

SOLAR Edge – Interfacing Software

SOLAR Edge is an independent interfacing software which works along with Solar LIS or with any third party LIS. It is designed, to electronically upload test results directly in the patient's record from instruments thus improving efficiency, reducing errors, increasing reimbursements, and preventing loss of data.

SOLAR Edge can be directly integrated with medical laboratory equipments, through bi-directional (two way communication) and unidirectional (one way communication) interfacing, and the results generated from the machines will automatically get updated into the corresponding patient's record in the LIS thereby avoiding manual entry and mistakes.

In bi-directional interfacing all the test requests are automatically routed to the laboratory equipment when there is a request from the LIS. The machine acknowledges the test requests from the interfacing software automatically or by reading a bar code and processes the tests. As the results are ready, the machine transmits the results back to the interfacing software and then to the LIS. Multiple test requests generated can be sent to multiple machines at the same time, there by saving time consumed in doing manual test entry for different machines.

In uni-directional interfacing, test requests cannot be sent to the machines from the interfacing software. Instead, the test requests have to be manually entered into the machine using an input device provided with the machine and as the results are ready, the machine transmits the results back to the interfacing software and then to the LIS.

All results generated are mapped into the corresponding patient's records as per the test request.

Unique features of SOLAR Edge:

- ❖ Bi- directional Interface
- ❖ Uni-directional Interface
- ❖ User friendly graphical user interface
- ❖ Addresses regulatory issues, improves efficiency, reduces errors, and increases reimbursements.
- ❖ Barcode enabled
- ❖ Can interface all laboratory instruments
- ❖ Advanced search option
- ❖ Supports all pathology lab tests
- ❖ Auto mapping of the test results with the patients tests.

Bidirectional Interfacing Work Flow

Bidirectional interfacing involves sending of data from across the PC(host) to the analyzer as well from across the analyzer to the host. Bidirectional interfacing may happen in two ways:

- 1) Downloading of test request from the host to the analyzer without a request being received from the analyzer.
- 2) Downloading of tests from the host to the analyzer based on a request sent from the analyzer to the host.

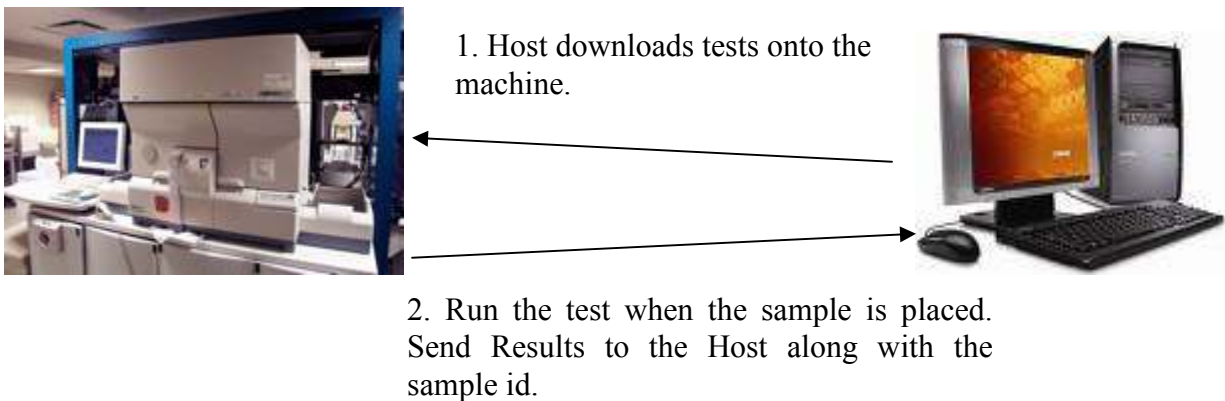


Fig. 1.1

- 1) In the first case(Fig.1.1), the host receives the test ordered at the time of billing. The host then determines the machine on which the test is to be performed. The ordered tests are then transferred onto the appropriate machine along with the sample id. When the machine receives a sample with a barcode label attached, the sample id is scanned from the label and the machine searches the worklist to see the tests that need to be performed. If it finds an entry for the scanned sample id, the tests are then performed on the sample.

