

What's New in the Google Ads API

Google Ads API Migration Workshops - 2021



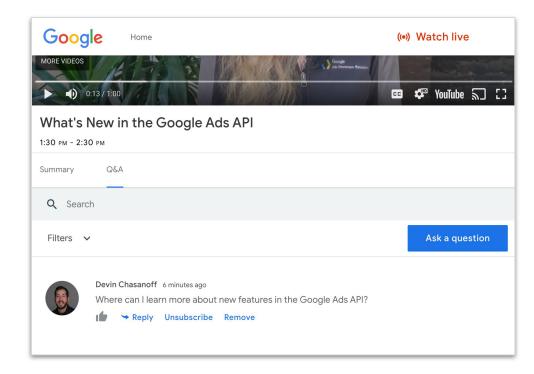
Laura Chevalier, Developer Relations Engineer

Presenter



We're here to help!

- Q&A forum located below the video
- Our team is standing by to help answer your questions
- Submit questions at anytime
- Upvote interesting questions



Agenda

- Overarching changes
- Paradigm Changes
 - Versioning
 - gRPC and REST
 - Reporting
 - Unified Data Model
 - Strict Typing
 - Restructured Requests



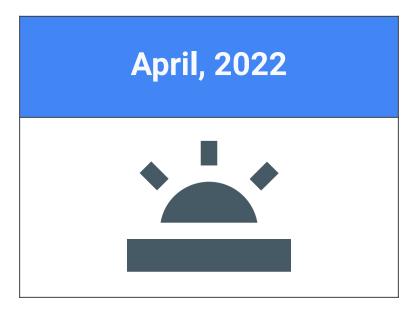
Agenda (continued)

- New features and innovations
 - Optimization Score & Recommendations
 - Additional Ad and Campaign Types
 - Billing & Invoices
 - Change History
 - Account Management
 - Keyword Planning
 - Assets
 - Bidding Strategies
- Next Steps & Resources



Overarching Changes

AdWords API Sunset



More Frequent Releases

20	020		2021		:	2022	
JAN F	EB MAR	JAN	FEB	MAR	JAN	FEB	MAR
							v10
APR M	JUNE	APR	MAY	JUNE	APR	MAY	JUNE
		v7		v8			
JULY A	UG SEP	JULY	AUG	SEP	JULY	AUG	SEP
v4*	/5*				v11		
OCT	OV DEC	ОСТ	NOV	DEC	ОСТ	NOV	DEC
,	v6	v9				v12	
*Beta							Google

Improved Usability

- Clear error messages
- More documentation and tools
- Unified reporting and mutating interface
- Flexible reporting
- Standardized API design



Paradigm Changes

Versioning

Versioning

Version	Planned Release	Projected launch*	Projected sunset*	
	Type*			
v7	Major	April 28, 2021 (launched)	January/February 2022	
v8	Major	June 9, 2021 (launched)	March/April 2022	
v8_1	Minor	August 2021	March/April 2022	
v9	Major	October 2021	June/July 2022	
v10	Major	February/March 2022	October/November 2022	
v10_1	Minor	April/May 2022	October/November 2022	
v11	Major	June/July 2022	March/April 2023	
v11_1	Minor	August/September 2022	March/April 2023	
v12	Major	October/November 2022	June/July 2023	

gRPC and REST

AdWords API



Google Ads API





Transport Comparison



- Smaller payloads
- Data type correctness enforced at both ends
- Ready "out of the box" when using client libraries



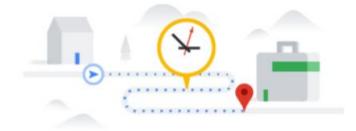
- Larger payloads
- No data type enforcement when used without a client library
- Easy to use ad-hoc (for example, via command-line)

Reporting

Intro to Reporting & GAQL

- Introduction to the Google Ads API
- AdWords API vs. Google Ads API
- GoogleAdsService & Search Request Types
- Syntax & Your First API Call
- Constructing Query Strings
- Q&A (URL Above)





