



**InterMED-Rx Request Viewer
User Guide and Manual**

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Revision Sheet

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Rev. 0	2009.04.05	Initial document
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The InterMED-Rx Request Viewer

The InterMED-Rx Request Viewer application is provided as a means for the end user to consult "Request Results", launch "Manual Requests" as well emit pharmaceutical opinions if the feature is enabled.

This document exposes in detail the use and operation of this application.

General Overview and Application Organization

The application is presented as a single tabbed window (seen below) that provides most of its functionality.



- 1. Application Tabs:** Used to expose the desired type of information.
- 2. Utility Bar:** The utility bar is common to all tabs and is reconfigured according to the currently active tab.
- 3. Request data:** This section presents patient, request and medication related data as it would have been sent by the Interfaced Patient Management Application. This section is common to the "IT Table", "Analysis" and "Manual Requests" tabs.
- 4. Content section:** According to the currently selected tab, this section will present the required information. Please refer to the specific tab documentation for section content information.

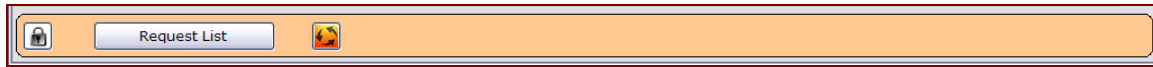
Please refer to individual section documentation in this document for detailed descriptions.

Application Tabs

Use these tabs to expose the desired information section of the application... Available tabs are:

- 1. IT Table:** Exposes the Interactions Table for the currently loaded request. Please refer to the [InterMED-Rx](#) web site for instructions about interpreting the interactions table. Please note that you must have an active web site account to access this information.
- 2. Analysis:** Exposes the performed analysis results for the currently loaded request. Please refer to the [InterMED-Rx](#) web site for instructions about interpreting the analysis. Please note that you must have an active web site account to access this information.
- 3. Manual Requests:** Allows the end user to send manual requests for analysis. Manual requests can be derivations of the currently loaded request or newly formulated requests.
- 4. InterMED-Rx:** Exposes an embedded web browser that connects to the InterMED-Rx web site when selected. Please note that the workstation must have access to an active web connection for this section to perform correctly.
- 5. Configuration:** Exposes the different configuration options for the application. Please note that these configuration options are not persistent (i.e. closing the application will reset all options). Detailed configuration options are available in the "Configuration Tab" section of this document.

Utility Bar



The utility bar exposes functional options and is reconfigured according to the selected tab. Detailed operation instructions are included in specific tab subsections of this document.

The following controls are common to all utility bar configurations:

- 1. Application Lock Button:** Used to lock the application. The currently configured password must be used to unlock the application. If the password has not been configured it is "intermed" by default.
- 2. Request List Button:** Used to access and load requests launched from the workstation. Please refer to the "Request List Window" section of this document for further details on loading requests.
- 3. Request Refresh/Reload Button:** Used to refresh the currently loaded request when the Request Data and Content Section are not synchronized.

Request Data Section

The screenshot shows a software interface with four distinct data sections, each highlighted with a red arrow pointing from the accompanying text:

- Patient Data:** Contains fields for Patient ID (8110), Age (0), Weight (0.00), Creat. (0.00), and Gender (x).
- Request Stats:** Contains fields for Request date/time (2009/03/28 09:19:19 AM), Response date/time (2009/03/28 09:19:20 AM), Processed date/time (2009/03/28 09:19:20 AM), Source (BOUBOU-DV8230), Lang. (EN), Interface (FALSE), Meds. (2), Inters. (1), and New (0).
- Medication 1:** Displays ADALAT [10.00 mg] with an empty list box below it.
- Medication 2:** Displays ACTOS [10.00 mg] with an empty list box below it.

As specified above the request data section is responsible for exposing patient data, request stats and medication data. The following subsections are available.

Patient Data: This section presents patient related data as it would have been sent by the Interfaced Patient Management Application. Please note that this data is only available for interface requests.

Request Stats: This section presents various request properties and statistics such as request dates, source, language, med count and interaction counts.

