FEMA

FIRMette Desktop 3.2.6 Installation and User Guide

The FIRMette Desktop application was developed to enable users to create and print a selected portion of a Flood Insurance Rate Map (FIRM) since many users do not have the capability to print an entire FIRM, which normally measures 36”x 25.875”. The application was designed to allow users to select a portion of the FIRM which would fit, to scale, onto an 8.5” x 11”, 8.5” x 14”, or 11” x 17” sheet of paper. These mini-FIRMs, called FIRMettes, can be printed or saved in a Portable Document Format (PDF) file and are considered equivalent representations of the original FIRM panel from which they are made so long as they include the panel number, north arrow, and scale bar.

The FIRMette Desktop application has been upgraded in order to add some additional features:

- Search for a panel by address*
- Search for a panel by coordinate*
- Search for and download Letters of Map Change (LOMC) for a panel*
- Provide a link to the FEMA Flood Map Service Center (MSC) to download a FIRM*
- Notify the user that the panel being viewed has a LOMC**
- Allow the user to click on the LOMC number and view the image***
- Select a user-defined area of a FIRM and print to the specified page size****
- Print a full-size FIRM*****
- Allow the user to define the folder locations where the FIRM and LOMC images are to be stored and import data that is already stored in other directories.

This application communicates with the FEMA Flood Map Service Center (MSC) for many of these features, so some of this functionality will not be available if the application cannot establish an internet connection to the MSC, found at http://msc.fema.gov.

* -internet connection is required

** -internet connection is not required if LOMCs are stored into the proper directories

*** -requires third party PDF viewing software

****-may not be to scale or proportionate depending on the shape of the selected area

***** -may not be to scale as printers handle image printing in different ways

Requirements:

Windows XP/Windows 7 (may not be fully compatible with Vista)

.NET 4.0 or greater

Remove the previous version of the application if necessary

Administrative privileges to install

5M of space for the installation

Printing device that can print to the appropriate size

Third party software capable of displaying PDF files to view LOMCs

Release Notes:

Version 3.2.6 of the FIRMette Desktop application provides the following updates:

Upgrades compatibility with previously deployed enhanced GIS functionality

Ensures compatibility with Windows XP and Windows 7 (32-bit and 64-bit)

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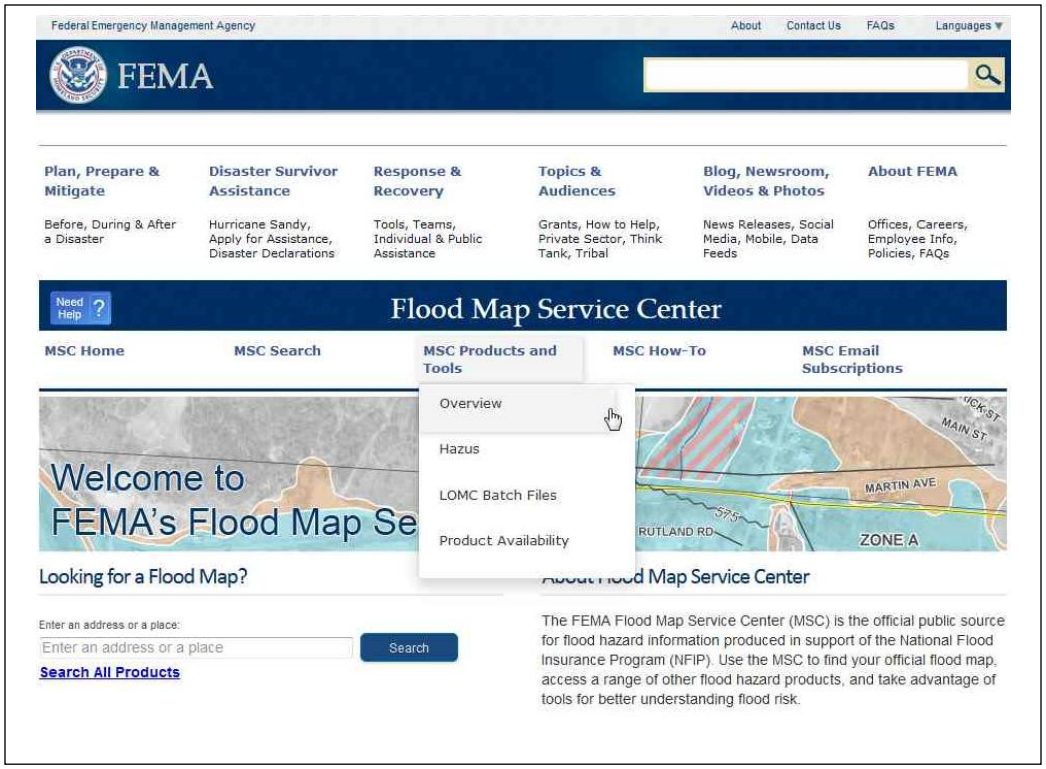
Installation