Google

Reporting

- GoogleAdsService.SearchStream
- GoogleAdsService.Search
- Flexible querying

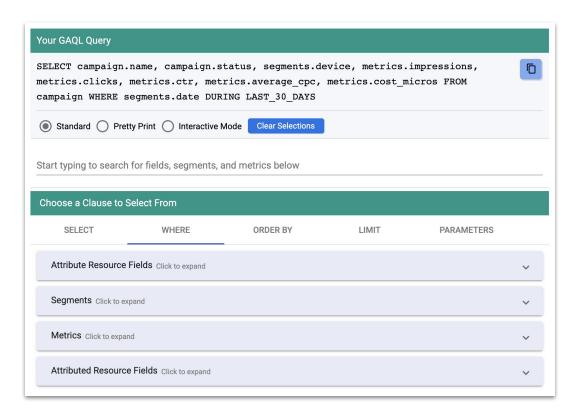


Reporting - Multi-attribution Only

```
ga_service = client.get_service("GoogleAdsService")
                                                                 Python
auerv = """
     SELECT
           campaign.id,
           ad_group.id,
           ad_group_criterion.criterion_id,
           ad_group_criterion.keyword.text,
           ad_group_criterion.keyword.match_type,
           metrics.impressions,
           metrics.clicks
     FROM keyword_view WHERE segments.date DURING LAST_7_DAYS
     AND ad_group.status = ENABLED
     AND ad_group_criterion.status IN (ENABLED, PAUSED)
     ORDER BY metrics.impressions DESC
     LIMIT 50"""
response = ga_service.search_stream(customer_id=customer_id, query=query)
```

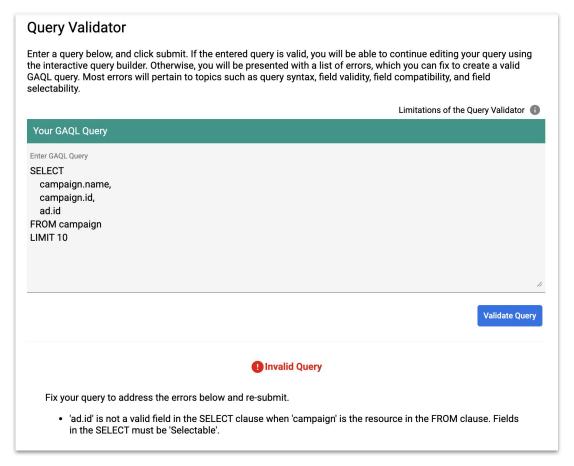
Interactive Query Builder

- Explore query syntax
- Interactively construct queries
- Copy and paste into your client source code
- Available in Google Ads API developer documentation



Interactive Query Validator

- Validate GAQL queries
- Edit validated queries directly with Interactive Query Builder tool



Unified Data Model

Unified Data Model

Fetch objects using SearchStream.

Google Ads API

GAQL query GoogleAdsRow(s)

2 Modify object(s).

Note: row is a GoogleAdsRow object.
campaign = row.campaign
campaign.network_settings.target_search_network = False

Send mutate request to Google Ads API.



MutateCampaignsRequest

MutateCampaignsResponse

Fetch Campaigns with SearchStream

```
ga_service = client.get_service("GoogleAdsService")
query =
     SELECT
           campaign.id,
           campaign.resource_name,
           campaign.name
     FROM campaign
     ORDER BY campaign.id
     LIMIT 50"""
response = ga_service.search_stream(customer_id=customer_id, query=query)
for batch in response:
     # Note: row is a GoogleAdsRow object.
     for row in batch.results:
           campaign = row.campaign
```

Iterate through SearchStream results

```
response = qa_service.search_stream(customer_id=customer_id, query=query)
for batch in response:
     # Note: row is a GoogleAdsRow object.
     for row in batch.results:
          campaign = row.campaign
           campaign_service = client.get_service("CampaignService")
           campaign_operation = client.get_type("CampaignOperation")
           campaign.network_settings.target_search_network = False
           campaign_operation.update_mask = protobuf_helpers.field_mask(
                None, campaign._pb
           response = campaign_service.mutate_campaigns(
                customer_id=customer_id, operations=[campaign_operation]
```

Update Campaign and Send Mutate Request

```
response = qa_service.search_stream(customer_id=customer_id, query=query)
for batch in response:
     # Note: row is a GoogleAdsRow object.
     for row in batch results:
           campaign = row.campaign
           campaign_service = client.get_service("CampaignService")
           campaign_operation = client.get_type("CampaignOperation")
           campaign.network_settings.target_search_network = False
          campaign_operation.update_mask = protobuf_helpers.field_mask(
                None, campaign._pb
           response = campaign_service.mutate_campaigns(
                customer_id=customer_id, operations=[campaign_operation]
```

GoogleAdsService.Mutate

```
response = qa_service.search_stream(customer_id=customer_id, query=query)
for batch in response:
     # Note: row is a GoogleAdsRow object.
     for row in batch results:
           campaign = row.campaign
           campaign_service = client.get_service("CampaignService")
           campaign_operation = client.get_type("CampaignOperation")
           campaign.network_settings.target_search_network = False
           campaign_operation.update_mask = protobuf_helpers.field_mask(
                None, campaign._pb
          response = ga_service.mutate(
                customer_id=customer_id, mutate_operations=[campaign_operation]
```

