Job Aid

Platform for Seamless Mobility Applications (PSM1000) Adding and Authorizing Subscribers

Introduction

This training job aid is designed for technicians, operators, CSRs, and other MSO decision makers. This aid details the planning and process to add, authorize, and register Caller ID subscribers for use with the Motorola Platform for Seamless Mobility Applications (PSM1000). This solution has two primary elements: the PSM1000 Application Server, which resides within the operator's network, and a client application that resides on the set-top box.

The PSM1000 server contains the subscriber database, which is used for "blending" the two services (voice and video) as well as housing much of the household "personalization" data such as a contact/address book for the application. The PSM1000 also contains a web portal that subscribers can use to personalize their service or operators can use to monitor or troubleshoot the system. Information about integrating the PSM1000 server/portal is not included in this job aid.

Before a household can begin using Caller ID, the PSM1000 databases must contain certain information about each household. Therefore, after installing the PSM1000 applications, an MSO must extract household information from its own databases and make it available to the PSM1000 Central Database. This job aid provides training on how to accomplish these activities.

Objectives

When you have finished reading this job aid you will understand how to:

- Add Subscribers
- Authorize Subscribers
- Register Subscribers

Each is explained below.

Process Steps

Perform the following steps in the order listed:

1. Install and configure the PSM1000 application hardware and software, which is documented in the Seamless Mobility Applications (PSM1000) Installation Manual. (550362-001)
2. Determine the process and method you will use to add subscriber households.
3. Allow PSM1000 to authorize and register Caller ID.

The last two topics are covered in this job aid.

The Tasks to Add Subscribers

The following are the tasks you must complete to add PSM1000 Caller ID subscribers:

1. Select the method you will use to add subscriber information. See Task 1 below.
2. Understand the information needed to add subscriber households.
3. Create an input data file that contains the subscriber household information.
4. Run a PSM1000 database script utility on the input data file to populate the PSM1000 central database.

Each of these tasks is explained below.

Task 1 - Select the Method to Add Subscribers

There are two possible methods to add subscribers.

- You can add all potential households at a single time (batch) before rolling out PSM1000 /Caller ID
- You can add a single household (as a household subscribes to Caller ID) after rolling out PSM1000 /Caller ID

There are no requirements made by PSM1000/Caller ID for which method to use to add subscribers. The decision is entirely yours—you may even decide to use a combination of both methods. For example, when you initially add subscribers, you may batch a large number of subscribers, and then later add one at a time.

Task 2 - Understand the Information Needed to Add Subscribers

After deciding which method to use, you will need to understand the information you will need to add subscribers. You will need to:

1. Identify which households are candidates to subscribe to Caller ID
2. Understand what information is needed

Identifying Candidate Subscribers

Candidate subscribers are all households who have:

- ☐ Digital Video Cable
- ☐ Digital Voice with Caller ID
- ☐ Supported set tops (See the list below)

The following table lists supported Motorola set tops:

Model #	Firmware	Model #	Firmware
6412 PIII		DCH70 P1	
6412 PII		DCT3416/2300	
6412 PI		DCT1800 P4	
3412		DCT1800 P3	
5100		DCT2000 R8L	
700 P0		DCT2000 R9	
2500 P2		DCT2000 R7	
2500 P0		DCT2000 R2.3M	
6200 P0	16.42	DCT2500 P4	
DCH70 P1		DCT2500 P3	3.18
6208 P0		DCT3080 P1/PPR	
DCT2000 R0		DCT6200 P2	
1800 P1		DCT6200 P1	
DCH100 P1		DCT6208 P2.3	
DCH200 P1	4.11 w/2.65	DCT6412 P2.3	16.42
DCH3200 P4		DCT700 P2.7	
DCH3416 P4		DCT700 P2	
DCH6200 P4	18.34 w/2.65	DCT6416/2300	
DCH6416 P4	18.34 w/2.65	DCT-6200 P0 (64M)	16.42

Use your current business system(s) to determine which households match all of the above criteria.

Understanding What Information is Needed by PSM1000

The PSM1000 /Caller ID central database needs the following information to add subscribers.

