

# VoIP Configuration & Operation Settings

## ***Dial Plan Settings***

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## Dial Plan Table

Dial Plan is a database resides in flash memory and it consists of three tables:

### **A. Address Table**

- Define a phone number and mappin to a hunt group ID
- Defines the number of minimum digits to collect in this phone number
- Defines the number of maximum digits to collect in this phone number
- Defines the number of prefix digits to be stripped before forwarding this telephone number to the destination.
- Defines a numeric string to be prefixed before forwarding this telephone number to the destination

## Dial Plan Table (Cont'd)

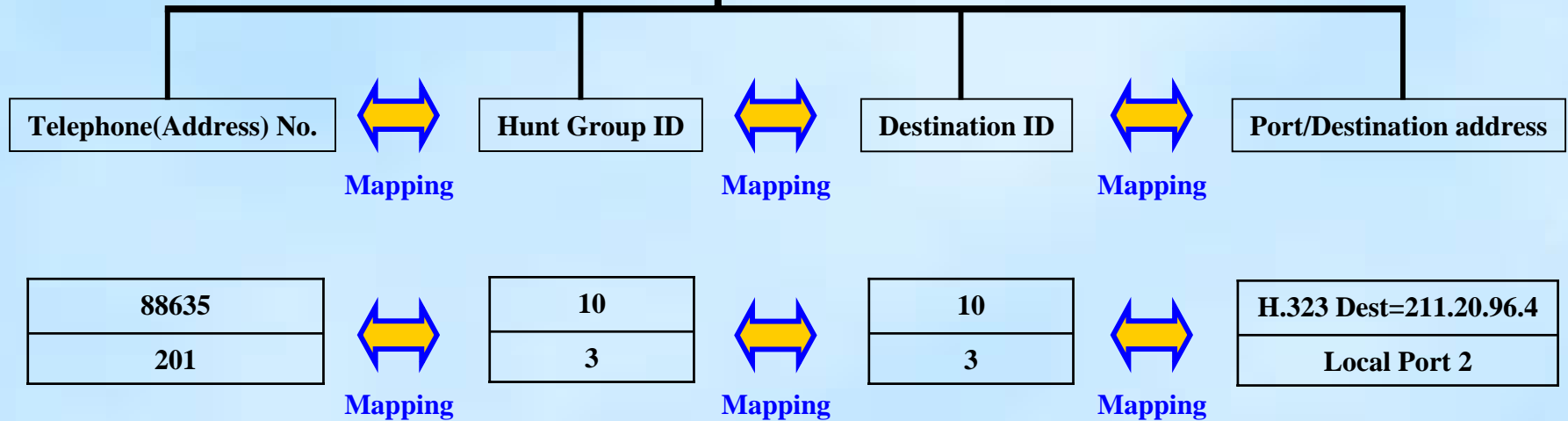
### **B. Hunt group table**

- Assign a hunt group (designated by hunt group ID) and map to a destination ID or a list of destination IDs.

### **C. Destination table**

- Assign a destination (designated by destination ID) and map to a local port or a remote GW IP address.

## Dial Plan Table Entries



## ATPM Command Entries

### A. Start & stop dial plan database update commands

**atpm req** dial plan database update start, ATPM state machine pause

**atpm done** dial plan database update complete, ATPM state machine resume

### B. Store / Restore / Erase dial plan to/from Flash storage

**atpm store** store dial plan to NV storage

**atpm restore** restore dial plan from NV storage

**atpm erase** erase dial plan from NV storage

**atpm purge** purge table from NV storage

## ATPM Command Entries (Cont'd)

### C. Address table commands

- |                         |   |
|-------------------------|---|
| <code>atpm aadd</code>  | Add a new telephone number into address table, assign this number and map to a designated hunt group ID |
| <code>atpm alist</code> | List all telephone number in address table  |
| <code>atpm adel</code>  | Delete a telephone number from address table  |
| <code>atpm afind</code> | Find a telephone number from address table  |

