

Client/Server Handshake

Formatting Conventions

Content derived from subject matter experts (no formatting)

Content generated by business analyst (italic) Once verified by a SME, content generated by business analyst reverts to no formatting

Content core to the document; serves as executive summary (red text)

Content that may be unresolved or may require more discussion (bold)

Product Development

The following information is specific to product planners.

Scheduled release version	0.4.6
Priority (critical, high, medium, low)	
Corresponding EI concept	
List any existing documents that provide details for this feature	Client-Server_handshake_(requirements).doc
Customer(s) who requested the feature	None
This spec has been reviewed by	
This spec has been approved by	

Development Staff

The following information is specific to development staff.

Impacts backward compatibility (data, usability, ...)?	No.
If impacts backward compatibility, is there a mitigation plan?	N/A.
Required resources	Huy, Matt

Level of schedule risk (high, medium, low)	Low
Level of technical risk (high, medium, low)	Low
Time estimate for implementation	
Time estimate for quality assurance/testing	
Features that depend on this feature, or on which this feature depends	
Interim deliverables	None.
Installation routine impact	Requires update to the Ant script.

Details

EI model/methodology changes:

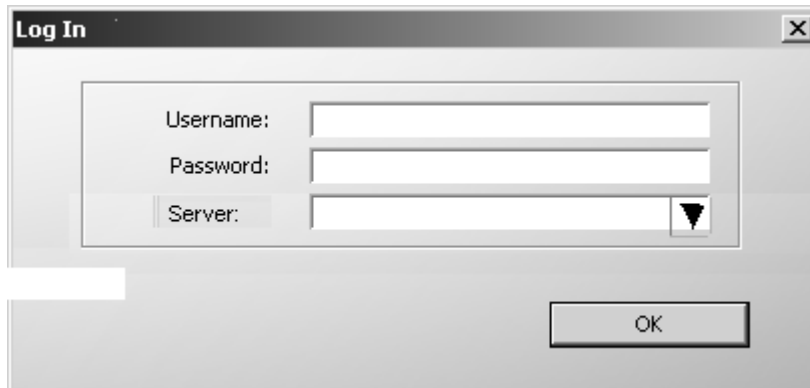
None.

Feature description:

The client and server need a way to communicate to determine if the client is compatible with the server. Changes to common code require that the client be from the same build as the server, or later. When a build is performed, the build will store a config file (XML) on the server. This server config file will also be included as part of the server installer. The server config file will contain a client-compatibility version number and the path to that version of the client installer. The names of the available servers will be included in the client config file.

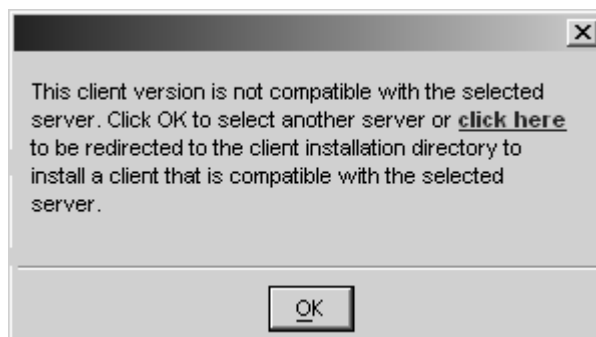
1. On log in, the user will select a server, and the feature will check the version of the current client against the client-compatibility version number stored on the server.

The log in dialog will be enhanced to display a field with label, "Server:" and drop-down list containing all servers that are listed in client configuration file.



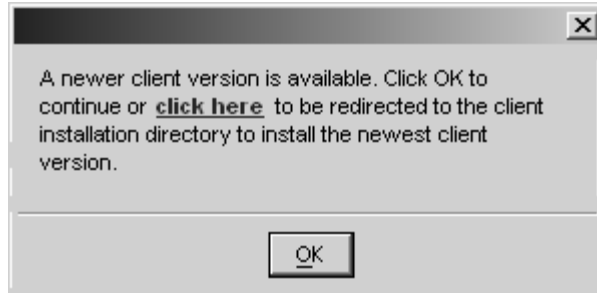
Visual Note: (I drew the black arrow in MSPaint, so don't laugh!!)

- Username and Password fields maintain current functionality
 - Server field is required
 - The current client version will be compared to the client-compatibility version in the server config file of the selected server.
2. If the current client is not recent enough to connect to the server, a dialog box will appear that will say so, and will include a link to the latest installer..
- Message dialog box will contain
 - Message: “This client version is not compatible with the selected server. Click OK to select another server or [click here](#) to be redirected to the client installation directory to install a client that is compatible with the selected server.”



Visual Note: this screenshot is to display the appearance of the message, and placement of the button – dialog box size is not indicated and there should be a ‘warning’ icon on left side.

- click here
 - underlined
 - font color = red
 - font weight = bold
 - hyperlink to network directory of the client-compatibility version (as stored in server config file)
 - when clicked
 - message box and application close
 - user is redirected by the hyperlink
 - OK
 - horizontally centered at bottom of message box
 - when clicked
 - message box closes
 - user is returned to login screen to select another database
 - user login name field remains populated
 - password field is blank
 - server drop-down selection is blank
3. If the client is recent enough to connect to the server, but is not the most recent version, an informational dialog box will appear saying so, and will include a link to the latest installer. Clicking OK on that dialog box will close the dialog box and will open the Welcome dialog box.
- Message dialog box will contain
 - Message, “A newer client version is available. Click OK to continue or **click here** to move to the client installation directory to install the newest client.”