Strict Typing

Strict Typing

AdWords API

```
class KeywordMatchType
{
    const EXACT = 'EXACT';
    const PHRASE = 'PHRASE';
    const BROAD = 'BROAD';
}
```

Google Ads API

Strict Typing (continued)

AdWords API

```
class KeywordMatchType
{
   const EXACT = 'EXACT';
   const PHRASE = 'PHRASE';
   const BROAD = 'BROAD';
}
```

Google Ads API

Login Customer ID

- The Google Ads API allows you to specify a login_customer_id
- Enables access to any child account of account specified by the login_customer_id

```
api.googleads.developerToken: **********

api.googleads.clientId: *************

api.googleads.clientSecret: ***********

api.googleads.refreshToken: ***********

api.googleads.loginCustomerId: 123-456-7890
```

validate_only and partial_failure fields moved from header to request body

```
client = adwords.AdWordsClient.LoadFromStorage()
client.validate_only = True
client.partial_failure = True
ad_group_ad_service = client.GetService("AdGroupAdService", version="v201809")
# ...
```

Google Ads API

```
request = client.get_type("MutateAdGroupAdsRequest")
request.customer_id = customer_id
request.operations.append(ad_group_ad_operation)
request.partial_failure = False
request.validate_only = True
response = ad_group_ad_service.mutate_ad_group_ads(request=request)
```

validate_only and partial_failure fields moved from header to request body

```
AdWords API

client = adwords.AdWordsClient.LoadFromStorage()
    client.validate_only = True
    client.partial_failure = True
    ad_group_ad_service = client.GetService("AdGroupAdService", version="v201809")
# ...
```

request = client.get_type("MutateAdGroupAdsRequest") request.customer_id = customer_id request.operations.append(ad_group_ad_operation) request.partial_failure = False request.validate_only = True response = ad_group_ad_service.mutate_ad_group_ads(request=request)

validate_only and partial_failure fields moved from header to request body

```
AdWords API

client = adwords.AdWordsClient.LoadFromStorage()
client.validate_only = True
client.partial_failure = True
ad_group_ad_service = client.GetService("AdGroupAdService", version="v201809")
# ...
```

Google Ads API

```
request = client.get_type("MutateAdGroupAdsRequest")
request.customer_id = customer_id
request.operations.append(ad_group_ad_operation)
request.partial_failure = False
request.validate_only = True
response = ad_group_ad_service.mutate_ad_group_ads(request=request)
```

New and Improved Features

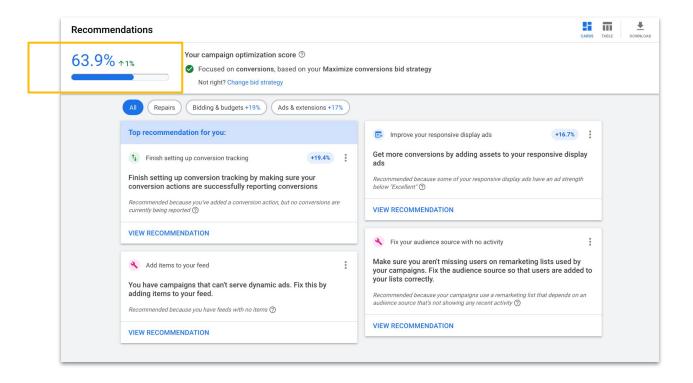


Optimization Score & Recommendations

Optimization Score



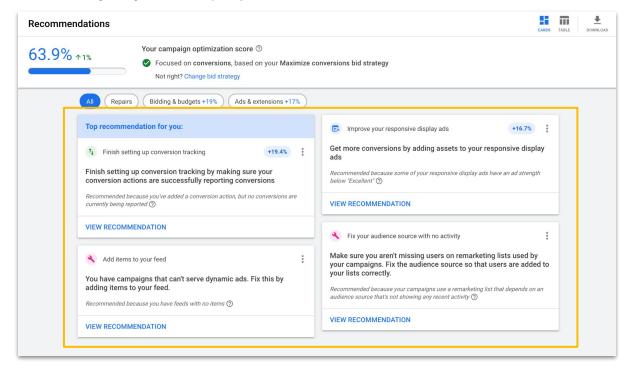
Estimates how well your Google Ads account is set to perform. Available at customer and campaign levels.