### D. Hunt group table command

- |                         |  |
|-------------------------|--|
| <code>atpm hadd</code>  | Add a new hunt group ID into hunt group table, assign this ID and map to a designated destination ID |
| <code>atpm hlist</code> | List all hunt group ID in hunt group table   |
| <code>atpm hdel</code>  | Delete a hunt group ID from hunt group table   |
| <code>atpm hfind</code> | Find a hunt group ID from hunt group table   |

## ATPM Command Entries (Cont'd)

### E. Destination table commands

<code>atpm dadd</code>	Add a new destination ID into destination table, assign this ID to a Local port or remote IP address
<code>atpm dlist</code>	List all destination ID in destination table
<code>atpm ddel</code>	Delete a destination ID from destination table
<code>atpm dfind</code>	Find a destination ID from destination table



## ATPM Command Parameters

Destination table management	atpm	dlist	
	atpm	dfind	<i>dest_id</i>
	atpm	dadd	<i>dest_id mode IP_addr/host name/port#</i>
	atpm	ddel	<i>dest_id</i>
Hunt group table management	atpm	hlist	
	atpm	hfind	<i>hg_id</i>
	atpm	hadd	<i>hg_id hg_type dest_id ...</i>
	atpm	ddel	<i>hg_id</i>
Address table management	atpm	alist	
	atpm	afind	<i>phone#</i>
	atpm	aadd	<i>phone# min max hg_id pf_strip pf_addr</i>
	atpm	adel	<i>phone#</i>

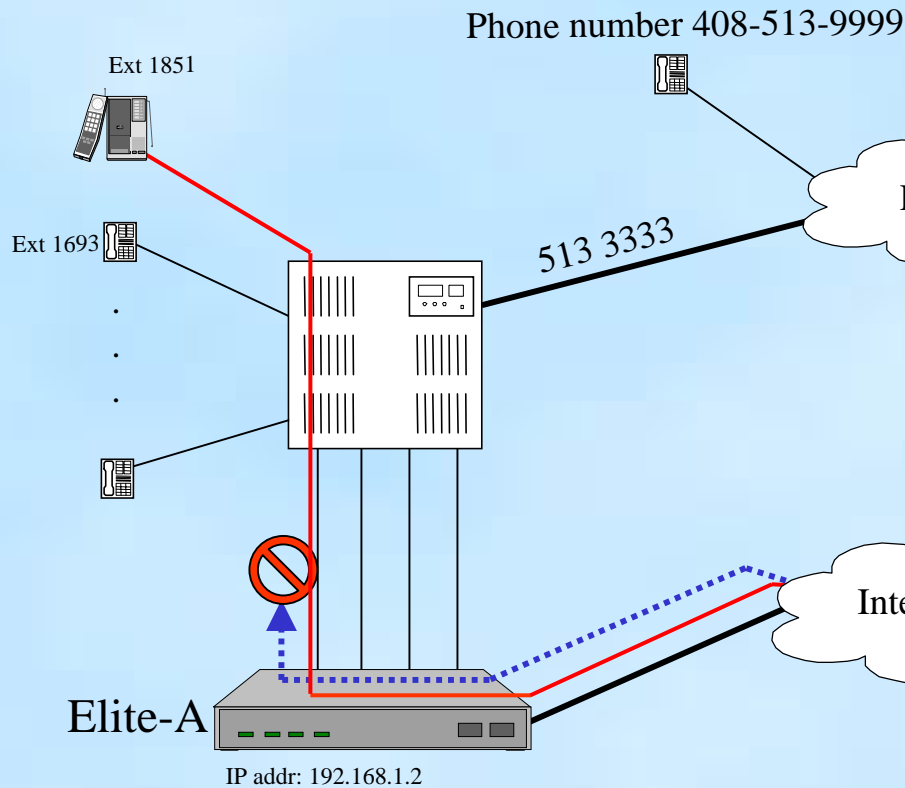
There are 3 types of destination mode:

