

EPON L3 OLT Series Datasheet v1.0



- ✓ Open to any brand of ONU
- ✓ Support RIP v1/v2、 OSPF v2、 IPv6
- ✓ Power backup
- ✓ Easy to manage and friendly interface



Product overview

V1600D series EPON OLT products are 1U height 19 inch rack mount products. The features of the OLT are small, convenient, flexible, easy to deploy, high performance. It is appropriate to be deployed in compact room environment. The OLTs can be used for “Triple-Play”, VPN, IP Camera, Enterprise LAN and ICT applications.

Product	User interface	Unlink interface
V1600D2	2PON Port	2*GE+2*GE(SFP)/10GE(SFP+)
V1600D4	4PON Port	4*GE+4*GE(SFP)/10GE(SFP+)
V1600D8	8PON Port	8*GE+4*GE(SFP)+4*10GE(SFP+)
V1600D16	16PON Port	4*GE+4*GE(SFP)+4*10GE(SFP+)



functional characteristics

Satisfactory standard

- ◆ Meet IEEE802.3ah standards and CTC3.0 standards
- ◆ Meet relevant EPON standards

Support IPv6 Function

- ◆ Support DN, IPv6 Ping, IPv6 Telnet
- ◆ Support ACL based on source IPv6 address, destination IPv6 address, L4 port, protocol type, etc.
- ◆ Support MLD v1/v2 snooping

IP route

- ◆ Support static route, dynamic route RIP v1/v2、 OSPF v2

Easy to manage

- ◆ Friendly EMS/Web/Telnet/CLI/SSH management
- ◆ CLI command style similar to mainstream manufacturers
- ◆ Support APP management

Fully open platform

- ◆ Open to any brand of ONU

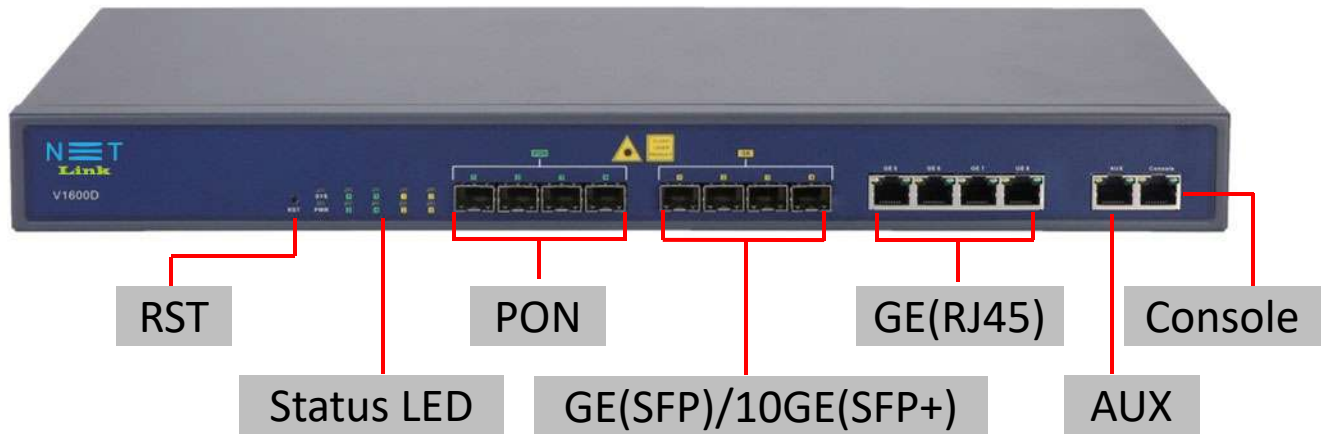
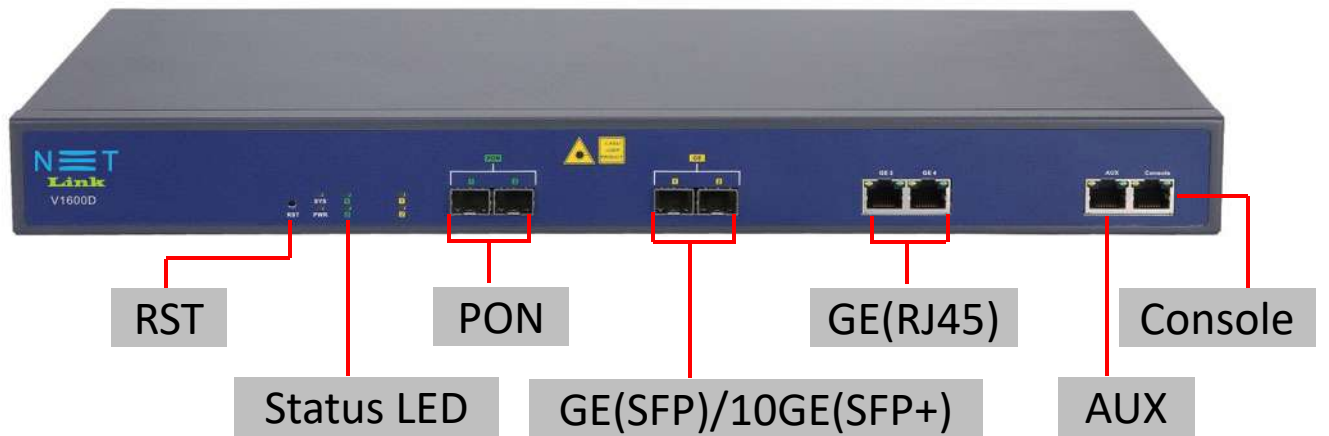
High performance cost