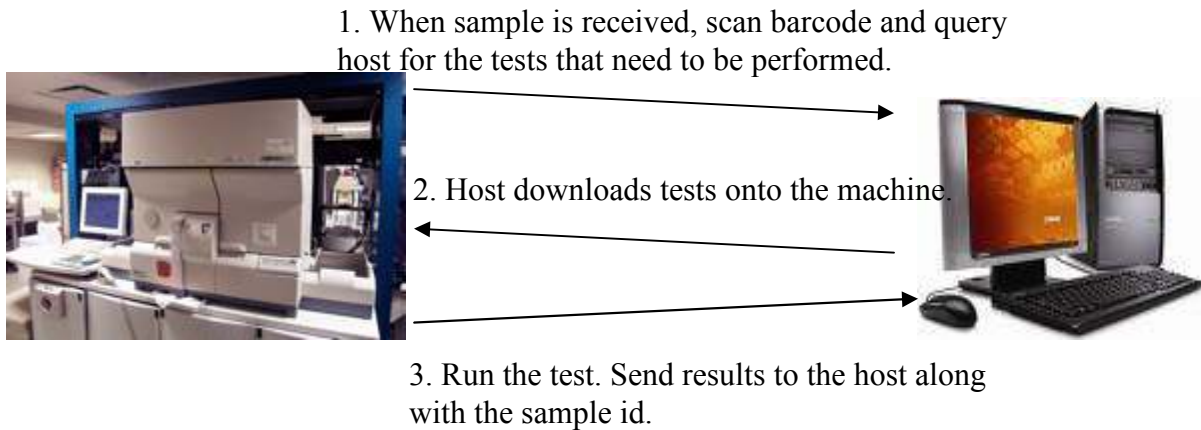
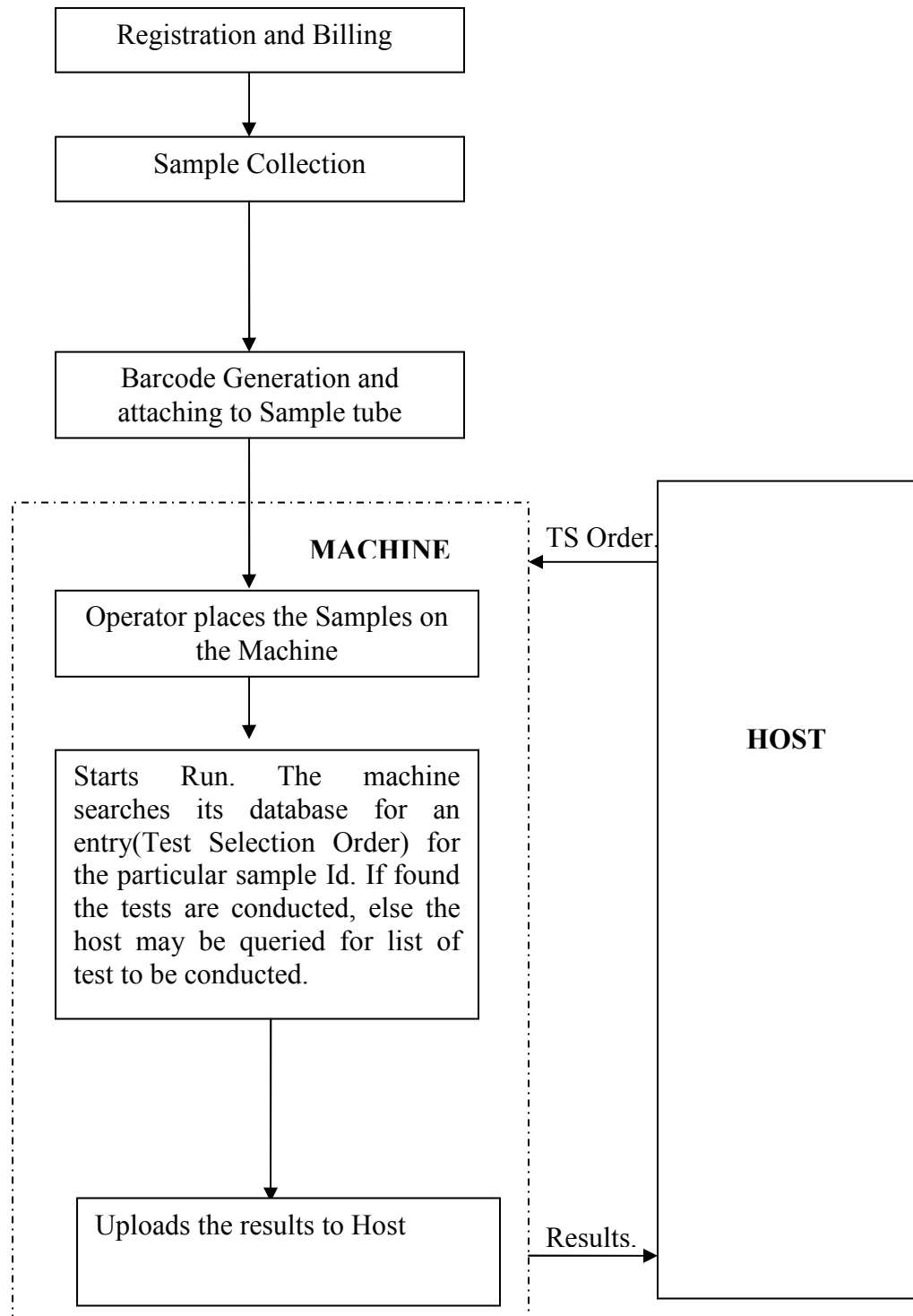


Fig. 1.2

- 2) In the second case(Fig.1.2), when the analyzer receives a sample tube with a barcode label attached to it, it sends a query to the host machine requesting for the tests that need to be run on the particular sample. If the host machine has an entry for that particular sample ID it sends the tests across to the analyzer.

In both the above cases once the results are available on the analyzer, it would generally send the results along with the sample id and other relevant data to the host machine.

Work Flow Diagram For Bidirectional Interfacing-I



Work Flow Diagram For Bidirectional Interfacing-II

