

# **The SMS2 Management Manual**

**January 2005**



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# Introduction

This manual has two purposes. First, it provides a guide to the workings and logic of the SMS Call Scheduler, henceforth called the SMS2. Second, this manual provides documentation for Project Leads, who have the primary responsibility for the SMS2 specifications and parameters for their projects, and other Managers, who may be called upon to execute a Project Lead's decisions and who need to track sample activity during a shift.

To facilitate these dual goals of describing the functioning of the SMS2 and providing guidance to managing Survey Services Lab (SSL) studies, we have broken the manual into four distinct components. The first is a short overview – a definition, really – of the SMS2. This is followed by a description of specifications and parameters that need to be in place at the beginning of a project, as well as ways in which they can be modified, if necessary, during the field period. Next, we illustrate how to create these settings in the SMS2 user interfaces. The third section shifts the focus to tasks that Managers need to manage during different study phases. Again, we illustrate how to accomplish these tasks with the SMS2 interfaces. The fourth section emphasizes tasks that the Manager may need to accomplish at the shift level, mostly involving availability and the proper assignment of sample. At the end of Chapters 2, 3, and 4, we provide a checklist designed to provide a quick overview of SMS tasks that we have identified to set up a project, manage it during different study phases, and manage it on a daily basis, respectively.

This is the first manual to describe the functioning of the SMS2, and as such it is necessarily incomplete. We are extremely interested in your feedback on how to further improve the manual, and ask that you contact your supervisor with any suggestions you may have.

Sincerely, the SMS2 Team

Lloyd Hemingway, Dave Dybicki, Andrew Hupp, Peter Sparks, Grant Benson.



## **Chapter 1: The SMS Call Scheduler**

The purpose of the SMS Call Scheduler is first and foremost to automate several of the tasks that Team Leaders and Production Managers have had to manage manually until now. In brief, the purpose of SMS2 is to distribute sample to interviewers electronically. Automatic distribution does away with several significant shortcomings of managing paper coversheets. These include occasional misfiling of coversheets – and therefore missed appointments or worse yet, lost sample – burdensome sorting of sample according to client or study requirements, lost interviewer time due to repeated review of sample distributed to them, lost Team Leader time associated with setting up interviewer packets, and so on.

In spite of these problems, manual sample distribution has long been considered superior to an automated system by its users, because manual management permits Supervisor intervention on a daily or even sample-line level. After all, managing sample can be as much art as science.

We believe that SMS2 retains all the flexibility that Supervisors need to manage a study, while automating many other tasks. With SMS2, the Manager can manage sample at the daily level, the interviewer level, and even at the sample-line level. If there are cases that should go just to one specific interviewer – or group of interviewers – that task is easily accomplished. If a Manager believes it beneficial to focus on resistant cases for the day, that too is easily accomplished.

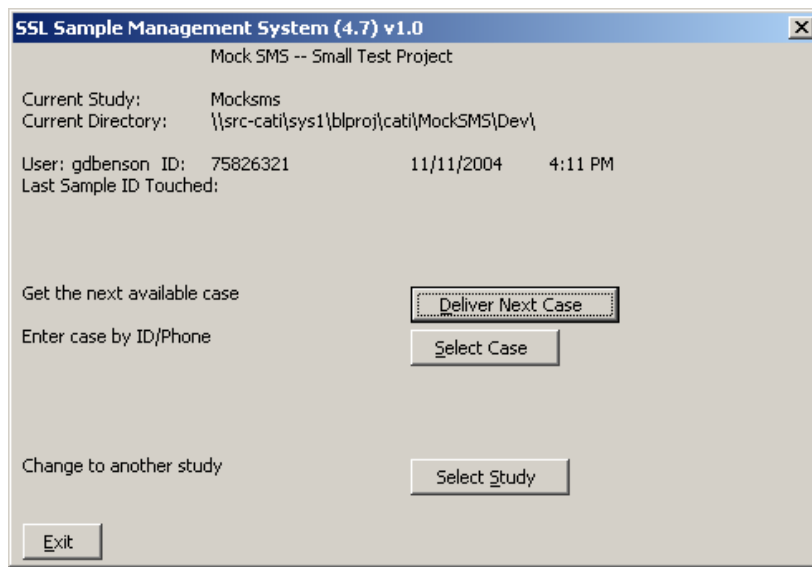
There is a learning curve associated with the implementation of the SMS2, at least from the Manager perspective. That is, the system has been tested and it definitely *works!* However, it may not always work the way that the Manager *expects*. One purpose of this manual is to bridge the gap between the expectations and reality of the SMS2. The other purpose is to demonstrate some ways in which the SMS2 may be put to use.

### ***Interviewer Interaction with the SMS2***

Above, we noted that Managers do have a learning curve with the SMS2. In comparison, interviewers have little new to learn. We have added a few additional features, such as the ability to review a case summary of a sample line in a way that shows why the sample line got routed to that specific interviewer at that particular time. Also, the interfaces for assigning result codes and designating appointments have been modified to coordinate with the call scheduler. These features are described in detail the Interviewer Quick Start Guide to SMS2.

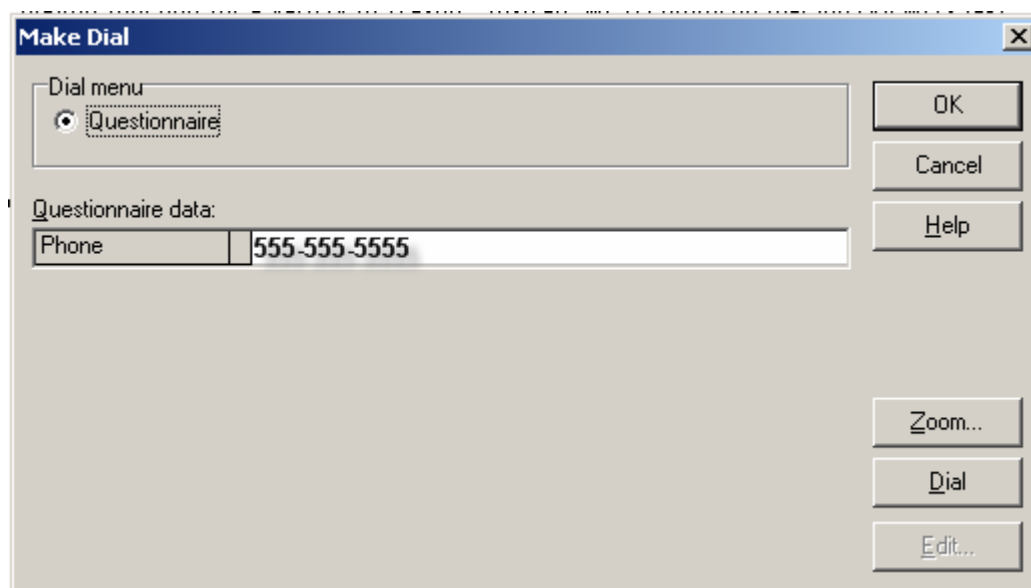
When an interviewer enters a project, he or she is prompted to either “Deliver Next Case” or “Select Case” (see Figure 1). If the interviewer clicks on the “Deliver Next Case” button, the next available case, based on project specifications that have been set by a Manager, will be delivered.

**Figure 1: Interviewer Case Delivery Interface**



The interviewer will then be brought to the “Make Dial” screen. While this screen is designed to be used to have the computer dial the sample line, we have deactivated the dialing function for a variety of reason. Instead, we recommend that interviewers take advantage of the “Zoom” button.

**Figure 2: Make Dial Screen**



The “Zoom” button will display a short summary of the case (the Case Summary Screen), including which interviewer or group the sample line was designed to, time difference between the sample line and Ann Arbor, the four most recent contact attempts, and the first contact attempt. When the interviewer is satisfied that he or she has understood the information on the screen, he or she will simply press “Close,” “OK” on the Make Dial Screen, and the Coversheet will be delivered.

**Figure 3: Case Summary Screen**

The screenshot shows a window titled "Case Summary" with three main sections: Case info, Appointment info, and Call info.

**Case info**

Key:	30918
Phonenumber:	555-555-5555
Active:	from 4:00 PM to 8:55 PM
To group:	GenEng
To interviewer:	ahupp (Expired)
Time difference:	- 1:00

**Appointment info**

Appointment type:	Date and time
Appointment time:	Thursday, November 11, 2004 / 4:00 PM
Made by:	ahupp

**Call info**

	Who	Date	Time	Dials	Result
Last call:	ahupp	11/11/2004	12:00 PM	4	Appointment
Last minus 1:					
Last minus 2:					
Last minus 3:					
First call:	ahupp	11/11/2004	12:00 PM	4	Appointment

At the bottom of the window are three buttons: "Data...", "Close", and "Help".

Once work on that sample line for that call has been completed, the interviewer can immediately request a new case. The type of case that the interviewer receives is controlled by sort orders and preferences set by Project Managers and Team Leaders.

## ***Sample Distribution Algorithm Basics***

In general, sample is distributed based on how lines are sorted in the “Daybatch.” A Daybatch is simply the prioritized listing of all cases that are available for automated delivery at any given point in time. The Daybatch is typically created automatically overnight, but may be recreated (or “run”) by a Manager at any time when there are no interviewers working sample in the project.

When a Daybatch is run, the SMS2 searches through all available sample and determines which sample lines should be included for distribution based on criteria specified by the Manager. For example, let’s say that there are 500 non-finalized sample lines, of which 300 have been called and received a resistant response in the last two days. If the Manager has indicated that resistant calls should not be recontacted for a week, then only 200 cases will be available in the Daybatch. These 200 cases will be sorted according to various built-in and Manager-specified preferences.

The SMS2 has a few built-in settings that affect the order in which sample is sorted for distribution. Basically, appointments set by Supervisors are always put to the top of the Daybatch. Next come hard appointments, missed hard appointments (known to SMS2 as “medium appointments”), busy dials, soft appointments, and finally all other cases. These built-in settings are based on “treatments” that are triggered by the most recent result on a case. There are many ways in which Managers can affect distribution both within and around these treatments.

One way is to change the setting or treatment of a sample line such that it has an appointment set by a Supervisor. That will bring the case to the top of the distribution order. Another way is to modify the way in which sample lines are sorted within these treatment groups so that, for example, cases with fewer attempts can be distributed first. Third, repeat calls on cases can be modified – including busy calls, non-honored appointments, and answering machines – so that they reappear more or less frequently. These are but some of the many ways in which sample distribution may be affected.

The most difficult part of managing will be to trust that SMS2 distributes cases efficiently in accordance with the study specifications. The second most difficult part will be to intervene appropriately, depending on study specifications or changing phases of the study. These will be described in greater detail throughout this manual.

## ***Overview of the SMS2 Supervisor Interface***

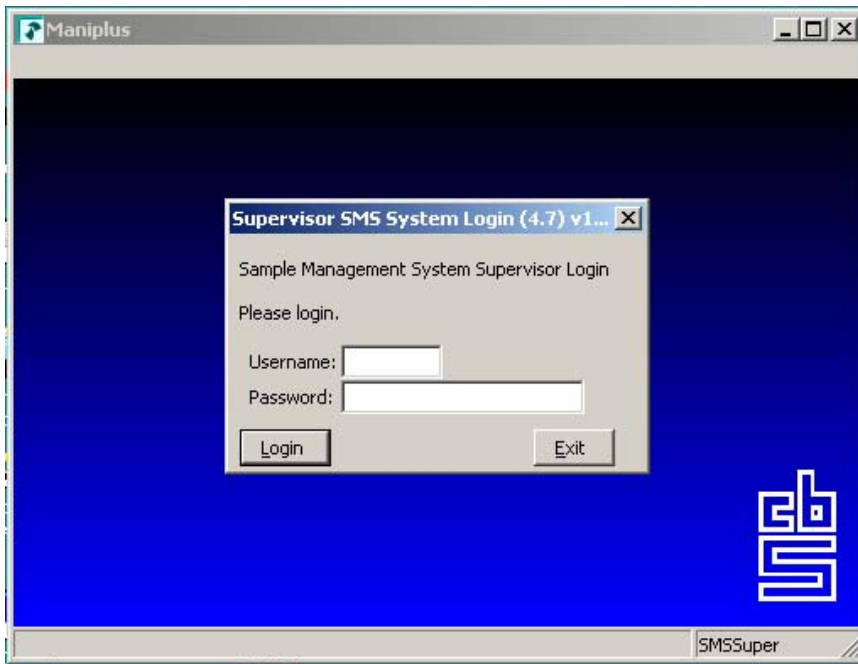
Supervisors and Team Leaders access SMS2 through the icon on the Windows desktop by double-clicking on the Blaise Logo graphic.

**Figure 4: SMS2 Desktop Icon**



This will launch the SMS System Login Window. The user will be instructed to enter his or her username and password in the appropriate fields. Once these are entered, the user should click on the <Login> button to submit the information.

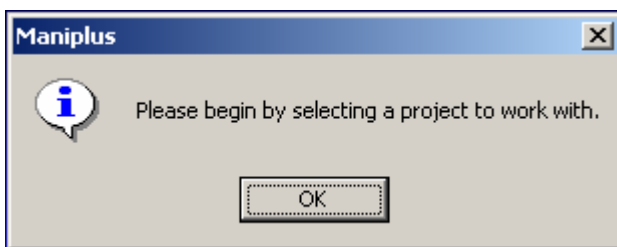
**Figure 5: SMS System Login Screen**



## Selecting a Project

Once a Supervisor has logged in, he or she will be prompted to select the project for this session.

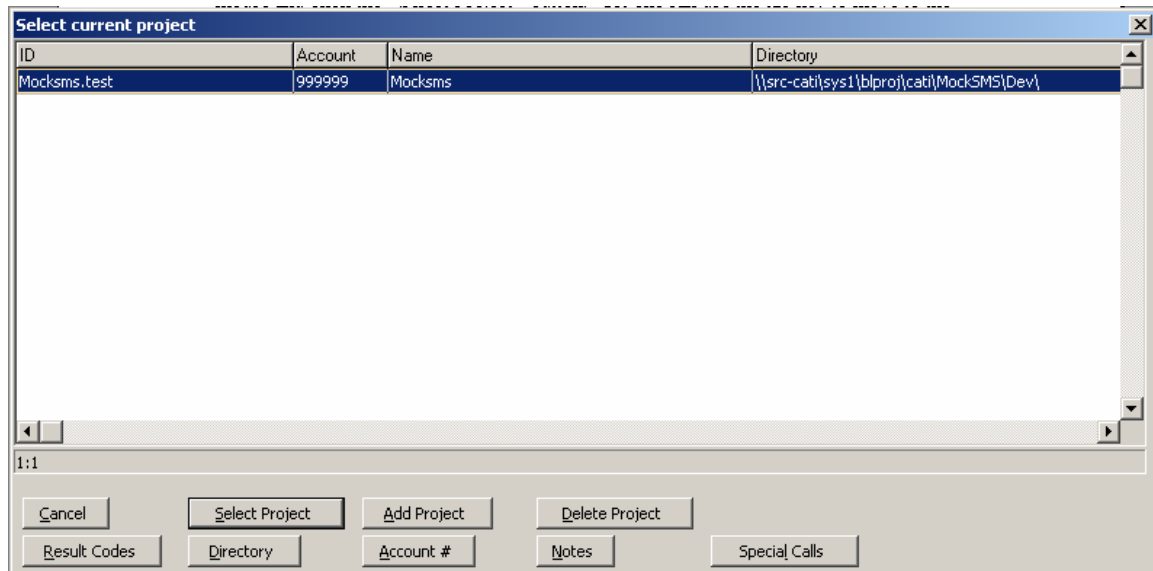
**Figure 6: Project Selection Pop-Up**



There are two ways to access a study. One can highlight the desired study using the mouse and click the <Select Project> button. Or, one can use the tab key to move to the

grid, then use the arrow keys to move the highlight bar to that project and press <ENTER> to select the project.

**Figure 7: Selecting a Project**



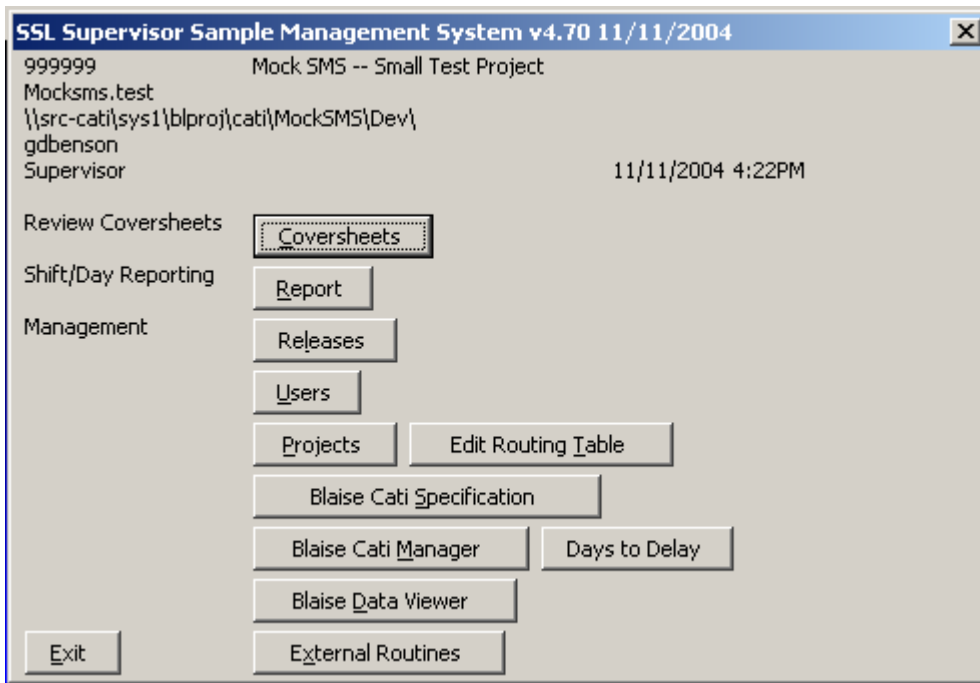
Note that while there are additional buttons here, including adding or deleting a project, these are typically not used by Team Leaders or Supervisors, except in collaboration with the programmers.

## Supervisor Main SMS Window

The SMS Supervisor application relies on a main window or user interface to help guide supervisory staff through the SMS' tools. In subsequent chapters and sections of this document, the individual elements in this window will be explored and discussed in greater detail.



**Figure 8: Supervisor Main SMS Window**



SMS2 will utilize the now familiar SMS supervisors 'main' dialogue window. This interface is based on the standard that has been in use since SMS was first released to the SSL in 2000. While new features have been added, the overall look and feel has not changed.



## Chapter 2: Setting Up a Project

This chapter describes items that the Project Lead needs to discuss and agree with the client on prior to launching a project. These items include the setting of SMS2 specifications, or “parameters,” that will remain unchanged for the period of the study *unless* the **client** specifies otherwise, as well as the establishment of users, and setting of study goals. It also includes all other settings that may be adjusted throughout the study, but that need a starting point. Where subsequent chapters focus on just a few parameters, this chapter includes a discussion of all the major SMS2 parameters.

This chapter begins with a description of each of the parameters and their impact on the study. It is followed up with a detailed “how to” for modifying the parameters. Finally, there is a check list summary of each item that must be addressed prior to the study initiation.

The purpose of this structure is to make the process more transparent to users of this manual and therefore to make it more user-friendly. However, as a result of this structure where the importance and impact of each aspect are first discussed, followed by instructions, then a checklist, there will be some inevitable duplication from one section to another. In fact, while we have generally separated tasks that need to be accomplished at the outset of the study from those that are only tended to periodically and daily, this does not mean that these are mutually exclusive. As a result, there is some duplication between sections of the manual as well.

## **Study Specifications**

This section describes study specification that must be set prior to the launching of the study, and areas where they impact the functioning SMS2 parameters. In many cases, it is easiest if the programmer sets the parameter setting when he or she loads the project, particularly if these may be duplicated from other studies.

This is not intended as a comprehensive list of everything that Managers need to do to set up a project. Instead, the focus here is on the functioning and impact of SMS2 on key aspects of setting up a study. We are hopeful that the checklist at the back of this section will assist the Managers in establishing and managing SSL projects.

## **Survey days**

The dates during which interviews can be conducted are known as “Survey Days” in SMS2. This includes a start date, an end date, and excludes dates in between when interviewers will not be working, such as holidays.

The impact of survey days is concretely to limit when interviewers can set appointments. Interviewers will not be able to set an appointment outside of the survey days. This can work in tandem with crew parameters (see Crew Parameters, page 15), which constrains appointments to times when the SSL is open and staffed. In addition, by establishing which days can be worked and which ones cannot, the Manager will find it easier to set realistic daily, weekly, and study goals.

Managers must review this setting at the start of the study period, making sure that the settings exactly match when the study is scheduled to begin and end. Also, any day when the SSL will be closed must be excluded in from the study days.

Managers should NEVER change the survey day settings without the approval of the Project Lead and the client. If such changes are approved, the Survey Days need to be modified in the SMS2 specifications immediately so that interviewers can set appointments according to the calendar of the new field period.

## **Crew Parameters**

Crew parameter settings have two effects on the SMS2. First, crew start and end times constrain when appointments may be set. Second, multiple crew sizes during a day impact the distribution of soft and medium appointments.

There are two sets of crew parameters: Global and specific. Global parameters may be used to set the start and end time of most days, usually weekdays. Each specific date that deviates from the global parameters need to be set separately, preferably at the start of the study, to enable appointment setting during times and days that interviewers will be available to work sample.

Thus, the major importance of crew parameters is to establish when the first and the last call may be made on a sample line, in the time of the SSL. These can be further modified by specific time zone (see Call limits, page 20). In order to ensure that interviewers do

not accidentally set appointments for a time when no one is available, thereby guaranteeing a missed appointment, it is important that both global and specific start and end times be set up at the beginning of a study.

A secondary importance involves the distribution of soft and medium (i.e., missed hard) appointments. Managers may arrange for up to 5 different crew sizes and start / end times during any one day. Since the appointment time for these cases is actually a range of times, the program is set up in such a way as to distribute them relative to the availability of interviewers. Thus, the scheduler will attempt to distribute soft and medium appointments evenly across interviewers according the number of interviewers entered into the crew parameter for that day and time.

Depending on the study-specific needs, a priority may be set on honoring soft and medium appointments over working other sample, or a preference may be set on getting through the sample. If the preference is on getting through the sample and lowering the urgency of spreading soft appointments across interviewers, then Supervisors should set the expected crew size to the lowest number of interviewers expected to show up during the specified shift. In other words, if there is only one crew parameter set for the day, it should be set for the fewest interviewers working sample throughout that day. This will make soft appointments made during the same day parts available immediately to whichever interviewer may be calling for the next sample line. By contrast, if the emphasis is on spreading soft appointments across as many interviewers as possible, then the crew size should be set to the largest number of available interviewers on any particular day.

In general, it is recommended that a middle approach be implemented, particularly if only the global crew parameters are used for the most part. That is, select some middle number of interviewers between the most interviewers available during the day and the fewest. Focus on the number of interviewers who will be available for most of the calling day, and enter that number into the crew size.

If there is a large difference between the number of callers scheduled at different times of day, as is often the case with household-based surveys on weekdays, then the better course would be to set different crew parameters for daytimes and evenings.

Global settings must be set up at the start of the study period. Managers should monitor and review crew settings on a daily basis, based on the scheduled staff size.

## **Sample Size and Daybatch Size**

It is critical that sample size, reserve sample size (if any), and replicate number be established very early in the process of setting up a project. These have a direct impact on study goals and study length, as well as staffing needs. Sample sizes are generally determined based on the cost of the survey, expected response rates, working number rates, and eligibility rates. Typically, these are all contractually established well in advance of any study initiation. However, it may not be clear how the client expects sample to be released. He or she may wish to have all the sample worked through as quickly as possible (sometimes known as a “quick take”), or he or she may wish to have sample worked evenly throughout the study period in such a way that a quarter of the

interviews are completed the first quarter of the study, half the interviews by the mid-point, and so on (sometimes known as a “square take”), or some variation on either. Each of these has significant cost implications and therefore many clients prefer to leave the actual distribution of sample up to the Project Lead. The point is that the Project Lead should not assume how the client wishes the sample to be released, but instead negotiate an agreement based on feasibility and cost.

Client expectations for releases and interview completions is directly relevant to replicate releases and daybatch sizes. Daybatch size specifies the number of sample lines that are available for delivery at any given point in time. Technically, there is no practical upper limit to the daybatch size. That is, it is possible to load 10,000 sample lines into a daybatch. This would mean that if we have 50 interviewers working at all times from 9:00 AM to 10:00 PM, every interviewer that day could make up to 15.4 calls per sample line before they ran out of sample, assuming that the parameters were set up to permit this many calls on a single case in a day.

However, if there is significant network congestion on any given day, then having more than 6,000 lines available in a single daybatch (that would be 9.2 calls per sample line if there were 50 interviewers working every hour from 9:00 AM to 10:00 PM) could slow down the call scheduler somewhat. Therefore, we generally recommend that the daybatch size be set to a maximum of 6,000 if there are more than 6,000 sample lines. Otherwise, it should be set to the maximum number of lines available for the project in total.



