

# MonLogin

Saturday, July 16, 2022 3:14 PM

monloginx

process_login_finish event	1. xdbgateway, xdbhost and sqlservr all produce this event 2. event is produced either failure or success	
	Column Name	Description
	state	1. use State_Desc to find out more info 2. <a href="#">TdsServerDatabaseUnavailableStates</a> (used by xdbhost and xdbgateway packages). 1. <b>DbUnavailableCantFindRequestedInstance</b> will become <b>CantFindRequestedInstance</b> (DbUnavailable will be stripped out). search <a href="#">TdsServerDatabaseUnavailableStates and mapfromenum</a> 3. ELoginFailedState used by sqlservr
	Connection_peer_id	1. Unique per connection and set by the client. Process_login_finish event on xdbhost and sqlserver will have same connection_peer_id. 2. Gateway sets connection_peer_id to that provided by client (if provided in driver) before creating connection to backend. Thus, can be used for correlation between gateway and backend. 3. Example: The login failed. ClientConnectionId:957436c4-8a29-48d4-9ff2-29ecf59deb90. ClientConnectionId is Connection_peer_id in this table
	is_user_error	whether login failed is due to user error (such as incorrect password)
	total_time_ms	the total time of process_login_finish (sqlalias look up + winfab lookup for gateway, dosguard, authentication, firewall, xodbc etc for sqlserver) x_eTime_Total FProcessLoginAck starts the timer ProcessXDBHostCommands and TDSSNIClient::AcceptCommon finishes the timer
	enqueue_time_ms	queue time before the task is picked up onto scheduler x_eTime_Enqueue in process_messages, it finishes the event (SetLoginEventFinishLocked)
	login_time_ms	x_eTime_Login // The time spent in the server login routine
	netwrite_time_ms	sum of time taken while writing packet to SNI
	Netread_time_ms	sum of time taken while reading packet from SNI
	find_login_ms	my understanding: this is FindLogin routine plus a few things. see login method x_eTime_FindLogin (which is in login routine). it starts a timer and then ends timer between FindLogin tip: use SetFind_login_ms to search
	Ssl_time_ms	total time spent during ssl encrypt / decrypt
	Fedauth-*_time_ms	multiple columns that talk about corresponding step in fedauth
	Proxy_dispatcher_time_ms	(gateway only) time spent by proxy open task in the dispatcher actively running
	Proxy_dispatcher_wait_list_time_ms	(gateway only) time spent by login waiting to be picked up by dispatcher. Long time here indicates some other login (to another database) taking time and hogging up dispatcher pool time which has a max of 200 active proxy open tasks at a time
	Proxy_open_time_ms	(gateway only) - time spent by proxy open connection in the process of opening connection
	LgnPoolWait	from extra_info column. only for sqlserver: this should be between the time xdbhost dispatches and SQL picks it up.
	lookup_state	States are divided into several categories enumerated here by order of transition from file <a href="#">uricachelookup.h</a>
	result	If login was successful then it tells us if login was redirected or proxied - e_crContinueSameState - Login is proxied - e_crContinue - Login is redirected - e_crDisconnect - Login was disconnected (lookup failure)
	ssl_protocol	Contains protocol used for <a href="#">ssl</a> : - SNI_TLS1_1_SERVER - <b>1.1</b> - SNI_TLS1_SERVER - <b>1.0</b> - SNI_TLS_1_2_SERVER - <b>1.2</b>
	extra info	
proxy_close_connection event	Used for throughput of proxy connection	
	Column Name	Description
	connection_id	used to corelate
	logical_server_name	server name to which we are proxying. Used for hashtable lookup
	total_task_count	Number of proxy task for logical_server_name. Number of tasks ~ number of pending + number in dispatch pool
	open_running_count	Number of tasks in dispatch pool
	dispatch_pool_size	Size of dispatch pool. Size is ~ total_task_count for each logical_server_name
	sni_conn_count	Number of SNI connections. You can estimate that number connections is sni_conn_count / 2 (since each proxy connection takes two connections CLI -> GW and GW -> SQL)
	tdsproxycontainer_count	These should be number of connections proxied
	tdssession_count	Maximal number of tds sessions NOT used (actual TDS session is 64k - tdssession_count)

report_login_proxyconn_throttling event	Once login lookup finishes and we determine that we will have to proxy this login we create proxy task. Once created, proxy task has to pass through several phases in order to be scheduled for proxy. Time that each proxy task spends while waiting depends on multiple factors, like number of proxy tasks for that server, total number of task (all servers), number of running tasks etc.																
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