

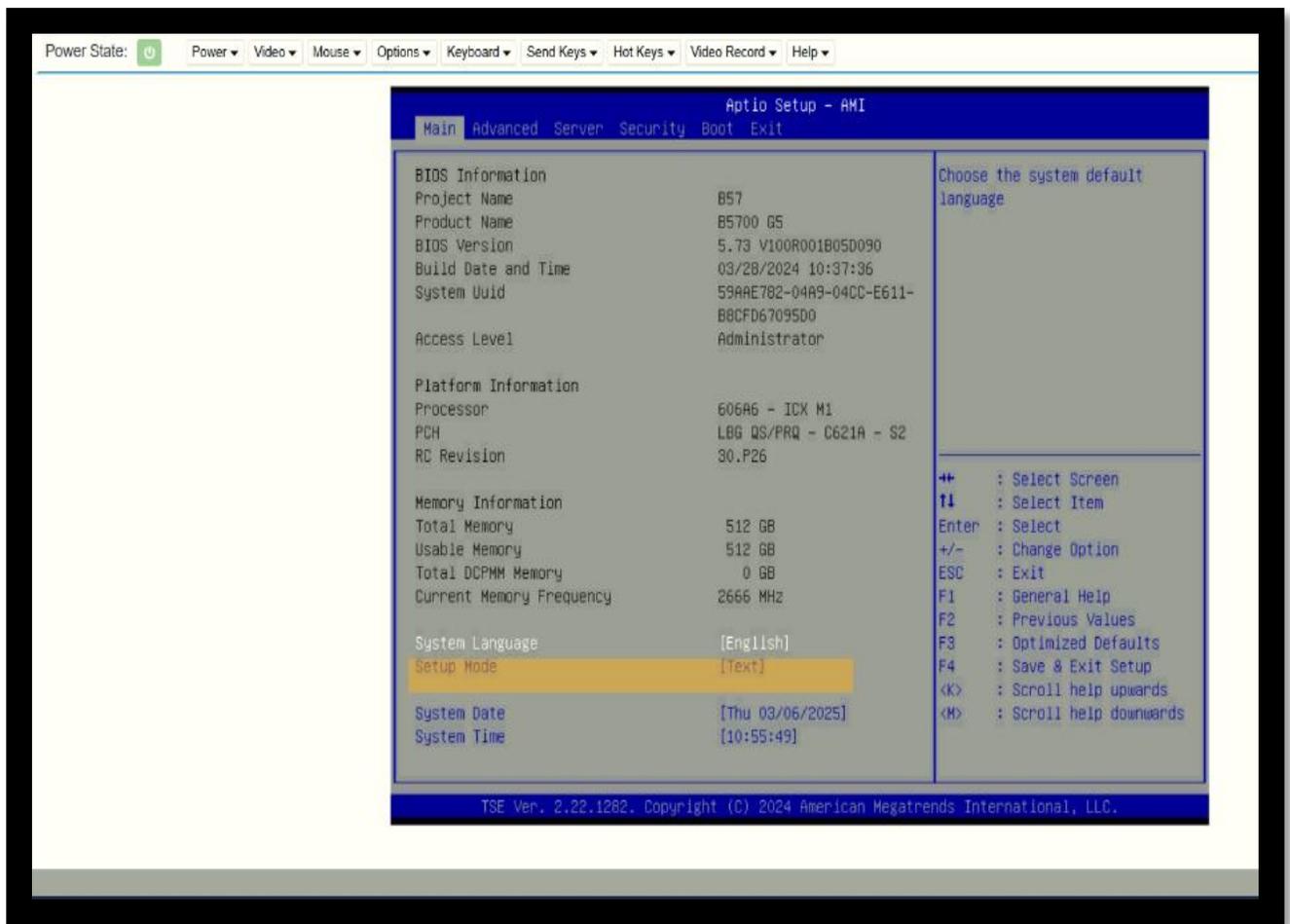


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## FCOE NIC PARTITIONING:

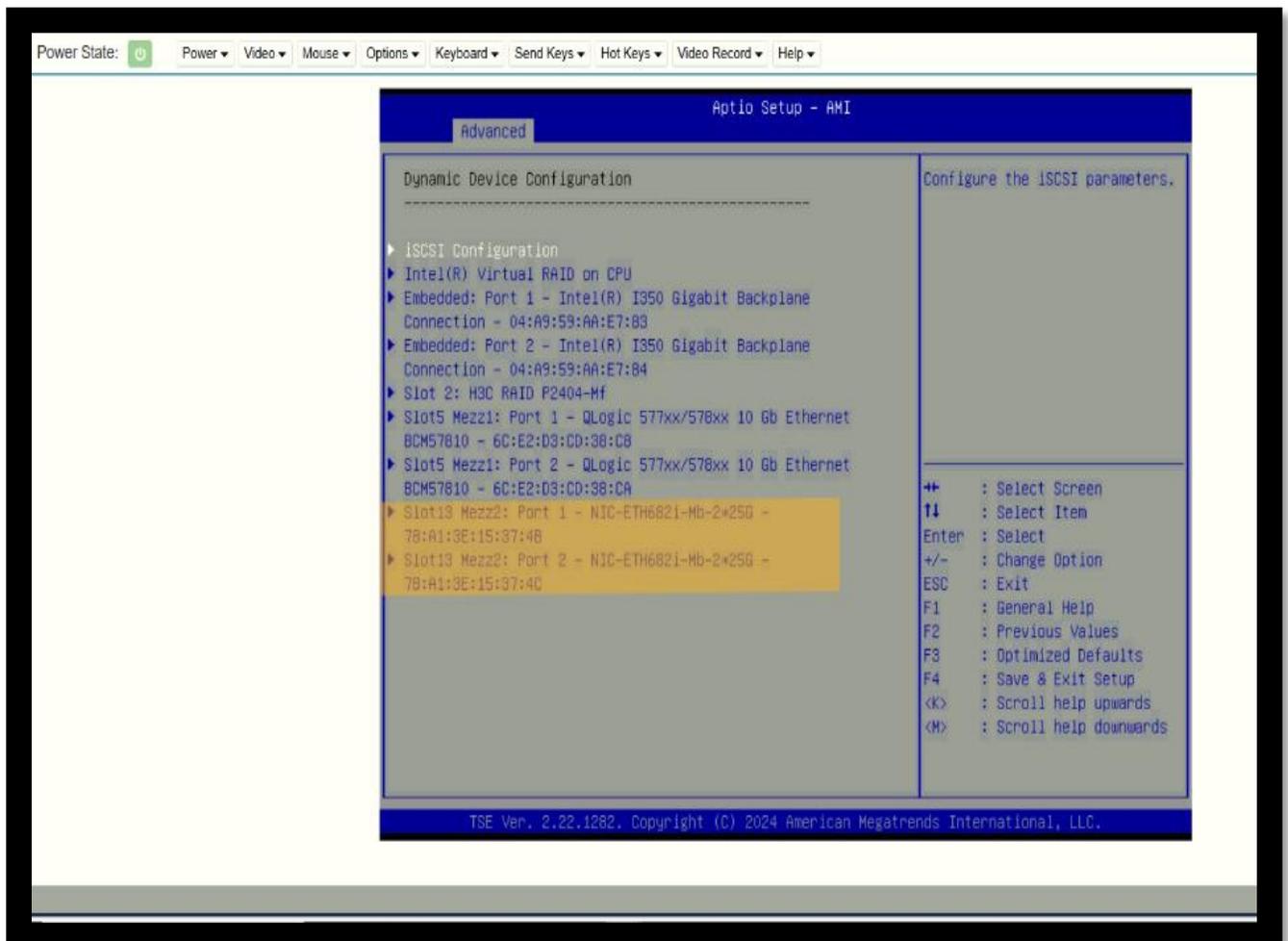
### Step 1: Accessing BIOS Settings

Power on the server and enter the **BIOS settings**. In the **Main Menu**, navigate to **Setup Mode** and select **Text Mode** for configuration.



