Halo CMM

Community Town Hall

February 7 2024

Democratizing Cross-Media Measurement

The industry's only advertiser-driven, global, open-source, neutral CMM framework.

Powering locally-owned, industry-wide, adaptable solutions which enable Better Marketing.

Bi-monthly Townhall…

Register here:
https://wfanet.org/events/item/3973/halo-community-townhall-meeting

Summit core themes…

1. Making it easier to get data **IN** to the system

2. Challenges with getting data **OUT** of the end-users of the system

3. Efficiency, Communications & Go-To-Market issues

Highlighting how the Halo Framework is on its way to being adopted as a credible, validated and fully capable cross-media measurement solution in the market by both <u>marketers</u> and <u>practitioners</u>.

Summit Summary

- **Now 8 code releases in**! Halo - the industry's only advertiser-driven, global, open-source, neutral CMM framework - exists to make it easier for the core CMM methodology to be rolled out.

- Both based on Halo, **Origin and ANA pilot progress across 2023 has been extraordinary**. Both platforms can ingest REAL data. Trials later this year (Origin Beta = >30 brands) will be a HUGE moment.

- In order to scale these solutions, **we will need to find a more reliable means of improving data INPUTS** (publisher integration) to the system. Various options exist to ease this issue, including EDP Aggregators, Turnkey EDP solution, VID on device SDK. All of these should be progressed.

- Equally, **challenges with data OUTPUTS** (advertiser account IDs, report automation and campaign nomenclature) **are all barriers to efficient access to the systems** and use of reports. More (intra-market) collaboration is required to resolve these challenges.

Summit Summary (continued)

- Clearly there are opportunities for **deeper collaboration between markets** (inc task forces and even code sharing, etc). Strategic issues such as these are best dealt with via the Halo SteerCo. But the **governance around this group requires a reset**.

- The benefits of Halo are not universally understood (especially outside of pilot markets). A white paper / position paper is needed to communicate to key industry, regulatory and political stakeholders about the value of a '**Privacy by Design**' solution.

- Led by ACA, a powerful coalition is being formed in Canada with representation from across the industry. The plan is to be a **'fast follow'** market and use Halo as the foundation of their CMM ambition. There are several other markets with the same intention.

Some highlights…
Pilot Progress
Halo Roadmap

2. Brought together >50 funding stakeholders to collaborate on service design

The Origin platform is Beta-ready

The Origin Platform is **ready to perform measurements with real data**

The **Origin UI has been tested** by Alpha triallists

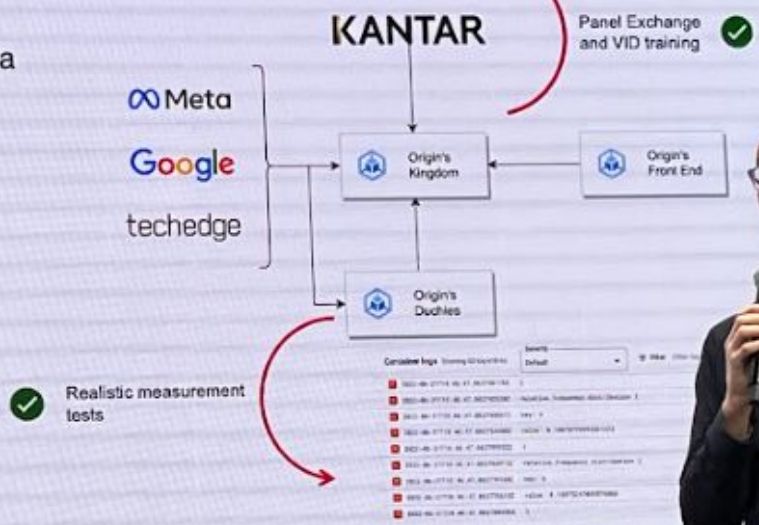**Measurements have been validated** with realistic data

Panel Exchange is Live with Google & Meta and is being improved for better coverage

Initial **VID models have been shared** with EDPs for testing

Training improved Beta-entry VID models is in progress and targeted f

Amazon EDP onbo

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Launch Roadmap with Halo Features

Launch - 2024

	Jan - Mar	Apr - June	July - Sep	Oct - Dec
Data Partners	G ꚰ TV	amazon	Provision for future data partner integration:	

Product Features

Jan - Mar	Apr - June	July - Sep	Oct - Dec
35+ Advertisers onboarded	Incrementality reports	Admin features – accessing reports	Trials UI improvements
Cross-Media Filtering	Demographic slicing	Slicing outputs	Scaled infrastructure - launch-ready platform
Report Output	Accuracy thresholds	Report scheduling	Report templates – stretch goal
Real data integration	Origin API – Schema definition and implementation		
Measured by Origin – Analysis only		Measured by Origin	
EDP integration support ∞			