By setting the daybatch to 6,000, the Manager instructs the SMS2 to sort through all the available sample lines and pick the 6,000 cases “most desirable” according to whether or not there is an appointment on the case and whether there are other sort orders or preferences that have been specified by the Manager. That is, if there are 9,000 active cases, and the Supervisor has specified a priority on working through all lines with the fewest attempts first (see Sort Orders and Priorities, page 23), then the 3,000 lines that have no appointments and most calls will not be available in the daybatch. The lines not in the daybatch will NOT be delivered when an interviewer asks for the next sample line. However, they can be reactivated manually by a Supervisor or by an interviewer specifying which sample ID or phone number he or she wants.

If the client specifies a requirement for a quick take or a modified form of the quick take, then this can be managed by setting priorities on particular replicates and limiting the daybatch size. By limiting the daybatch size, the Manager essentially compels interviewers to continue to work the same sample lines throughout the day, rather than go on to fresh cases, depending on the number of available interviewers, their calling habits, and the relative size of the daybatch. Daybatch settings may be modified with Production Manager approval on a regular basis.

## **Reserving Sample for Specific Interviewers or Groups**

Sample will sometimes be provided with a known characteristic that impacts either likelihood to participate or constraints on who can work the sample. For example, a client may have sample that they wish only men or only women to call, based on an

experimental treatment. Each of these must be identified *before* the sample is loaded. The assigned SMS programmer should be made aware of the flag used to identify the sample and the group or interviewer to which that sample should be routed.

Sample type and routing to specific groups of interviewers, such as Spanish-language sample, tracking sample, etc., must be set prior to the release of any cases, if applicable. If this is not set in advance, the sample will by default be made available to the general English group, and post adjustments will be difficult. By contrast, if a group is misspecified in advance and loaded in error, it will be very difficult to move sample out of the routing that assigns cases to individuals.

## **Call limits**

Call limits are a key concern in limiting costs. However, there is also a potential impact not only on response rates by limiting calls, but also on bias, if, for example, non-respondents are significantly different from respondents on key variables.

It is essential that the client understands the potential impact to both cost and quality of the survey if limits are set on total calls on a sample line. It is up to the client to assume the risk of limiting attempts on the sample. The data on the relative impact of limiting calls is mixed. Clearly, some key variables are affected more significantly by limiting calls than other variables, but which ones and why is still unclear.

Keep in mind that the SMS2 differentiates between “dials” and “calls.” Generally speaking, multiple attempts with the same result code on the same day<sup>1</sup> are considered one “call” even if there were multiple attempts (or “dials”) on that case during that day. The actual relationship between “dials” and “calls” is specified by the Manager on a periodic basis with settings for the scheduler parameters, number of answering machine calls in a day, intervals between busy calls, and appointment intervals.

Generally speaking, SRO currently works with a 25 call limit as its base rate, all things equal. This means that each line *minimally* gets called 25 times before it is excluded from the daybatch, more depending on how the scheduler parameters are set (see Scheduler Parameters, page 25). However, Supervisors should work with the SSL Manager and others in setting this limit, depending on budget, staff, and response rate goals.

Once a sample line gets more calls than the limit set by the Supervisor, it is automatically excluded from the daybatch. This means that it is neither coded out, nor available for further work until one of two things happens. Either the limit on number of calls per line is changed to a higher number, or else the supervisor forces the line back into the daybatch.

Call limits should be modified only after consultation between the Project Lead and the client.

---

<sup>1</sup> To complicate the matter further, a “day” is interpreted as a calendar day, even if multiple daybatches are run.

## **Days Between No Answer Calls**

SMS2 allows for the exclusion of sample lines that result in no answer on a given day from the daybatch. That is, if a certain number of attempts (“dials”) during a calendar day result in no answer, then that sample line could be excluded from a fixed number of future daybatches. The number of dials that constitute a call is given in the scheduler parameters.

The purpose of excluding no answer calls from the daybatch is to facilitate the process of working through other sample lines that may be more likely to yield completed interviews. The number of days may be set to 0 or 99 or any number in between. If it is set to 1 and attempts on a sample line result in no answer on a Tuesday, then the sample line will not be available for inclusion into the daybatch until Thursday. To make the sample line available the next day (Wednesday), the days between no answer calls must be set to 0.

Barring extraordinary circumstances, SRO recommends that studies set their days between no answer calls to zero (0) throughout the study period.

## **Days Between Answering Machine Calls**

Like the days between no answer calls, SMS2 permits the exclusion of cases that result in getting an answering machine from the daybatch for a specified number of calendar days. Together with the “Do not allow multiple same day answering machine calls” (see

Scheduler Parameters, page 25), the purpose of this setting is three-fold. First, it permits the prioritization of other types of cases that may be more likely to yield contact with a human on the other end. Second, particularly at the beginning of a study, it is worth giving contacted households the opportunity to call back in response to a message. Finally, by excluding answering machine calls from immediate further contact attempts, we reduce the chance that interviewers will leave multiple, consecutive messages on a respondent's answering machine. Cases can be excluded for any number of days between 0 and 99.

As a general rule, SRO believes that surveys should begin by excluding answering machine calls from the daybatch for one day, in part because interviewers generally do not leave messages on the first attempt. Thus, if an interviewer reaches an answering machine on a Tuesday, that sample line will not be available for daybatch inclusion until Thursday. During the end game of a study, the days between answering machine calls should be set to zero (0).

## **Sort Orders and Priorities**

One of the most powerful tools that SMS2 offers is the ability to affect sort orders. If sort orders are used, then a new daybatch will not only select cases for inclusion based on the sort orders (assuming that the daybatch is smaller than the number of available sample lines), but it will prioritize sample lines according to the sort orders. Multiple sort orders (or “nested” sort orders) can be used at the same time. Only two things are necessary to make the sort orders work: The “Use Sort Order” option must be selected, and the

variable that is to be sorted on must be a field that is sorted either ascending or descending. So if you choose to sort on a field for which some cases have a missing value, these cases will ALWAYS have lowest priority. Moreover, if the interest is in prioritizing cases with a value of “2” in a variable that has the values of “1”, “2”, and “3”, then a new variable must be created which recodes the “2” either as a “1” or a “3”. Sorting only works in ascending or descending orders.

Sorting works within treatment categories. Given one hard appointment, one soft appointment, and three general call backs, the hard appointment will continue to receive the highest priority, followed by the soft appointment, followed by the general call back with the highest sort order value specified by the supervisor.

The SMS2 can sort on any variable in the SMS.bla, which is the database that contains the preloaded values, call history information, and special flags (such as contact made or initial refusal) for all cases. The list of these variables is available through the “Day batch” tree. If multiple variables are selected for sorting, the Supervisor must indicate which variable has first priority, which has second priority, and so on. These are set by arranging the order in which the priorities appear.

While sort orders are extremely powerful, they can also have a significant negative impact on a study if used incorrectly. Unless there are specific client requirements, we generally discourage the use of sort orders. However, there are occasions when it is reasonable to implement sort orders. This includes times when the client may wish to prioritize completion of lines in a particular stratum, or when the client requires a quick

take, and wishes uncalled lines to be prioritized over lines with multiple sample lines.

Sort orders must be implemented by the Project Lead after consultation with other SRO Leaders and/or the client.

## **Select Fields**

The SMS2 regulates which cases are available to be worked through the “select fields” function. This specification is always set to “on.” Minimally, it ensures that (a) only released lines are delivered to interviewers, and (b) only non-finalized lines are delivered to interviewers. Unless there are overriding reasons for excluding some released, non-finalized sample lines from delivery to interviewers, the default settings should never be modified by Managers.

## **Scheduler Parameters**

The scheduler parameters are used to set the relationship between “dials” and “calls”. At the most basic level, a “dial” is an attempt. Every time an interviewer picks up the telephone and makes an attempt on a given sample line, it is counted as a dial.

By contrast, a “call” is a set of logically related dials (or attempts) during one calendar day (not daybatch). If the result of the dial is a final result such as an interview, an appointment, a non-sample, a final refusal, or other final non-interview, then that dial is identical to the call. That is, one dial is one call. On the other hand, if the result of the dial is something else, like a busy signal or no answer, then there may be several dials

before one call is counted, depending on settings in the scheduler parameter. This is calculated by the SMS2 based on whether a sample line is characterized as “active” or “not-active.” Non-active cases have final result codes, or they have a busy signals, and appointments. Busy signals and appointments have their own special settings that associate dials to calls.

The purpose of differentiating between dials and calls is to enable multiple calls during a day on some result codes but not others. Specifically, the SMS2 allows the Manager to determine (a) if an answering machine be dialed more than once a day, and (b) how many times a case with a busy signal should be called back (and at what intervals). In addition, this permits a more efficient gridding out of sample lines, following the time slice parameters (see Time Slices and Grid Procedures, page 31).

In general, every SRO study should begin by making sure that answering machines are not called back on the same day. In addition, the number of dials constituting a call should be set to 3, and the number of busy dials constituting a busy call should be 3. There should be 10 minutes between the first and second call, and 60 minutes between the second and third call. These may change as the study enters the end game, when there are fewer sample lines available for delivery, meaning that we would want more attempts (“dials”) on each sample line before it gets removed from the daybatch.



Under the parameter settings provided above, the following scenarios are possible:

- |   |   |   |
|---|---|---|
| 1. Interviewer calls, gets a no-contact result – one dial | } | Excluded for both 3<br>dials and 3 busy dials |
| 2. Interviewer calls, gets a no contact result – one dial |   |   |
| 3. Interviewer calls, gets a busy signal                  |   |   |
| 4. Interviewer calls, gets a busy signal                  |   |   |
| 5. Interviewer calls, gets a busy signal                  |   |   |
- } one dial

Or

- |  |   |                                   |
|--|---|-----------------------------------|
| 1. Interviewer calls, busy signal                  | } | Excluded for answering<br>machine |
| 2. Interviewer calls, answering machine – one dial |   |                                   |

These examples are not exhaustive, but illustrative of the effect of setting the scheduler parameters to calculate the relationship between dials and calls.

## Appointment Parameters

SMS2 allows for defining which interviewer or group of interviewers should receive cases with appointments on them. The current SSL standard is to route an appointment back to the interviewer who set it. When this option is selected in the appointment parameters, the call scheduler will try to deliver the case to the original interviewer at the appointment time.

Of course, sometimes the interviewer (or the respondent) may not be available at the time of the appointment. Fortunately, there is feature that instructs SMS2 how long to wait for the original interviewer to request the case before delivering it elsewhere. Currently, the standard delay on these appointments is set at 10 minutes. If the interviewer does not

request a case to be delivered before 10 minutes have elapsed since the appointment time, then the case will go to the applicable main group to which that interviewer belongs (see Users / Interviewers below).

While the safeguard is helpful in routing appointments for specific interviewers to groups of interviewers in the event that the interviewer is unavailable at the appointment time, it does have potential problems. In particular, if an interviewer is a member of the general English group (GenEng) but has Spanish language (Spanish) as his or her main group, it is possible that the interviewer received a GenEng case and was able to set an appointment for it. However, if the interviewer is busy conducting an interview at the time of the appointment, or if he or she is not working that day, then the case will be routed to the *Spanish* group, which is the interviewer's **main** group. It will remain in this group until a Manager manually reassigns the case to the GenEng group.

Another route back option is to have the case automatically routed to the first available interviewer in the group to which it is assigned. This would not only eliminate any delay in delivering the appointment, but it would also ensure that cases would never get routed to an inapplicable group. However, delivering appointments through groups could undermine the potential benefit that comes from having a familiar voice interacting with the respondent.

The decision to route cases to individuals or groups has to be established at the project level. Each option has certain advantages and disadvantages, and project-specific requirements may make one option more attractive than the other.

There is also an appointment buffer that the Project Lead needs to set in consultation with the SSL Manager. This buffer regulates the amount of time before the end of the SSL workday that the latest appointment can be set. The longer the interview, the more time you will probably want to put in this buffer to avoid keeping interviewers and Managers on the premises long past midnight on weekdays.

**A note about the way in which SMS2 measures time:** SMS2 counts in increments of 5 minute intervals. That is, the first 5 minute interval might be between 10:00 AM and 10:05 AM, the second interval between 10:05 AM and 10:10 AM and so on. A missed appointment set for 10:00 AM will be delivered to the next available interviewer between 10:05 AM and 10:10 AM, which is the 10 minute delay set on hard appointments.

## **Users / Interviewers**

In order for the scheduler to deliver cases to an interviewer, he or she must be identified as being assigned to the project in SMS2. At the project outset, the Manager must enter all the interviewers in the Cati Specifications. The names of the users must be the same as their Novell login names for the ISR networks. Otherwise, Blaise won't recognize them and will never give them sample to call.

Interviewers also need to be assigned to at least one group that has been identified in the CATI Specifications. These groups are defined by interviewers' special skills (if any), such as refusal conversion, tracking, and Spanish-language interviewing. There is also a catch-all general group for those who have not yet developed these skills. Each

interviewer must have a main group, and that main group should be the one that includes their most specialized skill. Doing so insures that they get delivered the cases that are most appropriate to their abilities.

If cases need to be reassigned to specific *groups*, these also need to be added through the Users menu under “Manage Groups.” If the groups are not added here, cases cannot be reassigned.

## **Time Zones**

SMS2 requires that interviewers set appointments in the time of the respondents. The system’s ability to translate any difference in times and deliver appointments appropriately is set through the time zones feature. In addition, the Manager is able to set limits on the first (non-appointment) dial and the last (non-appointment) dial. While appointments are limited based on crew availability, the availability of lines are limited based on the do not call before and after parameters of the time zones. The values entered here will depend on the type of survey being done and the SSL’s hours of operation.

Time zones also include a “grace period” parameter that work in concert with the hours of operation. Grace periods refer to the redistribution of missed appointments, whether by the interviewer or the respondent. Setting the grace period to 15 minutes when a “do not call after” is set to 9:00 PM, for example, will allow the continued attempt by the

SMS2 to redistribute the case through 9:15 PM, assuming that the crew parameters indicate staffing beyond 9:00 PM.

## **Time Slices and Grid Procedures**

Time slices define periods of time during which cases without appointments are distributed for calling. Multiple sets of time slices can be set for different sample types. The purpose of the time slices is two-fold: First, to make sure that if a dial on a sample line does not yield contact, a follow-up dial will be made at a different time. SMS2 terms a non-contact dial during one time slice a “try.” This does not include busy dials, but does include answering machine dials. Second, if multiple dials have been made across the distribution of time slices without a final result, then the sample line will get removed from the daybatch.

One try and one try only is possible for each slice on any given day. That is, if a dial yields no contact (not including busy dials) on a December 10<sup>th</sup>, during time slice 1, the case will not be available for delivery through the automated call scheduler again on December 10<sup>th</sup> until the next time slice begins, all other things equal. However, if the time slice series is set up to disallow multiple tries a day (see Grid Procedure and Time Slices, page 31), or if the minutes between no contact dials is set up in a way that conflicts with the time slice settings (see Days Between No Answer Calls, page 22 and 47), then the one try may be all for the day.

SRO has worked with the Statistical Design Group (SDG) at ISR to set up time slice sets. These should not be revised or modified in any way except with the explicit approval of the Project Lead, after consultation with SDG members and the client. The reason for this is that the way in which we decide which non-finalized cases receive no further attempts has a significant impact on the validity of our studies.

In order to treat cases where contact has never been made from those that have had contact at some point during the study, this last category gets moved into a second time-slice set that allows maximum flexibility for attempting to make further contact.

For sample lines where we have no knowledge of eligibility and a general population, fresh cross-section (RDD), we use the following grid procedure:

1. Two tries, weekdays from 10:00 AM to 6:00 PM
2. Six tries, Sunday through Friday, 6:00 PM to 9:00 PM
3. Two tries, Saturday from 10:00 AM to 6:00 PM
4. Two tries, Sunday from 12:00 noon to 6:00 PM

This ensures first that several attempts will be made at different times of day and during different days of the week if no contact is made, and second, that at least twelve tries will be made on each no contact sample line.

If we have known eligibility on a sample line, Supervisors have two options. First, they may set up each sample line with a best known time to contact. In essence, each case begins with a soft appointment. This can be accomplished through preloads.

Alternatively, we can route the sample line through a time slice series that exceeds the

maximum number of calls limit, but otherwise cycles consecutive no contact dials through various times and weekdays.

## **Days to Delay Resistant Calls**

Managers can set the minimum number of days following an initial resistance calls before the case becomes available again for a conversion attempt via the “days to delay” button on the main menu. This number will be determined by the Project Lead, taking into account such factors as the length of the field period, IRB requirements, and the desires of the client.

The “days to delay” needs to be set at the study’s outset. The number entered here will exclude any case coded an initial resistance from the daybatch for this number of days. For example, the SCA IRB currently requires that conversions not be attempted until the sixth day after the refusal, so the days to delay for the project equals five.

As a study enters the end game, this limit may be reduced to ensure that a resistant case is called before the study ends.

## **Special Procedures**

At times a project may need some calling algorithms that cannot be set through the regular SMS2 Cati Specifications. In these circumstances, Project Leads need to consult with programmers in order to set up special automatic routines that will enhance

parameters. For example, the SSL has determined that the SMS2 default for missed hard appointments is inefficient. If left to operate on its own, SMS2 would take a case with a missed appointment (no answer when called at the designated appointment time and later attempts that same day) and designate it a medium appointment for the beginning of the next day. If that appointment had been for a weekday evening, it seems unlikely that the following weekday morning would be a likely time to reach the respondent. So SRO programmers have written a program that runs automatically overnight that resets these missed appointments as medium appointments for the same general time of the day the next day. For instance, if a 7 PM appointment resulted in no contact one night, the next night it would be a medium appointment to be tried sometime between 6 PM and 9 PM. We expect that most SSL studies will want to make this routine a standard part of their SMS2 setup.

SRO programmers have also created special code that allows for the special protocols followed by RDD studies. The gridding out of appropriate cases after they have exhausted their time slice set is one such routine. Another routine allows for fax machines, modems, pagers, etc. to be delivered again after 6 PM the following evening.

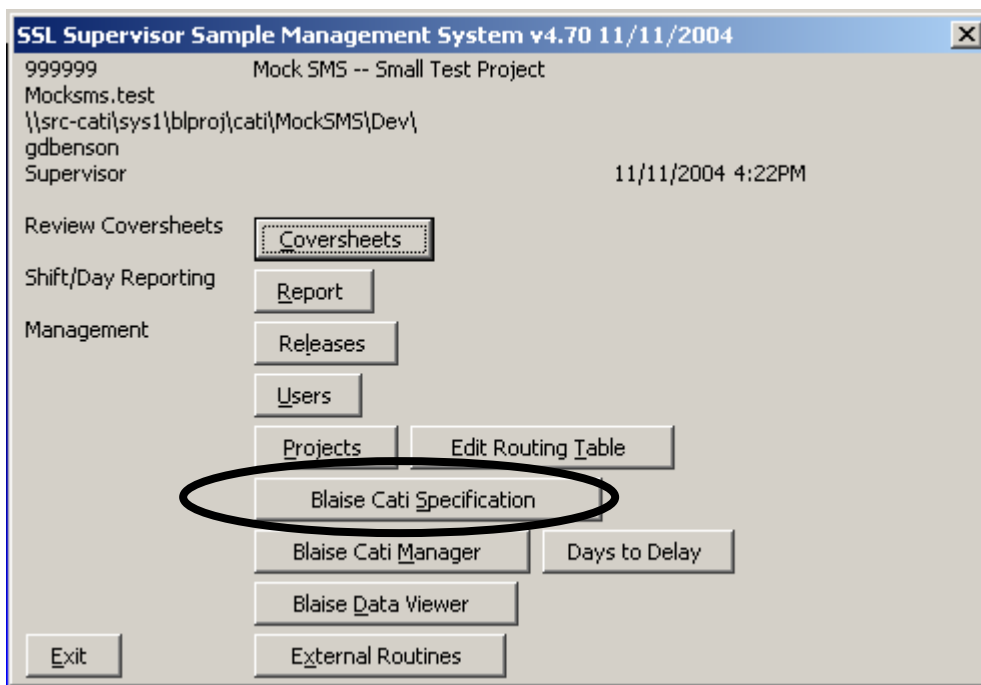
If you are setting up a project that needs any of these routines, you need to let your CATI programmer know. Also, if there are special calling protocols or algorithms in the design of your study, consult with your programmer to determine if these can be achieved through the standard Blaise Cati Specifications, or if new program code will be needed.



## Setting Parameters

Most of the SMS2 parameters that Managers will set up, monitor, and modify, are found under the “Blaise Cati Specifications” button. Managers may also need to make adjustments to the interviewer list (under “Users”), the routing table (under “Edit Routing Table”), and the number of days that a resistant case is excluded from the daybatch (“Days to Delay”). In addition, Supervisors will use many of the other buttons to monitor production, guide interviewers, and manually adjust sample delivery.

**Figure 9: Blaise Cati Specification Button**

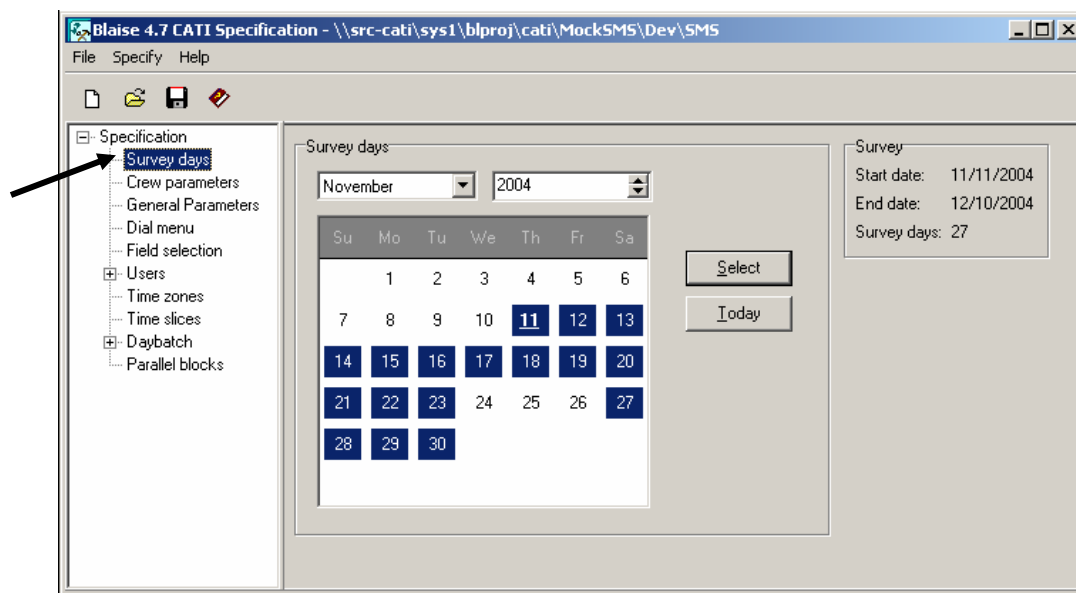


## Survey Days

Survey Days are listed under the root directory of CATI Specifications. Select the month and year in which the survey will be conducted from the boxes above the calendar using

the drop-down list. Then select the exact days for the survey by double-clicking the numbers on the calendar to either select or unselect particular days. Alternatively, one can select (or deselect) an entire weekday by double-clicking on the letters designating the day of the week. Continue to set survey days by choosing the appropriate month, year, and days.

**Figure 10: Survey Days**



A day is selected when a highlighted box appears around the number. Notice that the start and end dates of the survey appear in the 'Survey' section on the right, together with a summary of the total number of days during which the survey can be conducted.

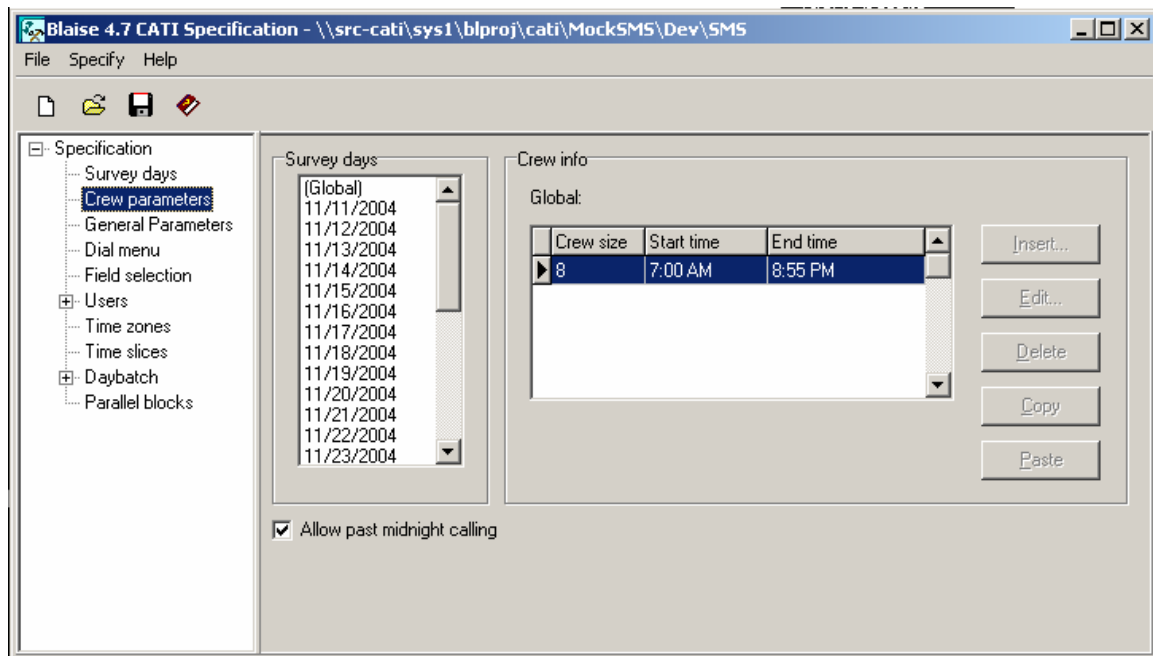
Finally, in the event that old survey days need to be cleared out, this can easily be done by holding down the CTRL key and pressing the "C" key. This can be particularly useful if a study re-uses old specification files with a previous survey period.