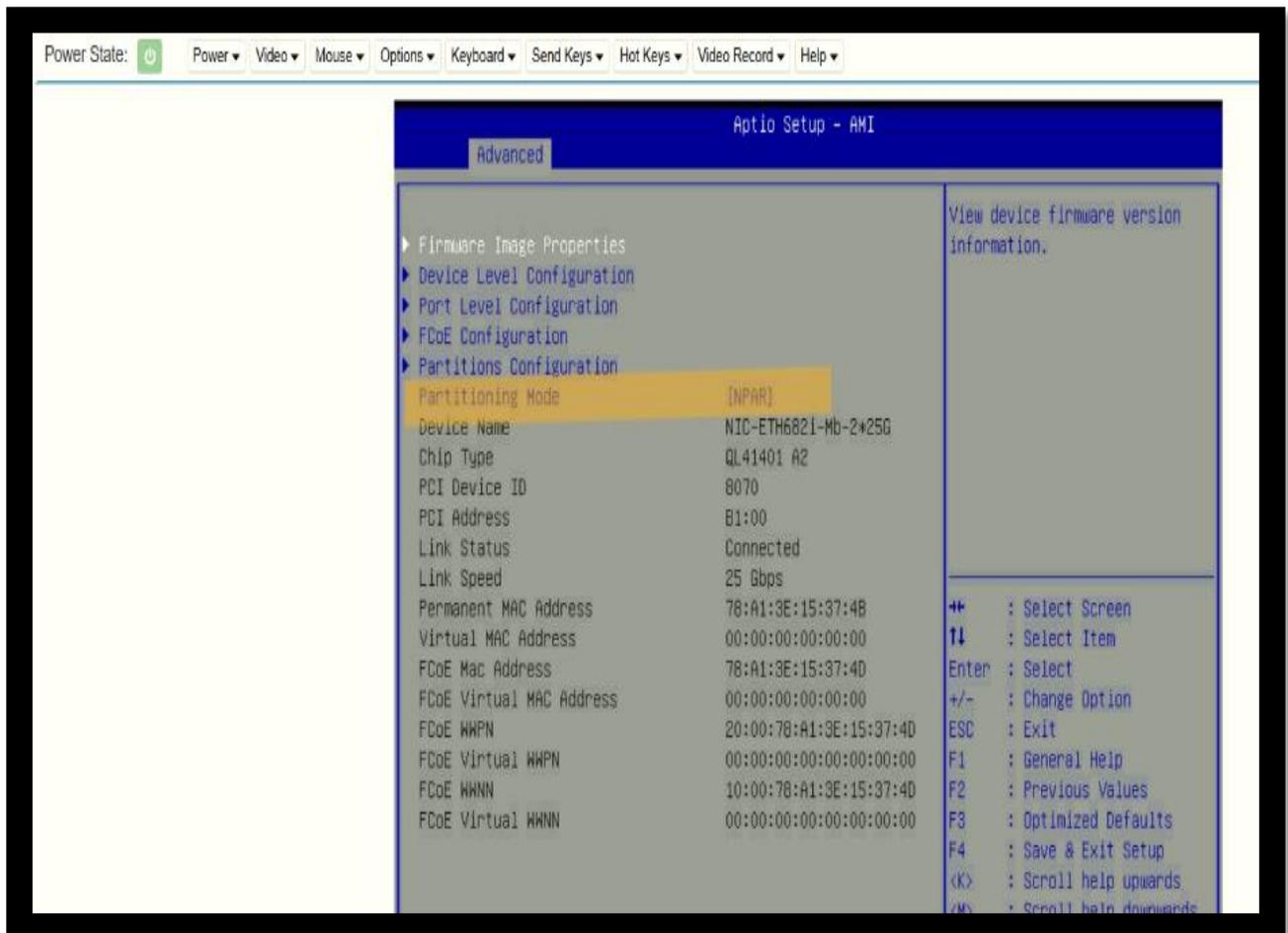
## Step 2: Navigating to Dynamic Device Configuration

Go to the **Advanced Settings** section and access **Dynamic Device Configuration**. Here, you will see available **NIC partitioning slots** for configuration.



