prolis® Bridge

Version 4.0

PROLIS BRIDGE

PROLIS BRIDGE is Prolis component software responsible for communicating with external systems like EMR, EHR, other Laboratory Management Systems and any Healthcare System capable of communicating on based of HL7 protocol. Prolis Bridge communication with external system is only in the context of Prolis functionality and its capabilities through various kinds of interfaces. The Bridge supports following kinds of interfaces;

Unidentified Interface

Unidentified Interface with the ID of zero '0' is for the future use and is disabled programmatically by default currently. The Interface is never activated even after putting the check mark in the Bridge Setup.

Main Lab Interface

The Main Lab Interface with the ID of '1' is provided as a part of the Bridge, in order to communicate with the other system (Legacy) if applicable, in addition to PROLIS.

Branch Lab Interface

The Branch Lab Interface with the ID of '2' is provided as a part of the Bridge, in order to communicate with the non Prolis system if running in a branch of the main laboratory.

Collection Depot Interface

The Collection Depot Interface with the ID of '3' is provided as a part of the Bridge, in order to communicate with a non Prolis system running in a collection depot of the main laboratory.

Reference Lab Interface

The Reference Lab Interface with the ID of '4' is provided as a part of the Bridge, in order to communicate with the other Lab system employed at the client's Reference Lab.

Client Interface

The Client Interface with the ID of '5' is provided as a part of the Bridge, in order to communicate with the EMR systems at the Laboratory's client sites.

Regulatory Interface

The Regulatory Interface with the ID of '6' is provided as a part of the Bridge, in order to communicate with the systems employed by various Regulatory Agencies (Department of Health, CAP, AAB etc).

Payer Interface

The Payer Interface with the ID of '7' is provided as a part of the Bridge, in order to communicate with systems employed by Insurance Companies.

Clearing House Interface

The Clearing House Interface with the ID of '8' is provided as a part of the Bridge, in order to communicate with systems (Billing) employed by Clearing Houses.

Laboratory Identifiers

PROLIS uses the laboratory Identifier to communicate with external systems like EMR, EHR, other Laboratory Systems and other Healthcare Systems. Laboratory running the PROLIS Bridge is required its Laboratory record to have the data in one of the following fields;

CLIA NUMBER

CLIA number in the format of 99AA9999999. For example '22DD1234567'.

NPI

National Provider Identifier (NPI) in the format of 9999999999. For example '1234567890'.

Federal ID

Federal ID in the format of 99-9999999. For example '20-1234567'.

Communication DLL

Communication DLL is a software component written and provided by American Soft Solutions Corp, specific to every type of Interface within the Bridge and specific to the system Prolis is communicating with. This communication DLL is referenced during the Interface Setup within the Bridge.

User Interface

The User Interface of Prolis Bridge is comprised of 3 screens. One main and 2 set up screens. Since Bridge involves with the minimum user interaction, it has no built in user security. It is assumed that only Lab Administrator or an appropriate IT level personal will be interacting with the Bridge.

