

National Atmospheric Release Advisory Center Internet Client (NARAC iClient) On-line Help System Documentation

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**National Atmospheric Release Advisory Center
Internet Client (NARAC iClient)**

On-line Help System Documentation

Version 1.1 (July 23, 2001)

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Getting Started

Summary of Steps for Simple Response

- 1) "Basic" questionnaire GUI: Enter release information (time, location, material) and press "Submit" button
- 2) "Submission" window: Press "Run Model" button to send information to NARAC
- 3) "Visualization" tabbed folder: Model calculation results (with a mini-legend) will be automatically displayed; Press layer editor icon (icon to right of map scale field) and press "Legend" button to display model calculation full legend
- 4) "Submission" window: Select "New Report" from the "File" pull-down menu to create a report using the current Visualization image
- 5) "Report" tabbed folder: view the report (i.e., model results with legend information) and print if desired (select "Print" from the "File" pull-down menu)

Pictorial Summary of Steps for Simple Response

The "Basic" questionnaire GUI will automatically be displayed when the NARAC Net software is initiated:

The screenshot shows the 'Basic' tab of the 'Problem Detection - NARAC Client' window. The form is divided into three main sections: 'Source Time', 'Source Location', and 'Source Material'. The 'Source Time' section includes a 'Start Time' field set to '07 Jun 2001 14:00:00 PDT' and a 'Duration' field set to '0' days, '1' hour, and '0' minutes. The 'Source Location' section includes a 'Preferred Location' dropdown set to 'EVERMORE, CA', 'Latitude' and 'Longitude' fields set to '37.884100' and '-121.707100' respectively, and a 'Map...' button. The 'Source Material' section includes a 'Material List' dropdown set to 'RADIOLOGICAL - MOST USED', a 'Material Name' dropdown set to 'CO-60', a 'Strength Type' dropdown set to 'Mass', and a 'Strength' field set to '5' with a unit dropdown set to 'g'. At the bottom, there are buttons for 'Submit', 'Summary', 'Detailed', and 'Help'. Annotations with arrows point to the 'Start Time' field, the 'Preferred Location' dropdown, the 'Material List' dropdown, and the 'Submit' button.

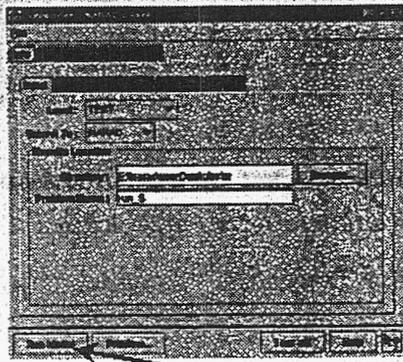
Change release start time and duration as needed

Select release location

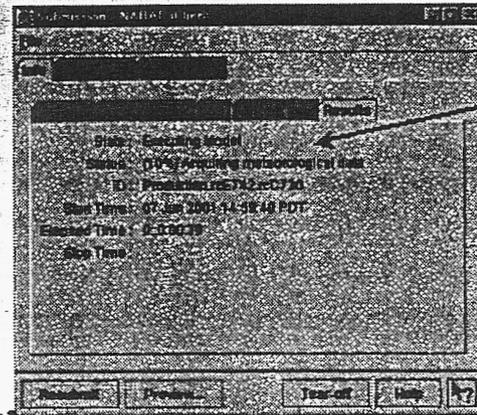
Select source material

Press "Submit"

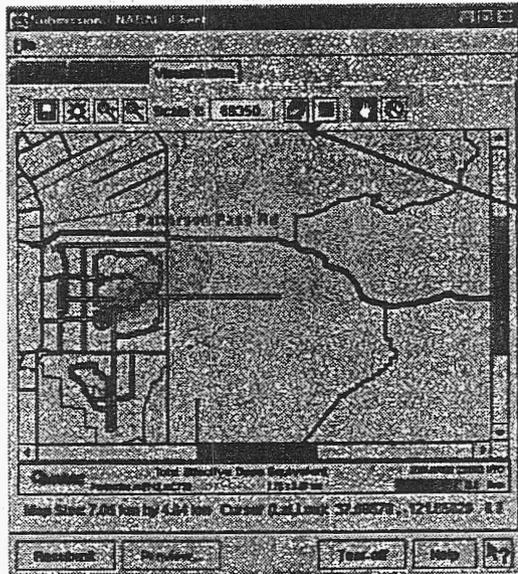
Strength: Valid range is $x \geq 0.0$ g (Mass)



Press "Run Model"