The installation of the application can be performed by following these steps:

Remove/uninstall any previous versions of the *FIRMette Desktop* application. This will remove the application, but it will not remove any subfolders that may have been created under the installation directory.

1. Open a web browser, such as Internet Explorer or Firefox, and go to the FEMA Flood Map Service Center (MSC), located at http://msc.fema.gov.
2. Click on "MSC Products and Tools" from the navigation bar and then select "Overview" from the dropdown to bring up the Products and Tools Overview page. Scroll down to the "Flood Map Tools" section of the page and select the *FIRMette Desktop* link to download the installation file.



3. Save the file to a known location on your local computer.
4. Navigate to where the file was saved.
5. Double click on the installation file (FIRMette_Desktop_3.2.6.msi).

- For Windows XP and Windows 7 (32-bit), the application will automatically install to C:\Program Files\FEMA\FIRMette – Desktop

- For Windows 7 (64-bit), the application will automatically install to C:\Program Files (x86)\FEMA\FIRMette – Desktop. This will create the necessary folders for storing information under this folder and add a new item to the application menu that can be accessed by clicking on the *Start* button, and moving the mouse over *Programs*, *FIRMette Desktop*, and clicking on *FIRMette Desktop*.

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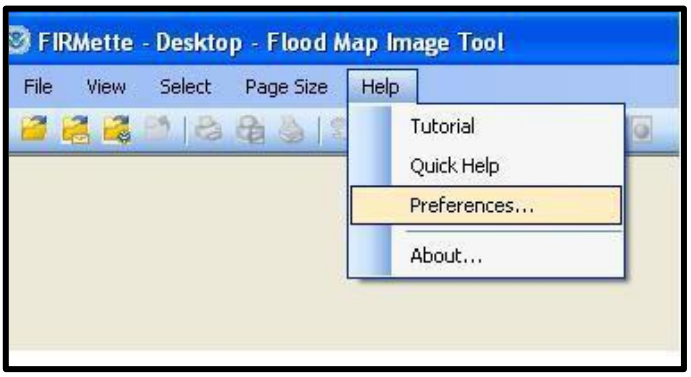
Setup

Set Preferences:

The *FIRMette Desktop* application allows the user to specify different directories for where the Flood Insurance Rate Map (FIRM) images (TIF and PNG format) and Letters of Map Change (LOMCs) (PDF format) are stored. The default option is to have all of the panels stored in a single folder called FEMA_Flood_Info that is created under the users AppData folder (e.g., C\Users\<user_name>\AppData\Local\FEMA\FIRMette Desktop\3.2.6\". The LOMCs that are downloaded from the MSC Web site will be saved in directories under FEMA_Flood_Info that are named according to the FIRM panel that they affect. So if a LOMC modifies panel 990009C0025D for Flood County, USA, the application will create a folder named 990009C0025D and save the LOMC there.

These default folder options that specify where FIRMs and LOMCs are stored can be changed. This can be done by running the application, clicking on *Help* on the application's menu bar and then clicking on *Preferences*. This will open the dialog box that will allow the user to change these settings by clicking on the buttons to the right of each option and browsing to the appropriate folder location. These directories can be on either on a local computer or on a network drive where the user has read and write permissions. This should prevent members of an organization from maintaining separate, duplicate copies of these files.



