

HOW TO ACHIEVE

Proactive Data Observability for your Lakehouse



Josh Benamram Co-Founder and CEO



Ryan Yackel Chief Product Evangelist



What we'll cover today



5 Steps for Proactive Observability





Platform Demo

15 min



Q&A Discussion

5 min



#standwithukraine ²

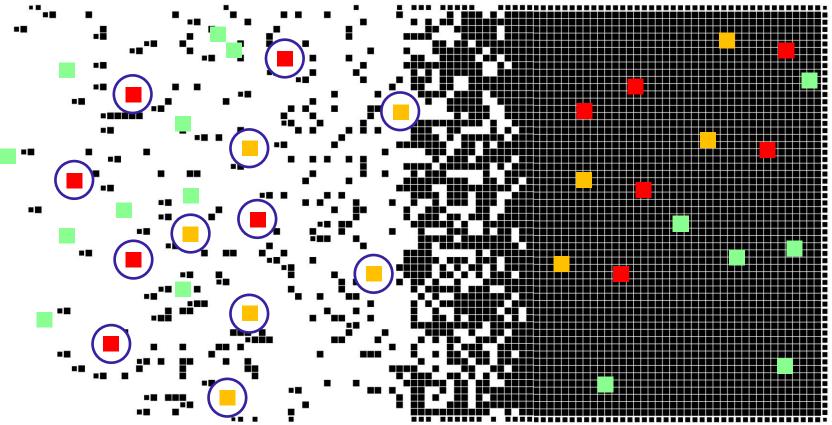
Lakehouse

-								1	ŗ,					L			1	1		1	1	1				Ţ
		+							E	F			\pm	E									E			\pm
		Ŧ			E		-	+	F				Ŧ	F	H		1	F		-		Ŧ	F		-	Ŧ
		t					1	t	t	E		\pm	t	t								t	+		1	
\vdash		+	Η	+	+	Η	+	+	╀	⊢	Η	+	╋	┝	\square		+	╞	Н	+	+		_	H		+
		T					+	t	t	F		+	t	t			t	t				t	t			T
\vdash	++	+-	H	+	H	-	+	+	╀	⊢	\dashv	+	╋	┝	\vdash		+	╀	H	+	+	╀	⊢	Н		
								1	t	E		1	t	E			1	t		1		t	E			_
\vdash	++	+-	H		+	H	+	+	┢	⊢	Η	+	┿	┝	\vdash		+	╀	Н	+	+	+	┝	Н	+	+
							1	1	t	E		#	1	Þ			1	t			1	t	E			1
			H	+	+	H	+	+	+	⊢	Η	+	+	┝	\vdash		+	╀	Н	+	+	+	┝	H		+
		T					+	T	t	E		1		t			t	t				t	t			T
		+					+	+	+	\vdash	\dashv	+	+	ł		+	+	+	H			+	\vdash		-	+
								Ŧ	t	E		1	1	L			1	t				t	Ē			
	++	+	H	+	\vdash	H	+	╉	+	⊢	+	+	╋	┝	\vdash	-	+	╀	⊢	+	+	+	⊢	H	+	+
							1	1	t	E		#		E			1	t				t	E			1
		_	H						┝	⊢		+	╋	┝	\square		+	╀	Н	+	+	+	⊢	H		4
									t	E			t	t			t	t				t	t			T
\vdash	+-+	+	H	-	-	н	+	+	╀	⊢	\dashv	+	╋	╞	\vdash	-	╇	╀	H	+	+	╀	┝	Η	+	4
							1	t	t	E	F	-+-	t	t								t	t			
++	++	+	Н	+	⊢	Η	+	+	╀	⊢	L		╀	┝	\vdash		+	╀	Н	+	+	+	⊢	Н	+	4
							1		L	L		1		L			1	t				t				
++		+	H	_	H		+	+	┢	⊢		+	╋	┝						-	+	╋				4
							1		t	E		1		t					i			t				
++	+++	+-	Н	4		4	+	+	╀	⊢	\dashv	+	╀	╞	\vdash		+	╀	H	+	+	+	┝	Н	+	4
				=			1		t	E				t			t	t				t	E			T
++	++	+	H	+	Н	H	+	+	╀	⊢	Η	+	╀	┝	+		+	╀	Н	+	+	+	⊢	Η	+	+
							1		t	E		1	t	t			1	t				t	t			
	++	+-	H	+	+-	H	+	+	┝	⊢	\dashv	+	╋	┝	\vdash		+	╀	H	+	+	╋	┝	H	+	4
							1	1	t	E		1	t	t			t	t				t	t			
	++	+			H	H	+	+	┢	⊢	4	+		⊢	H		+	+	Η	+	+	+	⊢			+
									Ē								t					t				t
\vdash		+	\vdash			н	+	+	+	⊢	\dashv	-	+	-	\vdash		+	+	H	+				\vdash		+
																	I.	I.								
+++		+				4	+	+	⊢	\vdash	\square	4	+	-	\square		+	+		4	4	+	+	4	4	4
										1			10		- 1											1
										Η.	H				H		+	+	H	-			t	=		



3

Lakehouse



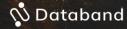
🔊 Γαταραπα



Lakehouse

Data Engineer

7



90% of our problems come from INPUT data problems. This propagates to the system and blows up further down the line.

