



What: Photon Performance Counters
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Author: developer@exitgames.com
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Group	Counter	Dashboard	Description
Photon Socket Server	Bytes {in, out}	x	How many bytes that the server has received.
	... Bytes {in, out}/sec	x	How many bytes are arriving per second.
	Peers	x	The total number of peers connected to the server.
	Connections Active		The total number of connections to the server.
	CLR commands/sec		The total number of commands processed by the CLR per second.
	Commands {in, out}	x	The total number of commands into and out of the server.
	... Commands {in, out}/sec	x	The total number of commands into and out of the server per second.
	IO Buffers {Total, In Use}		Total: this number represents all of the I/O data buffers that are actively being used plus all of those that are in the pool waiting to be reused. In Use: The number of I/O data buffers that are currently being used for data flow purposes.
	... IO Buffers {Total, In Use} +/sec		The increase in the total number of IO buffers available per second.
	... IO Buffers {Total, In Use} -/sec		The decrease in the total number of IO buffers available per second.
	Sockets {Total, In Use}		Total: As with the buffers, the server pools sockets. This is the total of all sockets in use and all sockets in the pool waiting for reuse. In Use: The number of sockets currently in use. Note that this includes sockets that are waiting for connections and sockets that have connections.
	... Sockets {Total, In Use} +/sec		The increase in the total number of sockets in the socket pool per second.
	... Sockets {Total, In Use} -/sec		The decrease in the total number of sockets in the socket pool per second.
Photon Socket Server: UDP	Bytes {in, out}	x	The total number of bytes into and out of the server via UDP.
	... Bytes {in, out}/sec	x	The total number of bytes into and out of the server via UDP per second.
	Datagrams {in, out}		The total number of datagrams in/out.
	... Datagrams {in, out}/sec		The total number of datagrams in/out per second.
	Pending Recvs		The total number of pending recvs posted (in effect, the listen backlog).
	Peers	x	The total number of peers connected to the server via UDP.
	Connections Active		The number of UDP connections to the server.
	CLR commands/sec		The number of commands from a UDP source processed by the CLR per second.
	Commands {in, out}	x	The number of commands into/out the server via UDP.
	... Commands {in, out}/sec	x	The number of commands into/out the server via UDP per second.
Photon Socket Server: TCP	Bytes {in, out}	x	The total number of bytes into the server via TCP.
	... Bytes {in, out}/sec	x	How many bytes are arriving per second via UDP.
	Peers	x	The total number of peers connected to the server via TCP.
	Connections Active		The number of TCP connections to the server.
	CLR commands/sec		The number of commands from a TCP source processed by the CLR per second
	Commands {in, out}	x	The number of commands into/out the server via TCP.
	... Commands {in, out}/sec	x	The number of commands into/out the server via TCP per second.
Photon Socket Server: Threads and Queues	IO Threads Active		The number of threads in the I/O thread pool. Note that this number should stay static for the life of the server. If it doesn't there's a bug that's causing threads to die!
	... IO Threads Processing		The number of I/O threads that are currently working on I/O requests. This should be a low number and it should go up and down. If it ever sticks at one place for a long time and doesn't go down then it's likely that the server has deadlocked.
	... IO Threads Events/sec		The number of I/O events processed per second.
	Business Logic Threads Activ		The total number of business logic threads in the business logic thread pool. If the pool is a fixed size then this shows the number of threads that the server was configured with and if it changes whilst the server is running then it's VERY bad news. If, however, the server is configured with a dynamic pool then this shows the current size of the thread pool.
	... Business Logic Threads Processing		The number of business logic threads currently processing. Gives an idea (subject to the sample rate of the tool viewing the counter) of how busy the thread pool is. Useful on graphs that cover a long period of time to show trends in server load.

	... Business Logic Threads Events/sec		The number of business logic events processed per second. Useful on graphs that cover a short period of time to show fluctuations in server load as it happens.
Business Logic Queue		x	The total number of requests in the business logic queue.
... Business Logic Queue +/sec		x	The total number of requests added to the business logic queue per second. Useful on graphs that cover a short period of time to show fluctuations in server load as it happens.
... Business Logic Queue -/sec		x	The total number of requests removed from the business logic queue per second. Useful on graphs that cover a short period of time to show fluctuations in server load as it happens.
ENet Threads Active			The total number of ENet threads in the ENet thread pool.
... ENet Threads Processing			The number of ENet threads currently processing.
... ENet Threads Events/sec			The number of ENet thread events processed per second.
ENet Queue			The total number of requests in the ENet queue
... ENet Queue +/sec			The total number of requests added to the ENet queue per second.
... ENet Queue -/sec			
ENet Timer Threads Processing			The total number of requests removed from the ENet queue per second.
... ENet Timer Thread Events/sec			The number of timer threads processing. How often the timer queue is checked for expired timers per second.

Photon Socket Server:
ENet

	Reliable commands queued {in, out}		IN: The number of reliable commands currently queued for processing. Out: The number of reliable commands that have been sent and are currently awaiting ACKs.
Outgoing commands/sec			The number of outgoing commands per second.
Reliable commands out/sec			The number of outgoing reliable commands per second.
... Reliable commands dropped/sec			The number of incoming reliable commands dropped (due to sequence number errors) per second. Shows some measure of network congestion. Clients are retransmitting needlessly as we already have seen the reliable commands that are arriving.
Unreliable commands out/sec			The number of outgoing unreliable commands per second.
... Unreliable commands throttled/sec			The number of outgoing unreliable commands throttled (not sent!) per second. Unreliable commands are throttled when the server decides that too much bandwidth is being used for a peer. Adjust your per peer bandwidth limits to reduce throttling.
... Unreliable commands dropped/sec			The number of incoming unreliable commands dropped (due to sequence number errors) per second. Shows some measure of network congestion. Unreliable data is arriving after the next reliable command on that channel and so has been invalidated and is thus discarded.
Acknowledgements {in, out}			The total number of incoming acknowledgements received/sent.
... Acknowledgements {in, out}/sec			The number of incoming/outgoing acknowledgements per second.
Pings {in, out}			The total number of incoming pings received/sent.
... Pings {in, out}/sec			The number of incoming/outgoing pings per second.
Commands resent			The total number of commands resent due to ACK timeouts.
... Commands resent/sec			The number of commands resent due to ACK timeouts per second.
Timeout disconnect			The total number of disconnects due timeouts.
... Timeout disconnects/sec			The number of disconnects due timeouts per second.
Transmit Rate Limit Bytes Queued +/sec			The number of bytes per second that were added to the transmit rate limit queue.
... Transmit Rate Limit Bytes Queued -/sec			The number of bytes per second that were removed from the transmit rate limit queue.
... Transmit Rate Limit Bytes Queued			The total number of bytes currently in the transmit rate limit queue.
... Transmit Rate Limit Bytes Discarded			The total number of bytes in the transmit rate limit queue when a peer was reset.

ENET Timers

Timers Active			The total number of ENet timers currently active.
... Timers Created/sec			The number of ENet timers created per second.
... Timers Destroyed/sec			The number of ENet timers destroyed per second.
... Timers Set			The total number of ENet timers currently set.
... Timers Set/sec			The number of ENet timers set per second.
... Timers Reset/sec			The number of ENet timers reset per second.
... Timer Events/sec			The number of ENet timers firing per second.
... Timers Cancelled/sec			The number of ENet timers cancelled per second.
Time Spent In Server: In (ms)			The time an inbound datagram spends in the server before being passed to the CLR.
Time Spent In Server: Out (ms)			The time an outbound datagram spends in the server before being sent.