Import Data:

The *FIRMette Desktop* application will copy the FIRM images that are stored on the user's local computer or network into the folder that is specified in the *Preferences* dialog box (see *Set Preferences* section for more information about changing this location). The user can do this by clicking on the *File* option on the menu bar and clicking on the *Import* option. This will open a dialog window that will allow the user to navigate to the folder where the FIRM images are currently located and selecting the images that are to be copied by clicking on each individual image or by clicking on the first image in the list and holding down the Shift key while clicking on the last image in the list. Clicking on the *Import* button will copy these files to the location defined in the preferences dialog box. This import activity will not overwrite files that are already located in the destination folder.

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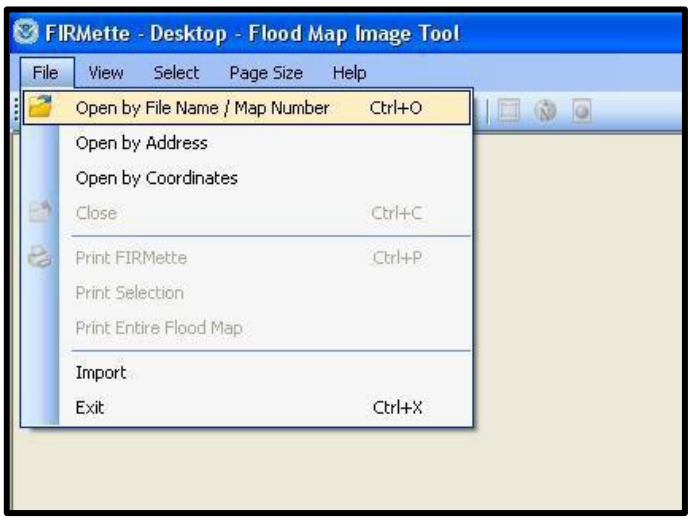
If the user currently has any LOMC files that they would like the *FIRMette Desktop* application to use, these should be stored in directories that are named for the panel that they affect. These directories should then be moved to the location of the LOMC folder that is defined in the *Preferences* dialog box (see *Set Preferences* section for more information about changing this location). Once these LOMC files are located in the proper directories, the application will then be able to recognize that this information exists and will display the list of LOMCs when the appropriate FIRM panel is opened. This function will work even without an internet connection. Otherwise, the application will attempt to download any LOMCs that modify the FIRM panel that is opened from the MSC web site, but it will not overwrite any existing information.

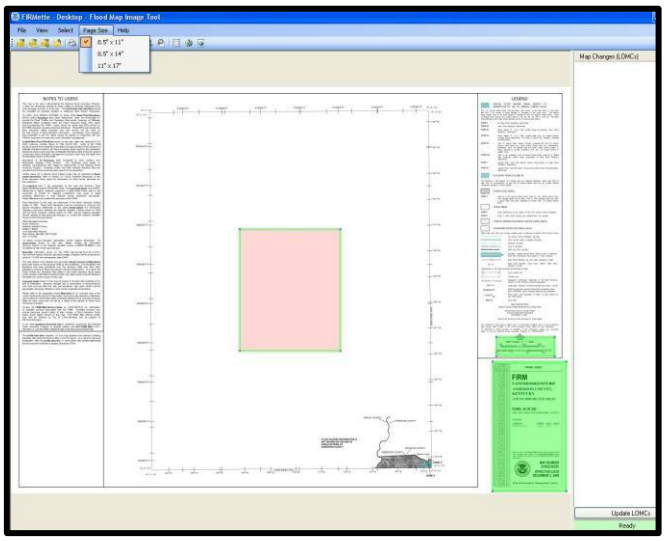
Use:

1. FIRMette Creation

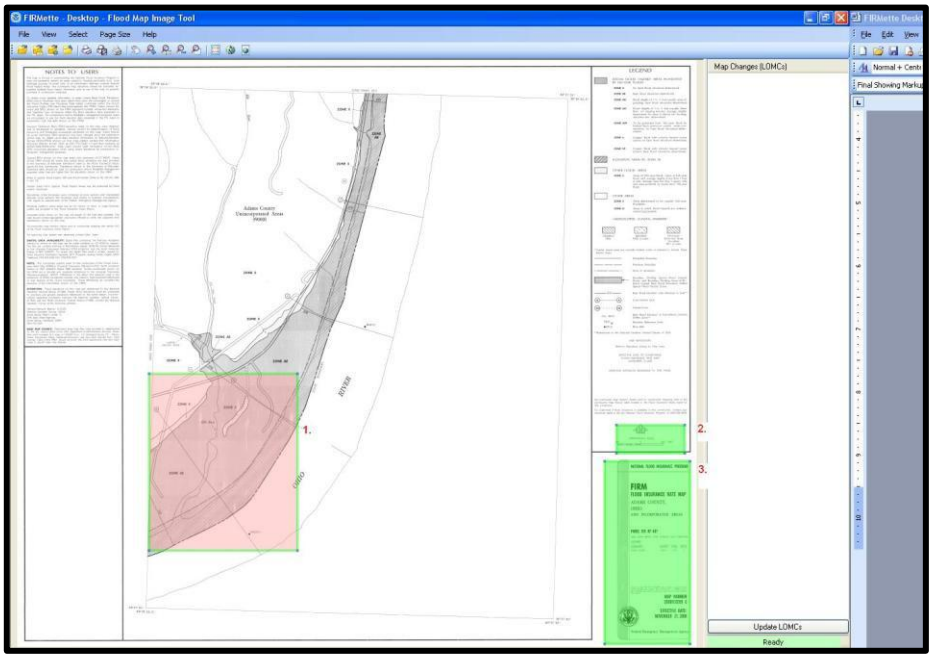
Open a FIRM panel image that is stored on the local computer or network. This can be done either by moving the mouse to the menu bar and clicking on *File*, *Open by File Name / Map Number*, or by clicking on the *Open by File Name / Map Number* icon on the tool bar which will open up a dialog box that will allow the user to navigate and select a panel image.



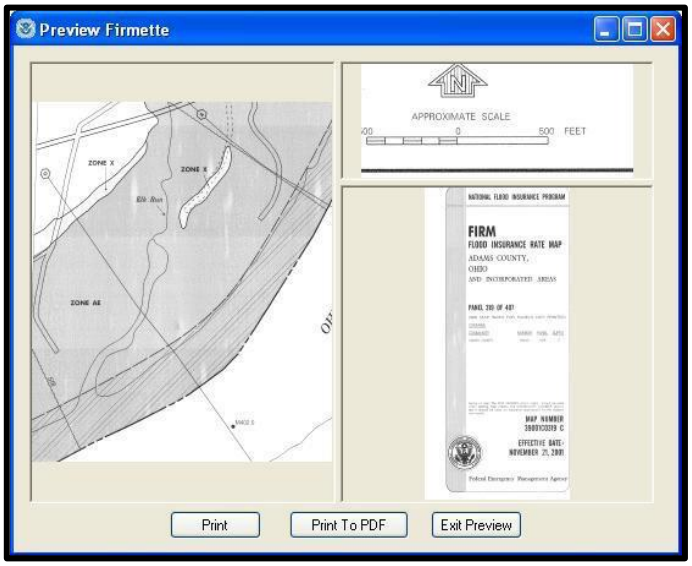
Once the FIRM panel is opened, the user can set the page size of the FIRMette by moving the mouse to the menu bar, clicking on *Page Size*, and clicking on the appropriate option for 8.5” x 11”, 8.5” x 14”, or 11” x 17”. The graphic tool is used to select the portion of the map area will change size accordingly.



There should be 3 graphic areas visible over the FIRM image. These are designed to highlight the various portions of the FIRM panel that will appear in the final FIRMette. Each graphic can be selected and moved by either clicking on the graphic, which will change the color from green to pink with a green outline, and holding the left mouse button down to drag the graphic to the proper location or by clicking on the icon in the tool bar to select the graphic and dragging the graphic to the proper location by holding down the left mouse button. The graphic selected by clicking on the *Select Firmette Area* tool should be moved to cover the area of interest of the map panel. The graphic selected by the Select *North Arrow* tool should be positioned over the north arrow and the scale bar. And the graphic selected by the *Select Title Block* tool should be positioned over the title block of the FIRM panel.