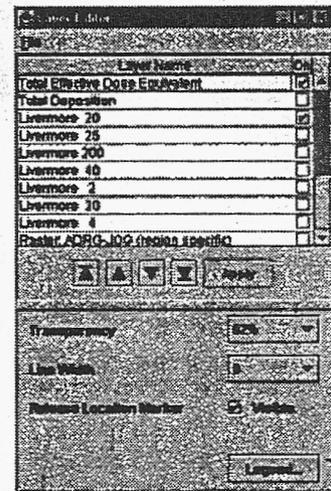


The "State" and "Status" lines will automatically report the progress of the model calculation

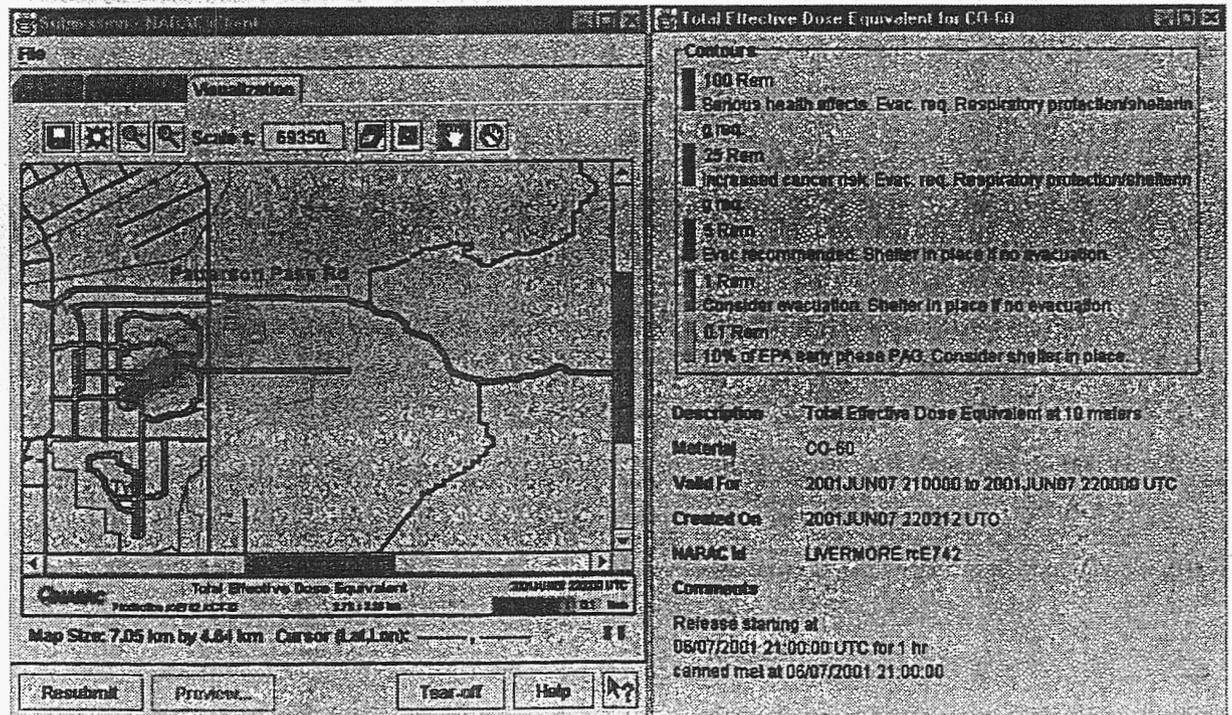


If Successful, the first layer of the model results will be automatically displayed

Press the layer editor icon



Press "Legend"