Halo Features
To support the Origin product feature development

Jan - Mar		Apr - June		July - Sep		Oct - Dec	
Demographic slicing	Population services	Beta error logging	Error logging	Origin API	Measurement Consumer API	2025 scope	Planning (R&F)
Report scheduling	Data availability	Beta performance	Report consistency checks	Campaign Grouping	Interactive Event Group search		
	Scheduling		HM Shuffle integration	Beta help & support	Measurement invalidation		
Beta performance	Reporting Server performance test	EDP integration	Turnkey EDP				
	Metric Reuse						

Incremental releases will be carried out monthly, providing access to new features for trialists and enabling ongoing feedback and value realisation

Alpha → Beta →
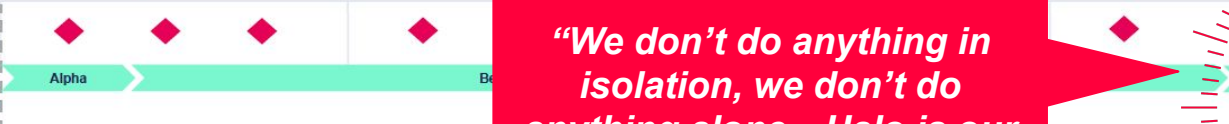
> *"We don't do anything in isolation, we don't do anything alone…Halo is our partner in this…"*
> Chloe Dennis, Origin

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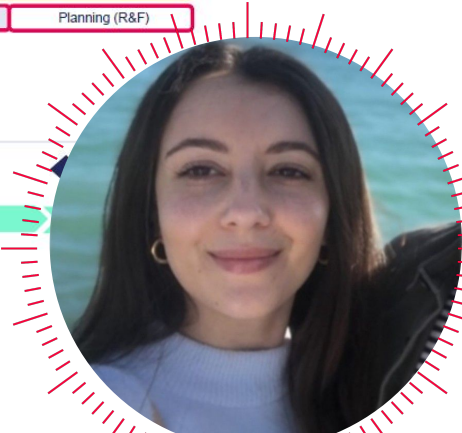
Celebrating a Major Success

- We Produced Real Campaign Cross-Media Measurement Reports Using the Halo Framework!

| Platform and Linear TV Ad Occurrences | Real Advertiser Campaigns | Audience/Content and Advertising Campaign |

Huge thanks to Comscore and our EDP partners for the hard work to make this happen, and also to the Halo team for all the underlying work!

under measurement

- Allows us to scale to more platforms without performance degradation or costs

8 Halo code releases and counting!

- Will allow end users to be able to generate outputs quicker and more efficiently

2023 Deliverables

2024 Roadmap

2023 Deliverables	2024 Roadmap
Multi cloud support | + AWS Duchy	Fit and Finish
MPC research to improve performance | ~50x	Scaling adoption
Improved Reporting API	MPC Performance improvements
Privacy Budget enhancements | 2X queries allowed	R/F Planning & Forecasting
Release Automation	
Incorporation of Population data	

Some highlights…
Easing Integrations

Currently there is a big lift required to integrate (and maintain integration) as an Event Data Provider (EDP)