Recommendations



Suggest new and relevant features, plus improvements to bids, keywords and ads, to increase overall performance and efficiency of your campaigns.



Retrieving Recommendations

```
ga_service = client.get_service("GoogleAdsService")
query =
                                                                                          Python
     SELECT
           recommendation.resource_name,
           recommendation.type,
           recommendation.campaign
     FROM recommendation
     LIMIT 10"""
search_request = client.get_type("SearchGoogleAdsStreamRequest")
search_request.customer_id = customer_id
search_request.query = query
response = ga_service.search_stream(request=search_request)
```

Retrieving Keyword Recommendations

```
ga_service = client.get_service("GoogleAdsService")
query =
                                                                                          Python
     SELECT
           recommendation.resource_name,
           recommendation.keyword_recommendation,
           recommendation.campaign
     FROM recommendation
     WHERE recommendation.type = KEYWORD
     LIMIT 10"""
search_request = client.get_type("SearchGoogleAdsStreamRequest")
search_request.customer_id = customer_id
search_request.query = query
response = ga_service.search_stream(request=search_request)
```

Applying Recommendations

```
recommendation_service = client.get_service("RecommendationService")
apply_recommendation_operation = client.get_type(
    "ApplyRecommendationOperation"
)

# Use the Recommendation resource_name retrieved from our search query.
apply_recommendation_operation.resource_name = recommendation_resource_name
recommendation_response = recommendation_service.apply_recommendation(
    customer_id=customer_id, operations=[apply_recommendation_operation]
)
```

Additional Ad and Campaign Types

Hotel Ads NEW



Google Ads API

Manages

Accounts
Campaigns
Ad groups
Ads
Hotel groups

Bid multipliers

Google Hotel Ads Center &

Google Travel Partner API

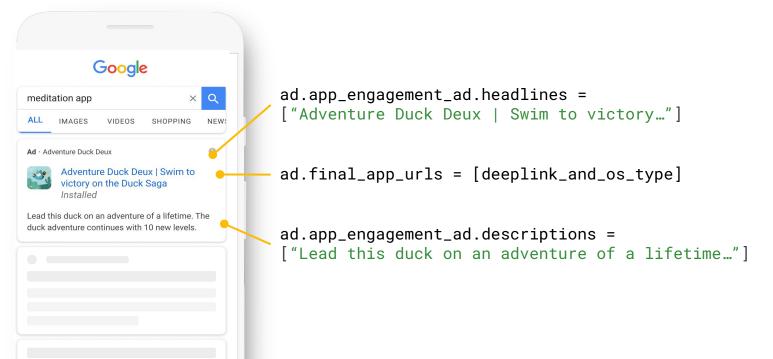
Manages

Hotel feeds Hotel prices

App Engagement Ads



Write text encouraging a specific action in the app, like checking in, making a purchase, or booking a flight.



Shopping Comparison Listing Ads

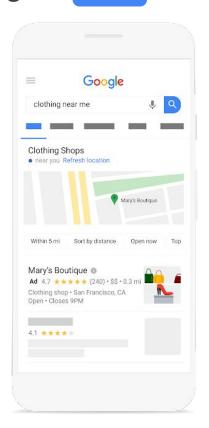
Advertise a group of products from your Comparison Shopping Service (CSS) website with Comparison