- Household ID
- Number of set tops
- The Unit address of each set top
- The set top model number
- The number of phones
- The household phone numbers

Determine where in your current business system the information above resides. In a following task you will use this information to create an input file for the PSM1000/Caller ID central database.

Task 3 - Create An Input Data File

The PSM1000/Caller ID central database needs the information just discussed to add subscribers and to register and authorize the subscription.

To populate the central database, you will need to create a text file containing this data. This text file is input into the central database using a PSM1000 script utility, which is explained later in this job aid.

The following explains how to create this text file.

Input File Format

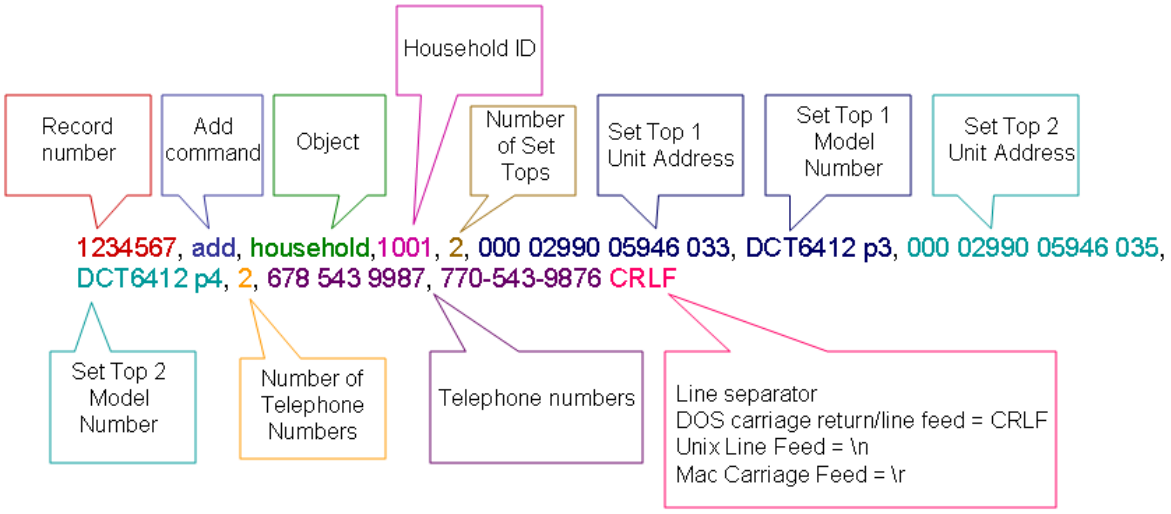
Extracting the necessary data from your business systems may be completed in either of two ways:

- Programmatically
- Manually

Speak with your database administrator about extracting the necessary data from your business database(s) and providing it in the format explained on the following pages.

If you are unable to extract the data, you may have to manually enter the data into the input file.

The input file is a comma separated value (CSV) file and so, each filed value is separated by a comma. The following diagram shows the format in which the data must be entered in the input file.



The following table explains each field shown in the previous diagram:

Field	Description	Options
Record number	Each record number does not have to be unique although it is recommended. The record number is used to correlate with a log file.	The maximum size is seven digits (0 through 9.)
Command	The operations that can be accomplished using this input file. The two commands are “add” and “delete.” “Add” will add one or more records to the central database and “delete” will delete one or more records.	add delete
Object	The entity on which the command will act. For example, if you want to add a household to the central database, you would enter the word “household” in this field.	household settop phonenumber
Household ID	The unique identifier for a household. An MSO may use an existing code to identify households. The code may be called something different than “Household ID.” An MSO may use the existing code or designate a new unique set of characters to represent each household.	The maximum size is 32 characters. Because all other fields in the input file are associated with an individual household the household ID must be unique for each household.
Number of set tops	The total number of set tops that will be authorized to use Caller ID.	The number of set tops can be 0 – 6.

