

# 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)

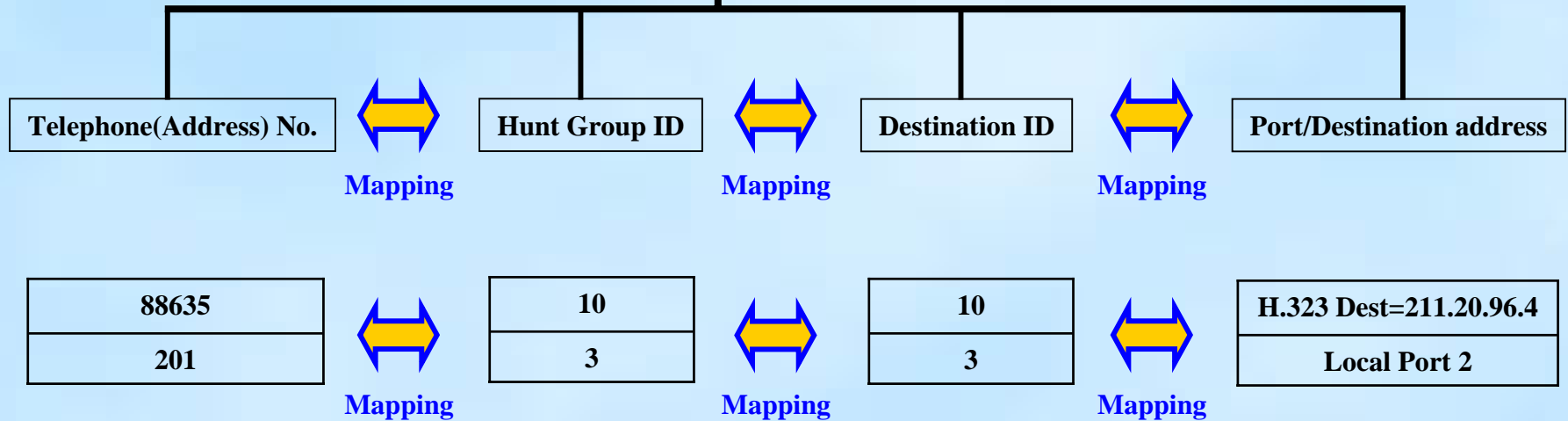
### **B. Hunt group table**

- 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>                                |

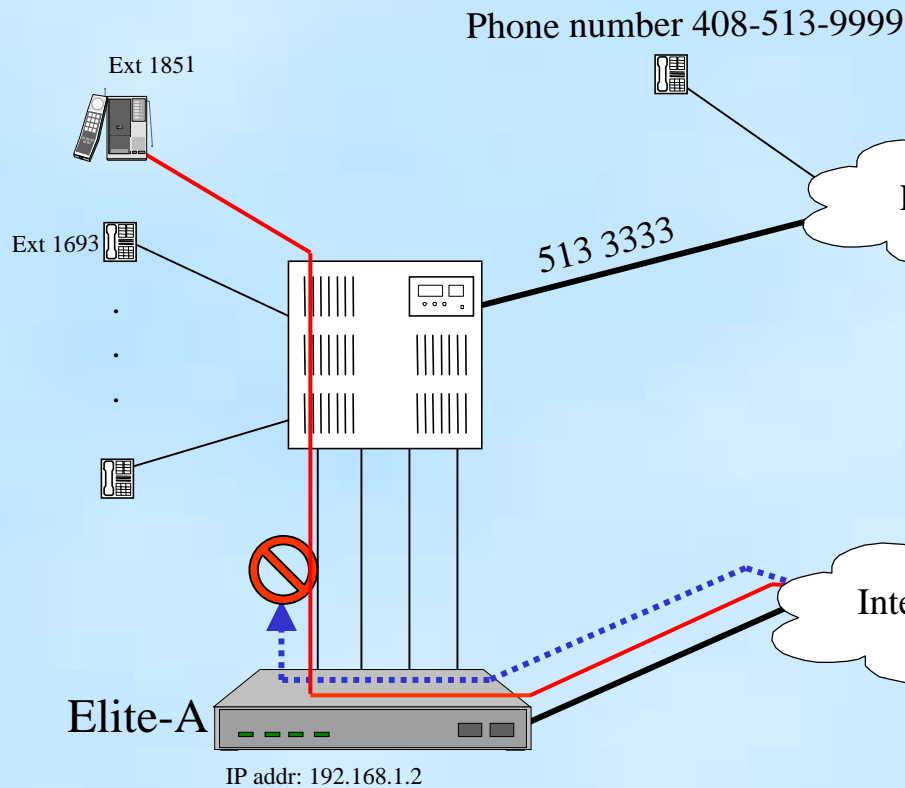
There are 3 types of destination mode:

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

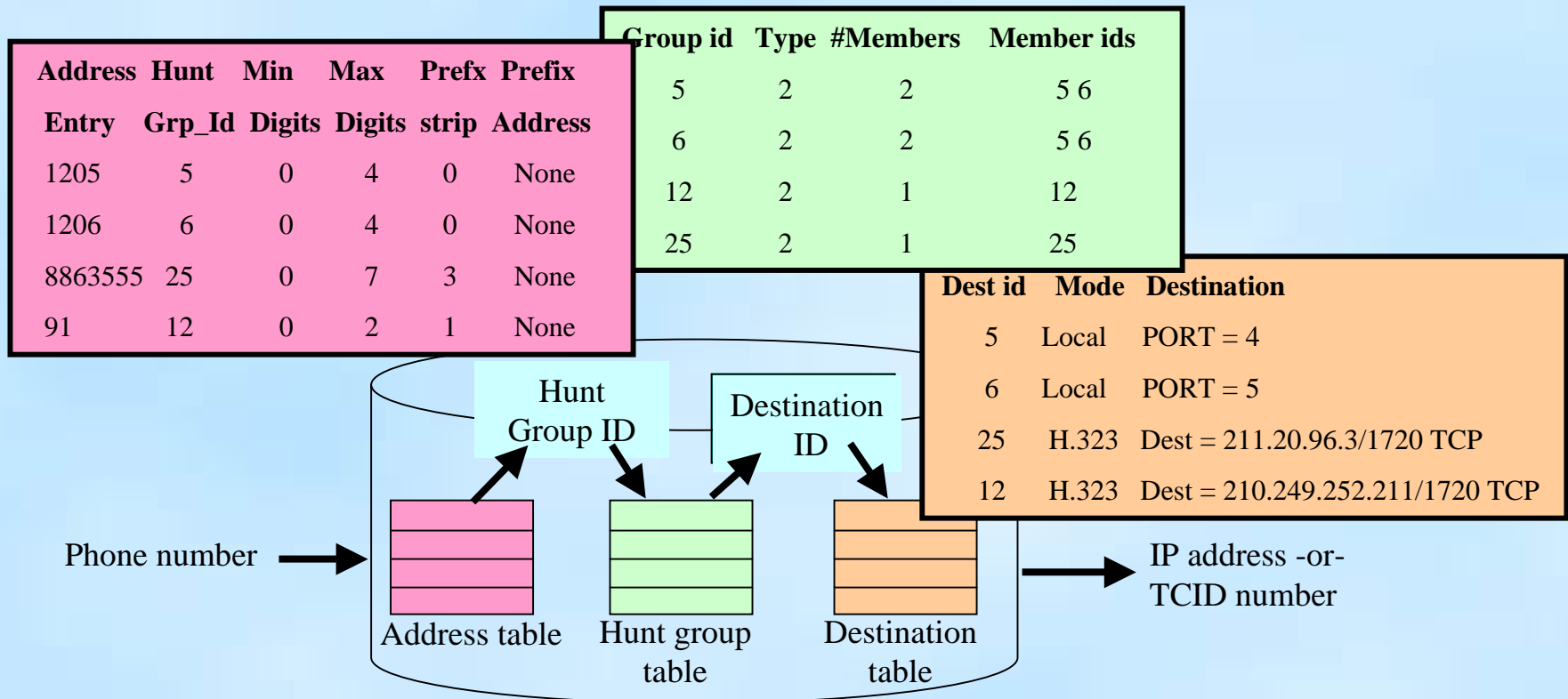
From: IP network (192.168.0.1)

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)

