

## Requirements:

In order to establish the connection with Redfish Server, the Redfish Server needs to be running on the configured (see Configuration below) IP Address and Port.

## Configuration:

It is required to configure several variables to establish communication between UEFI Redfish Client and Redfish Service (Web Server). To aid in this process, a RedfishConfig.efi application is provided. This UEFI application will set the following variables:

**HostIpAddress HostIpMask HostMacAddress RedfishServiceIpAddress  
RedfishServiceIpMask RedfishServiceIpPort**

In order to use RedfishConfig.efi, it is necessary to boot to the EFI internal shell:

**UEFI menu->Boot Manager->Efi Internal Shell**

Once booted to UEFI Shell, select FS0 (fs0:) and list (ls) files to check whether the application is present. Now run the application passing the variables mentioned above in respective order.

Example: RedfishConfig.efi 192.168.101.13 255.255.255.0 001ACAD94A88 192.168.101.1  
255.255.255.0 5000

Where:

192.168.101.13 - **HostIpAddress (Ip address to be used on the host interface)**

255.255.255.0 - **HostIpMask (Subnet mask to be used on the host interface)**

001ACAD94A88 - **HostMacAddress (Mac address of the interface to be used)**

192.168.101.1 - **RedfishServiceIpAddress (Redfish Server Ip Address)**

255.255.255.0 - **RedfishServiceIpMask (Redfish Server Subnet mask)**

5000 - **RedfishServiceIpPort (Port where Redfish Server is listening)**

On a successful configuration, a confirmation message will be seen on the console. After this Restart/Reset the system.

## Expectation/Output:

On reboot after successful configuration, the Redfish UEFI Client will perform a GET Request on /redfish/v1/, this can be seen on the Server side if incoming requests are logged in some manner.

## Notes:

1. Only IPv4 is supported at this time.
2. Tested using OOB interface on Bluefield platform.
3. OOB MAC needs to be fixed by provisioning the MAC so it doesn't randomize with every reboot. See below for instructions on how to provision the OOB to a fixed MAC address.

### **Provision OOB to a fixed MAC:**

OOB MAC can be found on the Bluefield card tag. Boot into Bluefield image OS and then perform the following steps:

1. **cd /sys/bus/platform/drivers/mlx-bootctl**
2. **echo XX:XX:XX:XX:XX:XX > oob\_mac**
3. **echo 1 > mfg\_lock**