Field	Description	Options
Set top unit address	The IP address of the set top units in the household. Add each set top in the household followed by the set top model number (separated by a space).	Separate the number sequences with a space---do not use periods. No entry if you indicated that there are 0 set tops.
Set top model ID	The Motorola model identifier for each of the set tops.	This is an optional field. Enter only supported set tops. Refer to the list above for supported models. No entry if you indicated that there are 0 set tops.
Number of telephone numbers	Enter the number of telephones in the household.	The number of telephone numbers can be 0 – 6. It is required that at least one telephone number be listed for PSM1000.
Telephone numbers	List the telephone numbers, including area code, for each telephone in the household. Separate each telephone number with a comma.	No entry if you indicated that there are 0 telephone numbers.
Line Separator	The line separator is platform specific.	Each line of the file is to be terminated (denoted) by the CR followed by LF (CR+LF, 0Dh 0Ah).

Note	When creating the input file, note that: 1. Each line in the file indicates a single operation on the central database (i.e. “add” or “delete” objects). 2. Each field must be separated by a comma. 3. All fields are case sensitive.

Naming and Saving the Input File

No matter whether you extract the data from your business database or enter it into a text file manually, when complete, save it with an easily recognizable name. For example, you may want to include the date the file was created in its name.

Task 4 - Run the PSM1000 Database Script

The following explains how to run the input file you created to populate the PSM1000 central database.

Step	Action
1	Log in to the server that holds the PSM1000 central database.
2	Navigate to the **PDP** directory ***/home/psm1000/dbutil/pdputility-1.1***
3	List the sub-directories: **Sub-directory** — **Contents** Bin — Contains the PDP script utility Conf — Contains the configuration files Inputfile — The sub-directory to which your input file will be copied. Lib — Contains additional files Log — Contains any log files produced
4	Copy the input file that you created to the inputfile sub-directory.
5	Navigate to the bin directory. This contains the PDP script utility.
6	List the directory to see the file **pdputil.sh**, which is the name of the PDP script utility.
7	Run **pdputil.sh** on your input file, as shown here: ***# ./pdputil.sh/home/psm1000/dbutil/inputfile/<input file name.txt>***
8	When this is complete, the central database is populated with CID household information. The central database provides this information to the regional database the next time they synchronize.

Note	Running this utility (with the input file) builds multiple tables in the PSM1000 central database, by which the household, phone, and set top information is populated. One of the central database tables will be updated to include a “1” for all households added. The number “1” indicates that the household is authorized for Caller ID

All Households or One?

As you may recall, you can add all potential households at a single time or you can add a single household (as they subscribe to Caller ID).

Use the same script utility to add all or only one household. If you are adding a single household, your input file will contain only one record.

