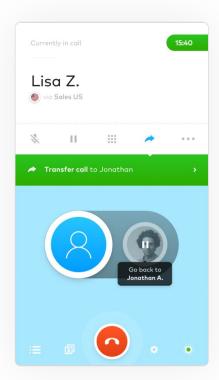
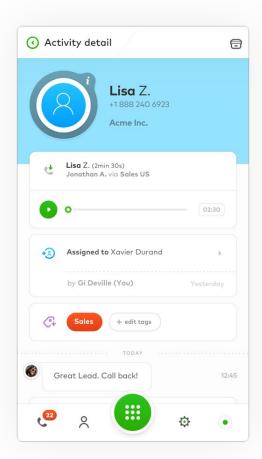
Aircall • Airflow

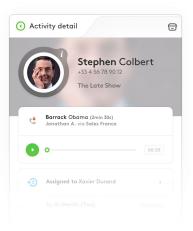
How we use Airflow to collect and study call data

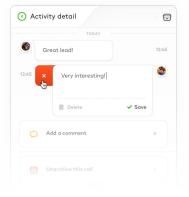


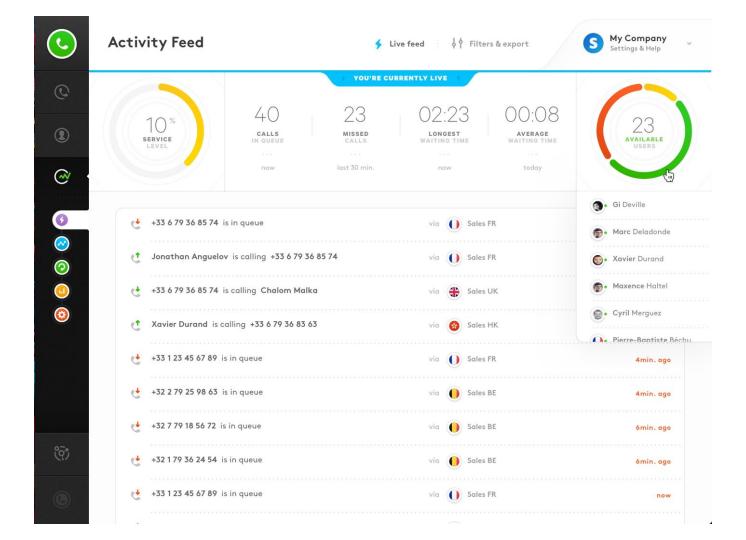
What is Aircall?















desk

zendesk

Help Scout





zeno























ZOHO

call data?

What do we do with our

Pricing regularity

Financial modeling

Integrations performance

MRR reports

Technical issues

User research

Billing issues

Client account

reporting

Custom Analytics

Call Data

Support Info

Provider research

Call quality

.

Product analysis

Product research

Pricing regularity

Financial modeling

Integrations performance

MRR reports

User research

Billing issues

Custom Analytics

Call Data

Support Info

Technical issues

Client account reporting

Provider research

Call quality

Product analysis

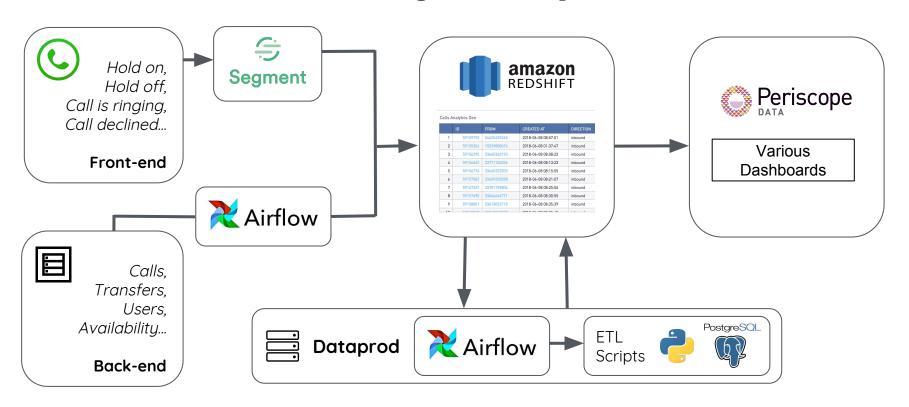
Product research

Problems

- 1. Data is **collected from diverse sources** frontend events, call providers, production backend
- 2. For each use case, the sources need to be **combined in different ways** calls analytics, pricing, companies MRR
- 3. These combinations need to be **modeled by dimensions** daily user calls, monthly MRR



Calls Analytics Pipeline

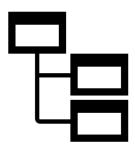








>



Replicate (extract)