## Crew parameters

Set crew parameters in accordance with survey design and call center circumstances.

Times and crew sizes may need to be modified as the survey progresses in order to accommodate unexpected patterns in respondent availability. It is very important to get the daily start time of the first crew and the end time of the last crew correct so that appointments will not be scheduled when crew are not available. Do not be particularly concerned about getting crew sizes correct, because SMS2 only uses crew sizes to spread out soft and medium appointments that do not have specific time ranges when the daybatch is made.

**Figure 11: Crew Parameters**



For each active day you can specify the crew size and working hours for a maximum of five crews. Crew sizes are only used for the purpose of distributing all-day (no time or time range) soft and medium appointments throughout the calling day.

This parameter is initially set by Project Managers and maintained by Shift Leaders.

The active days of your survey appear on the left. For each crew you can specify the number of interviewers and the start and end times. If you do not specify any day parameters, the CATI Management Program will assume that there is one crew working from 9:00 am until 9:00 PM.

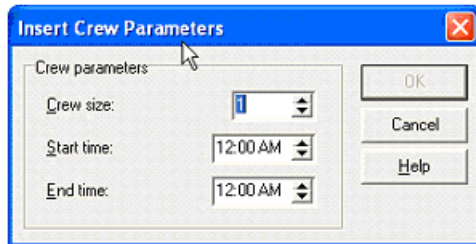
First, select the survey days from the list on the left. To set the crews for all days, choose the (Global) option. Global crew definitions become the default for the days for which you have not defined any specific values.

Then either edit the default settings by clicking the Edit button or add a new crew by clicking the Insert button. The Insert or Edit Crew Parameters dialog box appears.

When you have set the option *Allow past midnight calling* you are allowed to specify an end time after midnight for the last crew specified. This makes past midnight calling possible. There is one important restriction: Past midnight calling is only possible for a work station that started calling before midnight. This is because past midnight is considered to be a prolongation of the day for which the daybatch was created. You are

advised first to specify all crews with an end time before midnight and to specify as last the crew with the end time past midnight.

**Figure 12: Insert Crew Parameters**



Indicate the crew size, start time, and end time. You do not have to specify the number of interviewers, but you must include start and end times for the crew to be valid. You can have more interviewers than the number entered.

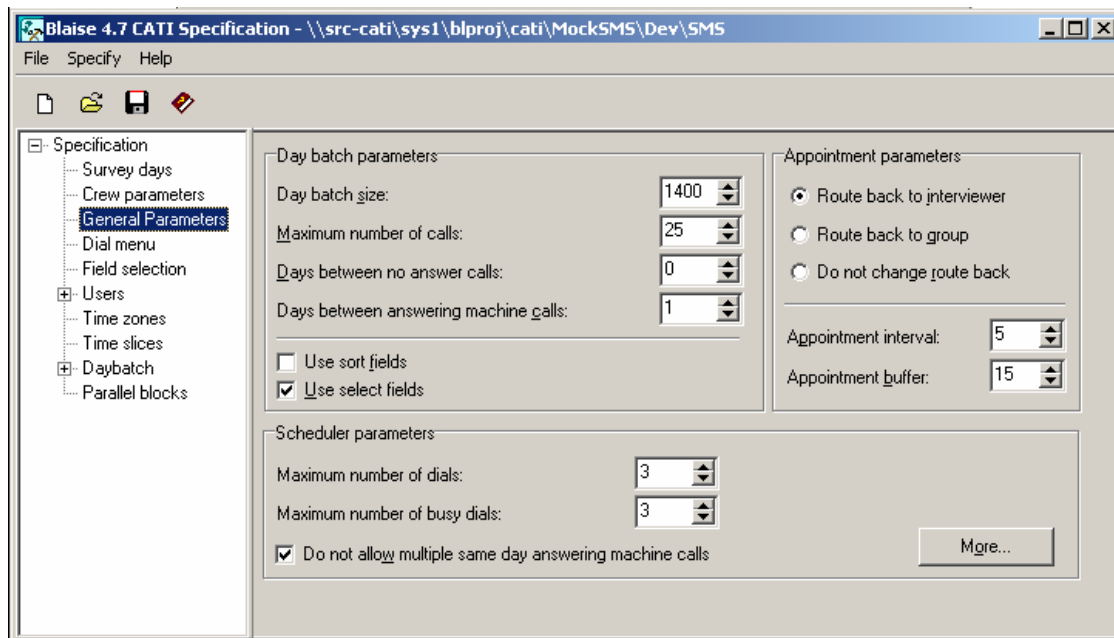
Click the OK button to return to the Crew parameters dialog. You can also copy, paste, and delete definitions by clicking the appropriate buttons. You can copy the parameters for one day into multiple days by highlighting a series of consecutive dates before clicking on the “paste” button.

For period appointments and day-of-the-week appointments, only the global times are taken into account. For this reason you should define all of the valid dates and times of the survey and crews right at the start of the survey. This way you avoid appointments for times when you will not have a crew at work.

## Daybatch Parameters

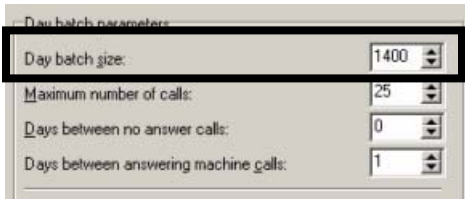
The “General Parameters” branch of the tree in the left side of the CATI Specification window contains most of the settings that control the availability and delivery of cases to interviewers. The top left portion of the dialog box contains the parameters for the daybatch.

**Figure 13: Daybatch Parameters**



A daybatch is a file that contains a set of cases that can be tried on a specific day in the survey period. Daybatch parameters influence the construction of the sample available at any given point in time. Daybatch specifications take effect when the daybatch is *run*, **not** when specifications are set. After all modifications are made in this dialog box, you must save the changes in order for them to be incorporated in the next daybatch.

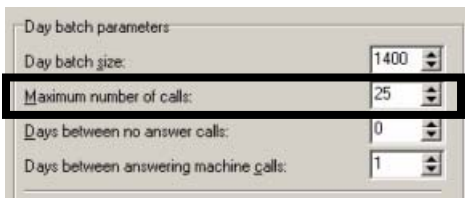
**Figure 14: Daybatch Size**



Day batch parameters	
Day batch size:	1400
Maximum number of calls:	25
Days between no answer calls:	0
Days between answering machine calls:	1

*Daybatch size*--The first daybatch parameter controls its size. The number entered here indicates the maximum number of lines that can be in the daybatch. As discussed previously, this number should either be 6,000 or allow for the total amount of sample for the survey, whichever is greater. The daybatch size number is in increments of 100.

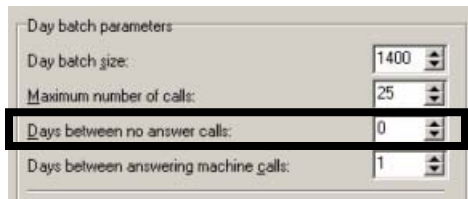
**Figure 15: Maximum Number of Calls**



Day batch parameters	
Day batch size:	1400
Maximum number of calls:	25
Days between no answer calls:	0
Days between answering machine calls:	1

*Maximum number of calls*--Specify the maximum number of calls that can be made for a telephone number during the field period. If the maximum has been reached, the number will no longer be included in the daybatch. This setting is ignored for numbers with a hard appointment or with a preference appointment that is current. Note that a call may consist of more than one dial. *Toward the end of a survey, the Project Lead needs to consider increasing the maximum number of calls if the daybatch size gets too small.*

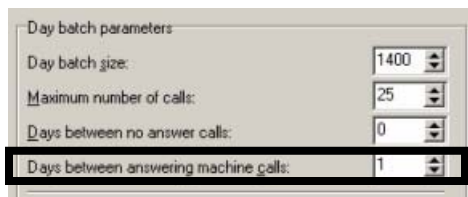
**Figure 16: Days Between No Answer Calls**



Day batch parameters	
Day batch size:	1400
Maximum number of calls:	25
<b>Days between no answer calls:</b>	<b>0</b>
Days between answering machine calls:	1

*Days between no-answer calls*-Specify how many days must pass before including the number again in a daybatch if the last dial result was No-answer. If, for example, this number is 2, then the case will not appear in 2 consecutive daybatches before returning to availability. For numbers with a hard or preference appointment that is current, this setting is ignored. *The Project Lead should consider reducing these parameters whenever the daybatch starts to get smaller than desirable, or toward the end of the survey.*

**Figure 17: Days Between Answering Machine Calls**



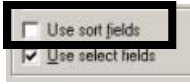
Day batch parameters	
Day batch size:	1400
Maximum number of calls:	25
Days between no answer calls:	0
<b>Days between answering machine calls:</b>	<b>1</b>

*Days between answering machine calls*-Specify how many days must pass before including the number again in a day batch if the last dial result was answering service. This logic works the same as for “Days between no answer calls.” That is, if this number is set at 2, then the case will not be in the daybatch again until the third day following the answering machine call. For numbers with a hard or preference appointment that is current, this setting is ignored. *The Project Lead should consider*



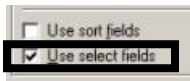
*reducing these parameters whenever the daybatch starts to get smaller than desirable, or toward the end of the survey.*

**Figure 18: Use Sort Fields**



*Use sort fields*-Select to sort the forms in the daybatch based on the fields selected on the Daybatch sort tab. (See below for how to select fields for sorting.) If this box is not checked, the daybatch will ignore any sorts that have been entered.

**Figure 19: Use Select Fields**

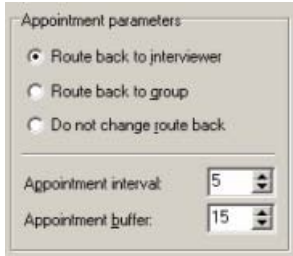


*Use select fields*-Select to include forms in the daybatch based on the values stored in fields selected on the Daybatch select tab. This controls which forms are placed in the daybatch. This box must be checked in order to exclude finalized cases from the daybatch.

Using select fields with the include option has the effect of excluding forms that do not satisfy the inclusion criteria. For example, if you include EST time zone forms, all other time zones would be excluded.

## Appointment Parameters

**Figure 20: Appointment Parameters**

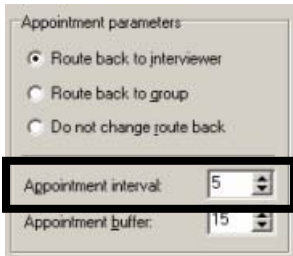


The screenshot shows a dialog box titled "Appointment parameters". It contains three radio buttons: "Route back to interviewer" (which is selected), "Route back to group", and "Do not change route back". Below the radio buttons are two spin boxes: "Appointment interval" set to 5 and "Appointment buffer" set to 15.

*Appointment parameters (under General parameters)*-By default, the *Do not change route back* radio button is enabled when a new project is created. However, because we are using a routing table for the specific purpose of changing groups for cases depending on outcomes, we can not use this button.

Instead, the current SSL norm is to enable *Route back to interviewer* or *Route back to group*, depending on project needs. This means that the scheduler will look to deliver a hard appointment to the interviewer who made it. If *Route back to group* is selected, then hard appointments will go to any active interviewer who belongs to the group to which the case belongs.

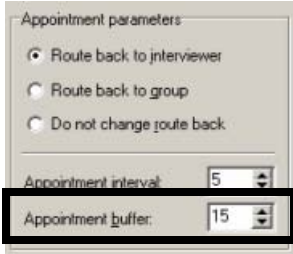
**Figure 21: Appointment Interval**



This screenshot is identical to Figure 20, but the "Appointment interval" spin box, which is currently set to 5, is highlighted with a black rectangular border.

*Appointment interval*-Specify the time intervals at which appointments can be set. For example, if 15 minutes is selected, then appointment times on the hour, 15, 30 and 45 minutes past the hour may be set.

**Figure 22: Appointment Buffer**

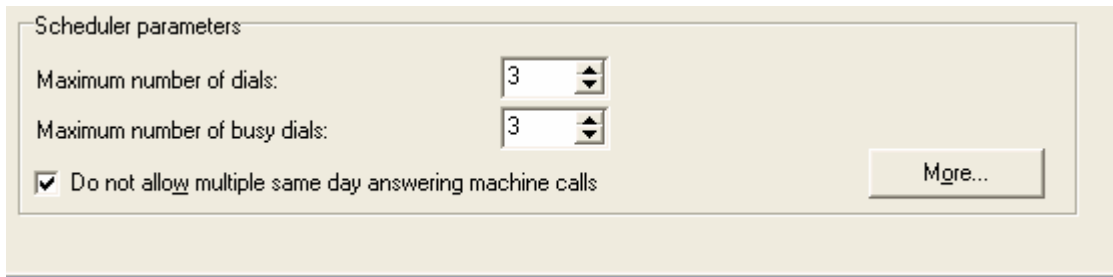
The image shows a screenshot of a software dialog box titled "Appointment parameters". It contains three radio button options: "Route back to interviewer" (which is selected), "Route back to group", and "Do not change route back". Below these options are two spin box controls. The "Appointment interval" spin box has the value "5" displayed. The "Appointment buffer" spin box has the value "15" displayed and is highlighted with a thick black rectangular border.

*Appointment buffer*-Specify the shortest length of time before the end of the workday that an appointment can be set. A good rule of thumb would be to enter the average interview length for this field. The last possible appointment time shown to the interviewer in the **Make Appointment** dialog is equal to the ending time of the last crew minus the number of minutes in this *Appointment buffer*.

## Scheduler Parameters

The “Scheduler Parameters” area in the bottom portion of the parameters dialog box. In this area you can set the maximum number of no-answer and busy dials on one case for the day. Here you can also choose whether or not to allow a case that reaches an answering machine to be dialed again the same day.

**Figure 23: Scheduler Parameters**



Scheduler parameters:

Maximum number of dials: 3

Maximum number of busy dials: 3

☒ Do not allow multiple same day answering machine calls

More...

*Maximum number of dials*-Specify the maximum number of non-contact, non-finalized attempts that can be made on a case for the day. If, for instance, the daybatch size and other parameters are such that to allow a case with a no-answer result to be delivered multiple times, the specification here puts a cap on the number of times the case could be delivered if each attempt during the day resulted in a ring, no answer.

*Maximum number of busy dials*-Specify the number of attempts with a busy signal that constitute one dial. (See below for details about how to set time intervals between consecutive busy dials.) Note that, depending on the daybatch size and other parameters, in the illustration above, it would be possible for a case to receive nine busy results in one day—3 busy dials count as 1 dial toward the maximum number of dials parameter.

*Do not allow multiple same day answering machine calls*-Checking this box excludes cases with an answering machine result from reaching the maximum number of dials for the day. As the daybatch dwindles over the course of the study, the Project Lead needs to consider unchecking this box in order to maximize attempts on all active sample.

## More Scheduler Parameters

Clicking on the “More” button in the General Parameters dialog box brings up another dialog box where more parameters must be set.

**Figure 24: More Scheduler Parameters**

More Scheduler Parameters

Scheduler parameters

Interviewer de-activation delay (medium): 10

Group de-activation delay (medium): 1440

Interviewer de-activation delay (hard): 10

Group de-activation delay (hard): 1440

☒ Expire on de-activation delays only

Minimum time between hard/super no-answer: 10

Minimum time between 'other' no-answer: 180

Minutes between busy dials: 10 60 30 10 20 20 30 30

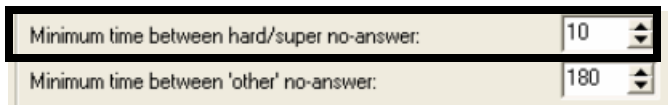
OK Cancel Help

*De-activation delays*-Specifies the number of minutes for the scheduler to wait until delivering an appointment to someone other than the interviewer who made the appointment or a member of the interviewer group that the case belongs to. In the illustration above, the scheduler will reserve a case for the interviewer who made the appointment until 10 minutes past the appointment time. If the interviewer does not request a case during that time, the scheduler will then send it to the next member of the group that owns the case who requests a sample line. Because we do not want cases

reserved for groups with specialized skills (refusal converters, Spanish speakers) to go outside that group, the group de-activation delay is set to 1440 minutes, or 24 hours. This setting prevents non-Spanish speakers from receiving Spanish language cases, for example.

**Managers need to review appointments on a regular basis to make sure that members of appropriate groups are working at appointment times.** If not, they then need to assess the case to see if it can be called by members of some other group, and reassign the case, if possible.

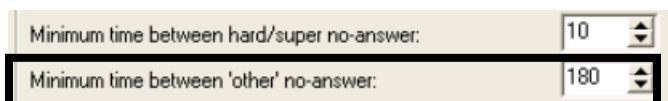
**Figure 25: Minimum Time Between Hard/Super No-Answer**



Minimum time between hard/super no-answer:	10
Minimum time between 'other' no-answer:	180

*Minimum time between hard/super no answer*-Specify the number of minutes to allow after a no-contact call to a hard or supervisor appointment before delivering the case again. The assumption is that respondents may be running late and might still be available shortly after the originally scheduled appointment time, so this setting ensures that a case with a high probability of contact doesn't get missed.

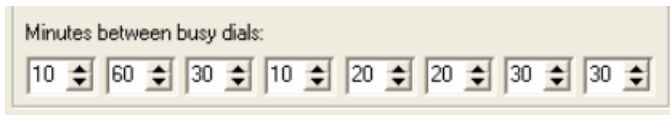
**Figure 26: Minimum Time Between Other No-Answer**



Minimum time between hard/super no-answer:	10
Minimum time between 'other' no-answer:	180

*Minimum time between ‘other’ no answer*-Specify the number of minutes that a case without an appointment must remain inactive after a no-answer call. This does not mean that no-answer cases will automatically come back after this amount of time has elapsed, because of other priorities in the daybatch.

**Figure 27: Minutes Between Busy Dials**



Minutes between busy dials:

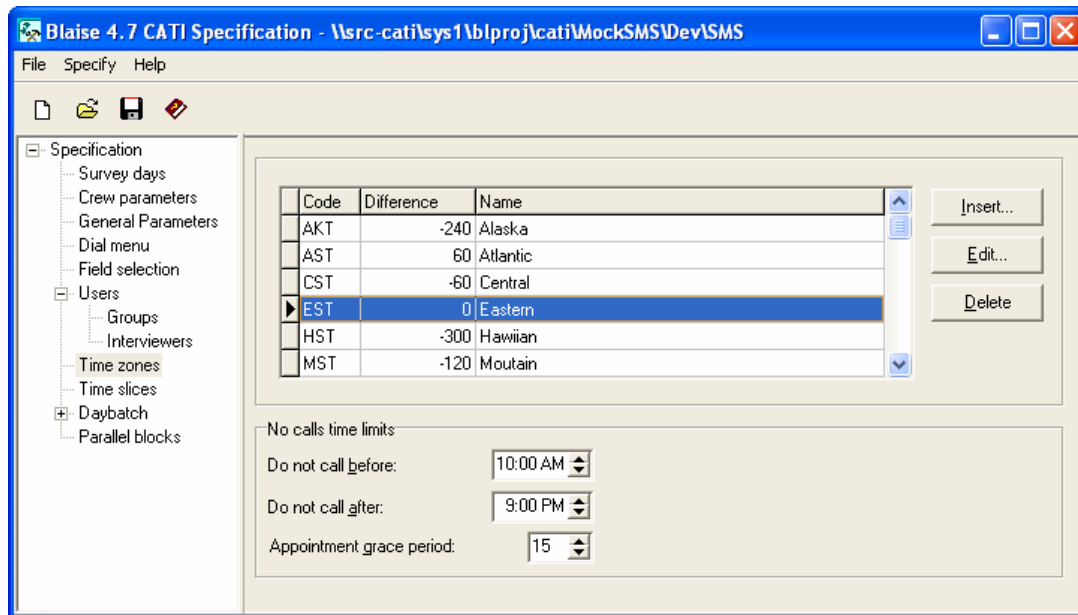
10	60	30	10	20	20	30	30
----	----	----	----	----	----	----	----

*Minutes between busy dials*-Specify the number of minutes after a busy dial when the case should be delivered for another attempt. The first number specifies the number of minutes between the first and second calls, the second number, the minutes between the second and third calls, etc. However, the intervals will only take effect with respect to as many busy dials as specified under General Parameters.

## Time Zones

The “Time Zone” branch on the Specification tree opens a dialog for indicating the time differences between the call center and other time zones, as well as setting the times for the earliest and latest possible calls in a time zone.

**Figure 28: Time Zones**



*Time zone*-Generally speaking, you will not have to modify the actual time zones for a study unless there are additional time zones that should be included beyond the standard zones or if you need to capture differences in time zones as some states move to daylight savings while others do not. Assign a difference of 0 to the time zone in which the call center is located. Give positive differences, in minutes, to time zones east of the call center time zone and negative differences to time zones to the west. Change the default values in the *No calls time limits* if they are not appropriate for the survey (they are currently set to 10 AM and 9 PM). The no call limits are in respondent time. You cannot define separate no call limits for each time zone. If you use 9 AM as the do not call before time, barring a hard or super appointment, no case is delivered before 9 AM in its respective time zone. The no call limits apply even if no time zones have been defined.

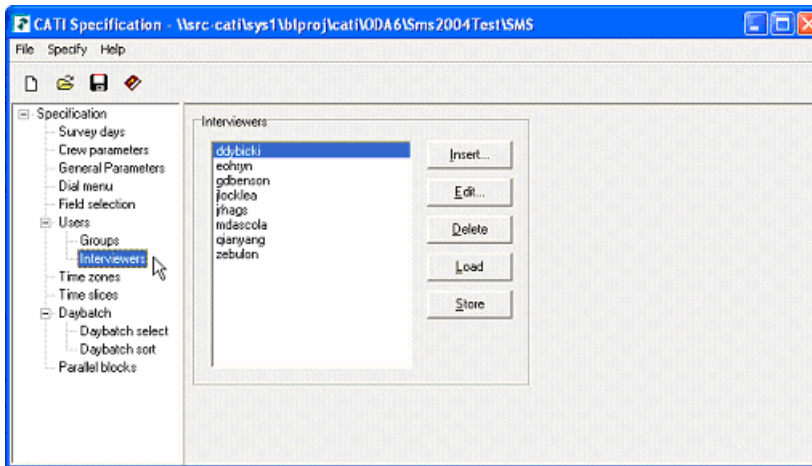


Consider setting the *Appointment grace period* at about 60 minutes. This allows exact date and time appointments set for later in the day to be delivered for a while after the *Do not call after* time in the event that a respondent requests such an appointment

## Users

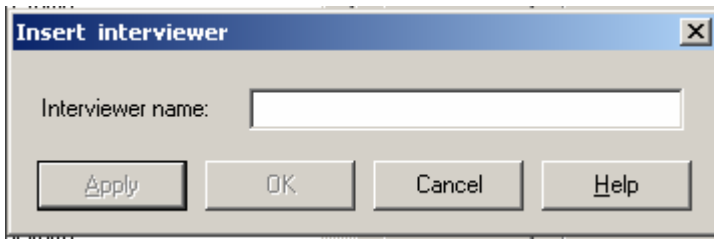
The “Users” branch on the Specification tree has two sub-branches: “Groups” and “Interviewers.” You must enter interviewers’ names in the interviewer dialog and assign them to groups in order for the call scheduler to deliver cases to them.

**Figure 29: Interviewers**



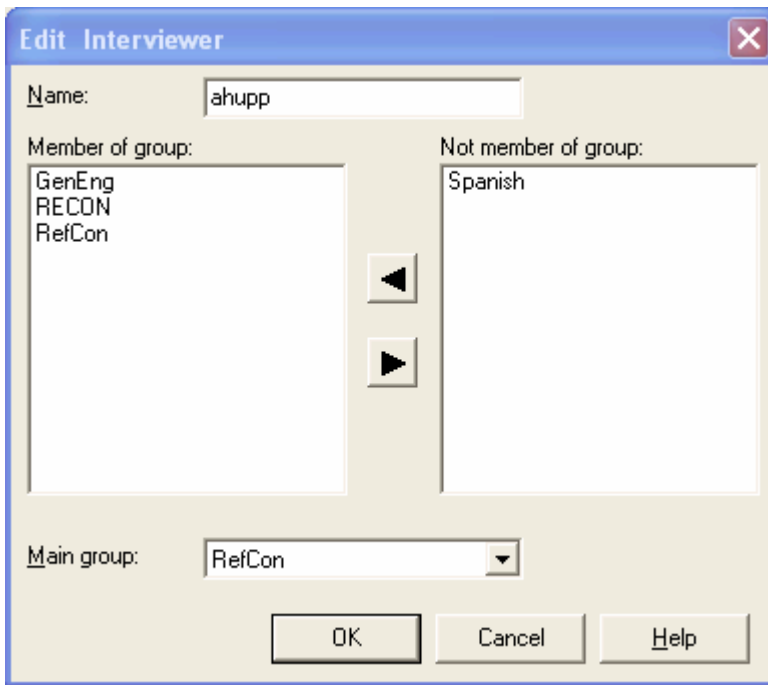
To add an interviewer to the project, hit the “Insert” button. This will open up a field for you to enter the interviewer name. This list of interviewers should be updated every time an interviewer leaves or joins the survey. The name entered here needs to be the one that the interviewer uses to log in to the computer in his or her carrel.

