Considering Updating Your RPM UI?

Here's a Few Guidelines to Follow

RPM configures a file that is read by RPM NetLinx Studio code, controlling a large variety of devices. It also provides a standardized Touch Panel file for every project. This file is generic and does not have customized graphic capabilities; it is a consistent approach for the standard classrooms and meeting rooms that RPM can provide.

The ability for this panel to control unique 3rd party devices is done via a configuration file that is loaded on the NetLinx Master Processor. The interaction between the code and the Touch Panel file enable the end user to control the AMX system by adhering to SNAPI (Standard NetLinx API).

Updating Your RPM User Interface, What to Modify

There are several elements that can be modified on the Touch Panel file to provide a unique look and feel - these changes should be cosmetic in nature. For example, button positioning can be changed, but it should be consistent throughout the project, as not to create any confusion for the end user.

Use the TPDesign4 or TPDesign5 Touch Panel Design Program to edit the *.TP4 or *.TP5 Touch Panel UI File that is generated as part of the RPM Project.

Pages, Popup Pages, and Buttons can all have their graphical elements altered as necessary via the **States** tab of the *Properties* window in TPDesign4/5.

The *States* tab should be the focus of any changes made to the panel for customization purposes. (FIG. 1):
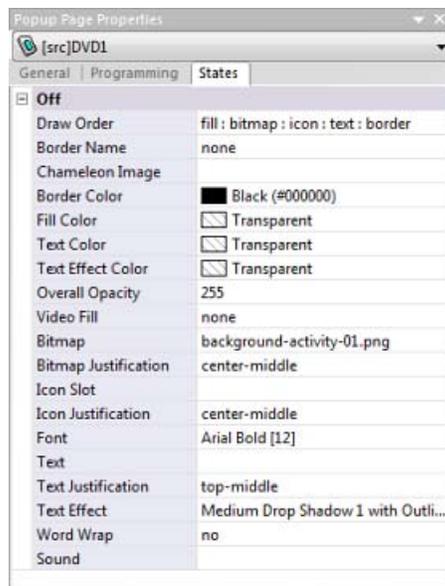
FIG. 1 TPDESIGN4 - PROPERTIES WINDOW (STATES TAB)

Note: Refer to the TPDesign4 and TPDesign5 online help for details on editing States properties.

Most buttons in RPM have two states (on/off), both of which can be customized.

Some examples of cosmetic (State) properties that can be modified include new icons, bitmaps, colors (Border Color, Fill Color, Text Color, and Text Effect Color), fonts, and bitmap/text justification.

FIG. 2 provides an example of a standardized RPM user interface for a DVD player (without any alterations):

FIG. 2 TPDESIGN4 - STANDARD UI EXAMPLE WITHOUT ALTERATIONS

In FIG. 3, several cosmetic changes have been made to the DVD page. Note that the colors of the icons have been altered, along with the font of the buttons and the background:

FIG. 3 TPDESIGN4 - STANDARD UI EXAMPLE WITH ALTERATIONS

This file can now be reloaded into RPM to use as a template for future use.

Updating Your RPM User Interface, What NOT to Modify

Because the Touch Panel UI relies on SNAPI to work properly, most properties *SHOULD NOT* be modified.
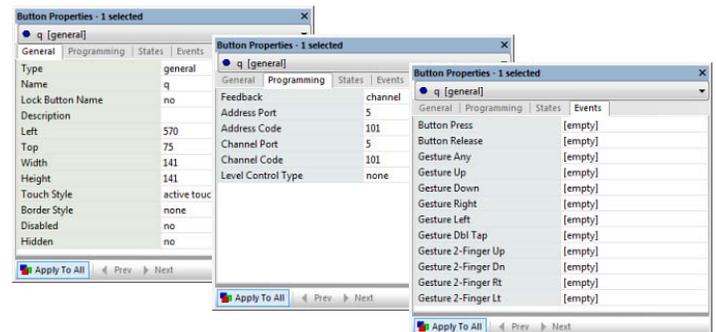
FIG. 4 TPDESIGN - GENERAL, PROGRAMMING TABS, EVENTS TAB (EVENTS TAB IS IN TP5D ONLY)

Properties in the *General*, *Programming* (TPDesign4/TPDesign5) and *Events* tabs (TPDesign5 only) SHOULD NOT be modified. This is true for Pages, Popup Pages, Sub-pages, and Buttons. The results of modifying any of these non-cosmetic elements range from unexpected behavior to a completely unusable system.

Therefore, the Address Ports/Codes and Channel Ports/Codes indicated in the *Programming* tab need to remain the same. If any of them are changed, this button will not work properly. For instance, changing the Channel Code from 101 to 102 on a button for a DVD player would make the "play" button issue a "stop" command instead.

Also, none of the Groups folders, Page names, or the Popup Pages names should be changed. RPM is code-driven to pop up various pages, and changing any of these names will result in a system that does not work properly.

Customization Support

Because RPM already comes with pre-configured, tested, and standardized user interfaces, it is highly recommended to use these files.

Note: RPM is updated regularly to provide support for new devices and features. Customized UI Files will not automatically be updated to reflect updates to RPM. New pages, popup pages and buttons relating to RPM updates will have to be manually added to the custom UI.

For any change or customization of the Touch Panel files that results in unexpected behavior or errors, it is up to the individual who made the changes to troubleshoot the issues.

- AMX can only support the Touch Panel files that RPM generates and cannot support any user modified user interfaces.
- Calls into Tech Support will result in a recommendation to use the standard Touch Panel file instead of the customized interface.

