Troubleshooting TCF v2.0 implementation

Grace periods and troubleshooting suggestions

Google will participate in the IAB Europe Transparency & Consent Framework v2.0 and comply with its Specifications and Policies. We will begin reading and passing the TC string for all ad requests starting from when the IAB fully transitions from TCF v1.1 to v2.0.

To give publishers and partners time to manage errors and misconfigurations related to the launch of IAB Europe's Transparency & Consent Framework v2.0, Google will provide partners with a report of errors we've detected and a 90-day grace period upon the availability of our integration with the IAB TCF v2.0 in which to resolve the errors.

Error report

Exchanges can request access to a detailed report of TC string errors that have been detected over the last 7 days.To request access, Exchanges integrated with DV360 can fill out this form.

The report will contain the following information about each of the detected errors:

Number of bid requests: An estimate of the number of requests affected by an associated error. (**Note**: This is sampled and does not reflect the exact number of bid requests received).
Is GDPR applicable: Indicates whether the bid request is GDPR-applicable through the reg.ext.gdpr field. If the field is not included in the bid request, the IP-based geographic location is used instead.
Consent type: Indicates the consent signal included in the bid request.
Serving mode: Indicates whether the bid request is eligible for personalized or basic ads. Note that this only indicates whether we believe the GDPR applies to this bid request, not if Display & Video 360 will bid on it.
Exemption: Indicate whether Display & Video 360 exempts the bid request during the grace period to serve personalized or basic ads, even if it does not fully meet Display & Video 360 requirements. After the 90 day grace period, the serving mode will change and Display & Video 360 requirements will apply.
TCF string parsing error: Indicates the reason causing TCF string parsing errors. Please refer to the troubleshooting section for detailed information.
TCF policy check error: Indicates the reason causing TCF policy check errors.

Exchanges and their publishers can use the error codes listed in the report to find the suggested actions to be taken in the following troubleshooting tables and resolve the errors.

Grace period

The 90-day grace period will differ slightly based upon the type of error being addressed. The following table defines the types of grace periods and when they will be applied. All of the following grace periods take place simultaneously, and are non-sequential.

The grace period will end 90 days from August 15th, 2020, regardless of the type of error it addresses.

Grace period	Overview
Grace period 0: Misconfiguration	Intended to resolve common situations in which publishers have misconfigured their Consent Management Platforms (CMPs) and failed to send a valid TC string. Google will provide publishers with 30 days in which to use the GDPR ad tech provider controls to remedy misconfigurations without impacting monetization. After 30 days, Google will serve non-personalized ads (NPA) for the remaining 60 days of the grace period. These errors always take precedence over other types of errors, even if a given request has multiple errors. Grace period 0 will be applied when: • For the first 30 days of the grace period, publishers will be able to fix misconfiguration issues without impacting monetization. • For the remaining 60 days of the grace period, non-personalized ads will be served. After the grace period ends, ad requests won't be filled.
Grace period 1: TC string issues	Intended to address significant flaws in the TC string. Google will only serve non-personalized (NPA) ads during the grace period. Grace period 1 will be applied to issues in this category when there are problems with the TC string associated with an ad request. Ad requests will continue to be filled with non-personalized ads during the grace period. After the grace period ends, ad requests won't be filled.

Grace period 2: Consent must be reobtained	Intended for publishers who integrate with the TCF v2.0 before Google has been included on the IAB global vendor list (GVL). Publishers will have obtained consent for Google from users outside of the TCF v2.0 prior to Google's integration. Now that Google has officially launched its integration, consent must be reobtained from those users using the TCF v2.0, however, publishers may choose when to do this within the grace period.

Grace period 2 will be applied when consent must be obtained from the user. If you previously obtained consent from a user over 13 months ago, you should use this grace period to reobtain the user's consent.

After the grace period ends, ad requests won't be filled. |
| Grace period 3: Global scope or out-of-band scope | Intended to address TC strings that include global scope and out-of-band scope. Google will serve ads for these ad requests in accordance with the TC string, subject to Google's policies, however, the grace period should be used to correct this issue.

During this grace period, we will serve ads for these ad requests in accordance with the TC string, subject to Google's policies. After the 90-day grace period ends, we will not serve an ad if the TC string indicates "Out-of-band" or "Global scope." |

Learn more about [personalized and non-personalized ads for Display & Video 360](#).

Troubleshooting

To help publishers fix misconfigured IAB TCF v2.0 integrations, we've assembled a table of the most common TC string error types as well as corresponding troubleshooting recommendations. You should also use the table to determine which grace period treatment (if any) applies to an error.