**Figure 30: Insert Interviewer**

A dialog box titled "Insert interviewer" with a close button (X) in the top right corner. It contains a text input field labeled "Interviewer name:". Below the input field are four buttons: "Apply", "OK", "Cancel", and "Help".

To assign the interviewer to one or more groups, click on the edit button.

**Figure 31: Edit Interviewer**

A dialog box titled "Edit Interviewer" with a close button (X) in the top right corner. It contains a text input field labeled "Name:" with the value "ahupp". Below this are two list boxes. The left list box is labeled "Member of group:" and contains the items "GenEng", "RECON", and "RefCon". The right list box is labeled "Not member of group:" and contains the item "Spanish". Between the two list boxes are two arrow buttons: a left-pointing arrow and a right-pointing arrow. At the bottom, there is a dropdown menu labeled "Main group:" with "RefCon" selected. Below the dropdown are three buttons: "OK", "Cancel", and "Help".

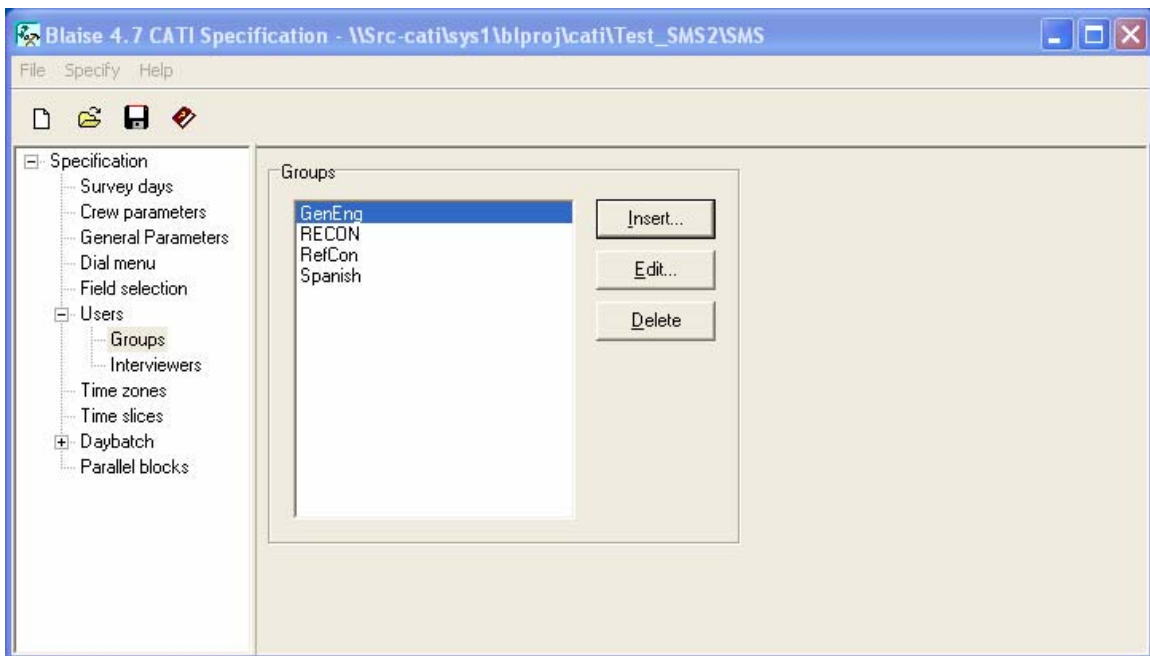
The two columns display the groups that have been assigned to the project. Use the arrows to move the interviewer in or out of a group, as needed. Notice that the interviewer must have a main group designated. While this interviewer belongs to three groups, his main group is RefCon. This insures that any refusal conversion cases that he

sets appointments on will stay in the RefCon group instead of going to interviewers who do not do conversions.

## Groups

The “Groups” sub-branch of the Users branch allows you to designate which interviewer groups are to be used for the project. These group names are part of the part of the routing table that has been designed by our CATI programmers to regulate the delivery of cases based on certain outcomes. Groups are case-sensitive, so they must be entered in the project exactly as they appear in the routing table.

**Figure 32: Groups**



To insert a new group, click the “Insert” button, and then type the group name into the field. You can use the “Edit” button to move interviewers into and out of groups.

## Grid Procedure and Time Slices

Time slices allow you to spread the call backs for no-answer and answering machine dials when there is no pending appointment over different parts of the survey day or week. For example, if you receive a default-priority no-answer during a weekday, you might want the next try to be an evening or weekend.

Time slice definitions are used only for cases that have default status.

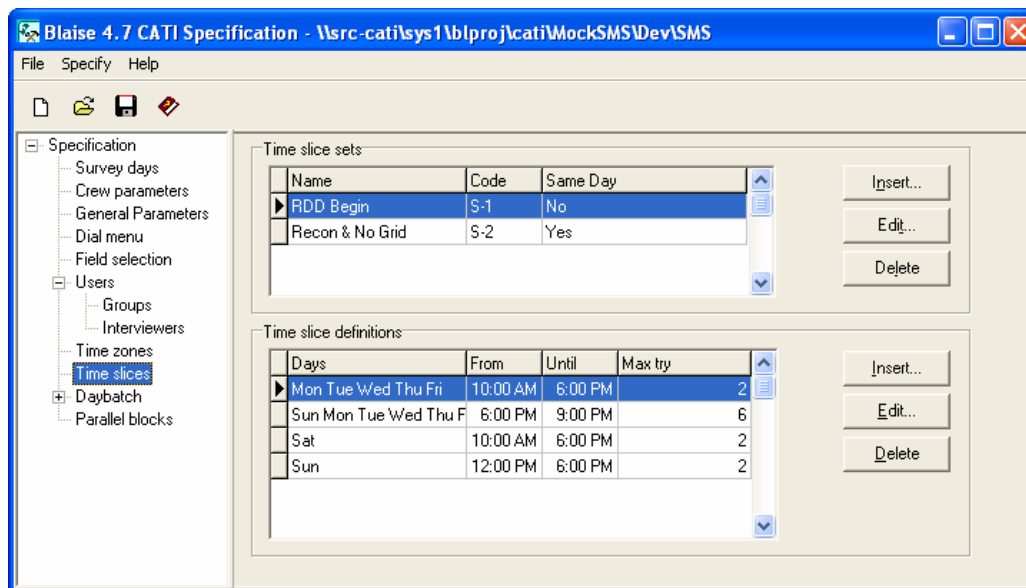
You can define one or more slice sets. A time slice set is a group of slice definitions that belong together. If you use more than one set, you must first define a time slice field in your data model. If a slice field has been defined, the time slice mechanism will only be used if that field contains a valid slice set code. If no slice field has been defined, the first slice set will be used.

*Time slices.* These divide up the interviewing week into time periods that have a different likelihood of finding an available respondent. To define a time slice set, give it a name and a three-character code. Check *Allow slices to be tried on same day* unless you want to spread out *no answer* dial attempts to the maximum extent possible, or you believe that if no one answers at any point during a given day then no one will answer at any time later on that day. Specify time slice definitions to match the expected behavior of respondents. For example, for school children, do not set any time slice definitions during school hours, but have three separate after-school definitions: pre-dinner, dinner time and post-dinner. One time slice set should be sufficient unless there is enough information

available to know how to divide respondents into groups with different expected behavior patterns.

This parameter is determined by the Project Lead, in consultation with the client and sampling personnel. The Project Lead will need to inform the CATI programmer of the names and codes for the Time Slice Sets, so that they can be preloaded in the project's SMS2 data model.

**Figure 33: Time Slice Sets and Definitions**

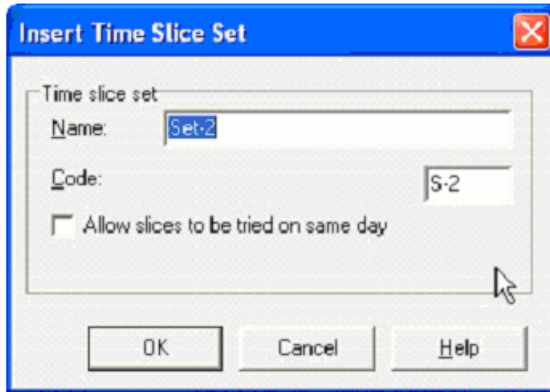


When you define time slices, the system keeps track of what time a number was called, and will dial the number in a different time slice the next time it becomes active.

To define a time slice set, select the Time slices branch.

Click the first Insert button (in the Time slice sets box), and the Insert Time Slice Set dialog box appears.

**Figure 34: Insert Time Slice Sets**



Specify a name for the time slice.

Specify a three-character code for the time slice set. The set codes must be unique.

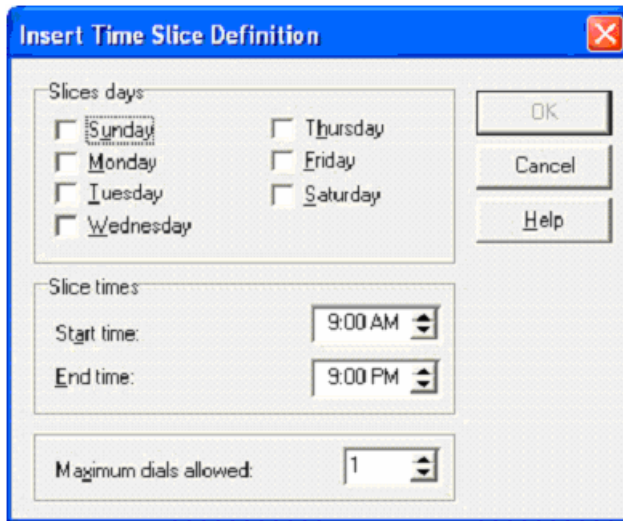
Typically, we use “S-#” as our format, which is also the default format.

Select the *Allow slices to be tried on same day* if you want to allow the Scheduler to deliver a form in different time slices during one day.

Click the OK button to return the Time slices settings.

Next, define the time slices for the time slice set. Click the Insert button in the Time slice definitions box. The Edit Time Slice Definition dialog box appears.

**Figure 35: Insert Time Slice Definition**

The image shows a Windows-style dialog box titled "Insert Time Slice Definition". It has a blue title bar with a red close button. The dialog is divided into three main sections. The top section, labeled "Slices days", contains two columns of checkboxes for the days of the week: Sunday, Monday, Tuesday, Wednesday in the first column, and Thursday, Friday, Saturday in the second column. The middle section, labeled "Slice times", contains two labels: "Start time:" and "End time:", each followed by a time selection control showing "9:00 AM" and "9:00 PM" respectively. The bottom section, labeled "Maximum dials allowed:", contains a numeric spinner control set to the value "1". On the right side of the dialog, there are three buttons: "OK", "Cancel", and "Help".

Select the days for the time slice. You can select more than one day.

Select the start and end times for the time slice.

Specify the maximum number of dials allowed in that time slice.

All time slices for a set must be mutually exclusive. Click the OK button to return the Time slices settings. Then click “Insert” again if you want to enter another time slice into the set.

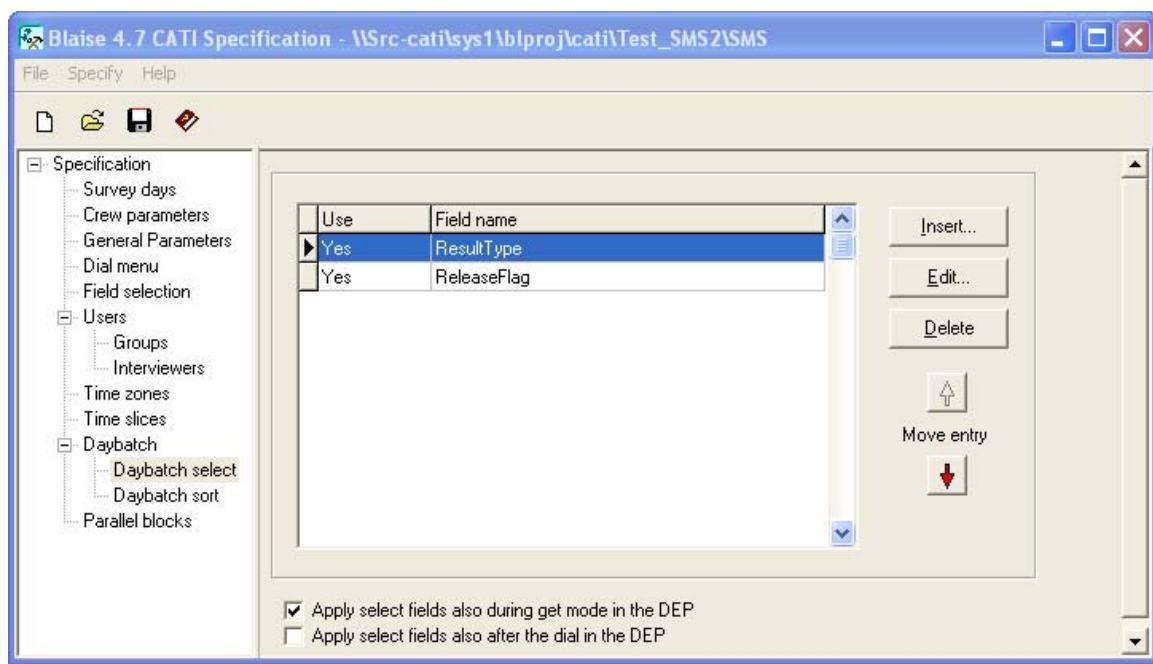
## **Daybatch Select**

Under the “Daybatch” branch of the “Specification” tree, there are two sub-branches: “Daybatch Select” and “Daybatch Sort.” Together these two settings control the kinds of

cases that will get included in the daybatch and the order in which lines with default priority will be delivered.

The Daybatch select dialog can be used to either include or exclude sample lines based on variables associated with information in the SMS2 database.

**Figure 36: Daybatch Select**

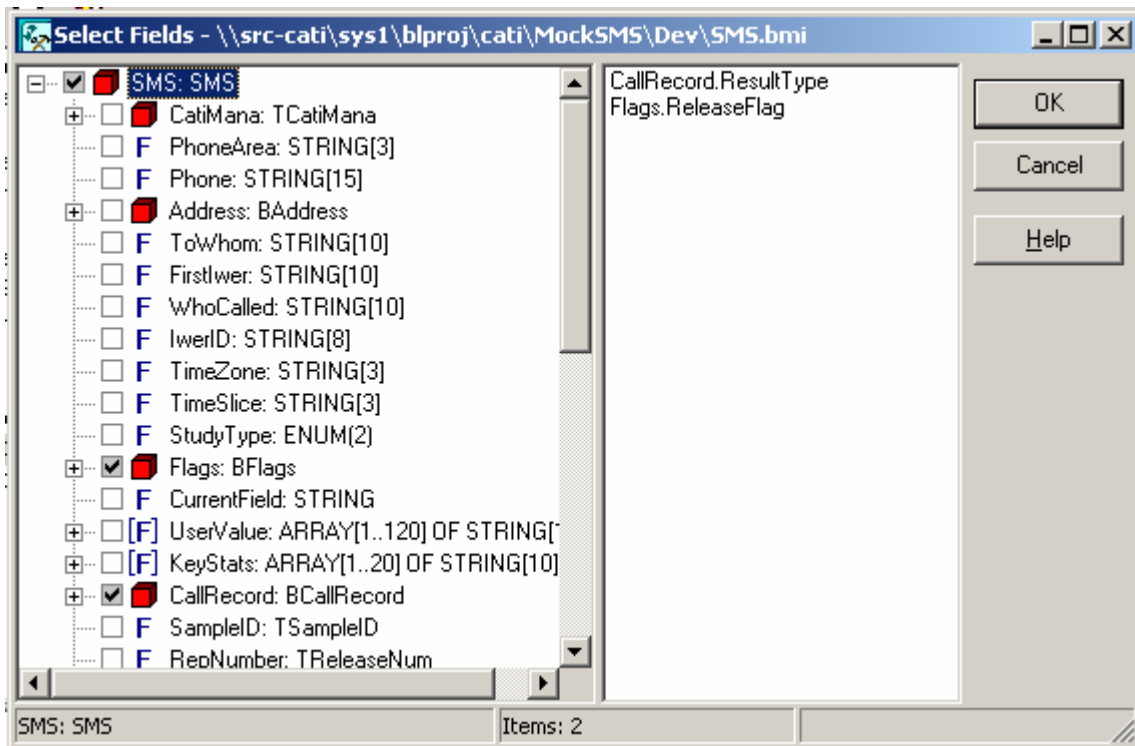


This illustration shows two fields that the SSL will routinely check in order to exclude cases from access or delivery to interviewers. The first, “ResultType,” is used to exclude finalized cases. In order to keep cases that have been finalized during the current daybatch from coming back, the box labeled “Apply select fields also during get mode in the DEP” must be checked.



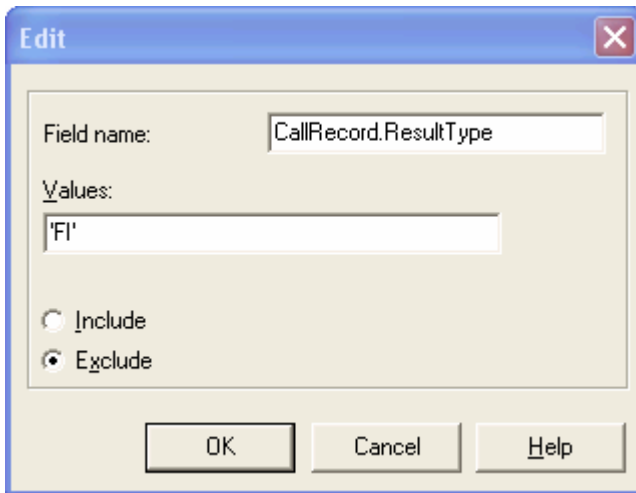
To add fields to the Daybatch selection, click on the insert button. This will open up a tree showing all the variables in the SMS2 data model. Check off all the fields that you want to use for select criteria, and then click OK.

**Figure 37: Select Fields**



Next, highlight one of the fields in the “Daybatch select” window and click “Edit.” This allows you to define the values in this field that match the criteria you want. Then choose whether you want to include or exclude these values. *Using the exclude option is recommended, because the include option means that only cases with the selected value will be in the daybatch, and everything else will be excluded.*

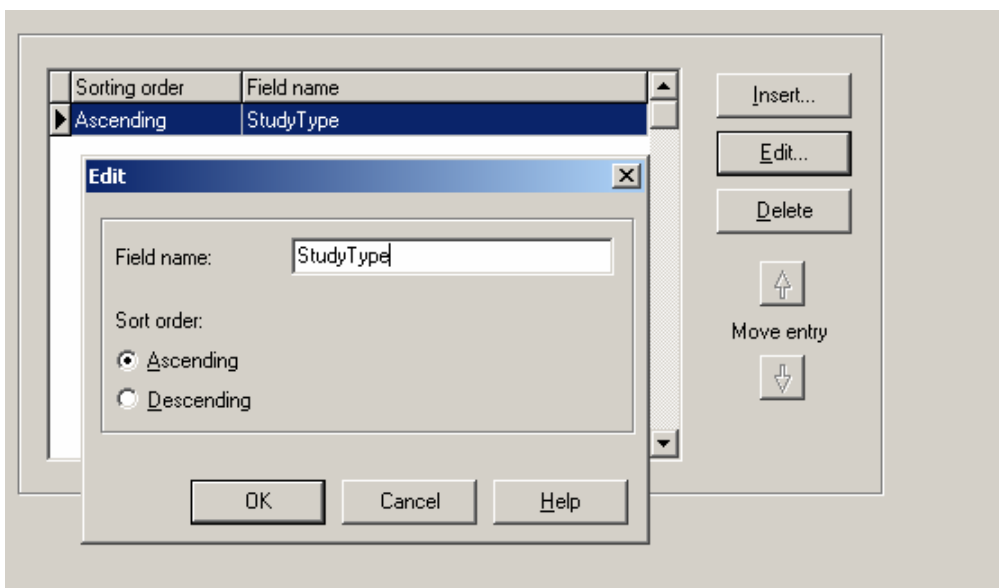
**Figure 38: Edit Selected Fields**



## Daybatch Sort

The Daybatch sort option can be used to give a higher priority to some “default” priority cases than others. As with the Daybatch select feature, this is done by selecting fields in the SMS data model upon which to sort.

**Figure 39: Sort Fields**

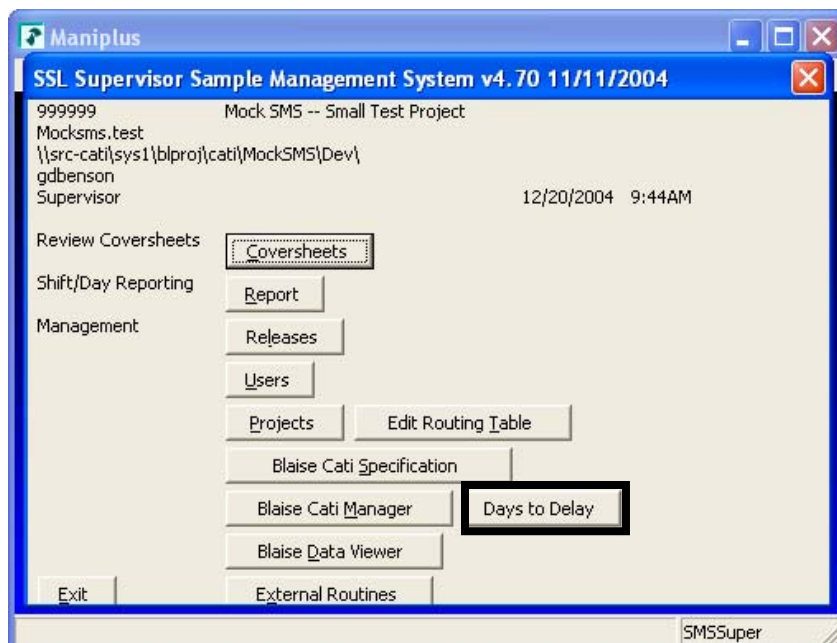


Once the field for sorting has been inserted, click on the “Edit” button to indicate whether the daybatch should sort this field in ascending or descending value. In this example, the sort field indicates whether a case is RDD (value=1) or recontact (value=2). The effect of this sort will be to make sure that all RDD cases with a default priority get delivered before recontact cases with the same priority. *If you choose a field for which some lines have a null value, the null value cases will have the lowest priority.*

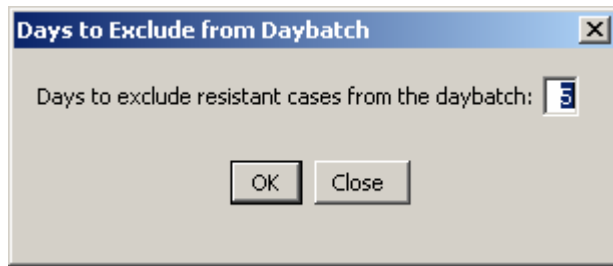
## Days to Delay

In order to set the number of days to keep cases out of the daybatch following an initial refusal, click on the “Days to Delay” button on the main supervisor menu. You will see a dialog that allows you enter the number of days that need to elapse before conversion can be attempted.

**Figure 40: Days to Delay Button**



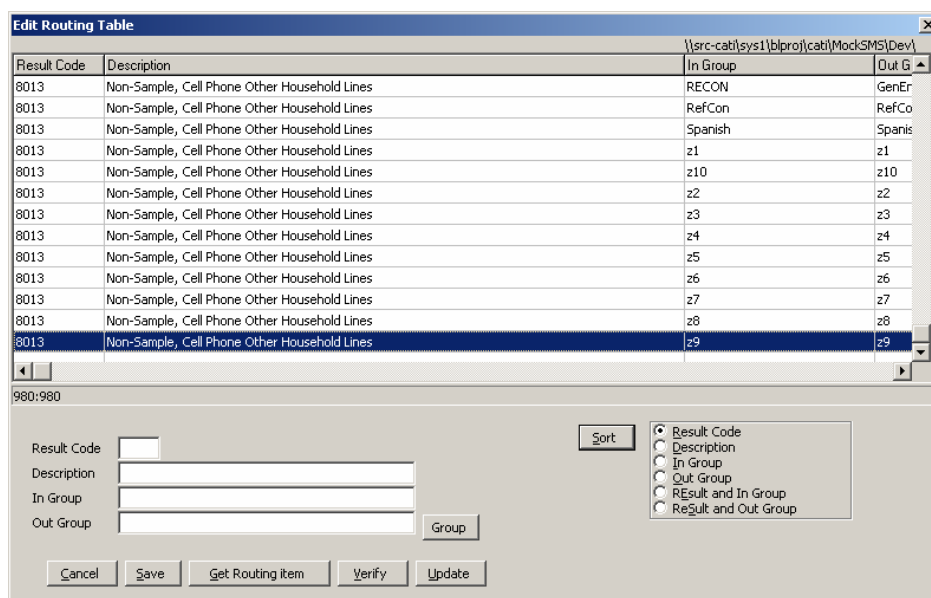
**Figure 41: Days to Exclude**



## Routing Table

SMS2 determines the handling of cases based on result codes and other outcomes through the use of the routing table. You can access the routing table through the “Edit Routing Table” button on the Supervisor menu. If a project is considering modifications to the standard routing table, the Project Lead needs to work with the CATI programmer to determine the feasibility and ramifications of any changes. Other Managers should not access the routing table.