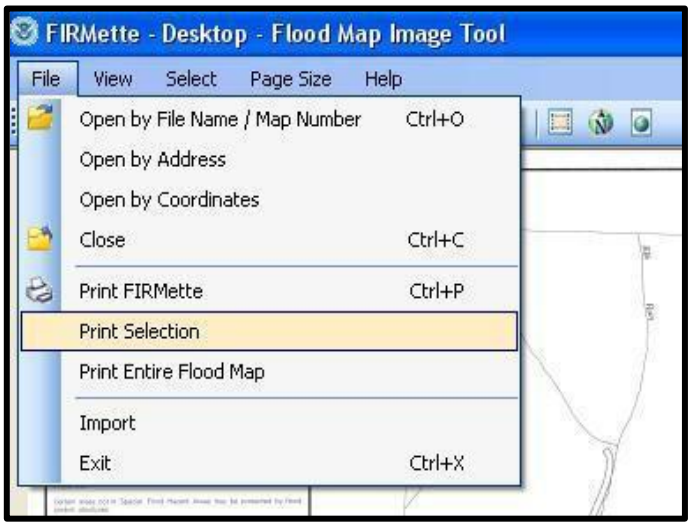
Once the graphics are placed in the proper positions, the user can choose to either print the image or save the image to a PDF file on the local computer or network. This can be accomplished by either clicking on the *Print FIRMette* tool in the tool bar or by clicking on *File*, *Print FIRMette* in the menu bar. Either of these actions will open the *Preview FIRMette* dialog box that will provide a preview of the final result and provide buttons to *Print*, *Print To PDF*, or *Exit Preview*.



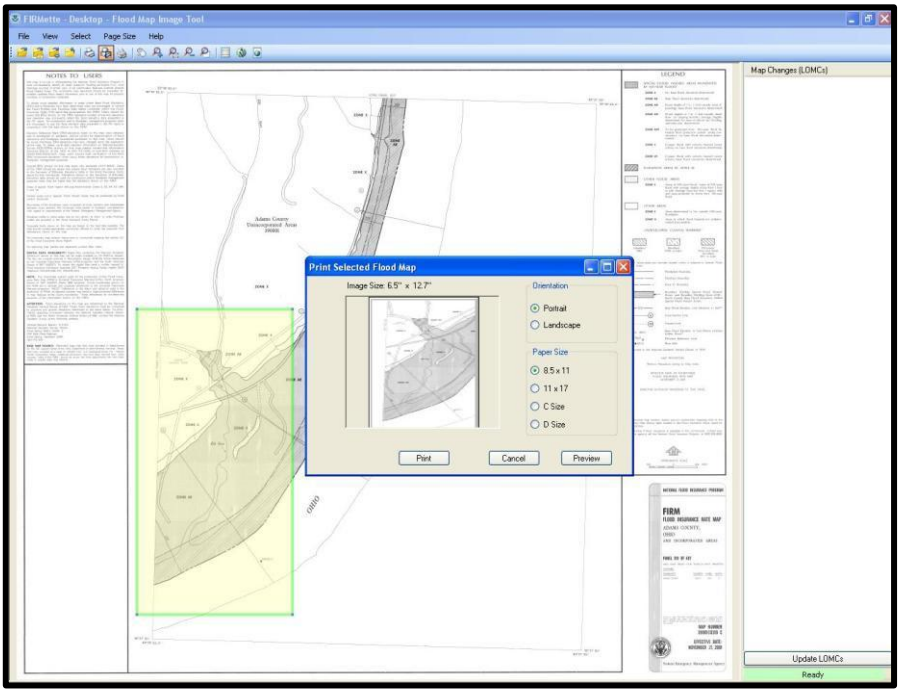
2. Print User-defined Areas

Open a FIRM panel image that is stored on the local computer or network. This can be done either by moving the mouse to the menu bar and clicking on *File*, *Open by File Name / Map Number* or by clicking on the *Open by File Name / Map Number* icon on the tool bar which will open up a dialog box that will allow the user to navigate and select a panel image.

Once the FIRM panel appears, the *Print Selection* tool can be activated by either clicking on *File*, *Print Selection*, or by clicking on the *Print Selection* icon on the tool bar.