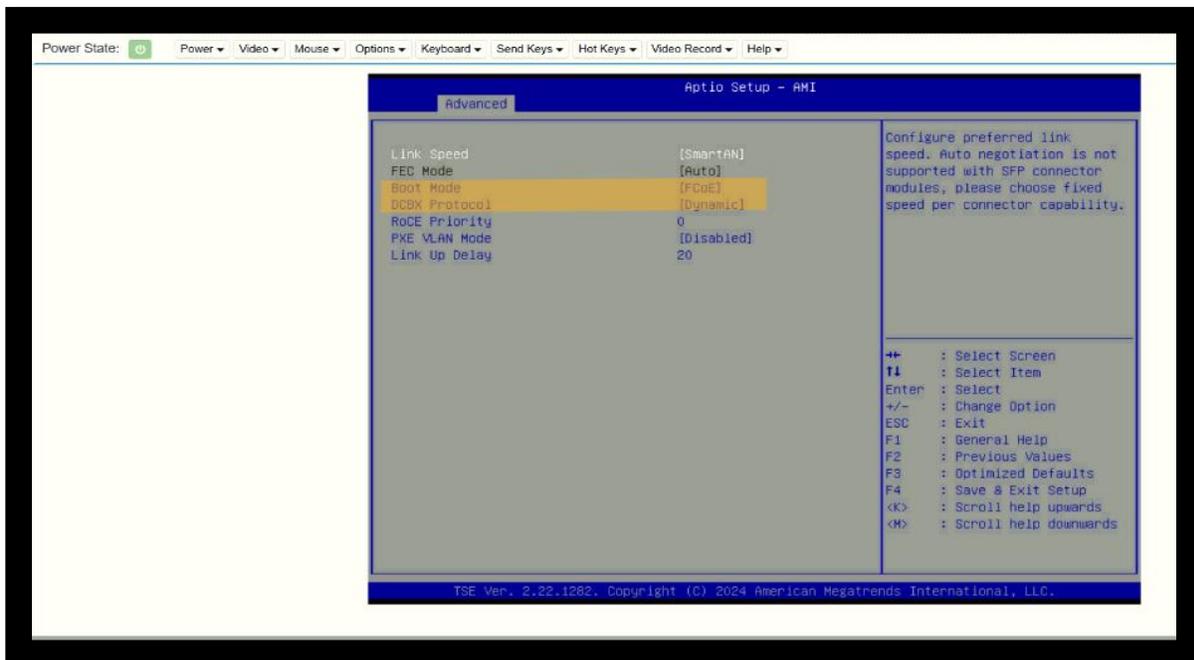
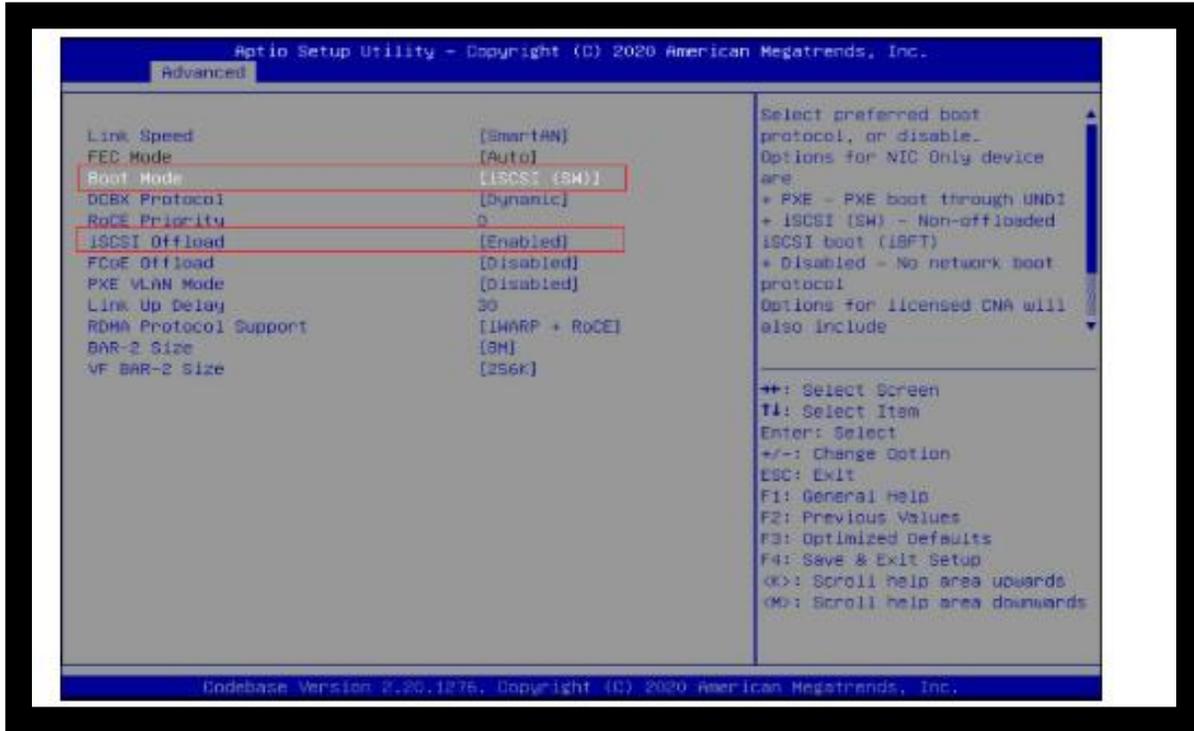
### Step 3: Enabling NIC Partitioning

Select the desired **NIC slot** and choose **NPAR (NIC Partitioning) Mode** to enable partitioning.