Expensive build and maintenance

User / device viewership Logs → EDP Stack

- Req. fulfillment
- PBM | Event Group mngt.
- VID labeling
- Panelist Exchange

EDP Stack → Halo Market #1

EDP Stack → Halo Market #2

EDP Stack → Halo Market #n

WFA Halo
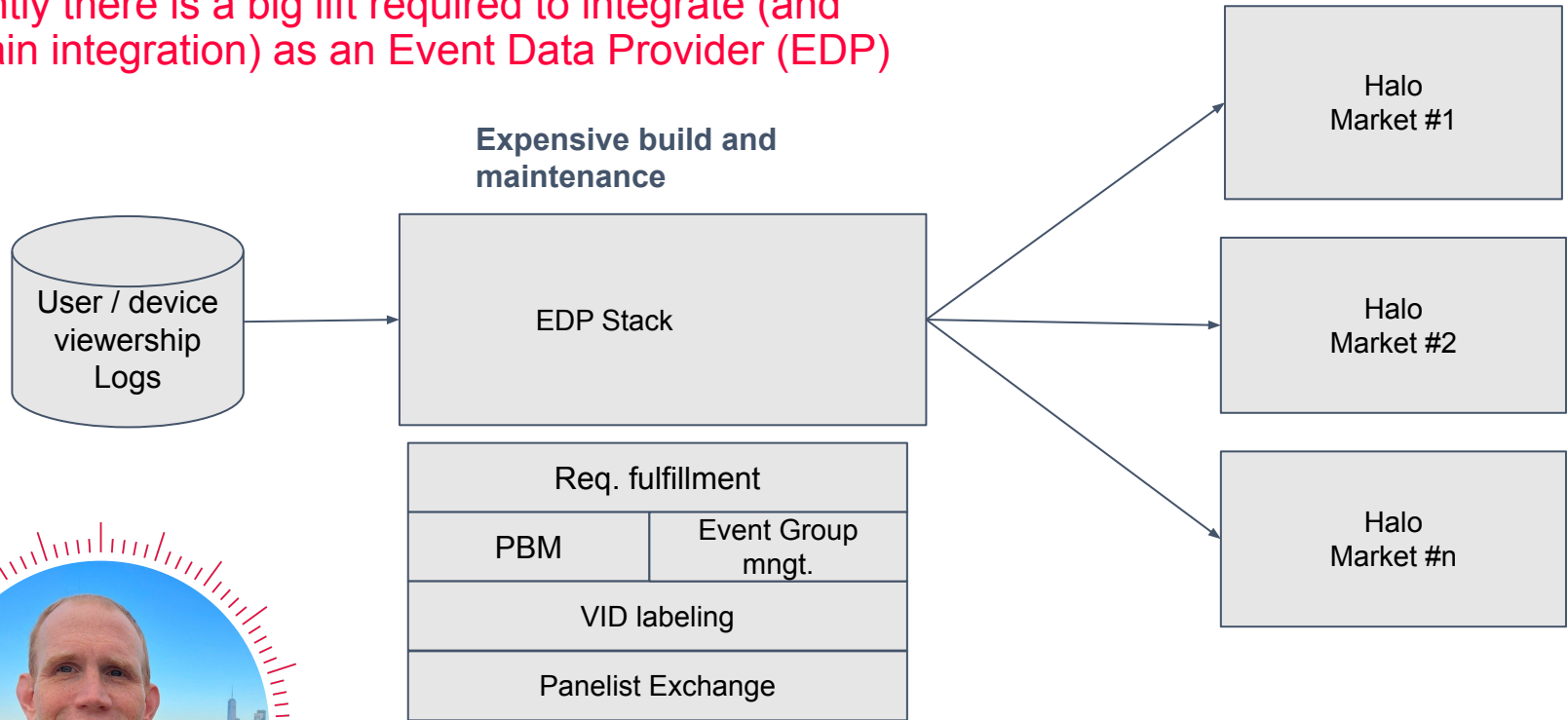
We have three solutions in focus, each with different benefits…

	Large Pubs	Pubs without logged in users	Small Publishers	DSPs	100s of Publishers
EDP Aggregator: Entities (e.g. DSPs) integrate data from multiple publishers.			✅	✅	✅
Turn-Key-EDP (OSS EDP stack): High quality, production ready, ref implementation of key components, required by EDPs for integration..	✅			✅	✅
VID-on-device: On-device SDK that can be adopted by publishers to perform VID labeling on device, enabling integration with EDPs.		✅	✅	✅	✅

Next steps

EDP Aggregator
- Approach measurement companies, DSPs, SSPs, etc with a proposal to get feedback and find their willingness to host an aggregator node.

Turn-Key-EDP (Open Source EDP)
- Seek feedback from new EDP partners on the onboarding experience.
- Explore whether Halo has capacity to build the open source solution.

VID-on-device
- Continue to scope the project (with partners IAB Tech Lab)
- Weigh the merits for when to start the mission (considering focus is on Origin Beta)

Some highlights…
End User Enablement

Challenges in CMM

*We are starting to see the problems…earlier we had coverage gaps…now getting **like to like** measurement across media is the key challenge - Group M*

*While MMM's can provide channel level insights, but good **audience/customer level insights** are hard without a good CMM - Ovative*

*Lot of questions on the quality and consistency of data. Need **trusted sources of data** that is all encompassing cross cross platform and audience segment level data - Pepsico*

Opportunities with Halo

*This is the start…we have a **much richer data set,** and allows us to identify opportunities to use these data sets to drive the future of media planning - OMD*

*We need to identify the extra ways in which we can tweak **plans with this new data sets** and drive business impact for clients - OMD*

***Planning capabilities** will be key to allocate investments more effectively and efficiently, once we have this common and better data to counting impressions - Group M*

*Making it easier to integrate, improve **awareness** and **understanding** of the solution. And alo addressing the **outcomes** question - Ovative*

Opportunities to Differentiate

*We need to **keep consumer experience & privacy expectations** front and center, this privacy centric tool will allow our agencies to improve the overall ad experience for customers - Pepsi*

*We will have **more time to focus on the real issues** of better planning, strategies, optimisations - than finding good source of data - Ovative*

*With this data our team will have the opportunity to really drill down into the data and ask the right questions and **create better products and processes** that drive better outcomes for clients - OMD*

Enabling advertiser accounts: Origin Learnings

Origin's ambition in 2024 is to **onboard 100+ advertisers** and one to two additional EDPs

The challenge

- Each advertiser owns multiple buy-side accounts for each EDP, with ownership dispersed across different teams.

