  resource\_extend.apply\_funcs('ports', result, port\_db)  return result, mech\_context |

1. Create net0
2. Create Port with allowed\_address\_pairs attributes:

openstack port create --network net0 --allowed-address ip-address=10.0.4.100,mac-address=11:11:11:11:11:11 test\_port

1. Check the output

|  |
| --- |
| DEBUG neutron.plugins.ml2.plugin [^[[01;36mNone req-65415a85-b343-4591-9299-8cd27bc3c7de ^[[00;36madmin admin] ^[[01;35m###### **port\_db1 is '[]'**^[[00m ^[[00;33m{{(pid=26766) \_create\_port\_db /opt/stack/neutron/neutron/plugins/ml2/plugin.py:1202}}^[[00m  DEBUG neutron.plugins.ml2.plugin [^[[01;36mNone req-65415a85-b343-4591-9299-8cd27bc3c7de ^[[00;36madmin admin] ^[[01;35m###### **port\_db2 is '[<neutron.db.models.allowed\_address\_pair.AllowedAddressPair[object at 7fbc161ab090] {port\_id=u'e6b814a5-17eb-407d-a681-a526a0d07d3c', mac\_address=u'11:11:11:11:11:11', ip\_address=u'10.0.4.100'}>]'**^[[00m ^[[00;33m{{(pid=26766) \_create\_port\_db /opt/stack/neutron/neutron/plugins/ml2/plugin.py:1208}}^[[00m |

**Result Analysis**:

Without the patch applied (e.g. context.session.refresh(port\_db)), the allowed\_address\_pair attribute of port\_db instance had been updated automatically when call **.\_process\_create\_allowed\_address\_pairs** () to create the allowed\_address\_pairs instance (the auto update is invoked may due to (1) port\_db = self.create\_port\_db(context, port) -> context.session.add(port\_db) (2) class AllowedAddressPair create the relationship to backref to Port.allowed\_address\_pairs).

So it seems the patch is NOT required for this case.

Can you share with us what the case and steps in the code comments of “this refresh is needed because otherwise the allowed\_address\_pairs attribute of the DB object will not be automatically updated if anything causes the DB object to be re-read before this point. This is needed because the VLAN codeis re-reading the port object and causing the allowed\_address\_pairs to be returned as an empty list)?