

Homework#3 MGCP Project



Embedded Systems and Wireless Networking Labs

NTU CSIE VoIP 2005 Spring

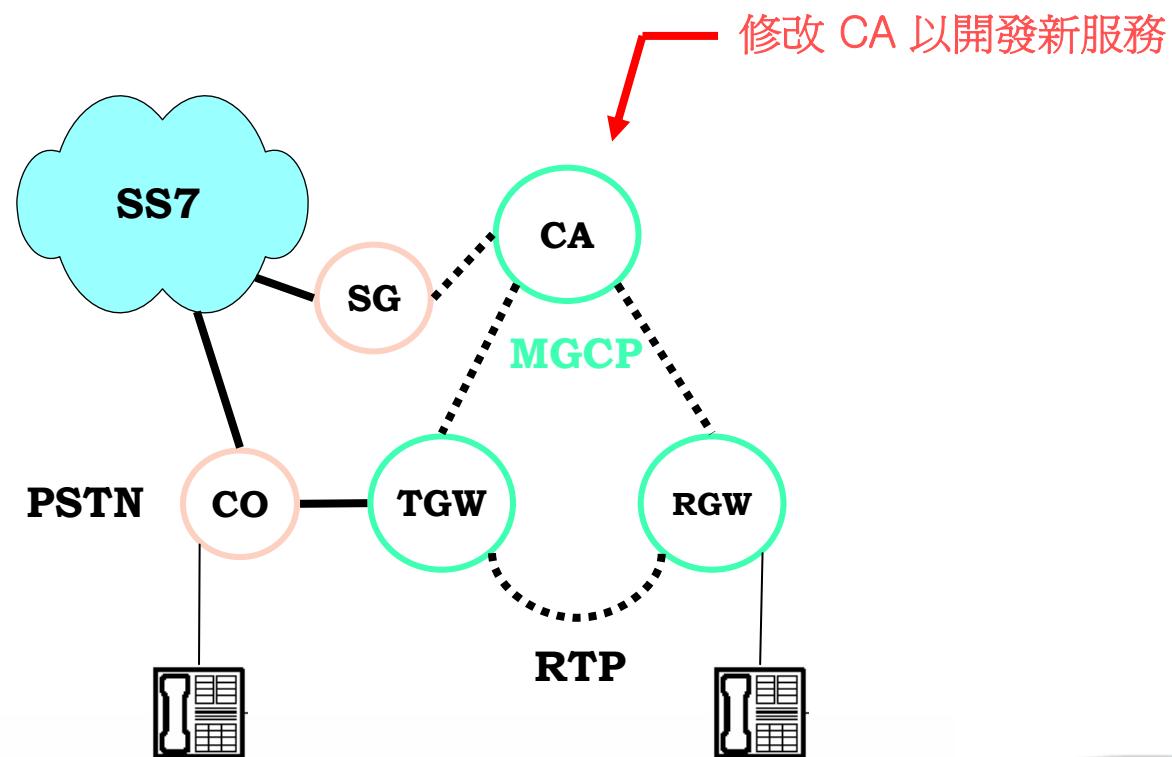
臺灣大學



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- Lab. Goal

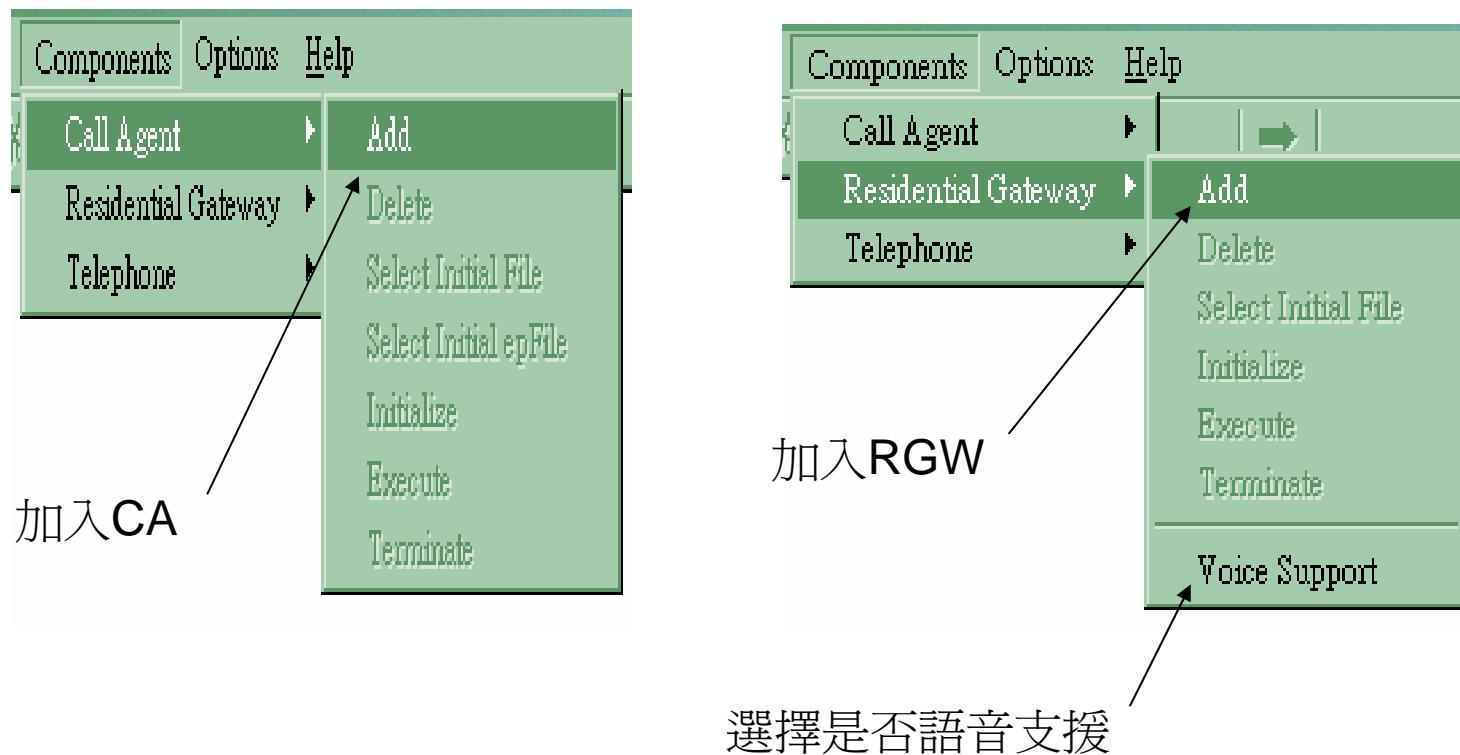
- 使同學瞭解MGCP模擬程式和基本通話流程，熟悉MGCP的命令與訊息，並了解Call Agent程式的運作，並學會開發新的通話服務。