**Figure 42: Routing Table**



The “Edit Routing Table” option should be used only if there are minor modifications to the way that result codes are being treated. For example, while most studies will want all Spanish resistant cases to stay with the Spanish group, other studies may decide that they should be routed to the Refusal Conversion (RefCon) group. For minor modifications such as these, a CATI Programmer can work with the Project Manager to make the adjustment.

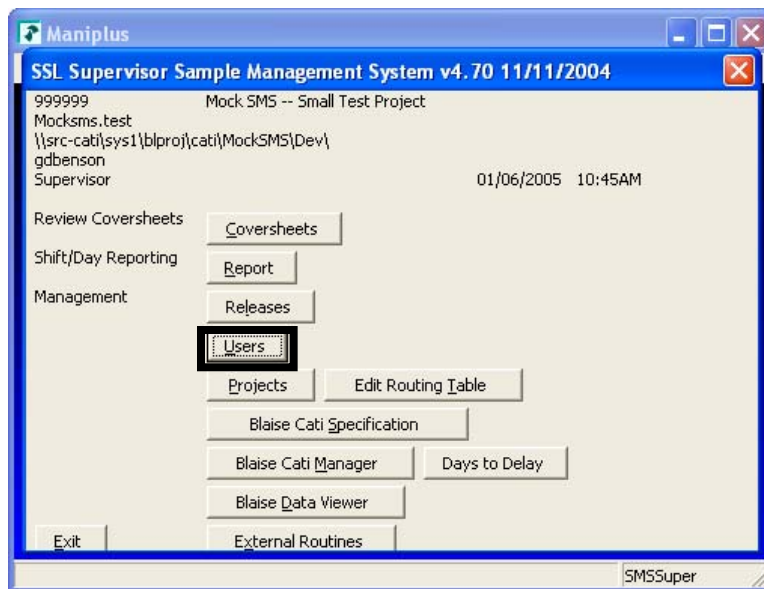
If a project requires that a new group of interviewers be established to manage certain sample types, for example a tracking group or a race group or a male / female group, then an entire result code set (from “0000” to “9000”) must be set up with that new group as an “InGroup.” This tells the routing table what to do with result codes created by interviewers belonging to that new group. An “OutGroup” must also be assigned for each result code, so that the routing table knows whom to deliver a case with that result code from that interviewer group to. Similarly, if new groups are added to the routing table, project specific rules should be established for the “OutGroup” routing of result codes from other groups so that the new group will receive cases.

Finally, if it is known in advance of the launching of the field period which cases need to be worked by which groups, this MUST be specified as “ToWhom” prior to the first sample being worked. If not, all cases will get routed to the General English group (GenEng) first.

## Users

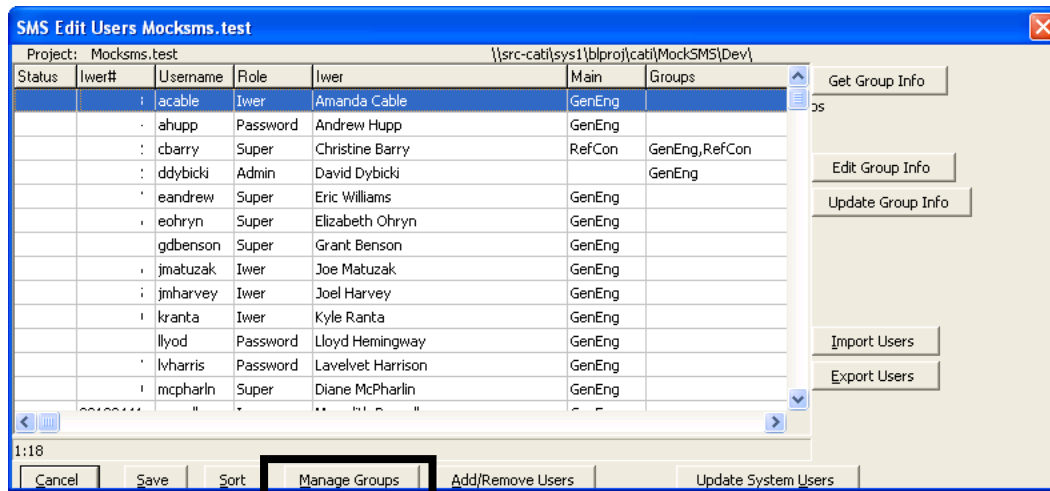
If cases are to be reassigned to groups as well as interviewers, for example if it is determined that a particular type of case belongs with a set of interviewers, or if a case has been routed to a group in error due to missed appointments, these groups must be added through the “Users” button.

**Figure 43: Users Button**



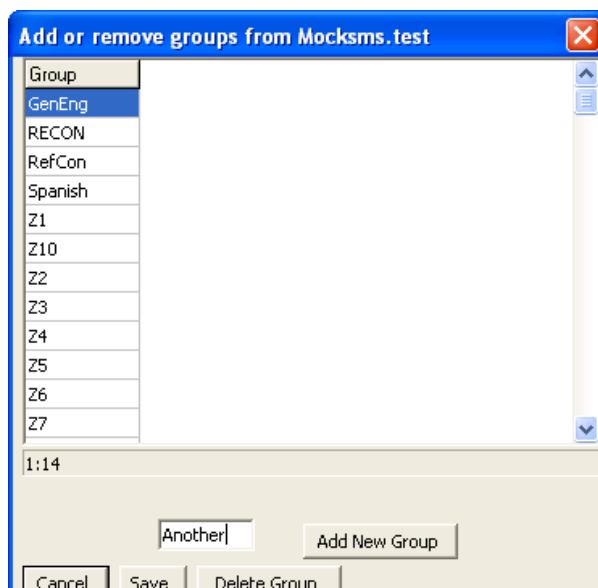
At the bottom of the Edit Users window, there is a “Manage Groups” button where groups can be added so that cases may be reassigned from the Coversheets interface.

**Figure 44: Manage Groups Button**



By selecting the Manage Groups button, you are taken to an interface where groups may be added or removed. However, keep in mind that the group names are case sensitive. If you use a group name with different upper and lower cases than is listed in the routing table, reassigning a case to a group will essentially render the case dead. When done, select “Save” and exit.

**Figure 45: Add Or Remove Groups**







## ***Check List 1: Setting Up a Project***

This checklist highlights issues that Project Leads need to take into account when setting parameters for a project.

<b>Issue</b>	<b>Relevance</b>	<b>SMS2 Issues</b>	<b>Client Decision</b>
Survey Days	Constrains appointment setting; Assists in planning goals	Appointments	
Crew Size	Affects the distribution of appointments; Constrains appointment setting	Sample Distribution; Appointments	Not applicable. SRO determination. Set to average number of available interviewers during any given day.
Sample Size	Interview goals; Response rates; Eligibility rate; Working Number rate; Staff needs; Timing	Daybatch, Crew Parameters	
Interview Timeline (Quick take, Square take)	Interview goals; Staff needs; Timing	Daybatch, Crew Parameters; Sort Order	
Reserving Sample	Language constraints; Sample type constraints	“ToWhom” preloads	
Call Limits	Negative impact on response rates; Potential impact on response bias; Impact on budget	Maximum number of calls	
Appointment Routing	Do appointments go back to interviewers, groups, or don’t we care? Potentially may increase response rates, but may also delay completion of interview	Appointment parameters; Appointment intervals	Not applicable. SRO determination. Appointments are routed back to individuals.

<b>Issue</b>	<b>Relevance</b>	<b>SMS2 Issues</b>	<b>Client Decision</b>
Missed Appointment Follow-Up	If a hard appointment is missed, should it come back at a specific time or day? What about soft appointments?	Hard coded. Default is for hard appointments to come back the next day for the same time slice. Missed soft appointments are eliminated from rerouting and treated as default priority	Not applicable. SRO determination.
Time Slice Sets – Used or Not Used? If Used, Which Slices.	Impacts delivery of previous no-contact dials. If used, slices can control how many times no-contact dials can be made in a certain day and time. However, it limits the number of times cases can be dialed in a day.	Time Slices; Days Between No Answer; Minimum Time Between ‘Other’ No Answer; Do Not Allow Same Day Answering Machine Calls; Maximum Number of Dials	
Time Slice Sets – Grids	Time slices can be set to automatically code out cases based on a grid procedure. However, this requires the establishment of time slices. Typically, grids are only used for RDD cases.	Time Slices	
Sort Priorities	Should some cases be focused on more than other cases? Is there a preference for how cases are called through?	SMS.bla flags; Use Sort Fields; Sort Fields	
Groups and Sample Types	Is there special sample that requires particular interviewer characteristics?	Users; Groups; Routing Table; ToWhom preloads	

<b>Issue</b>	<b>Relevance</b>	<b>SMS2 Issues</b>	<b>Client Decision</b>
Days to Delay	How many days should initial resistant cases be excluded from delivery? What is the IRB protocol?	Days to Delay	
Do Not Call Before / After	What is the earliest a case should be called local time? What is the latest it should be called local time?	Time Zones; Crew Parameters	
Start / End of Shifts	When should interviewers be staffed for?	Crew Parameters; Time Zones	Limited applicability. Generally, an SRO determination based on available staff.



## Chapter 3: Managing Study Periods With SMS2

Once a project has been set up, there is very little additional work that needs to be done with the parameters other than periodic maintenance to meet changing study priorities at different phases of the study. Generally speaking, we can refer to these study periods as the beginning, middle, and end of the project, although this is admittedly a very simplistic view of project life cycles. The initial project set-up is directed to launching a study, and should therefore take into account study requirements at the beginning phase. As this has already been addressed in chapters 1 and 2, this chapter will focus on parameters that may require maintenance during the middle and final phases of a study.

### ***Sample Release***

A release is a set of sample lines used in the management of the sample. The group may consist of one case or a thousand cases. Each release is typically designed to be representative of a larger sample. Releases may be both made available (“released”) for interviewing, or they may be withdrawn from the sample. Generally speaking, we prefer not to withdraw releases after interviewers have begun working them, unless absolutely necessary or as part of a two-phase sample design (“subsampling” or “double sample”). In addition, we often hold back several releases until we get a sense for eligibility rates and response rates among the initial sample. Sample is released or withdrawn after consulting with the client.

SMS2 manages releases (replicates) in two parts, handled through the same interface.

There is a master list of releases stored in the system for the study, and each case has a

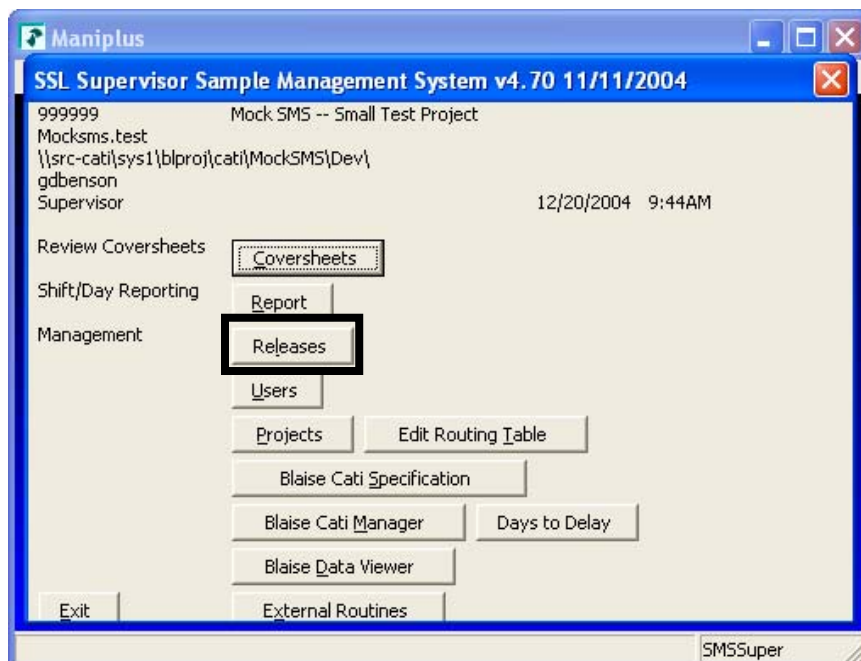
release number (RepNumber) and a flag whether the case has been released (ReleaseFlag).

Setting the flag on individual cases is important for automatic case delivery because the SMS2 delivery algorithms are based upon flags and other status codes for each case.

**Note:** because releases may take place during production interviewing, the release management is conducted in “shared mode.” This means that updates to releases may be made while interviewers are logged onto the project, but it will be slow; the only way to make it faster is to change to “exclusive mode” and stop production by having all other project users log off to process the releases.

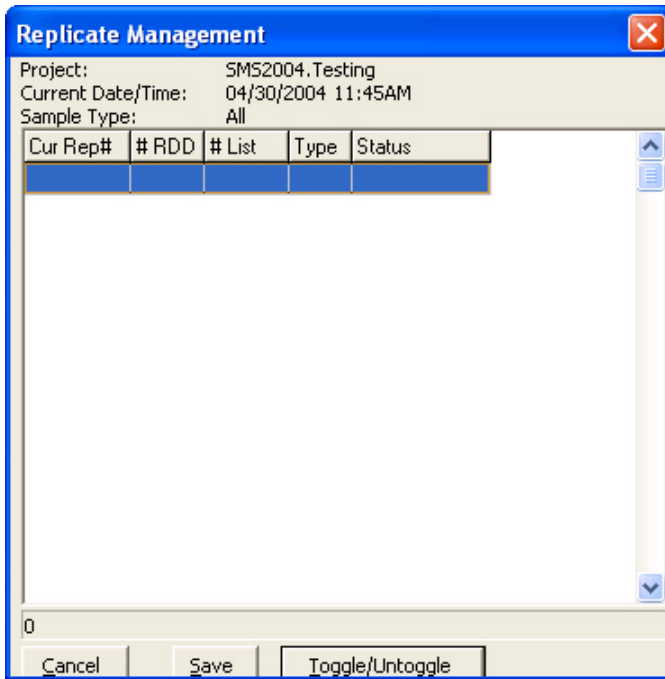
To release sample, begin by clicking the “Releases” button from the main supervisor screen.

**Figure 46: Release Button**



This will launch the Replicate Management window.

**Figure 47: Replicate Management Window**



Releases are made available in whole units and are never partially “released.” So there can be thousands of sample lines in the study, though only a small number of units are available for interviewing.

Scroll through the list of release numbers and toggle the status for the replicates. Those replicates that change from a status of “NotReleased” to “Released” will have their flag set to released. Those that change from a status of “Released” to “NotReleased” will have their flag unset.

When you click the “Save” button, be patient. The more changes made, the longer this operation will take.

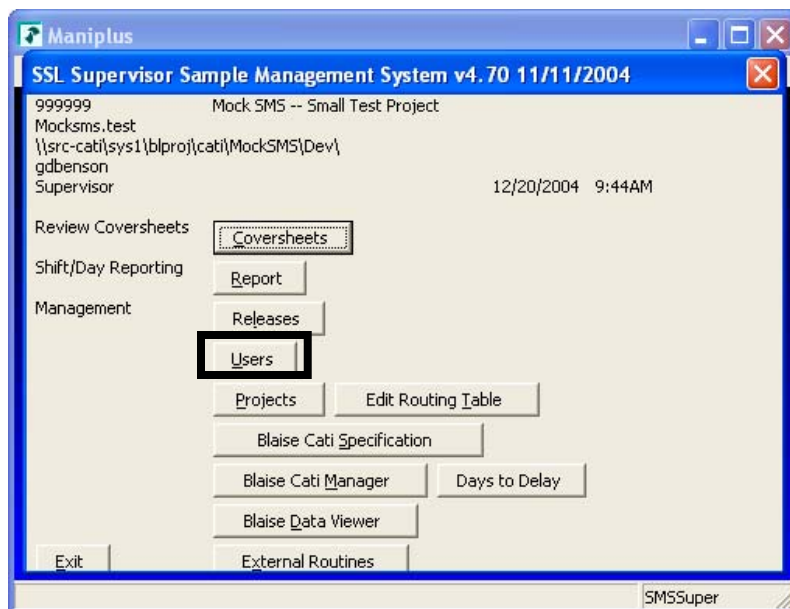
## Group Management

Throughout the study period, interviewers may have to be added to the project or interviewer characteristics (groups) modified. As with many things in SMS2, there are often several different ways of accomplishing these tasks. We will provide one explanation here for adding interviewers to the project and changing group assignments, but it is not the only way of accomplishing the task.

### Adding an Interviewer

To add an interviewer to a project, click on the “Users” button from the main dialog screen.

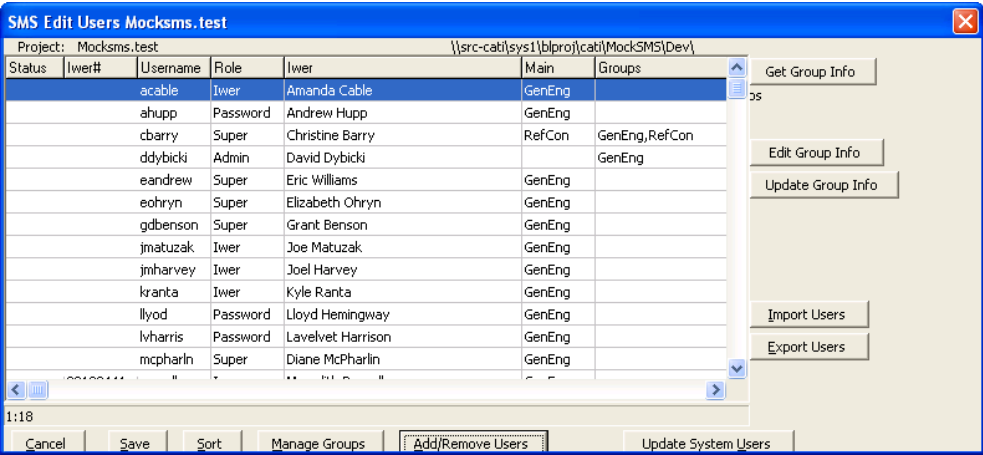
**Figure 48: Users Button**





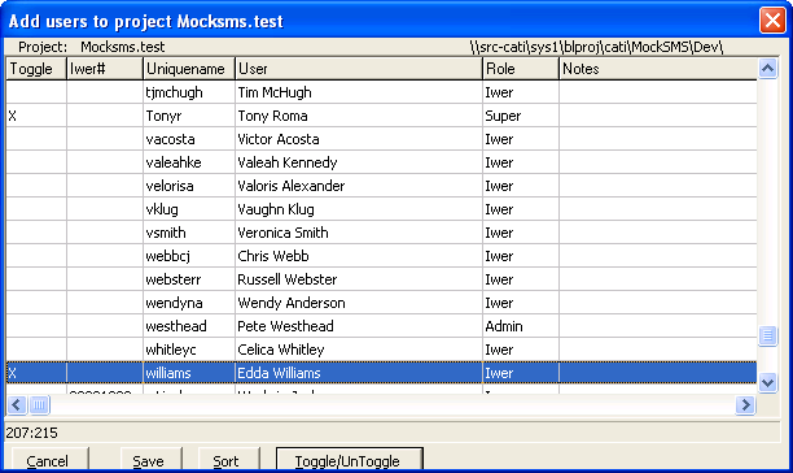
This will launch the list of current interviewers and Managers assigned to the project in an Edit Users window. Before going any further, you should check to make sure that you are the only Manager adding an interviewer to the project, as multiple, simultaneous efforts to do so will only overwrite each other.

Figure 49: Edit Users Window



To add a user, click on the “Add/Remove Users” button at the bottom. This will list all users currently assigned to at least one SSL project.

Figure 50: Add Users to Project



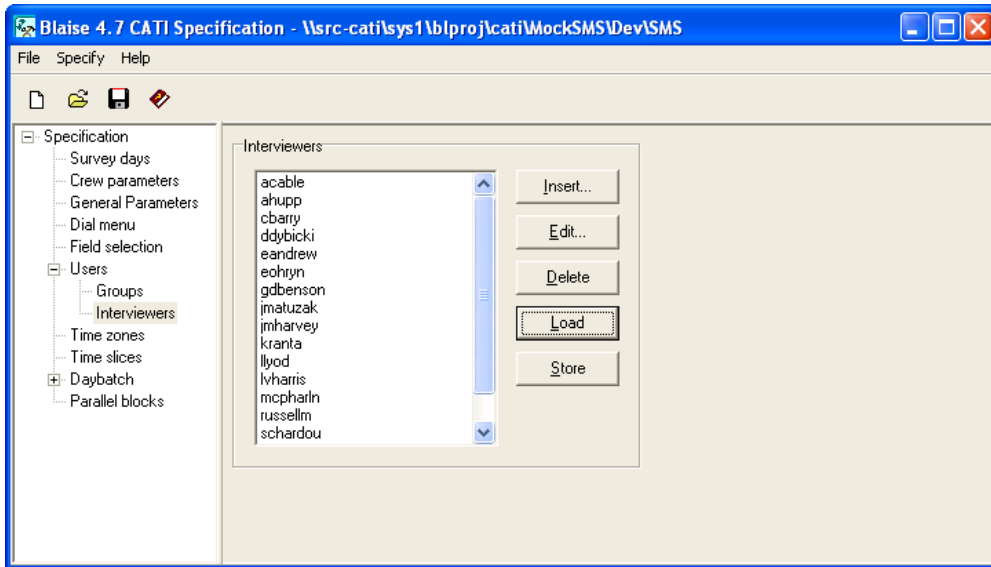
Select the interviewer you wish to add to the project by left clicking on his or her name once and then clicking the “Toggle/UnToggle” button. An “X” in the “Toggle” column will indicate which users are selected for the project, both in this session and from past sessions. Click “Save” to save the change to the ProjectUser database. You will be asked to verify to save the current view. By answering “Yes,” you will write the changes back to the ProjectUser database; answer “No” to avoid saving changes.

Once you have added an interviewer or Manager to the project, you will have to provide him or her with one or more group assignments. You can accomplish this from the Edit Users Window by selecting an interviewer who already has the relevant group assignments, clicking on “Get Group Info,” then selecting the new interviewer and clicking on “Update Group Info.” However, unless there are a lot of interviewers that have to be added and updated simultaneously, we generally recommend going through the SMS2 Cati Specifications menu, as described below.

## **Editing User Group Assignments**

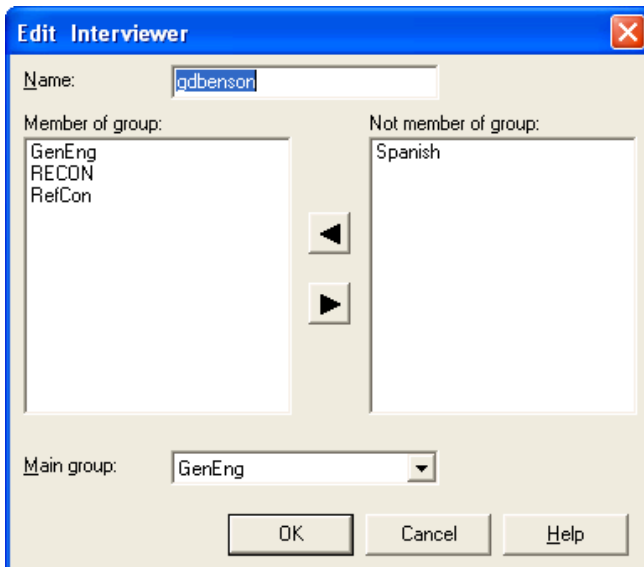
The easiest way to edit user group assignments is to go through the Cati Specifications, expand the “Users” category, and select “Interviewers.” Begin by clicking the “Load” button to update the list of users with the information just completed through the “Add Users to Project” interface described above.

**Figure 51: CATI Specifications - Interviewers**



Next locate the interviewer whose group settings need to be updated, select him or her, and press the “Edit” button. This will launch “Edit Interviewer” window.

**Figure 52: Edit Interviewer**

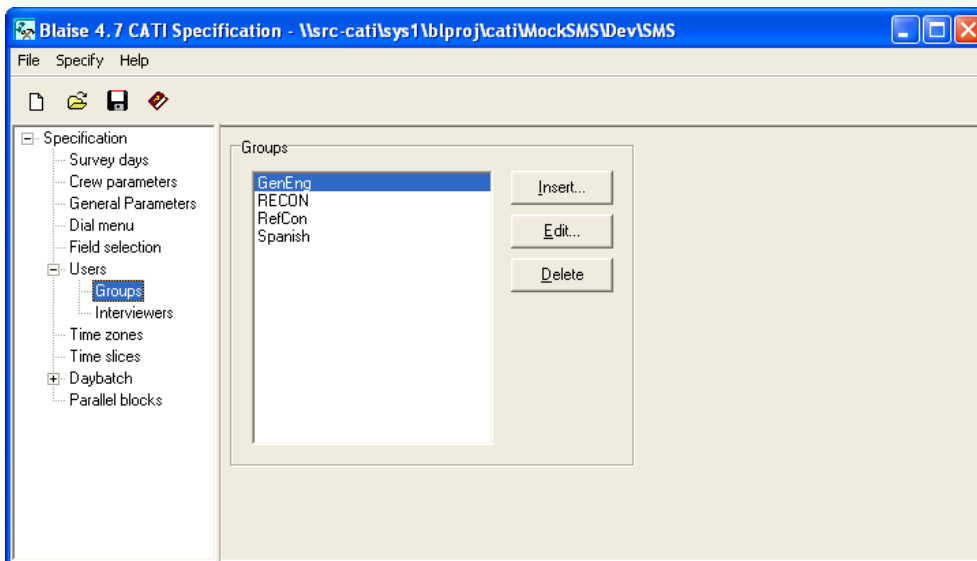


In this window, two things need to be accomplished: First, the interviewer needs to be assigned to at least one group. Next, select the group which should be the interviewer's main group from the drop box. The drop box will be populated with groups listed in the left hand column.