- **Onboarding our first six triallists took several months**, with considerable manual effort to identify all Account IDs.

- We need a robust process for advertiser onboarding to launch in 2024, which caters for explicit advertiser consent and increased platform coverage.

Campaign Matching

The challenge

Campaign matching is complex, manual and time consuming. This poses a threat to platform adoption for advertisers and agencies who need to spend a significant amount of time to identify their campaigns

Early feedback from advertisers support an easier way to identify and match their campaigns:

"If there was a whole market's worth of campaigns, how would I find the campaigns that I'm after?
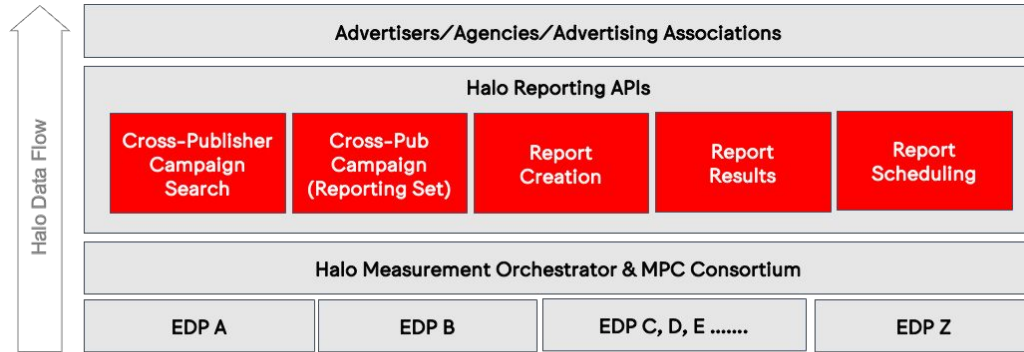– Trialist A, P&G.

"Our campaign names are not simple, so you really have to know the data you're looking at to identify the right ones."
– Trialist B, P&G

Campaigns for Advertiser X
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 1
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 2
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 3
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 4
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 5
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 6
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 7
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 8
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 9
FY_2324_BrandName_Conversion Q2 2023 EMEA - Product 10

Campaign matching is critical not only for the front end but also for increased accuracy of the VID model and for any advertiser-facing API

Measurement Consumer API Roadmap

Halo Data Flow

Advertisers/Agencies/Advertising Associations

Halo Reporting APIs

| Cross-Publisher Campaign Search | Cross-Pub Campaign (Reporting Set) | Report Creation | Report Results | Report Scheduling |

Halo Measurement Orchestrator & MPC Consortium

| EDP A | EDP B | EDP C, D, E .... | EDP Z |

1. Find campaigns across-publishers
2. Tie together cross-pub campaigns into Report Sets
3. Create reports
4. Consume results
5. Schedule reports for future delivery

Requirements Scoping Research

Data Delivery Requirements

Campaign Metadata Structures

Reporting Dependencies

Planning Dependencies

Moving beyond the UI

The Origin back-end services transform UI inputs into Halo data objects, including mathematical set operations (Reporting Sets)

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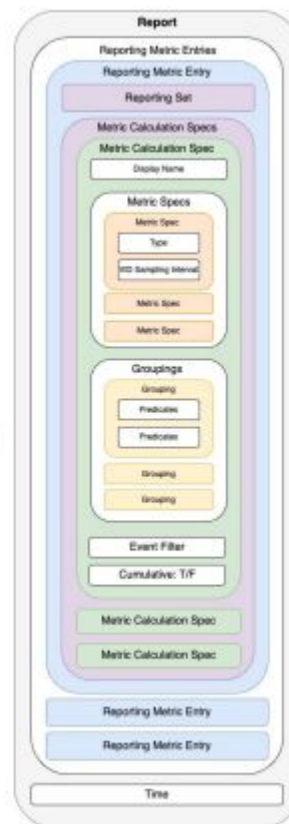## What would you like to see?

Show me reach over time.