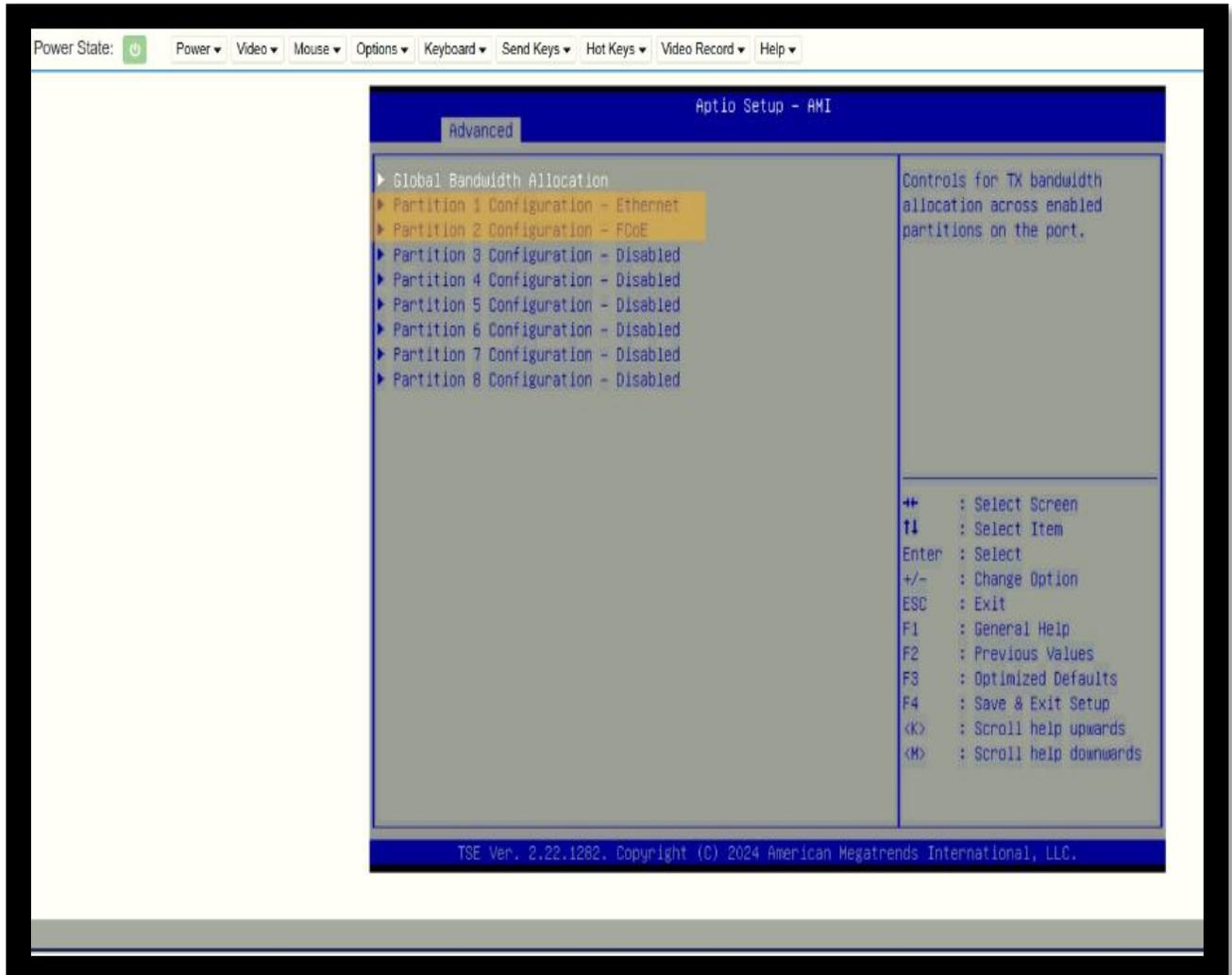
## Step 4: Configuring FCoE Boot Mode

In the **Advanced Settings** of the server, navigate **NIC Partitioning** and access the **Port-Level Configuration** section. Locate the **iSCSI Offload** option and **disable** it to prevent conflicts with FCoE. Then, **enable FCoE Mode**.



