# Ah ha moment of trouble-shooting

OCTOBER 13, 2015

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- Sr. DBA
- 7 Years of Idera DM experiences
- No Financial Conflict of Interest



#### A million dollar question?



What is the best, fastest, easiest way to diagnose a performance issue?

#### idera' geek sync

#### Within SQL Server traditionally: (MSP)

- DMV/F, MDW, Xevent, CMS, perfmon

I am a maverick:

- DBA DIY calculating wait stats, recording history ....
- 3<sup>rd</sup> party tools like Idera DM ....



- 3 types of performance issues:
- Reproducible any time
- Not reproducible but occurring
- Phantom



The best arsenal for SQL Server troubleshooting is simply a pair of powerful homegrown queries. In this Geek Sync, Jason Wong will simulate workloads, using PowerShell and T-SQL, on SQL server 2016, and will diagnose and exam the execution process via some powerful queries. <u>http://dbace.us</u>



### Wait type:

#### ASYNC\_NETWORK\_IO

When network writes are blocked behind network. Ensure client is processing server data faster.

#### • CXPACKET (asymptomatic)

When parallel threads have an unequal workload, causing wait on the entire query until the longest-running thread is complete.



Power query records activities

- Active Session History (Oracle has ASH) – to look back activities at any time.
- Incremental Wait Stats to show moment of database statistic information that depicts performance issues.



### Demo

- Active Sessions (and history)
- Incremental Wait Stats (and history)



### Take-away:



"Never let a good crisis go to waste." - Winston Churchill

Thank you for your time.





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