clear-down-cadence Function

Category	S/W Release Version	Date
General	8.10	June. 2004

When a FXO interface is used between the local PABX and VoIP gateway as shown in Figure 5 and a call is disconnected from local PABX, the FXO interface detects the re-order-tone or clear-down-tone to disconnect the VoIP call. However, if the FXO interface is not able to detect the tone properly, it cannot tranmit the release signal to the remote gateway. That is, the FXO port is busy even though the local user is on-hook. In this case, the clear-down-toen frequency and cardence value of the local PABX should be configured at the gateway. If this setting cannot solve this issue, apply voice class clear-down-cadence command.

This command detects the ON/Off time (cadence) of the clear-down-tone and the enegery level drift, then it forefully clears the port. The ON/OFF points of the tone and voice codec greatly affect the energy level drift, so carefully review this document before using this command.

Network Diagram
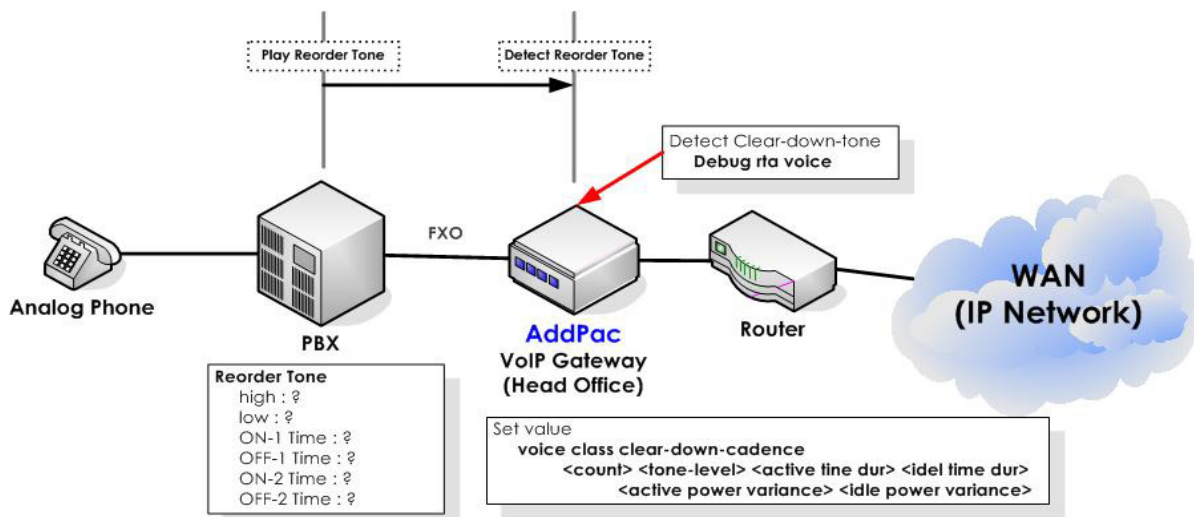
[Voice class clear-down-cadence]

Example of analyzing Clear-down-tone cadence and energy level

(Example (In case of codec = g7231))
Codec=G711,G729 (10msec * count), G7231 (30msec * count)

debug rta voice
Make PABX play clear-down-tone by hook-on the phone which connected extension line.
8 18 18 17 17 17 17 17 18 18 18 18 18 18 14 _10 12 11 11 12 10 12 11 11 12 10 12 11 11 12 10 12 11 11 12 10 12 11_
_11 16_ _49 58 56 57 54 58 56 53 56 57 56 56 55 57 56 57 55 56 55 57 55 57 55 57 55_ 15 10 12 11 11 12 10 12 11 11 12
10 12 11 11 12 10 12 11 11 12 10 12 11 11 16 50 57 55 57 57 57 56 57 56 57 57 55 56 56 56 54 57 55 58 56 57 55 58 _15 10 12 11 11_
_12 10 12 11 11 12 10 12 11 11 12 11 12 11 11 12 10 12 11 11 16_ 50 56 55 56 56 57 56 57 56 57 56 58 56 57 56 57 54 57 55 57 56 57 54
58 _15 10 12 11 11 12 10 12 11 11 12 10 12 11 11 12 10 12 11 11 12 10 12 11 11_

