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## Native vlan-id and tagged behavior in EX Switches

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### SUMMARY:
Native vlan-id and tagged behavior in EX Switches

### PROBLEM OR GOAL:
This article is intended to help one understand tagged behaviour on an EX Switch when native-vlan id is configured.

### SOLUTION:
When the native-vlan id is configured and when the same VLAN is configured under the port mode trunk, the switch receives untagged frames as well as tagged frames for native-vlan id configured and forwards it to the VLAN configured as native.

For the same configuration, when the packets are send out on the native-vlan the frames are send as tagged frames as it is added under the port mode trunk.

For example:

In the configuration below, the "native-vlan-id 1" equals the MGMT vlan (ID 1) and also the MGMT vlan is configured as a member of the trunk.
vlan:

```
ge-0/0/23 {
unit 0 {
family ethernet-switching {
port-mode trunk;
vlan {
members [ MGMT Cust_150 Cust_151 ];
< ----------(Reason why MGMT packets are tagged)
}
native-vlan-id 1;
}
}
}
```

The EX will tag and transmit the MGMT packets. To send untagged packets on the native vlan, the MGMT vlan has to be removed as a member of the trunk but left in the native vlan set to the MGMT.


Here's how it works:

MGMT is NOT a member of trunk, but it is a member of native VLAN:
Transmit = untagged (pass)
Receive = untagged (pass - mapped to MGMT)
Receive = tagged to MGMT (drop)

MGMT IS a member of trunk and native vlan:
Transmit = tagged (pass)
Receive = untagged (pass - mapped to MGMT)
Receive = tagged (pass)


So if a tagged VLAN needs to be send as untagged traffic, it should be configured only with the native-vlan id, and the VLAN should not be added under the port mode trunk configuration.

```
ge-0/0/23 {
unit 0 {
family ethernet-switching {
port-mode trunk;
vlan {
members [ Cust_150 Cust_151 ];
}
native-vlan-id 1; <---- will be send as untagged.
}
}
}
```

### PURPOSE:
Configuration
Implementation

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