- ◆ 1U height compact design
- ◆ Adopt mainstream chip scheme



functional characteristics

Product appearance features





functional characteristics

Product appearance features



- RST
- Status LED
- PON
- GE(SFP)
- 10GE(SFP+)
- GE(RJ45)
- AUX
- Console

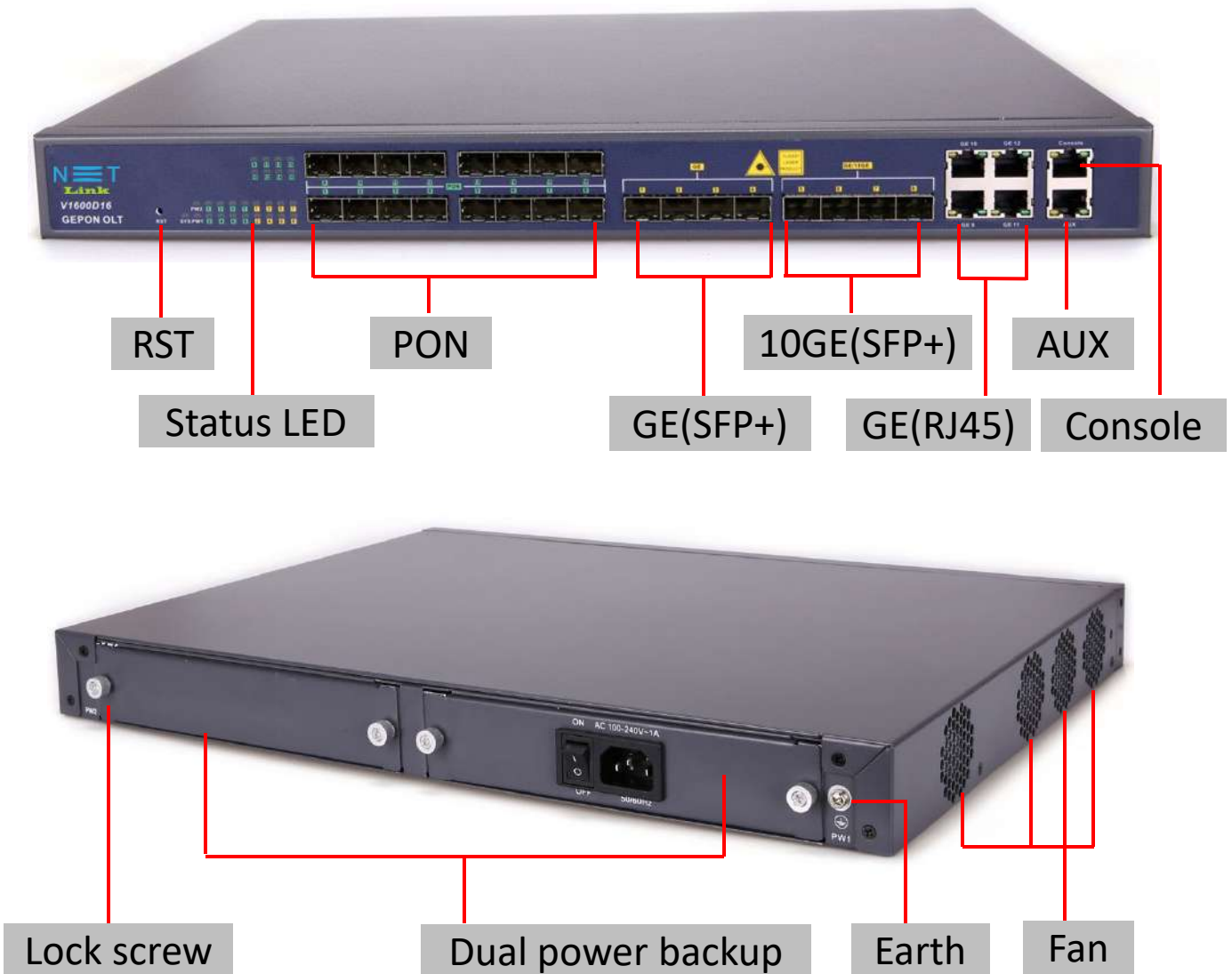


- Lock screw
- Dual power backup
- Earth
- High-speed fan



functional characteristics

Product appearance features





technical indicator

Item		V1600D2	V1600D4	V1600D8	V1600D16
Chassis	Rack	1U 19 inch standard box			
1G/10G Uplink Port	QTY	4	8	16	12
	Copper 10/100/1000M auto-negotiation	2	4	8	4
	SFP 1GE	2	4	4	4
	SFP+ 10GE			4	4
EPON Port	QTY	2	4	8	16
	Physical Interface	SFP Slot			
	Connector Type	PX20+			
	Max splitting ratio	1:64			
Management Ports	1*10/100BASE-T out-band port, 1*CONSOLE port				
PON Port Specification (PX20+ module)	Transmission Distance	20KM			
	EPON port speed	Upstream 1.25G Downstream 1.25G			
	Wavelength	TX 1490nm, RX 1310nm			
	Connector	SC/UPC			
	Fiber Type	9/125μm SMF			
	TX Power	+2~+7dBm(PX20+)			
	Rx Sensitivity	-30dB(PX20+)			
	Saturation Optical Power	-6dBm			
Dimension(L*W*H)(mm)	442*200*43	442*200*43	442*320*43	442*320*43	
Weight(kg)	3.1	3.2	4.5	6.5	
AC Power Supply	AC:100~240V, 47/63Hz				
DC Power Supply(DC:-48V)	X			√	
Double Power Module Hot Backup	X			√	
Max Power Consumption(W)	25	30	55	95	
Operating Environment	Working Temperature	0~+50°C			
	Storage Temperature	-40~+85°C			
	Relative Humidity	5~90%(non-conditioning)			



technical indicator

V1600D: LED information

LED	ON	Blink	OFF
PWR	The device is powered up	—	The device is powered down
SYS	Device is starting	Device is running normal	Device is running abnormal
PON1~ PON16	ONU is registered to the PON system	ONU is registering to the PON system	ONU is not registered to the PON system or ONU do not connect to OLT
SFP/SFP+	The device is connected to the port	The device is ongoing data transmission	The device is not connected to the port
Ethernet (green-- ACT)	—	Port is sending or/and receiving data	—
Ethernet (yellow-- Link)	The device is connected to the port	—	The device is not connected to the port



Software function

Management Mode

- SNMP、Telnet、CLI、WEB、SSH v1/v2;

Management Function

- Fan Group Control;
- Port Status monitoring and configuration management;
- Online ONU configuration and management;
- User management, Alarm management;

