



# Business Intelligence Modules



## ē.Monitor

Psychē Systems ē.Monitor is a comprehensive solution for Laboratories to monitor and manage all of the data integration services that send and receive data to Psychē's Laboratory Information Systems (LIS). It provides support for monitoring Backend Processes, EMR Connections, and HL7 Interfaces.

With fast real-time monitoring of all processes and connections, you can quickly determine where there may be bottlenecks or roadblocks in your inbound and outbound data delivery. With transactional-level views of each process and resend capability, you can quickly ensure that your laboratory data is being delivered on time where you need it and when you need it. The product offers the following benefits and features:

### Process Monitor

The screenshot shows the e.Monitor application window with a table of processes. The table has columns for Status, Code, Interval, Last Updated, Seconds, and D:H:M:S. The status for all processes is 'Ready'.

Status	Code	Interval	Last Updated	Seconds	D:H:M:S
Ready	Email Agent	30	1/20/2017 1:47 PM	8	0:00:00:08
Ready	EMR AutoFax	5	1/20/2017 1:47 PM	1	0:00:00:01
Ready	EMR Connection Mo...	7200	1/20/2017 12:27 PM	4782	0:01:19:42
Ready	EMR Copy To Agent	900	1/20/2017 1:44 PM	189	0:00:03:09
Ready	Fax Integration	30	1/20/2017 1:47 PM	1	0:00:00:01
Ready	Fax Status	30	1/20/2017 1:47 PM	10	0:00:00:10
Ready	NucleoLIS Outreac...	5	1/20/2017 1:47 PM	0	0:00:00:00
Ready	NucleoLIS Outreac...	5	1/20/2017 1:47 PM	1	0:00:00:01
Ready	Process Monitor	60	1/20/2017 1:46 PM	47	0:00:00:47

The Process Monitor tracks the real-time status of all backend processes and integration points such as:

- Email Delivery
- Fax Delivery
- EMR Connection Monitoring

- LIS Results to Outreach Distribution
- Outreach Orders to LIS Distribution
- Easily monitor the health and uptime of back-end processes with color-coded status indicators that display at-a-glance the status of all processes
- Additional detail is provided to indicate the last time a process ran, and process run intervals

## Process Monitor Drill-Down

The screenshot shows the 'Delivery Monitor' application window. It features a search and filter interface at the top with fields for 'Start Date' (1/10/2017), 'End Date' (1/20/2017), 'Delivery', and 'Application'. There are also buttons for 'Clear Filter', 'Resend', and 'Cancel'. The main area contains a table with the following data:

	Delivery Requested	Delivery Attempted	Delivery Message	Application	Delivery Type	Destination	Remark
▶	1/16/2017 2:26 PM	1/16/2017 2:27 PM	FAIL-ChikaitLog_SendEmail...	System Monitor	EMAIL		EMR Connection Monitor
	1/16/2017 2:16 PM	1/16/2017 2:17 PM	Successful	System Monitor	EMAIL	ivyf@psyches...	Process Monitor
	1/16/2017 12:33 PM	1/16/2017 12:33 PM	Successful	System Monitor	EMAIL	ivyf@psyches...	Process Monitor
	1/10/2017 1:00 PM	1/10/2017 1:00 PM	FAIL-Error Code:-111 Attemptin...	OUTREACH	FAX		Specimen Retrieval Request ...
	1/10/2017 12:58 PM	1/10/2017 12:58 PM	FAIL-Error Code:-111 Attemptin...	OUTREACH	FAX		Specimen Retrieval Request ...
	1/10/2017 10:27 AM	1/10/2017 10:27 AM	FAIL-Error Code:-111 Attemptin...	OUTREACH	FAX		Specimen Retrieval Request ...
	1/10/2017 10:26 AM	1/10/2017 10:26 AM	FAIL-Error Code:-111 Attemptin...	OUTREACH	FAX		Specimen Retrieval Request ...

Status: Ready

- Easily drill down from the process monitor into each distinct process to get further transaction level detail for that process
- Quickly identify delivery status, problem areas and strategies for resolution
- Filter and search for specific transactions based on time and type of transaction
- Highlight specific transactions and flag them to be resent in cases where data needs to be re-delivered

## EMR Monitoring

The screenshot shows the 'e.Monitor' application window. It has a 'Processes' tab and an 'EMR' sub-tab. There is an 'Auto Refresh' checkbox. The main area contains a table with the following data:

	Status	Code	OK	Message	Version
▶	●	GROUP	True	Client connection OK	2.5.2.0S
	●	IMU	True	Client connection OK	2.5.2.0S
	●	PHY	True	Client connection OK	2.5.2.0
	●	ROBINS	True	Client connection OK	2.5.2.0S
	●	SMITH	True	Client connection OK	2.5.2.0S

Status: Ready

The EMR Monitor tracks the real-time status of all EMR systems.

- Easily monitor the health of each EMR with color-coded status indicators that display at-a-glance the status of all EMR connections
- Each EMR connection displays a message providing additional details regarding the health of the EMR connection

## EMR Monitor Drill-Down

The screenshot shows the 'EMR Client Details' window. At the top, there are filters for Client (MU, TEST IMU), Start Date (1/20/2017), and End Date (1/20/2017). Below this is a table of transactions with columns: Event Date, Description, Responder, PatientName, VisitCode, CaseNumber, Type, MessageSent, MessageReceived, Status, Comments, SubmitterCode, and SubmitterGroup. The table contains 18 rows of 'Download Reque...' transactions from 1/20/2017. Below the table is a section for 'PENDING REPORTS' with columns: Event Date, Description, PatientName, VisitCode, CaseNumber, ReportDate, and Status. The status bar at the bottom indicates 'Status: Ready'.

- Drill down into each EMR connection and get transaction level detail, including pending transactions
- Drill down into each distinct EMR connection to get further transaction level detail - Quickly identify delivery status, problem areas and strategies for resolution
- Filter and search for specific transactions based on time, case number, visit number, patient, and submitter
- Highlight specific EMR transactions and flag them to be resent in cases where data needs to be re-delivered

## Next Steps

ē.Monitor is available as an add-on module in all of the Psychē Systems e.Lixa products:

- nucleoLIS ē.finity
- WindoPath ē.ssential
- MicroPath OneVersion
- ē.Outreach