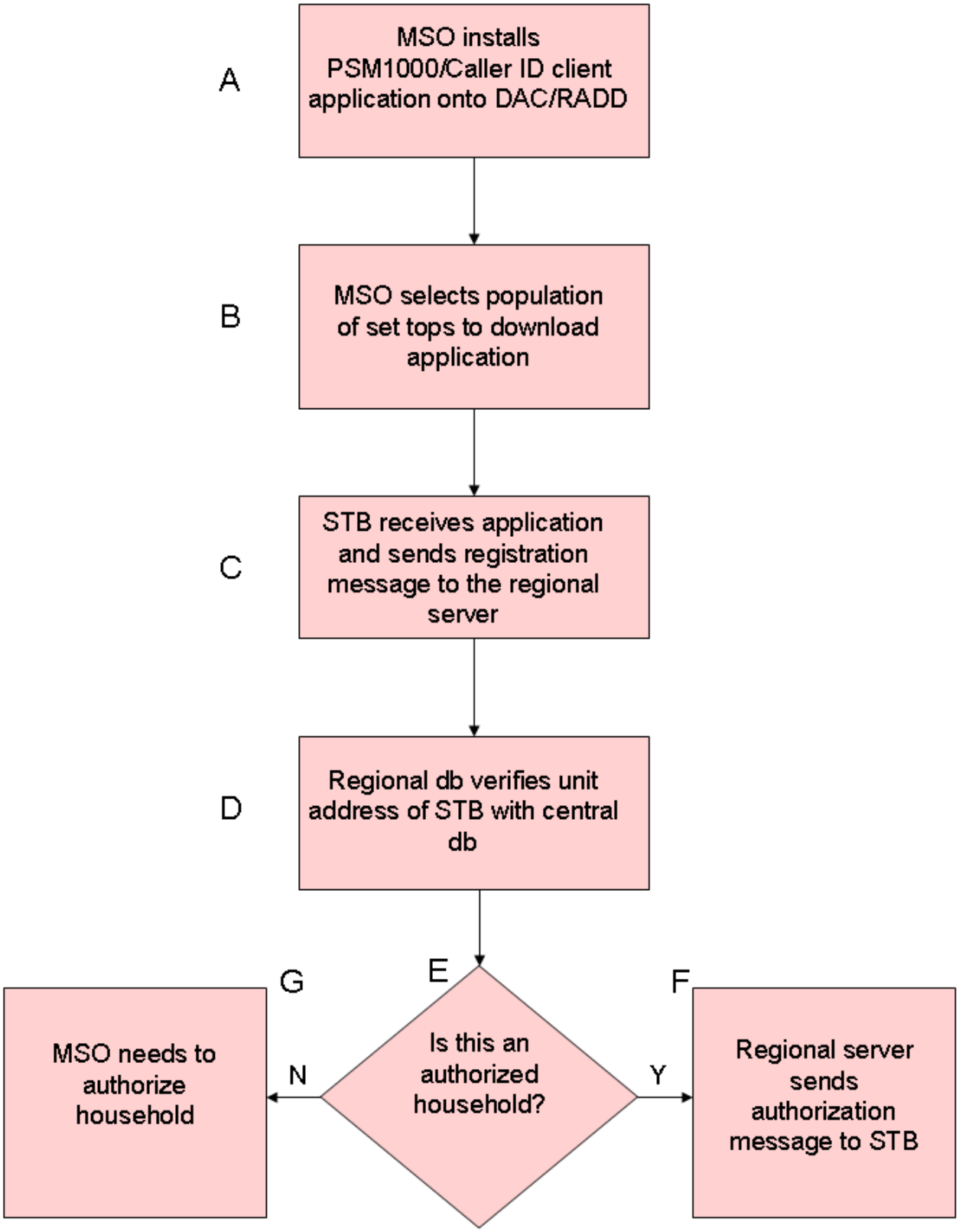
Authorizing and Registering Subscribers

"Authorizing" refers to populating the central database with households who have digital video cable, digital voice with Caller ID and a supported set top. There are two times when you can authorize households:

- You can opt to authorize subscribers by populating the central database with all households who have met the criteria. Each household is identified as "authorized" in the database. You then download the PSM1000/Caller ID application to **only** those set tops.
- You can download the PSM1000/Caller ID application to **all** set top boxes and then authorize a household when it signs up for Caller ID. You do this by adding subscribers as they subscribe, using the steps explained in Tasks 3 and 4 above.

Registration occurs automatically when certain conditions are met---this is explained in the table following the next diagram.

The following diagram shows how the PSM1000/Caller ID set top application is registered and authorized.


A
MSO installs PSM1000/Caller ID client application onto DAC/RADD
B
MSO selects population of set tops to download application
C
STB receives application and sends registration message to the regional server
D
Regional db verifies unit address of STB with central db
E
Is this an authorized household?
G
N
MSO needs to authorize household
F
Y
Regional server sends authorization message to STB

Understanding Authorization and Registration

Action	Description
A	The MSO obtains the PSM1000/Caller ID client application from Motorola (either on CD or through Digital CM) and installs the application on the DAC/RADD carousel server.
B	This depends on how the MSO plans to manage potential Caller ID subscribers. As you remember from Tasks 1-4 above, they may opt to populate the PSM1000 central database with all potential subscribers or add a household when it subscribes. As shown in this step, the MSO selects the population of set tops to which to download the application. The MSO may download the application to all potential households, all households, or only when a household subscribes to Caller ID.
C	No matter how or when the MSO completes the previous actions, when the application downloads onto the STB, it sends a “request for registration” message to the regional server.
D	The regional database receives the message. When it next synchronizes with the central database it checks that the unit address of the STB is found in the household information that was earlier populated.
E	A decision is made based on whether or not the unit address of the STB is found in the central database.
F	If the unit address of the STB is found in the central database, the regional database sends an authorization message to the STB. The customer is now ready to begin using Caller ID.
G	If the unit address of the STB is not found in the central database, the MSO needs to add the household to the PSM1000 central database. The above process repeats until the STB is authorized.