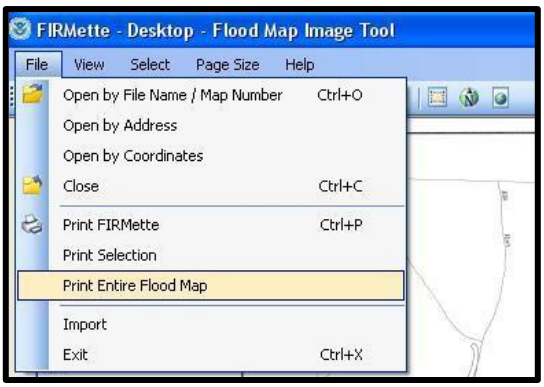
The user can then define an area by clicking and holding the left mouse button to define one corner of the area and dragging the mouse. When the mouse has been moved to the opposite corner of the area of interest, release the left mouse button. This will open the *Print Selected Flood Map* dialog box which will allow the user to select the appropriate orientation and paper size. **Please note that the application will attempt to proportionally expand the selected area so that it may be printed at maximum magnification on the paper size that has been selected. These plots are not the equivalent of FIRMettes and are non-regulatory.**



3. Full Panel Printing

Open a FIRM panel image that is stored on the local computer or network. This can be done either by moving the mouse to the menu bar and clicking on *File*, *Open by File Name / Map Number* or by clicking on the *Open by File Name / Map Number* icon on the tool bar which will open up a dialog box that will allow the user to navigate and select a panel image.

Once the panel is opened and viewable within the application, either click on the *Print Entire Flood Map* icon on the tool bar or click on *File*, *Print Entire Flood Map*.



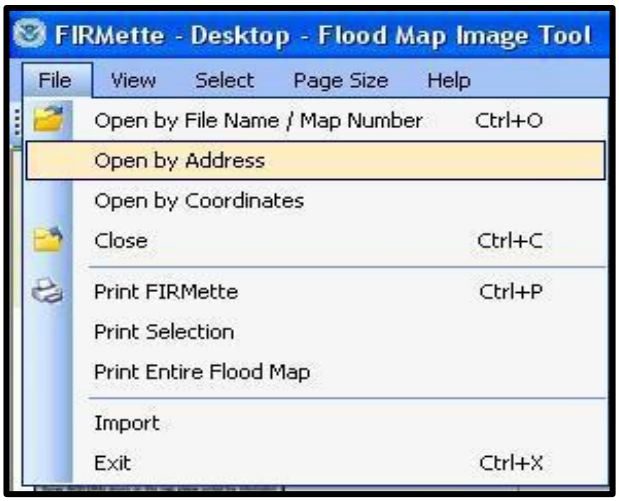
The *Print Entire Flood Map* dialog box will appear which will allow the user to print the entire FIRM panel at full size (36" x 25.875"), or allow the user to click on the check box for *Print to Standard Page Size* and select from the list of page sizes that is provided: 8.5" x 11", 11" x 17", C Size, or D Size. Plots created using the *Print to Standard Page Size* option will include a note stating "This print is non-regulatory" across the top. **Please verify that full size plots at 36" x 25.875" are to scale, as some printers may not print these images properly.**

4. Address Search

This function requires the user to have an internet connection that will allow the *FIRMette Desktop* application to communicate with the FEMA Flood Map Service Center (MSC).

Open the *Panel Search Dialog* box by either clicking on *File*, *Open by Address*, or by clicking on the *Open by Address* icon on the tool bar.

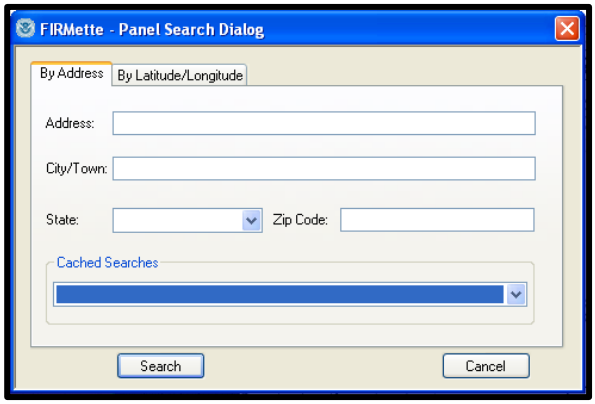
The *By Address* tab should be visible and will allow the user to enter an address as they would on the MSC Search by Address page, and click on the *Search* button.



