

## IRF Compatibility for HP Networking Switches (Aug 2018) – v3.0

SWITCH SERIES	MAXIMUM DEVICES IN IRF DOMAIN	IRF LINK CAPACITY	MAX PHYSICAL PORTS PER IRF-PORT	NOTES	NUMBER OF ACTIVE LINKS PER AGG. GROUP	NUMBER OF AGG. GROUPS
<b>12900E</b>	2	Must use 10/40/100GbE links	8	Only works within 12900E switch series.	Up to 64	Up to 1024 (2048 links maximum)
<b>12500</b>	4	Must use 10/40GbE links	12	Only works within 12500 switch series.	Up to 12	240
<b>11900</b>	4	Must use 10/40GbE links	8	Only works within 11900 switch series.	Up to 16 (# of ports X # LAG groups should be < 2K)	Up to 1024 (2048 links maximum)
<b>10500</b>	4	Must use 10/40GbE links	8	Only works within 10500 switch series.	Up to 32	256
<b>9500</b>	4	Must use 10E links	8	Only works within 9500 switch series.	Up to 12	240
<b>7900</b>	2	Must use 10/40/100GbE links	8	Only works within 7900 switch series.	Up to 16	Up to 1024 (2048 links maximum)
<b>7500</b>	4 (7503, 7506) 2 (7510, 7503-S) (IRF functionality is not supported on HP 7502 Switch Chassis)	Must use 10/40GbE links	8	Only works within 7500 switch series. Only switches of the same models can form an IRF. IRF is not supported on the 7510 if they are using the HP A7500 384Gbps Fabric/Advanced Main Processing Unit (JD195A).	Up to 32	128
<b>5980</b>	4	Must use 10/100GbE links	16	Only works within 5980 switch series.	Up to 32	Up to 256
<b>5950</b>	9	Must use 25/40/100GbE links	8	Only works within 5950 Switch Series.	Up to 32	Up to 256
<b>5945</b>	10	Must use 25/40/100GbE links	8	Only works within 5945 Switch Series.	Up to 32	Up to 256
<b>5940</b>	9	Must use 10/40/100GbE links	8	Only works within 5940 Switch Series.	Up to 32	1K
<b>5930AF</b>	9	Must use 10/40GbE links	8	Only works within 5930 switch series.	Up to 32	512
<b>5920AF</b>	9	Must use 10GbE links	8 (R2311)	Only works within 5900/5920 switch series.	Up to 32	128

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			4 (Before R2311)			
<b>5900AF</b>	9	Must use 10GbE/40GbE links	8	Only works within 5900/5920 switch series.	Up to 32	128
<b>5830AF Series</b>	4	Must use 10GbE links	8 – 5830AF-96G 4 – 5830AF-48G	IRF works with 5830AF-48G and 5830-96G switches when using code CMW520-R1115 and above.  When using code prior to CMW520-R1115, the 5830AF-48G switches can only IRF with 5830AF-48G switches - and 5830AF-96G switches can only IRF with the 5830AF-96G switches.	Up to 8	128
<b>5800/5820</b>	9	Must use 10GbE links	4	Only works within 5800/5820 switch series. When 5800 and 5820 are mixed stacking, it is recommended to set 5820 as the Master and make sure the same software version is running on all switches.	Up to 8	128
<b>5710</b>	9	Must use 10/40/100GbE links	8	Only works within 5710 switch series.	Up to 32	1K
<b>5700</b>	9	Must use 10/40GbE links	8	Only works within 5700 switch series.	Up to 16 or 4x40GbE	128 (eIRF systems = 1K LAGs with max 2K ports total)
<b>5510 HI</b>	9	Must use 10/40GbE links	1 x40GbE 3 x10GbE	Only works within 5510 HI switch series	Up to 8	With IRF = 128 Without IRF = 24
<b>5500 HI</b>	9	Must use 10GbE links	3	Only works within 5500 HI switch series	Up to 8	128
<b>5500 EI</b>	9	Must use 10GbE links	2	Only works within 5500 EI switch series	Up to 8	With IRF = 128 Without IRF = 26 for 48-port models or 14 for the 24-port models
<b>5500 SI</b>	4	Must use 10GbE links	2	Only works within 5500 SI switch series	Up to 8	With IRF = 128 Without IRF = 26 for 48-port models or 14 for the 24-port models
<b>5130 HI</b>	9	Must use 10GbE links	3 x10GbE	Only works within 5130 HI switch series	Up to 8	With IRF = 128 Without IRF = 24

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<b>5130 EI</b>	9	Must use 10GbE links	4	Only works within 5130 EI switch series	Up to 8	With IRF = 128 Without IRF = 24
<b>5120 EI</b>	4	Must use 10GbE links	2	Only works within 5120 EI switch series	Up to 8GbE or 4x10GbE	26 for 48-port models / 14 for the 24-port models
<b>5120 SI</b>	4	Must use GbE uplink ports	2	Only works within 5120 SI switch series.	Up to 8	26 for 48-port models / 14 for the 24-port models / 10 for the 16-port model
<b>3610</b>	16	Must use GbE uplink ports	2	Only works within 3610 switch series. Supports IRF lite.	Up to 8FE or 4GbE	26 for 48-port model / 14 for all other models
<b>3600 EI v2</b>	9	Must use GbE uplink ports	2	Only works within 3600 EI v2 switch series	Up to 8	128
<b>3600 EI</b>	8	Must use GbE uplink ports	2	Only works within 3600 EI switch series	Up to 8FE or 4GbE	With IRF = 8 Without IRF = 2
<b>3600 SI v2</b>	9 (16 for JG315A when using IRF lite)	Must use GbE uplink ports	2	Only works within 3600 SI v2 switch series - JG315A also supports IRF lite	Up to 8	128
<b>3600 SI</b>	8	Must use GbE uplink ports	2	Only works within 3600 SI switch series. Supports IRF lite.	Up to 8FE or 4GbE	With IRF = 8 Without IRF = 2
<b>3100v2 EI</b>	16	Must use GbE uplink ports	2 – 8TP 4 – 16TP & 26TP	Only works within 3100v2 EI switch series. Supports IRF lite.	Up to 8 FE or 8GbE	8p-4, 16p-9, 24p-13
<b>3100v2 SI</b>	16	Must use GbE uplink ports	2 – 8TP 4 – 16TP & 26TP	Only works within 3100v2 SI switch series. Supports IRF lite.	Up to 8FE or 8 GbE	8p-4, 16p-9, 24p-13

IRF enables support for DDM, DRR, and DLA. 'IRF lite' means only DDM is supported:

- DDM (distributed device management): As seen from outside, the whole Fabric is a single equipment. It allows users to manage the Fabric through diverse modes: CONSOLE, SNMP, TELNET, WEB, etc.

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- DRR (distributed resilient routing): For users, various devices of a fabric appear as a single layer 3 switch. The whole Fabric will, as single equipment, perform routing function and forwarding function between layer 2 and layer 3. Unicast Routing Protocol and Multicast Routing Protocol run in distributed mode and support hot backup; when there is fault in a certain device, routing protocols and data forwarding can continue.
- DLA (distributed link aggregation): it supports cross-device link aggregation, capable of link load balancing and mutual backup among devices.