

Network Teaming Setup Instruction on Latest Windows 10 Update

Prepared by: Khoo Junn Ming

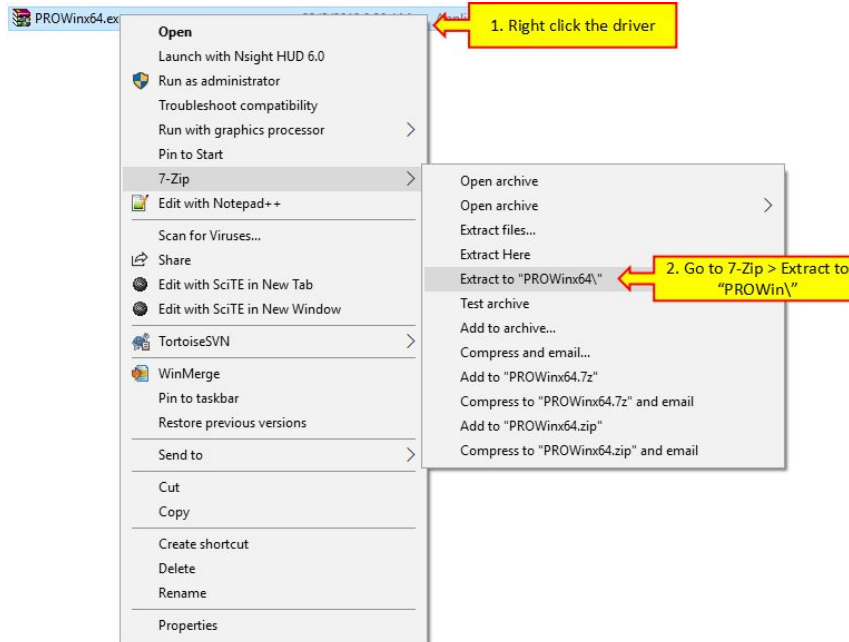


Introduction

Network Teaming configuration of Intel PROWin network driver version 23.2.0 is not working accordingly on latest Windows 10 update from version 1809 above. After complete teaming configuration, the teamed network remain disable and the teamed network connection is down. To solve this teaming issue, new Intel PROWin driver is required and teaming method using Windows PowerShell command

Intel PROWin installation Step

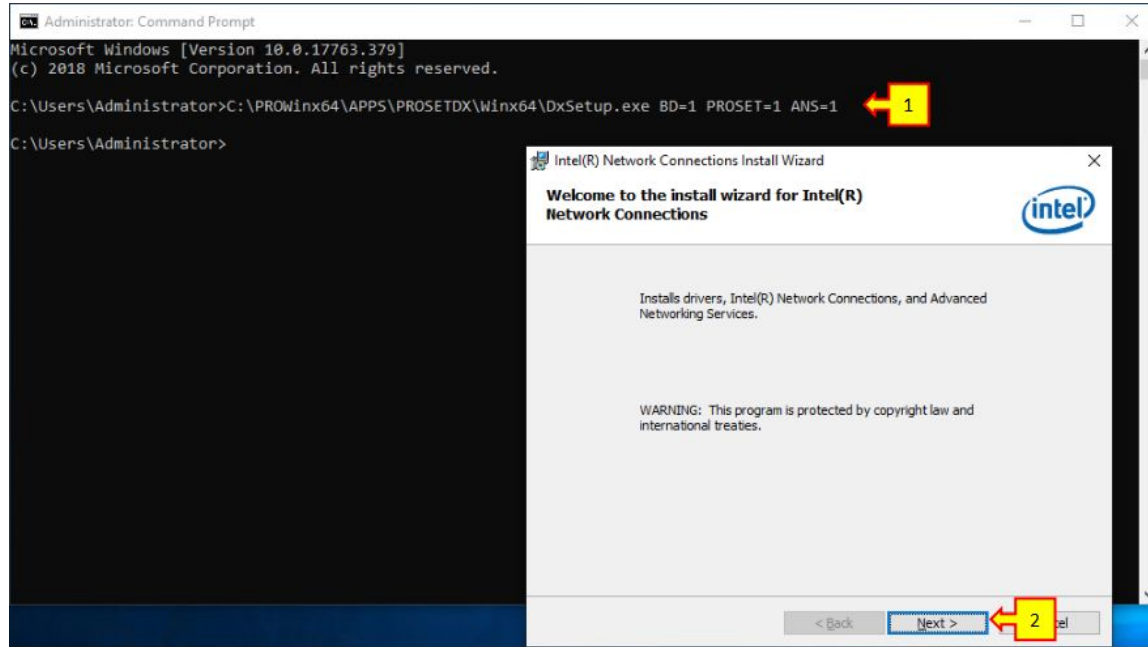
1. Go to "<https://downloadcenter.intel.com/product/36773/Ethernet-Products>" and download latest driver "Intel® Network Adapter Driver for Windows® 10"
2. Copy and paste "PROWinx64.exe" Intel PROWin drive in C:\
3. Extract Intel PROWin driver using 7Zip



