

Voice Services Configuration Information

The following information is needed for configuring voice services on the Cisco MC3810. Questions are presented for both network interfaces, however only the applicable section needs to be completed.

Voice Interface

Digital

Type of digital line	T1/E1, D4	_____
Line coding	AMI/B8ZS/HDB3	_____
Framing	SF/ESF or CRC4/No CRC4	_____
Number of DS0s	1-24	_____
Clock	Line / Internal	_____
Cabling	Length Pinouts	_____
Interface Type	FXS / FXO / E&M	_____
Signaling Type	Ground start / Loop start Immediate / Delay / Wink / MELCAS	_____
Channel Associated Signaling Groups		
CAS channel	0-23	_____
CAS timeslot	1-24	_____
CAS type	FXS / FXO / E&M	_____
Range	48k/56k/64k	_____
Companding	a-law (E1) / μ -law (T1)	_____

Analog

Connection information		
External connection	Stand-alone / Through a PBX	_____
Connection type	PLAR / Trunk / Tie-line	_____
If through a PBX	Terminated on PBX only (On-net) or Routed to PSTN (Off-net) or Both	_____
Is digit forward used?	Yes / No	_____
Signaling Type	FXS / FXO E&M type I E&M type II E&M type III E&M type V	_____
If E&M	2-wire / 4-wire	_____

Voice Port Signaling

Start type	Ground start / Loop start /	_____
	Immediate / Delay-dial /	_____
	Wink start	_____

Cabling	Pinouts	_____
	Pinouts	_____
	Pinouts	_____
	Pinouts	_____

Voice Circuit Mapping

To which port?	Serial 0 / Serial 1 / T1/E1 (MFT)	_____
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Dial type	10-pps pulse / DTMF	_____
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Call progress tone	cptone value	_____
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E&M port tuning	Timing clear-wait: 100 - 2000 ms	_____
	Timing delay-duration: 100 - 5000 ms	_____
	Timing delay-start: 100 - 290 ms	_____
	Timing delay-with-integrity: 0 - 5000 ms	_____
	Timing wink duration: 100 - 400 ms	_____
	Timing wink-wait: 100 - 5000 ms	_____

Voice over Frame Relay settings

DLCI	_____
Circuit rate and segmentation size	_____
Burst size	_____
CIR	_____
Set route DLCI	_____
Set serial DLCI	_____
Configure dial peers	_____

Voice over Frame Relay - Required

- Configure Backward Explicit Congestion Notification
- Set interface encapsulation to Frame Relay
- Set interface traffic shaping to Frame Relay

Voice over ATM settings

VPI	_____
VCI	_____
CIR	_____
Encapsulation type aal1/aal5/aal5snap	_____

Voice over HDLC settings

Interface S0 / S1 / S2	
Voice-encap size	_____
Dial peers destination-pattern string	_____
Dial peers port	_____

The Dial Plan describes the destination telephone numbers and the number of digits from each unit. This information, along with the telephone traffic in terms of the number of telephone calls and their duration in minutes during the busiest hour of the day associated with each port or path, will be used to estimate the total number of parallel paths or ports (hunt groups) required to support the traffic without blocking. (Refer to Dial Plan Guide for additional information.)

Dial Plan

Number of digits sent and received _____ / _____
 Off premise access code _____
 On premise access code _____
 Optional special access code _____

For each interface carrying voice traffic

Estimated number of telephone calls
 in the busiest hour _____ / _____ / _____ / _____
 Estimated average duration (minutes) _____ / _____ / _____ / _____

Detailed layout of each destination telephone number is recorded in the attached T1 Analog or T1 Digital Planning sheets.

Voice Gain/Loss

dB levels In/Out

Voice Port 1/1 (-6 to 14/0 to 14) _____ / _____
 Voice Port 1/2 _____ / _____
 Voice Port 1/3 _____ / _____
 Voice Port 1/4 _____ / _____
 Voice Port 1/5 _____ / _____
 Voice Port 1/6 _____ / _____

Echo cancellation

If enabled:

Yes / No _____
 Coverage (ms) Default (16) / other _____
 Non-linear? Default (No) / Yes _____
 Companding a-law (E1) / μ -law (T1) _____
 VAD enabled? Yes / No _____
 Comfort noise enabled? Yes / No _____

Voice timeout parameters

Initial timeout duration (seconds) _____
 Interdigit timeout duration (seconds) _____
 Ringing timeout duration (seconds) _____

DTMF timeout parameters

DTMF digit duration (ms) _____
 DTMF interdigit duration (ms) _____

FXO port tuning

Impedance 600r / 600c / 900 / 900c _____
 Number of rings before connection closed _____

FXS port tuning

Ring frequency 20 / 50 Hz _____
 Ring cadence (set according to country) _____