Medication Data: This section presents request medication data. Each request medication will have its own section exposing the medication name, dosage and prescribing physician. Please note that the prescribing physician is only available for interface requests.

Content Sections

The content sections are directly associated to the selected tab.
Each content section is described below.

Interactions Table Section

The contents section associated with the "IT Table" tab exposes the reconstituted interactions table for the loaded request.

The screenshot displays the InterMED-Rx Client Interface. On the left, a sidebar contains patient information (ID: 8110, Age: 0, Weight: 0.00, Creat: 0.00, Gender: x), request details (Request: 2009/03/28 09:19:19 AM, Response: 2009/03/28 09:19:20 AM, Processed: 2009/03/28 09:19:20 AM, Source: BOUBOU-DV8230, Lang: EN, Interface: FALSE, Meds: 2, Inters: 1, New: 0), and medication lists (MEDICATION 1: ADALAT [10.00 mg], MEDICATION 2: ACTOS [10.00 mg]). The main area shows the 'REQUEST 8110 : INTERACTIONS TABLE' with a table of interactions. The table has columns for Medication, CYP1A2, CYP2B6, CYP2C8, CYP2C9, CYP2C19, CYP2D6, and CYP3A4. The rows show Adalat and Actos, with Adalat having a checkmark in the CYP3A4 column and Actos having a checkmark in the CYP2C8 column. The bottom of the interface features a utility bar with a 'Request List' button and an 'Order by' dropdown menu.

MEDICATION	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2D6	CYP3A4
Adalat							✓
Actos			✓				✓

This instance of the utility bar contains the usual buttons and an "Order by" dropdown which can be used to specify by which column the table is sorted.

The dropdown contains the isoenzymes by which the table can be sorted and selecting an isoenzyme from the dropdown results in the table being re-displayed sorted by the specified column.

Please note that new medications for the request are displayed in red.

Please refer to the InterMED-Rx web site for instructions about interpreting the interactions table.

Analysis Section

The contents section associated with the “Analysis” tab exposes the analysis for the loaded request.



This instance of the utility bar contains the usual buttons and a “Prepare Opinion(s)” button which can be used to generate “Pharmaceutical Opinions” for the loaded request.

In order to generate an opinion you must have selected (use the checkbox at the right-hand side of the analysis) one or more analysis for which to formulate an opinion.

For details on formulating Pharmaceutical Opinions please refer to the “Formulating a Pharmaceutical Opinion” section of the document.

Please note that headers for analysis that involve new medications for the request are displayed in red.

Please refer to the InterMED-Rx web site for instructions about using the analysis page and interpreting the analysis itself.

Manual Requests Section

The contents section associated with the "Manual Requests" tab exposes the means by which a user may send a new request for analysis.

MANUAL REQUEST MED GRID

Add/Update Button: The caption of the button toggles between Insert and Update according to the value of the Medication pull down. If the med in the Medication pull down is already in the grid then the caption will be "Update" otherwise it is "Add".

Medication	Dose	Unit	ID
Actos	10.00	mg	9040
Adalat	10.00	mg	8939

Medication: Adalat Dose: 10.00 mg

Buttons: Reset, Update, Delete

Utility Bar: Request List, Load, Send

This instance of the utility bar contains the usual buttons and as well as a "Load" and a "Send" button which can be respectively used to load the medications of the loaded request and send the request for analysis.

By clicking the "Load" button, the meds of the currently loaded request are loaded into the manual request med grid. This is especially useful if you want to adjust dosages or meds of an interface request and resubmit it for analysis.

By clicking the "Send" button, the meds configured in the request grid are sent for analysis. The result is displayed as soon as they are received. A 30 second timeout is in effect for the operation after which a message is displayed and normal operation is resumed (i.e. if the request is not answered within a 30 second period it is considered that the request has failed and needs to be re-submitted).

The manual request section itself is made up by a medication grid, a medication pull down, fields to specify the dose and dose unit as well as buttons to re-initialize, insert, update and delete meds from the request.

The "manual request med grid" is for display purposes only. Use the "Medication", "Dose" and unit fields together with the "Reset", "Add/Update" and "Delete" fields to interact with the med grid.