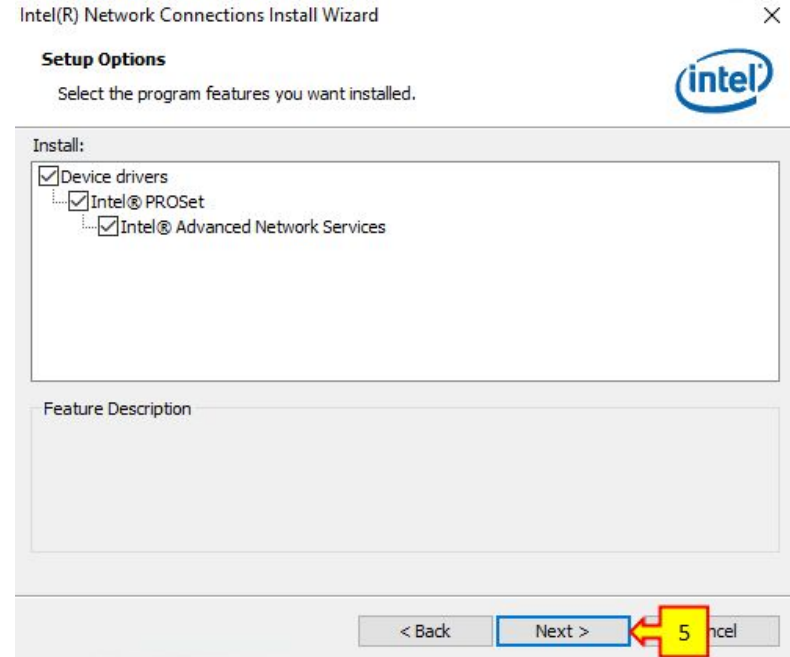
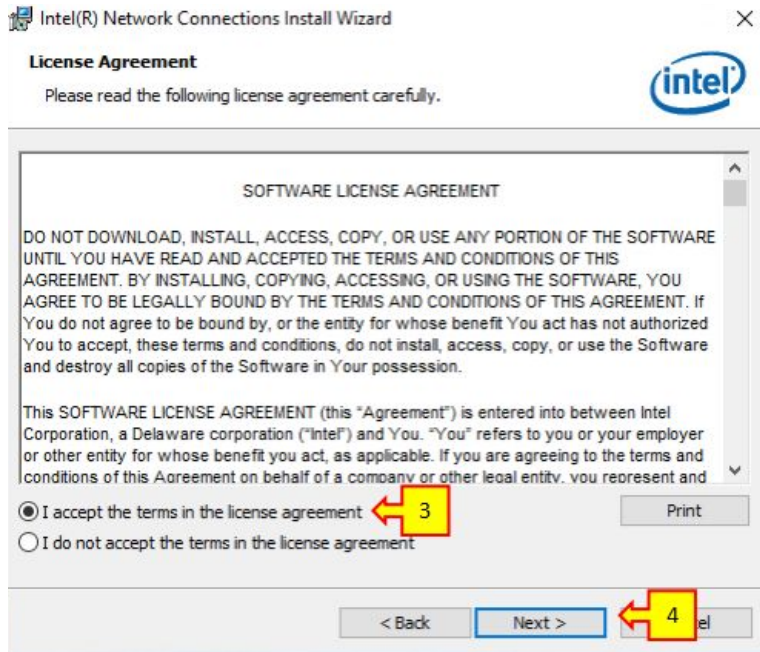
4. Run Command Prompt as administrator