Layer2 Function

- 16K Mac address;
- Support port VLAN and protocol VLAN;
- Support 4096 VLANs;
- Support VLAN tag/Un-tag, VLAN transparent transmission, QinQ;
- Support IEEE802.3d trunk;
- Support RSTP;
- QoS based on port, VID, TOS and MAC address;
- IEEE802.x flow control;
- Port stability statistic and monitoring;
- Support P2P Function;

Multicast

- IGMP snooping;
- 256 IP Multicast Groups;



Software function

IP Route

- Support static route、 dynamic route RIP v1/v2 and OSPF;

Support IPv6

- Support DN;
- Support IPv6 Ping、 IPv6 Telnet;
- Support ACL based on source IPv6 address, destination IPv6 address, L4 port, protocol type, etc;
- Support MLD v1/v2 snooping(Multicast Listener Discovery snooping);

EPON Function

- Support port-based rate limitation and bandwidth control;
- In compliant with IEEE802.3ah standard;
- Up to 20KM transmission Distance;
- Support data encryption, multi-cast, port VLAN, separation, RSTP, etc;
- Support Dynamic Bandwidth Allocation (DBA);
- Support ONU auto-discovery/link detection/remote upgrade of software;
- Support VLAN division and user separation to avoid broadcast storm;
- Support various LLID configuration and single LLID configuration;
- Different user and different service could provide different QoS by means of different LLID channels;
- Support power-off alarm function, easy for link problem detection;
- Support broadcasting storm resistance function;
- Support port isolation between different ports;
- Support ACL and SNMP to configure data packet filter flexibly;
- Specialized design for system breakdown prevention to maintain stable system;
- Support dynamic distance calculation on EMS online;



Software function

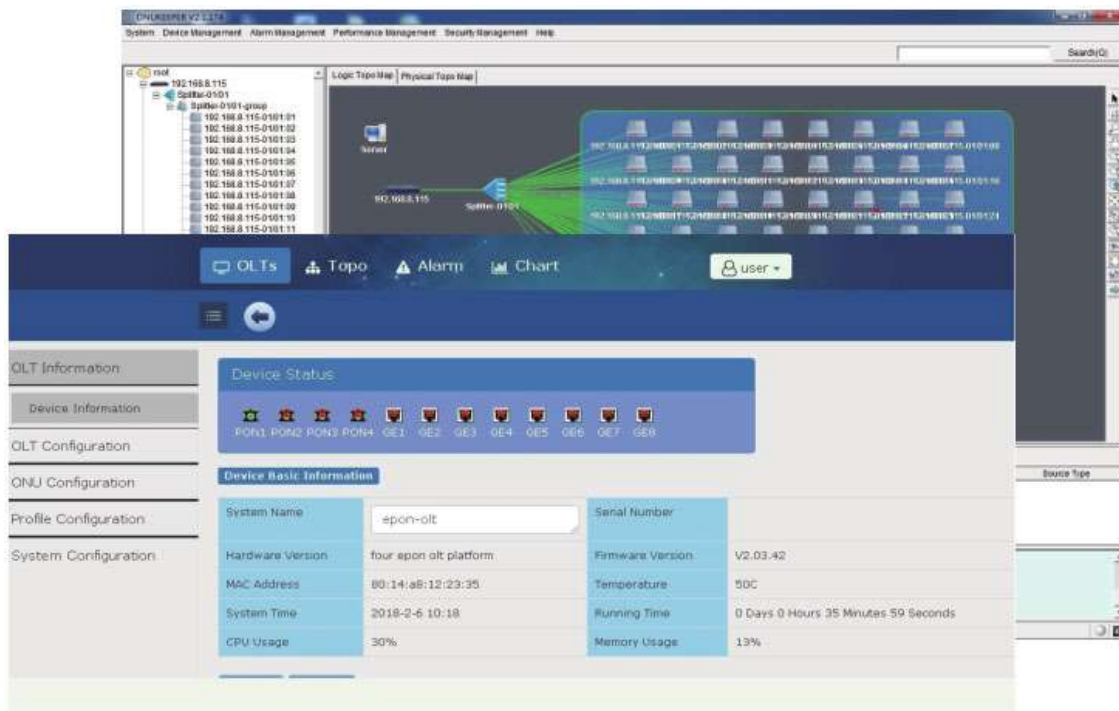
License Management	ONT limit	Limit the number of ONU registration, 64-1024. When the number of ONU reach the max number permit, add new ONU to system will be refused.
	Time limit	Limit system used time, 31days. Equipment trial license, after 31days of running time, all ONUs be set offline.
PON mac table		A mac table of PON, including mac address, VLAN id, PON id and ONU id for easier services checking, troubleshooting.
ONU management	Profile	Including ONU DBA, Service, VoIP, Alarm Profiles.
	Auto learn	ONU automatically discovery, register, online.
	Auto configure	All features can be automatically configured by profiles when ONU auto online—plug and play.
	Auto upgrade	The ONU firmware can be auto upgraded. Download ONU firmware to OLT from web/tftp.
	Remote config	The powerful private OAM protocol provides remote HGU configuration including WAN, WiFi, POTS, etc.