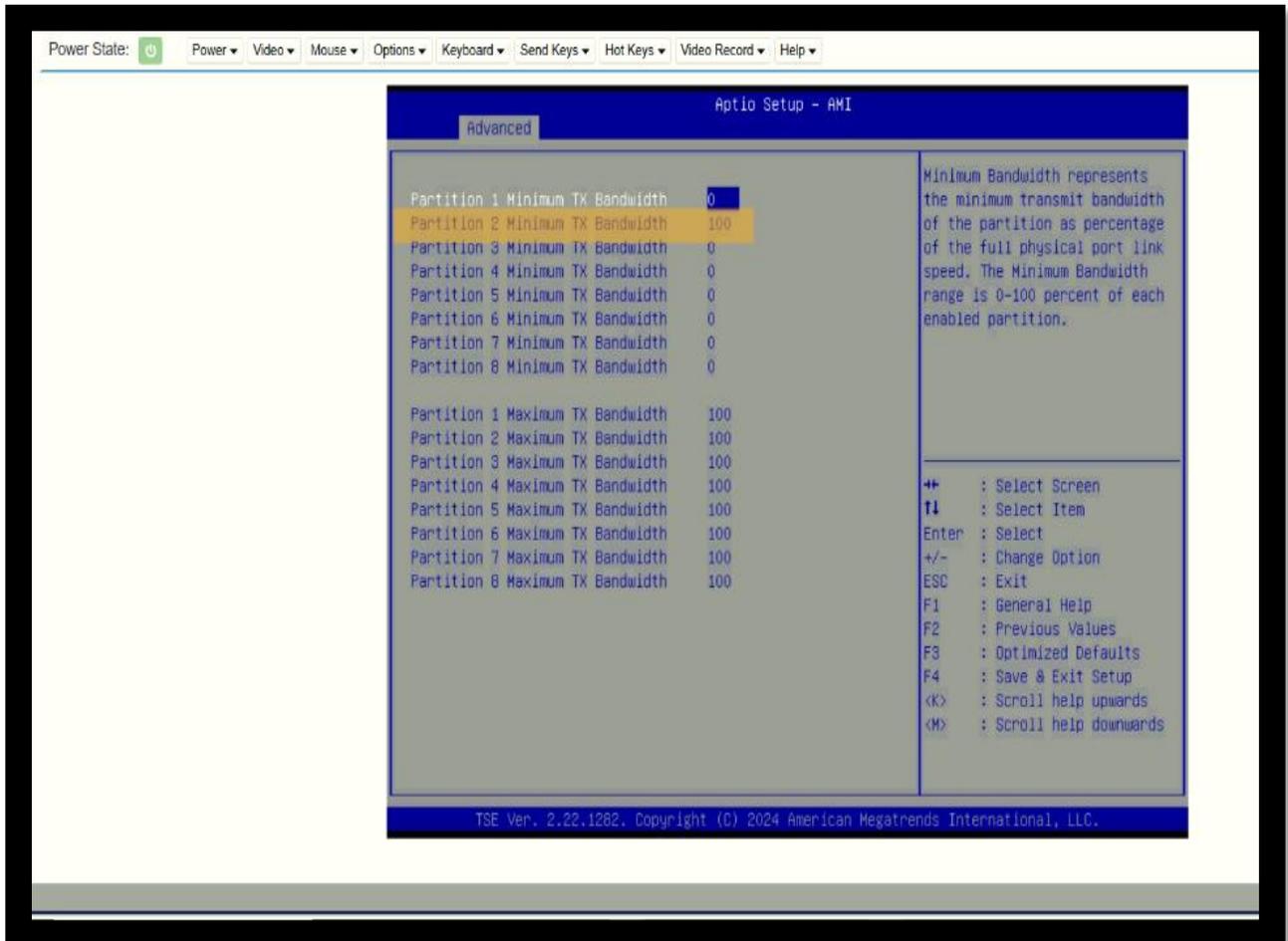
## Step 5: Partition Configuration

In the **Advanced Settings**, go to **Partition Configuration**. Assign **Partition 1** as **Ethernet** and **Partition 2** as **FCoE**, while keeping all remaining partitions **disabled**.