Use the following tables to understand the issues occurring at the ad-request level as well as the corresponding system behavior.

No grace period, ads not served

These errors always result in dropped and unfilled ad requests and they do not receive a grace period. They always take precedence over other types of errors, even if a given request has multiple errors.

Error	Description	Suggested action to take
1.1	Google, as a vendor, is not allowed under consent or legitimate interest.	Confirm whether the user intentionally rejected Google as a vendor, CMP implementation errors have occurred, or there are publisher restrictions.
1.2	No consent for Purpose 1 for EEA countries and the UK.	Confirm whether the user intentionally disallowed Purpose 1 or if this is due to CMP implementation errors. German publishers should ensure they are setting the PublisherCC and PurposeOneTreatment fields correctly if they are not asking users for consent.
1.3	Has consent for Purpose 1, but lacks legal bases for Basic Ads.	Confirm whether the user intentionally rejected legitimate interests on the other purposes or if this is due to CMP implementation errors.

Grace period 0: Misconfiguration

Grace period 0 will be applied when:

> For the first 30 days of the grace period, publishers will be able to fix misconfiguration issues without impacting monetization.
> For the remaining 60 days of the grace period, non-personalized ads will be served.

After the grace period ends, ad requests won't be filled.

Error	Description	Suggested action to take
2.1	Tag or SDK isn't receiving a TC string due to CMP status being `stub`, `loading`, or `error`.	Ask your CMP to make sure that their APIs are properly implemented based on the IAB TCF tech spec.
2.2a	The TC string is not parseable because of a decoding error. Example: Includes an incorrect number of bits	CMP should fix the TC string implementation errors.

2.2b	The TC string is not parseable because of a data error. Example: Incorrect timestamp, vendor ID is too large	CMP should fix the TC string implementation errors.

Grace period 1: TC string issues

Grace period 1 will be applied to issues in this category when there are problems with the TC string associated with an ad request. Ad requests will continue to be filled with non-personalized ads using the existing settings during the grace period. After the 90-day grace period ends, ad requests will be dropped and unfilled.

Error	Description	Suggested action to take
3.1	Invalid CMP ID.	Make sure an IAB-validated CMP is being used and its ID is correctly set in the TC strings. If a CMP was valid when a TC string was generated but was later deleted by the IAB, you need to reobtain consent using a valid CMP.
3.2	The TC string creation date was more than 13 months ago.	CMP should delete the old TC string and reobtain consent.
3.3	The TC string last update date was more than 13 months ago.	CMP should delete the old TC string and reobtain consent.
3.4	The TC string is not parseable because it isn't base64 encoded. Example: `"2"`	CMPs (or publishers) should only send base64 encoded data in `gdpr_consent=` parameters.

Grace period 2: Consent must be reobtained

Grace period 2 will be applied when consent must be obtained from the user. If you previously obtained consent from a user over 13 months ago or before Google joins the GVL, you should use this grace period to reobtain the user's consent.

After the 90-day grace period ends, ad requests will be dropped and unfilled.

Error	Description	Suggested action
4.1	The TC string generated using a version of the GVL in which Google is not yet listed.	When it becomes available, reobtain consent using a version of the GVL that includes Google.

Grace period 3: Global scope and out-of-band scope

Grace period 3 will be applied when there are issues related to global scope and out-of-band scope .

During this grace period, we will serve ads for these ad requests in accordance with the TC string, subject to Google's policies. After the 90-day grace period ends, we will not serve an ad if the TC string indicates "Out-of-band" or "Global scope."

Error	Description	Suggested action
5.1	The TC string allows Out-of-Band consent.	Instruct your CMP to remove Out-Of-Band signals from the TC strings.
5.2	Globally-scoped TC string.	Instruct your CMP to update the TC strings to be service-specific.

No grace period, Google will apply mitigation

When these issues occur, Google will mitigate the problem when necessary and proceed with normal TCF handling.

Error	Description	Suggested action
7.1	`regs.ext.gdpr` parameter is not present in the bid request or set to an invalid or indecipherable value, but a valid TC string is present.	N/A
7.2	The TC string was generated with a GVL version newer than the current version known to Google's ad serving technology.	N/A
7.3	Some purposes, features, and/or vendors are out of range (unknown).	N/A
7.4	The TC string has an older `tcf_policy_version` than the newest GVL.	CMP should delete the older TC string and reobtain consent using the newest GVL.

7.5	Invalid publisher country code, but consent to Purpose 1 is present.	CMP should fix the TC string implementation errors.
7.6	Invalid language code.	CMP should fix the TC string implementation errors.
7.7	TC string version field is neither `1` nor `2`.	CMP should send TCF v2.0 strings.