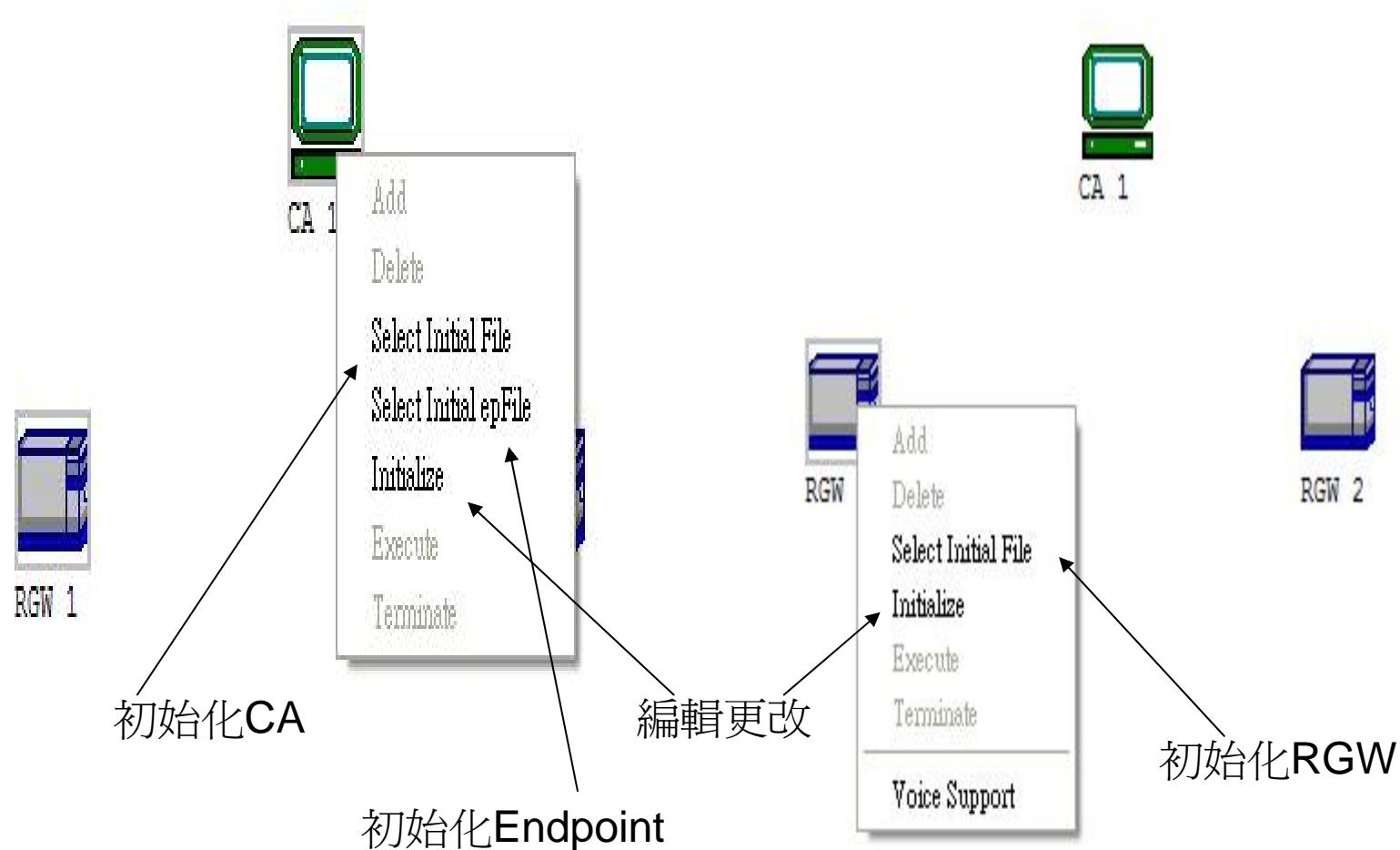
Execute MGCP simulation Program

- 將網頁上voip_v1.zip的資料夾解壓縮後存於電腦中，直接點選VoIP.exe即可使用。資料夾中其他檔案均為所需，不得任意刪減，否則將可能無法正確執行。
- **voip_v1所放置的路徑不得有空白，否則模擬程式將無法正確執行(ex:不能放在 My document，桌面...)**

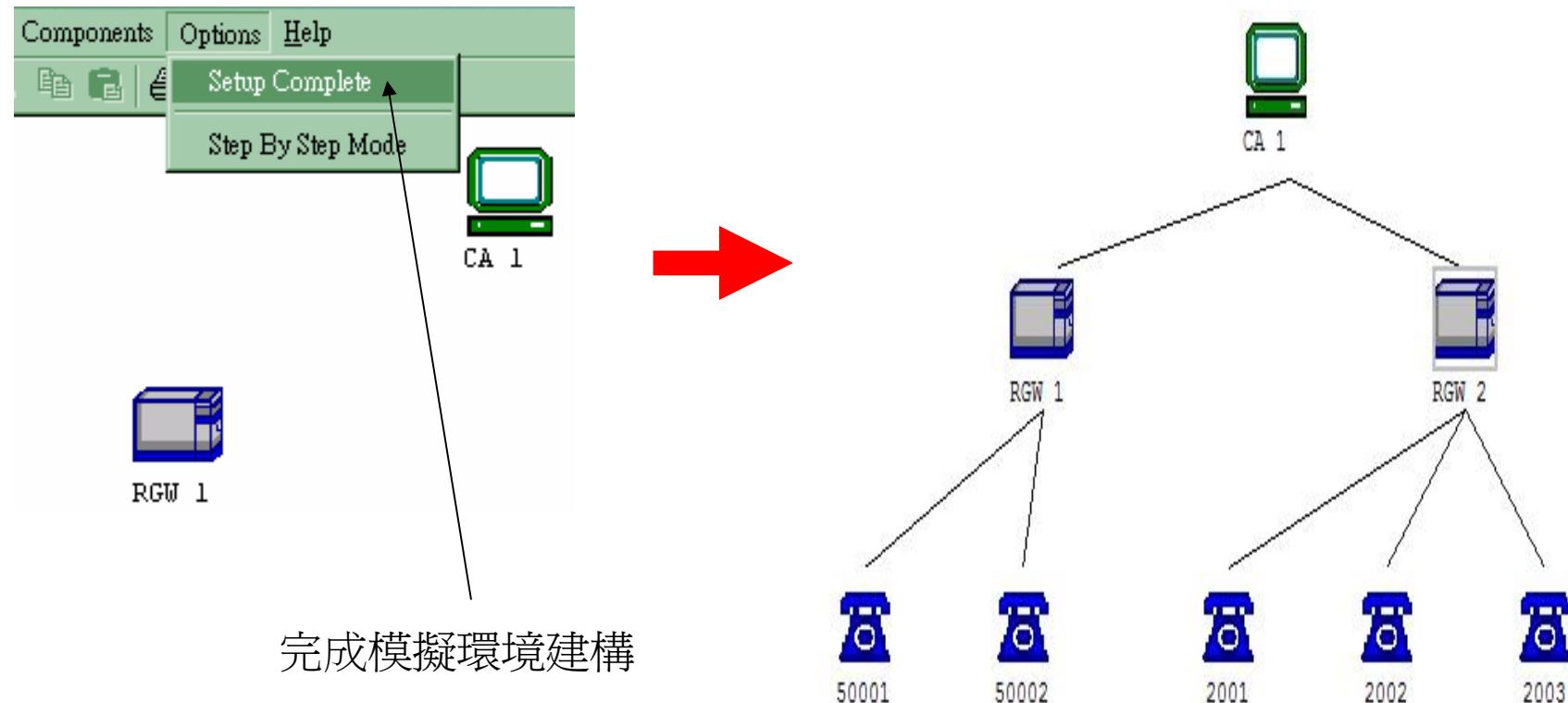
Lab. Procedure (1/4)