1. Main Screen

The main screen shows up upon starting the component and stays visible in both states (Running and Stopped) until it is shut down.
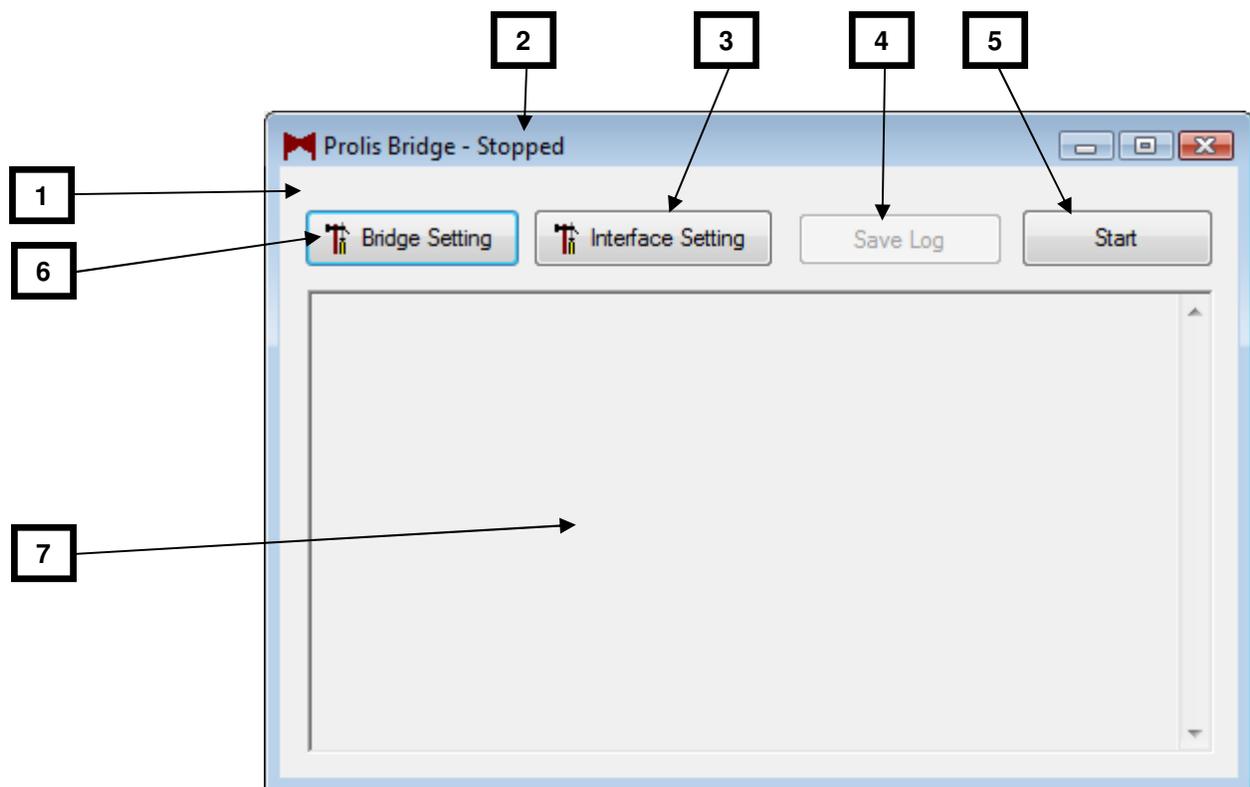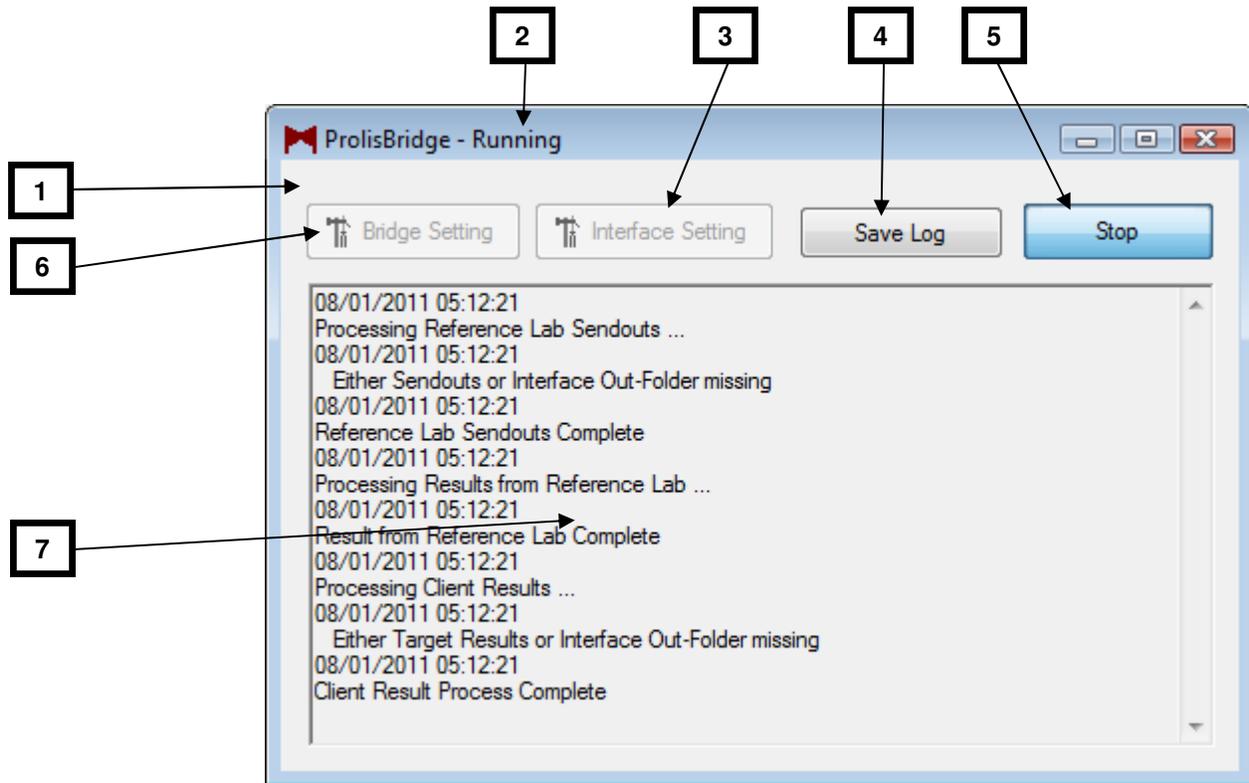

