

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. Place RedfishConfig.efi on the ESP using OS. 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. If OOB MAC is not already set to a fixed value, it needs to be fixed 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**