

Planes de ejecución 2016

Enrique Catala Bañuls

MVP , Mentor at SolidQ

| *ecatala@solidq.com*

| *enrique@enriquecatala.com*

| *@enriquecatala*

| *www.enriquecatala.com*

Grabación planes de ejecución 2015

<http://bit.do/planesdeejecucion1>



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BIG Thanks to SQLSatMadrid Sponsors



**Hewlett Packard
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**plain
concepts**



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4 Sponsor Sessions at 11:40

Don't miss them, they might be getting distributing some awesome prizes!

- HPE
- SolidQ
- KABEL
- TSD Consulting

Also BIG Raffle prizes at the end of the event provided by:

Plainconcepts, SolidQ, Kabel, TSD Consulting, Pyramid Analytics & sqlpass.es

Enrique Catalá Bañuls



- Ingeniero Informático
- Microsoft Data Platform MVP
- Mentor en SolidQ
- Tuning y alta disponibilidad

ecatala@solidq.com | www.solidq.com

[@enriquecatala](https://twitter.com/enriquecatala) | www.enriquecatala.com



Mejoras QO en SQL 2016 (130)

- Compatibility Level Guarantees
- Query Optimizer Improvements under Trace Flag 4199
- New Referential Integrity Operator
- **Parallel Update** of Sampled Statistics
- Sublinear Threshold for Update of Statistics
- Additions to the New Cardinality Estimator (New CE)
- Misc. Enhancements

Mejoras QO “misc enhancements”

- **Batch query processing in serial queries**
- Sort operators in batch mode
- Window aggregates in batch mode
- Distinct aggregates in batch mode
- Parallel INSERT SELECT into heaps and CCI
- Heap scans for memory-optimized tables
- Parallel scans for memory-optimized tables
- Sampled and auto-update stats for memory-optimized tables

QO trace flag 4199

- Trace flag “mágico” para QO
 - <https://support.microsoft.com/en-us/kb/974006>
- Ahora a nivel de BBDD “*Query Optimizer Fixes*”

Setting	SQL compatibility level	Trace flag 4199	Optimizer hotfixes before SQL Server 2016 RTM	Optimizer hotfixes after SQL Server 2016 RTM
1.	120	Off	Disabled	Disabled
2.	120	On	Enabled	Disabled
3.	130	Off	Enabled by compatibility level	Disabled
4.	130	On	Enabled by compatibility level	Enabled by compatibility level

Nuevas opciones que afectan al QO

- Legacy Cardinality Estimation
- Legacy Cardinality Estimation for secondary
- Max DOP for Secondary
- Parameter Sniffing
- Parameter Sniffing for secondary
- Query Optimizer Fixes
- Query Optimizer Fixes for secondary

Database Scoped Configurations	
Legacy Cardinality Estimation	OFF
Legacy Cardinality Estimation For Secondary	PRIMARY
Max DOP	0
Max DOP For Secondary	
Parameter Sniffing	ON
Parameter Sniffing For Secondary	PRIMARY
Query Optimizer Fixes	OFF
Query Optimizer Fixes For Secondary	PRIMARY