1. **H323** for fix IP
2. **DNS** for host name
3. **Port** for local port

There are 2 types of hg\_type:

- 1: round robin
- 2: always start from first

## Hunt Group Functions



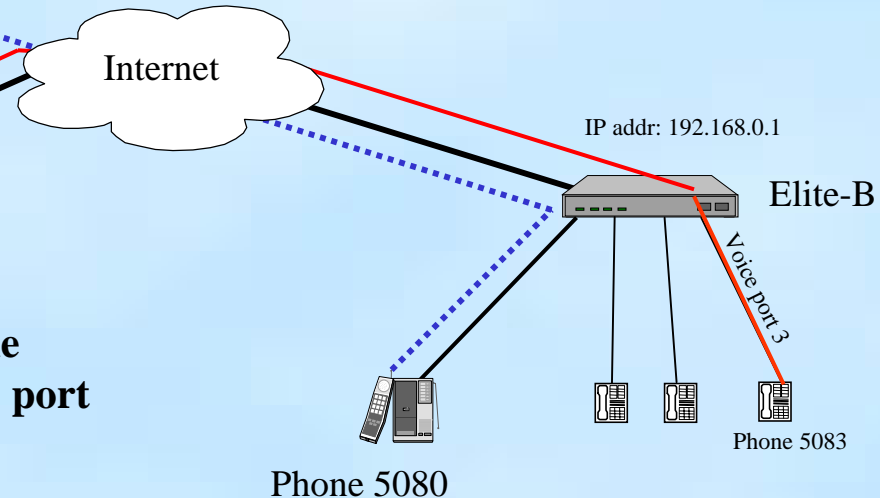
### Scenario:

1. Port 0 of Elite-A is being occupied by phone 1851.
2. Dial 4085139999 from Phone set 5080.

### Elite-A ATPM

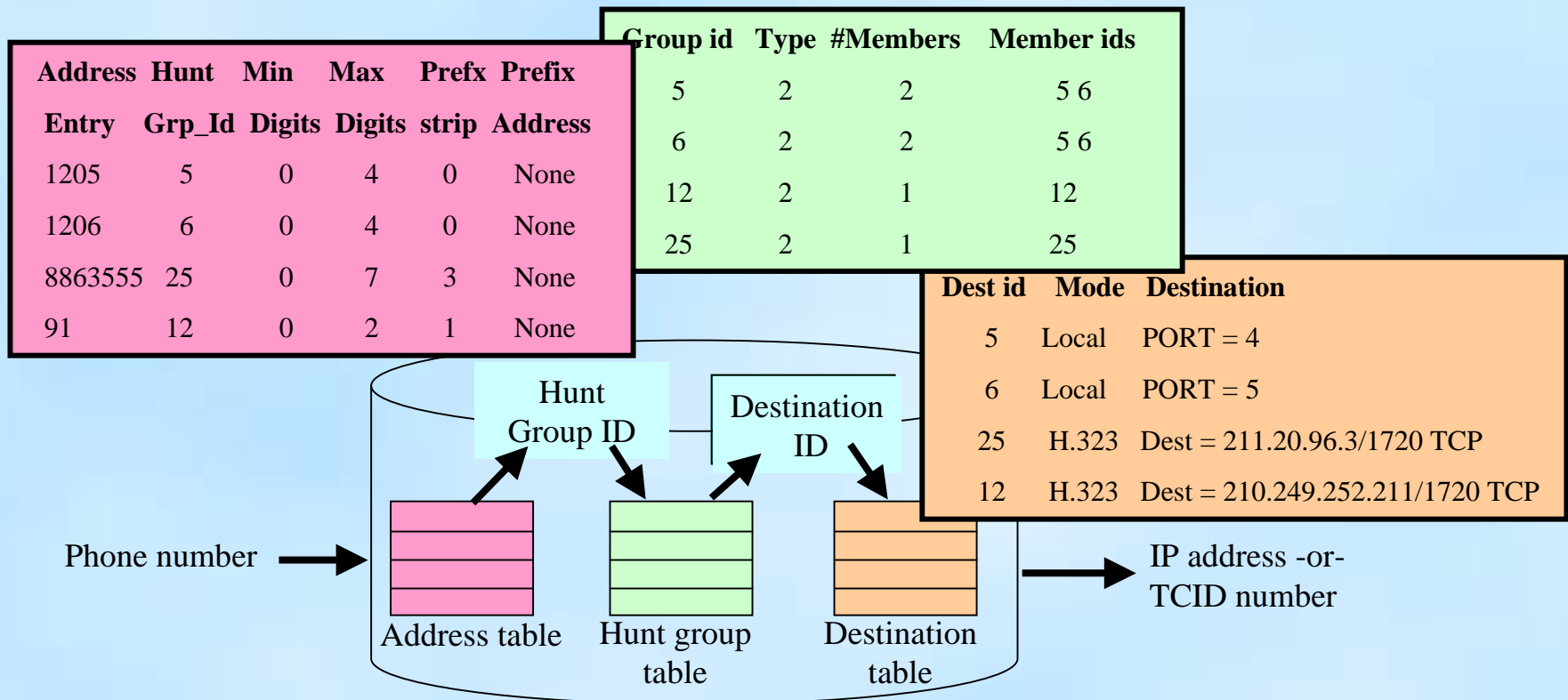
Source: 5139999  
From: IP network (192.168.0.1)  
Destination: port 0

