Tableau running against Hive-MapR through SmartData Fabric® on Azure Demo

November 2019

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Customer Challenges	SmartData Fabric® (SDF) Solution
Hive-MapR is slow performing complex queries, similar to other Big Data systems. Standardized on Tableau and wants to run it on Hive-MapR on Azure in combination with on-prem data sources in a true, integrated VDW.	Establish indexed adapters and federation servers for Hive-MapR using Hive ODBC driver, and for other data sources, running SDF in the Cloud (Hybrid Cloud 2.0) and/or on-prem (Hybrid Cloud 1.0). Read, Transform and Index (RTI) relevant data, map to Logical Data Views and run MDM.
To avoid data copying and improve performance, wants to run Tableau in “Live Query” mode and not “Data Extract” mode, regardless of data source.	Run Tableau in both “Live Query” and “Data Extract” modes for comparison – allow the option of both.
Wants AD/LDAP-based SSO with complete access and data security that Hive-MapR and other data sources cannot provide.	Configure a number of different user and role (RBAC) profiles with various RLS, CLS and Data Source Level Security (DSLS).

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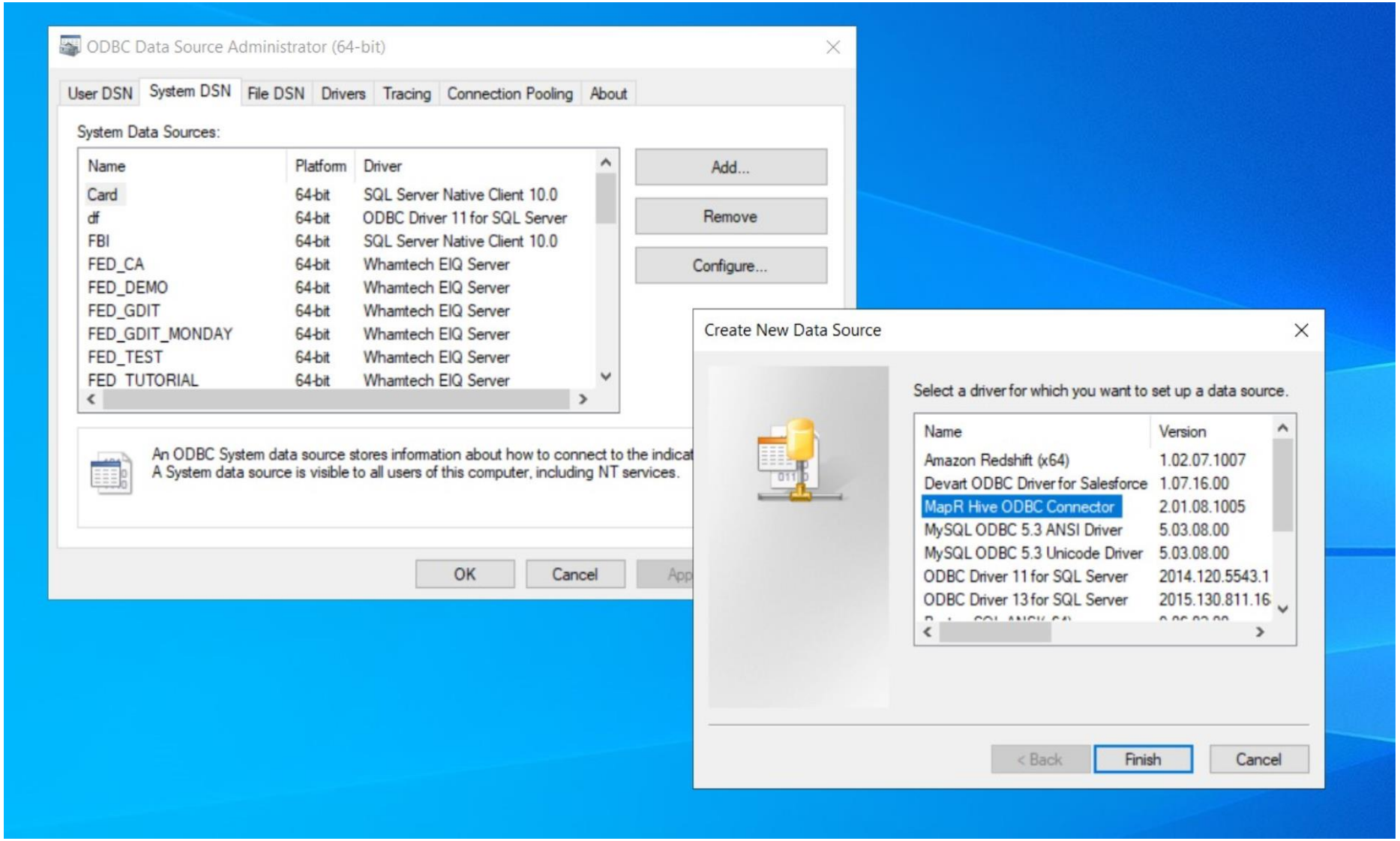
Install MapR ODBC driver



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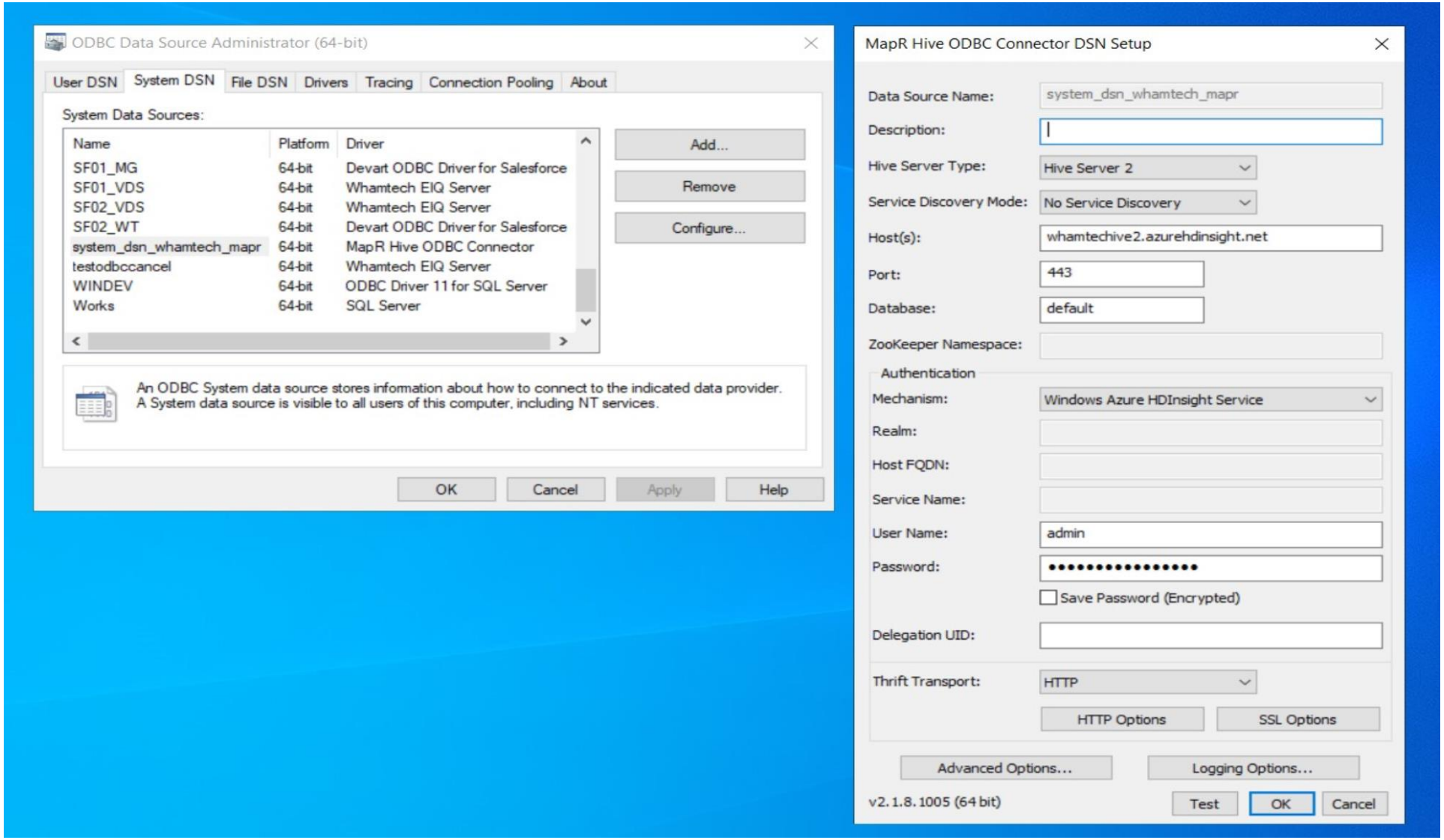
Hive DSN connection