CTO, Investment Advisory

We not only need to monitor pipelines, but we also need to get ahead of data issues, so our customers won't experience bad data.

VP of Data Engineering, Online Sports Betting

We spend a lot of time fixing operational issues due to fragmentation of our data stack. Tracking data quality, lineage, and schema changes becomes a nightmare.

Software Data Engineer, Cryptocurrency Exchange

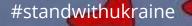


Data Engineer

Data Analyst

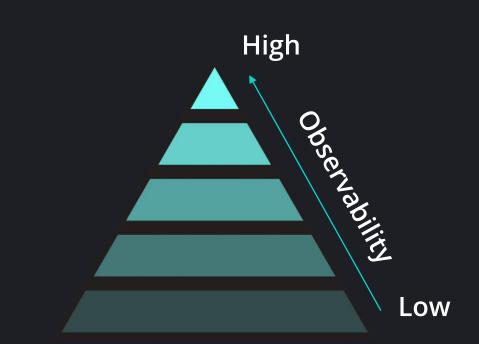
"OK, why's the data wrong..."





Data Scientist

5 Steps to Proactive Data Observability



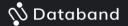


#standwithukraine

STATEMENT ASSAULT MALLA

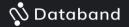
Step 1: Understand Pipeline Health



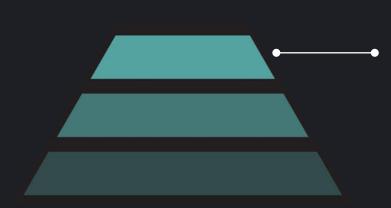


Step 2: Alert on Pipeline Latency





Step 3: Check Data Sanity

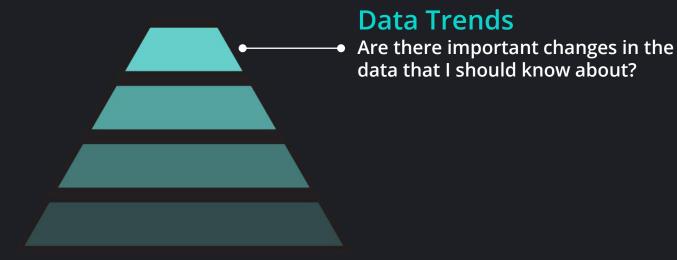


Data Sanity

Is the data coming through valid and complete? Are there errors in the data itself?



Step 4: Analyze Data Trends



🔊 Databand

Step 5: Identify Business Impacts



Data Access

 How do these issues map to business decisions?



5 Steps to Proactive Data Observability



🔊 Databand

Live Demo

Proactive Data Observability



Josh Benamram

Co-Founder and CEO

.... 💖 Dataset Details | Databand 🛛 🗙 🕂 databand-internal-sa.databand.al/app/datasets/8ca96d08-58fe-11ec-83ea-d2550ae9bd88/overview < BQ - Hourly Data ŝ Dec 09, 2021 09:44:44 AM BigQuery BigQuery monitoring S DBND Today at 01:58 bigquery://us/dbn ... _311/hourly_data 0.64.1 Overview Lineage Operations -2 Total Rows Over Time Issue Sumn - Failed o A B L service L service ah. - Total size Ô Daily Rows Written & Read a 7 25M A 7 OBND Alertmanager APP 21:07 ALERT!!! *HIGH* Alert for a Pipeline: service_311_gcp_train_ttr_model Summary: Duration > 223.30959230661392 seconds or < 124.07124370336533 Feb 22 Feb 23 seconds • Alert Trigger Time: UTC 2022-02-27 02:06:57 • Run Start Time: UTC 2022-02-27 02:02:22 • Run Name: trig_2022-02-26 02:00:00 • Triggered by: databand • Airflow Tags: python, bigquery, gcp, demo, project: Service 311 Affected Datasets: All Alerts Show less

#standwithukraine

🔊 Databand



Josh Benamram • 1st Co-Founder & CEO at Databand | Forbes 30 Under 30

Databand.ai stands with our fellow Ukrainian teammates and all the people of Ukraine.

As our Ukrainian team members navigate this challenging time, Databand is offering help in every way possible and aiming to rally support.

Our team members have contributed to various organizations, and you can help too! Links below to the Ukraine Humanitarian Fund on GoFundMe and The National Bank of Ukraine's humanitarian fund. We encourage all our connections to give what they can to help those impacted by this conflict.

#standwithukraine

https://Inkd.in/daXun-iv 📀

https://lnkd.in/dBdEXH4y 🥑



https://lnkd.in/daXun-iv

https://lnkd.in/dBdEXH4y