Morpho - Bug #157

redesign of plugin architecture for dmanclient

09/29/2000 01:39 PM - Matt Jones

Status:	Resolved	**Start date:**	09/29/2000
Priority:	Immediate	**Due date:**	
Assignee:	Matt Jones	**% Done:**	0%
Category:	morpho - general	**Estimated time:**	0.00 hour
Target version:	Beta1	**Spent time:**	0.00 hour
Bugzilla-Id:	157		

Description

Need to redesign the plugin architecture for dmanclient so that it supports dynamically added menus, toolbar items, and inter-plugin services. See the diagram in cvs under design/plugin-services.gif for an overview of a potential architecture.

Related issues:

Blocked by Morpho - Bug #200: New top-level container framework	**Resolved**	04/09/2001
Blocked by Morpho - Bug #203: new UI layout for the top-level container	**Resolved**	04/09/2001

History

#1 - 04/09/2001 02:24 PM - Matt Jones

Need to consider discussion in Santa Barbara regarding this, especially wrt removing requirement of the hardcoded "tabbed" user interface.

#2 - 04/09/2001 02:25 PM - Matt Jones

In Santa Barbara, we put the following topics under this task:
details of plug-in use, context sensitive menus, communication between plug ins, keyboard shortcuts, etc.

#3 - 04/25/2001 11:15 AM - Matt Jones

New design of plugin and services architecture has been checked into CVS under the tag FRAMEWORK_REDESIGN_BRANCH. Now the ClientFramework finds the name of plugins from the configuration file and loads them. This involves giving the plugin an opportunity to register menus, toolbar items, and services, and add a tab in the main user interface. Services are generic functions that the Plugin will execute for other plugins, identified by name. Data is passed between plugins using generic ServiceRequest and ServiceResponse objects. The "morpho-design.vsd" visio file in the design module contains a UML class diagram and a UML sequence diagram illustrating this architecture and the interactions between plugins wrt services.

Each plugin can register a single tabbed pane that is inserted into the main user interface. Our current plans are that there will only be one tab (for the users data list), and that all other UI frames needed by plugins will be implemented as independent windows. The plugin can (and should) register these windows as they are created, at which point they become visible in the "Window" menu that is implemented by the framework. Plugins should remove windows from the framework when they are deleted or hidden. Dialog boxes and wizards that are modal need not be listed in Windows menu, but generally non-modal windows should be listed (registered) while they are visible.

Still to do:
1) Generalize menus so plugins can insert them in specific places, not just append. (this is problematic becase determining an absolute index is non-trivial). Add shortcut keys to menu items.
2) Generalize toolbars so that additional kinds of widgits can be inserted (like checkboxes and textboxes) by plugins.
3) Add an API for communicating with Metacat. This will probably involve creating a MetacatRequest object and a MetacatResponse object that can be passed. This could possibly be implemented as a service that communicates with Metacat, but might be simpler as direct access methods in the framework.

#4 - 04/27/2001 12:01 PM - Matt Jones

Added menu placement features, so now plugins can determine the order of menus and menu items.

Added utility routines for communicating with metacat so now plugins need not know the network communication issues associated with sending data to metacat. See the design/morpho-design.vsd Visio file for an overview of the API.

#5 - 05/10/2001 09:58 AM - Matt Jones

Redesigned to allow more flexibility in when menus and toolbars can be added. Now they can be added by a call to ClientFramework at any time. Still need to tweak the toolbar to allow positioning and alternative widgets.

#6 - 07/20/2001 09:59 AM - Matt Jones

Created new bug for the toolbar issues, so the plugin redesign is completed.

#7 - 03/27/2013 02:13 PM - Redmine Admin

Original Bugzilla ID was 157