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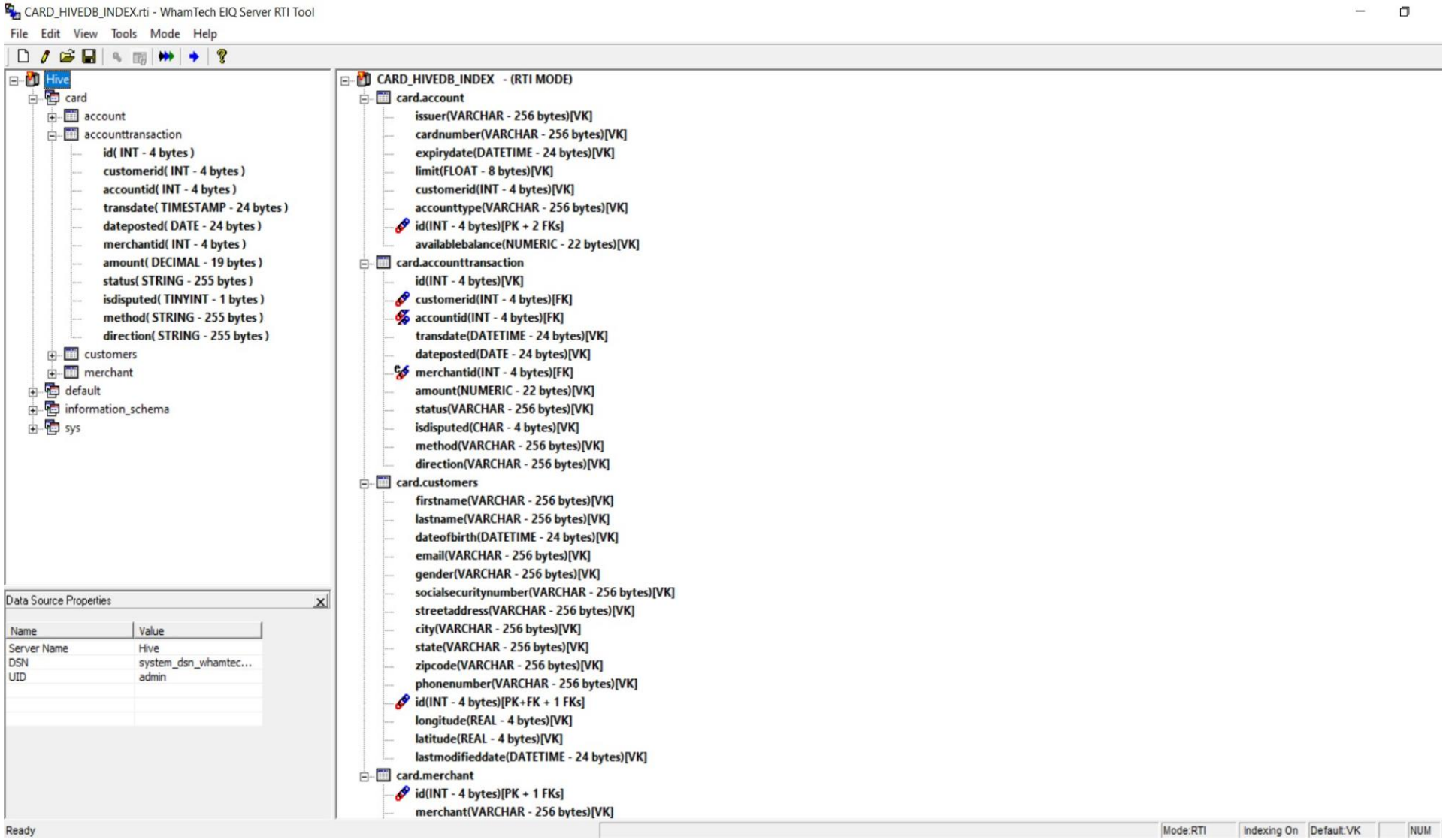
EIQ Adapter index (aka EIQ Index) initial build on Hive



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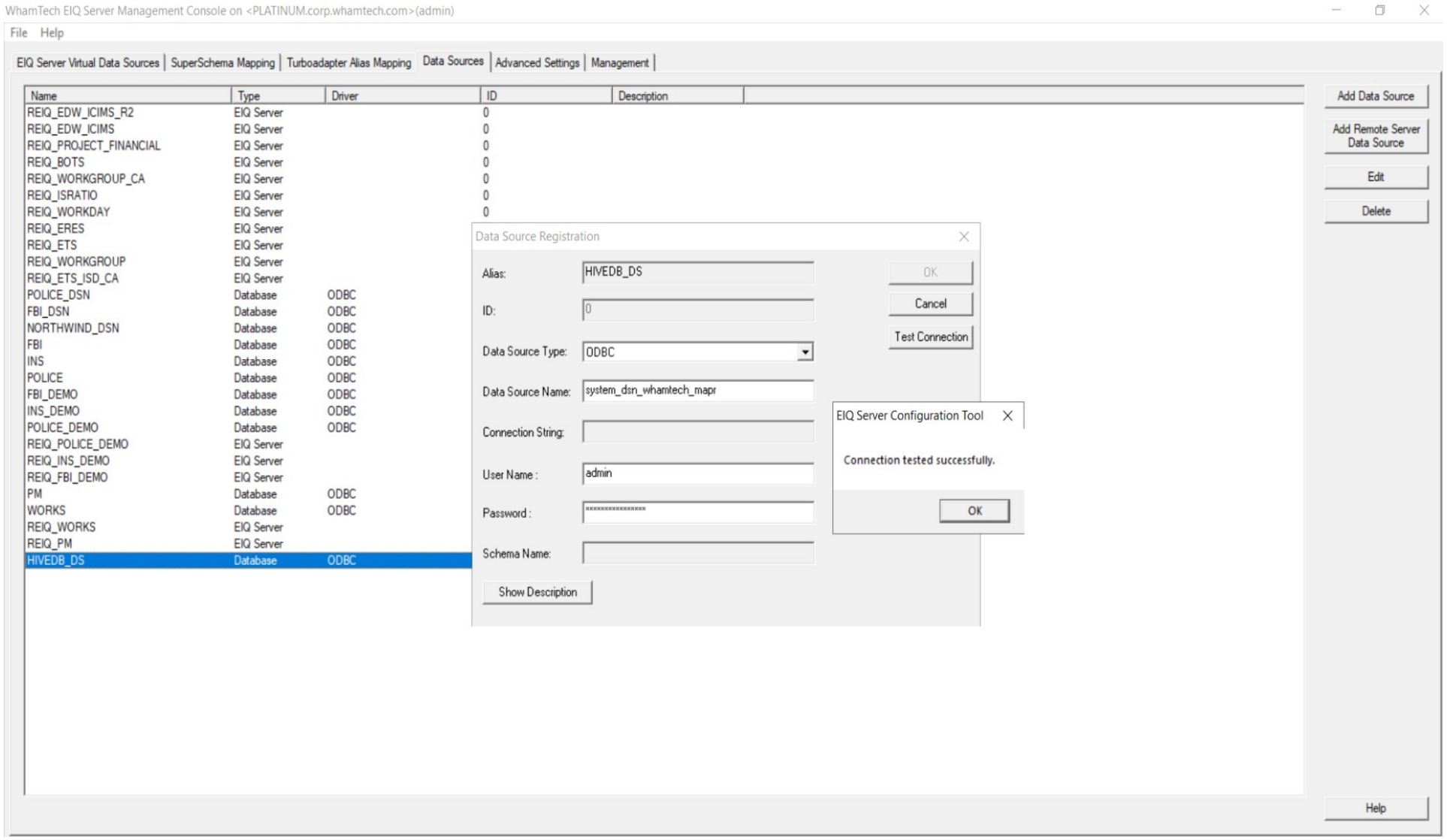
Registering Hive as a Data Source (DS)



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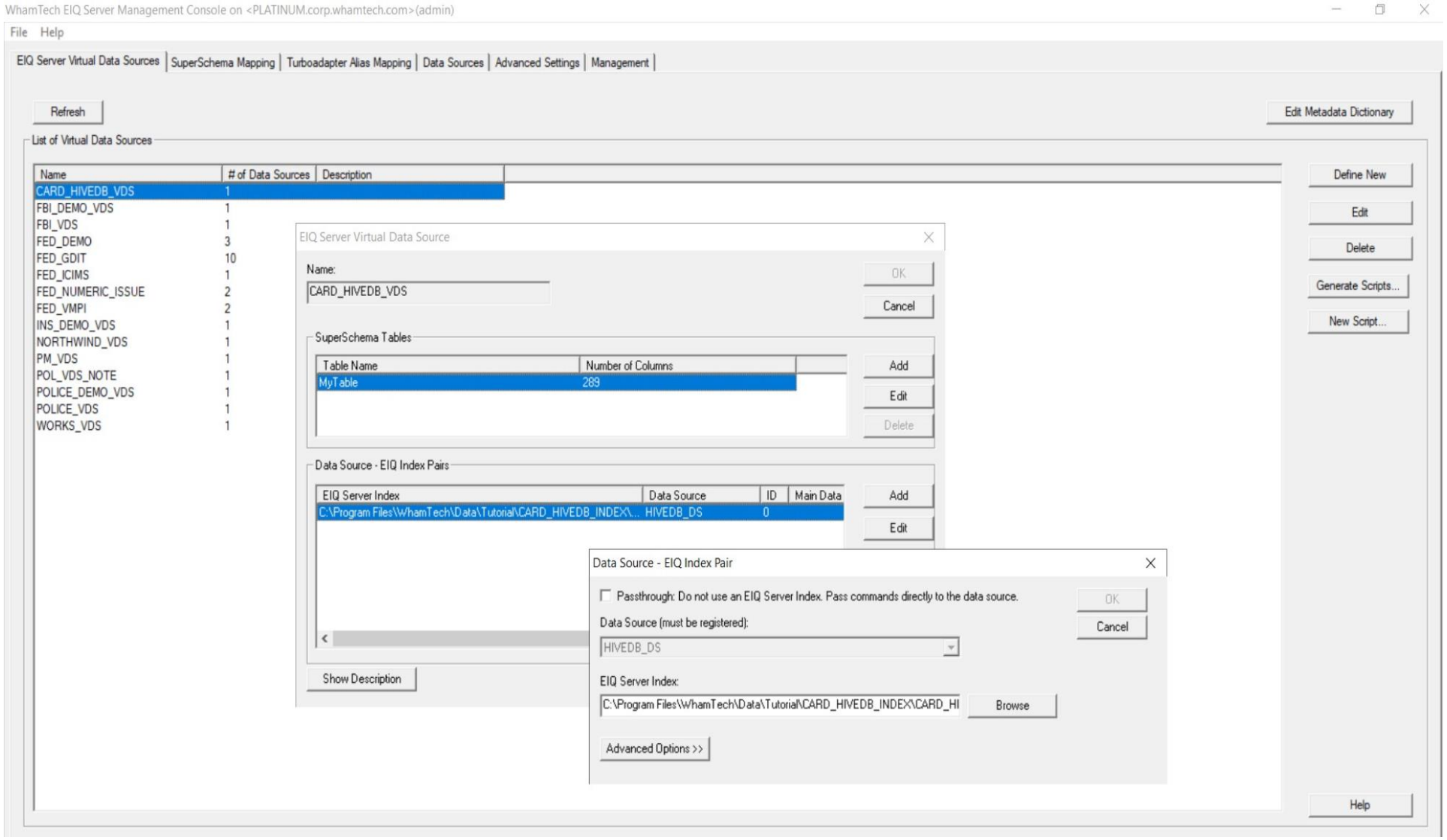
Pairing Hive DS with Hive EIQ Index as Hive Virtual DS (VDS)