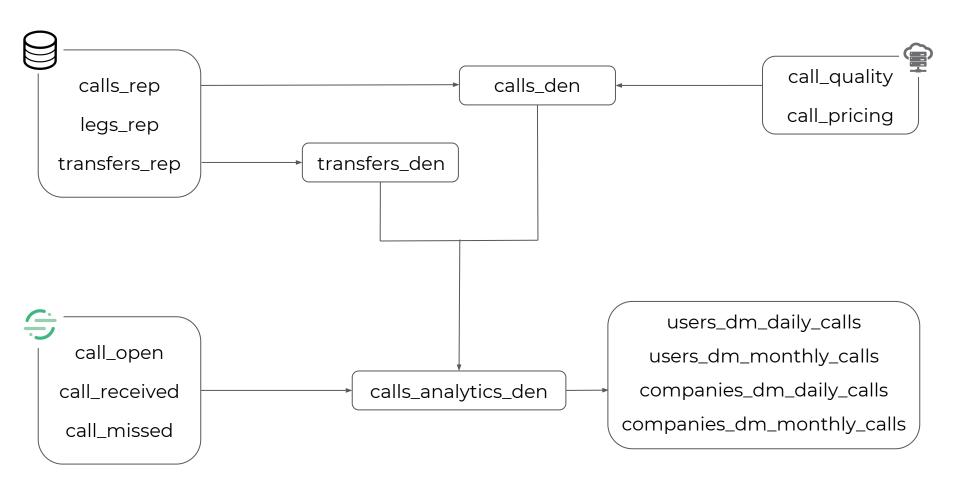
Denormalize (transform)

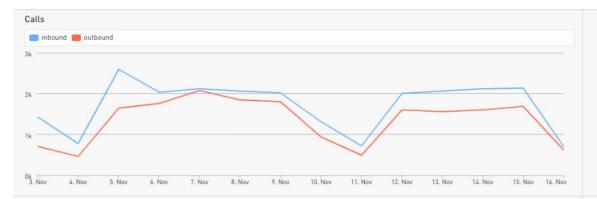
Dimension-Model (load)

calls_rep
users_rep
invoices_rep
numbers_rep
companies_rep

calls_den
users_den
companies_den
calls_analytics_den
calls_pricings_den

users_dm_daily_calls
users_dm_weekly_calls
users_dm_monthly_calls
companies_dm_weekly_calls
companies_dm_monthly_calls





19%

of calls were missed

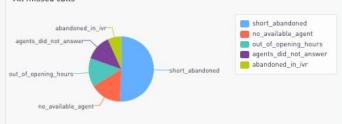
52%

of missed calls have been called back

Inbound Call Distribution over the Week

DAY OF WEEK													
SUN	159	150	151	193	224	178	138	124	96	31	20	22	14
MON	370	508	490	462	417	428	450	656	394	203	124	89	20
TUE	415	482	496	403	390	384	383	420	284	177	143	84	33
WED	430	532	486	450	427	415	366	386	289	184	144	95	41
THU	424	518	450	449	421	426	399	332	291	236	141	77	34
FRI	446	472	476	180	243	231	192	173	131	79	58	32	11
SAT	413	367	353	326	275	267	234	200	153	72	42	32	13

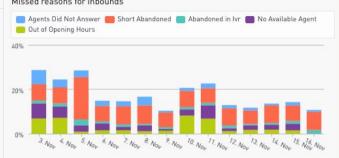
All missed calls



Outbound Distribution over the Week

DAY OF WEEK													
SUN	119	119	93	111	113	116	96	121	63	1			
MON	306	419	412	334	310	305	298	314	278	163	82	32	
TUE	349	433	356	288	252	316	310	380	355	113	89	71	(0)
WED	321	458	441	398	369	322	378	378	338	140	68	62	- 13
THU	320	446	448	356	355	305	319	402	381	124	46	25	
FRI	353	447	414	181	173	188	183	197	154	79	33	16	
SAT	212	246	239	191	158	183	173	129	108	4			

Missed reasons for inbounds



What are our current challenges?