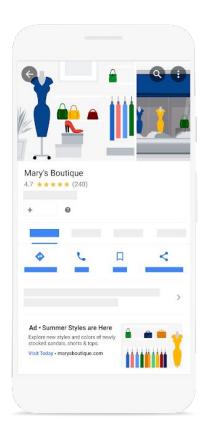
NEW

Listing ads.









```
# Use locations from Google My Business account.
                                                                                           Python
campaign.local_campaign_setting.location_source_type =
     client.enums.LocationSourceTypeEnum.GOOGLE_MY_BUSINESS
# Maximize conversion value is the only bidding strategy supported
# for Local campaigns.
campaign.maximize_conversion_value.target_roas = 3.5
optimization_goal_type_enum =
     client.enums.OptimizationGoalTypeEnum
# Optimization goal setting is mandatory for Local campaigns.
campaign.optimization_goal_setting.optimization_goal_types
     .extend([
           optimization_goal_type_enum.CALL_CLICKS,
           optimization_goal_type_enum.DRIVING_DIRECTIONS,
```

```
# Use locations from Google My Business account.
                                                                                           Python
campaign.local_campaign_setting.location_source_type =
     client.enums.LocationSourceTvpeEnum.GOOGLE MY BUSINESS
# Maximize conversion value is the only bidding strategy supported
# for Local campaigns.
campaign.maximize_conversion_value.target_roas = 3.5
optimization_goal_type_enum =
     client.enums.OptimizationGoalTypeEnum
# Optimization goal setting is mandatory for Local campaigns.
campaign.optimization_goal_setting.optimization_goal_types
     .extend([
           optimization_goal_type_enum.CALL_CLICKS,
           optimization_goal_type_enum.DRIVING_DIRECTIONS,
```

```
# Use locations from Google My Business account.
                                                                                            Python
campaign.local_campaign_setting.location_source_type =
     client.enums.LocationSourceTvpeEnum.GOOGLE MY BUSINESS
# Maximize conversion value is the only bidding strategy supported
# for Local campaigns.
campaign.maximize_conversion_value.target_roas = 3.5
optimization_goal_type_enum =
     client.enums.OptimizationGoalTypeEnum
# Optimization goal setting is mandatory for Local campaigns.
campaign.optimization_goal_setting.optimization_goal_types
     .extend([
           optimization_goal_type_enum.CALL_CLICKS,
           optimization_goal_type_enum.DRIVING_DIRECTIONS,
     ])
```



An easy, efficient, cross-channel campaign type best for small businesses, automatically optimized based on the details of your business and your goals.

Comprehensive Insurance | Protect Yourself on a Budget | Get Your Free Quote Today

Ad www.example.com/insurance

Get affordable & trustworthy insurance. 10% discount on all online quotes. Easily compare insurance plans side-by-side in just a few seconds.

```
ad.headlines = ["Comprehensive Insurance | Protect Yourself..."]
```

smart_campaign_setting.final_url = "www.example.com/insurance"

ad.descriptions = ["Get affordable & trustworthy insurance..."]

 ${\tt KeywordThemeConstantService}$

 ${\tt SmartCampaignSuggestService}$

KeywordThemeConstantService

 Generates a set of keyword themes using a word or phrase, region code, and language code.

 ${\tt SmartCampaignSuggestService}$

KeywordThemeConstantService

 Generates a set of keyword themes using a word or phrase, region code, and language code.

SmartCampaignSuggestService

 Uses those keyword themes along with information about the business being advertised to suggest daily budget amounts.

Billing & Invoices

• No allowlisting required

- No allowlisting required
- Transparency
 - More granular error messaging

BudgetOrderError	
GENERIC_BILLING_ERROR	
Summary	An attempt to mutate BudgetOrder failed because of generic billing errors.
Common causes	Trigger: NO_BILLING_CUSTOMER_ACCESS The OAuth2 access token sent in the request is for a user who does not have access to the billing customer account.
Recommended handling tips	N/A
Prevention tips	Trigger: NO_BILLING_CUSTOMER_ACCESS Make sure you either generate the access token for the correct account, or that accounts are linked properly in the manager account so that the credentials in your request can access the billing customer. See the Manager-Client relationships section of the Budget Order Service guide for more information.

- No allowlisting required
- Transparency
 - More granular error messaging

Enums	
UNSPECIFIED	Enum unspecified.
UNKNOWN	The received error code is not known in this version.
CANNOT_USE_EXISTING_AND_NEW_ACCOUNT	Cannot specify both an existing payments account and a new payments account when setting up billing.
CANNOT_REMOVE_STARTED_BILLING_SETUP	Cannot cancel an approved billing setup whose start time has passed.
CANNOT_CHANGE_BILLING_TO_SAME_ PAYMENTS_ACCOUNT	Cannot perform a Change of Bill-To (CBT) to the same payments account.
BILLING_SETUP_NOT_PERMITTED_FOR_ CUSTOMER_STATUS	Billing setups can only be used by customers with ENABLED or DRAFT status.
INVALID_PAYMENTS_ACCOUNT	Billing setups must either include a correctly formatted existing payments account id, or a non-empty new payments account name.
BILLING_SETUP_NOT_PERMITTED_FOR_ CUSTOMER_CATEGORY	Only billable and third-party customers can create billing setups.
INVALID_START_TIME_TYPE	Billing setup creations can only use NOW for start time type.
THIRD_PARTY_ALREADY_HAS_BILLING	Billing setups can only be created for a third-party customer if they do not already have a setup.
BILLING_SETUP_IN_PROGRESS	Billing setups cannot be created if there is already a pending billing in progress.
NO_SIGNUP_PERMISSION	Billing setups can only be created by customers who have permission to setup billings. Users can contact a representative for help setting up permissions.
CHANGE_OF_BILL_TO_IN_PROGRESS	Billing setups cannot be created if there is already a future-approved billing.