Visual note: this screenshot is to display the appearance of the message, and the placement of the button – dialog box size is not indicated and there should be an ‘information’ icon on left side.

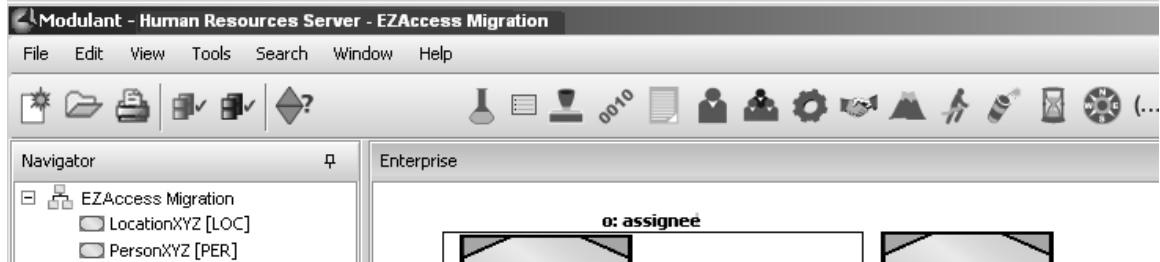
- - click here
 - underlined
 - font color = red
 - font weight = bold
 - hyperlink to network directory of the client – compatibility version (as stored in the server config file)
 - when clicked
 - message box and application close
 - user is redirected by the hyperlink
 - OK
 - horizontally centered at bottom of dialog box
 - when clicked
 - message box closes
 - application continues - Welcome dialog is displayed
4. Also, the About box needs to have a build number in it, so that we can easily/quickly verify the client version to troubleshoot issues that arise.

The About box currently has the version number listed on the System tab, but it will be much easier to find if on the Tool (default) tab.

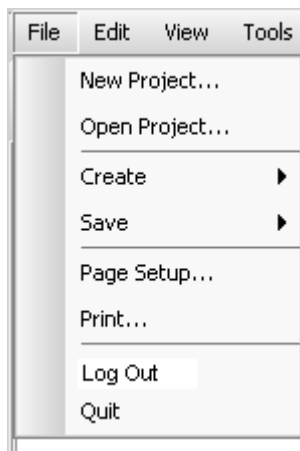
Full version number will be listed as shown on the following screenshot. (Should include alphabetic character as part of version, if applicable).



- Please note the following changes....
 - 'Tool' tab should change to 'Application'
 - Text in white section at top should change to, "Use the tabs below to view information about the application and the system.
 - Modulant version number is displayed below copyright – should display full version number with alphabetic character if applicable
- 5. The selected server name, as selected on the login dialog, should be displayed in the application title bar, before the project name.



- The server name displayed will be the value of 'server info' in the server config file.
6. The File option of the main menu will contain a "Log Out" option that will log the user out of the application allowing him/her to log back in, selecting a different server, without having to completely reload the application.
- The 'Log Out' option will be directly above the 'Quit' option in the File menu



- when clicked
 - application will close
 - current server connection will end
 - user will be returned to log in dialog
 - user name, password, and server fields will all be blank

Impact to installer:

None.

Impact to administrator:

On log in, the feature will check the version of the installer against a server-compatibility version number stored in the server config file. The server config file will also contain the path to the client installation directory on the network. This information will be placed in the server config file when a new client version is built or when the server is installed. If the client is not compatible with the server, a dialog box will appear.

Impact to builder:

See *Impact to administrator*.

Impact to maintainer:

See *Impact to administrator*.

Impact to browser:

See *Impact to administrator*.

Schedule risks:

None known.

Mitigation plan for schedule risks:

N/A

Technical risks:

None known.

Mitigation plan for technical risks:

N/A

Impact on back-end data model:

None

Impact on back-end code:

Requires receiving version data sent from client, and returning data about the versions the server supports.

Requires client receiving directory path information for network location of client-compatible version from the server config file – This information should be placed in the server config file during new server installation, and during builds.

Impact on user interface code:

Requires creation of two message boxes: one for client cannot connect/too old, one for can connect/not latest.

Also requires update to About dialog box to show build number.

Requires log in screen to contain drop-down field for selecting a server

Requires display of current server name in client window

Requires 'Log Out' option on File menu

New methodology, technology, or third-party product requirements:

None.

Additional notes:

Example XML content to be added to server-info.xml on client:

```
<version>
  <Main v="0.4.5" />
  <PatchLevel v="C" />
  <ServerComplianceVersion v="0.4.5" />
  <FullVersion v="0.4.5-C" />
</version>
```

Example XML content to be added to datasources.xml on server:

```
<version>
  <Main v="0.4.5" />
  <PatchLevel v="C" />
  <ServerComplianceVersion v="0.4.5">
  <FullVersion v="0.4.5-D" />
  <LatestClientVersion v="0.4.5-G" />
  <URLForLatestClientVersion url="\\ch1filer" />
  <ServerSelfIdentification id="Modulant Production" />
</version>
```

The client sends the content of ServerComplianceVersion to the server, which compares it to its own ServerComplianceVersion value. If they do not match, the message indicating that the client is not compatible with the server is sent back to the client.

The value of FullVersion on the client is used in the About dialog box.