If the application is able to receive the panel number from the MSC, it will search for that panel in the folder that has been specified to store the panel images which is discussed in the *Set Preferences* portion of this document and either open the panel image or notify the user that the image is not on the local computer and provide a link to the MSC to order the panel. The *Try Again* button allows the user an opportunity to attempt to open the panel again in case the image file was not stored in the proper folder while the *Cancel* button will allow the user to perform another search.

Please verify that the address has been matched correctly since the software that is used by FEMA to convert street addresses into real world (Latitude/Longitude) coordinates may not have every address.

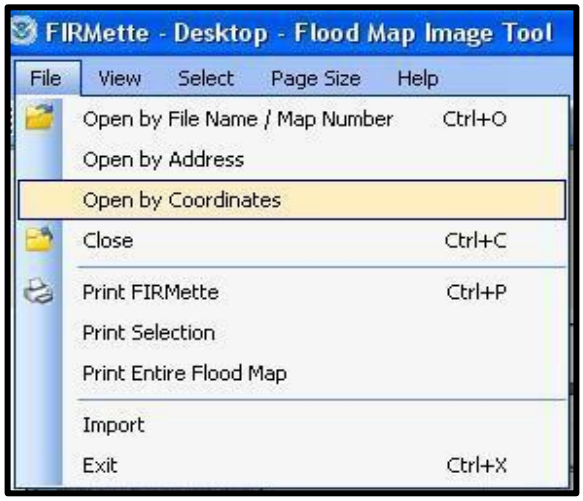
Addresses that are used to search for FIRM panels are kept in a list box and can be selected and used to perform another search. This list will be cleared when the application is shut down.



5. Coordinate Search

This function requires the user to have an internet connection that will allow the *FIRMette Desktop* application to communicate with the FEMA Flood Map Service Center (MSC).

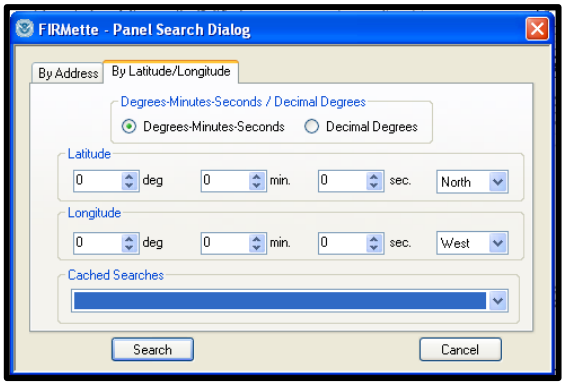
Open the *Panel Search Dialog* box by either clicking on *File*, *Open by Coordinates*, or by clicking on the *Open by Coordinates* icon on the tool bar.



The *By Latitude/Longitude* tab should be visible and will allow the user to select whether the coordinates will be in Degrees-Minutes-Seconds (DMS) or Decimal Degrees (DD). Once specified, the user can then enter coordinates as they would on the MSC Search by Address page, and click on the *Search* button. This search method is more accurate than the address search.

If the application is able to receive the panel number from the MSC, it will search for that panel in the folder that has been specified to store the panel images which is discussed in the *Set Preferences* portion of this document and either open the panel image or notify the user that the image is not on the local computer and provide a link to the MSC to order the panel image. The *Try Again* button allows the user an opportunity to attempt to open the panel again in case the image file was not stored in the proper folder while the *Cancel* button will allow the user to perform another search.

Coordinates that are used to search for FIRM panels are kept in a list box and can be selected and used to perform another search. This list will be cleared when the application is shut down.



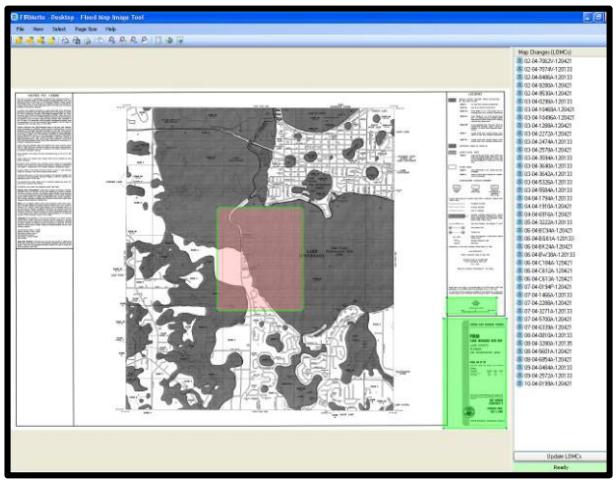
6. LOMC Notification, Download, and View

This function works automatically when a FIRM panel is opened by the application. When a FIRM panel is opened, the application will search for any LOMCs that are stored within the designated folder that is discussed in the *Set Preferences* portion of this document.

