Webhooks Documentation

The module called "webhooks" is utilized to enable integration between 3CX and CRM systems from third-party providers. It is programmed in C#, and works as a service that connects with 3CX upon initialization. Consequently, this module persistently monitors the underlying telephonic activity, generating high-level events such as ringing, call start, and call end based on the monitoring. The 3CX Webhook generator triggers an HTTP request (webhook) to the address provided in the .ini file when any of these events occur, transmitting specific call data. Please note that in case an extension's phone stops ringing but the call doesn't end (transferred to another extension), no such event occurs. The data conveyed via webhooks upon the occurrence of events is described below.

Call initialization

- event = ringing/dialing
- callerid = Caller ID
- did = external number the call was received from (incoming DID rule)
- user = user extension
- usertype = ext/queue/other
- id = unique call id (string value). If a call has come to the queue and the phone is sequentially or simultaneously ringing for several managers, then they will all have the same id.

Call started

- event = incomingcall_started / outgoingcall_started (Incoming or outgoing call)
- callerid = External number participating in the conversationExtension
- user =participating in the conversation
- did = If the call is incoming, then the external number that received the call (DID- rule)
- trtype = NotDef / Blind / Accomp (How the call was received: 1) a regular call, 2) a call received through a blind transfer, 3) a call received through an accompanying transfer)
- Id = Unique call id (string value) The

Call ended

- event = incoming / outgoing
- callerid = External number
- user = Internal number. If the call is missed, and it ended at the queue level, then this will be the queue extension
- finishtype = Ok / Missed (How the call ended: successful (there was a conversation) or unsuccessful (i.e. when an outgoing call was called, but the other end did not picked up the phone, and when the call came in, no one answered the call on the 3CX side))
- transfer = false / true (Did the call end completely, or went through the transfer to another extension)
- duration = Call duration
- title = As a phrase, detailed information about the call, which, in addition to the above includes: a) the name of the DID rule for an incoming call; b) if the call ended at the queue level, was a callback ordered; c) call duration
- id = Unique call id (string value) The call ID is formed as follows:

```
[date time]_[unique call number within the current 3CX session]-[call link
number]
```

Example ID: 210701165649_782-1

The arrival time and date of a call are associated with the moment it reached 3CX. A call link denotes a unique sequence number assigned to each call in a transfer chain. Initially, when a call reaches the PBX and remains unanswered, its call link is denoted by 0. Once the call is answered, the link value changes to 1. Subsequent transfers increase the call link value by 1. All calls in a transfer chain share the same date, time, and unique number within the ongoing session. The only distinguishing factor is the call link number.

Example:

```
https://webhook.site/?event=ringing&callerid=425630434343&user=120&usertype
=other&did=CompanyDID&id=211230100614_331-0
https://webhook.site/?callerid=425630434343&event=hangupincoming&user=120&d
id=CompanyDID&trtype=NotDef&id=220106205945_323-1
```

3CX MP3 RECORDS

Once an external subscriber hangs up and the call is complete, the conversation is recorded and stored in 3CX. If there were any transfers during the call, there may be multiple recordings corresponding to the entire chain. These recordings are not immediately available, but have a slight delay of a few milliseconds to 1-2 seconds. When the recordings are available, the "webhooks" module converts them from wav to mp3 format and places them in a designated folder. The recordings can then be downloaded using an https-link sent via a POST request. It is important to note that the webhook containing information about the end of the call and the webhook containing the link to the conversation file are two separate webhooks.

Multiple links may be sent in a single POST request to download all the recordings associated with a single conversation. This occurs when a mobile application is used and the connection is lost temporarily during the conversation. In such cases, each short disconnection generates a new sound file, which results in multiple files for a single conversation.

The POST request also includes a call ID that identifies the call start and end events. If required, complete information about the ended call can be included in the POST request by enabling this feature in the ini file. This information will be in addition to the link to download the recording.

Recordings in mp3 format are stored for a specific number of days as set in the ini-file.

```
{"FILES":["https://3CXFQDN:5001/webapi/recording/326552322343_629-1-
1.mp3"]}
```