

# Network Configuration for Cisco UCS Director Express Baremetal Agent

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### **About the Network Configuration Options**

You can choose between the following network configuration options for Cisco UCS Director Express for Big Data Baremetal Agent:

- Single network for management and Preboot Execution Environment (PXE)
- Separate networks for management and PXE

Choose the network configuration option that best meets the requirements of your environment.

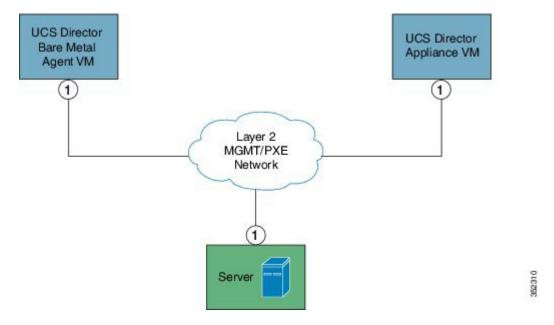
### **Single Network for Management and PXE**

We recommend that you choose this network configuration option if your environment permits the following to be hosted on the same network interface and Layer 2 network (see the following figure):

Services provided by Baremetal Agent, such as DHCP, TFTP, and HTTP

 Management traffic between Baremetal Agent and Cisco UCS Director Express for Big Data or other devices and appliances

Figure 1: Sample Topology for a Single Network



#### **Prerequisites and Assumptions for a Single Network Configuration**

If you plan to configure Baremetal Agent with a single network configuration, ensure that your environment meets the following prerequisites and assumptions:

- Cisco UCS Director Express for Big Data has been installed and the network interface configured, as described in the appropriate Cisco UCS Director Express for Big Data installation guide.
- Cisco UCS Director Express for Big Data is reachable through a web browser and you can log in.
- Baremetal Agent has been installed, as described in the Cisco UCS Director Express for Big Data Baremetal Agent Installation and Configuration Guide and no additional configuration has been performed.
- The required single Management and PXE VLAN is provisioned and available as a virtual port group or port profile that virtual machines (VMs) can be attached to or leverage.

## **Separate Networks for Management and PXE**

We recommend that you choose this network configuration option if your environment does not permit the following to be hosted on the same network interface and Layer 2 network (see the following figure):

• On the PXE network, services provided by Baremetal Agent, such as DHCP, TFTP, and HTTP

• On the Management network, traffic between Baremetal Agent and Cisco UCS Director Express for Big Data or other devices and appliances

UCS Director
Baremetal
Agent VM

2 1

Layer 2
MGMT Network

Figure 2: Sample Topology for Separate PXE and Management Networks

#### **Prerequisites and Assumptions for a Separate Network Configuration**

PXE Network

If you plan to configure Baremetal Agent with a separate network configuration, ensure that your environment meets the following prerequisites and assumptions:

- Cisco UCS Director Express for Big Data has been installed and the network interface configured, as described in the appropriate Cisco UCS Director Express for Big Data installation guide.
- Cisco UCS Director Express for Big Data Baremetal Agent is reachable through a web browser and you
  can log in.
- Baremetal Agent has been installed, as described in the Cisco UCS Director Express for Big Data Baremetal Agent Installation and Configuration Guide, and no additional configuration has been performed.
- The following networks are provisioned and available as a virtual port group or port profile that VMs can be attached to or leverage:
  - Management (MGMT) network—Used for traffic between Baremetal Agent and Cisco UCS
     Director Express for Big Data Baremetal Agent
  - PXE network—Used for PXE services traffic, such as DHCP, HTTP, and TFTP

**Prerequisites and Assumptions for a Separate Network Configuration**