2. State

One of two states (Stopped or Running) of the Bridge. Bridge communicates when in running state.

3. Interface Setup Button

The button to access the Interface Setup Screen. The button is available only when Bridge is not running (Stopped state).

4. Save Log Button

This button is used to save the Bridge activity log in to a file, to be used by Prolis Support Team, to resolve any issue if there is.

5. Start/Stop Toggle Button

The button is used to switch the 'Stopped' state to the 'Running' state and vice versa. Button 3 and Button 6 are only available when the state is 'Stopped', not otherwise. Button 4 is only available if the Bridge has a log entry there, unavailable otherwise.

6. Bridge Setup Button

The button to access the Bridge Setup Screen. The button is available only when Bridge is not running (Stopped state).

7. Bridge Log Display Area

The area displays the entire activity of the Bridge. Each selected Iteration (selected at the Bridge Setup screen) is displayed along with the date, time and its status (success or failure. In case of any malfunction, the client is requested to save this log, using the button 4, and send the saved file to our Support Team.

1. Bridge Setup Screen

This screen is used to access/ view or setup the Bridge parameters. Bridge parameters are setup to control the way Bridge carries out iterations periodically to communicate with various systems.
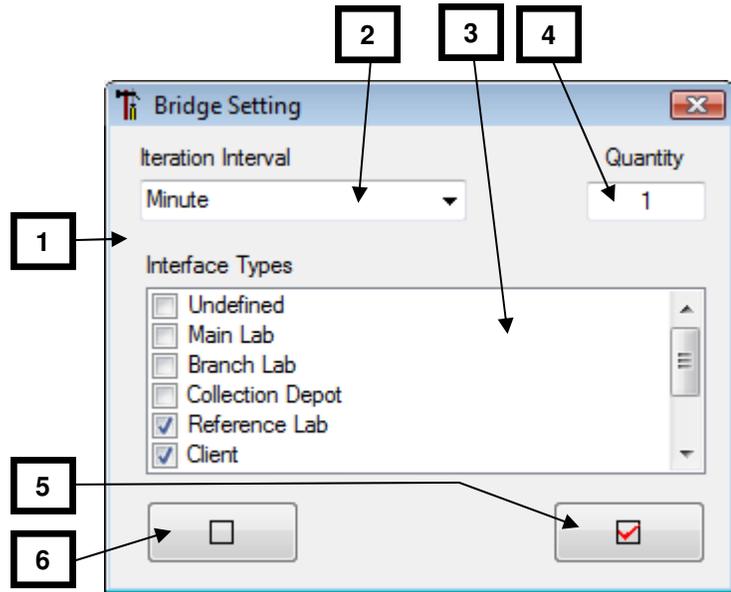
2. Iteration Interval