Opening the RPM Touch Panel File for Editing in TPDesign

Once you have generated a RPM Project and downloaded the .RPMX file to a local directory (via the *Generate* and *Download Project* options in the RPM web application), the RPM-generated UI file is available for editing.

There are two ways to open the RPM-generated UI file in TPDesign4/5:

- Right-click on the RPM Project file (*.RPMX) and open it using a ZIP compression application. The UI file (*.TP4 or *.TP5) is bundled in the project file. Double-click the UI file to open it in either TPDesign4 or TPDesign5.

  Note: By default, RPM saves project files to the User\Downloads folder, but the target directory for downloaded RPM projects can be set in the RPM web application.

- When RPM generates the project, all of the files that comprise the *.RPMX file are copied to the Windows **User\Temp\RPMLoader** folder.

  Double-click on the UI file (*.TP4 or *.TP5) to open it in TPDesign4 or TPDesign5.

Once the file has been edited in TPDesign4/5, save the file under a new filename to a known location.

Transferring the Project Files via RPMLoader

Use the *RPMLoader* application to transfer the RPM project to the Master and Touch Panel(s).

In RPMLoader you can transfer the project files to the Master only you are connected to the Master. The RPMLoader status bar indicates the current connection status.

RPM-generated projects already include connection information for the target Master and touch panel(s), as set in the RPM Web Application. Typically there is no need to re-configure the connection settings for the Project.

Updating the File Transfer List

When the RPM Project is opened in RPMLoader, the *File Transfer* list indicates the original (un-modified) Touch Panel UI file. It is necessary to modify the File Transfer list to include the modified UI file rather than the original:

1. Right-click in the *File Transfer List* window, and select **Add/Import Local File to Transfer** to open the *Add/Import File to Transfer* dialog (see FIG. 5):.
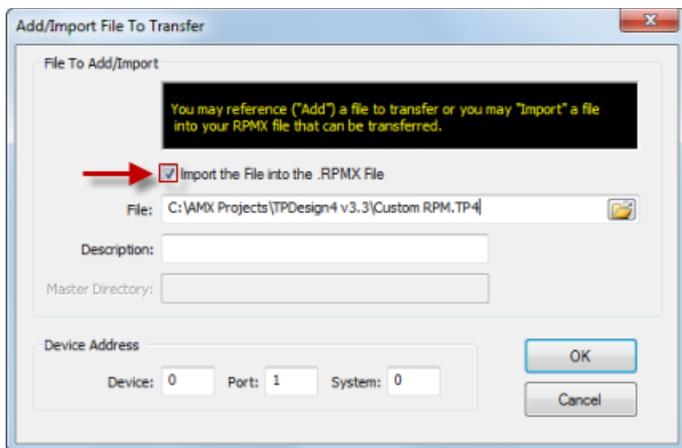
FIG. 5 RPMLOADER - ADD/IMPORT FILE TO TRANSFER DIALOG

2. Select the **Import the File into the .RPMX File** option.
3. Select the modified UI file that you want to include in the RPM Project.
4. Click **OK** to close the dialog; the selected UI file is indicated in the *File Transfer List*.
5. In the *File Transfer List*, de-select the original RPM-generated UI file.
6. Verify that the modified UI file is selected for inclusion in this transfer.

Transferring the Files

1. Verify the File Transfer List and click **START FILE TRANSFERS**.
   If the RPMLoader project does not have connection information, then the START FILE TRANSFERS button is disabled, and the *Master Connection* field indicates that no communication settings have been selected for this project (FIG. 6):

FIG. 6 RPMLOADER - MASTER CONNECTION DISPLAY (NO COMMUNICATION SELECTED)

In this case, it is necessary to configure communications settings to establish a connection with the target Master via the Communication Settings dialog. See the RPMLoader v2 - Quick Start Guide for details.

Once communications have been configured, the START FILE TRANSFERS button is enabled.

2. The Transfer Status bar indicates each file's progress during the transfer operation (FIG. 7):

FIG. 7 RPMLOADER - TRANSFER STATUS BAR S

Smart Transfer (TP4 and TP5 files only)

The *Smart Transfer* feature reduces the transfer time by only replacing those panel files that have been updated (relative to the files already loaded in the panel). Any bitmaps, sound files and fonts that are already resident on the target panel, or in your panel file on your PC (for uploads) are not included in the transfer.

By default, Smart Transfer is enabled for both TP4 and TP5 files in RPMLoader. This feature can be disabled via the Enable "Smart Transfer" options in the Preferences dialog (FIG. 8):
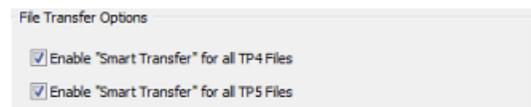
FIG. 8 RPMLOADER - FILE TRANSFER ("SMART TRANSFER") OPTIONS

Additional Documentation

Additional documentation is available via online help and www.amx.com:

- For details on using TPDesign4 (to edit G4 panel projects), refer to the TPDesign4 online help and Instruction Manual.
- For details on using TPDesign5 (to edit G5 panel projects), refer to the TPDesign5 online help and Instruction Manual.
- For details on using the RPM Web Application, refer to the *Rapid Project Maker (NSS-RPM) Instruction Manual*.
- For details on using the RPMLoader application, refer to the *RPMLoader v2 - Quick Start Guide* (in RPMLoader, select Help > Quick Start Guide).

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Last Revised: 10/01/2015