

# Quality of Service Subscription *Explainer*



zoom

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# Quality of Service Subscription is an add-on product that delivers Zoom Meeting, Webinar, and Phone QoS data to a customer's third-party endpoint

Zoom's Quality of Service Subscription (QSS) is an add-on product that offers near real-time quality of service (QoS) data for Zoom Meetings, Webinars, and Phone calls. QSS extends Zoom's product functionality by sending raw QoS data for every participant to a customer's network monitoring service at 4 to 6 times per minute. Customers can use this rich data stream to proactively identify whether disruptive network environments are affecting Zoom's services.

## The data delivered to customer endpoints via QSS is the same information already available via the Zoom Dashboard

The existing [Zoom Dashboard](#) provides network performance and usage metrics, which can help customers understand how Zoom is operating in a given network environment. QSS offers the *same* Zoom QoS data at a faster rate and allows customers to configure it into their own dashboard views to correlate Zoom data with additional systems.

The table below describes the QoS data delivered to a customer's endpoints via QSS.

	QoS Data delivered via QSS
Quality Metrics	Bitrate, Latency, Jitter, Packet Loss, Resolution, Frame Rate, CPU Usage
Usage Metrics	Device, Network, Signaling Region, Client Version, Audio (I/O), Video (I/O)
Frequency	4 to 6x per minute, per participant
Data Retention	30 days

## Zoom Dashboard data should not be compared with data delivered via QSS to a customer's third-party endpoint

QSS and the Zoom Dashboard provide two separate mechanisms for accessing Zoom QoS data that should not be compared. While the Zoom Dashboard and QSS pull from the same pool of QoS data, the data contained in each mechanism will not match up due to differences in retrieval timing and frequency of data delivery.

## QSS supports real-time event data for Meetings, Webinars, and Phone calls

QSS supplies QoS event data for all users on an account for Zoom Meetings and Webinars, as well as for Zoom Phone calls. Because Zoom does not manage the last leg of calls, QSS only provides account-level QoS event data for Zoom Phone calls and therefore cannot provide full visibility into the end-to-end advanced participant data.

## QSS data does *not* include data for external participants

QSS does not provide data for external meeting participants. However, QSS *can* provide Personally Identifiable Information (PII) for internal meeting participants, as well as the quality and usage metrics that customers will need to quickly troubleshoot issues.

## QSS is only available to Business and Enterprise customers at launch

Customers must have a Zoom Business or Enterprise account to purchase the QSS add-on plan. Each Zoom account is permitted one QSS plan, which cannot be shared, linked, or co-termed with any other account. If a Zoom master account has purchased QSS, it can receive events for its sub accounts. QSS is not available for Zoom for Government at launch.

## QSS allows customers to bring raw QoS data from Zoom Dashboard into their existing workflows

While Zoom customers have historically been able to use tools like the Zoom Dashboard or APIs to view or retrieve Zoom QoS data, QSS offers a unique webhook solution for customers that need to consume the raw Zoom QoS data and integrate it into their own network management system.

## QSS pushes real-time Zoom QoS data to a customer's webhook-receiving endpoints

QSS customers can subscribe to real-time QoS events and data that will be pushed to their application endpoints, which helps free up API bandwidth and optimize network utilization. QSS is an augmentation of Zoom's [standard webhook service](#) because it can send raw QoS data to an endpoint at a near real-time rate of 4 to 6 times per minute.

## QSS enables customers to access real-time QoS data from Zoom Dashboard without hitting API rate limits

API services are request based and use a “pull” mechanism to gather data requested by an app or user. APIs are more resource intensive than webhooks because they require repeated calls to pull data from an API endpoint.

Customers who use [Zoom APIs](#) to pull QoS data from Zoom Dashboard may encounter rate limits, meaning that they’ve reached the maximum number of API calls they can make within a given time period. QSS does not increase API rate limits, but it reduces customers’ rate-limit concerns by *pushing* raw QoS data to their endpoints instead of requiring customers to pull the data themselves.

## QSS allows customers to consume raw Zoom QoS data and troubleshoot using their preferred network management system

Certain customers may need to assess their network performance on multiple applications at once. QSS allows them to monitor Zoom QoS data in a dashboard alongside other data in their suite of applications, providing a flexible, scalable way to consume Zoom QoS data and seamlessly integrate it into custom dashboards.

## Zoom QoS Data is transmitted over TLS 1.2

Zoom QoS data is securely transmitted using Transport Layer Security (TLS) 1.2, meaning that the data is authenticated and encrypted when sent between servers. To receive webhooks, a customer’s event notification endpoint URL must be a publicly accessible HTTP endpoint URL that supports TLSv1.2+ with a valid certificate chain issued by a Certificate Authority (CA).

For additional security, customers will be prompted to [validate their webhook endpoints](#) using a Challenge-Response Check (CRC). The CRC will confirm the ownership and security of their event notification endpoint URLs.

## Customers can begin consuming QoS data by creating an application that can receive QSS events

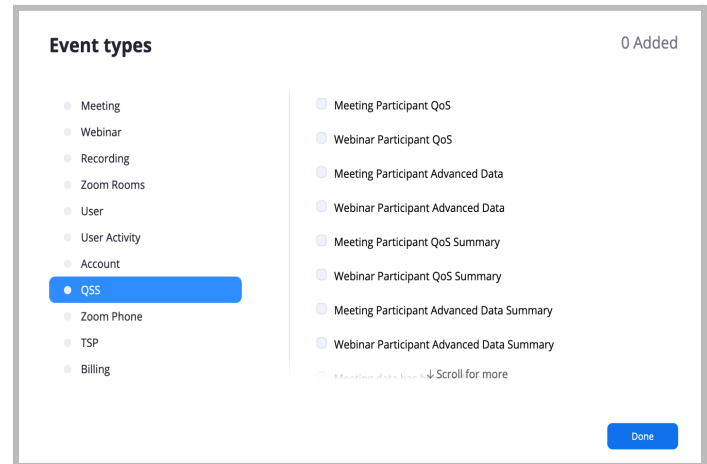
After a customer purchases the QSS add-on plan, at least one user on the account must have developer permissions enabled. Customers can then use the following three steps to create a webhook application that can subscribe to QSS events.

## Step 1: Create a Webhook-only app

Customers will first need to create a [Webhook-only](#) App in the Zoom App Marketplace and enable event subscriptions with the **Event subscription** toggle. Customers can then specify where they'd like to receive QSS events by entering their webhook application's **Event notification endpoint URL**.

## Step 2: Subscribe to QSS Webhook events

To subscribe to QSS events, customers must add events and choose from the list of available QSS **Event types**. Customers can select one or more QSS events before completing the process and activating their application.



## Step 3: Verify Webhook events

Customers should always verify that Zoom QoS data has arrived in their third-party system or tool. To verify that Webhook requests are sent from Zoom, Zoom includes a `x-zm-signature` value in the Webhook request header. Customers can use the Webhook secret token and the Webhook request body to create a signature to compare with the `x-zm-signature` header value sent by Zoom.

For full implementation details, please refer to the [QSS Implementation Guide](#) for developers.