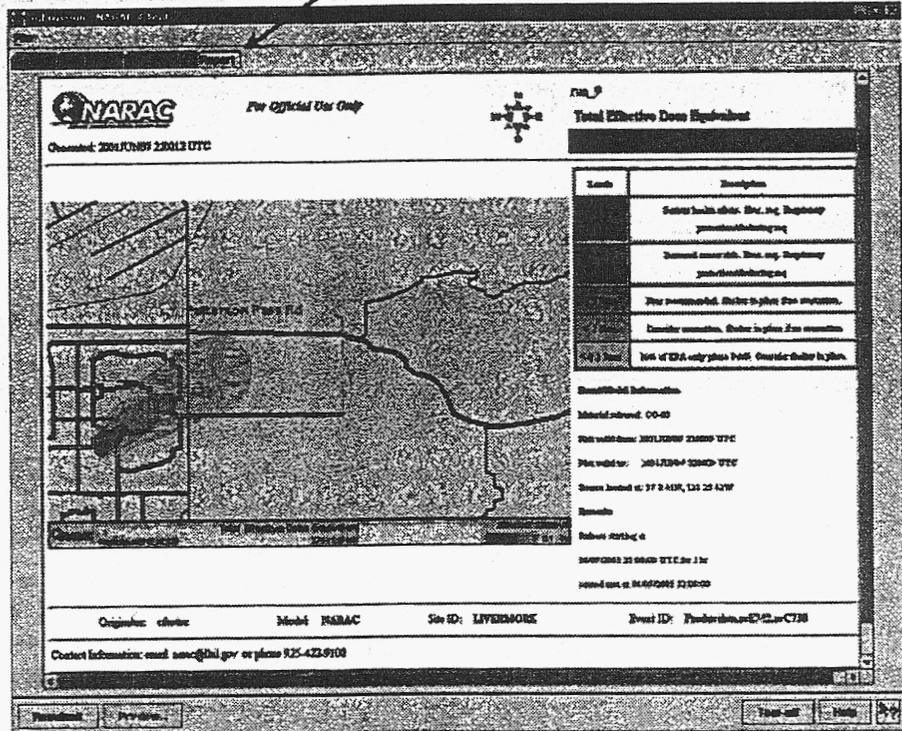




Select "New Report" to create a report using the current image from the "Visualization" tabbed folder.

The report will appear in the "Report" tabbed folder.

Select "Print" to print the report.



Getting Started with Other Scenarios

The "Basic" questionnaire GUI allows the user to specify a simple geometry (i.e., release height and radius) source release. If other simplified scenarios are desired (listed below), the user can select them from the "Scenarios" pull-down menu of the "Session Manager" window:

Basic = simplified geometry source release

Moving Point = simplified moving point source release

Mixtures = like Quick except ability to modify/create mixtures (i.e., multiple materials)

Explosive Dispersion = simplified explosive dispersion release

Fire = simplified fire release

Detailed = empty questionnaire template and access to full set of questionnaire fields

If access to the more detailed release information and/or product request information is desired, the user can press the "Detailed" button from any questionnaire GUI. Please note that this area is still under construction.

If you wish to create your own scenario, please refer to the Help available on the "Session Manager" window.

Accessing Existing Submissions

From the "Session Manager" window, either:

- 1) select the desired submission name from the "Submissions" pull-down menu (the most recent submissions are listed), or
- 2) select the desired submission from the "Completed" tabbed folder of the "Session" window, and press the "Details" button.

The "Info" tabbed folder contains a summary of the submission and execution information (subfolders "Input", "Log", and "Results") and a summary of the release and calculation request information (subfolder "Questionnaire"). Field measurement data may be entered using the "Field Meas." tabbed folder. The "Visualization" tabbed folder contains the graphical model results, and the "Report" tabbed folder contains a plot image surrounded by annotations describing the plot. (Note that the "Report" tabbed folder is only present if the user has first created one by selecting "New Report" from the "File" pull-down menu of the "Submissions" dialog.)

Errors, Feedback, Contacting NARAC

Submission Process Errors

If the submission, model calculation, or transfer of results were unsuccessful, the message "Unable to visualize results." will be displayed. You can check the "Log" dialog for information on where the failure occurred, and contact NARAC if you have questions.

Contacting NARAC

Please use the Session Manager's "File" pull-down menu, select "About" and refer to the "Contact Info" tabbed folder for NARAC contact phone numbers and operational hours.

Session Manager

Session Manager Introduction

The main body of the "Session Manager" dialog allows the user to retrieve refined plots (i.e., additional model calculations that NARAC may have done that were not included in the original calculation request), view the status of active (i.e., not yet completed) submissions, view completed submissions (including submission summary, questionnaire information, event log, and visualization of products), and delete submissions.

InBox

The "**InBox**" tabbed folder allows the user to retrieve refined plots from NARAC.

Active Submissions

The "**Active**" tabbed folder lists active (i.e., not yet completed) submissions. The "State" and "Activity" columns will update to show the current status. When a submission completes (i.e., all of the calculation results have been retrieved from NARAC), it will be moved from the "Active" tabbed folder to the "Completed" tabbed folder.

Completed Submissions

The "**Completed**" tabbed folder lists the completed submissions, both those that successfully completed (i.e., all of the calculation results were successfully retrieved from NARAC) as well as those that did not successfully complete.

Trash Can

Select one or more submissions (shift-click to select multiple adjacent submissions, or ctrl-click to select multiple non-adjacent submissions) and press the "Trash" button to move the submissions from the "Completed" tabbed folder to the "Trash" tabbed folder, in preparation for eventual deletion.

Submission Control

Import Run Id

Currently this is a very awkward text string consisting of four parts separated by a period.