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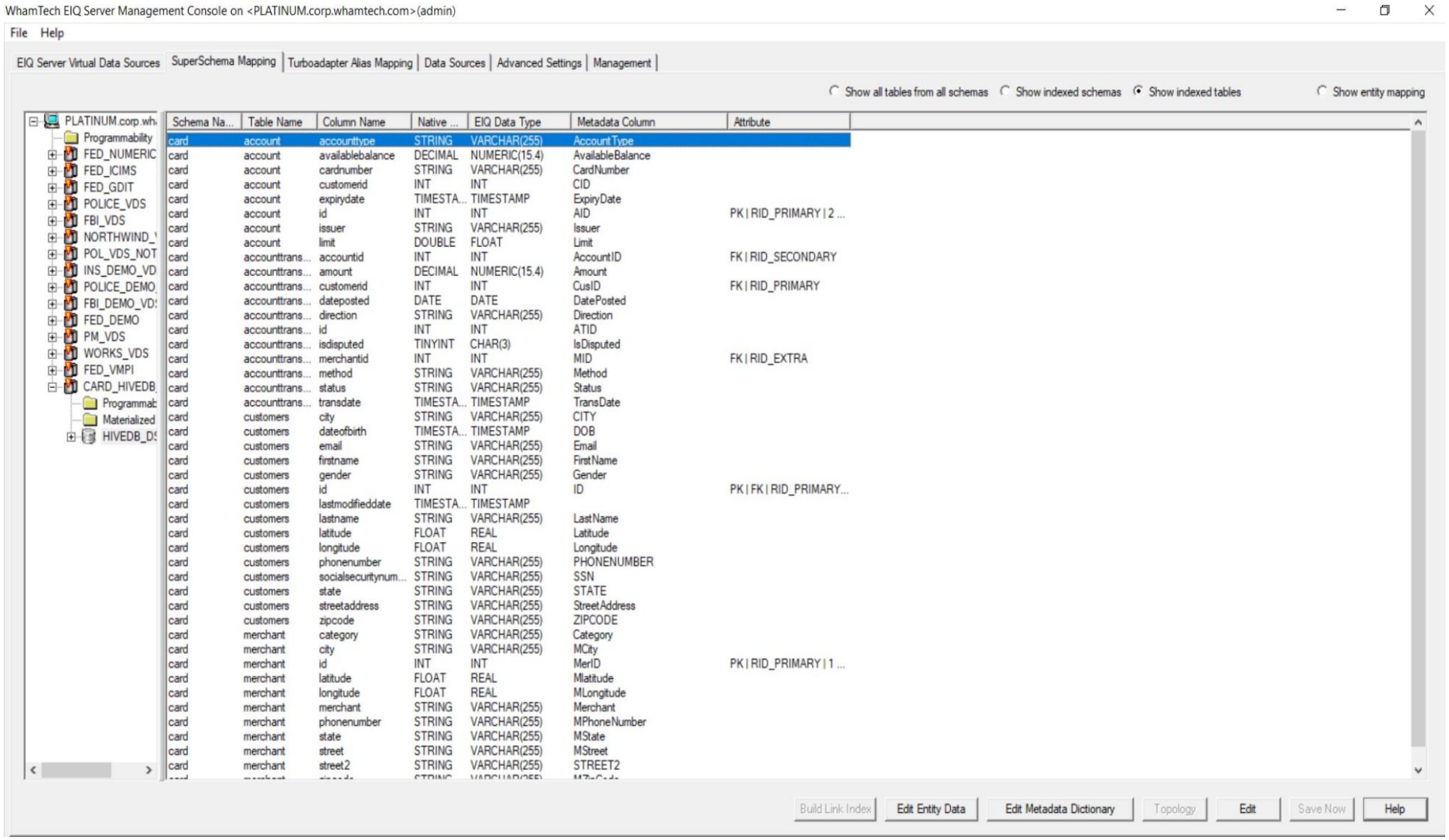
Hive EIQ Index mapping to SuperSchema/Logical Data View



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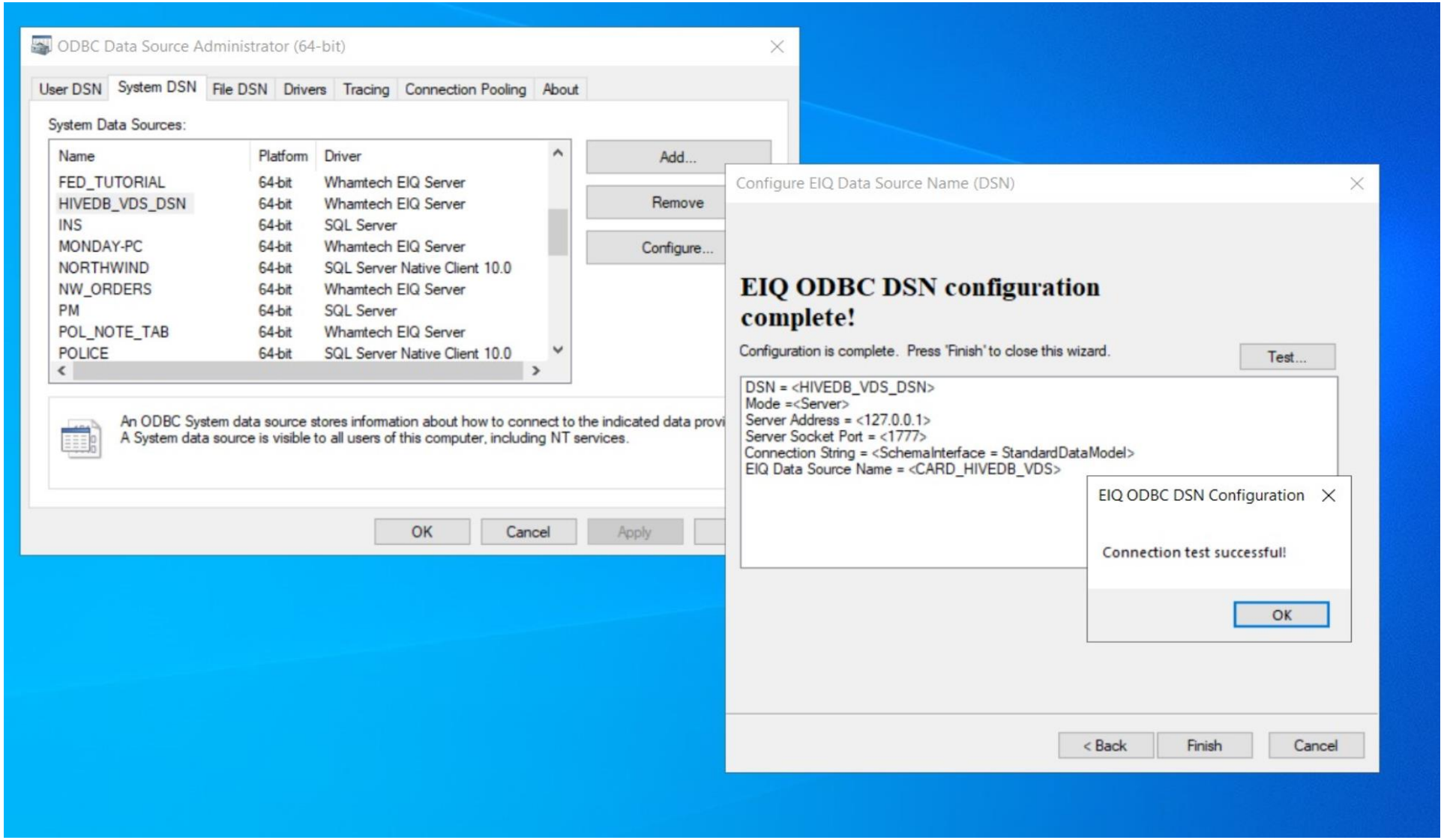
Configuring and testing EIQ Adapter to Hive ODBC as HIVEDB_VDS_DSN



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Configuring Tableau to EIQ Adapter through HIVEDB_VDS_DSN