×	Airflow	DAGs Data Profiling ▼ Browse ▼ Admin ▼ Docs	▼ About ▼					18:51 UTC 💍
	0	DAG	Schedule	Owner	Recent Tasks 6	Last Run 6	DAG Runs 6	Links
©	On [denormalize_aci_scores_to_redshift	30 5 * * *	aircall		2018-11-17 05:30 🚯	381 36	⊙◆※山路水至ヶ重♡
©.	On	denormalize_analytics_to_redshift	45 * * * *	aircall	3	2018-11-18 17:45 🚯	5108 150	⊙♠₩₼₩★≣≠≣©
©.	On	denormalize_analytics_to_redshift_daily	50 4 * * *	aircall	3	2018-11-17 04:50 🚯	101 7	⊙♠ ₩₼₽ ★≘∱≣♡
©.	On	denormalize_call_pricing_to_redshift	40 * * * *	aircall	3	2018-11-18 17:40 🚯	4599 519	⊙♥₩₼₩★≘∮≣©
©.	On	denormalize_call_pricing_to_redshift_daily	30 4 * * *	aircall	3	2018-11-17 04:30 🚯	166 43	⊙♠ ₩₼₽ ★≘∱≣♡
Ø	On	denormalize_companies_attributes_and_trials_to_redshift	45 1 * * *	aircall	6	2018-11-17 01:45	428 4	⊙♠₩₼₩₩₽₹≣₽
Œ	On	denormalize_users_calls_metrics_to_redshift	35 * * * *	aircall	2	2018-11-18 17:35 🚯	5219 34	⊙♠ ₩₼₽ ★≘∱≣©
©.	On	denormalize_users_to_redshift	30 1 * * *	aircall	3	2018-11-17 01:30 🚯	433 13	⊙♥₩₼₩₩≡₹≣₽
©.	On	dimension_model_companies_monthly_to_redshift	20 7 * * *	aircall	00000	2018-11-17 07:20 🚯	311 2	⊙♥₩₼₩★≡≠≣©
©.	On	extract_abandoned_trials_to_slack	30 6 * * 1	aircall	00000	2018-11-05 06:30 🚯	77	⊙♥₩₼₩₩≡₹≣₽
©.	On	extract_anyvan_call_data_to_mail	30 6 * * *	aircall	4	2018-11-17 06:30 🚯	108 4	⊙♥₩₼₩★≡≠≣Ø
©.	On	extract_availability_to_mail_emea	30 7 * * *	aircall	6	2018-11-17 07:30 🚯	376 25	⊙♥₩₼₩★≘≠≣♡
Œ	On	extract_availability_to_mail_na	30 9 * * *	aircall	8	2018-11-17 09:30 🚯	378 21	⊙◆※山崎水豊ヶ豊♡
Ø	On	extract_detractors_to_slack	30 6 * * *	aircall	00000	2018-11-17 06:30 🚯	479	⊙♥₩₼₩★≣≠≣©
Ø	On	extract_inactive_companies_with_plan_to_slack	07***	aircall	3	2018-11-17 07:00 🚯	301 7	⊙♥₩₼₩₩≡₹≣₽
Œ	On	extract_increased_tickets_to_slack	07***	aircall	00000	2018-11-17 07:00 🕄	50	⊙♥₩₼₽₩₽₹≣₽