- 1) NARAC Central System domain (usually "Production")

- 2) event number of associated event ("rcExxx", where xxx is an assigned number)
- 3) calculation number of associated event ("rcCyyy, where yyy is an assigned number)
- 4) refined plot group number (the first set of refined plots will be "1", the second will be "2", etc.)

The first three parts are specified as the "ID" field in the associated event's "Results" tabbed folder (imbedded in the "Info" tabbed folder of the "Submission" dialog). This string also appears in the legend bar at the bottom of the plot image in the "Visualization" dialog.

After entering this string, press the "Add" button to generate an entry in the submission table.

Accept

Select an entry from the submission table of the "InBox" tabbed folder and press the "Accept" button to initiate query and transfer of the selected submission results from NARAC to the iClient. The submission will move to the "Active" tabbed folder until transmission is complete, at which point the submission will move to the "Completed" tabbed folder and will be available for viewing.

NOTE: If a submission remains on the "Active" list with activity of "Request sent to NARAC", please call NARAC since there is probably something wrong with the communications link or your refined plot group request.

Discard

To remove an entry from the "InBox" submission table, select it and press "Discard". The submission will be moved to the "Trash Can" folder, from which it can be selected and deleted from the system.

Trash

Select one or more submissions (shift-click to select multiple adjacent submissions, or ctrl-click to select multiple non-adjacent submissions) and press the "Trash" button to move the submissions from the "Completed" tabbed folder to the "Trash" tabbed folder, in preparation for eventual deletion.

(Submission) Details

Select a submission from the submission table and press the "Details" button to bring up the "Submission" dialog, from which you can access the information about the submission as well as the calculation results.

Cancel (Active Submission)

Select a submission from the "Active" submission table and press the "Cancel" button to terminate the retrieval of submission results.

Restore (from Trash)

Select a submission on the "Trash Can" tabbed folder and press the "Restore" button to move the submission back to the "Completed" folder.

Delete (from Trash)

Select one or more submissions (shift-click to select multiple adjacent submissions, or ctrl-click to select multiple non-adjacent submissions) in the "Trash Can" tabbed folder and press the "Delete" key to remove the submission from the iClient system.

File

About

This option displays a dialog containing an overview of the NARAC iClient system.

Refresh Menus

This option refreshes the list of existing scenarios, and is a good thing to do whenever you delete or create scenarios.

Exit

This option exits the NARAC iClient application.

Scenarios

A scenario is a reference to a combination of either a questionnaire template (data entries for calculation request specifications) or a questionnaire file (data entries for a partial or complete set of source term information and calculation request specifications), and a questionnaire GUI (the dialogs that you use to view/modify the questionnaire template information):

Scenario = Questionnaire GUI + (Questionnaire template or Questionnaire file)

The "Detailed" GUI provides access to the complete set of questionnaire information, while the other GUI's (Basic, Moving Point, Explosive Dispersion, Fire, and Mixtures) are streamlined to allow simplified access to a minimal set of questionnaire information, with the ability to access the full questionnaire (using the Detailed GUI) via the "Detailed" button in the Problem Definition dialog.

Note that a questionnaire template file can be associated with more than one scenario (for example, "Basic", "Moving Point", and "Mixtures" use the same questionnaire template file). Therefore be aware that modifications to this questionnaire template file will affect all three scenarios.

Standard scenarios that are provided with the NARAC iClient software are listed below.

Scenario	Questionnaire Template File	Questionnaire GUI
Basic	basic.quest = template containing a basic set of product calculation requests	Basic GUI = access only to basic time, location, source material information, and metadata
Detailed	none.quest = empty questionnaire template	Detailed GUI = access to the complete set of possible questionnaire fields
Explosive Dispersion	explosiveDispersion.quest = template containing a basic set of product calculation requests	Explosive Dispersion GUI = access only to source start time, location, release height, source material, explosive amount, and metadata
Fire	explosiveDispersion.quest = template containing a basic set of product calculation requests	Fire GUI = access only to source start time, source duration, location, release height, source material, fire source geometry, and metadata
Mixtures	basic.quest = template containing a basic set of product calculation requests	Mixtures GUI = access only to source start time, source duration, location, release height, release radius, source mixtures material information, and metadata
Moving Point	basic.quest = template containing a basic set of product calculation requests	Moving Point GUI = Basic GUI access plus multiple source locations (showing movement of source with time) and travel time adjustment

These can be edited by the user (not recommended) or can be used as a starting point for additional customer-specific scenarios.

How To Create Your Own Scenario

To create your own scenario, create and edit the questionnaire template file, and then create a new scenario that points to the newly-saved template and uses the desired questionnaire GUI. A detailed description of the steps is given below.