EMS

Key Features

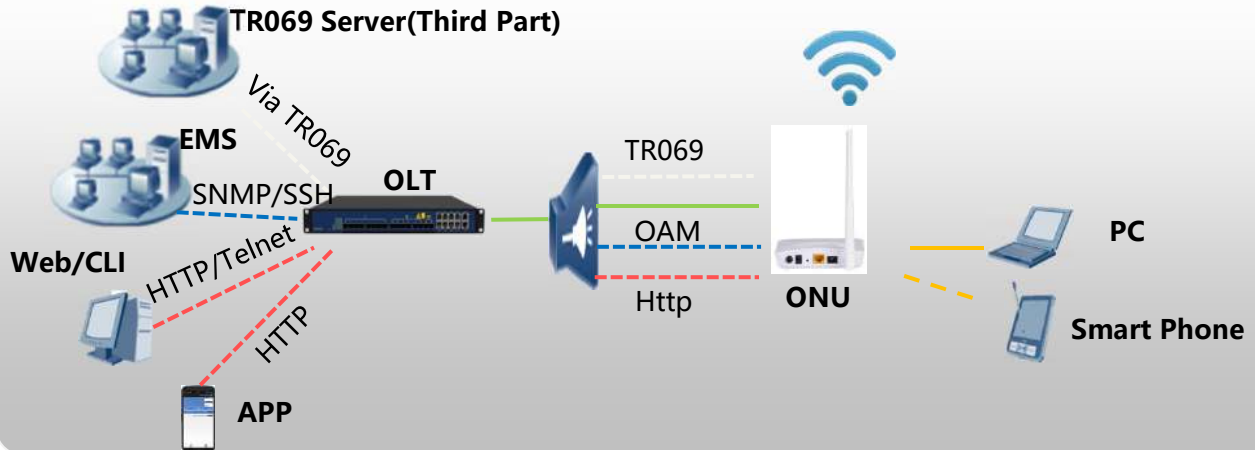
- ✓ Support C/S & B/S architecture
- ✓ Support auto topology or modify manually
- ✓ Add Trap Server to detect ONU automatically
- ✓ EMS can add and configure ONU automatically
- ✓ Add ONU position information
- ✓ Support EMS APP