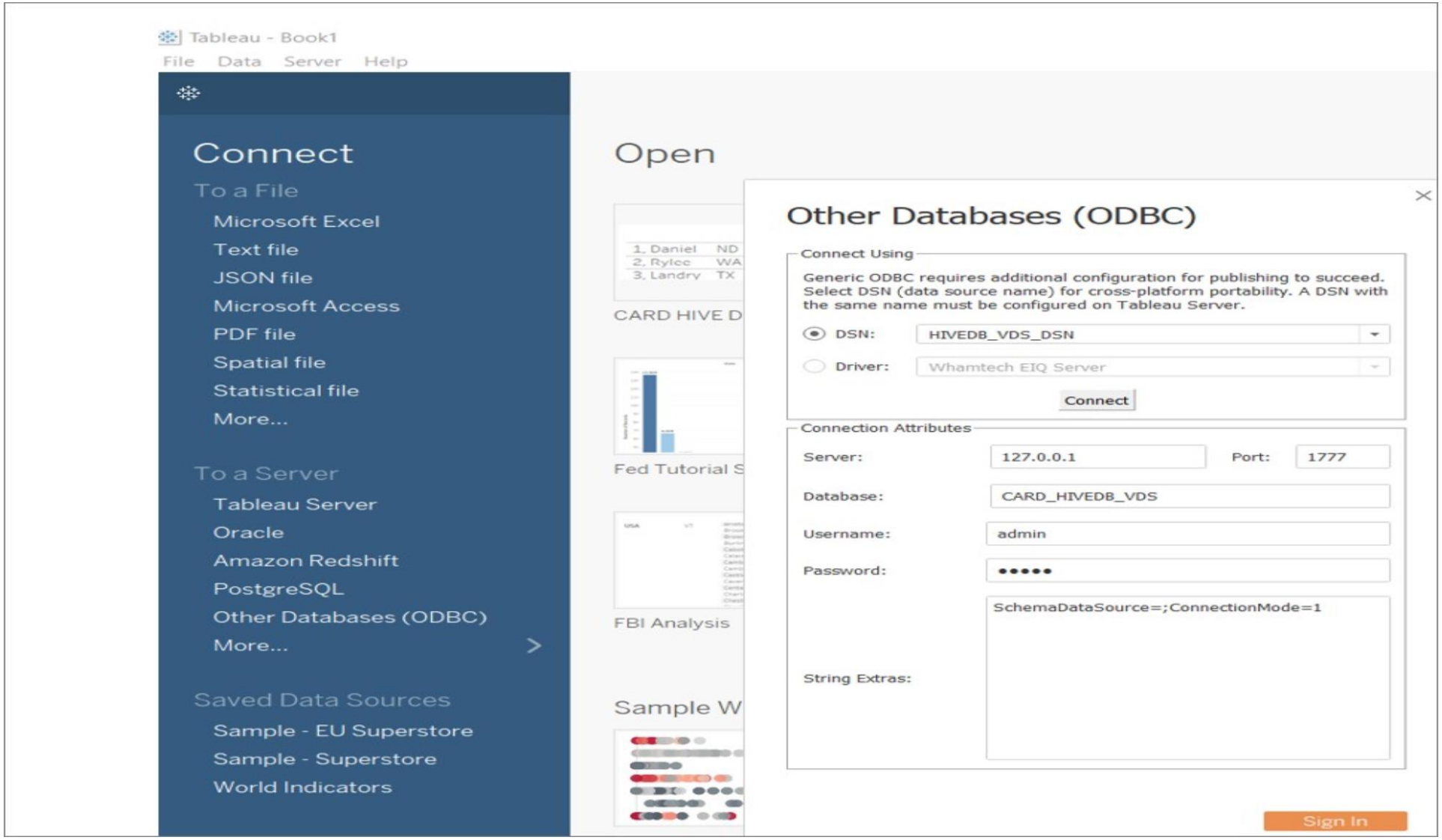

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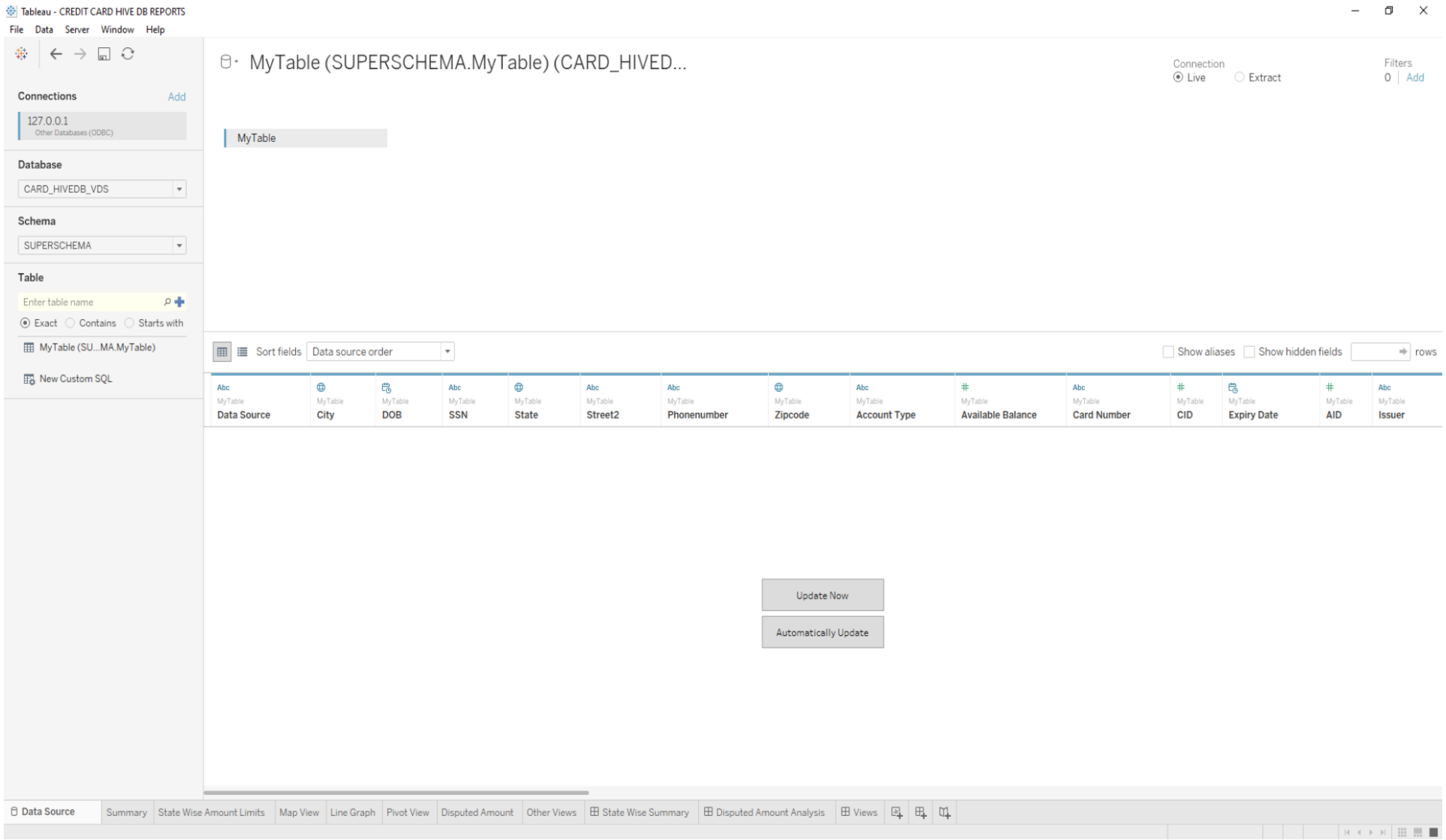
Tableau using Live Connection to Hive VDS



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Results of Live Query on Hive VDS EIQ Indexes and subsequent results read from Hive