## Managing Groups

In addition to adding groups to interviewers, you can add interviewers to groups by selecting “Groups” from the Specifications-Users menu instead of “Interviewers.” If you select “Edit” from the Specifications Groups window, you will be provided with a pick list of interviewers that can be moved over into the group. However, you will still have to assign main groups to each interviewer.

**Figure 53: CATI Specifications – Groups**



In addition, you can insert new groups and delete existing groups from the Specifications – Groups window. Keep in mind that if you add a group, you will also need to add InGroup and OutGroup specifications in the routing table for every result code.

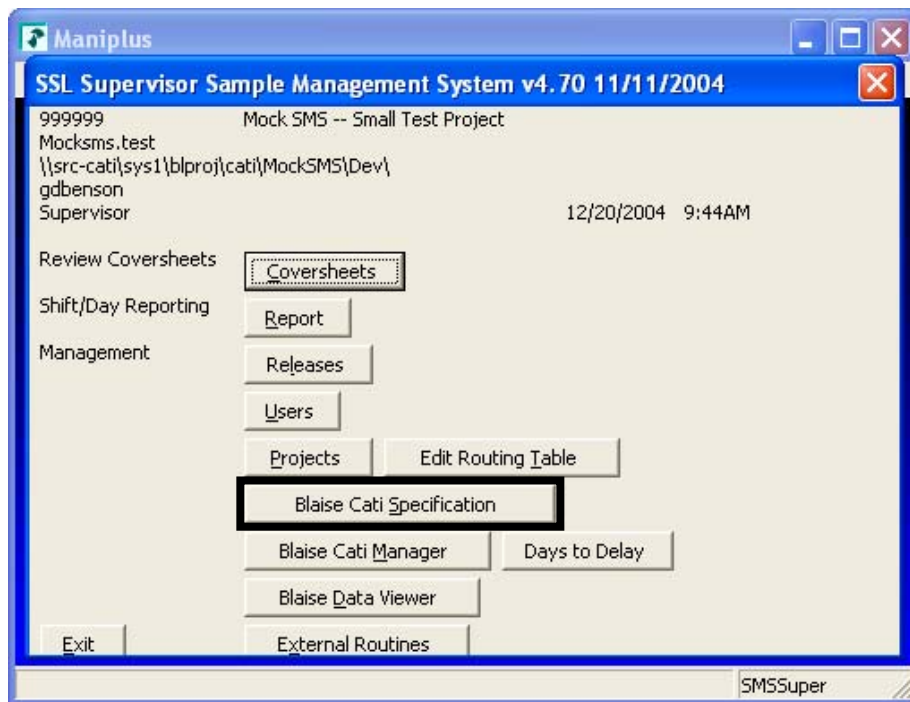
However, as you approach the end of a study, it may be worth going through the Specifications – Groups window and add all interviewers to all groups that they can possible work in order to ensure that each case gets worked through and each interviewer is able to work as many cases as possible.

## ***Survey Days***

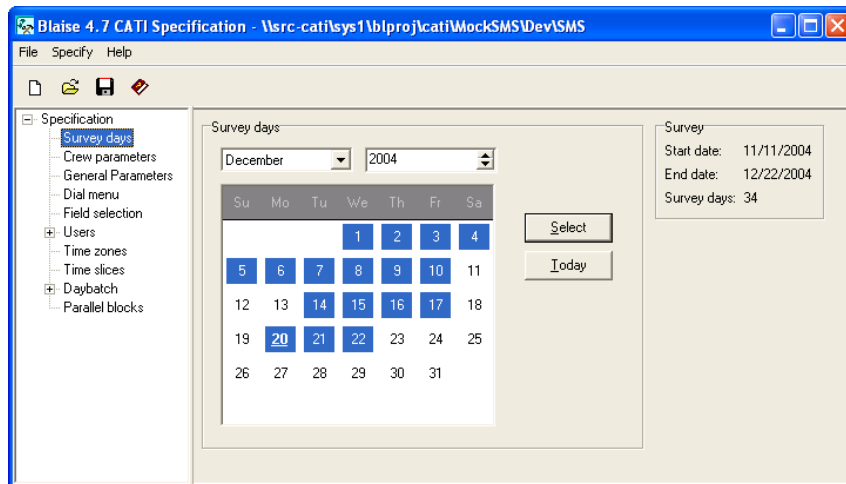
Projects occasionally change scope depending on budget, response rates, and number of completed interviews. This most commonly impacts the length of the field period, either extending or shortening it. You should check with the client on a regular basis to determine if the field period will change. The sooner you know, the better it is, as survey days impact when appointments can be made through the SMS2 system.

To update the survey days, select Cati Specifications from the main supervisor menu. From here, select Survey Days from the left hand menu.

**Figure 54: Cati Specifications**



**Figure 55: Survey Days**



To add a day, simply double click on it and save the setting. To add all the days of a particular weekday in a month, double click on its abbreviation in the top menu (“Su,” “Mo,” “Tu,” etc.). You can also add survey days in future months by selecting EACH

appropriate month and year, as applicable, from the Survey Days drop boxes. Again, you will be required to double click on the day abbreviations or the individual days that are being extended to.

To remove days, simply complete the process in reverse. If you double-click on a day abbreviation, it will only delete future days, not days that have occurred in the past.

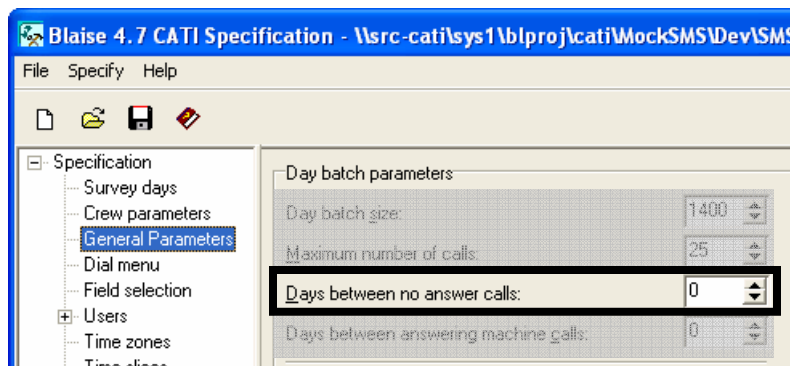
When done, click on the diskette symbol signifying “Save.”

Remember to modify the crew parameter start and end times for any new survey days added to the project.

## ***Days Between No Answer Calls***

Typically, a study begins by having cases that do not yield any sort of contact excluded from the daybatch for a few days. This is done to ensure that interviewers can cycle through all the cases, focusing on cases that yield successful contact and cases that have not been dialed at all.

**Figure 56: Days Between No Answer Calls**



As a study enters the middle phase of the field period, the number of cases with no contact attempt on them will most likely be vastly smaller, although there may still be some new lines that were recently released. As a result, you are still likely to want to exclude no contact calls from the daybatch, thereby ensuring that new cases will be called (barring a large number of appointments or low staffing levels), but probably only for 1 or 2 days. Keep in mind that days to exclude means exclusion from the daybatch such that if a case is excluded for two days, it means that a no contact call on Monday will result in exclusion from the daybatch on Tuesday and Wednesday, and the case will not be available for inclusion in the daybatch until Thursday.

Finally, as a study enters the end phase of the field period, all cases should have received at least one contact attempt and the focus is on making as many viable cases available to interviewers as possible. For this reason, we recommend setting the days between no contact calls to 0, as it is in Figure 56, above.

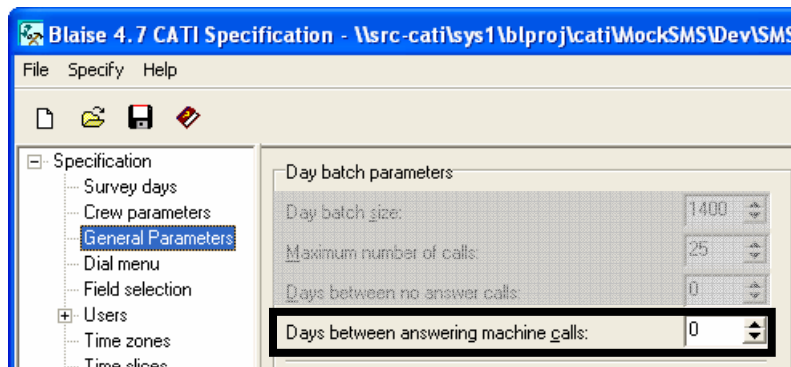
### ***Days Between Answering Machine Calls***

Studies typically begin by setting the days between answering machine calls to multiple days in order to give respondents a chance to call in. This means that once we have left a message on the answering machine, we do not make the case available for automated delivery for several days, though the case can be brought up by searching on case ID or phone number. As the study enters the middle of the field period, these days should be reduced to one or two days, as respondents may be using the answering machine as a screening device.



Near the end of the study, we will want to maximize the likelihood of reaching a respondent on the line by eliminating the days between answering machine calls (setting it to zero) and allowing multiple same day answering machine dials, as described in Do Not Allow Same Day Answering Machine Calls, below. This will enable the same number of daily dials on answering machines as on any other no contact dials. By doing this, a case can be attempted at different times of the day, increasing the chance of making contact with the respondent.

**Figure 57: Days Between Answering Machine Calls**

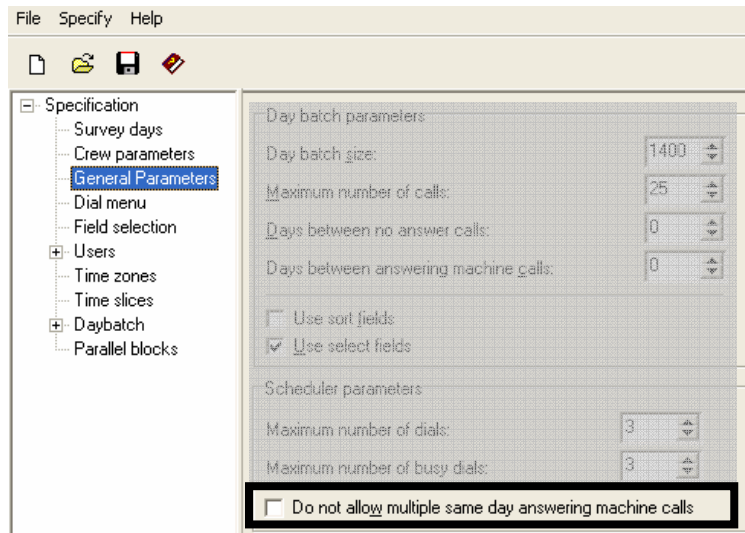


### ***Do Not Allow Same Day Answering Machine Calls***

Depending on sample type and study goals, a project may decide not to allow a repeat same day dial to a case where an answering machine is reached. If that is the case, then a busy dial followed by an answering machine dial will exclude the case from the daybatch for the rest of the day, even if the number of dials in the general parameters is set to something greater than 1.

By allowing multiple same day answering machine calls (which should be termed “dials”), cases that reach answering machines will be treated according to some of the same rules as other no contact dials, including minutes between no answer dials and maximum number of dials.

**Figure 58: Do Not Allow Multiple Same Day Answering Machine Calls**



## ***Use Sort Fields***

Sort fields is a very powerful tool that allows the Manager to prioritize some cases over others. However, they must be used with extreme discretion, as they will interact with crew shifts, time slices, and minutes between no contact calls. By sorting on a particular set of variables, including whether or not contact was made and number of attempts made on a case, you are determining the order in which the cases are loaded into the daybatch. Thus, the prioritized cases are the ones that are brought up *first* in the daybatch, and therefore more likely to be called during the *early* crew shift. As a result, the one sort field that lends itself most to sorting at any stage in the field period is time zone. Keep in

mind, though, that a new field will have to be created for the time zones such that they will be sortable in ascending or descending order. That is, if we attempt to sort on time zones by themselves, then Central Time (CST) will come up first, followed by Eastern Time (EST), Mountain Time (MST), and Pacific Time (PST). This would probably not be the intent of the sorting, as we would typically want to sort by EST, CST, MST, and PST.

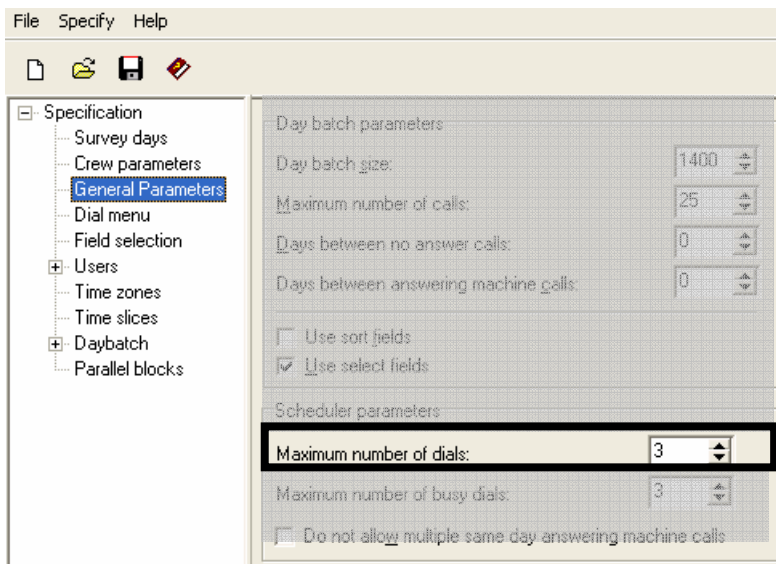
There are no general guidelines for when to use sort orders or whether to nest them. This will have to be determined on a study-by-study basis.

### ***Maximum Number of Dials***

At the beginning of a field period, the maximum number of dials is likely to be relatively small. The purpose of enabling some multiple dials at the beginning is to enable follow-up attempts on appointments (hard and soft), in the event that a respondent is not available at the arranged time. At the same time, by keeping the number low, interviewers are compelled to work through the entire sample, rather than focus on a few lines.

During the middle of the field period, the number of dials should be increased both to accommodate having fewer cases available to work – and therefore permit more attempts on no contact cases – and to enable more follow-up attempts on appointments that did not reach the respondent.

**Figure 59: Maximum Number of Dials**



At the end of a field period, when there are very few cases left, it is worth considering setting the maximum number of dials to 9, which is the highest number allowed.

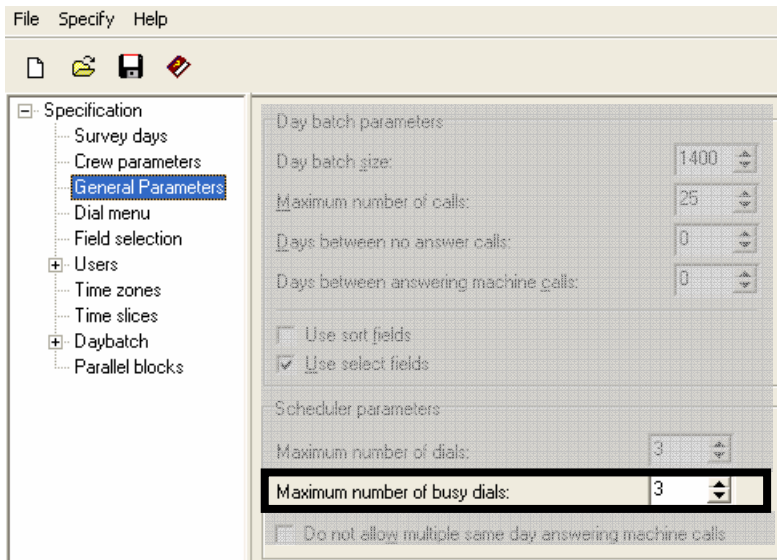
### ***Maximum Number of Busy Dials***

Busy dials are treated as a soft appointment in SMS2, thereby taking priority over no contact dials. This is because a busy signal is indicative of someone being at home. However, in the event that a line is a permanent busy signal, we may not want to put too much effort into working that sample line, particularly during the beginning of the study.

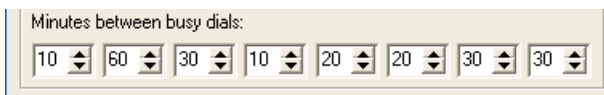
As the number of busy dials is adjusted to allow more dials during the middle and end phases of the field period, you should also pay attention to the time interval between dials. Thus, we recommend a small amount of time between the first and second busy dial, a little more between the second and the third, and a significant amount of time

between each subsequent dial. The intervals between busy dials may be accessed through the “More” button in the “General Parameters.”

**Figure 60: Maximum Number of Busy Dials**



**Figure 61: Minutes Between Busy Dials**



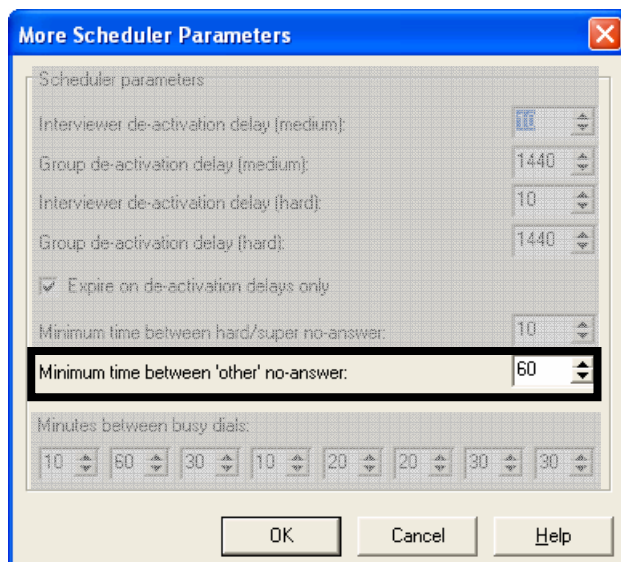
### ***Minimum Time Between ‘Other’ No Answer***

Typically, we begin by setting the minimum time between other no answer to somewhere between 1 and 3 hours to ensure that interviewers can work through the entire sample.

However, because this interacts with both time slices and with soft appointment call-back attempts, the intervals should be increasingly minimized as one approaches first the middle and then the end of the field period.

By setting the minimum amount of time between 'other' no answer dials to, say, 3 hours, we are ensuring that a soft appointment between 3 PM and 4 PM which gets no contact on the first attempt at 3:30 PM, will not be retried until 6:30 PM at the earliest. During the beginning of a study, this may be quite appropriate. However, during the phases of the field period where there are fewer optimal cases left, this interval should be reduced so as to allow follow-up calls at least within the hour, possibly more frequently.

**Figure 62: Minimum Time Between 'Other' No Answer**



## ***Time Slices***

Time slices essentially guarantee that cases that never have any contact on them only receive one 'try' a day during a particular time range, and that all subsequent attempts be made across a distributed time periods and days. In the beginning, this is ideal for making sure that no contact cases only be called at times most likely to yield contact given what we already know about their relative success rate.

As a study enters the final phase of the field period, it may make sense to disable the time slices to allow multiple no contact attempts on a case throughout a day.

### ***Word of Caution About Managing Parameter Settings***

Like any other computer program, SMS2 can only do what it's told. While it reduces the burden on interviewers by selecting their cases for them, it adds responsibility to the Managers to ensure that the sample is being distributed in optimum fashion. The success of any interviewing project using the automated call scheduler depends on Managers staying aware of the sample's progress and understanding the appropriate times to adjust parameters in order to maximize opportunities as the amount of available sample dwindles, and avoiding changing parameters when not required. When in doubt, discuss what you wish to achieve with a parameter change with one of the SMS2 Team Members before making any changes.





## ***Check List 2: Managing a Project Through Study Phases***

This checklist highlights issues that Project Leads may need to take into account when managing a project through different study phases.

<b>Issue</b>	<b>Relevance</b>	<b>Guidelines</b>	<b>Client Decision</b>
Survey Days	Should the study be extended? Should the study period be shortened?	This is a budget and response rate trade-off issue	
Days Between No Answer Calls	Reducing the days between no answer calls allows for more cases to be available in the daybatch	Consider reducing days between no answer calls to 1 or 2 during the middle phases and to 0 during the final phase of the study	Generally not applicable. Lead Project Manager Decision
Days Between Answering Machine Calls	Reducing the days between answering machine calls allows for more cases to be available in the daybatch	Consider reducing days between answering machine calls to 1 or 2 during the middle phases and to 0 during the final phase of the study. However, if an end-game incentive is offered, perhaps set the parameter to 1 to allow the respondent to call us	Generally not applicable. Lead Project Manager Decision. However, end-game incentive treatment should always be discussed with the client.
Do Not Allow Multiple Same Day Answering Machine Calls	Permitting multiple same day answering machine calls generally only applies to the end of the study period	Allow the final week of a study	Generally not applicable. Lead Project Manager Decision
Use Sort Fields	Sorting enables the project to focus on contacting particular sample to meet study requirements	During the middle of a study, it may be useful to sort on number of dials such that cases with the fewest dials are called first. During the end of a study, Managers should consider sorting on cases with contact and no resistance.	

<b>Issue</b>	<b>Relevance</b>	<b>Guidelines</b>	<b>Client Decision</b>
Maximum Number of Dials	Permits multiple no contact attempts during a day	At the end of a study, this should be increased to 9	Generally not applicable. Lead Project Manager Decision
Maximum Number of Busy Dials	Permits multiple busy dials during a day	At the end of the study, this should be increased to 9 and the time between busy dials should also be modified so as to verify whether it is a permanent busy line or not. For example, consider setting the intervals to 5-5-10-30-60-60-60-60 minutes	Generally not applicable. Lead Project Manager Decision
Minimum Time Between 'Other' No Answer	Permits an increased number of dials on a no contact case	At the final phase of the study, consider reducing the minimum time between no answer calls to one hour	Generally not applicable. Lead Project Manager Decision
Time Slices	Spreads out no contact attempts but also excludes cases from delivery	Depending on the study period length and the release of new sample, consider disabling the time slices at the end of the study	
Group Assignment	Manages the routing of cases	At the end of the study, consider making all interviewers members of all groups except special language groups	Generally not applicable. Lead Project Manager Decision

## Chapter 4: Shift Management with SMS2

Managing interviewing activities on shift with SMS2 calls for staying abreast of appointments, interviewer groups, and the status of the current daybatch. The tools for performing these tasks are accessed through the “Blaise Cati Manager” and the “Coversheets” buttons in the main SMS Supervisor menu.

Keep in mind that the SMS2 offers tools to *assist* management; it in no way replaces management. In fact, we are hopeful that the SMS2 provides Managers with better tools to implement decisions in a more timely fashion and more accurately, and also gives Managers more time to manage interviewers rather than manage the sample.

A key aspect of supervision in the SSL is the management of interviewer effort and quality. That is, it is not only our objective to meet production goals, but also to reduce project costs by reducing the amount of time that interviewers spend calling households without success, or worse yet, the amount of time that interviewers spend not dialing at all. Management in the SSL must include more than monitoring results on the computer. It should include being proactive, anticipating and heading off problems that interviewers may encounter, and monitoring interviewer activity in person.

This guide to shift management with the SMS2 is in no way complete. It merely references items that a Shift Manager should be monitoring on a daily basis from within the SMS2.

## View Daybatch

Clicking on “View Daybatch” in the SMS tree on the left side of the Cati Management window gives you a snap shot of the current status of the daybatch. This includes the number of cases currently being worked (“Being Treated”), cases done for the day (“No Need Today”), cases that are not active for a variety of reasons and therefore not available for delivery by the SMS2 (“Not-Active”) and cases that may be distributed by the daybatch (“Active”). If more than one crew shift is specified for the day, these results will be broken down by crew shift.

**Figure 63: Daybatch View**

The screenshot displays the 'Daybatch View' interface. It features two main sections: 'View by Status' and 'View by Priority', each with a table of counts and a 'Total' row. A date and time summary is at the bottom.

View by Status	
	.. 9:00 PM
Being treated	0
No need today	1
Not-active	2
Active	772
<b>Total</b>	<b>775</b>

View by Priority	
	.. 9:00 PM
Default	773
Soft	0
Medium	0
Hard	1
Super	0
<b>Total</b>	<b>774</b>

Daybatch date:	Tuesday, December 21, 2004
Last schedule time:	5:25 PM
Current crew:	9:00 AM-9:00 PM

In addition, the priority perspective shows how many appointments in each category are currently in the daybatch. Looking at both these perspectives gives the Manager a quick picture of how many lines there are to work and how many of these have a high priority, and thus a higher probability contact and completion.