If the computer has an internet connection, the application will connect to the MSC, check for LOMCs for the FIRM panel that has been opened, and download any image files that have not already been stored within the designated folder. This process will not erase or overwrite any LOMCs that have already been stored within the designated folder.

The list of LOMCs that are found for the FIRM panel that has been opened will be listed in the *Map Changes (LOMCs)* portion of the application. The application will ignore any non-PDF files that happen to be stored in the LOMC folder.

Any LOMCs that are listed can be opened by double-clicking on the case number. This requires a separate application that is capable of viewing files in PDF format.



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Configuring the Application for Network Use

Version 3.2 of the *FIRMette Desktop* application removes the requirement for each user to download and store their own copies of FIRM scans and LOMC documents. Instead, copies of these files can be maintained within a single network folder which will allow multiple users to access this information.

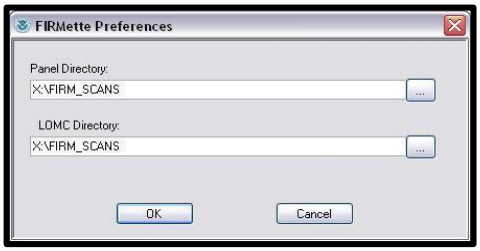
This will provide the following benefits:

- Reduce the amount of storage space required because this will reduce the number of multiple copies of FIRM scans and minimize the number of multiple LOMCs that are be copied and stored in various locations
- Reduce the administrative burden of loading and managing new data.
- Allow each member of the group to work with the same information, which will prevent confusion that can be caused if members of the group have incomplete or obsolete information.
- Allow each member of the group to download new data which will be immediately accessible by the entire group.

To configure the *FIRMette Desktop* application for use on the network:

1. Identify a folder on the network to store the FIRM scan and LOMC files. Generally, LOMC files are automatically downloaded from the MSC when a FIRM scan is opened.
   - Ideally, each user should have "read and write" access to these folders so that updated information can be downloaded from the Internet and placed in the folders, as necessary. If this is not the case, an alternative is described below.
2. Change the default settings for the *FIRMette Desktop* application to point to the selected folder.
   - Select the Preferences option under the Help drop down menu on the Main Menu.

   - Change the default folder settings for the Panel Directory and LOMC Directory (C:\FEMA_Flood_Info) to the designated network folder (e.g., X:\FIRM_SCANS).
   - Once these settings have been changed, the LOMC data will be downloaded and stored in the proper network folder automatically as each panel is accessed if the user has Internet connectivity.



1. Prepare the FIRM scan and LOMC data currently stored by the organization into the network folder.
   - All FIRM scans should be loaded directly in the specified folder (e.g., X:\FIRM_SCANS).
     - Manually cut-and-paste these files from their current folders to the new folder

     OR

     - Use the *Import* option under the *File* menu to navigate to the folder where the FIRM scans are currently stored and select single or multiple files to be copied into the designated network folder.
   - All LOMC files should be copied to sub-folders named for the FIRM panel that they affect (e.g., X:\FIRM_SCANS\01001C0025A).
     - This can be done manually using copy-and-paste.
       - If a LOMC modifies multiple FIRM panels, it should be copied into each sub-folder.
     - LOMCs will automatically be downloaded from the MSC Web site as each FIRM scan is opened within the application and if the user has internet connectivity.
     - If the user does not have write access to a folder on the network, a folder on the user's local computer should be specified (e.g., C:\LOMRs).

Once the FIRM scans have been consolidated in one location and the *FIRMette Desktop* application is installed and configured to access this folder for each user, the application will be able to work with the data on the network.