PART 1 (create & edit the questionnaire template file)

- 1) "Session" dialog - select "Detailed" from the "Scenarios" pull-down menu
- 2) "Problem Definition" dialog - select "Import Template" from the "File" pull-down menu, and select the desired similar default questionnaire template file
- 3) "Problem Definition" dialog - make your desired edits to the questionnaire (e.g., specify desired customized contour levels and wording). NOTE – The default questionnaire templates only contain product calculation specifications, since all of the release information is added later just prior to submission.
- 4) "Problem Definition" dialog - press "Save As", select the destination folder (we recommend the userTemplates folder), and your desired filename (.quest will be added to your name)
- 5) "Problem Definition" dialog - press the close window icon

PART 2 (define the scenario & point it to the appropriate template and GUI)

- 6) "Session" dialog - select "Scenarios" under the "Tools" pull-down menu, and press the "New" button on the "Scenarios" dialog
- 7) "Scenario Editor" dialog - fill in the Filename (e.g., "B170"), the Name that will appear on the "Scenarios" pull-down (e.g., "My Special Scenario"), a Description to help you remember what makes this scenario special, select "User Template", press "Select" and pick the desired questionnaire template (i.e., the one you created in step 4), select the desired questionnaire GUI, and press "OK"
- 8) "Session" dialog - select "Refresh Menus" from the "File" pull-down menu to update the list of available scenarios
- 9) "Session" dialog - select your desired scenario from the "Scenarios" pull-down menu

Whenever the user wants to do additional edits to his questionnaire template, select "Detailed" from the "Scenarios" pull-down menu, select "Open" from the "File" pull-down menu, and select the desired questionnaire template file. After the edits are complete, press "Save".

Submissions

The last five completed submissions (i.e., runs) are listed under the "Submissions" pull-down menu for quick access. (If you do not see a recent submission, you may need to select "Refresh Menus" from the "File" pull-down menu to refresh the list of recent submissions.) Selecting one of these is the same as if the user had selected the desired run name (submission) from the "Completed" tabbed folder, and pressed the "Details" button. A dialog will be displayed allowing the user to view run submission information, a summary of the full questionnaire data, a submission log, and the model results.

Tools

Tools: Field Measurement Defaults Editor

This option allows the user to predefine characteristics for different types of possible field measurements. These sets of characteristics can then be easily recalled when entering field measurement data ("Field Meas." tabbed folder of the "Submission" dialog) by using the "Default ID" combo box.

Tools: Materials List Editor

This option allows the user to modify the "most used" lists of chemical and radiological materials, which are subsets of the master lists. The intent of the "most used" lists is to have a short list of the user's favorite materials so he can quickly find a desired material.

Tools: Measurement Stations Editor

This option allows the user to modify the list of possible field measurement stations (identifying information and location). An appropriate entry must exist in the Measurement Stations database before field measurement data can be entered.

Tools: Mixtures

This option allows the user to define combinations of materials that usually exist together in particular relative quantities.

Tools: Scenarios

This option allows the user to create and edit scenarios definitions (i.e., combinations of questionnaire files and questionnaire GUI's).

Tools: Site Editor

This option allows the user to edit the site database, which contains the site name, site id, geography information, scale information, and coordinates for pre-defined sites. A site is simply a pre-defined location that the user may be interested in doing a dispersion model simulation for. Addition or deletion of sites should be coordinated with NARAC, because of the precise wording needed for the site id and geography file.

Tools: User Preferences

This option allows the user to certain properties affecting the display of information, as well as user identification information.

Tools: Vehicles

This option allows the user to define combinations of fuel type and fuel amount, which can referred to in fire release scenarios.

Help

Getting Started Help

This options provides a word and pictorial summary of steps for submitting a simple calculation request, as well as an introduction to the other scenarios and how to look as existing runs.

Help Contents

This option contains help for the Session Manager of the NARAC iClient.

Scenarios

What is a Scenario?

A scenario is a reference to a combination of either a questionnaire template (data entries for calculation request specifications) or a questionnaire file (data entries for a partial or complete set of source term information and calculation request specifications), and a questionnaire GUI (the dialogs that you use to view/modify the questionnaire template information):

Scenario = Questionnaire GUI + (Questionnaire template or Questionnaire file)

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Note that a questionnaire template file can be associated with more than one scenario (for example, "Basic", "Moving Point", and "Mixtures" use the same questionnaire template file). Therefore be aware that modifications to this questionnaire template file will affect all three scenarios.

