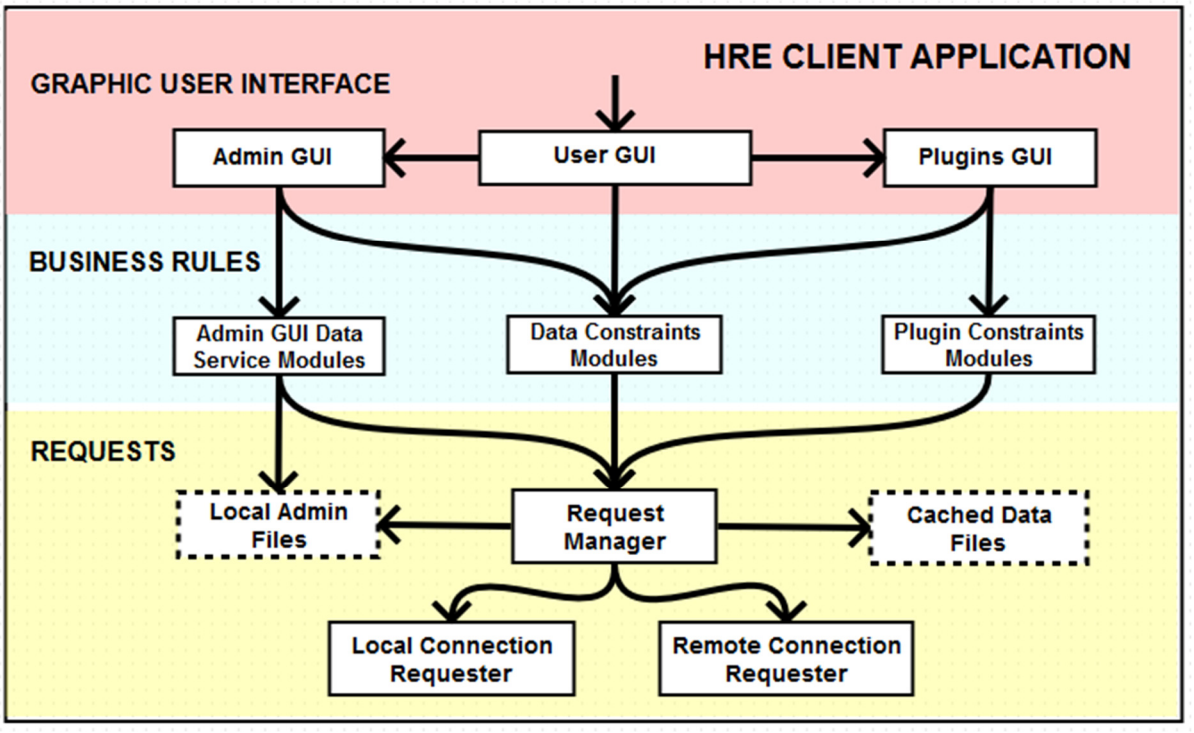
Architecture – HRE Client

Revision History

2017-04-06	Robin Lamacraft	Original draft
2018-08-16	Nils Tolleshaug	Updated with Revision History and Scope

SCOPE

The document identifies the building blocks in the HRE Client and the layered structure of the client implementations.



A representation of the structure of the Client Component

THE PRESENTATION (GUI) LAYER:

The GUI has 3 components; the standard user GUI, the GUI to be used to administer the access rights in the installation and any additional GUI that are the result of installing plugin packages.

THE BUSINESS RULES LAYER:

This is the collection of modules that provide services to the GUI layer and between other business rules layer modules. This is where validation of data entry is performed and where the cascading consequences of changing a connection between objects or the deletion of an object are managed. These modules also formulate requests for access to the HRE Server via the Requests Layer.

THE REQUESTER LAYER:

In this layer the Request Manager validates and dispatches the requests to the HRE Server containing the HRE database if the required data is not already available in a cache. The user can select if the request are a local or a remote access to the required HRE database. The HRE Client has identical API interfaces to Local Connection Requester and Remote Connection Requester therefore the HRE client has only one implementation used both for local and remote communication.

If the request is local the Local Connection Requester sends the request to Local Request Listener implemented on the same PC as the client. If the request is remote the Remote Connection Requester is used to establish a connection over the TCP/IP network to the Remote Connection Listener to access the remote database on a remote server. The partition in local and remote database access is implemented because in the local request case the communication can be more efficient and not being influenced by TCP/IP communication overhead.