## STEP 6:

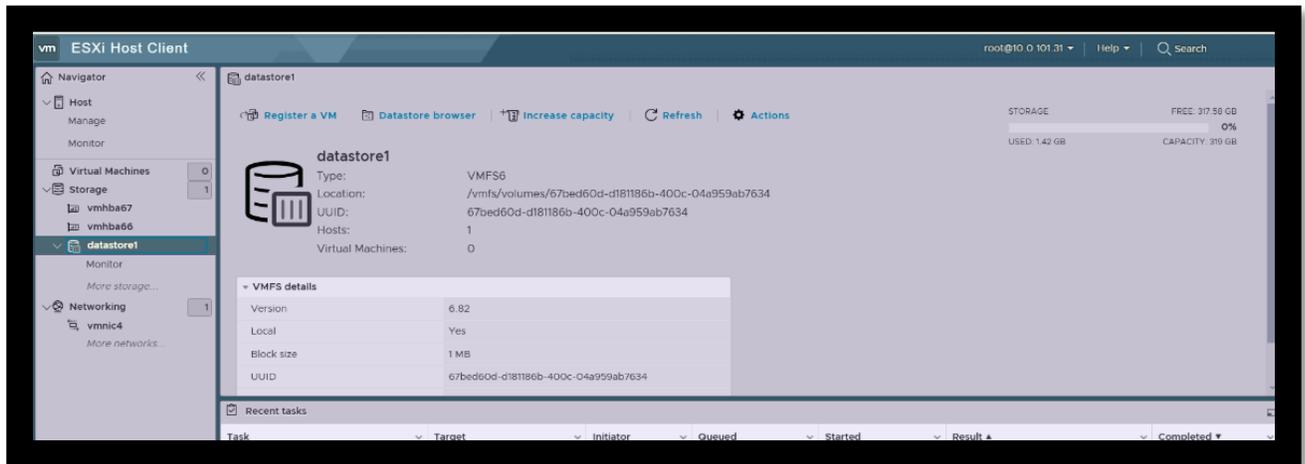
In the **Advanced Settings**, navigate to **Partition Configuration** and select **Global Bandwidth Allocation**. Assign **100% Minimum TX Bandwidth** to **Partition 2**, while keeping **Partition 1** and **all remaining partitions at 0%**. Ensure that the **Maximum TX Bandwidth** for all partitions remains set at **100%** for optimal performance.



# Driver Installation or Update Process in an ESXi Host

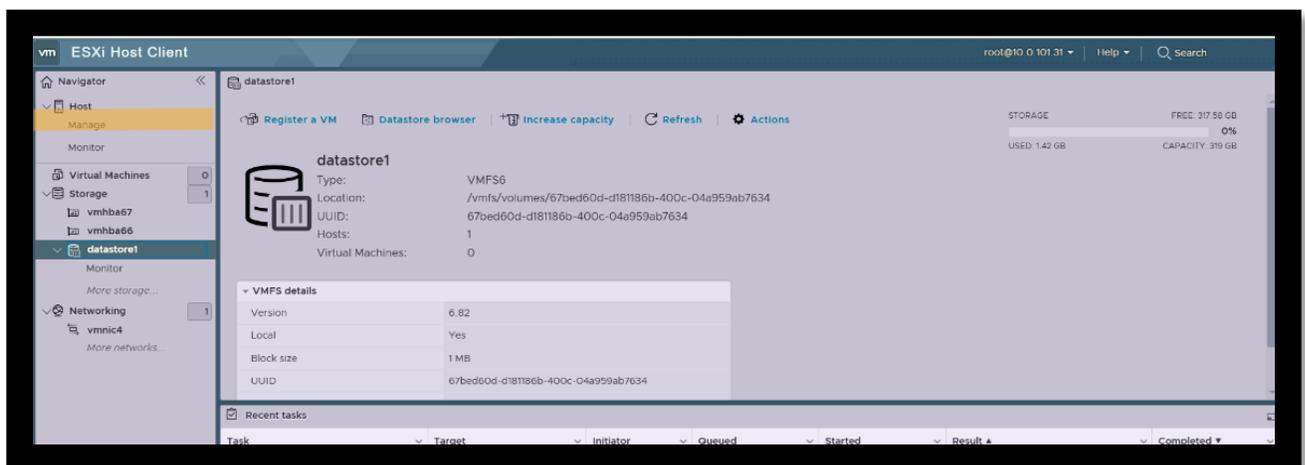
## STEP 1: Uploading Drivers to ESXi Datastore