To insert a med in the grid, select the desired med from the pull down, enter a dose and select the unit and then click the "Add" button.

To update a med in the grid select it in the med grid and adjust the dose or unit as needed then click "Update".

Use the "Delete" button to delete a med from the grid after having selected it.

Use the "Reset" button to delete all the meds from the med grid.

Please note that it is not currently possible to formulate "Pharmaceutical Opinions" for manual requests.

InterMED-Rx Section (Utility)

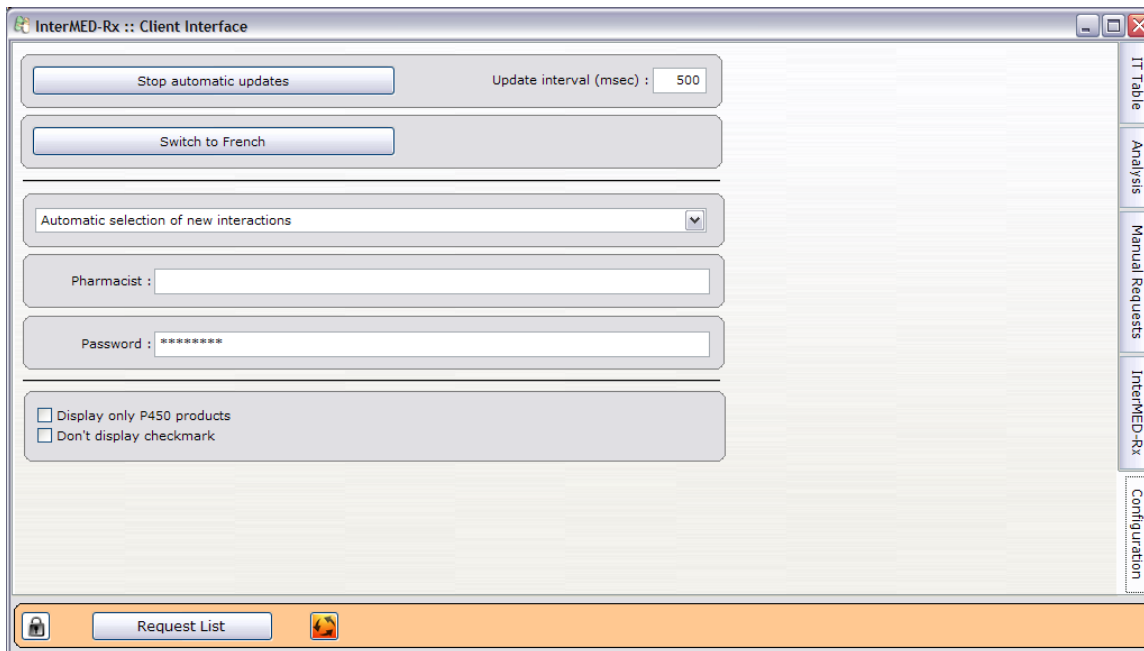
The InterMED-Rx tab shown below presents a simple embedded web browser which allows the user to access the InterMED-Rx web site without leaving the application window. This tab accesses the "InterMED-Rx P-450 Table" by default.



Please note that a valid account is needed to use the web site to its full potential. Registration to the web site is free.

Configuration Section (Utility)

The “Configuration” tab allows the user to configure the application according to his/her preferences.



The available configuration options are:

1. **Stop Automatic Updates:** The InterMED Viewer application is designed to automatically display the last request made from the workstation, whether it be a manual request or an interface request. Use this option button to enable or disable this behavior.
2. **Update Interval (ms):** Sets the automatic update interval for the application. By default the value for this parameter is 500 milliseconds. This configuration parameter controls the update frequency interval for the application when automatic updates are enabled. Setting this value to low may negatively impact system performance. The default values is 500ms.
3. **Language picker:** The application is available in English and French. Use this configuration option to switch between the two available languages. Please note that the application language also sets the “Web Service” response language.
4. **Interaction analysis selection:** For interface requests use this pull down to specify the type of analysis that will be automatically selected for opinion formulation. You may specify that all, none or only analysis involving new request meds be automatically selected.
5. **Pharmacist:** Use this field to specify the pharmacist name that will be used to formulate a “Pharmaceutical Opinion”.