The time period used to calculate the lapse time for each iteration start. System comes with the following selectable intervals;
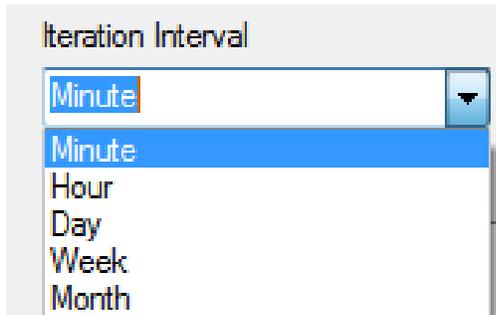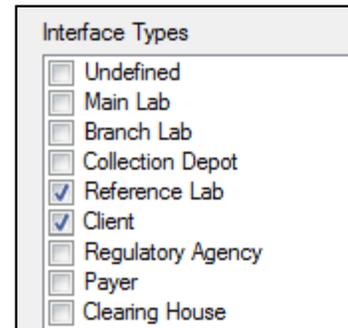

Iteration Lapse period (ILP)

ILP = Minute X 1 X Quantity
ILP = Hour X 60 X Quantity
ILP = Day X 1440 X Quantity
ILP = Week X 10080 X Quantity
ILP = Month X 1440 X Days in Month X Quantity

3. Interface Types

This field lists various types of interfaces, Bridge supports. Currently except 'Undefined', all other types of interfaces can be checked for the Bridge to process. Bridge does not process unchecked interface types.
Undefined (0), Main Lab (1), Branch Lab (2), Collection Depot (3), Reference Lab (4), Client (5), Regulatory (6), Payer (7) and Clearing House (8).

4. Quantity

Quantity is any integer used to achieve any desired Iteration Lapse Period (ILP).

5. Select All Button

This button can be clicked to check all 9 types of interfaces with just one click.

6. Deselect All Button

This button can be clicked to uncheck all 9 types of interfaces with just one click.

Bridge Setup procedure

The screen does not have any save button. Simply select the desired Interval, enter desired quantity digits, place a check mark against all desired interface types you want the Bridge to process and x-out (close) the screen.
Your entered setting will be saved and be used when Bridge starts running.

Interface Setup Screen

The Interface Setup screen is used to create new, edit and delete existing interfaces in the system. The screen can only be accessed during 'Stopped' state of the Bridge.
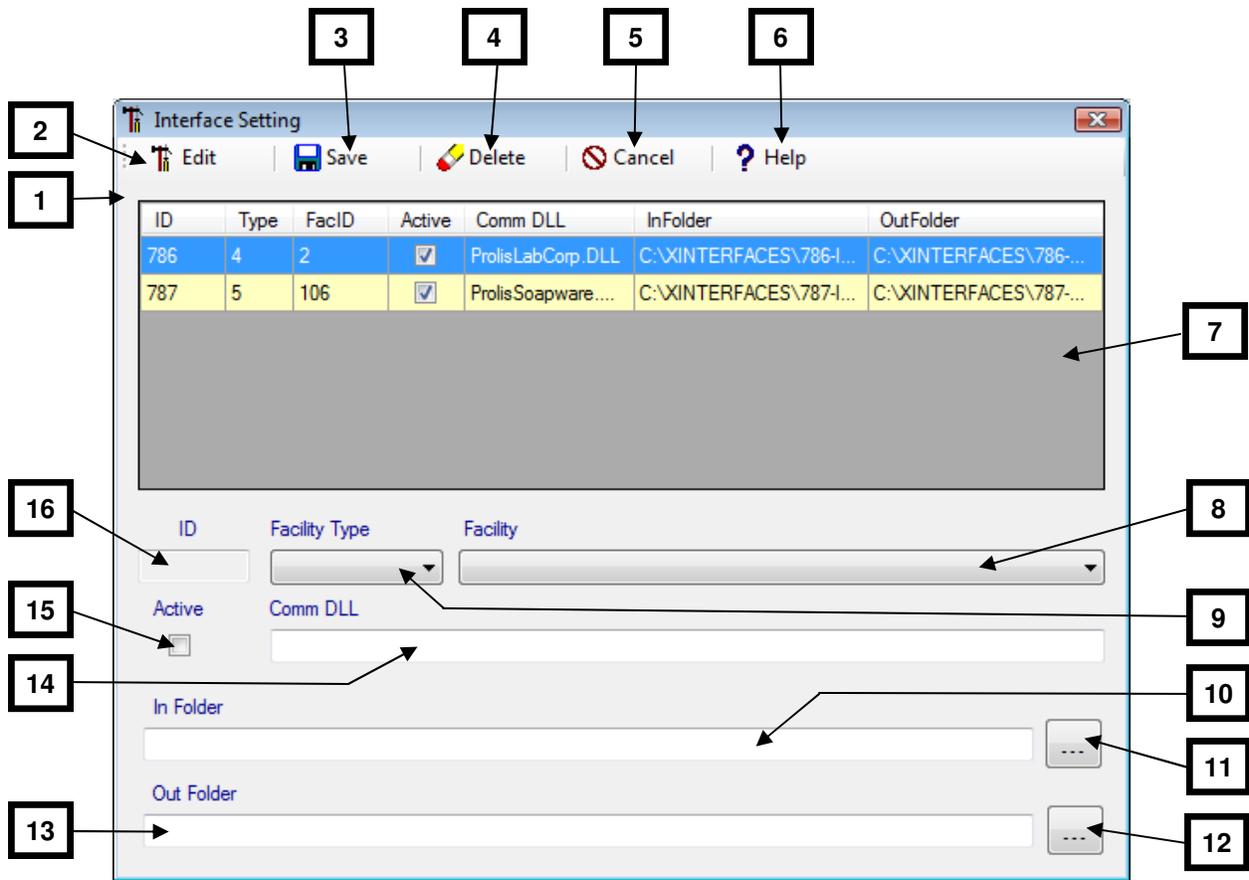
1. Interface Setup Screen