Airflow	DAGs Data Profiling Browse Admin Docs About						18:51 UTC ひ
•	DAG	Schedule	Owner	Recent Tasks 1	Last Run 1	DAG Runs 6	Links
Ø On	denormalize_aci_scores_to_redshift	30 5 * * *	aircall		2018-11-17 05:30 🚯	381 36	⊙ ♦ ☀ ሐ № ★ ೬ ៛ ≣ ♡
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Ø On	denormalize_analytics_to_redshift_daily	50 4 * * *	aircall	30000	2018-11-17 04:50 🚯	101 7	⊙ ♦ * ii ii k ≥ f ≣ S
Ø On	denormalize_call_pricing_to_redshift	40 * * * *	aircall	30000	2018-11-18 17:40 🚯	4599 519	⊙ ♦ ☀ ሐ № ★ ≧ ៛ ≣ ♡
Ø On	denormalize_call_pricing_to_redshift_daily	30 4 * * *	aircall	30000	2018-11-17 04:30 🚯	166 43	⊙ ♦ ☀ ሐ № ★ ≧ ∮ ≣ ♡
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Ø On	denormalize_users_to_redshift	30 1 * * *	aircall	30000	2018-11-17 01:30 🚯	433	⊙ ♦ * ii iì Å ≧ ∮ ≣ S
Ø On	dimension_model_companies_monthly_to_redshift	20 7 * * *	aircall	00000	2018-11-17 07:20 🚯	311 2	⊙ ♦ * ii bì k ≧ f ≣ S
Ø On	extract_abandoned_trials_to_slack	30 6 * * 1	aircall	00000	2018-11-05 06:30 🚯	$\bigcirc \bigcirc \bigcirc$	⊙ ♦ * ii iì Å ≧ f ≣ S
Ø On	extract_anyvan_call_data_to_mail	30 6 * * *	aircall	4	2018-11-17 06:30 🚯	108 4	⊙ ♦ * ii bì k ≥ f ≣ S
Ø On	extract_availability_to_mail_emea	30 7 * * *	aircall	00000	2018-11-17 07:30 🚯	376 25	⊙ ♦ * ii bì k ≥ f ≣ S
Ø On	extract_availability_to_mail_na	30 9 * * *	aircall	00000	2018-11-17 09:30 🚯	378 21	⊙ ♥ * 小 № ★ ≥ ≠ ≣ ♡
Ø On	extract_detractors_to_slack	30 6 * * *	aircall	00000	2018-11-17 06:30 🚯	479	⊙ ♦ * ii bì k ≥ f ≣ S
Ø On	extract_inactive_companies_with_plan_to_slack	07***	aircall	30000	2018-11-17 07:00 🚯	301 7	⊙ ♦ * ii № * = <i>f</i> = S
Ø On	extract_increased_tickets_to_slack	07***	aircall	00000	2018-11-17 07:00 🚯	50	
Ø On	extract_integrations_deleted_to_slack	07***	aircall	00000	2018-11-17 07:00 🚯	62	⊙ ♦ ☀ ሐ № ★ ≧ ∮ ≣ ♡
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Ø On	extract_mrr_to_slack_business_fr	0 6,16 * * *	aircall	2	2018-11-18 06:00 🚯	825 4	⊙ ♦ ☀ ሐ № ★ ≧ ∮ ≣ ♡
Ø On	extract_mrr_to_slack_nyc	0 13,22 * * *	aircall	2	2018-11-17 22:00 🚯	825	⊙ ♦ * ii iì Å ≧ ∮ ≣ S
Ø On	extract_net_mrr_churn_emea_to_slack	07***	aircall	00000	2018-11-17 07:00 🚯	258	⊙ ♦ * ii bì ★ = 4 = S

☑ On extract_weekly_mrr_update_to_slack

On permanent_discount_input_staging_to_redshift

☑ On extract_zendesk_chats_to_slack

☑ On monitoring_dag











D.	AGS				Search:			
	0	DAG	Schedule	Owner	Recent Tasks 0	Last Run 6	DAG Runs 6	Links
Ø	On	denormalize_aci_scores_to_redshift	305***	aircall	000000	2018-11-19 05:30 🐧	33) (3)	
0	On	denormalize_analytics_to_redshift	45****	aircall	000000	2018-11-20 14:45 📵	5150 (150)	⊙ ♦ • ii № * ½ 5 ≡ 5
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G.	On	denormalize_call_pricing_to_redshift	40 * * * *	aircall	000000	2018-11-20 14:40 0	664 619	⊙ • • di 🛍 🛧 🖹 f 🗏 C
©.	On	denormalize_call_pricing_to_redshift_daily	304***	aircall	000000	2018-11-19 04:30 🐧	(4) (4)	
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0	On	denormalize_users_calls_metrics_to_redshift	35****	aircall	000000	2018-11-20 14:35 0	(a) (a)	⊙ • • di 🛍 Å 🖹 f 🗏 C
Ø.	On	denormalize_users_to_redshift	301***	aircall	000000	2018-11-19 01:30 🐧	(1) (1)	
Ø.	On	dimension_model_companies_monthly_to_redshift	207***	aircall	000000	2018-11-19 07:20 🐧	30 2	⊙ • • di 🕸 🖈 🖹 ⊃
©.	On	extract_abandoned_trials_to_slack	30611	aircall	000000	2018-11-12 06:30 🐧	(m)	⊙ • • di 🕸 🛧 🖹 C
Ø.	On	extract_anyvan_call_data_to_mail	306***	aircall	000000	2018-11-19 06:30 🐧	⊚ 0	⊙ • • in ₩ A ≥ f ≡ C
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(3)	On	extract_mrr_to_slack	307***	aircall	000000	2018-11-19 07:30 🚯	(4) (b)	
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G.	on extract_availability_to_mail_na	309***	aircall	2018-11-19 09:30 €	
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Ø	on extract_new_customers_to_slack	306***	aircall	2018-11-19 06:30 €	
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O DAG Recent Tasks 8 Last Run 9 G and denomination act accords to rectalif 305*** 2018-11-19 09:00 🔞 45**** deremakos_arelytics_ts_redshift 2018-11-20 14:45 🕢 20 4 *** G oderzemskou analytica to redshift daily 2018-11-19 84:50 @ G denormation call pricing to redshift 40 meat 2018-11-20 14-40 @ 0 20.4*** 2018-11-19 84:00 🚯 0 G denomakas call pricing to redshift daily aircat 451*** 0 2018-11-19 01-45 🔞 0 0 0 G and denomialize companies attributes and trials to redshift sircal G deresmakos mn Jo redahiti 50 **** secut 0 2018-11-20 14:00 @ 0 0 G denomiskos users, calls, metrica, lo, redshift 35 **** meat 0 2018-11-20 14:05 € 0 0 G denomakos usera to redshift 30 1 *** aircat 0 2018-11-19 01:00 🔞 0 0 0 G pr dimension model companies monthly to recisive 20 7 * * * sircal 2018-11-19 07:20 🚯 0 208"1 secal **=** 0 S consect_abanckorest_trials_to_stack 2018-11-12 06:00 🔞 30 6 *** meat 2018-11-19 08:30 € 0 0 **≡** 0 G extract_anyon_cal_data_to_ma 30 7 *** aircat 2018-11-19 07:30 🚯 **=** 0 6 pr extract_availability_to_mail_emes 50 9 * * * 6 extract_avalability_to_mail_na sircal 2018-11-19 09:30 🚯 20 6 *** secal 2018-11-19 06:90 🚯 6 extract detractors to stack 6 per extract inactive companies with plan to stack 07*** nival 2018-11-19 07:00 € (6) per cofract increased Scients to sinck 07*** niveral 2018-11-19 07:00 6 07*** sircal 2018-11-19 07:00 🔞 6 pr colmot_integrations_debited_to_black G w sofrent my to stack 507*** secal 2018-11-19 07:00 🚯 0 6,16 *** nival G extract year, to about business to 2018-11-20 08:00 🚯 0 13,22 * * * sircal G extract_mv_to_stack_nyc 2018-11-19 22:00 6 07*** sircal 0 6 pr odract_net_mr_chum_enee_to_slack 2018-11-19.07.00 € 20 g * * * recoal 2018-11-19 08:90 0 0 0 6 Re colouri, new quaterners, to plack G entruct_new_train_to_shark 20 6 *** meat 2018-11-19 08:30 € 07**1 airca1 2018-11-12 07:00 6 (6) extract_outstanding_payments_to_stack G pr extract_quality_to_stack 206*** nivoxI 2018-11-19 08:30 🚯 0 0 07**1 2018-11-12 07:00 🔞 6 object support metrics eresa to stack