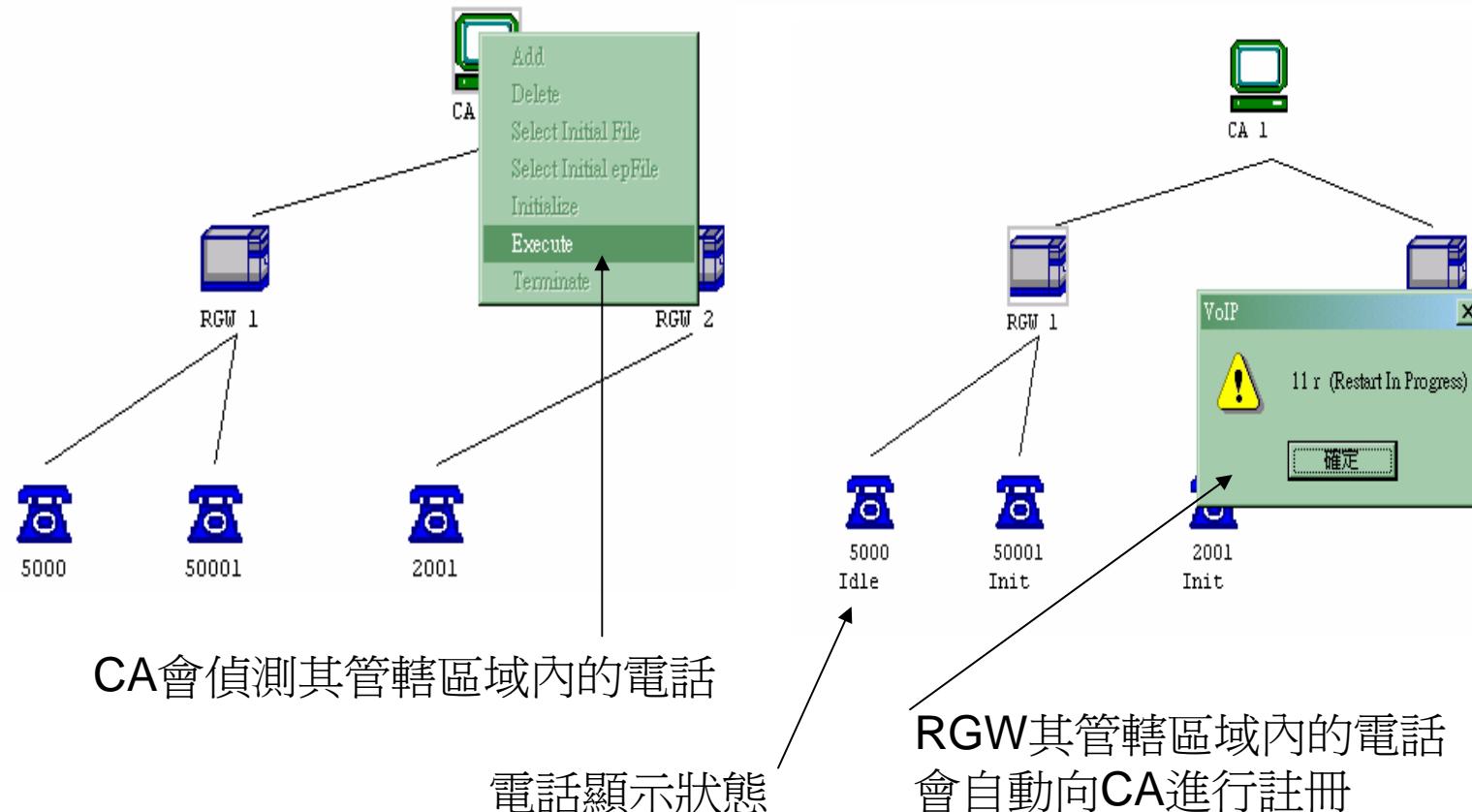
Lab. Procedure (2/4)



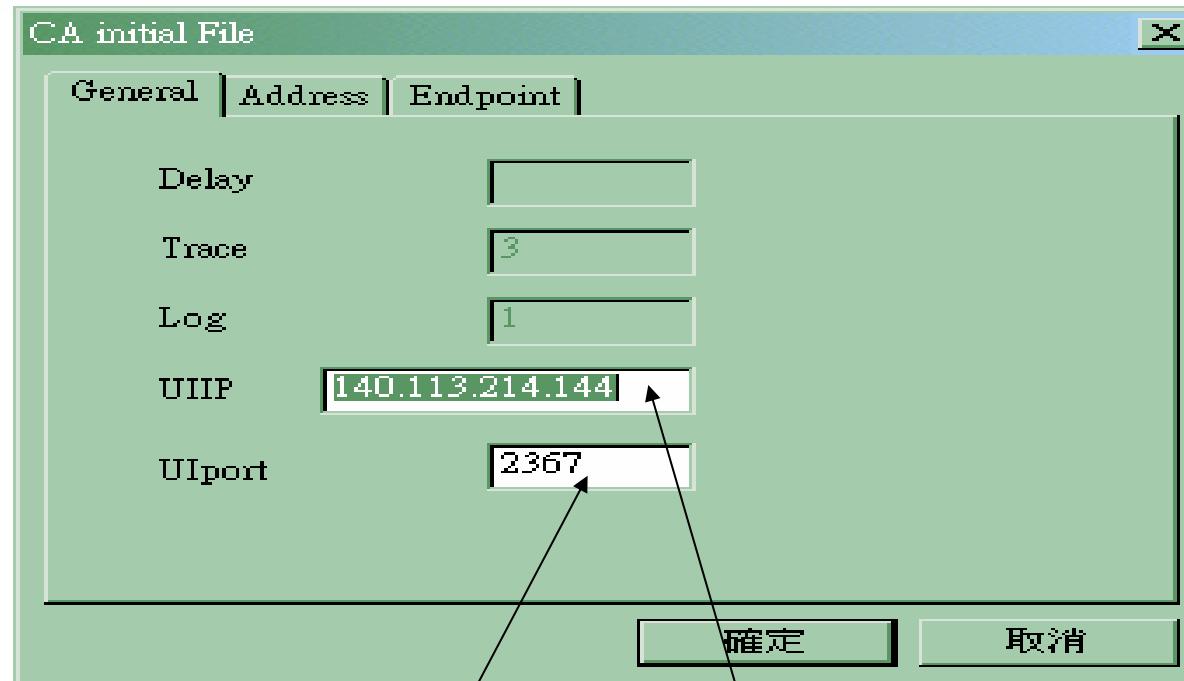
Lab. Procedure (3/4)



Lab. Procedure (4/4)



CA setting (1/3)