RUN ANALYSIS   I AM FEELING LUCKY

Title
Reach Over Time

Dimensions
EventDate

Measures
Reach

Filters

Sort
EventDate ↗

Limit
Show all

Chart
LineChart

Reach Over Time

— Reach<>

2,900,000

2,800,000

2,700,000

2,600,000

2,500,000

2,400,000

2,300,000

2024-06-01 2024-06-06 2024-06-11 2024-06-16 2024-06-21 2024-06-26 2024-07-01 2024-07-06 2024-07-11 2024-07-16 2024-07-21 2024-07-26 2024-07-31 2024-08-05 2024-08-10 2024-08-15 2024-08-20 2024-08-25

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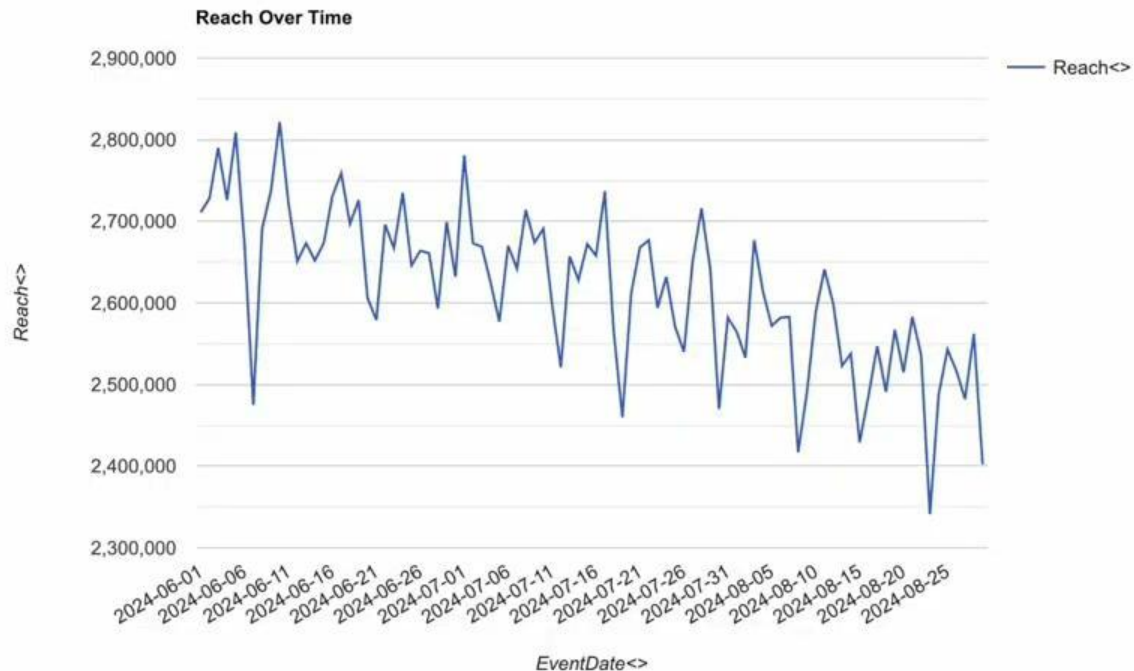*EventDate<>*

⬇ DOWNLOAD CSV

Next steps

- **End-User Collaboration**
  - There are high expectations from the end users from Halo based instances, by developing more capabilities to evaluate, optimise and plan based on this high quality cross media data. We will be working closely with the practitioner ecosystem to research, identify and build relevant infrastructure

- **Simplify End-User Onboarding**
  - We have identified key challenges for end-user onboarding including (1) Product Awareness/Education (2) Account ID Identification Automation (3) Cross-Platform Campaign Matching - which will be key areas of focus for the Halo team

- **Improved Query & Analysis Capabilities**
  - There is a clear need to enable integration with different end-user systems. We will focus on developing a 'Measurement Consumer API' framework that will enable scaled integration with existing planning systems as well as robust UI and potential visualization solutions for those who want direct access

Some highlights…

Appetite from other markets

New Advisory Groups

CROSS MEDIA MEASUREMENT

Stakeholders ACA secured:

PUBLISHERS: Google, Facebook, amazon, TikTok

BROADCASTERS: Bell Media, CBC, corus., QUEBECOR, Rogers Sports&Media

AGENCIES AND ASSOCIATIONS: A2C, cmdc., think tv

Advisory Groups

HITAG

[Halo Industry Technical Advisory Group]

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VP Eng & Applied Cryptography, Magnite

Andrew Covato
Founder @ Growth By Science

Brad Smallwood
Founder @ Anonym

Daniel Slotwiner
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Vice President - Measurement & Enabling Solutions, Ovative

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