Scenario Selection

Select the desired scenario from the "Scenario" combo box of the "Scenarios" dialog.

Using

The "Use" button functions the same as if the user had picked the desired scenario from the "Scenarios" item of the Session toolbar. The user will be put into the defined questionnaire GUI, from which you can view, modify, save, or submit the questionnaire information.

Creating

To create a new scenario, press the "New" button and you will be placed in the "Scenario Editor" dialog, where you can define a combination of either a questionnaire file or a questionnaire template, and a questionnaire GUI. If you wish to copy an existing questionnaire template to associate with a new scenario, do this copy step **BEFORE** creating the scenario. (Select the "Detailed" scenario, and "File: Import Template" to make your own customized questionnaire template.)

After creating a new scenario, the user should select "Refresh Menus" on the "File" pull-down menu of the Session toolbar to update the list of scenarios. To use a newly-created scenario, return to the "Scenarios" dialog, make sure the new scenario is selected in the "Scenario" combo box, and press the "Use" button; alternately the user can select the desired scenario under the "Scenarios" pull-down menu of the Session toolbar.

Editing

To edit the scenario definition information for an existing scenario, select the desired scenario in the "Scenario" combo box and press the "Edit" button. You will be placed in the "Scenario Editor" dialog, where you can view or modify the definition of the scenario (i.e., the scenario filename, the scenario name, the scenario description, the name of the associated questionnaire template, and the name of the associated questionnaire GUI). To view or edit the questionnaire template file for this scenario, select the "Detailed" scenario, and "Open" the desired questionnaire template file.

Deleting

To delete a scenario, select the desired scenario in the "Scenario" combo box and press the "Delete" button.

Scenario Information

Filename

The scenario information (i.e., the scenario name, the scenario description, the name of the associated questionnaire template, and the name of the associated questionnaire GUI) will be saved in a file (located in the scenarios directory) named according to the "Filename" specified in this field. The user should use proper filename conventions, such as no embedded spaces, etc.

Name

"Name" is a text string specifying the name of the scenario, which will be displayed in the "Scenarios" pull-down menu.

Description

The “Description” field is a free-form text field that is used to describe the scenario such that the user can decide which scenario that best suits his purpose.

Default/User Template

The “Default Template / User Template” combo box is used to select the desired questionnaire template data file that will be associated with this scenario. Default Templates are the standard system questionnaire template files, and User Templates are user-saved questionnaire template files.

GUI

The “GUP” combo box is used to select the desired set of questionnaire dialogs that will be used to access the questionnaire template information.

Submission

Submission Introduction

The "Submission" dialog allows the user to control/direct submission of a problem for processing ("Info" tabbed folder), enter field measurement data ("Field Meas." tabbed folder), view the full questionnaire data submitted ("Questionnaire"), view a log of the submission steps ("Log"), and view the calculation results ("Visualization").

There are three ways that the "Submission" dialog may be reached:

- 1) pressing the "Submit" button on the "Problem Definition" dialog (to make new submissions)
- 2) selecting the desired submission from the "Session" dialog and pressing "Details"
- 3) selecting the desired recent (completed) submission on the "Submissions" pull-down menu

Info: Input

The "Info" tabbed folder is used to control/direct submission of a submission for processing. After pressing the "Run Model" button, the "Input" internal tabbed folder of the dialog will change to a display-only summary of the submission information.

Level

The "Level" combo box describes the response level of the submission, which is used by NARAC to determine the intended purpose of the results received from the problem submission.

- "Test" is for training or practice purposes only (no NARAC personnel interaction is required)
- "Exercise" is for official drill or exercise purposes (NARAC personnel will be interacting with the user and making refined calculations as needed.)

- "Emergency" is for real-world potential or actual atmospheric releases (NARAC personnel will be interacting with the user and making refined calculations as needed.)

Submit To

The "Submit To" combo box designates the recipient of the problem information. Currently "NARAC" is the only possible recipient. Future recipients could include other local dispersion modeling systems.

Results Location

The "Results Location" section specifies where the "results" (referring to the collection of questionnaire information, the calculation request, submission log information, and the calculation results) are to be stored on the user's local machine. By default, the "Directory" is set to a subdirectory equal to the username under the userData directory, and "Problem Name" is a subdirectory (named run_x, where x is an integer incremented sequentially) under the "Directory". The user can change either of these fields as desired to redirect the results to another location. The "Browse" button can also be used to select desired directory locations.

Info: User Info

All of the fields in the "User Info" tabbed folder will be filled in with data from the User Preferences (see "Tools" pull-down menu on the "Session Manager" dialog). The user should change the field values as needed to ensure that NARAC Operations knows how to reach the user if there are questions or problems.