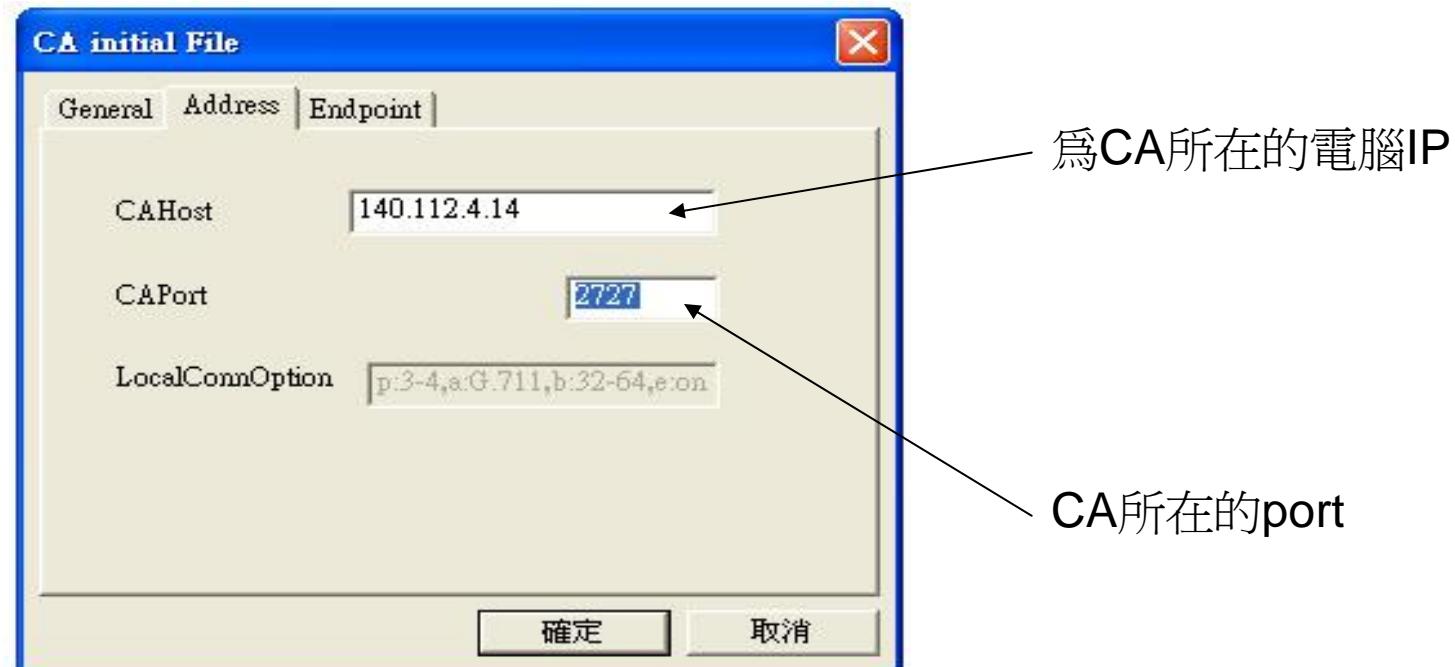


模擬程式選擇
的port

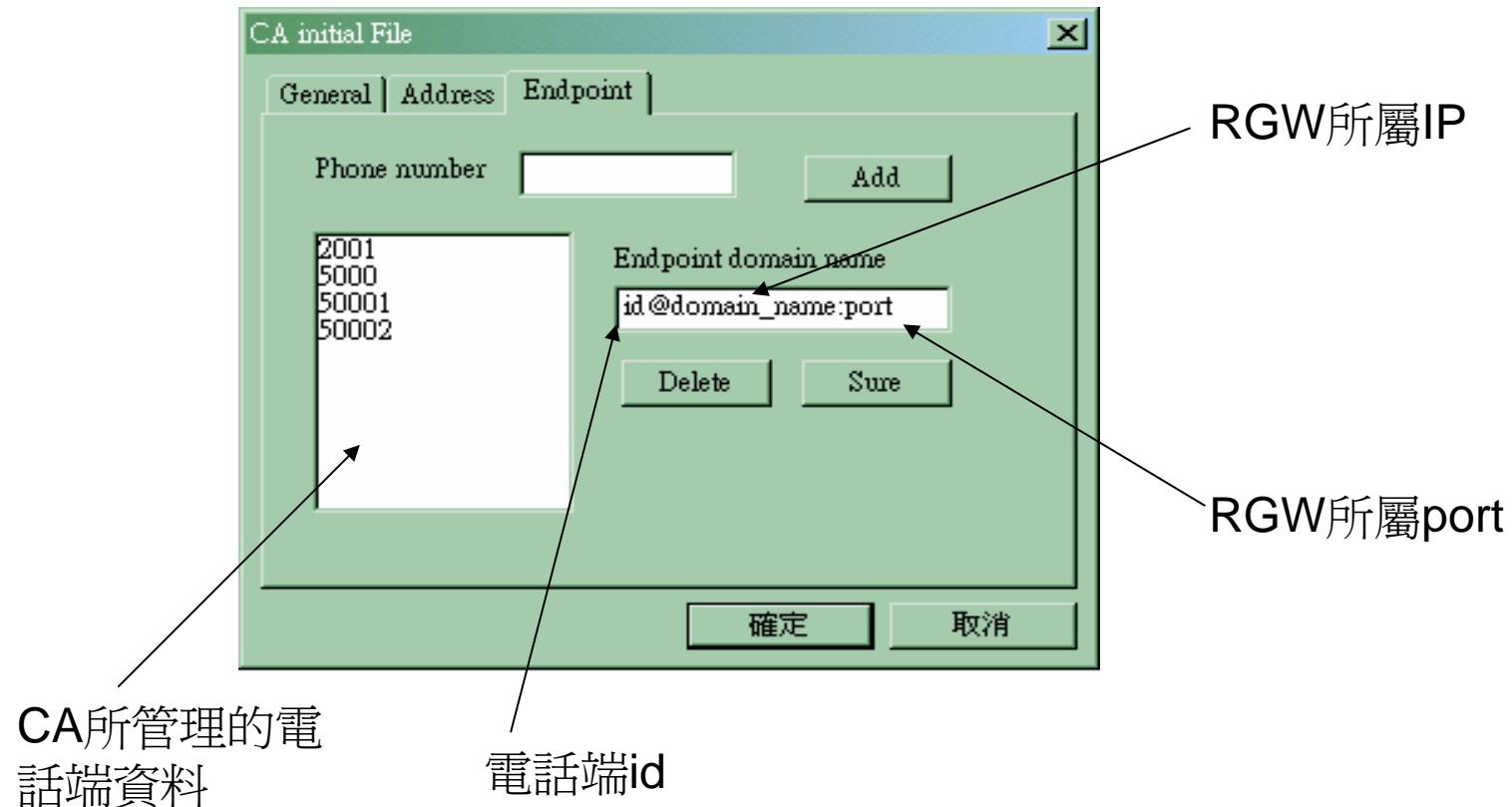
模擬程式
所在之IP

CA setting (2/3)

