# API summary

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| # | **API name and description** | **Where to look for it (initial ideas)** |
| 1 | Get physical topology – Find out all existing switches in the domain, connectivity, connection to racks, connection to hosts | * **Vitrage APIs**: Includes getting resources and topology, currently no auto discovery, switch data is loaded from configuration files, racks support not included in Mitaka, it is on the road map |
| 2 | Get virtual topology | **Vitrage API**: Includes getting resources and topology.  **Neutron** API: Currently defines networks, subnetworks and ports so we need those and I believe that neutron provides it. In my mind virtual topology is made of VMs, virtual switches and tunnels. There is a need of course build topology per tenant and per subnet |
| 3 | Get mappings: VMs to hosts, Hosts to racks, racks to switch ports, apps to VMs | **Vitrage API**: Racks will not be supported in Mitaka **Nova API**: VM to hosts  **IPMI**:??? |
| 4 | SNMP Manager – Receive SNMP traps | The most obvious example is port up/down indication which is supports on all physical switches, there may be other ways to understand it but this is defiantly the fastest way.  No current support in the virtual layer |
| 5 | Get switch status/ event | 1. **Vitrage API**: Get the state of a resource. This might either be the original state (like Nova state), or a state deduced by Vitrage (in case there is an alarm on the resource). 2. Targeted for Mitaka, but is at risk due to time limitations. 3. **SNMP traps**: Get switch port down from different switches |
| 6 | Get switch port status /event | 1. **SNMP traps**: Get switch port down/ up trap |
| 7 | Get NIC status /event | 1. NICs support is scheduled for Mitaka. Regarding the get state API, see use case #5. 2. And what do you mean by NIC event? Nic up/down, link up/down |
| 8 | Get VMs status /Event | 1. VMs are already supported in Vitrage. Regarding the get state API, see use case #5.   And what do you mean by VM event? A notification on the VM status change, I will think on the specific event |
| 9 | Activate link OAM tool | N/A for Vitrage |
| 10 | Get host’s NIC statistics | N/A for Vitrage. Should be done by a monitoring tool |
| 11 | Get host process list and status | N/A for Vitrage |
| 12 | Get OVS switch status | 1. OVS switch support is scheduled for Mitaka. Regarding the get state API, see use case #5. |
| 13 | Get L2 agent status | L2 agent will not be supported in Mitaka.  Vitrage architecture was designed to support adding new resource types over time, so supporting it should be easy |
| 14 | Get OVS/ SDN switch port status | OVS/SDN Switch ports will not be supported in Mitaka. May be supported in the future |
| 15 | Get OVS port down event | OVS port will not be supported in Mitaka. May be supported in the future |
| 16 | Get Hypervisor status/ event | Hypervisor will not be supported in Mitaka. It is an open issue whether it should be supported in Vitrage at all |
| 17 | Check process up time | N/A for Vitrage |
| 18 | Get host restarted event | Will not be supported in Mitaka. It is an open issue whether events should be supported in Vitrage |
| 19 | IPMI – sys up time | N/A for Vitrage |
| 20 | VNC ??? | What is the use case? vNIC down, can we access the VM in this case what kind of information can we get form the VM in this case? Can it be helpful for us in anyway? I don’t have an answer for it yet |
| 21 | Get expected configuration | N/A for Vitrage |
| 22 | Get actual configuration | N/A for Vitrage |
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