DAGs

6 mm replicate_account_reports_from_atrorgbox_to_redshift 6

G pr replicate_accowdch_feature_flags_to_redshift

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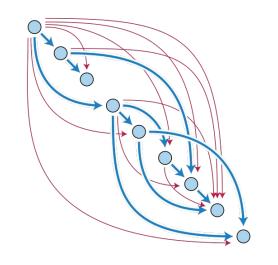
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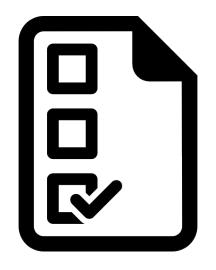
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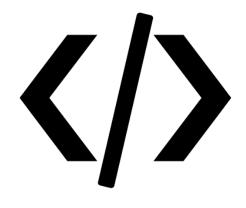
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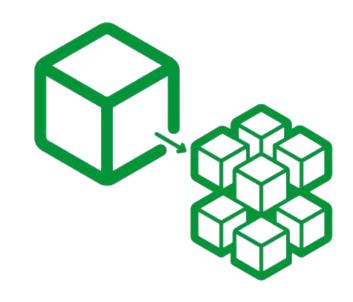


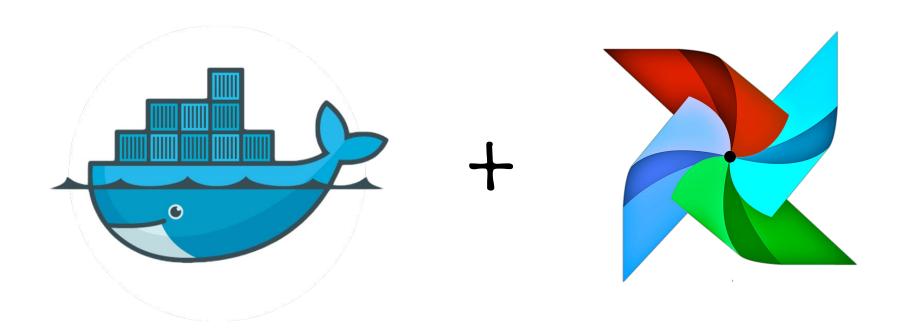




61 DAGs 167 Tasks 25,821 Lines of code

What comes next?





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