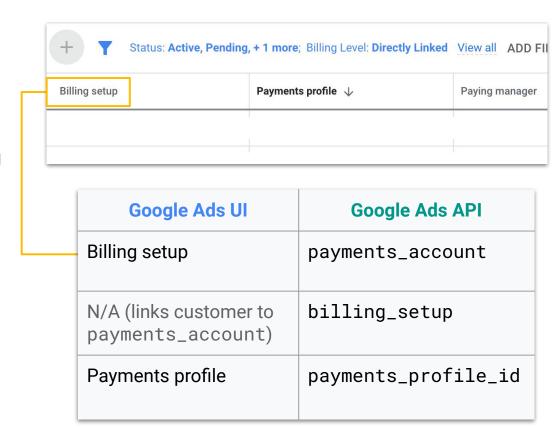


- No allowlisting required
- Transparency
 - More granular error messaging
 - Billing setup statuses

status	Description
APPROVED_HELD	The billing setup has been approved but the corresponding first budget has not. This can only occur for billing setups configured for monthly invoicing.
APPROVED	The billing setup has been approved.
CANCELLED	The billing setup was cancelled by the user prior to approval.
PENDING	The billing setup is pending approval.
UNKNOWN	Represents value unknown in this version.
UNSPECIFIED	Not specified.

- No allowlisting required
- Transparency
 - More granular error messaging
 - Billing setup statuses
- Manage billing setups directly

- No allowlisting required
- Transparency
 - More granular error messaging
 - Billing setup statuses
- Manage billing setups directly



Invoice Service NEW

A service to fetch invoices issued for a billing setup during a given month.

```
# Issues a request to list invoices.
response = client.get_service("InvoiceService").list_invoices(
    customer_id=customer_id,
    billing_setup=client.get_service("GoogleAdsService").billing_setup_path(
        customer_id, billing_setup_id
    ),
    issue_year=str(last_month.year),
    issue_month=last_month.strftime("%B").upper(),
)
```

Change History

Change Status Service

Provides a means to keep track of which resources have changed within an account over a given time period.

In the last 14 days, what campaigns were changed (and how)?

```
query = """
                                                                                          Python
     SELECT
           change_status.resource_name,
           change_status.last_change_date_time,
                                                             ADDED, CHANGED, or REMOVED
           change_status.campaign,
           change_status.resource_status
     FROM change_status
     WHERE
           change_status.last_change_date_time DURING LAST_14_DAYS
           AND change_status.resource_type = CAMPAIGN
     ORDER BY change_status.last_change_date_time
     LIMIT 10000"""
```

Change Event Service

Provides a detailed breakdown of what changed in your account.

In the last 14 days, what campaigns were changed, what was the precise change, and who made the change?

```
query =
     SELECT
           change_event.resource_name,
                                                                                          Python
           change_event.change_date_time.
           change_event.change_resource_name,
           change_event.user_email,
                                                GOOGLE_ADS_WEB_CLIENT, GOOGLE_ADS_API, etc.
           change_event.client_type, •
           change_event.old_resource,
           change_event.new_resource,
                                                              CREATE, UPDATE, REMOVE, etc.
           change_event.resource_change_operation,
           change_event.changed_fields
     FROM change_event
     WHERE change_event.change_date_time DURING LAST_14_DAYS
     AND change_event.change_resource_type = CAMPAIGN
     LIMIT 1000"""
```

Account Management

User Access Management

NEW

CustomerUserAccessInvitationService

 Manages the access invitation extended to users for a given customer.

CustomerUserAccessService

 Manages the permissions of a user on a given customer.

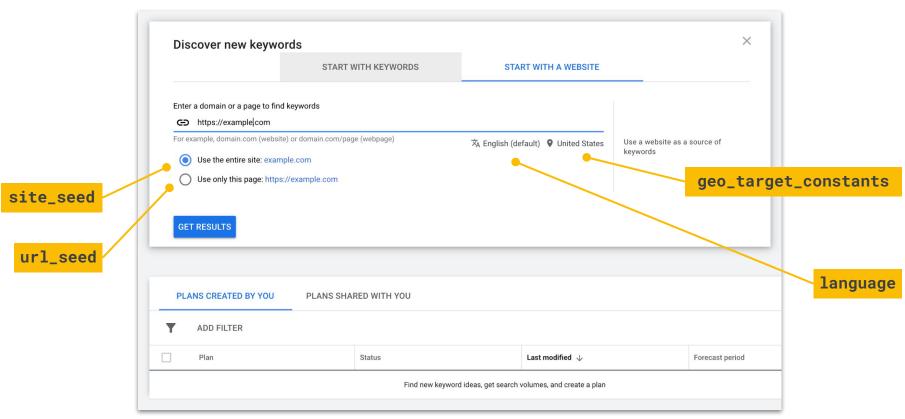
CustomerUserAccess			
resource_name	string, immutable		
user_id	string, immutable		
access_role	AccessRole enum, mutable UNSPECIFIED UNKNOWN ADMIN STANDARD READ_ONLY EMAIL_ONLY		
email_address	string, immutable		
access_creation_date_time	string, immutable		
inviter_user_email_address	string, immutable		