Calculation
   count of Tone Level (-10 ~ -16dbm) = 25
   Active Time Duration (25 * 30ms) = 750ms, if codec is g711 or g729, it will be codec 250ms (25 * 10ms)
   count of Idle level (-49 ~ -60dbm) = 25
   Idle Time Duration (25 * 30ms) = 750ms, if codec is g711 or g729, it will be codec 250ms (25 * 10ms)
   Tone Level = -11
   Active Power Variance = 5 (-6 ~ 16dbm)
   Idle Power Variance = 11 (-49 ~ -60)
     Idle Tone Level is set as -60 dbm internally, so it was calculated as (11 = (-60(Min)) - (49(Max))).
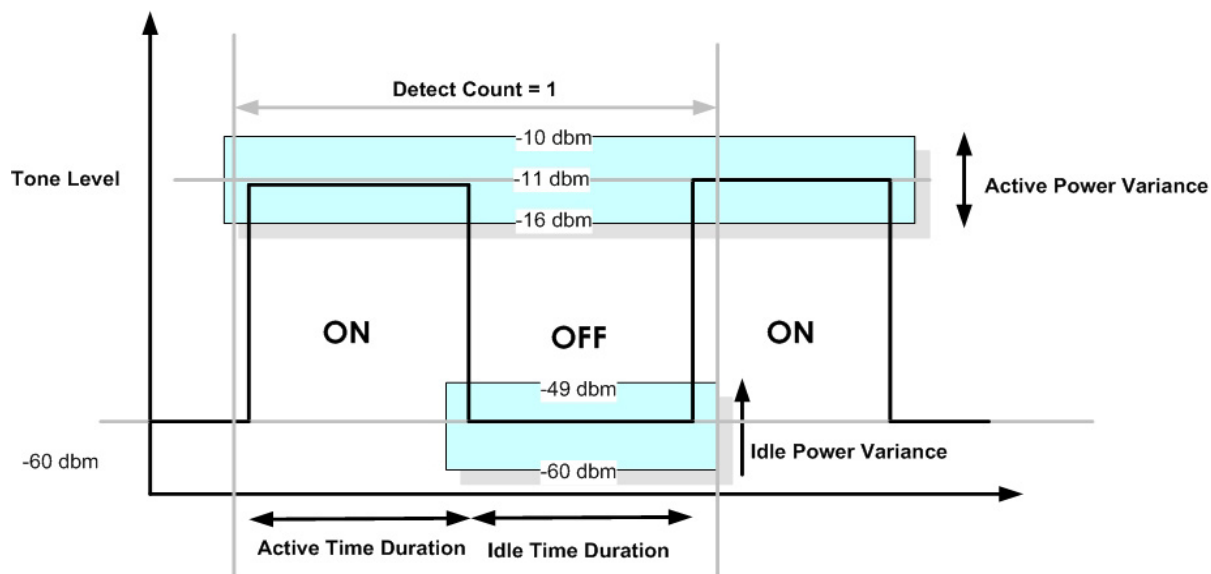
[Clear-down-tone parameter Detection]

Commands & Syntax

Configuring voice class clear-down-cadence

Step	Command	Remark
1	# # **config**	Enter APOS Configuration Mode.
2	(config)# **voice class clear-down-cadence 1 -11 750 750 5 11**	Detect Count = 1 Tone Level = -11 ActiveTimeDuration=750ms Idle Time Duration =750ms Active Power Variance = 5 Idle Power Variance = 11.

Disable voice class clear-down-cadence

Step	Command	Remark
1	# # **config**	Enter APOS Configuration Mode.
2	(config)# no voice class clear-down-cadence	Disable voice class clear-down-cadence.

Verify voice class clear-down-cadence parameters

```
# show clear-down-cadence
 count   level   actvTime    idleTime    actvMargin   idleMargin
 ---------------------------------------------------------------
   1      -11      750         750           5            11
```

Default : Disable