**Figure 64: Daybatch View, Multiple Crew Shifts**

View by Status				
	.. 12:00	.. 15:00	.. 18:00	.. 22:00
Being treated	0	0	0	0
No need today	0	0	0	2
Not-active	0	0	25	27
Active	16	91	839	0
Total	16	91	864	29

View by Priority				
	.. 12:00	.. 15:00	.. 18:00	.. 22:00
Default	0	0	802	0
Soft	0	58	32	0
Medium	14	0	0	0
Hard	2	33	30	27
Super	0	0	0	0
Total	16	91	864	27

The daybatch is updated every time a case is accessed and also in five minute increments to include cases with appointments on them and to include or exclude cases in different time zones.

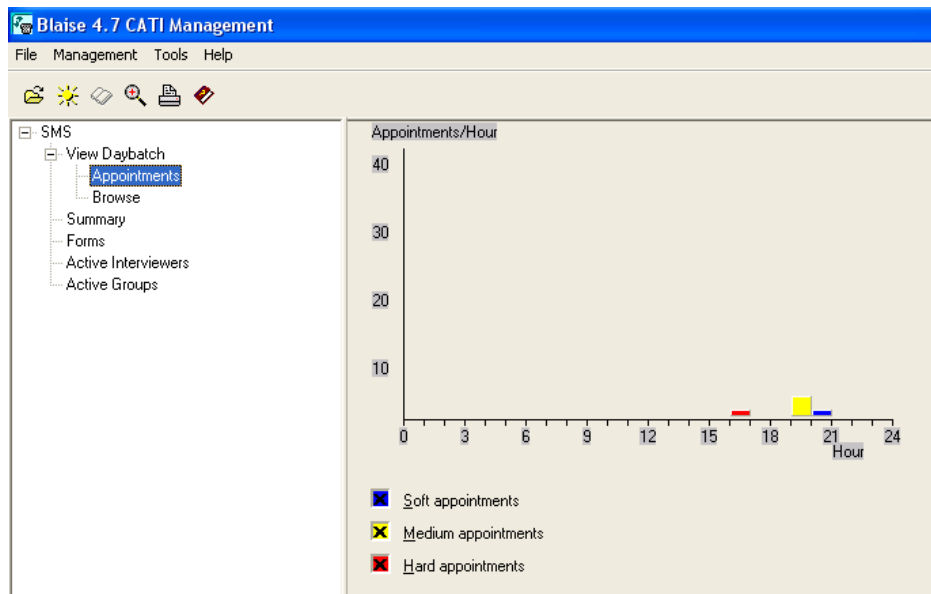
By performing a daily review of the status of the daybatch, the Manager is able to determine in advance if there may be a problem with running out of sample before it occurs, particularly if the daybatch is small. In that case, the Manager may work with the Project Lead to either change parameter settings or reduce the number of interviewers staffed on the project.

## ***View Appointments***

The first sub-branch of the View Daybatch branch is labeled “Appointments.” Clicking on this gives you a graphical representation of the number, types, and times of appointments for the day. These should be reviewed early in the shift to determine first if there is adequate staff available to work the appointments, and second, to determine if interviewer or group for whom the appointment is assigned is appropriate. For example,

if a case is assigned to an interviewer who will not be working that day or during that shift, then the Manager should be proactive and reassign the case to a particular group that will be staffed or an interviewer who will be present during that shift. Alternatively, if an appointment is scheduled for a group that will not be staffed for that shift, then the Manager should work to call in an interviewer belonging to that group for the appropriate time, particularly if this is a special language group.

**Figure 65: Appointments**



Clicking on any of the appointments in the graph will open up a Case Summary window, providing summary details for each case represented in the column. In Figure 66, below, one of *several* soft appointments for a day is listed. The summary includes information about the sample ID, the phone number, when it will be active in the respondent's time, who the appointment is set for (if it is routed to a specific interviewer, that interviewer's

main group will also appear), time difference between the respondent's time and Ann Arbor time, and details about the appointment and call history.

To view the other appointments, either click the up or down arrows in the bottom left hand corner of the window. This will cycle through all of the appointments in that category (soft, medium, or hard).

**Figure 66: Case Summary**

The screenshot shows a window titled "Case Summary" with a blue title bar and a close button. The window is divided into three main sections: "Case info", "Appointment info", and "Call info".

**Case info**

Key:	30825
Phonenumber:	555-555-5555
Active:	from 7:00 PM to 10:00 PM
To group:	GenEng
To interviewer:	
Time difference:	- 1:00

**Appointment info**

Appointment type:	Period and day part
Appointment time:	from Monday, December 20, 2004 / 7:00 PM to Monday, December 20, 2004 / 10:00
Made by:	ahupp

**Call info**

	Who	Date	Time	Dials	Result
Last call:	tonyroma	12/14/2004	2:45 PM	1	Appointment
Last minus 1:					
Last minus 2:					
Last minus 3:					
First call:	tonyroma	12/14/2004	2:45 PM	1	Others

At the bottom of the window, there are two arrows (up and down) and a row of buttons: "Dial screen...", "Data..." (highlighted), "More...", "Close", and "Help".

For the detailed information that is available about call notes, you will need to go back to the Supervisor menu and click on the "Coversheets" button to go to the coversheet browser.

It bears repeating that an important item to check for appointments is the "To Group" field in the Case Info area. This displays the **Main group** of the interviewer who set the

appointment. If the interviewer in the “To Whom” field isn’t scheduled to work at the appointment time, the case will go to another interviewer in this group after a certain amount of time (typically between 10 and 15 minutes). This doesn’t mean that the case requires the special skills of this group. Since the interviewer probably belongs to multiple groups, it’s quite possible that this case first came to him or her from a group other than his or her main group.

In circumstances where the interviewer’s main group has few members, such as the Spanish group, the Manager will want to make sure that if the interviewer is not working, that someone from the designated group is. (If the appointment is for the current shift, this information can be checked by clicking on the “Active Interviewers” and “Active Groups” branches of the SMS tree.) If no one from the group is scheduled to work at the appointment time, then the Manager should review the call notes (through the coversheet browser) and determine if the case can only be called by that group. If possible, the Manager should reassign the case so that the appointment can be kept.

### ***Reassigning Cases and Super Appointments***

SMS2 allows Managers reassign cases to specific interviewers or groups, to set appointments, and even to force a case to be called immediately. All this is may be done from the Treat Form dialogue, which can be accessed by clicking on the “Dial Screen” button in the Case Summary window.



**Figure 67: Treat Form**

The image shows a software dialog box titled "Treat Form". It contains a "Dial menu" section with four radio buttons: "Questionnaire", "Appointment" (which is selected), "Non response", and "Call as soon as possible". Below this is a "For whom:" label followed by a dropdown menu currently displaying "lloydh". Underneath is a "Questionnaire data:" section with a "Phone" label and a text input field containing "555/555-5555". On the right side of the dialog, there are several buttons: "OK", "Cancel", "Help", "Zoom..", "Dial", and "Edit..". The dialog box has a standard Windows-style title bar with the text "Treat Form" and a close button (X) in the top right corner.

Clicking in either the “Appointment” or the “Call as soon as possible” radial button makes the “For Whom” field active. From there the Manager can select either a group or an individual from the drop box to receive the case. If the Manager does this as an appointment, the Make Appointment dialog box appears after clicking “OK.” (This dialog box is covered in detail in the Interviewer manual, so it will not be discussed here.) The information displayed in the dialog will reflect the original appointment, so if the only change being made is in who will receive the appointment, the Manager merely needs to click OK in the Appointment box.

If the Manager changes the “For Whom” by clicking on the “Call as soon as possible” radial button, this means that a super appointment has been created. This will move the case to first in line in the daybatch and will be brought up by the very next interviewer requesting a case.

## ***Searching Forms***

The “Forms” branch on the SMS tree opens a window that displays information about all sample lines, not just the lines loaded into the daybatch. This is a sortable and searchable list of all sample lines for the project. You may want to use this window when a respondent calls in to set an appointment. First, sort by the field that you want to search for (perhaps phone number for an RDD case, or maybe respondent name for a list case). Then enter the value for the search. The appropriate sample line will be highlighted. Double-clicking on the line opens the Treat Form dialog, which allows for the assignment of a case to an interviewer or group, and also for setting an appointment.

This screen can also be used to review, case by case, sample lines that have been excluded from the daybatch (“Not-Active”) and non-finalized. These cases will have been excluded because they have met various parameter criteria, including maximum number of calls (typically set to 25) and possibly time slice restrictions (if the SCA standard is used, this applies only to S-2 slices, as filled S-1 slices automatically get coded out as 6011, grid procedure). These cases can be individually called up and recoded or activated, as appropriate.

## ***Browse Forms***

Clicking the “Browse” branch of the SMS tree opens up a viewer that displays daybatch-related information about sample lines. While much of this information is not particularly useful for management, it can be helpful in assessing upcoming activity on a shift. For instance, if the Daybatch Summary indicates a high number of not-active

cases, Managers can scroll through the Browse Forms view to see when cases are slated to become active.

## ***Review Crew Times***

It is particularly helpful if Managers can review crew times on at least a weekly basis (as schedules are set), but also throughout the week to determine if the daily interviewer shift coverage has been accurately represented in the SMS2. We are particularly interested in getting a sense for whether the first and last shifts are correctly listed, as this directly impacts when appointments can be set for.

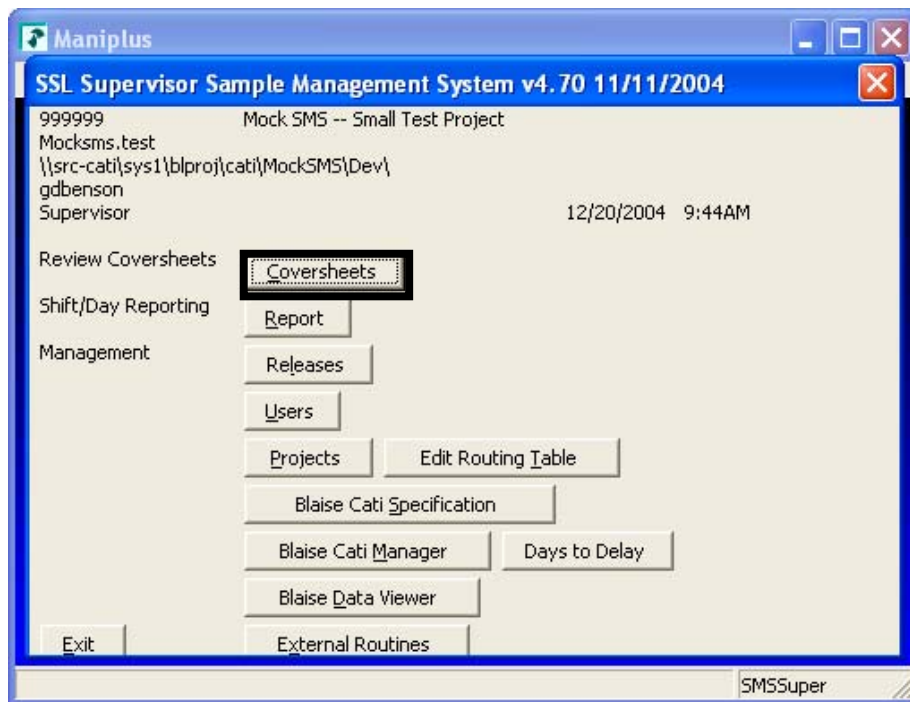
In addition, it is worth reviewing which groups will have coverage on any given day.

There is no field in SMS2 to record whether the groups will have coverage, but reporting to the next Shift Manager which interviewer will be working which group assignments, may be a helpful way for them to anticipate staffing needs and appointment reassignments.

## ***Working from Coversheet Review***

The Coversheet review is accessed directly from the Main Supervisor SMS screen. This is a very flexible search interface that has been coupled with features to permit the reassignment of cases and even enabling of conducting an interview by the supervisor. Most of the extensive list of features will only be used rarely in day-to-day management, while others may be used fairly regularly. This section will emphasize the items most likely to be used by Managers on a daily basis.

**Figure 68: Coversheet Review Button**



To access the Coversheet Review interface, simply click on the “Coversheets” button from the main window.

## **Review Coversheets Window**

The main purpose of the Review Coversheets window is to be able to either call up an individual case by ID or phone number, or a group of cases based on certain filter criteria. Once these cases have been called up, a Manager can add a result code and call note, reassign the case, or start an interview.

Much of the time, Managers will be entering a particular Sample ID and pulling up an individual case. This feature will be used to review result codes assigned to a specific

case and make changes if required (i.e. case becomes finalized by mistake or a wrong result code was entered).

**Figure 69: Review Coversheets Window**

The screenshot shows a software window titled "Review Coversheets" with a standard Windows-style title bar (blue with a close button). The window contains several input fields and checkboxes for filtering data. At the top, there is a "Choose IDs" text box and a "Phone #" field with three sub-fields separated by hyphens. Below these is a "Choose by Current Result Category" section with a list of checkboxes: All, No Attempt, Complete, Answering Machine or Service, Privacy Manager, Pager, Fax, Modem, Text Messenger, TTY, Cell Phone, Bad Number, Ring No Answer, Busy, General Callback, Best Time Known, Appointment, Initial Refusal, Final Refusal, Tracking, Hold / Problem, Final Non-Interview, Final Non-Sample, and Study Specific Codes. To the right of this list are several buttons: "Iwer Reserved for", "Group Reserved For", "Iwer", "Group", "Replicate #", and "Replicate Type". Below these buttons are three radio button groups: "Released" (with options Released, Not Released, All), "Resistant case" (with options RC Flag Set, RC Flag Not Set, All), and "Sample Type" (with options RDD, List, All). At the bottom left, there is a "By Specific Result Code" text box and three buttons: "Cancel", "Reset", and "Review". At the bottom right, there are "Date" and "Time" fields. The "Date" field has "Start" and "End" sub-fields with values "2/20/2003" and "2/21/2004". The "Time" field has "Start" and "End" sub-fields with values "6:00 AM" and "6:00 AM".

The choose IDs will permit multiple IDs to be entered. The ID is a search by itself, and the ID search takes precedence over all other search options, even if filters are applied.

The phone number may be entered with or without an area code, but requires the 3-digit and 4-digit parts. The '/' and '-' are automatically filled in, and are used as the literal phone number stored in the coversheet data. Only one phone number at a time may be searched, and takes precedence over all other search options other than the ID search.

## **Choose By Current Result Category**

Each result code is assigned a category and type when entered into the system (see Appendix C: Result Code Master List). For example, the code 1001 (complete) is typically assigned to the 'FI' (final) type and the "Complete" category, and the 1401 (answering machine – no message left) is assigned to the "NC" (no contact) type and the "AnswerMachine" category. The Current Result Category searches on the result category listed in the result codes for this project, and pulls up all cases with the corresponding result type. (Technical note: result category values are not stored in the call record.) Select "All" for searching every result type; "all" is the default if no boxes have been checked.

One can also search by specific result codes. The "By Specific Result Code Field" allows multiple result code numbers to be entered. If you know specific result codes you wish to look for and they are a subset of a category listed in "Choose By Current Result Category," then use this filter. For example, 1001 and 1005 are both "complete" categories, but 1001 is a totally complete interview, and 1005 is an accepted partial interview.

Typically, these searches may be used to pull up cases that either need review (for example, finalized result codes that are not completed interviews), or cases that need immediate attention (for example, call-in's and pending appointments). Once called up, the cases meeting the search requirements will be displayed. Further treatment is

possible from the Coversheet Summary Window, as described in Coversheet Summary starting on page 107.

## **Filter Fields**

Two of the filter fields may be of particular use in assigning cases to interviewers during a shift: Resistant Case and Sample Type (RDD or List). By selecting non-finalized cases in the result type categories and then selecting cases that are only list (recontact) cases with no resistance on them, the Manager can quickly identify the cases that are most likely to yield interviews, depending on the study parameters. Once these cases have been pulled up, they can be assigned line by line to particular interviewers on a given shift.

However, if this is done, keep in mind that the assignment stays with the interviewer. At the end of the shift, cases should be searched on by interviewer and non-finalized, non-appointments, to ensure that they be made generally available or otherwise assigned to the appropriate group.

## **Reserved For ...**

The reserved for fields (interviewer and group) allow multiple interviewers and groups to be entered, and they may also be selected from a drop list by clicking on the respective buttons. This searches the “ToWhom” field in the coversheet.

Using this search on interviewers and non-finalized, non-appointment lines provides a very quick, very efficient way for Managers to identify which lines have been assigned to a particular interviewer as part of a stop-gap measure, rather than as part of the normal business of conducting interviews. Cases should be reviewed and reassigned to the appropriate group at the end of every shift.

## **Interviewer Search**

The Interviewer filter allows multiple entries, and may also be selected from via the button. The filter searches the “WhoPhoned” field in the coversheet and therefore collects a record of who made the last contact attempt (dial) on a case. It may make sense to use this search to review the results of new interviewers to make sure that they are coding cases appropriately.

## **Start/End Date/Time**

By default, the filtered time range is from today at 6:00 AM through tomorrow at 6:00 AM. When there is a starting date/time entered, the filtered search will compare it against the data stored from the last call. To search without a starting date/time, delete the data in these fields.

This is often a useful filter to review the calls that have been made during the Manager’s shift.



## **Search and Filter**

Once the search and filter criteria have been set, click on the “Review” button to pull up all the coversheets / cases that meet the criteria. However, if you will to cancel the search, click the “Cancel” button, or else click the “Clear” button to clear all fields and start over on the search.

The “Review” button will perform a search on the coversheet data for the different search and filter criteria entered. One of three searches is performed:

1. ID – search on the list of IDs in the “Choose IDs” field
2. Phone – search on the “Phone#” field
3. Filter – use all the remaining entry fields to search for the cases that match

## ***Coversheet Summary***

Once one or more coversheets have been selected according to the “Review Coversheets” dialog, you will see a screen like the one in Figure 70 (depending upon your search and filter criteria). These are sortable, searchable, editable, a new call record can be added, and an interview started from this screen.

You can sort on the fields listed to the left of the screen, including sample ID, phone number, result code, result time, date and time (of last call), interviewer the case is reserved for, interviewer who last worked the case, and the number of calls made on the case. Select the item to sort on by clicking on the radial button and then clicking the “Sort” button. Reverse sort orders can be effected by clicking on the sort button again.

**Figure 70: Coversheet Summary**

**Coversheet Summary for \\src-catilsys1\blproj\cati\MockSMSDev\Mocksms**

Project: Mocksms.test

SampleID	Telephone	Sample Type	Rep #	Rep Status	Iwer	From	Result Code	Result Type	Result
20001	555-555-5555	List	1032	Released	GENENG	GENENG	1001	FI	11/15/2000
20002	555-555-5551	List	1232	Released	EOHRYN	GenEng	1001	FI	12/02/2000
20003	555-555-5552	List	1282	Released	TONYR	RefCon	5001	FR	12/08/2000
20004	555-555-5553	List	1160	Released	TONYR	GenEng	1001	FI	11/22/2000
20005	555-555-5554	List	1137	Released	TONYR	GenEng	1001	FI	11/22/2000
20006	555-555-5556	List	1100	Released	TONYR	RefCon	1401	NC	12/14/2000
20007	555-555-5557	List	1067	Released	LWHARRIS	RECON	1001	FI	11/19/2000
20008	555-555-5558	List	1221	Released	DDYBICKI	GenEng	4510	TR	12/15/2000
20009	555-555-5559	List	1036	Released	EOHRYN	GenEng	1001	FI	12/02/2000
20010	555-555-5550	List	1070	Released	TONYR	RefCon	5001	FR	12/08/2000
20011	555-555-5565	List	1290	NotReleased			0000		

1:1394

☒ Sample ID  
☐ Phone Number  
☐ Result Code  
☐ Result Type  
☐ Date/Time  
☐ Reserved Iwer  
☐ Last Iwer  
☐ Call Number

Sort    Edit Call Record    Hold Coversheet    Readback IW    Conduct IW  
 Search    Add Call Record    Release Held CS    Edit Interview  
 View Call History    Reserve Coversheet    Refresh  
 Cancel    Full Call Note    Export

If you click on the search button, a window will appear asking you to identify the primary key. Make sure the “secondary” key type is selected, and type the data for the search. The example in Figure 71 is searching for ‘FR’ (final refusal) lines within the data view. The cursor on the view will go to the first line of your search. Click the Close button to get back to the view window

**Figure 71: Search By**

**Coversheet Summary C:\BLProj\CatITest\catitest.dev**

FR

Close

Key type  
☐ No key    ☐ Primary key    ☒ Secondary

You may sort on Date/Time, but searching on this field will not be practical. The date and time have been converted (internally) to a single field that would be hard for you, as the user, to replicate, as it is converted to a numerical figure.

Once you have specified the case you are interested in, either through the search function or by scrolling through the coversheet summary, you should select the appropriate case by left-clicking it once, turning it blue. This will enable you to edit the last call record, add another call record after the last record, view the call history, view the full call note, hold and release a coversheet, reserve a coversheet, and start an interview, among many other actions.

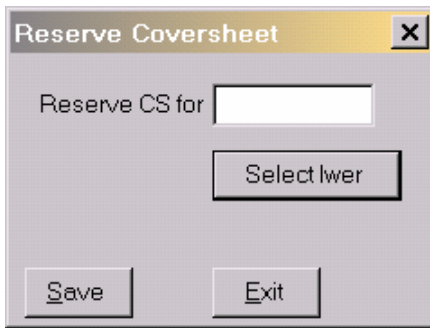
### **Start an Interview**

To start an interview, simply click the “Conduct IW” button. This will launch the dial screen, with the appropriate options of reviewing the “Zoom” features, including who the case was originally routed to, any appointment information, and five brief dial records.

### **Reserve Coversheet**

You can assign a line to an interviewer or group by clicking on this button. Either type in the name, or click on the Select Iwer button to choose. Both interviewers and groups will be displayed in the drop box. Select the appropriate interviewer or group, and click the “Save” button to reassign the line to this person/group for automatic delivery. This modifies the “ToWhom” field of the coversheet.

**Figure 72: Reserve Coversheet**

The image shows a software dialog box titled "Reserve Coversheet" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the dialog, there is a label "Reserve CS for" followed by a text input field. Below the input field is a button labeled "Select lwer". At the bottom of the dialog, there are two buttons: "Save" and "Exit".

This feature may be used in assigning a particular case to an interviewer who either requests a challenge for the day (by assigning a number of multiple resistant cases to that interviewer) or an interviewer who may need a case that is a little more promising. This may also be used to reassign appointments set for interviewers who are not available during the shift that the appointment is set for.

## ***Reports***

[As of the writing of this manual, the reporting function was being updated with several new features allowing for the disaggregating of interviewer and shift level reports. In addition, efforts are on-going to integrate SSL reports with the Dynamic Reporting System. This section will await updating until the reporting functions have been stabilized somewhat.]

## ***Summary***

It is impossible to anticipate the needs of a Manager on a daily basis. However, on the whole, there are only a few specifications that should be checked on a daily basis in the

Cati Manager specifications and the remainder may be conducted through the Coversheets review.

Several new features have been added to the Coversheets Review, including the ability of Managers to start an interview directly from this screen and the reassignment of cases to specific interviewers. It is our belief that this offers a significant improvement over the management of cases and interviewers by paper coversheets.



### ***Check List 3: Daily Project Maintenance***

This checklist highlights issues that Managers may need to take into account during daily project maintenance. Very few of these require modification of the SMS2 parameters.

<b>Issue</b>	<b>Description</b>
Appointment Review	Check the appointments scheduled for the day, including when and for whom. If it is clear that the person who made the appointment will not be available, reassign the appointment. Make sure that appointments are not missed due to lack of staff.
Group Review	Make sure that all active groups have at least one member working that day. If not, assign an interviewer to the group, temporarily if need be. Make sure that all interviewers are assigned to at least one active group.
Crew Times	Review crew times for the next day and week to make sure that the project is actually staffed for the time periods specified, as this will impact when appointments may be set. Also, if an interviewer needs to set an appointment for past normal SSL hours, add the crew shift to that particular day, making sure to indicate allow past midnight if need be and, if that is the case, making sure that the crew shift starts <i>before</i> midnight.
Case Assignment / Reassignment	Depending on the project needs, assign sample to specific interviewers using Super appointments or “Z” groups. Also, review missed appointments during the day to ensure that they didn’t end up in a group in error.
Run Daybatch (If Applicable)	If the daybatch did not run for the day or if there are new sort priorities, run a daybatch through the Cati Manager.
Activate Sample (If Applicable)	If interviewers are low on sample due to time slices, maximum number of dials reached, and contact having been made on a case, they can be activated.





## Appendix A: Troubleshooting

There are generally two types of warnings that interviewers receive to indicate that cases are not available for delivery. These are “No Valid Daybatch Available ...” and “No Telephone Numbers Available at the Moment.” These two warnings are helpful in diagnosing why cases are not available for delivery, and will be explained in greater detail below. In addition, there are other things you should do to uncover why cases were not delivered, including reviewing the “View Daybatch” in Cati Manager, and examining the various parameters that impact delivery of sample.