**Result:** call won't complete since port 0 of Elite-A is busy.



**Elite implements Hunt Group, so phone 5080 goes through another free Elite-A port to connect phone number 4085139999.**

## Dial plan Settings (Example 1)

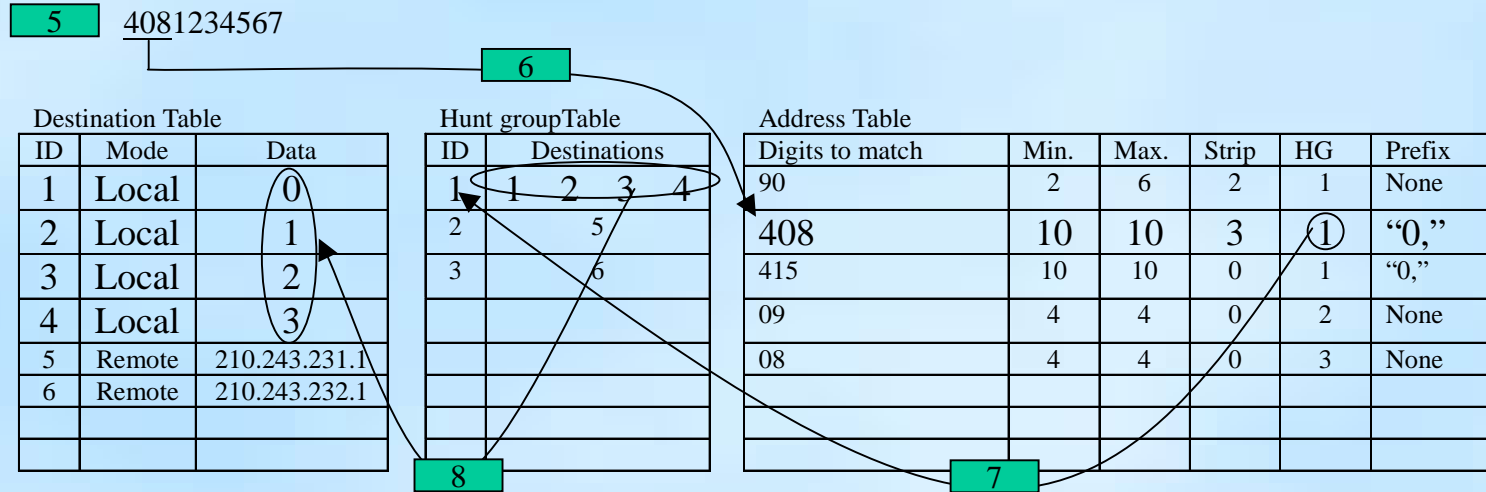


- ATPM provides address translation services of telephone numbers
- ATPM parses the standard telephony addresses, optionally modify it, then based on the dial plan translates it into a hunt group, which is a list of destinations.
- ATPM searches through the list of destinations until a free destination is found
- Send the modified dial string to the destination.
  - To remote Elite via IP
  - To local port in DTMF

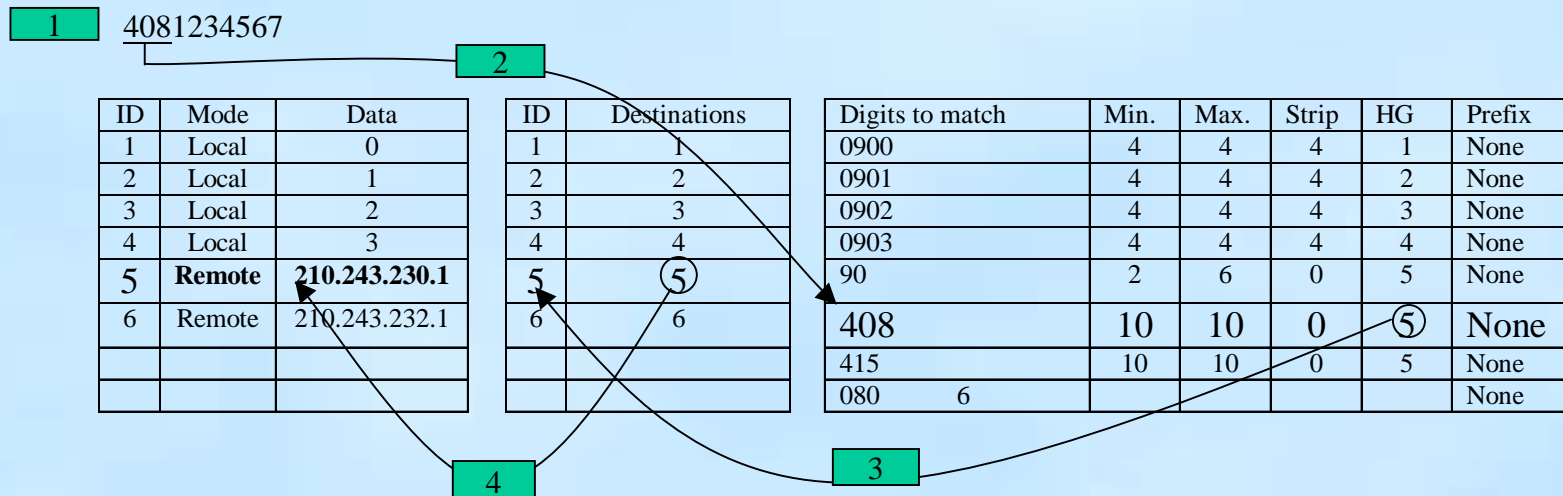
## Dial plan Settings (Example 2)

### How ATPM Works

Elite-A



Elite-B



## System Table

Item	Description
Dial terminating digit	End of the dial string is declared when the digit is entered
First digit timeout	Time between off-hook and when the first dial digit is entered. At expiration, causes address lookup to fail.
Inter-digit timeout	The maximum time allowed between entry of each digit after the previous digit.
Total dial timeout	The maximum time allowed for entry of the entire string of dial digits

### System table management commands

`atpm slist`

`atpm sys first_digit_timeout inter_digit_timeout total_dial_timeout dial_terminating_digit`

*Console>atpm slist*

*System Info: Total dial time = 30000ms, First digit wait = 10000ms,  
Interdigit wait = 5000ms, Dial term digit = None*

Q & A