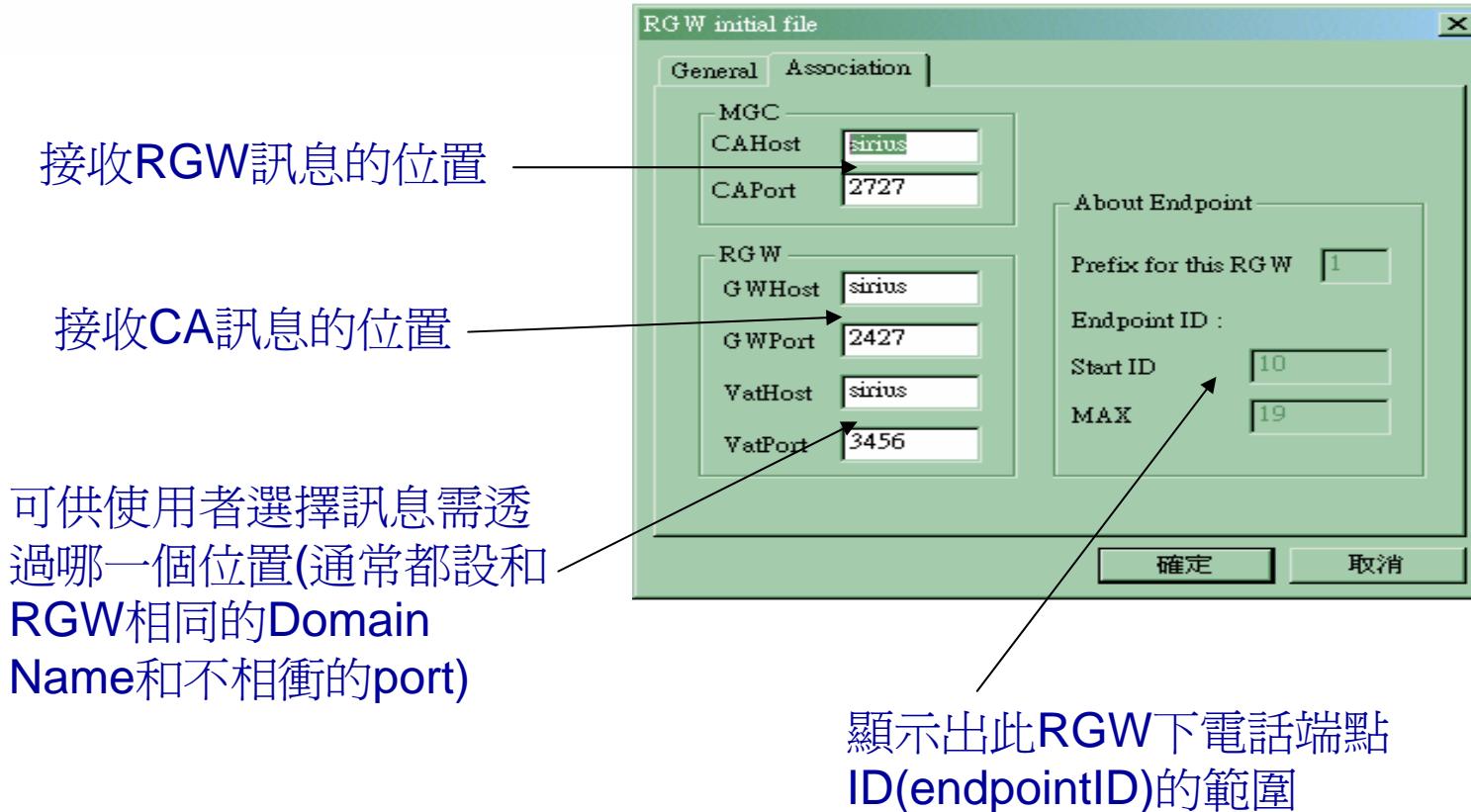
- 此為接收RGW訊息的位置



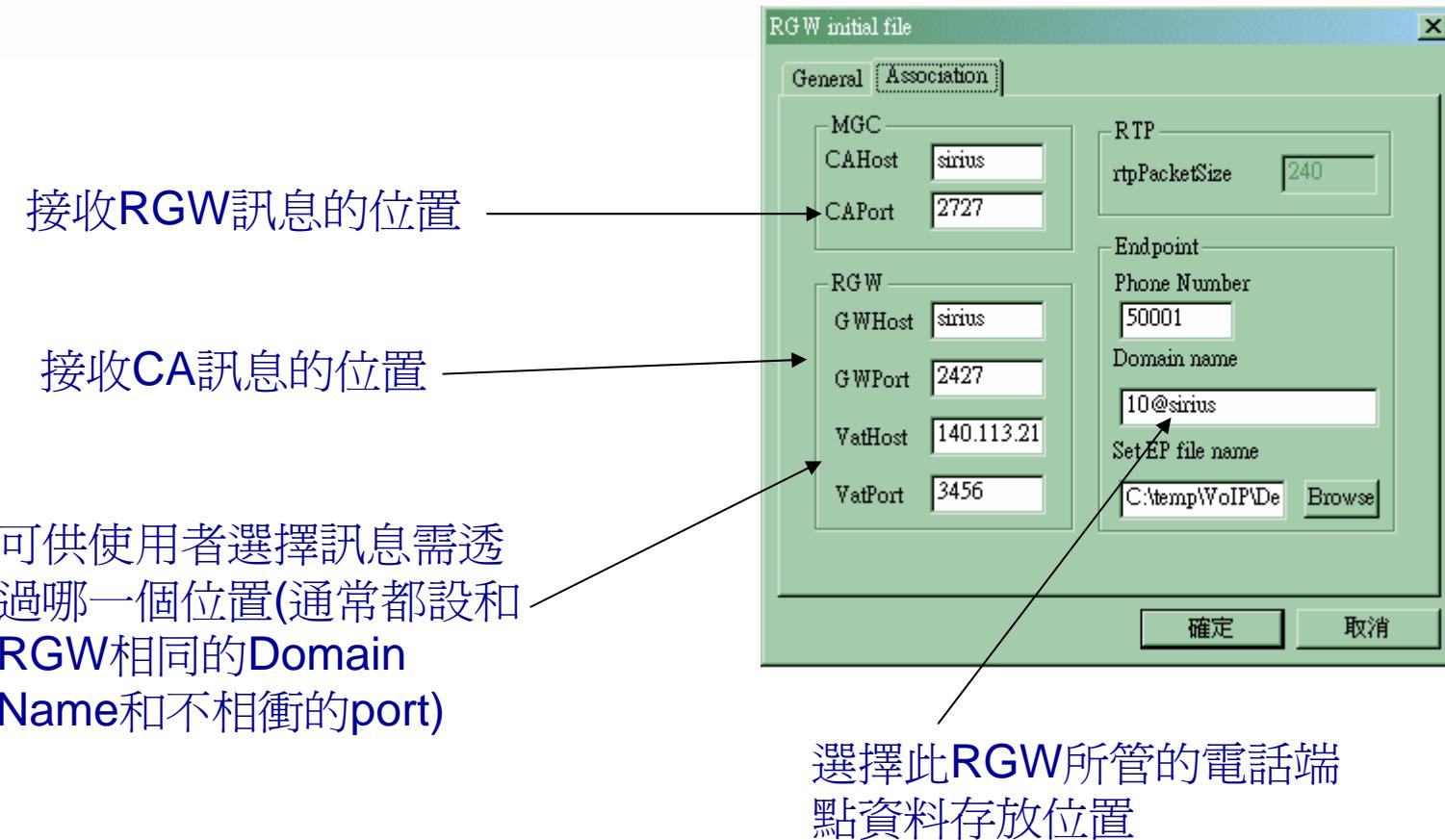
CA setting (3/3)