Intel ProWin installation Step

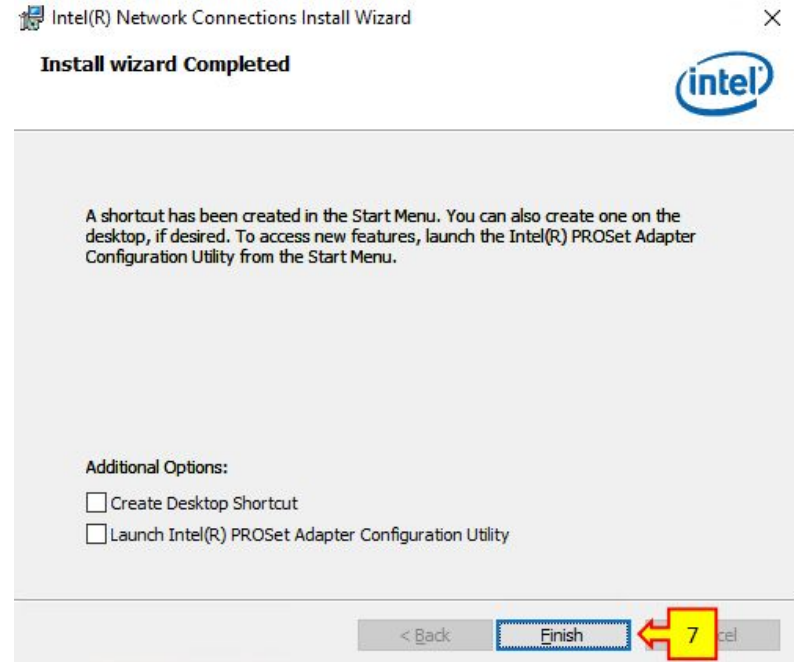
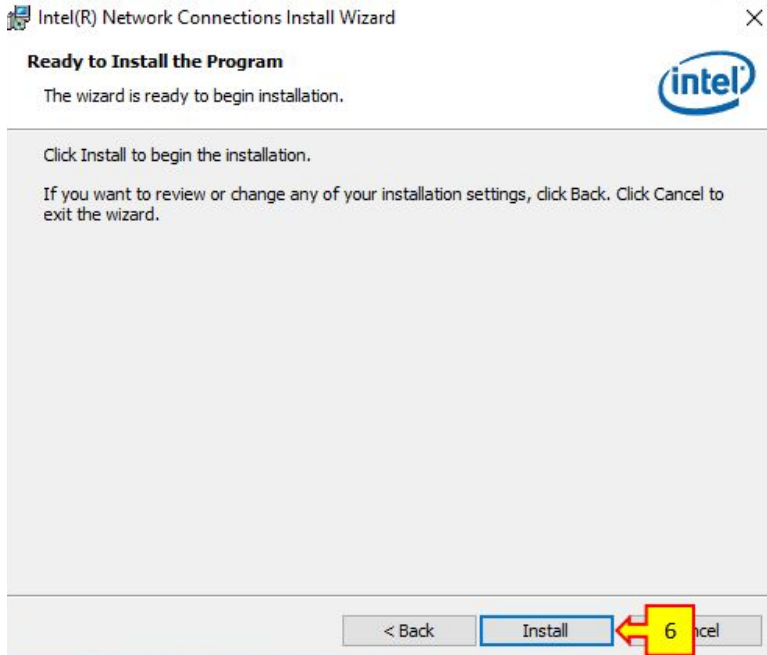
4. Enter “C:\PROWinx64\APPS\PROSETDX\Winx64\DxSetup.exe BD=1 PROSET=1 ANS=1” to install



Intel ProWin installation Step



Intel ProWin installation Step



5. Reboot the system to complete the Intel PROWin Installation

Teaming Configure Step

1. Run Windows PowerShell as administrator
2. Enter "Import-Module -Name "C:\Program Files\Intel\Wired Networking\IntelNetCmdlets\IntelNetCmdlets"" to Import Intel driver file for network teaming

```
PS C:\WINDOWS\system32> Import-Module -Name "C:\Program Files\Intel\Wired Networking\IntelNetCmdlets\IntelNetCmdlets"
```

3. Enter "Get-IntelNetAdapter" in Windows PowerShell to get network adapter name

```
PS C:\Users\Administrator> Get-IntelNetAdapter
```