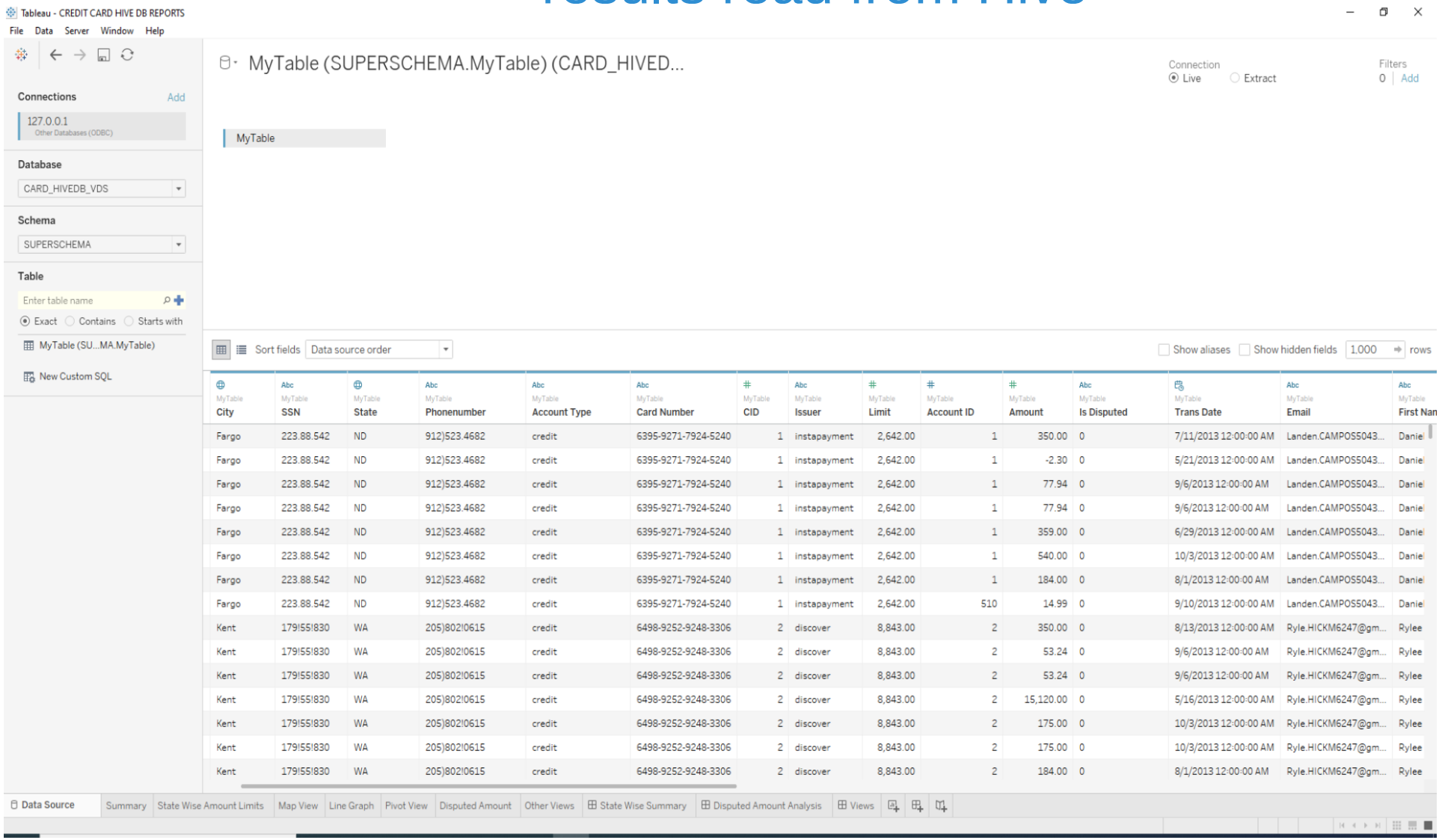

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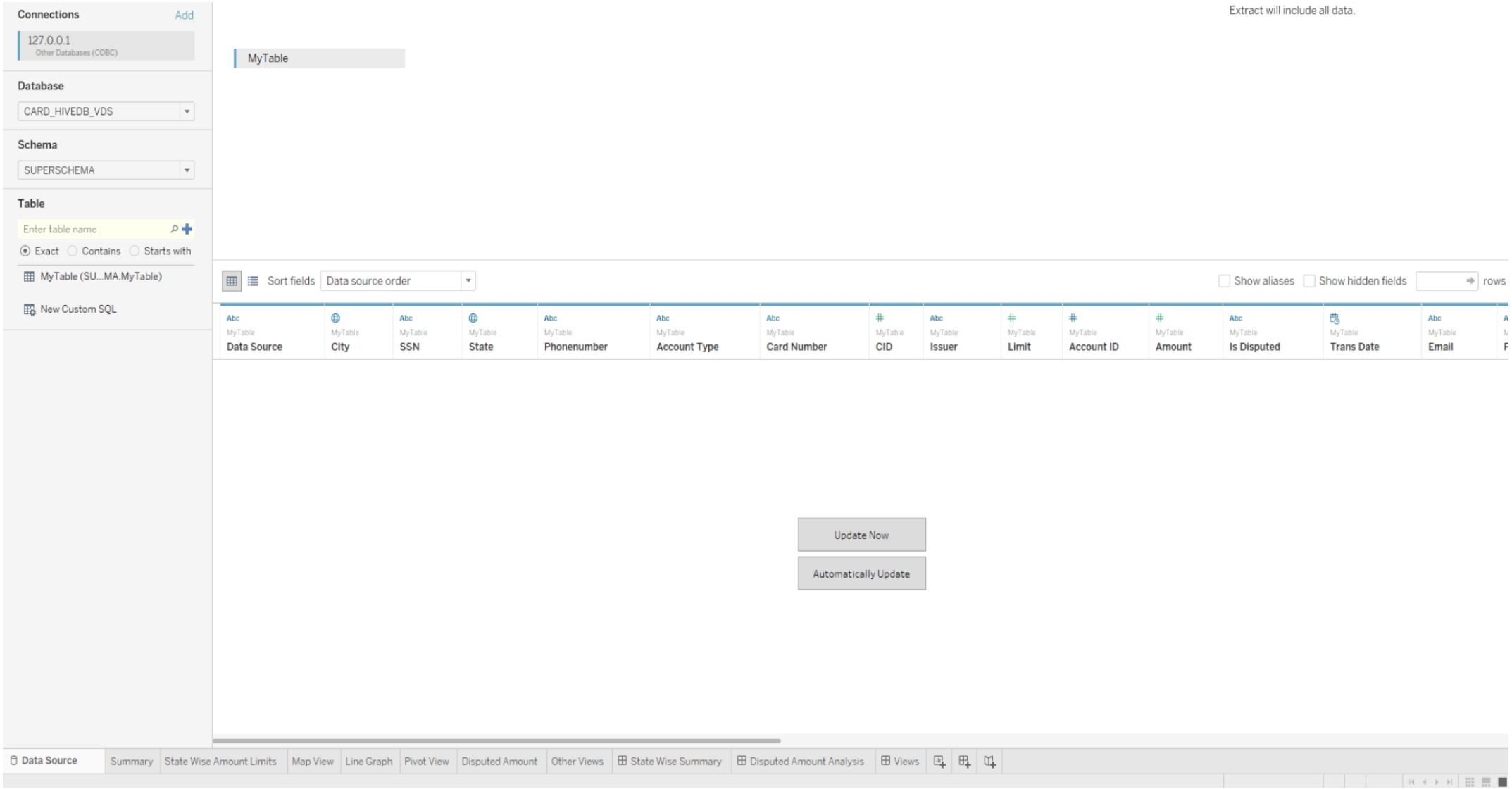
Tableau using Extract Connection to Hive VDS



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Results of Extract Query on Hive VDS EIQ Indexes and subsequent results read from Hive

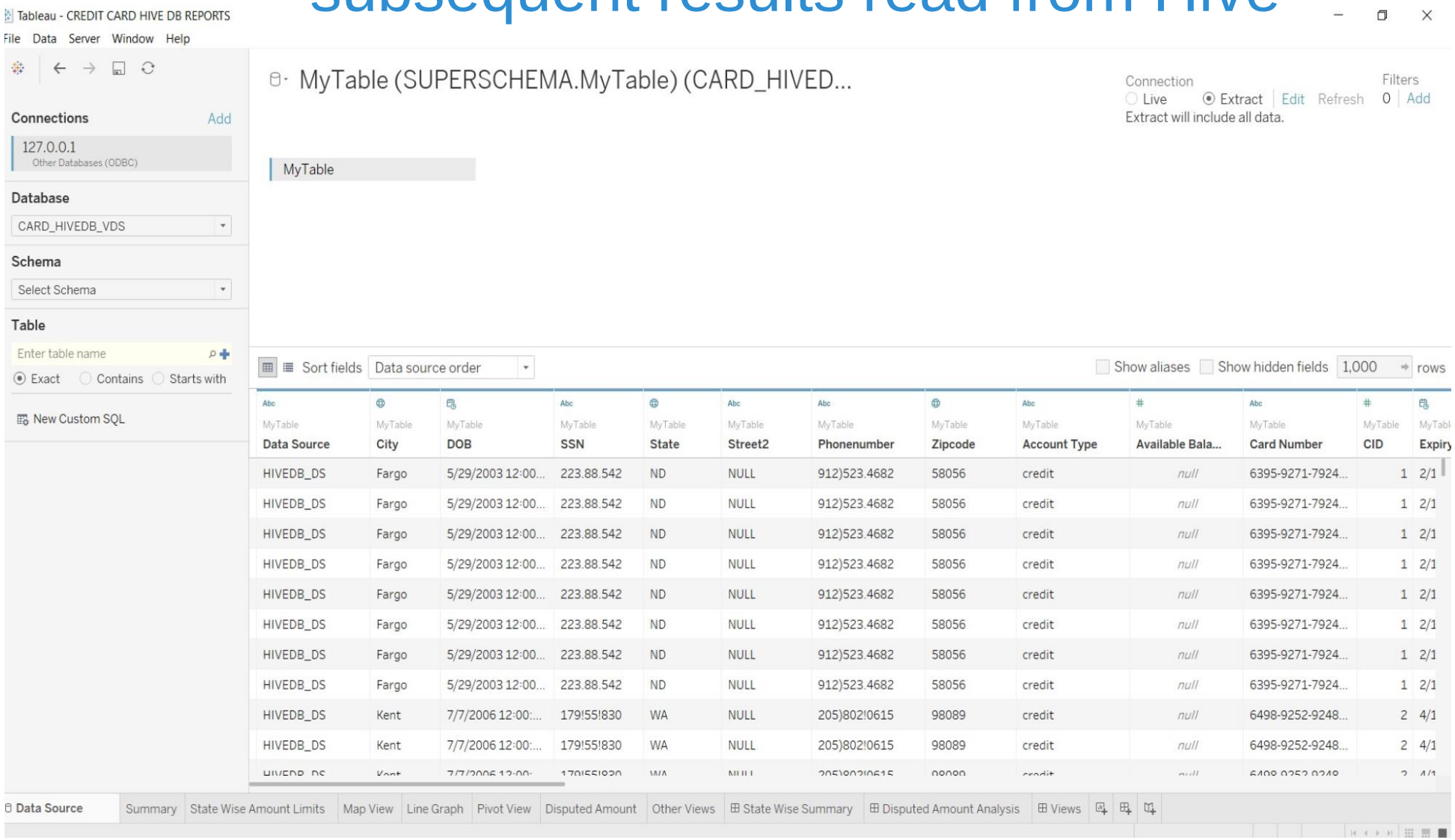

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Tableau report: Disputed Amount

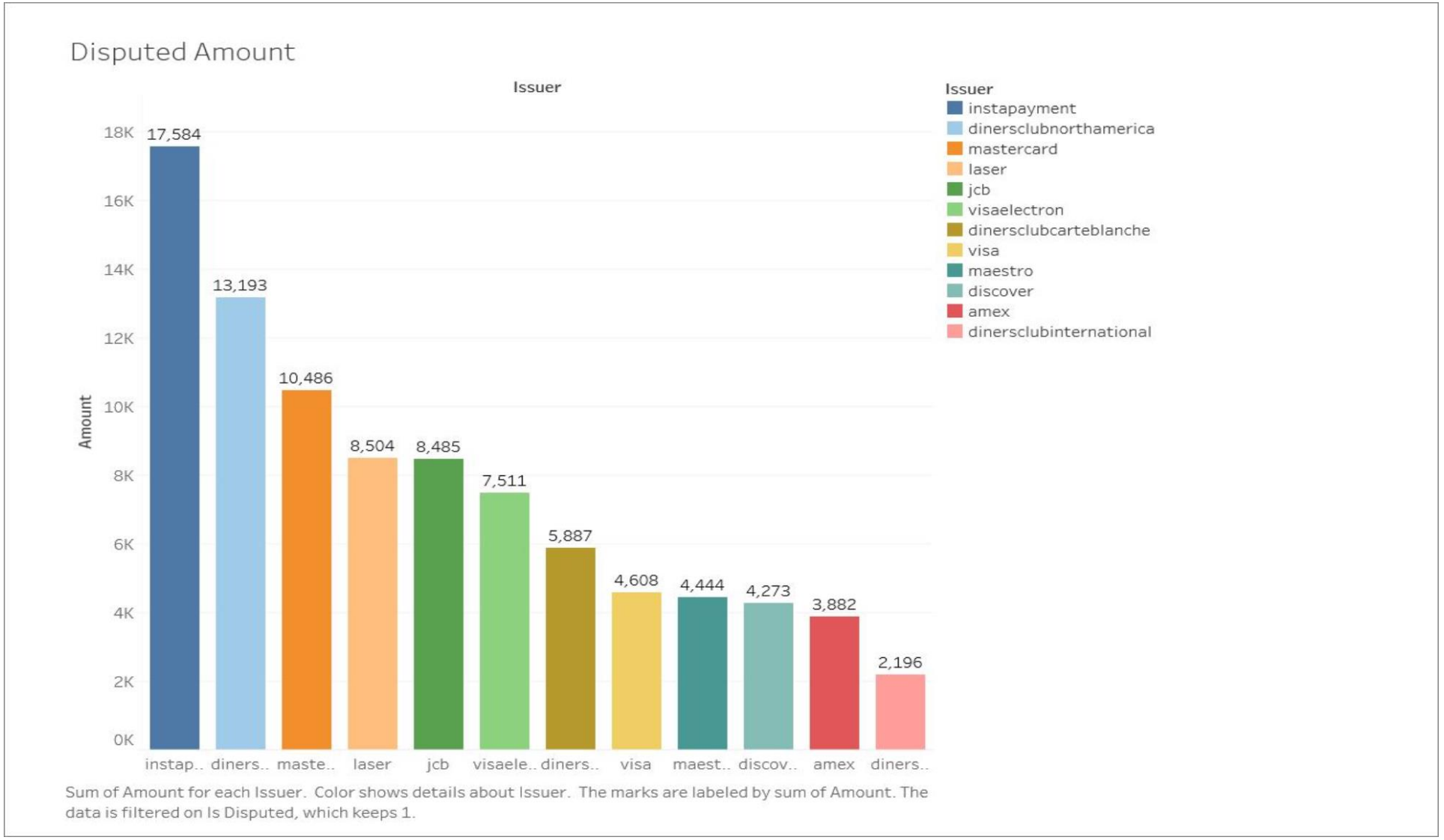

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Tableau report: State Wise Amounts Limits