- 6. Password:** Used to specify the application unlock password. If not specified this password defaults to "intermed". The password is reset to default each time the application is started.
- 7. Display only P450 products:** Use this checkbox to configure the Interactions Table. If this control is checked, only P-450 meds are displayed in the table.
- 8. Don't display checkmark:** Use this checkbox to configure the Interactions Table. If this control is checked, the isoenzyme checkmarks are replaced with text identifying the med as a substrate, inhibitor or inducer. This option is especially useful if you need to print the interactions table on a monochrome printer.

Utility Windows

Application Lock

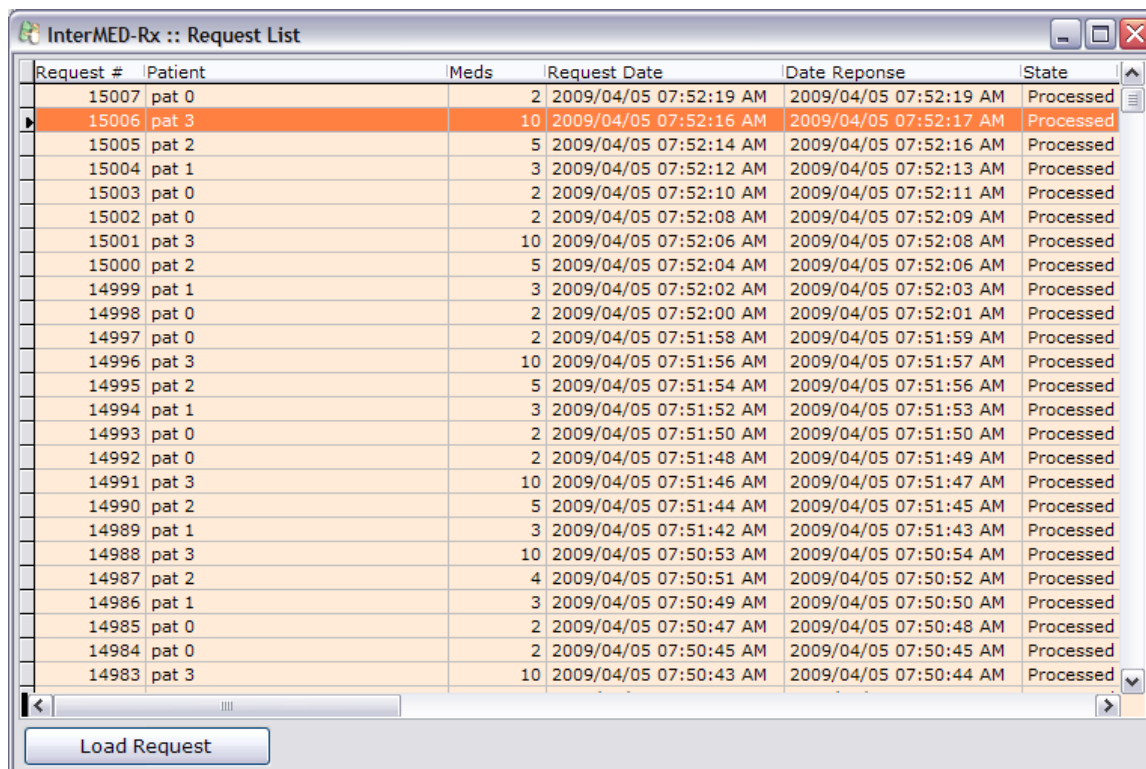
The application can be locked by clicking the "Lock" button from the utility bar. When the application is locked, only the "InterMED-Rx Authentication" window shown below is visible.



To unlock the application enter the password that was entered in the "Password" field of the Configuration section. If the password has not been set then it is "intermed" by default. The password is case sensitive and is reset to default when the application is started.

The Request List

The "InterMED-Rx :: Request List" window is used to load requests that have been initiated by the current user (determined by the network/domain username) in the past. It is accessed by clicking the "Request List" button on the utility bar of the main application window.