Registered Name

The "Registered Name" should be the name of the user that will be associated with the submission, and the person NARAC Operations will try to contact if there are questions or problems with the submission.

Authorization PIN

The "Authorization PIN" is used to uniquely identify the user, but is not used at this time.

Email

The "Email" will be used for NARAC Operations communications with the iClient user regarding this submission.

Primary Phone

The "Primary Phone" should be a phone number that NARAC Operations can call to speak with the "Registered Name" person (or another person knowledgeable about the submission) regarding any questions about the submission.

Fax

The "Fax" will be used as a last resort to send plots if there are computer communications problems.

Alternate Phone

The "Alternate Phone" will be used if no one can be reached at the "Primary Phone".

Pager

The "Pager" can be used to specify a sky pager number if there is no phone number available.

Info: Results

After the "Run Model" button is pressed, the status of the submission will be displayed in the "Results" tabbed folder, and will be periodically automatically updated. A description of each of the fields is given in the table below:

Field	Description
State	general stage (e.g., submitting, executing, transferring data)
Status	statement of which step within the stage that the model calculation is at, plus an estimate of the percent complete
ID	submission id received from NARAC
Start	date and time when submission was made
Elapsed Time	elapsed time since the submission was made
Stop Time	date and time when the calculation results were received

Note that the "ID" field is used when submitting a request for a refined plot set from NARAC.

Questionnaire

The "Questionnaire" tabbed folder shows the current contents of the full set of questionnaire data (release information and product request specifications).

(Questionnaire) Export

The "Export" button on the "Questionnaire" tabbed folder brings up a new Questionnaire GUI dialog loaded with the current Questionnaire information, enabling the user to make modifications to the original information and make a new submission.

Log

The "Log" tabbed folder displays the contents of the submission log, which is a time-stamped record of events occurring in the calculation and transmission of results.

General Submission Control

Run Model

The "Run Model" button makes the submission (i.e., sends the questionnaire and calculation request) to the specified "Submit To" recipient specified by the information in the "Info" tabbed folder. After a submission is made, this button is replaced with a "Resubmit" button for the current submission information.

Resubmit

After a submission has been made the "Run Model" button is replaced with a "Resubmit" button, enabling the user to make a new submission with the current submission information. If the user wishes to modify any of the Questionnaire information, he should use the "Export" button on the "Questionnaire" tabbed folder instead of the "Resubmit" button.

Preview

The "Preview" button allows the user to preview the model-specific input data that will be generated from the questionnaire data before it is sent to the desired model. For submissions to NARAC, this preview information is identical to the questionnaire information except that any symbols (such as EVENT_NAME in the Legend Title) will have been replaced. For submission to local models, this preview information will be much different depending upon the model being used.

Tear-off

The "Tear-off" button puts the currently-selected tabbed folder contents into a separate dialog, at which point the associated tabbed folder on the "Submission" dialog is inaccessible. (If the user presses "OK" or closes the torn-off dialog, the associated tabbed folder on the "Submission" dialog becomes accessible again.) This functionality is useful if the user wants to simultaneously view the information from more than one tabbed folder.

File: New Report

The "New Report" option on the "File" pull-down menu creates/updates the "Report" tabbed folder with a single annotated image of the current plot view in the "Visualization" tabbed folder, suitable for printing

File: Page Setup

The "Page Setup" option on the "File" pull-down menu allows the user to control page setup attributed prior to printing.

File: Print

The "Print" option on the "File" pull-down menu prints the current contents of the "Report" tabbed folder.

Visualization

There are two general uses of visualization by the iClient:

- picking a location (release location, canned metadata location, measurement location)
- viewing model dispersion results and field measurements

Both of these involve using general map controls, and the latter also involves additional report and layer manipulation.

General Map Controls

The controls at the top of the visualization dialog are described in the table below:

Map Controls	Description of Use
Save image button (<i>floppy diskette icon</i>)	Saves the current image (layers and attribute settings).
Recentering icon (<i>compass icon</i>)	Re-centers the map in the direction clicked on the icon (e.g., if you click on the right side of the icon, the map recenters on what was the right edge; if you click on the edge of the icon diagonally to the right and up, the map recenters on what was the upper right corner of the map). If you click in the center of the icon, it returns to the original center location.
Zoom buttons (<i>magnifying glass icons with + and -</i>)	Zooms in (magnifying glass icon with +), and zooms out (magnifying glass icon with -).
Scale value	Adjusts the map scale, e.g., 1:50,000
Map layer editor (<i>3-layer icon</i>)	Brings up the layer editor dialog to allow the user to turn on/off different layers (toggle circles to left of layer names), adjust order of layers (using green movement arrow buttons on right side of dialog), and, modify display of layer (click on dialog icon to right of layer name), add new layers ("Add" button), and remove existing layers ("Remove" button).
JPEG image (<i>framed picture</i>)	Saves the current image as a JPEG file.
Mode control buttons (<i>hand, no hand, blue bullseye icons</i>)	The "hand" icon (navigation) will allow the user to click on the map to re-center without moving the blue bullseye; the "no-hand" icon allows the user to click on the map without having any effect on the map view or the blue bullseye; the "blue bullseye" icon (problem definition) will reposition the blue bullseye to the location clicked on when defining the source location, canned met location, or measurement station location.