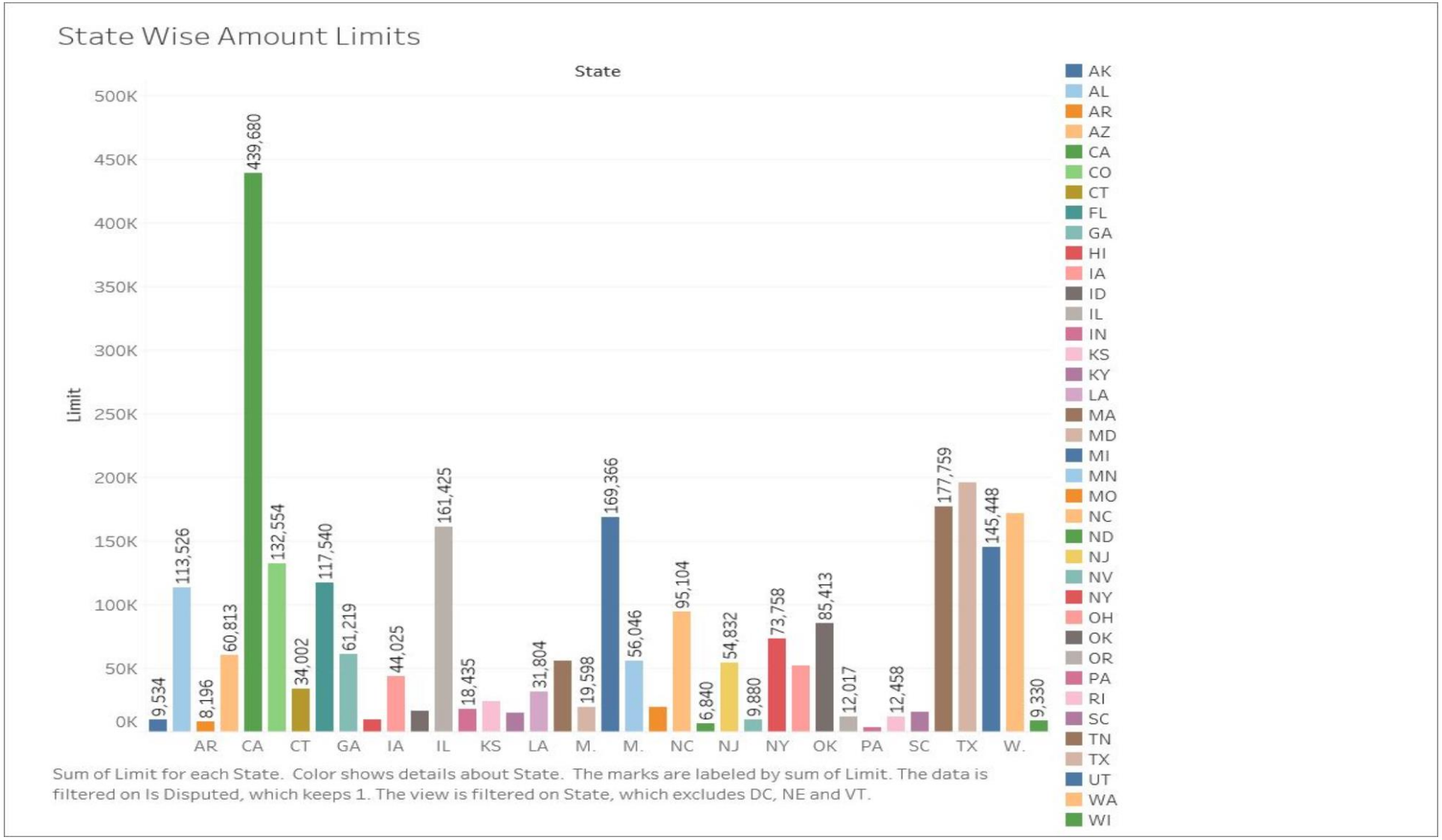

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Tableau report: Line graph

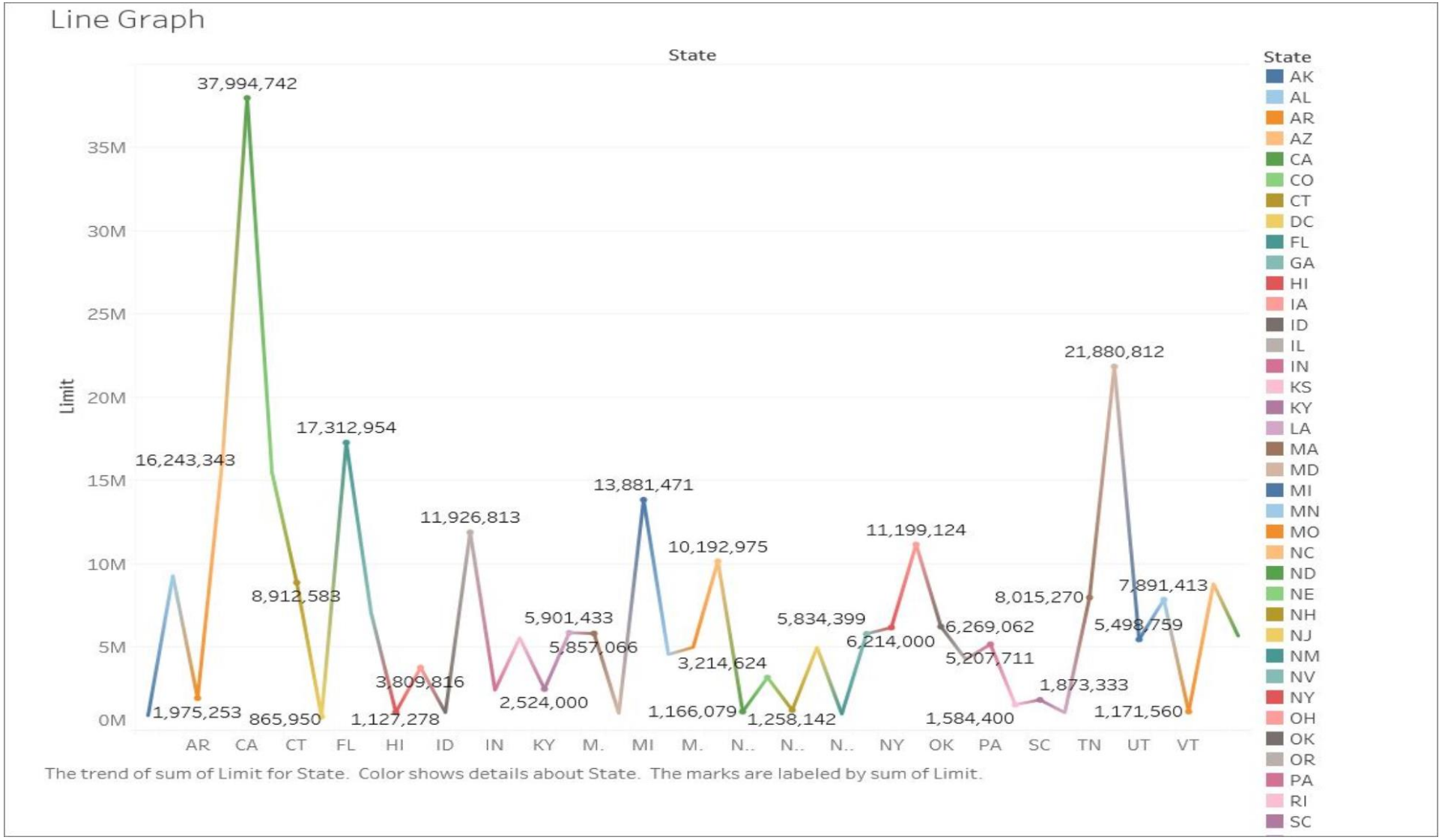

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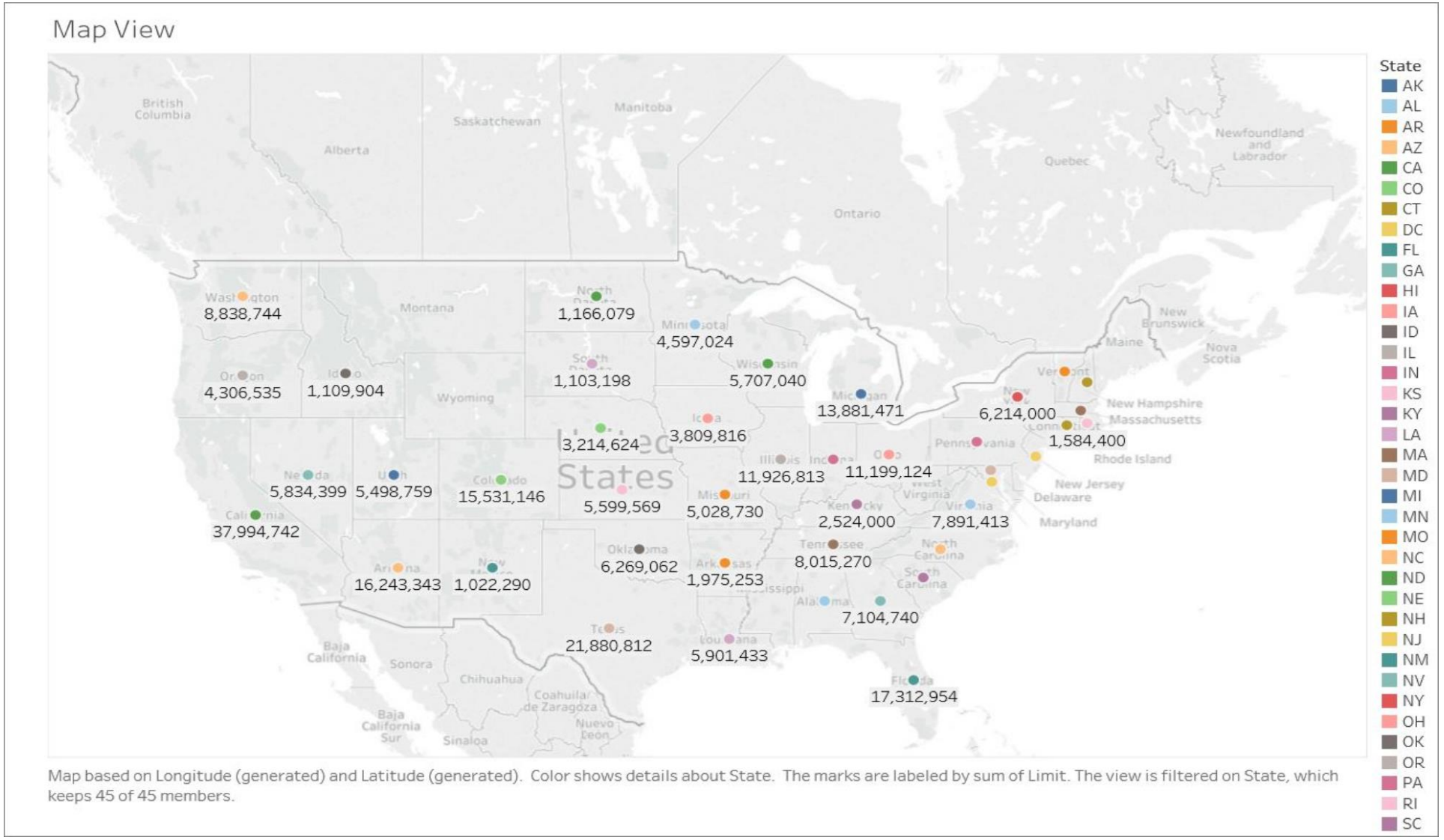
Tableau report: Map view