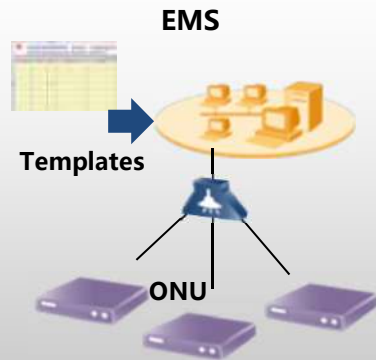


EMS

Support EMS/Web/Telnet(CLI)/TR069/SSH Configuration



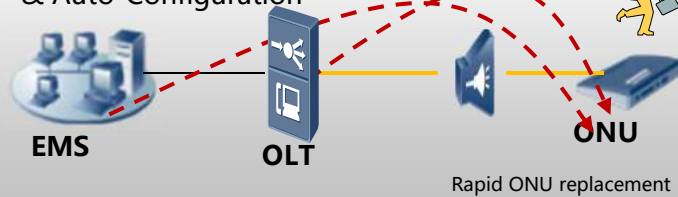
Support ONUs Plug&Play



Device Template for Auto-Configuration

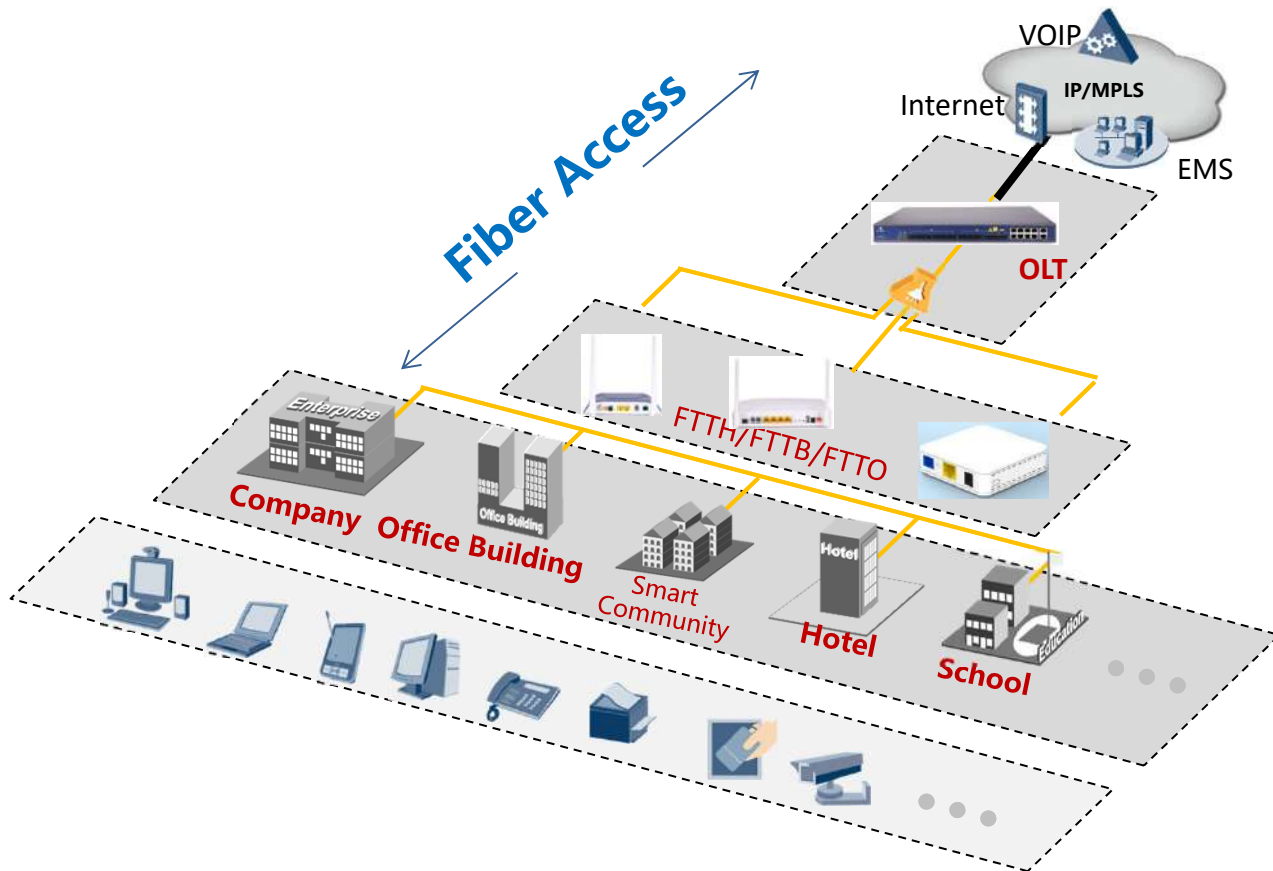
Rapid operation and maintenance

Auto-upgrade firmware & Auto-Configuration





Typical application diagram



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