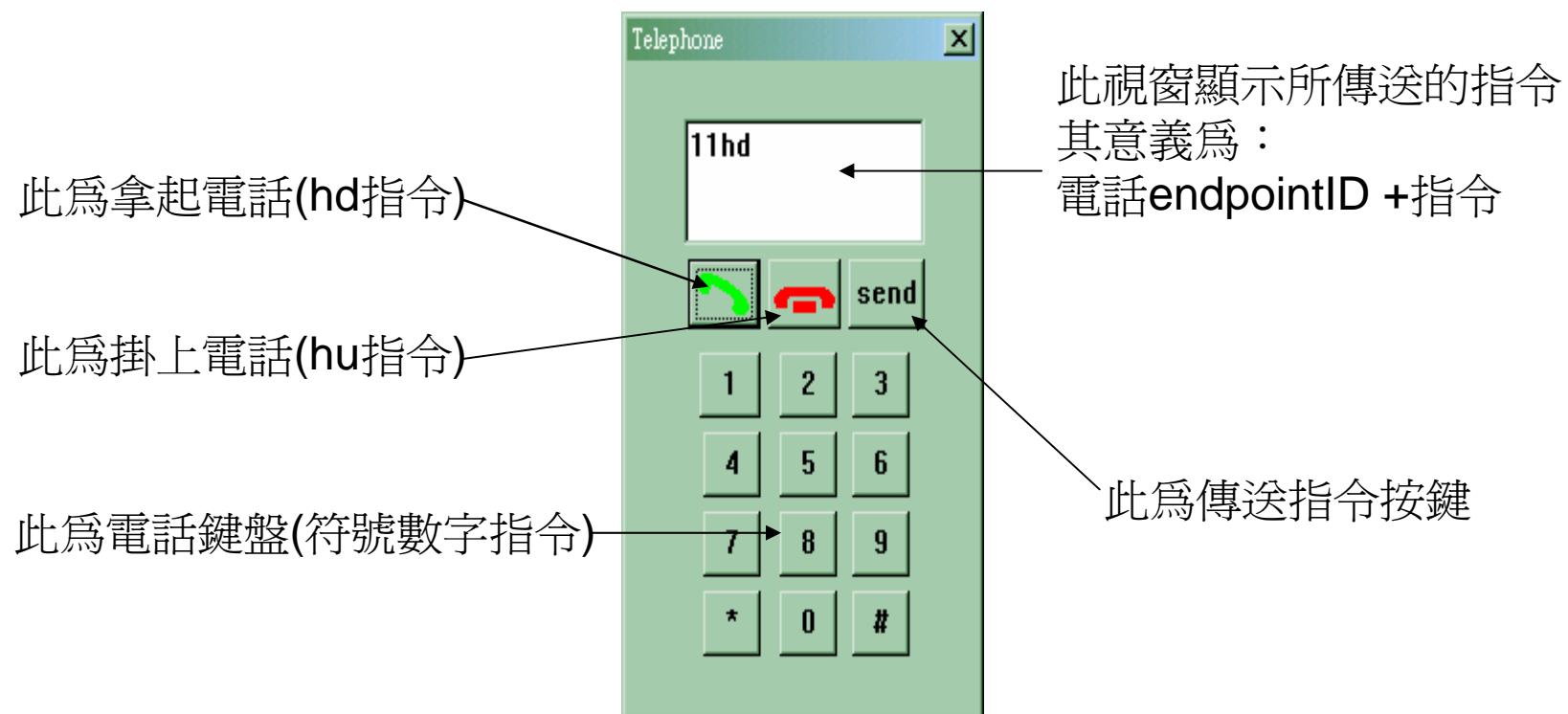
RGW setting (without voice support)



RGW setting (with voice support)

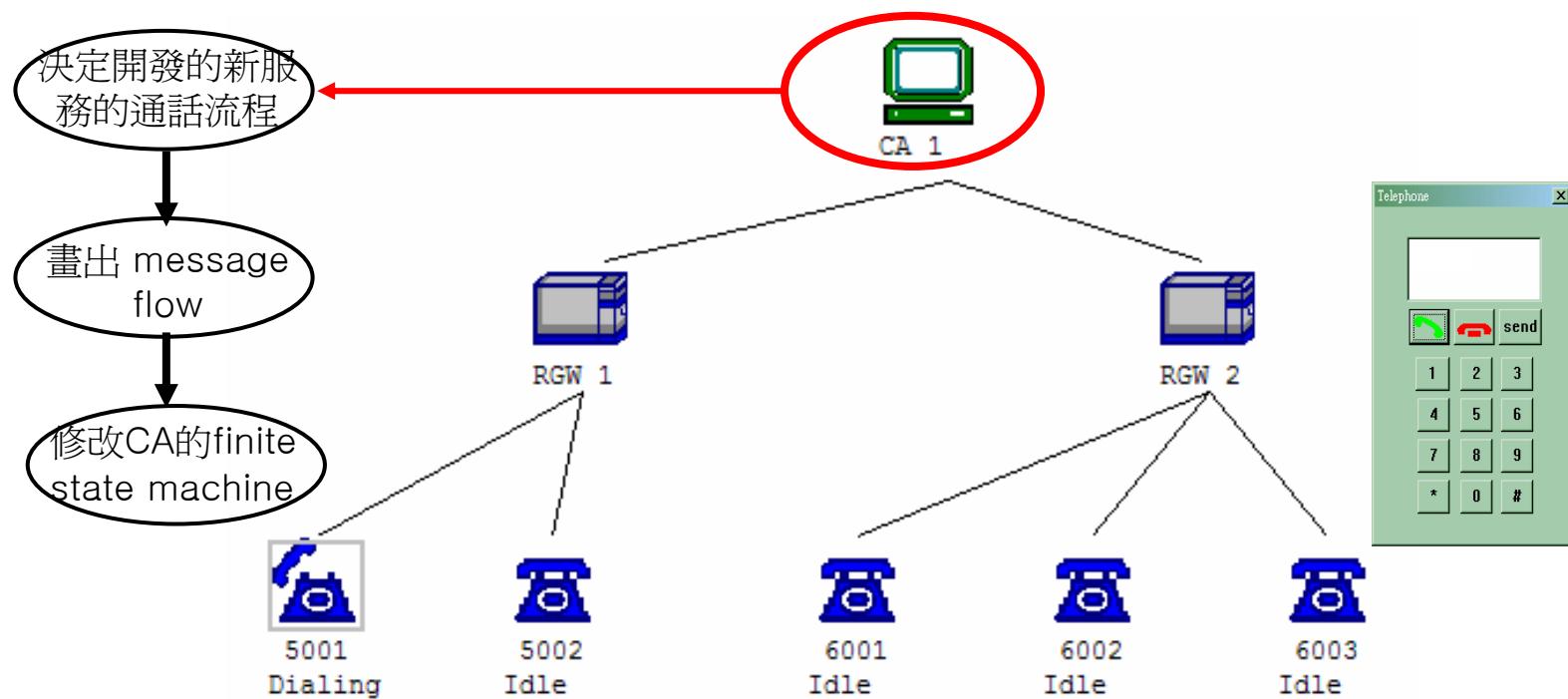


Phone Panel



Design New Service (1/7)

- 話中插撥、隨身碼...