Map based on Longitude (generated) and Latitude (generated). Color shows details about State. The marks are labeled by sum of Limit. The view is filtered on State, which keeps 45 of 45 members.

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Tableau report: Other views

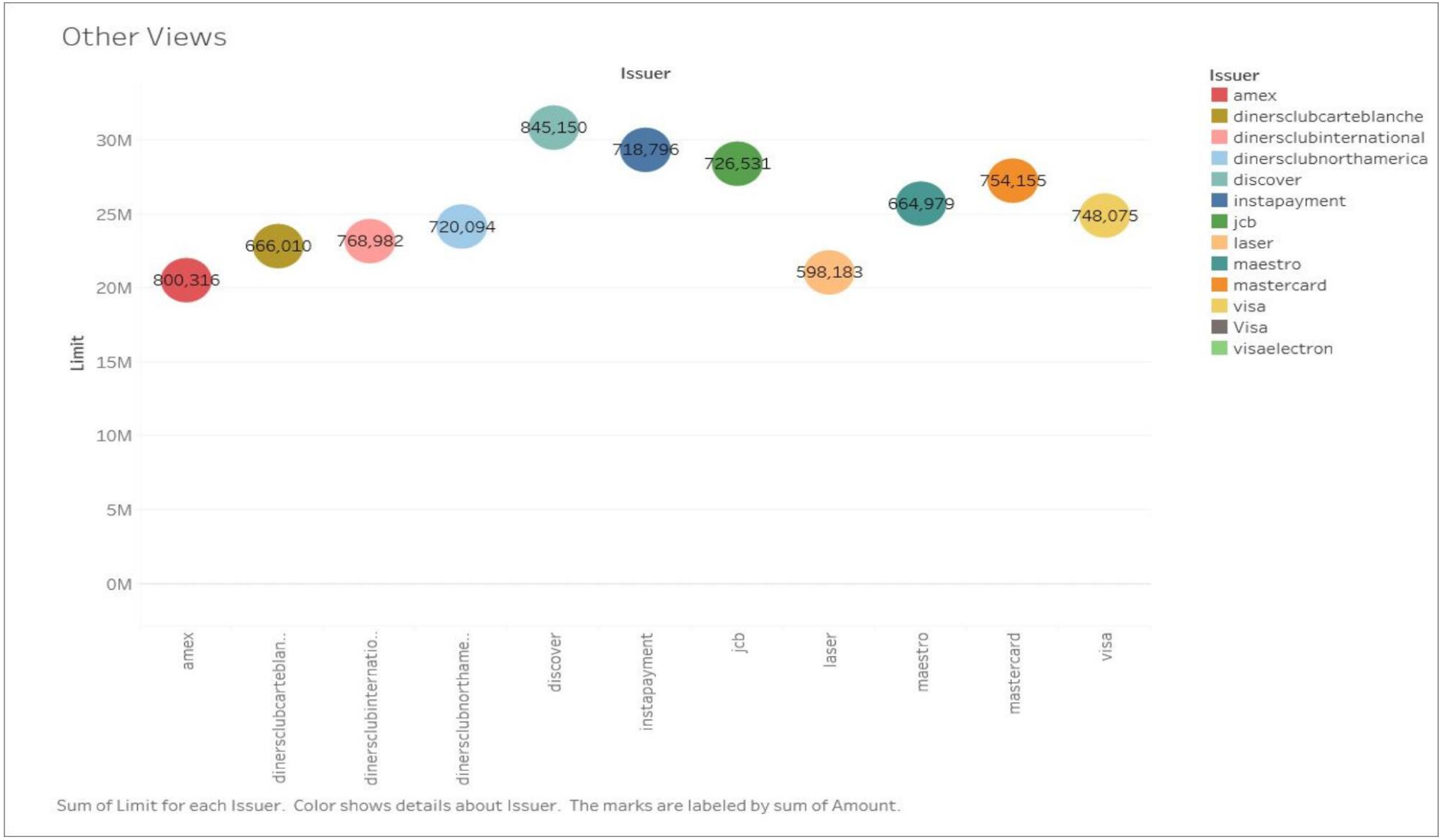

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Tableau report: Pivot view

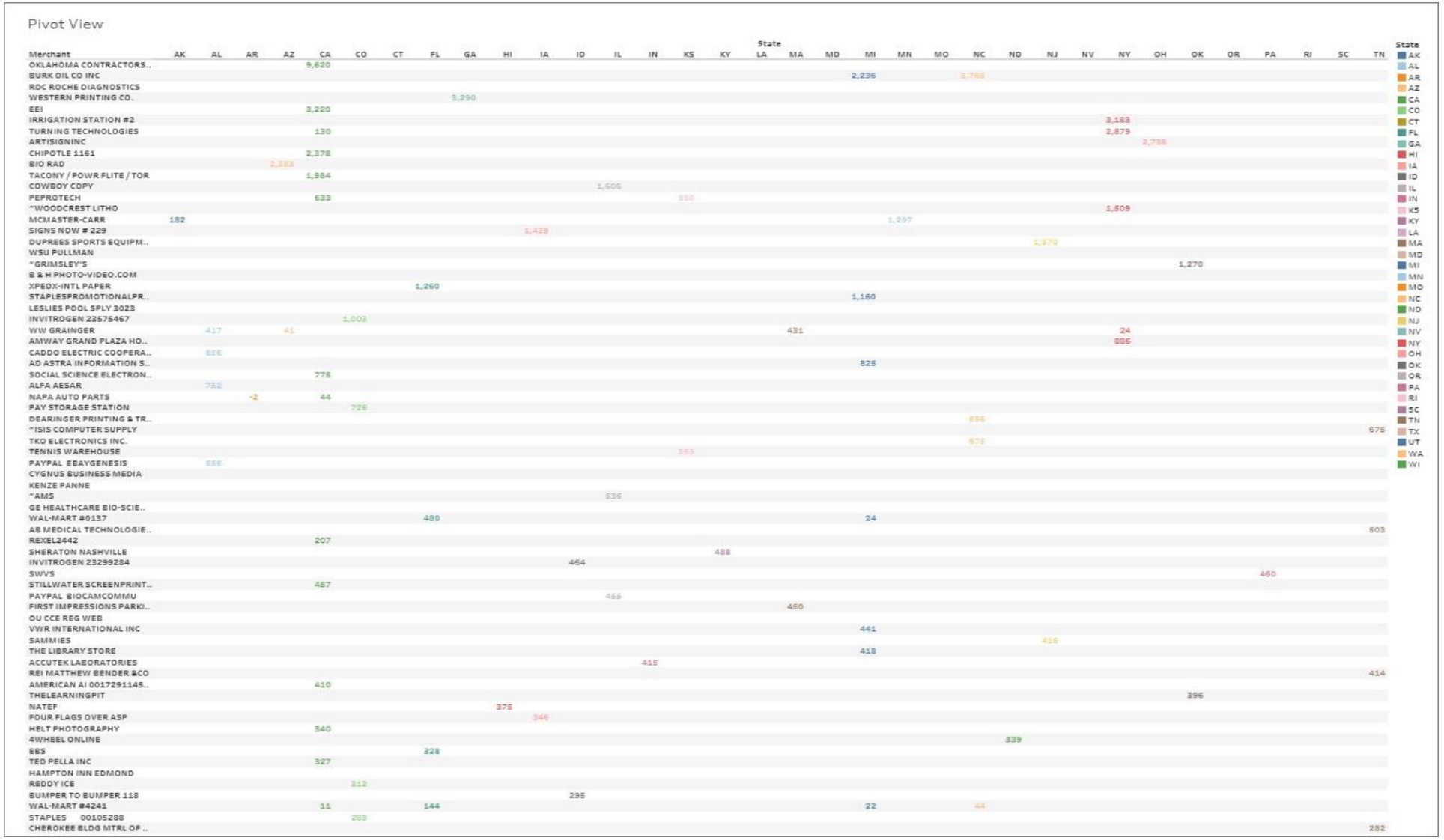

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Tableau report: State wise amount limits dashboard

Summary

State	First Na..	SSN	Merchant	Account I..	Is Disput..	Amount	Limit
CA	Janiya	165*74*304	OKLA. PRESS SERVI..	884	1	147	18,403
	Janiyah	465.02.990	TURNING TECHNOL..	151	1	130	18,304
	Marianna	672.96.724	NAPA AUTO PARTS	132	1	44	4,953
	Marina	668/94/367	POCKET NURSE ENT..	82	1	261	14,476
	Mikayla	557-92-255	OFFICE DEPOT #1079	998	1	2	1,392
	Rayan	116!71!677	REXEL2442	568	1	191	4,032
	Rihanna	582@72@878	ATW OF STILLWATE..	198	1	240	82,770
	Saniya	318#04#976	TACONY / POWR FLI..	456	1	1,984	18,606
			TEN ONE DESIGN LLC	456	1	92	9,303
	Sidney	364-52-316	CHIPOTLE 1161	328	1	2,378	9,592
	Ty	426-17-148	UPS 0906927939	205	1	16	11,151
	Valentin	332-34-208	AMERICAN AI 00172..	267	1	410	1,788
	Zaria	181-74-836	INTEGRATED DNA T..	733	1	22	12,642
CO	Abdullah	554/30/622	INVITROGEN 23575..	731	1	1,003	13,550
	Adeline	475&96&454	REDDY ICE	365	1	312	13,021