The screen is comprised of a horizontal bar of 5 action buttons, a list of interfaces in the system and 9 various fields to add, edit or display the detail of any interface. To delete any interface, one must double click first to display the detail of the interface and then delete.

2. Edit/New Switch

Since this screen is to add new or edit any existing interface, this button toggles between 'Add' and 'Edit' modes. Simply click the button to change the mode.

3. Save Button

The button is used to save the interface record in the database. The button is available only upon having all the required data, disabled otherwise.

4. Delete Button

The button is used to delete any existing interface record. It is not available when in 'New' mode and is available only upon displaying the record in 'Edit' mode.

5. Cancel Button

The button is used to exit the Interface Setup Routine.
Clicking this button will dismiss the screen without prompting the user to save the changes. The button is always available.
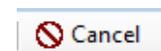
6. Help Button

The button displays the 'Help' topic. The button is always available.
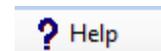
7. Interfaces List

This list control displays existing interfaces in the system, row by row. Interface characteristics are separated by columns in the list. The list itself is not editable.

Interface ID	Interface Type	Facility ID	Communication DLL	Interface Data Folders

|	ID	Type	FacID	Active	Comm DLL	InFolder	OutFolder
First Interface	786	4	2	☑	ProlisLabCorp.DLL	C:\XINTERFACES\786-I...	C:\XINTERFACES\786-...
Second Interface	787	5	106	☑	ProlisSoapware....	C:\XINTERFACES\787-I...	C:\XINTERFACES\787-...

8. Facility Drop Down

This drop down box holds the values according to the interface type selected in the #9 drop down box 'Facility Type' and the value selected in this drop down, is the facility, this interface communicates with.
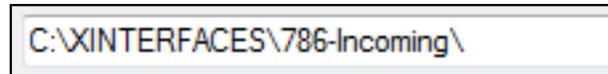
Labcorp
Labcorp
Quest Diagnostic inc.
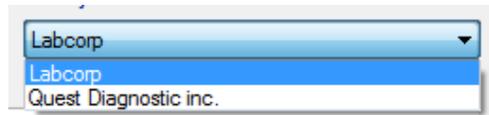
9. Facility Type Drop Down

This drop down box holds Facility Types values. Selection of a value in this drop down, populates #8 drop down with relevant facilities.
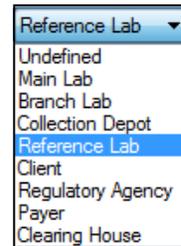
10. In Folder Name

This field is used to specify the folder from where the Bridge will process all received HL7 files through the interface.