Demo

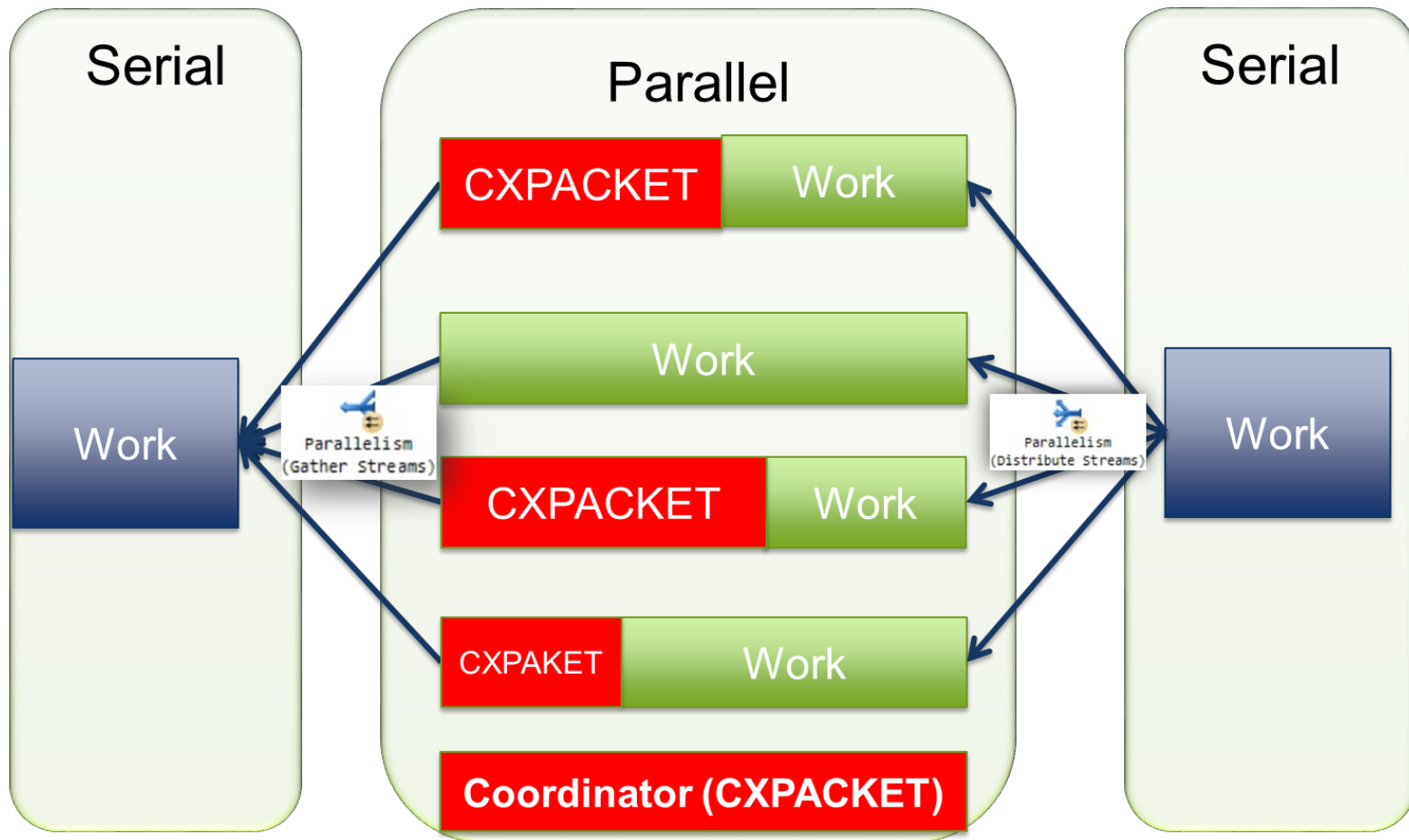


Demo!