### ***Interviewer Error Messages***

#### **No Valid Daybatch Available**

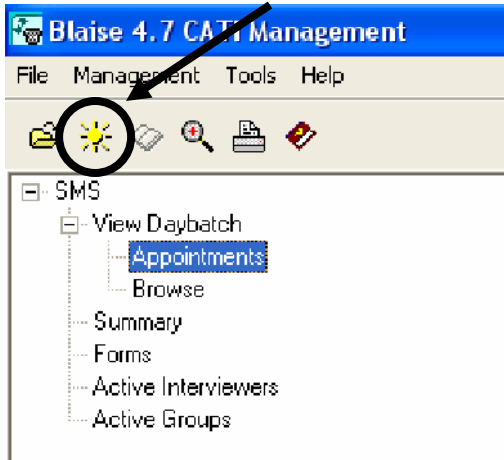
**Figure 73: No Valid Daybatch Available Message**



If interviewers are receiving an error message that states that there is no daybatch, this means that for some reason the overnight routines did not automatically create a daybatch for today. Immediately notify the CATI programmer, because other important routines may not have been completed. If you receive the go-ahead to create a daybatch, first

ensure that all interviewers are logged off the project. Next, click on the sun icon on the tool bar in the Cati Manager window.

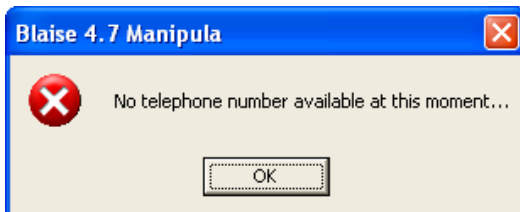
**Figure 74: Running a Daybatch Manually**



You will be prompted to approve the date for the daybatch. Once you OK the date, a new daybatch will be created. You will receive an error message if any interviewers are logged into the project. In order for a daybatch to run, there can be no active interviewers on the project.

## **No Telephone Number Available at this Moment**

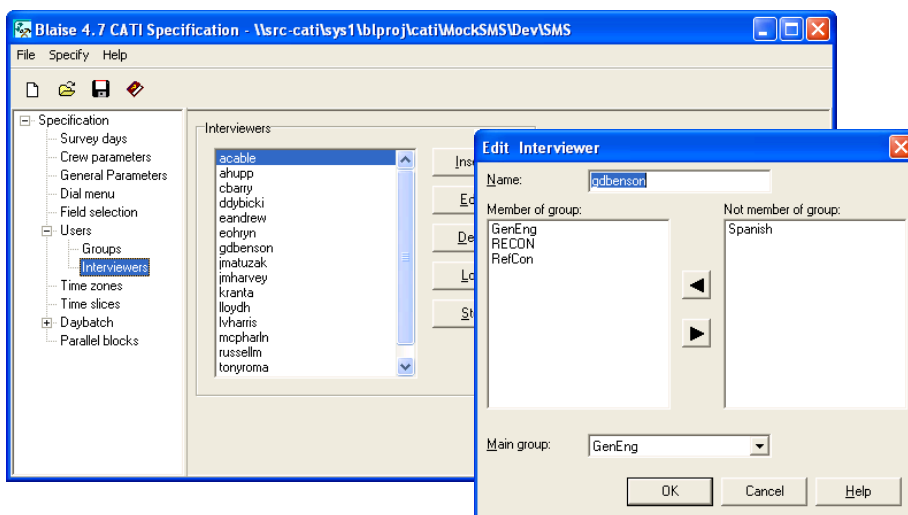
**Figure 75: No Telephone Number Available Message**



If interviewers receive this message, it means that there are no active sample lines belonging to the interviewer's groups, or that there are no active lines at all in the daybatch, or that the interviewer is not logged onto the Novell network with the same name as the Blaise project.

First you should examine which group or groups the interviewer who received the message belongs to. You can determine this from the Cati Specifications, Users, Interviewers menu. If they only belong to one group and that group is a specialized group (that is, not General English), then the solution may be to make the interviewer a member of other groups, including GenEng.

**Figure 76: Interviewer Group Assignment Review**

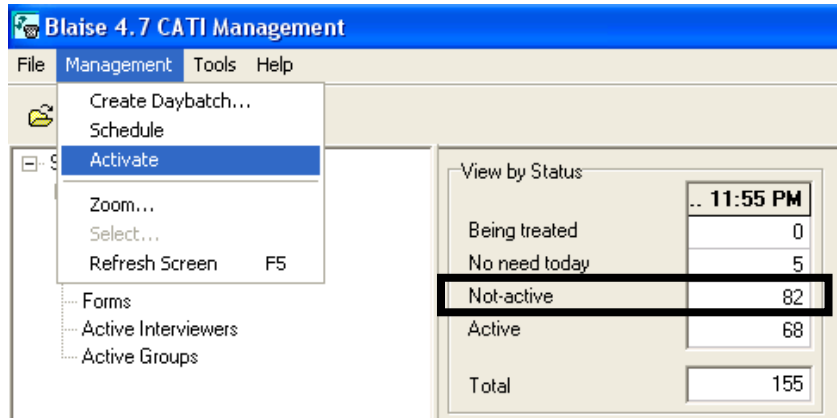


If the problem is not interviewer group assignment, browse the daybatch to determine whether there are cases left to become available. That is, how many cases are Active (available now) and No Need Today (worked today, but received a result code taking it

out of further delivery today), compared to Not Active? If many or most of the cases are Active or No Need Today, this indicates that the remedy may lie in changing some parameters including crew times, time zones, and so on (described further below). If most or all of the sample are Not Active, this indicates that all the cases have a status that prevents them from being released, including a future appointment, a resistant call excluded based on the delivery delay specifications, fulfilling all time slice parameters fro the day, and so on.

If the problem is that there are no cases available in the daybatch and the daybatch has been run on that day, then Not Active lines may be made active (“activated”) from the Management menu on the menu bar. Click on the “Activate” option in this menu.

**Figure 77: Activating Not-Active Sample**



*This will activate lines in ways that will supersede preset parameters governing maximum dials, time between no-answers, and time slices, so Managers should stay aware of available sample throughout the field period to avoid this situation.*

## ***Parameters Affecting Delivery of Sample<sup>2</sup>***

In addition to using the interviewer messages to diagnosing a delivery problem, Managers should review various parameter settings to evaluate whether these may be adjusted to improve delivery scheduling.

### **Crew Definition**

Keep in mind that cases will not be delivered outside the Start and End times for the crews on any given day. Even if an appointment is set for 9:00 AM, it will not be delivered until the first interviewer is scheduled to work that day. Modify the start and end times on a day-by-day basis to meet the reality of when interviewers are staffed on the project.

### **Time Zones**

Check the “Do Not Call Before” and “Do Not Call After” limits for each time zone. Hard appointments, and hard appointments ONLY, will be delivered outside these parameters, depending on the crew size settings. Keep in mind that the do not call before / after limits are set in local time, so that all Pacific time cases will not become available until 3 hours later Eastern time.

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<sup>2</sup> This section draws in large part from the Blaise Technical Notes Publication, “Technical Note on Blaise Call Scheduler, Handling Special Situations” (BSW-0002.03), May 8, 2001.

## **Appointment Routeback**

Soft appointments are always routed to groups based on the routing table. Note that these can therefore be impacted through the use of Z groups in a way that ensure that they will *never* leave the Z group unless a Manager intervenes.

Medium and hard appointments may be routed to individuals, based on the appointment specifications. Missed medium and hard appointments will be routed to that individual's main group and will *stay* with that group unless a Manager intervenes. Cases may be stuck with specific groups and therefore not available for delivery to the General English population. Managers can either reassign cases or reassign interviewers to groups to make more cases available to more interviewers. The situation may be exacerbated if only one group is working on a particular day.

## **Minutes Between Busy Dials**

There may be too few busy dials allowed in a day or too much time between busy dials. This will exclude many cases from delivery too soon in a day. Consider allowing more busy dials and shortening the time periods between the first several busy dials with the approval of the Lead Project Manager.

## **Time Interval Between No Answer Dials**

Note that for soft and medium appointments, the time between no answer dials dictates the amount of time that follow-up calls may be made on non-successful attempts. The

same is true for the number of dials allowed in a day. If there are many soft or medium appointments, consider changing these parameters, with the approval of the Lead Project Manager.

## **Time Slices**

If cases are being excluded due to time slices, consider having them turned off rather than trying to modify them. Again, this should be done only after consulting with the Lead Project Manager.

Alternatively, if there is an overriding reason for using time slices at the end of a study (for example, cases were released late in the study and the study still wants to ensure that the cases are called at different times and days), time slices may be modified such that there are multiple slices a day (up to 5) and multiple tries are allowed in a day.

## **Daybatch Size**

If there are more interviewers available to work the project than there is sample made available, it may be due to the daybatch size. That is, if a study does have enough sample to warrant having many interviewers staffed, but the sample is not being delivered, consider increasing the daybatch size.

## **Daybatch Select**

Working with the programmer, make sure that cases are not inadvertently being excluded from delivery based on the daybatch select criteria. For example a Manager might accidentally have added a constraint on which releases could be worked when this is not the intent of the study goals.



## Appendix B: CATI Specifications Setup

The table below identifies the parameters that need to be set in the Blaise call scheduler, a brief explanation of the function of each, and setting ranges. All parameters will be determined by the Lead Project Manager, in consultation with research staff as necessary. Some will be in place for the entire field period; others may be adjusted depending on production needs.

The parameter settings have been color-coded to indicate required authorization to change. Parameters coded black should never be changed unless there is a broad SSL policy change. Parameters coded with slanted lines (▨) should only be changed with client and / or SSL Manager approval, and almost never during the field period. Parameters coded with horizontal lines (▬) may be changed by the Project Manager, typically in consultation with the SSL Manager. Parameters that are left uncolored may be modified by the TL as needs dictate.

Parameter	Function	Setting	Determined By	When Set
Survey Days	Allows delivery of cases only on dates when project is in the field. Appointments cannot be set for dates after the end of the field period or for holidays when the SSL is closed.	Highlight all dates from start date through end date, omitting holiday closings, if any, during field period.	Lab Manager and Client	At beginning—changed only if field period is extended.
Crew Parameters	Sets the interviewing staff size by time and day. The call scheduler uses this information for the distribution of soft and medium appointments during the time period. It also uses start and end times as limits on when appointments may be set and cases delivered.  A global parameter should minimally be set to establish when the SSL will be staffed.	Crew Size: <u>Monday-Thursday</u> 10AM to 4PM 4PM to 10PM 10PM to 12AM  <u>Friday</u> 10AM to 4PM 4PM to 9PM  <u>Saturday</u> 10AM to 6PM  <u>Sunday</u> 12PM-10PM	Lab Manager and Project Manager	At beginning; may be changed as staffing size changes.

Parameter	Function	Setting	Determined By	When Set
Daybatch Size	Sets the maximum number of lines available for delivery.	Generally, should be set to the total sample size or 6,000 lines, whichever is smaller.	Project Manager and Client	At beginning
Maximum Number of Calls	Sets the maximum number of calls <sup>3</sup> that can be made on any one case. Once the limit is met, the case is excluded from the daybatch.	25	Client and Project Manager	At beginning; can be changed if Client so desires.
Days Between No Answer Calls	Sets the number of days between a no-answer result and the next day the case will be in the daybatch.	0	Project Manager	At beginning; can normally be changed as sample dictates
Days Between Answering Machine Calls	Sets the number of days between an answering machine result and the next day the case will be in the daybatch.	1  Later in the field period, this number can be reduced to 0 in order to keep all viable sample active. <sup>4</sup>	Project Manager and Client	At beginning; may change as sample dictates
Use Sort Fields	Allows the prioritization of sample in the daybatch according to selected criteria. (Appointments will always have highest priority.)	Recommend starting with it unselected unless Client specifies a specific priority in working through sample.	Project Manager and Client	At any time, according to production needs.

<sup>3</sup> A call is defined as a series of logically related dials (or attempts) made on any given calendar day. If a dial results in something other than a final status, an appointment, or a busy signal (jointly defined as “non-active”), then the number of dials made on a sample line during a day that constitute a call is set under the maximum number of dials setting. There are also special settings for appointments and busy signals that determine how many dials jointly constitute a call.

<sup>4</sup> This should be specified in advance. For example, after 10 days, set to 0.

Parameter	Function	Setting	Determined By	When Set
Use Select Fields	Allows the exclusion of sample from the daybatch according to predetermined criteria.	<p>Enable</p> <p>Having this setting enabled allows for the exclusion of finalized sample and non-released sample from delivery to interviewers. Specific case types to exclude in addition may be changed later in the study with Client buy-in, but the enabling of Select Fields should NEVER be changed.</p>	Project Manager and client	At beginning, to exclude finalized cases; may be modified throughout field period as production needs dictate.
Maximum Number of Dials	The Blaise call scheduler distinguishes between the number of dials and the number of call attempts. A call attempt may consist of more than one dial attempt. Since “time slices” and the “maximum number of calls” are parameters that count calls, this parameter counts how many no-answer attempts should count toward the limits in those parameters.	<p>3</p> <p>This number allows for multiple attempts over a short period of time for cases that result in a busy signal.</p>	Project Manager	At beginning
Maximum Number of Busy Dials	This sets the maximum number of dials that makes one call for a case with successive busy signals.	3	Project Manager	At beginning
Do Not Allow Multiple Same Day Answering Machine Calls	Avoids multiple calls in one day on cases that reach an answering machine that day.	(Selected)	Project Manager and Client	At beginning, may be modified as the amount of viable sample decreases during field period. <sup>5</sup>

<sup>5</sup> This should be established in advance. For example, after 15 days, allow multiple answering machine calls in a day.

<b>Parameter</b>	<b>Function</b>	<b>Setting</b>	<b>Determined By</b>	<b>When Set</b>
Route Back to Interviewer	Causes a case with a hard appointment to be delivered to the interviewer who set the appointment.	(Selected)	Project Manager	At beginning
Route Back to Group	Causes a case with a hard appointment to be delivered to the main group of the interviewer who set the appointment.	(Unselected)	Project Manager	At beginning
Appointment Interval	Sets minimum increment of time that interviewers can use for setting appointments.	15	Project Manager	At beginning
Appointment Buffer	Sets the amount of time before the end of the interviewing day that the latest appointments can be set.	15	Project Manager	At beginning
Interviewer Deactivation Delay (Medium)	Specifies how long the scheduler will wait for the interviewer who made a medium appointment to become available before delivering the case to the interviewer's group.	10	Project Manager	At beginning
Group De-Activation Delay (Medium)	If the interviewer who made a medium appointment is not available at the end of the delay period, this parameter specifies how long the scheduler will wait for an interviewer from his or her group to become available before sending the case to any interviewers who are not members of the specified group.	1440	Project Manager	At beginning

<b>Parameter</b>	<b>Function</b>	<b>Setting</b>	<b>Determined By</b>	<b>When Set</b>
Interviewer Deactivation Delay (Hard)	Specifies how long the scheduler will wait for the interviewer who made a hard appointment to become available before delivering the case to the interviewer's group.	10	Project Manager	At beginning
Group De-Activation Delay (Hard)	If the interviewer who made a hard appointment is not available at the end of the delay period, this parameter specifies how long the scheduler will wait for an interviewer from his or her group to become available before sending the case to any interviewers who are not members of the specified group.	1440	Project Manager	At beginning
Expire on De-Activation Delays Only	Enforces the de-activation delays that have been set. That is, if enabled, it ensures that cases never get routed out of their groups, even if there is no one in that group (e.g., Spanish) working at the moment.	Enabled	Project Manager and SSL Manager	At beginning
Minimum Time Between Hard/Super No-Answer	Sets the amount of time that should elapse before a hard or super appointment that resulted a no-answer is delivered for another attempt.	10	Project Manager	At beginning
Minimum Time Between "Other" No-Answer	Sets the minimum amount of time that can elapse before all other no-answer cases can be delivered again during the survey day.	180	Project Manager	At beginning; may be modified as the amount of viable sample decreases over field period.

<b>Parameter</b>	<b>Function</b>	<b>Setting</b>	<b>Determined By</b>	<b>When Set</b>
Minutes Between Busy Signals	Sets the amount of time that should elapse before a case with a busy-signal result gets delivered again.	10-60	Project Manager	At beginning; may be modified as the amount of viable sample decreases over field period.
Days to Delay	Sets the number of days that cases will be excluded from the daybatch after initial resistance before being delivered for a conversion attempt.	5 <sup>6</sup>	Project Manager and client	At beginning; may change near end of field period

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<sup>6</sup> This should be modified to match any IRB protocols.

Parameter	Function	Setting	Determined By	When Set
Time Slices	Sets of calls windows that force the delivery of cases that have never been contacted into a specified number of attempts by time of day and day of the week. Unless otherwise programmed, the case will be excluded from the daybatch once it has reached the maximum number of attempts for each time slice in its assigned set.	<p>Two time-slice sets: 1 for RDD cases at the beginning of the study in order to complete the no-contact grid (if necessary), and 1 for recontact cases at the beginning of the study and for RDD cases that have have obtained contact. Note that this transition between the two sets is managed by hard code at the project level.</p> <p>All times are in Respondent time</p> <p>Time Slice Set 1 (RDD begin)</p> <p>Mon-Fri 10AM-6PM 2 tries Sun-Fri 6PM-9PM 6 tries Saturday 10AM-6PM 2 tries Sunday 12PM-6PM 2 tries Multiple slices in same day not allowed</p> <p>Time Slice Set 2 (Recon &amp; RDD no grid) Mon-Fri 10AM-6PM 20 tries Mon-Fri 6PM-9PM 60 tries Saturday 10AM-6PM 20 tries Sunday 12PM-9PM 20 tries Multiple slices in same day allowed. (Cases will never reach these maximum attempts per slice, but these are set high to ensure flexibility in case delivery.)</p>	Project Manager and Client	At beginning





## Appendix C: Result Code Master List

Final, April 3, 2002

Updated December 11, 2003

### SurveyTrak and SMS CATI

<b>1000 Series</b>	<b>Code</b>	<b>Description</b>	<b>Result Type</b> (*=sets result flag on first occurrence)
<b>1000</b>		<b>Completes</b>	
	1001	Complete Interview	IW,FI,CO*, EL*
	1005	Accepted Partial Interview	IW, FI, CO*, PR, EL*
<b>1400</b>		<b>Answering Machine / Service Reached</b>	
	1401	Answering Machine, No Message Left	NC
	1402	Answering Machine, Message Left	NC
<b>1500</b>		<b>Privacy Manager</b>	
	1501	Privacy Mgr, No Message Left	NC
	1502	Privacy Mgr, Message Left	NC
<b>1600</b>		<b>Pager, Fax, Modem, Text Messenger, TTY</b>	
	1601	Pager, 2 beeps, Text Messenger	NC
	1602	Fax, Modem	NC
	1603	TTY	NC
<b>1700</b>		<b>Cell Phone</b>	
	1701	Cell Phone Answered by Person (RDD)	NC
	1702	Cell Phone Answered by Recording (RDD)	NC
<b>2000</b>		<b>Bad Address, Bad Number</b>	
	2001	First Phone Wrong Connection / Crossed Line (RDD only)	NC
	2002	First Non-Working Phone Number (Number verified) (RDD Only)	NC
	2003	First Wrong Number for R (List Only)	NC
	2004	R Number No Longer in Service (List Only)	NC
	2005	Respondent Not at Address (FTF only)	NC
	2006	Bad Address / Address Non-Existent	NC
	2007	Mail Returned, Forwarding Address Given	NC
	2008	Mail Returned, No Forwarding Address	NC
	2009	Complete Silence	NC
	2010	Strange Noise / Fast Busy	NC
<b>3000</b>		<b>Not Answered, No Contact</b>	
	3001	Ring No Answer / No one home	NC
	3002	Phone Busy	NC
	3003	Locked Building / Gated Community	NC
<b>4000</b>		<b>Contact No Resistance, General Callback</b>	
	4001	Cont No Resis, General Callback, Informant	CO*, CB
	4002	Cont No Resis, General Callback, Respondent	CO*, CB, EL*
	4003	Cont No Resis, General Callback, Respondent	CO*, CB

<b>1000 Series</b>	<b>Code</b>	<b>Description</b>	<b>Result Type</b> (*=sets result flag on first occurrence)
		Unknown	
	4004	Cont No Resis, General Callback, Proxy	CO*, CB
<b>4100</b>		<b>Contact No Resistance, Best Time Known</b>	
	4101	Cont No Resis, Best Time Known, Informant	CO*, AP*
	4102	Cont No Resis, Best Time Known, Respondent	CO*, AP*, EL*
	4103	Cont No Resis, Best Time Known, Respondent Unknown	CO*, AP*
	4104	Cont No Resis, Best Time Known, Proxy	CO*, AP
<b>4200</b>		<b>Contact No Resistance, Appointment Made</b>	
	4201	Cont No Resis, Appt Made, Informant	CO*, AP*, CB
	4202	Cont No Resis, Appt Made, Respondent	CO*, AP*, CB, EL*
	4203	Cont No Resis, Appt Made, Respondent Unknown	CO*, AP*, CB
	4204	Cont No Resis, Appt Made, Proxy	CO*, AP*, CB
<b>4300</b>		<b>Contact Initial Refusal</b>	
	4301	Cont Initial Refusal, Informant	CO*, RE*, CB
	4302	Cont Initial Refusal, Respondent	CO*, RE*, CB, EL*
	4303	Cont Initial Refusal, Respondent Unknown	CO*, RE*, CB
	4304	Cont Initial Refusal, Proxy	CO*, RE*, CB
<b>4500</b>		<b>Tracking by Interviewer</b>	
	4510	Tracking by Iwer, Respondent Tracking	NC, TR*, EL*
	4520	Tracking by Iwer, Contact / Other Tracking	NC, TR*, EL*
	4530	Tracking by Iwer, Proxy Tracking	NC, TR*, EL*
<b>4600</b>		<b>Tracking by Tracking Team</b>	
			NC, TR*, EL*
	4610	Tracking by Track Team, Respondent Tracking	NC, TR*, EL*
	4620	Tracking by Track Team, Contact / Other Tracking	NC, TR*, EL*
	4630	Tracking by Track Team, Proxy Tracking	NC, TR*, EL*
<b>4900</b>		<b>Hold – Problem Review</b>	
	4901	Hold, Technical Problem	HO
	4902	Hold, Procedural Problem	HO
<b>5000</b>		<b>Final Refusals</b>	
	5001	Final Refusal, Respondent	CO*, RE*, FR*, FI, EL*
	5002	Final Refusal, Informant	CO*, RE*, FR*, FI
	5003	Final Refusal, Respondent Unknown	CO*, RE*, FR*, FI
	5004	Final Refusal, Proxy	CO*, RE*, FR*, FI
	5005	Final Refusal, Never Reached for Conversion	CO*, RE*, FR*, FI
	5006	Final Refusal, Conversion Not Attempted	CO*, RE*, FR*, FI
	5007	Final Refusal, DK if Eligible Household	CO*, RE*, FR*, FI
<b>6000</b>		<b>Other Non-Interview</b>	
	6001	NI: Tracking Exhausted	CO*, FI, NI
	6002	NI: Never Answered; Final No Contact	CO*, FI, NI
	6003	NI: Incomplete Interview	CO*, FI, NI, EL*
	6004	NI: Permanent Condition	CO*, FI, NI, EL*
	6005	NI: Language Barrier	CO*, FI, NI, EL*
	6006	NI: Unable to Identify Proxy	CO*, FI, NI, EL*
	6007	NI: Other Reason	CO*, FI, NI, EL*

<b>1000 Series</b>	<b>Code</b>	<b>Description</b>	<b>Result Type</b> (*=sets result flag on first occurrence)
	6008	NI: Eligibility Unknown	CO*, FI, NI
	6009	NI: Locked Building / Gated Community	CO*, FI, NI
	6010	NI: Respondent Incarcerated	CO*, FI, NI
	6011	NI: Grid Filled	FI, NI
<b>7000</b>		<b>Non-Sample</b>	
	7001	NS: House Vacant (FTF)	FI, NS
	7002	NS: Sub-Selected Non-Sample	FI, NS
	7003	NS: Occupants Currently Reside Elsewhere	FI, NS
	7004	NS: Second Wrong # for R, No New # Available	FI, NS
	7005	NS: Second R's # No Longer in Service	FI, NS
<b>8000</b>		<b>Non-Sample</b>	
	8001	NS: Sample Listing Isn't Proper	FI, NS
	8002	NS: Second Wrong Connection (RDD)	FI, NS
	8003	NS: Vacant Trailer Site (FTF)	FI, NS
	8004	NS: Second Non-Working Number (RDD)	FI, NS
	8005	NS: Non-Residential Number – Number Confirmed (RDD)	FI, NS
	8006	NS: Second Pager / Fax / Modem / Text Messenger / TTY	FI, NS
	8008	NS: Final Complete Silence (RDD)	FI, NS
	8009	NS: Final Strange Noise (RDD)	FI, NS
	8010	NS: No Eligible Respondent	FI, NS
	8011	NS: Deceased Respondent	FI, NS
	8012	NS: Cell Phone Only (RDD)	FI, NS
	8013	NS: Cell Phone Other Household Lines (RDD)	FI, NS
<b>9000</b>		<b>Study Specific Codes</b>	
	9001	...	
	9002	...	

### Result Flags (ST and SMS)

Set once, first occurrence of specified Result Type (1=True)

Flag	Result Type
ApptFlag	AP
ContactFlag	CO
RCIndFlag	RE
TrackFlag	TR
EligFlag	EL

### Result Types (ST and SMS)

Code	Description
AP	Appointment
CB	Callback
CO	Contact
EL	Eligible
FI	Final
FR	Final Resistance
HO	Hold
IW	Interview
NC	No Contact
NI	Non-interview
NS	Non-sample
PR	Partial Interview
RE	Resistance
TR	Tracking