Request #	Patient	Meds	Request Date	Date Response	State
15007	pat 0	2	2009/04/05 07:52:19 AM	2009/04/05 07:52:19 AM	Processed
15006	pat 3	10	2009/04/05 07:52:16 AM	2009/04/05 07:52:17 AM	Processed
15005	pat 2	5	2009/04/05 07:52:14 AM	2009/04/05 07:52:16 AM	Processed
15004	pat 1	3	2009/04/05 07:52:12 AM	2009/04/05 07:52:13 AM	Processed
15003	pat 0	2	2009/04/05 07:52:10 AM	2009/04/05 07:52:11 AM	Processed
15002	pat 0	2	2009/04/05 07:52:08 AM	2009/04/05 07:52:09 AM	Processed
15001	pat 3	10	2009/04/05 07:52:06 AM	2009/04/05 07:52:08 AM	Processed
15000	pat 2	5	2009/04/05 07:52:04 AM	2009/04/05 07:52:06 AM	Processed
14999	pat 1	3	2009/04/05 07:52:02 AM	2009/04/05 07:52:03 AM	Processed
14998	pat 0	2	2009/04/05 07:52:00 AM	2009/04/05 07:52:01 AM	Processed
14997	pat 0	2	2009/04/05 07:51:58 AM	2009/04/05 07:51:59 AM	Processed
14996	pat 3	10	2009/04/05 07:51:56 AM	2009/04/05 07:51:57 AM	Processed
14995	pat 2	5	2009/04/05 07:51:54 AM	2009/04/05 07:51:56 AM	Processed
14994	pat 1	3	2009/04/05 07:51:52 AM	2009/04/05 07:51:53 AM	Processed
14993	pat 0	2	2009/04/05 07:51:50 AM	2009/04/05 07:51:50 AM	Processed
14992	pat 0	2	2009/04/05 07:51:48 AM	2009/04/05 07:51:49 AM	Processed
14991	pat 3	10	2009/04/05 07:51:46 AM	2009/04/05 07:51:47 AM	Processed
14990	pat 2	5	2009/04/05 07:51:44 AM	2009/04/05 07:51:45 AM	Processed
14989	pat 1	3	2009/04/05 07:51:42 AM	2009/04/05 07:51:43 AM	Processed
14988	pat 3	10	2009/04/05 07:50:53 AM	2009/04/05 07:50:54 AM	Processed
14987	pat 2	4	2009/04/05 07:50:51 AM	2009/04/05 07:50:52 AM	Processed
14986	pat 1	3	2009/04/05 07:50:49 AM	2009/04/05 07:50:50 AM	Processed
14985	pat 0	2	2009/04/05 07:50:47 AM	2009/04/05 07:50:48 AM	Processed
14984	pat 0	2	2009/04/05 07:50:45 AM	2009/04/05 07:50:45 AM	Processed
14983	pat 3	10	2009/04/05 07:50:43 AM	2009/04/05 07:50:44 AM	Processed

Load Request

You may load a request by double clicking it or selecting it in the grid and clicking the "Load Request" button.

When the request is loaded, it is first retrieved from the database, then processed by the application and ultimately displayed in the Interactions Table and Analysis sections of the main application window which will be brought to the foreground.

Formulating a Pharmaceutical Opinion

Please note: At the moment you may formulate opinions ONLY for interface requests that incorporate patient data.

The Viewer Application can be used to emit "Pharmaceutical Opinions". Pharmaceutical Opinions are used to convey prescription modifications to the concerned health professionals and/or organisms.

To access the Opinion window you must first select the analysis for which you want emit an opinion by checking its checkbox in the Analysis section and clicking the "Prepare Opinion(s)" button from the Utility bar.

The screenshot shows the 'InterMED-Rx :: Client Interface' window. A sub-window titled 'Opinion for analysis # 43' is open. It contains a text area with analysis text and a pull-down menu for recommendations. Two orange callout boxes are present:

- Box 1: "Analysis text as rendered in the Analysis section" with an arrow pointing to the text area.
- Box 2: "Recommendation pull-down. The value of this pull down determines the configuration of the remaining formulation fields." with an arrow pointing to the pull-down menu.