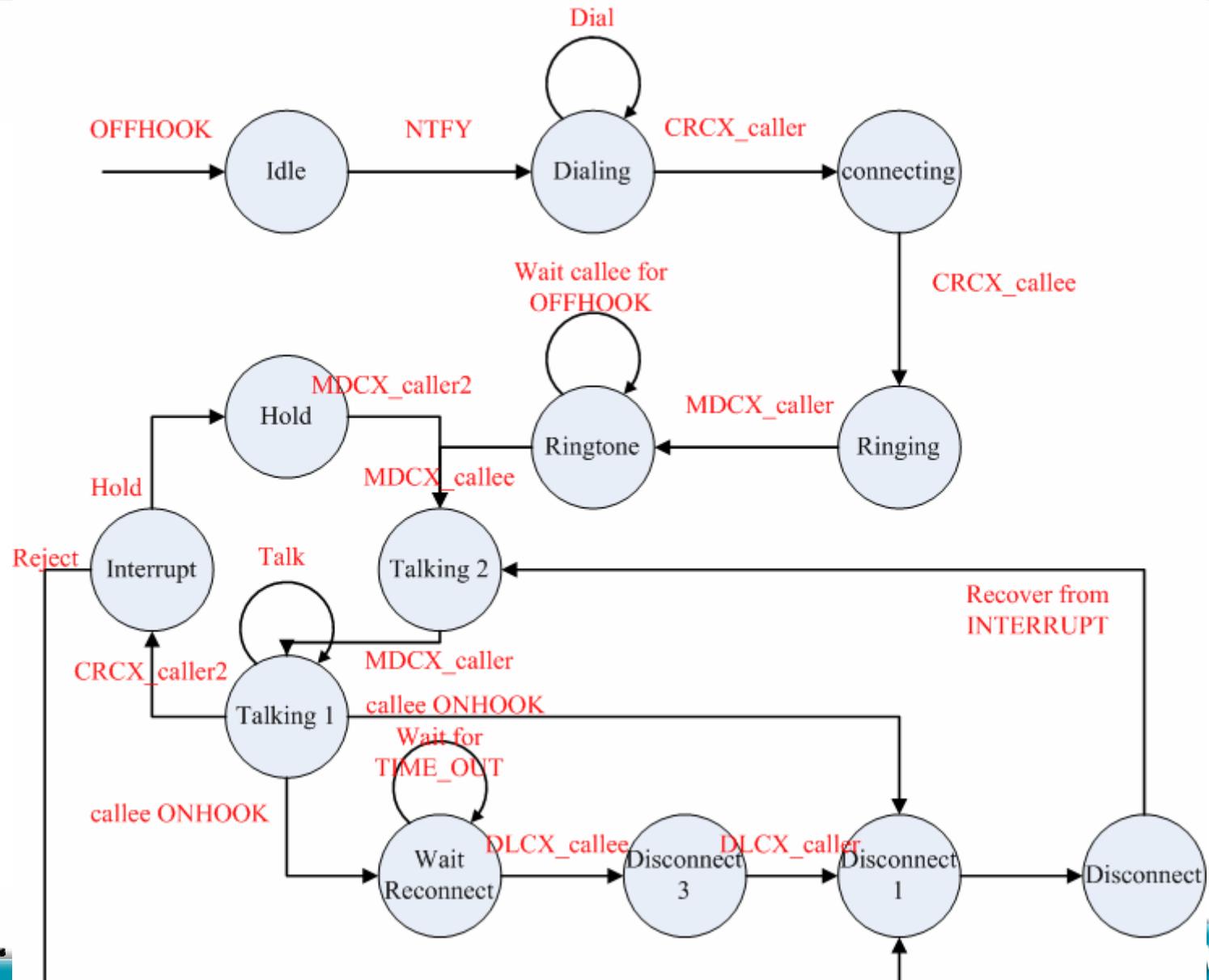


Design New Service (2/7)

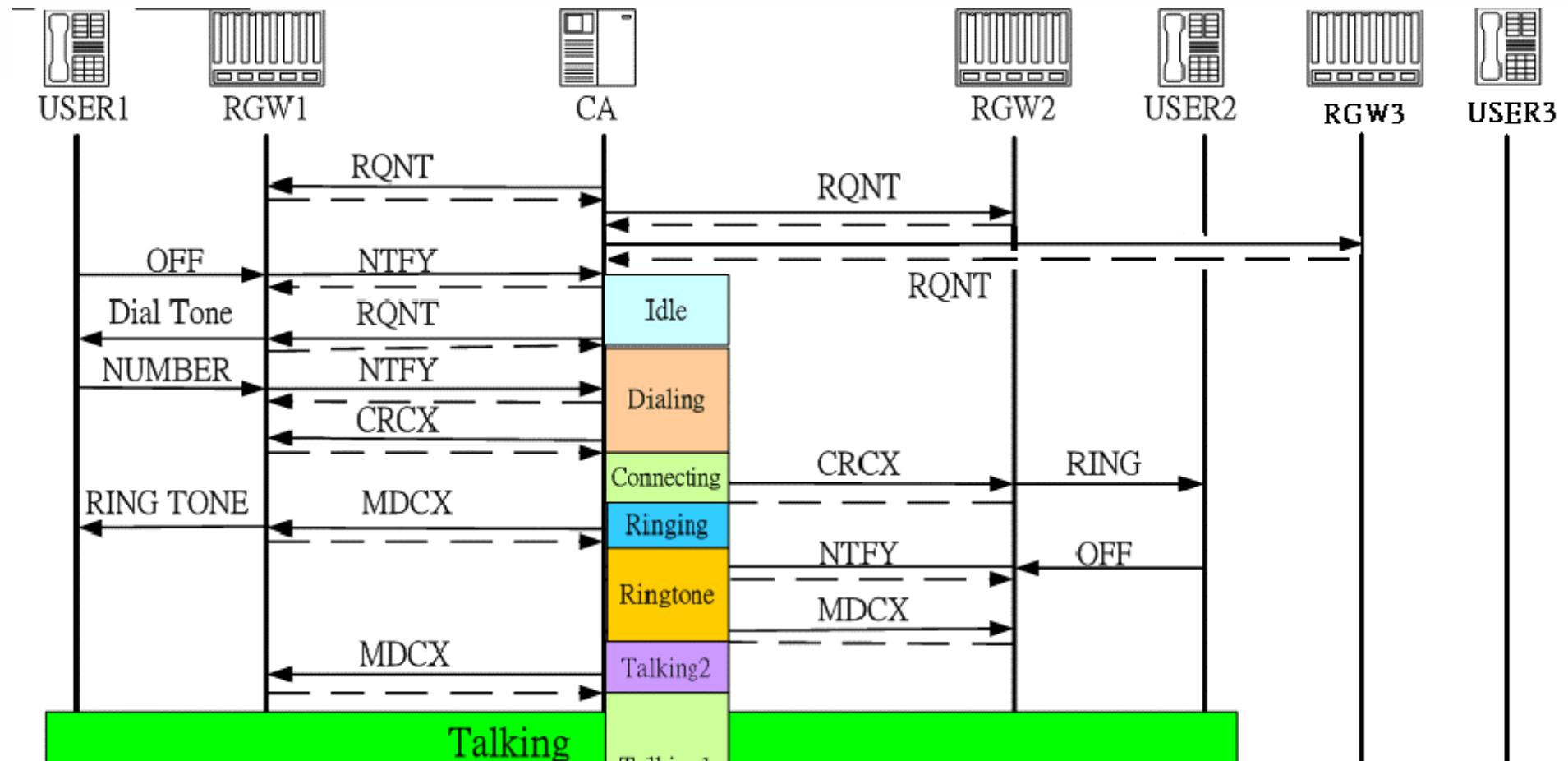
- **Example: 插撥**

- user1 and user2 are talking with each other ,and then user3 call user1.
- Case1:
 - user1 wants to talk with user3 and user2 is hold.
 - user1 continues to talk with user2 after ending the talking with user3.
- Case2:
 - user1 rejects user3 and continues to talk with user2.