State Wise Amount Limits

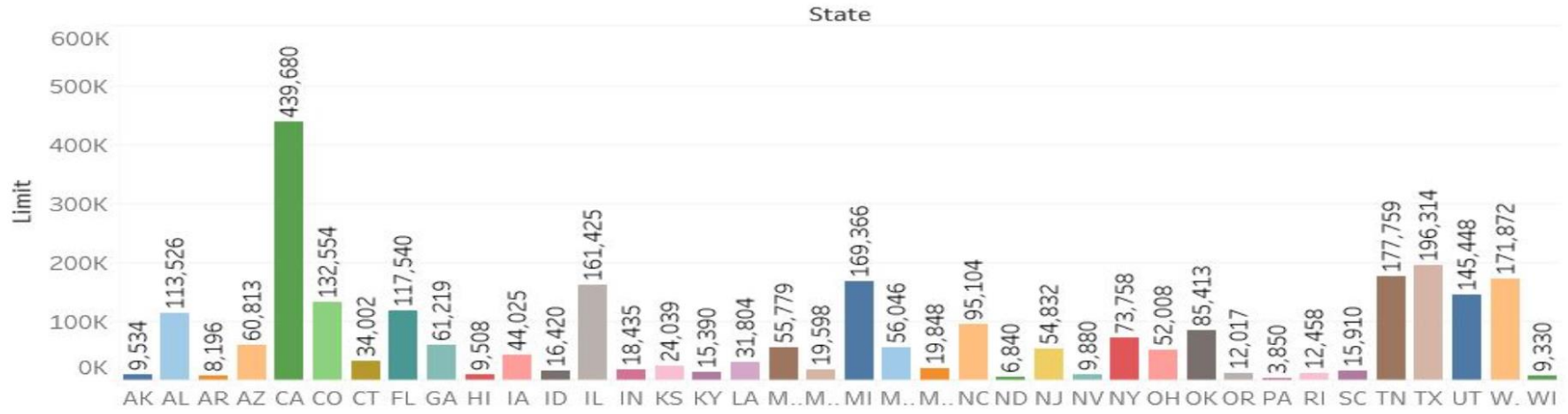

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Tableau report: Disputed amount dashboard

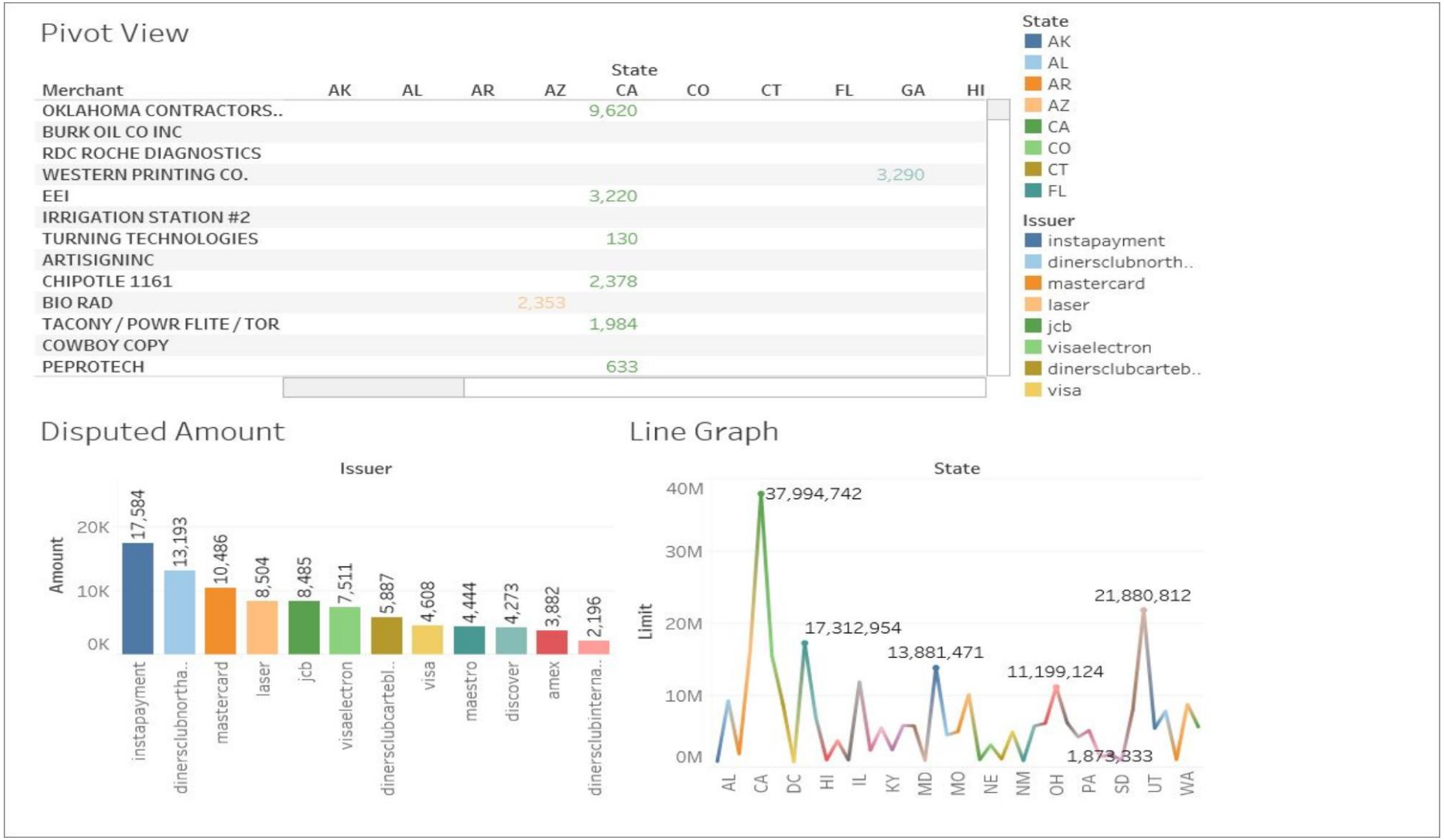

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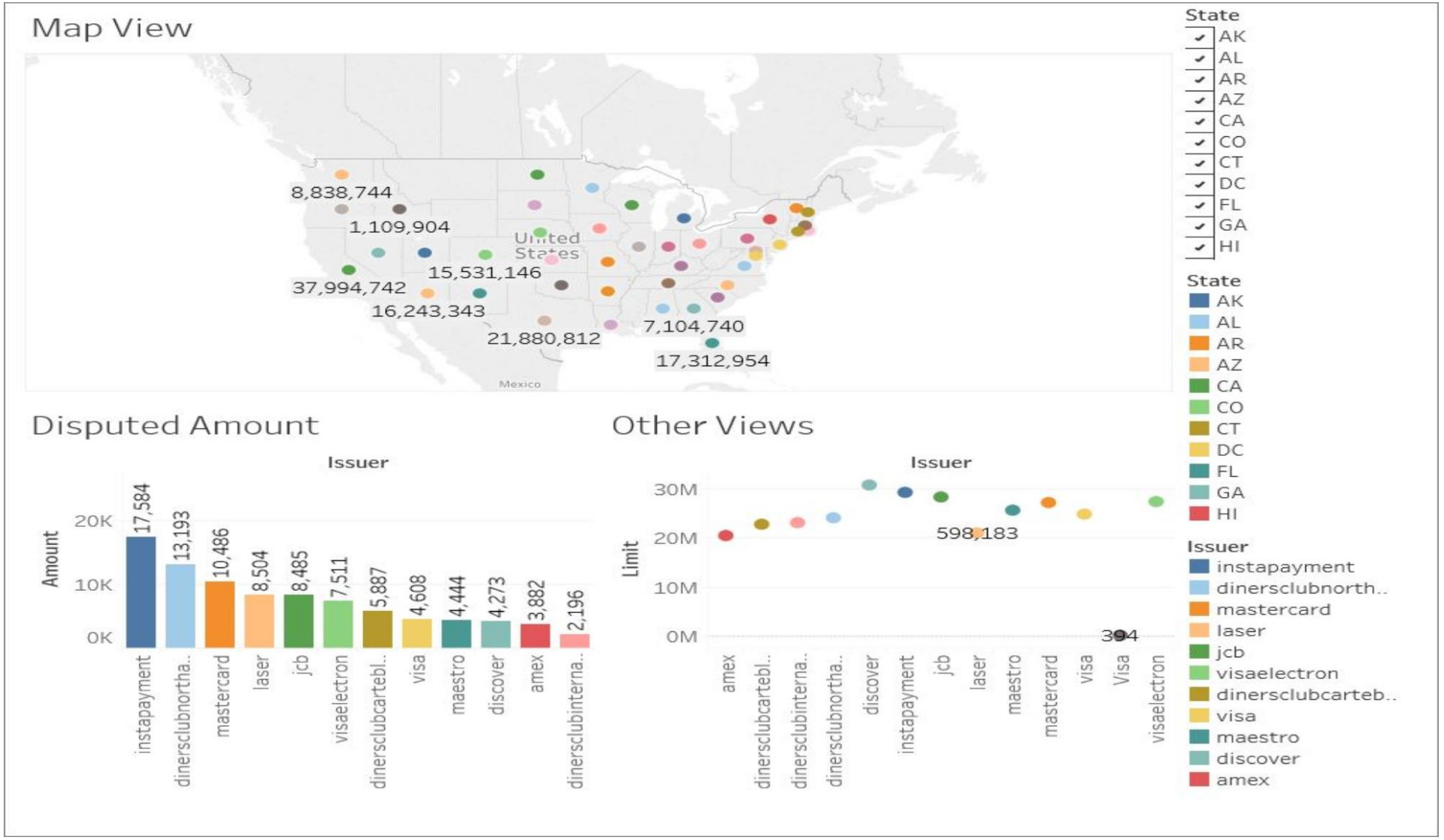
Tableau report: Summary dashboard



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The End

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