The analysis text in the window reads:

These two substrates are metabolized by the same cytochrome P450 isoenzyme, namely : CYP3A4

Their respective affinities for these isoenzymes are similar. However due to higher dose of Actos , it is very likely that the latter will suffer less interaction, but will raise a significant raise in concentrations of Adalat. It would therefore be prudent to lower the dose of Adalat.

The recommendation pull-down menu is set to "stop".

The window also includes fields for "Emit to Md 1(1)" and a "Comment space". At the bottom, there are buttons for "Cancel", "Cancel All", "Preview", and "Emit".

Formulating an opinion is accomplished by entering information in the text fields and making the appropriate choices from the pull downs provided. Note that the pull downs and text fields are configured dynamically according to the value of the recommendation pull down. All fields except the "Comment" are mandatory.

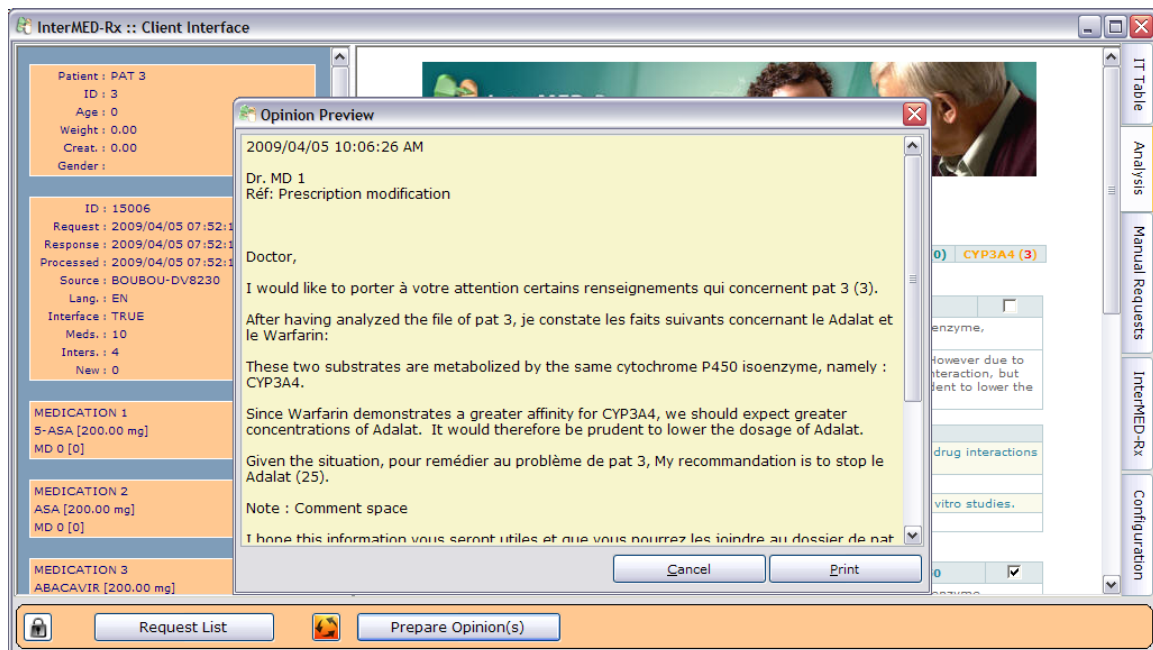
Once you have finished formulating the opinion you may preview it or emit it by respectively clicking the "Preview" or "Emit" button.

Use the "Cancel" button if you wish to cancel the current opinion formulation and go to the next one.

Use the "Cancel All" button if you wish to cancel all the opinion formulations and go to the main application window.

If only one analysis was chosen for opinion formulation then the effect of the "Cancel" and "Cancel All" button is identical.

If you have chosen to preview the opinion instead of emitting (printing) it, the Opinion Preview window will appear as shown below.



The edit box will contain the text of the opinion. You may consult but not modify the text. Alternatively you may copy/paste the text into a text editor and modify it as needed.

Use the "Print" button to render the opinion and close this window.

Use the "Cancel" button to close this window without rendering the opinion.