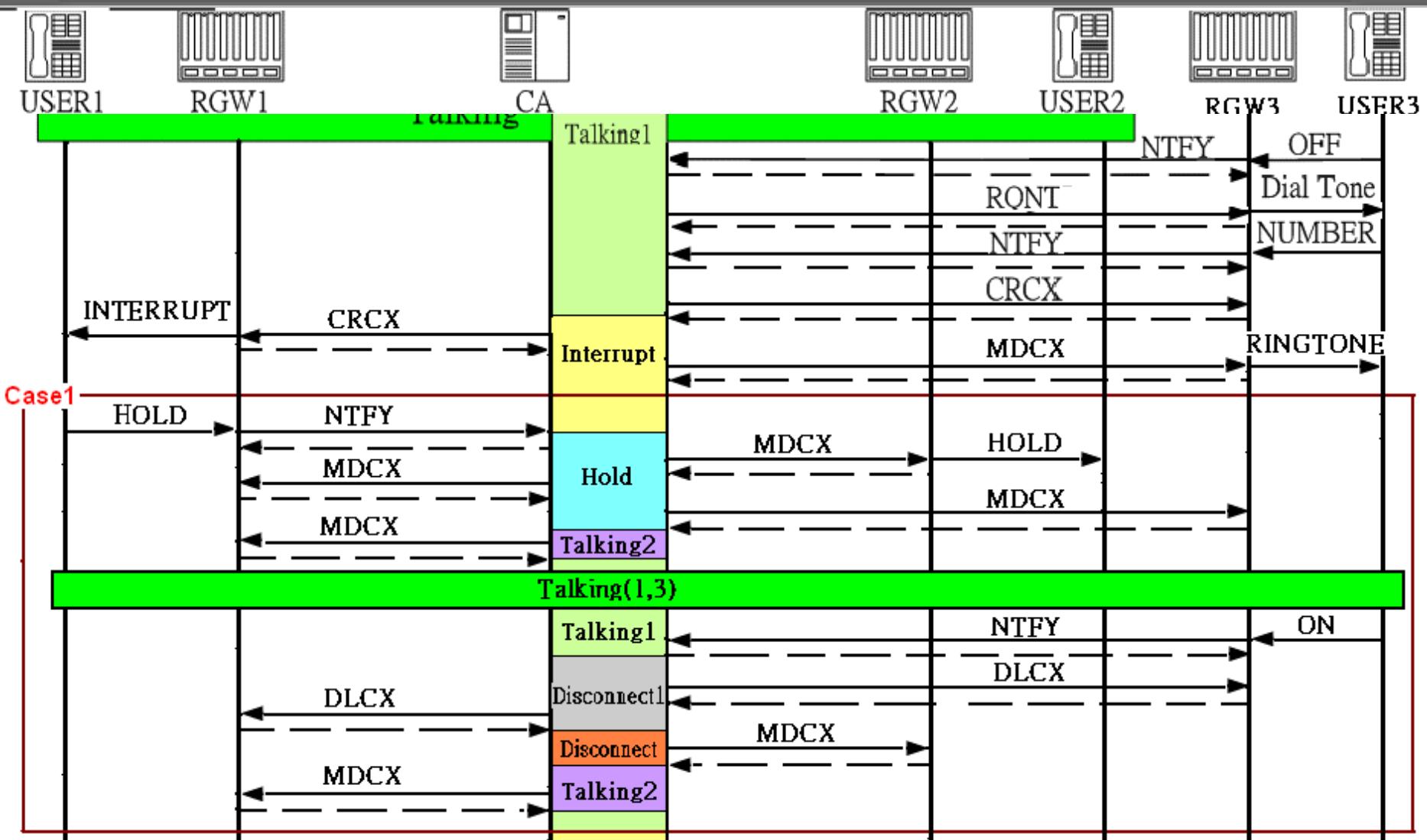
Design New Service (3/7)



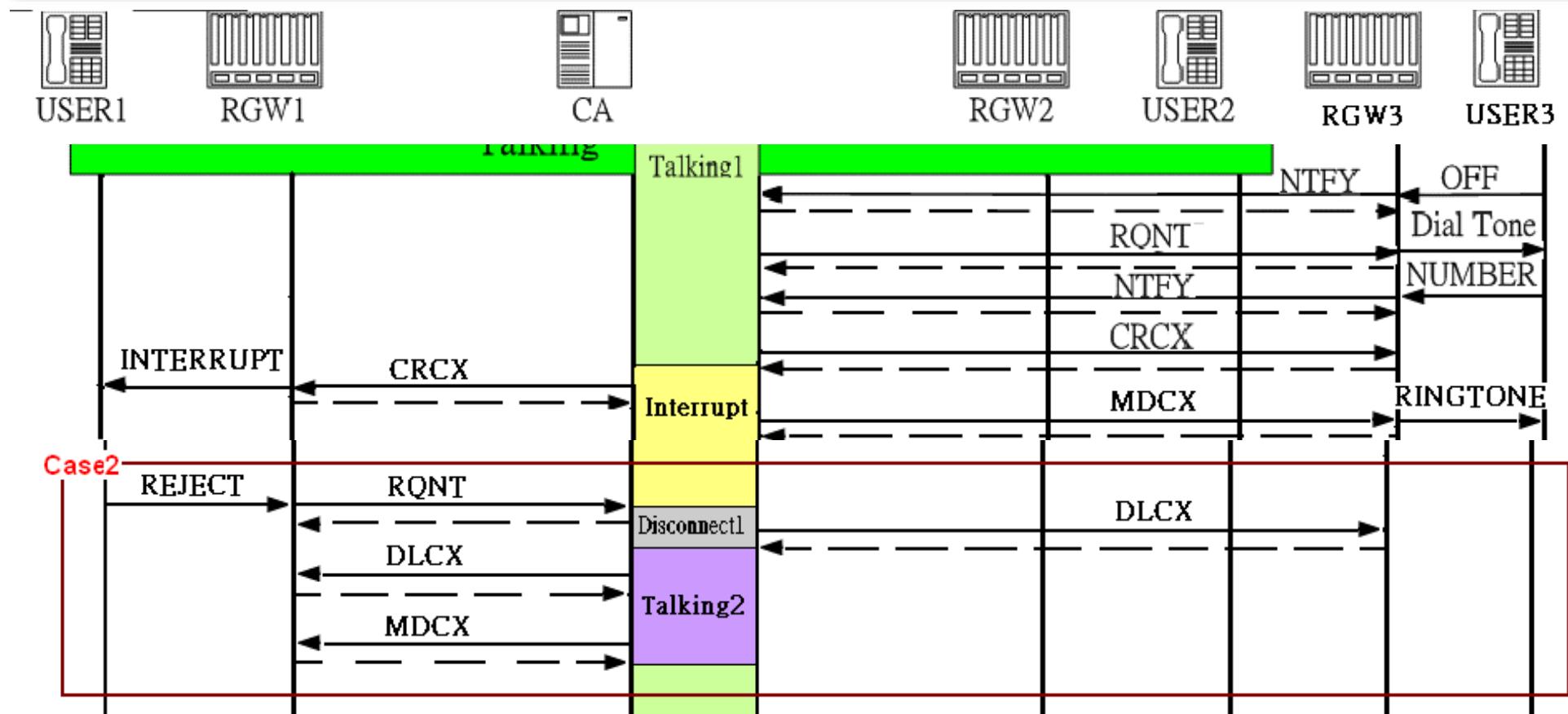
Design New Service (4/7)



Design New Service (5/7)



Design New Service (6/7)



Design New Service (7/7)

- 將CASimd.exe 複製到Voip_v1所在的資料夾中，然後在simulator上就可看到所發展的成果。CASimd.exe是透過socket和simulator的interface 做 communication. 所以simulator上的ip address一定要填正確。
- How to debug:
CA在每個動作完成都會log至file, programmer也可將debug message output 至 file.

- 程式是以C語言所撰寫，開發者需備有Microsoft Visual Studio C++，或其他可編譯C語言的軟體。將casim.zip檔案解壓縮後存於電腦硬碟任一資料夾中，開啟通話代理人程式開發專案CASim.dsw檔案，選擇CASim.c後則可進行新服務的開發。
- 目前測試的結果用Visual Studio .NET 2003會有問題，所以最好使用Visual Studio 6.0.