Location	Name	ConnectionName	LinkStatus
129:0:0:0	Intel(R) Ethernet Server Adapter X520-2	CPU2 SLOT6 PCI-... Port 1	Not Available
129:0:1:0	Intel(R) Ethernet Server Adapter X520-2 #2	Internal 192.168.128.60	10.00 Gbps
130:0:0:0	Intel(R) I350 Gigabit Network Connection #5	CPU2 SLOT7 PCI-... Port 1	Not A
130:0:1:0	Intel(R) I350 Gigabit Network Connection	CPU2 SLOT7 PCI-... Port 2	Not A
130:0:2:0	Intel(R) I350 Gigabit Network Connection #6	CPU2 SLOT7 PCI-... Port 3	Not A
130:0:3:0	Intel(R) I350 Gigabit Network Connection #3	CPU2 SLOT7 PCI-... Port 4	1.00
3:0:0:0	Intel(R) I350 Gigabit Network Connection #2	OnBoard LAN 1	1.00 Gbps ...
3:0:1:0	Intel(R) I350 Gigabit Network Connection #4	OnBoard LAN 2	100.00 Mbp...

Network port from same dedicated network card

Teaming Configure Step

4. Please follow the teaming command as below for network teaming (Remark: Network name may different on each server.)

New-IntelNetTeam

Intel(R) I350 Gigabit Network Connection

Intel(R) I350 Gigabit Network Connection #3

Intel(R) I350 Gigabit Network Connection #5

Intel(R) I350 Gigabit Network Connection #6

[Enter]

StaticLinkAggregation

SingleServer

```
PS C:\Users\Administrator> New-IntelNetTeam

cmdlet New-IntelNetTeam at command pipeline position 1
Supply values for the following parameters:
TeamMemberNames[0]: Intel(R) I350 Gigabit Network Connection
TeamMemberNames[1]: Intel(R) I350 Gigabit Network Connection #3
TeamMemberNames[2]: Intel(R) I350 Gigabit Network Connection #5
TeamMemberNames[3]: Intel(R) I350 Gigabit Network Connection #6
TeamMemberNames[4]:
TeamMode: StaticLinkAggregation
TeamName: SingleServer

TeamName      : TEAM: SingleServer
TeamMembers   : {Intel(R) I350 Gigabit Network Connection, Intel(R) I350 Gigabit Network Connection #6, Intel(R)
                I350 Gigabit Network Connection #3, Intel(R) I350 Gigabit Network Connection #5}
TeamMode      : StaticLinkAggregation
PrimaryAdapter : NotSet
SecondaryAdapter : NotSet
```


Teaming Configure Step

4. Enter "Get-IntelNetTeam" to check the team network

```
PS C:\Users\Administrator> Get-IntelNetTeam

TeamName      : TEAM: SingleServer
TeamMembers   : {Intel(R) I350 Gigabit Network Connection, Intel(R) I350 Gigabit Network Connection #6, Intel(R)
                I350 Gigabit Network Connection #3, Intel(R) I350 Gigabit Network Connection #5}
TeamMode      : StaticLinkAggregation
PrimaryAdapter : NotSet
SecondaryAdapter : NotSet
```

5. Reboot the system to complete the network teaming configuration
6. If require to remove teamed network, Please Enter "Remove-IntelNetTeam -TeamName "TEAM: SingleServer""

```
PS C:\Users\Administrator> Remove-IntelNetTeam -TeamName "TEAM: SingleServer"
PS C:\Users\Administrator> █
```

Jumbo Frame (MTU) Configure Step

1. Run Windows PowerShell as administrator
2. Enter “netsh interface ipv4 show subinterface” to show current network adapter MTU setting

```
PS C:\Users\Administrator> netsh interface ipv4 show subinterface
```

MTU	MediaSenseState	Bytes In	Bytes Out	Interface
4294967295		1	0	7965 Loopback Pseudo-Interface 1
1500	1	97426994	20520481	PSP EBLE
1500	5	0	0	Slot03 2
1500	5	0	0	192.168.128.60

3. Enter “ netsh interface ipv4 set subinterface "192.168.128.60" mtu=3814 store=persistent ” to change selected network adapter MTU setting

```
PS C:\Users\Administrator> netsh interface ipv4 set subinterface "192.168.128.60" mtu=3814 store=persistent
Ok.
```

4. To verify the changes, enter “netsh interface ipv4 show subinterface” to show current network adapter MTU setting

```
PS C:\Users\Administrator> netsh interface ipv4 show subinterface
```

MTU	MediaSenseState	Bytes In	Bytes Out	Interface
4294967295		1	0	7965 Loopback Pseudo-Interface 1
1500	1	98059533	20781230	PSP EBLE
1500	5	0	0	Slot03 2
3814	5	0	0	192.168.128.60

Thank You