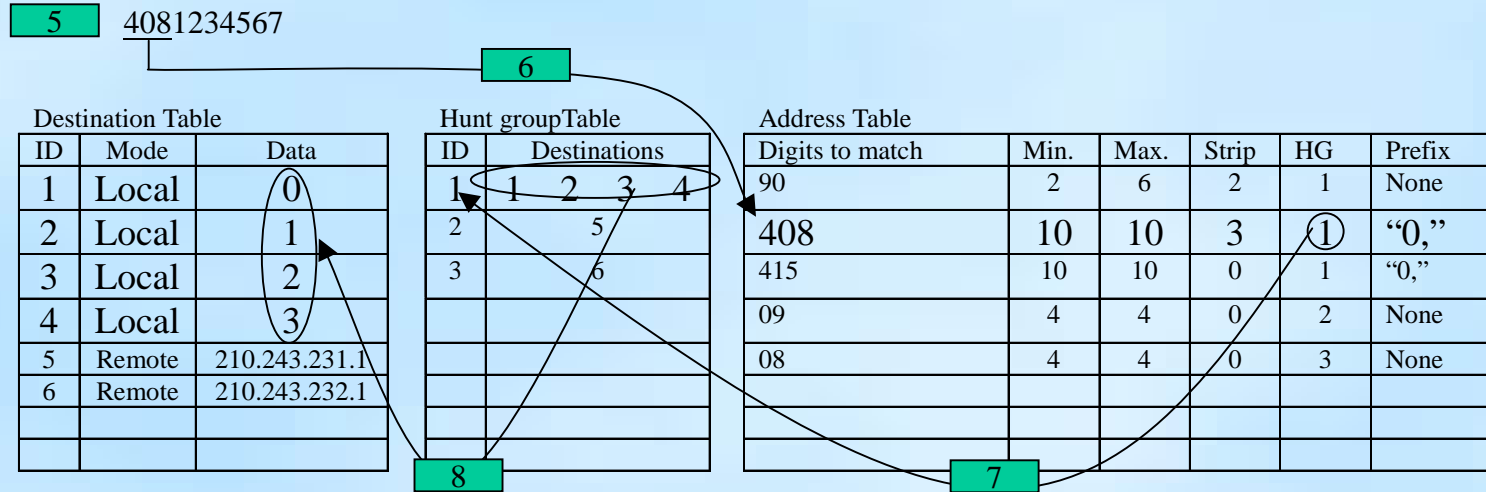


- ATPM provides address translation services of telephone numbers
- ATPM parses the standard telephony addresses, optionally modify it, then based on the dial plan translates it into a hunt group, which is a list of destinations.
- ATPM searches through the list of destinations until a free destination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

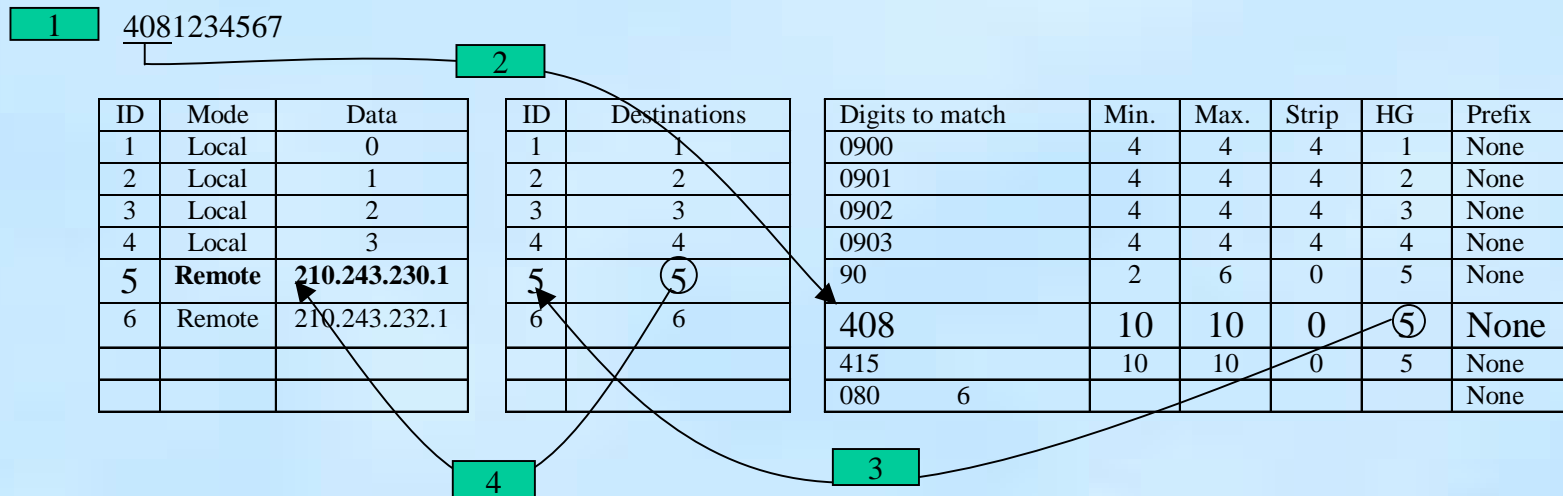
## Dial plan Settings (Example 2)

### 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