- Log in to the **ESXi Host Client**.
- Navigate to **Storage** from the left-hand menu.
- Select **datastore1** (or the relevant datastore).
- Click on **Datastore Browser**.
- In the Datastore Browser, upload the required driver files.



## STEP 2: Enabling ESXi Shell and SSH in ESXi Host Client

- In the **ESXi Host Client**, navigate to the **Host** section in the left panel.
- Click on **Manage** under the Host menu.
- Go to the **Services** tab.
- Locate **TSM (ESXi Shell)** and **TSM-SSH (SSH)** services.
- Click **Start** to enable both services.



## STEP 3: Steps to Install or Update Drivers in ESXi

### 1. Access the ESXi Command Line Interface (CLI)

- Open the ESXi **CLI** using SSH.
- Navigate to the directory where the driver file is stored.

### 2. Install or Update the Driver

- To install a driver, execute:

```
esxcli software vib install -d /path/to/driver/xxx.zip
```

- To update a driver, execute:

```
esxcli software vib update -d /path/to/driver/xxx.zip
```

```
[root@localhost:~] esxcli software vib install -d /vmfs/volumes/datastore1/682/MRVL-E4-CNA-Driver-Bundle_6.0.345.0-10EM.800.1.0.20143090_20529171.zip
Installation Result
  Message: The update completed successfully, but the system needs to be rebooted for the changes to be effective.
  Reboot Required: true
  VIBs Installed: QLC_bootbank_qedentv_3.71.10.0-10EM.800.1.0.20143090, QLC_bootbank_qedf_2.30.13.0-10EM.800.1.0.20143090, QLC_bootbank_qedi_2.30.12.0-10EM.800.1.0.20143090, QLC_bootbank_qedrntv_3.71.9.0-10EM.800.1.0.20143090
  VIBs Removed: VMW_bootbank_qedentv_3.40.5.70-4vmw.800.1.0.20513097, VMW_bootbank_qedrntv_3.40.5.70-1vmw.800.1.0.20513097
  VIBs Skipped:
[root@localhost:~] █
```

### 3. Restart the ESXi Host

- After a successful installation or update, restart the ESXi host for changes to take effect.

```
[root@localhost:~] esxcli software vib install -d /vmfs/volumes/datastore1/682/MRVL-E4-CNA-Driver-Bundle_6.0.345.0-10EM.800.1.0.20143090_20529171.zip
Installation Result
  Message: The update completed successfully, but the system needs to be rebooted for the changes to be effective.
  Reboot Required: true
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  VIBs Removed: VMW_bootbank_qedentv_3.40.5.70-4vmw.800.1.0.20513097, VMW_bootbank_qedrntv_3.40.5.70-1vmw.800.1.0.20513097
  VIBs Skipped:
[root@localhost:~] █
```

### 4. Verify the Driver Update

- To check the updated driver version, execute:

```
esxcli network nic get -n vmnicX
```

- (Replace X with the network interface number you are checking.)

```
[root@localhost:~] esxcli network nic get -n vmnic2
  Advertised Auto Negotiation: true
  Advertised Link Modes: Auto, 10000BaseKR/Full, 25000BaseKR/Full
  Auto Negotiation: true
  Backing DPUId: N/A
  Cable Type: FIBRE
  Current Message Level: 0
  Driver Info:
    Bus Info: 0000:17:00:0
    Driver: qedentv
    Firmware Version: mfw 8.55.43.0 storm 8.70.4.0
    Version: 3.71.10.0
  Link Detected: true
  Link Status: Up
  Name: vmnic2
  PHYAddress: 0
  Pause Autonegotiate: true
  Pause RX: true
  Pause TX: true
  Supported Ports: FIBRE
  Supports Auto Negotiation: true
  Supports Pause: true
  Supports Wakeon: true
  Transceiver: external
  Virtual Address: 00:50:56:5f:be:17
  Wakeon: MagicPacket(tm)
```