Keyword Planning

Keyword Planning

More consistent with the Google Ads UI

Keyword Planning (continued)

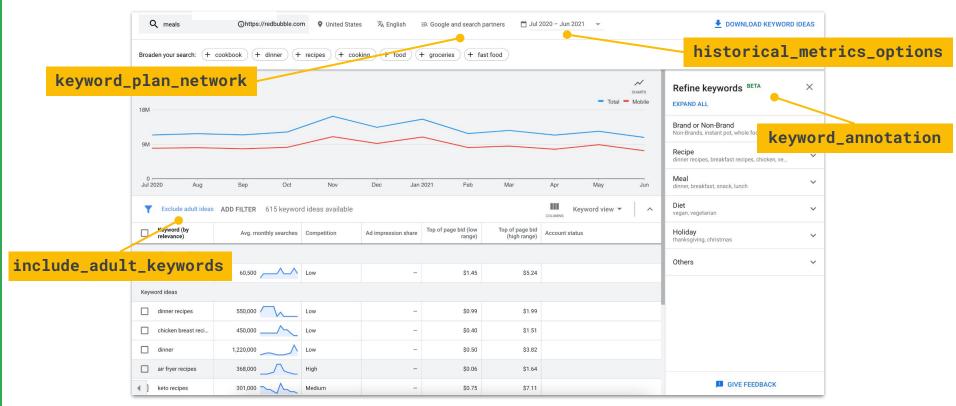


Keyword Planning (continued)

keyword_seed

X Discover new keywords START WITH KEYWORDS START WITH A WEBSITE Enter products or services closely related to your business Try not to be too specific or general. For example, "meal delivery" is better than "meals" for a food delivery meal delivery business Learn more X English (default) ♥ United State keyword_and_url_seed Enter a domain to use as a filter Using your site will filter out services, products, or https://example.com brands that you don't offer **GET RESULTS** PLANS CREATED BY YOU PLANS SHARED WITH YOU ADD FILTER Plan Status Last modified ψ Forecast period Find new keyword ideas, get search volumes, and create a plan

Keyword Planning (continued)

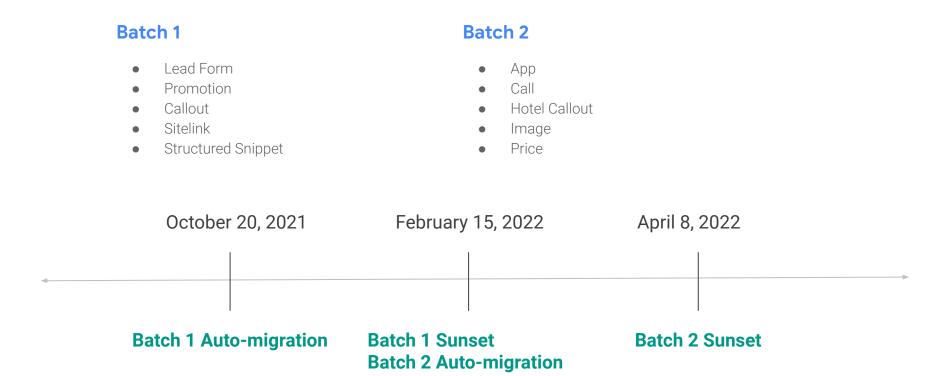


Keyword Planning (continued)

- More consistent with the Google Ads UI
- More parameters for keyword idea generation
 - include_adult_keywords
 - keyword_annotation

Assets

Migration from Feed-based to Asset-based Extensions



Asset Performance Label

performance_label	Description
BEST	Best performing assets.
GOOD	Good performing assets.
LOW	Worst performing assets.
LEARNING	The asset has started getting impressions but the stats are not statistically significant enough to get an asset performance label.
PENDING	This asset does not yet have any performance information. This may be because it is still under review.
UNKNOWN	Represents value unknown in this version.
UNSPECIFIED	Not specified.