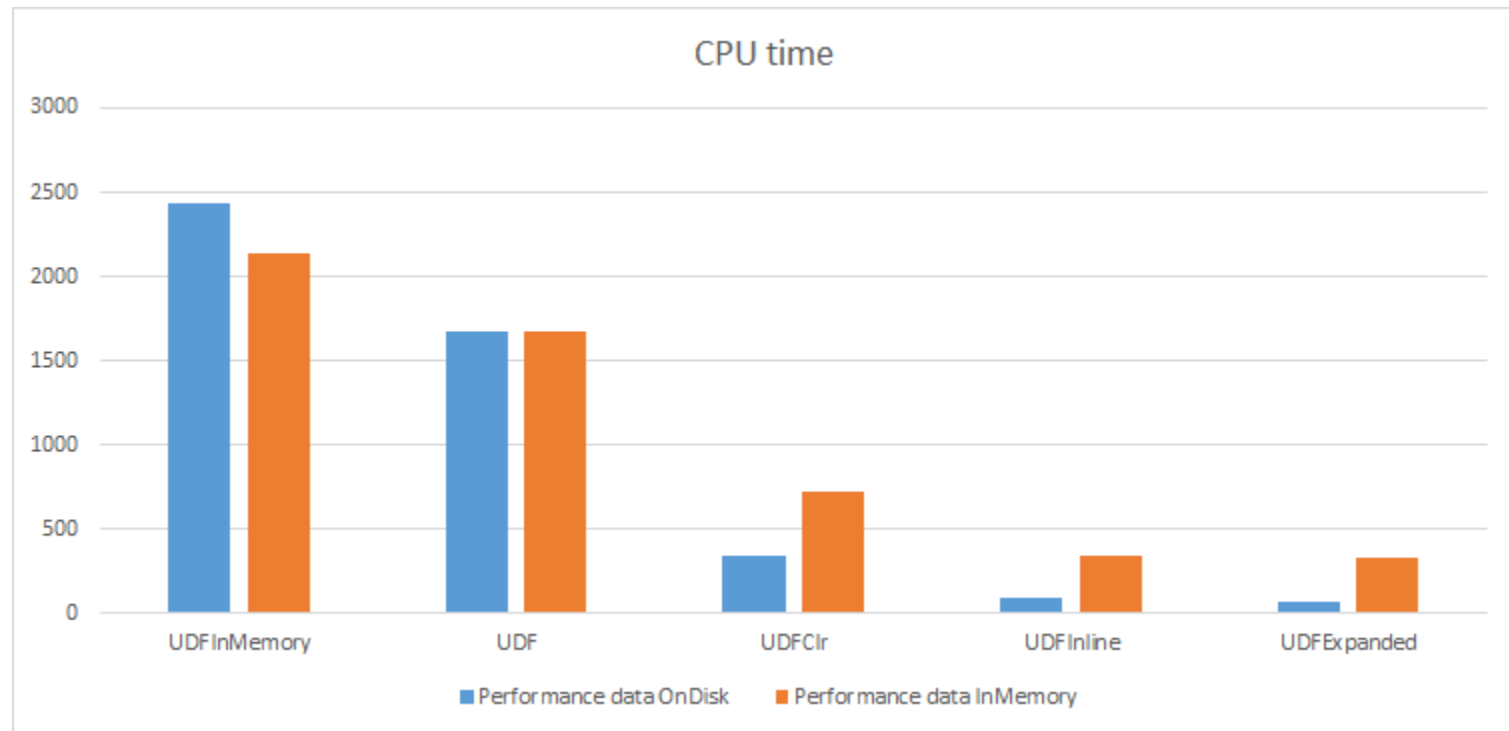


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CXPACKET



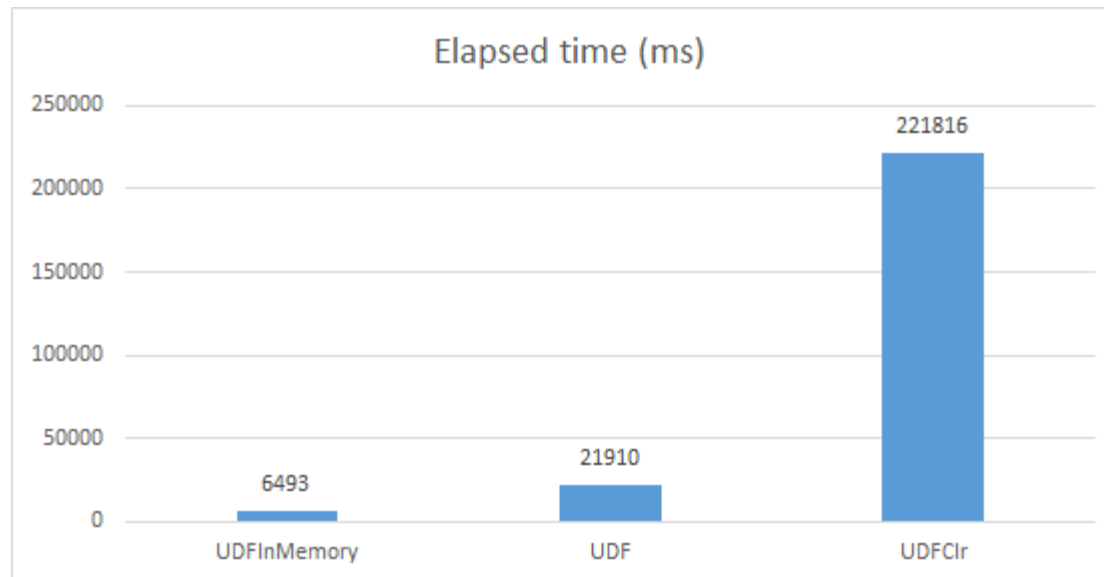
Funciones escalares sin acceso a datos



<https://github.com/enriquecatala/SQLServerScalarUDFPerformance>

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Funciones escalares con acceso a datos



<https://github.com/enriquecatala/SQLServerScalarUDFPerformance>

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GRACIAS!



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