C:\XINTERFACES\786-Incoming\

11. In Folder Name Build Button

This button can be used to name the In folder recommended by Prolis designer (optional use).

12. Out Folder Name Build Button

This button can be used to name the Out folder recommended by Prolis designer (optional use).

13. Out Folder Name

This field is used to specify the folder where the Bridge will place all processed HL7 files to be sent through the interface.

C:\XINTERFACES\786-Outgoing\
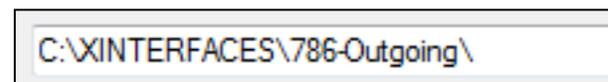
14. Communication DLL

This field is used to specify the name of communication DLL provided by American Soft Solutions Corp.
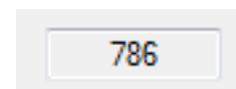
ProlisLabCorp.DLL
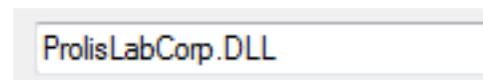
15. Active Check Box

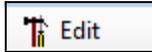This field is used to enable or disable the displayed interface.
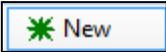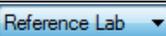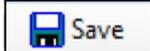
16.

This field the Interface ID (numerical digits). The entry in this field is controlled by the Bridge, without the user involvement.

786

Interface Management Procedure

Please follow the procedure outlined here, to manage interfaces in the Bridge. After defining all required interfaces, fulfill all pre-requisites and then run the Bridge followed by changing the state from 'Stopped' to 'Running'.

Adding New Interface

A. Change the mode from 'Edit' to 'New' by clicking the Mode button. List is disabled in 'New' mode.
B. Select the Facility Type from the drop down. ──────────────▶ `Reference Lab ▼`
C. Select the Facility from the next drop down. ──────▶ `Labcorp ▼`
D. Enter the Comm DLL name provided by American Soft Solutions Corp. ──────────────▶ `ProlisLabCorp.DLL`
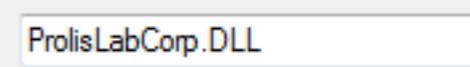
E. Specify In Folder name. ──────────────▶ `C:\XINTERFACES\786-Incoming\`

F. Specify the Out Folder name. ──────────▶ `C:\XINTERFACES\786-Outgoing\`

G. Click the Save Button. ──────────────────────────▶ `💾 Save`

Editing Existing Interface

A. Using the 'Edit' mode (change to 'Edit' if on 'New'), double click the interface to be edited within list of interfaces.
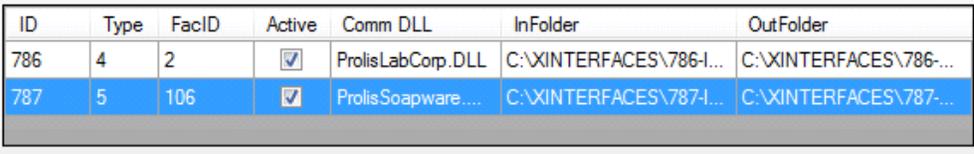
ID	Type	FacID	Active	Comm DLL	InFolder	OutFolder
786	4	2	☑	ProlisLabCorp.DLL	C:\XINTERFACES\786-I...	C:\XINTERFACES\786-...
787	5	106	☑	ProlisSoapware....	C:\XINTERFACES\787-I...	C:\XINTERFACES\787-...

B. , Make desired changes within the field # 8 through field # 16.
C. Click the Save Button to save changes. ──────────────▶ `💾 Save`
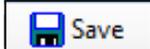
Deleting Existing Interface

It is strongly recommended to make an interface inactive if not being use. However, an interface can be deleted without any side effect to the system.
A. Using the 'Edit' mode (change to 'Edit' if on 'New'), double click the interface to be deleted within the list of interfaces.
B. After getting it displayed, click the 'Delete' button. ──────────────▶ `🗑 Delete`
C. Follow the prompt.