Additional Metrics on Assets

AdWords API

No Asset reports

Google Ads API

- ad_group_asset
- campaign_asset
- customer_asset
- ad_group_ad_asset_view

Additional Metrics on Assets

AdWords API

No Asset reports

Google Ads API

- ad_group_asset
- campaign_asset
- customer_asset
- ad_group_ad_asset_view

```
SELECT

ad_group.id,

asset.id,

metrics.clicks,

metrics.impressions

FROM ad_group_asset
```

Bidding Strategies

Cross-Account Bidding Strategies



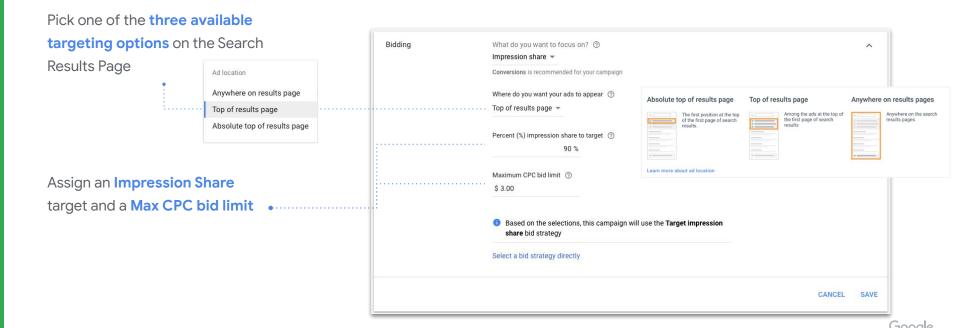
Create bidding strategies in manager accounts and attach them to campaigns in customer accounts.

```
bidding_strategy_service = client.get_service("BiddingStrategyService")
                                                                                         Python
# Creates a portfolio bidding strategy.
bidding_strategy_operation = client.get_type("BiddingStrategyOperation")
bidding_strategy = bidding_strategy_operation.create
bidding_strategy.name = f"Maximize Clicks #{uuid4()}"
bidding_strategy.target_spend = client.get_type("TargetSpend")
# If not provided, uses the manager account's default currency.
bidding_strategy.currency_code = "USD"
# Sends the operation in a mutate request.
response = bidding_strategy_service.mutate_bidding_strategies(
     customer_id=manager_customer_id, operations=[bidding_strategy_operation]
```

Target Impression Share



An automated bidding strategy that sets bids so that a certain percentage of search ads are shown in a particular location on the search results page.



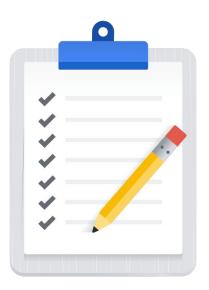
Target Impression Share (continued)

```
query =
     SELECT bidding_strategy.target_impression_share.cpc_bid_ceiling_micros,
                                                                                         Python
           bidding_strategy.target_impression_share.location,
           bidding_strategy.target_impression_share.location_fraction_micros,
          metrics.clicks,
           metrics.impressions
     FROM bidding_strategy
     WHERE segments.date BETWEEN '2021-01-01' AND '2021-02-01'"""
response = googleads_service.search_stream(
     customer_id=customer_id, query=query
```

Next Steps

Next Steps

- Visit the Release Notes
- Subscribe to the Google Ads developer blog
- Begin planning your migration
- Stick around for the rest of our workshops!



Resources

Resources

Google Ads API Developer Site

https://developers.google.com/google-ads/api

Migration Guide

https://developers.google.com/google-ads/api/docs/migration/overview

API Reference

https://developers.google.com/google-ads/api/reference/rpc/

Client Libraries & Code Examples

https://developers.google.com/google-ads/api/docs/client-libs

Release Notes

https://developers.google.com/google-ads/api/docs/release-notes

Google Ads Query Language

https://developers.google.com/google-ads/api/docs/query/overview

Google Ads API Webinars

Google Ads Developers Youtube Channel

https://www.youtube.com/c/GoogleAdsDevelopers/featured

Migrating to the Google Ads API

https://www.youtube.com/watch?v=2QaNf-JGCGU

Intro to Reporting and GAQL

https://www.youtube.com/watch?v=XvAkASBnQBo

Support

Google Ads Developer Blog

https://ads-developers.googleblog.com

Google Ads API Forum

https://groups.google.com/forum/#!forum/adwords-api

Dedicated Support

googleadsapi-support@google.com