The user can "rubber-band" (click on a corner and drag to the diagonally-opposite corner of the area of interest) an area. When picking a location (release location, canned met location, or field measurement location), the user should click on the blue bullseye icon to switch from navigation mode to "Problem Definition" model (i.e., clicking on the map will move the blue bullseye to that location, and the user can press "OK" or "Apply" to insert those location coordinates into the parent dialog).

If you are working with the "Visualization" tabbed folder of a completed submission, overlaid on the geography will be a graphical representation (usually isopleths of concentration) of the model dispersion simulation results. At the bottom of the image is a

brief legend bar, specifying the model (NARAC as opposed to a local model), plot title, submission id (central system domain, event id, and calculation request id, separated by dots), the contour values for each color, the contour units, and the valid plot time.

Layer Editor

After clicking on the map layer editor icon (three-layered icon) on the "Visualization" tabbed folder, the layer editor dialog will be displayed. The top portion of the dialog lists the names of the visualization layers and the checkbox to the right of the name indicates whether that layer is turned "on" (i.e., is visible) or "off" (i.e., is not visible).

The buttons in the middle of the dialog control the ordering of layers (blue arrow buttons) and allow the user to add new layers ("+" button) or remove layers ("- " button). The layer at the bottom of the list is "painted" first, and the layer at the top of the list is "painted" last.

The bottom portion of the dialog contains controls specific to the particular layer selected (a layer is selected by clicking on the layer name in the top portion of the dialog).

Field Measurements layers display measurements (either all measurements sent to NARAC or only those measurements used in a calculation). Currently only a labeled marker is shown, indicating the location of a measurement (data is listed at the bottom of the layer editor dialog). At some future time the marker will be colored according to the measurement value and the contour levels. NOTE that in order for the Field Measurements layer to be added to the layer editor, the user needs to exit the Submission dialog after the entry and sending of the initial batch of field measurements; thereafter the user can use the "Refresh" button at the bottom of the layer editor dialog to update the Field Measurements layer with additions made in the "Field Meas." tabbed folder.

Model results layers are named according to the plot title, and the layer controls allow the user to adjust the transparency of the layer (larger % transparency = more of the underlying layers show through), adjust the width of the isopleth outlines, and display the legend. If there are multiple plots in a plot group, only the first plot layer will be turned on. To see the other plots, simply use the "On" checkbox to turn off/on desired layers.

The **Raster** map layer controls allow the user to adjust the filters for dissolving and bleaching the image. Depending upon the size of the raster map files, display of results can be slow. It is recommended that you leave the raster layers off until you get the desired view of the model results.

The **Vector** map layer controls allow the user to turn off/on various attributes (click on checkbox to right of attribute name), and optionally fill the polygons (check box at bottom of dialog).

Note that currently only a single map layer is available when picking a location (release location, canned met location, or measurement station location).

Report

This tabbed folder only appears if the user has previously selected the "New Report" option on the "File" pull-down menu for a completed submission. When "New Report" is selected, the current plot view in the "Visualization" tabbed folder is surrounded by annotations

describing the plot. This image can be printed using the "Print" option on the "File pull-down menu.

The annotations on the right side include the following:

1st line = legend title, which is defaulted to the submission name specified by the user

2nd line = plot title

3rd line = highest pre-specified contour level reached by the model results

Contour levels and descriptions table = Values shown inside each contour on the map are greater than that contour level indicated in the legend, but less than the next higher contour. Recommended actions or other guidance may be specified. (Note: A Colony Forming Unit (CFU) is a quantity of viable bacterial organisms capable of producing an infection in a host. A CFU is typically equivalent to a single organism.)

Material released = list of materials simulated

Plot valid from = beginning time of integration or accumulation or averaging

Plot valid to = ending time of integration or accumulation or averaging

Source located at = coordinates of the source location (if there are multiple source locations, only one will be shown)

Remarks = miscellaneous comments regarding the plot